CITY COUNCIL MEETING
TUESDAY, APRIL 21, 2026
HELD REMOTELY & IN PERSON AT CITY HALL
22710 E COUNTRY VISTA DRIVE

Instructions for providing public comment can be found at the end of the agenda.

Questions or Need Assistance? Please contact the City Clerk at
rcaton@libertylakewa.gov

6:00 P.M. REGULAR SESSION

1. **Invocation**
2. **Pledge of Allegiance**
3. **Call to Order**
4. **Roll Call**
5. **Agenda Approval**
6. **Citizen Comments**
7. **Appointments**

   A. Confirmation of Amy Mullerleile to the Position of Community Development Director
   Recommended Action: Confirm the Mayor's appointment of Amy Mullerleile to the position of Community Development Director.

   B. Confirmation of Appointments to City Council Committees
   Recommended Action: Move to approve the slate of Mayoral appointments to Council Committees.

8. **Announcements / Proclamations / Special Presentations**

   A. SCRAPS Annual Report

9. **Reports & Inquiries**

   A. City Council

   B. Mayor

   C. City Administrator

   D. Spokane Valley Fire Department

E. Liberty Lake Sewer & Water District

F. Parks and Arts Commission

10. Workshop Discussions

A. Capital Investment Workshop

B. Spokane County Hazard Mitigation Risk Plan

11. General Business – Consent Agenda

A. Meeting Minutes
Recommended Action: Approve the April 14, 2026 Meeting Minutes.

B. April 21, 2026 Vouchers
Recommended Action: Approve the April 21, 2026, vouchers and the March 16–31 payroll and benefits in an amount not to exceed $744,090.01.

C. Memorandum of Understanding (MOU) between the cities of Liberty Lake, Airway Heights, Millwood, Medical Lake, and Cheney
Recommended Action: Move to approve and authorize the Mayor to sign the Memorandum of Understanding.

12. General Business - Action Items

A. Nomination for appointment to the SCRAPS Advisory Board
Recommended Action: Move to nominate Mark McAvoy to represent the "remaining municipalities" on the SCRAPS Advisory Board.

B. Recreation Agreement with Inclusa Fitness for Adult Social Recreation Leagues
Recommended Action: Authorize the Mayor to sign the recreation agreement with Inclusa Fitness to provide adult recreation programming in City parks.

C. Easement Agreement between the City of Liberty Lake and Liberty Lake Internet Portal, LLC.
Recommended Action: Move to approve and authorize the Mayor to sign the easement agreement.

D. Public Hearing - Code of Ethics Complaint
Recommended Action: Move to take action according to the options provided in Liberty Lake Municipal Code, Title 1, Chapter 10, Section 1-10-8G.

13. Council Comments

14. Public Hearings / Appeals-No items currently

15. Resolutions

A. Establishing qualifications for the Community Development Director position

16. **Ordinances-No items currently**

17. **Emergency Ordinances-No items currently**

18. **Introduction of Upcoming Agenda Items**

19. **Citizen Comments**

20. **Executive Session-No items currently**

21. **Adjournment**

JOIN ZOOM MEETING

2nd meeting of the month:

To view the meeting live via Zoom Meeting, join the Zoom web meeting:

Meeting Instructions:

Join from a PC, Mac, iPad, iPhone or Android device:
https://us02web.zoom.us/j/83557862246

Or One tap mobile:
+12532050468,,86578556158# US
+12532158782,,86578556158# US (Tacoma)

Or join by phone:
Dial: +1 253 205 0468 or +1 253 215 8782

Webinar ID: 835 5786 2246

PUBLIC COMMENT

If you wish to provide oral public comments during the Council meeting, you may do so in-person at City Hall or virtually via zoom. If you wish to speak in-person, please fill out a yellow Request to Speak Form. If you wish to speak via zoom, please join the zoom meeting using the meeting information above. The Mayor will invite public comments during the appropriate section of the agenda, at which time you can raise your hand, or send a request to speak to our meeting host using the chat function within the zoom meeting.

WRITTEN PUBLIC COMMENTS

If you wish to provide written public comments for the council meeting, please email your comments to rcaton@libertylakewa.gov by 4:00 p.m. the day of the council meeting and include all the following information with your comments:

1. The Meeting Date
2. Your First and Last Name
3. If you are a Liberty Lake resident
4. The Agenda Item(s) which you are speaking about

*Note – If providing written comments, the comments received will be acknowledged during the public meeting, but not read. All written comments received by 4:00 p.m. will be provided to the mayor and city council members in advance of the meeting.

AGENDA ITEM NO.: 7.A.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Confirmation of Amy Mullerleile to the Position of Community Development Director

Dept of Origin: Executive **Dept. Head Approval:** Mark McAvoy

Exhibit(s):
None

Expenditure Required	No
Budgeted	General Fund [001]; Salaries & Wages - Planning [558.60.10.00] - the Director's position is authorized and fully funded in the 2026 budget.
City Program	Human Resources

Summary Statement

The Mayor has appointed Amy Mullerleile to the position of Community Development Director based on the recommendation of the City Administrator and following an extensive selection process. City of Liberty Lake Ordinance 281, Section 1, states: There is created the offices of City Administrator, Police Chief, and Department Directors which offices shall be filled for an indefinite term by appointment of the Mayor with confirmation by the City Council.

Ms. Mullerleile was selected to fill the position following a nationwide search. The search, facilitated by Prothman, produced applications from 17 qualified candidates from 8 states.

Recommended Action

Confirm the Mayor's appointment of Amy Mullerleile to the position of Community Development Director.

AGENDA ITEM NO.: 7.B.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Confirmation of Appointments to City Council Committees

Dept of Origin: Legislative **Dept. Head Approval:** Mark McAvoy

Exhibit(s):
None

Expenditure Required	No
Budgeted	N/a
City Program	Legislative Governance

Summary Statement

Section 11 of the City Council Rules of Procedure requires City Council confirmation of Mayoral appointments to Council Committees. The standing committees play a key role in strengthening communication between the City Council and the staff, reviewing policy matters, and advancing recommendations to the full Council. Committee appointments are subject to term limits and periodic reappointment to ensure continued alignment with Council priorities and membership. Mayoral appointments to the standing committees are:

1. Public Health and Safety - CM Summer Darrow, CM Rick Klingler, CM Arlene Fisher
2. Growth, Development and Infrastructure - CM Linda Ball, CM Dan Dunne, CM Rick Klingler
3. Fiscal Affairs - CM Hugh Severs, CM Arlene Fisher, CM Summer Darrow

Recommended Action

Move to approve the slate of Mayoral appointments to Council Committees.

AGENDA ITEM NO.: 8.A.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: SCRAPS Annual Report

Dept of Origin: Executive **Dept. Head Approval:** Mark McAvoy

Exhibit(s):
None

Expenditure Required	No
Budgeted	N/a
City Program	Call Response (Law Enforcement)

Summary Statement

Spokane County Regional Animal Protection Services (SCRAPS) will present its performance and service utilization report, as required under the Interlocal Agreement (ILA) for Animal Care and Control Services between Spokane County and the City of Liberty Lake. This agenda item is for briefing and discussion purposes only.

The ILA establishes Spokane County, through SCRAPS, as the City's contracted provider of animal control and shelter services for the term of January 1, 2026, through December 31, 2030. Services include enforcement of local and state animal control laws, response to service calls, animal impoundment and care, licensing administration, and community education and outreach.

Section 22 of the agreement requires SCRAPS to provide an annual report to the City that includes key performance indicators and service metrics. These reports are intended to provide transparency, accountability, and insight into service delivery and resource utilization. The presentation will provide Council with an overview of SCRAPS operations within Liberty Lake, including service demand, trends over time, and performance outcomes. It also offers an opportunity for Council to engage in discussion regarding service levels, community needs, and any potential refinements to the partnership or service delivery model.

Recommended Action

No action recommended.

AGENDA ITEM NO.: 9.D.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Spokane Valley Fire Department

Dept of Origin: **Dept. Head Approval:**

Exhibit(s):
SVFD Run Report - LL 1st Quarter 2026

Expenditure Required	No.
Budgeted	N/A
City Program	

Summary Statement

A review of Spokane Valley Fire Department's 2026 1st Q. report will be presented.

Recommended Action

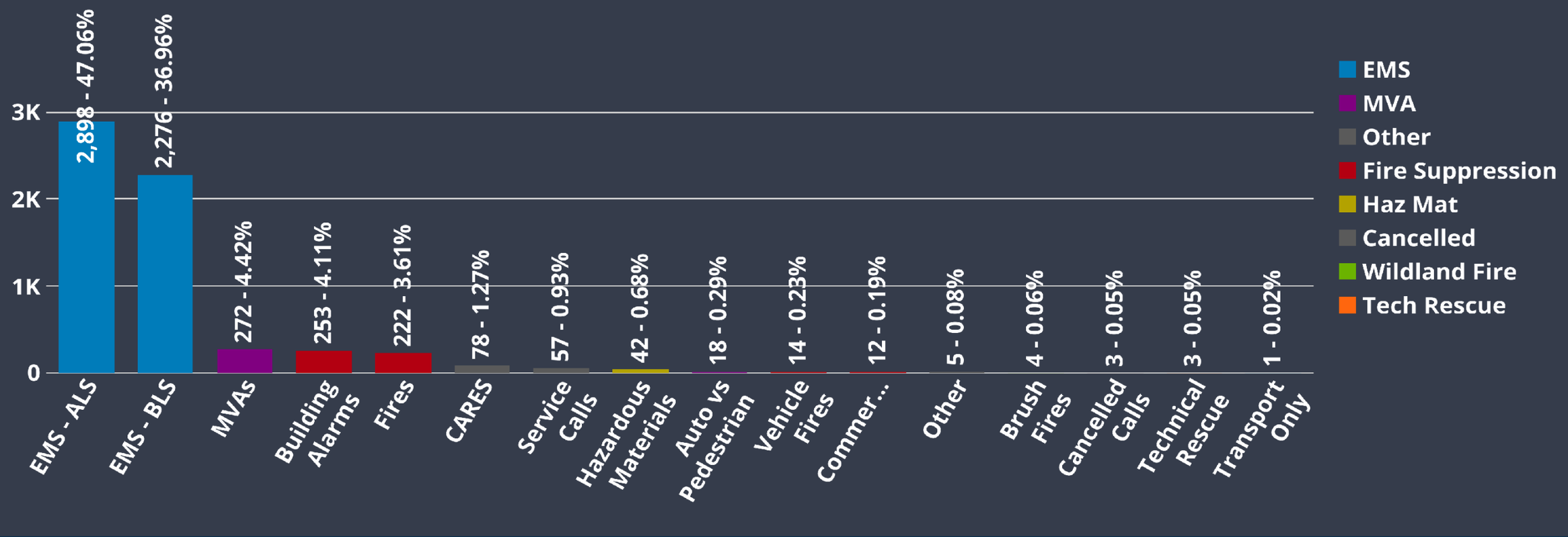
No action recommended.

SVFD Run Report
1st Quarter Report - 2026
All Response Areas

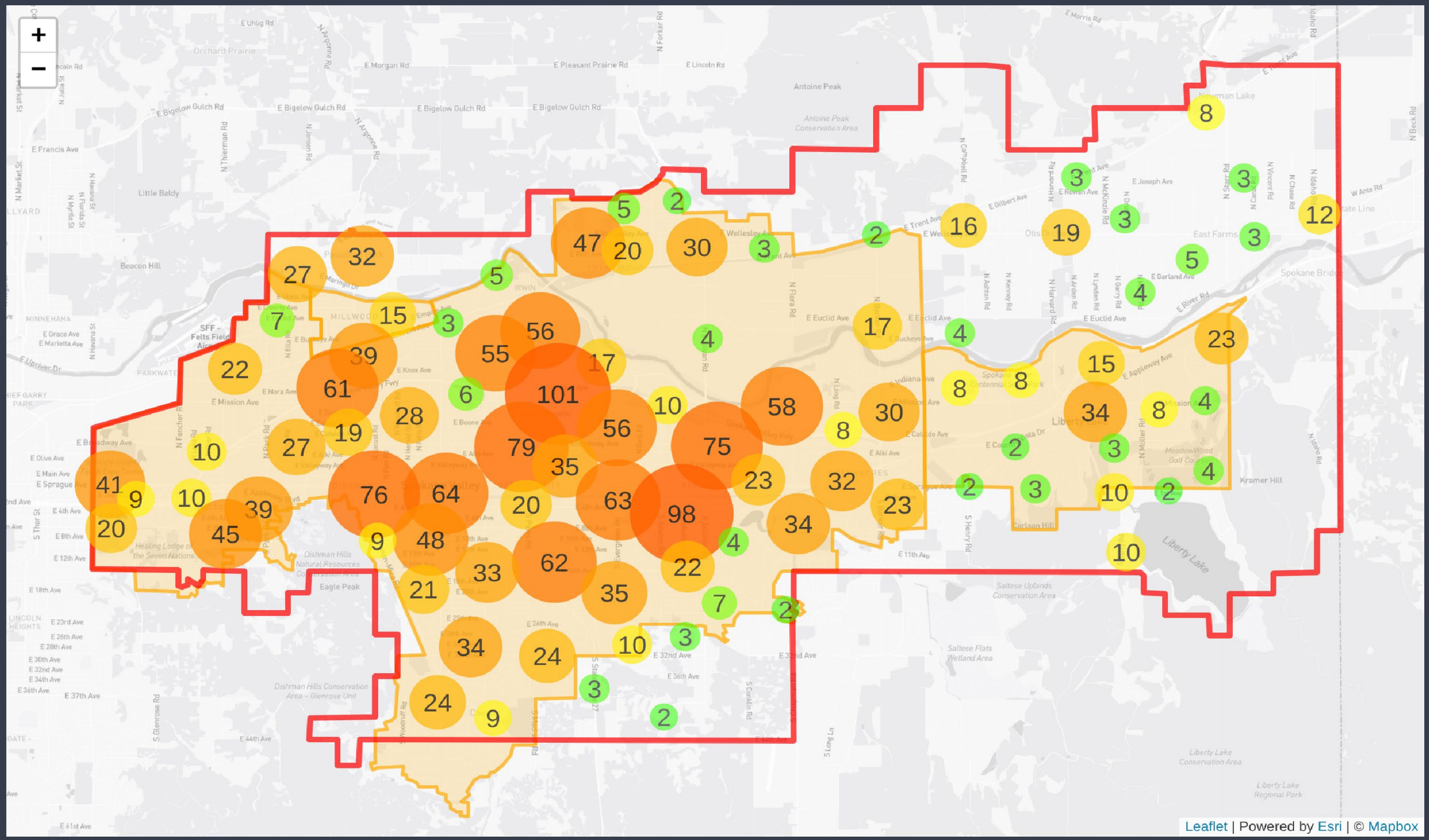
Total In-District Incidents - Last Quarter

6,158

Total In-District Incidents by Incident Category - Last Quarter



Incidents within the SVFD Boundary - Last Month



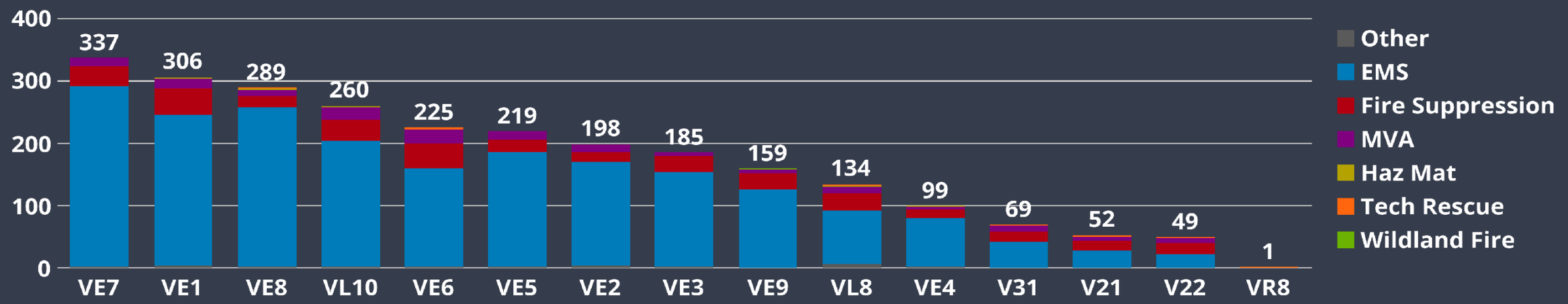
Response Summary

**A response is counted when an apparatus activates the responding button and an en route time is recorded*

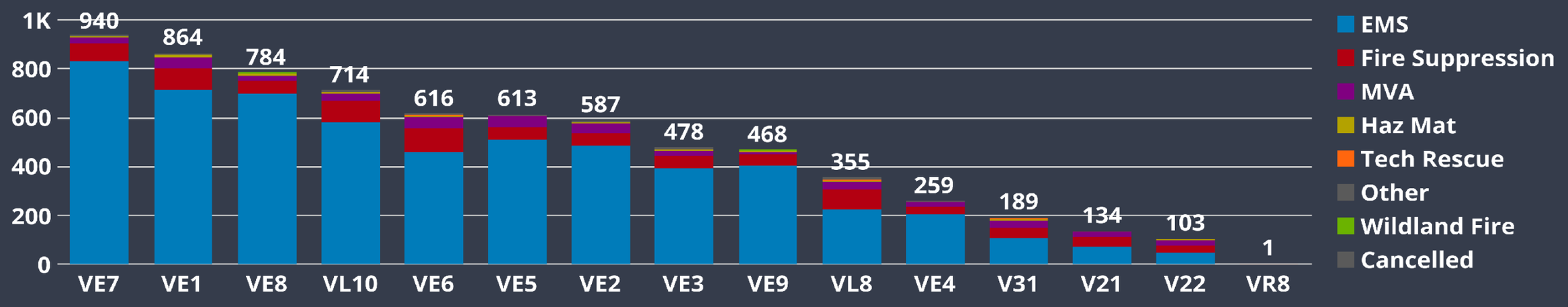
Total Responses - Last Quarter

7,250

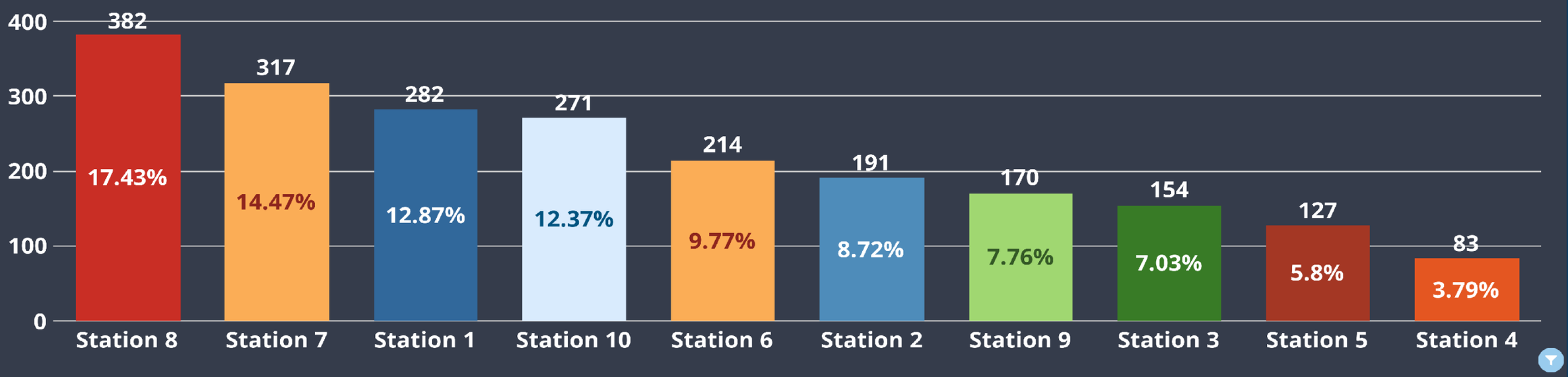
Total Responses by Frontline Apparatus - Last Month



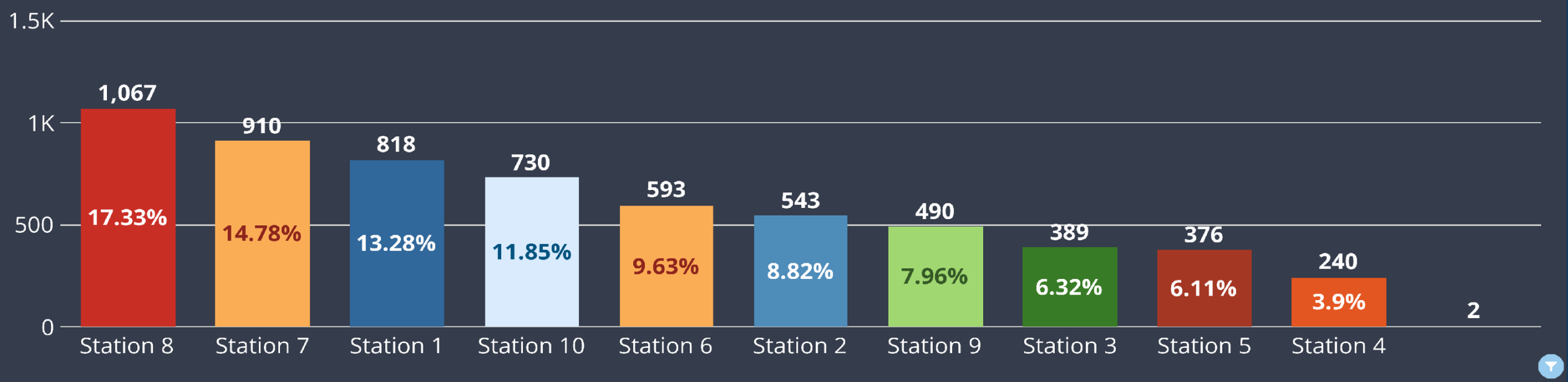
Total Responses by Frontline Apparatus - Last Quarter



Incident Locations by Station Area - Last Month

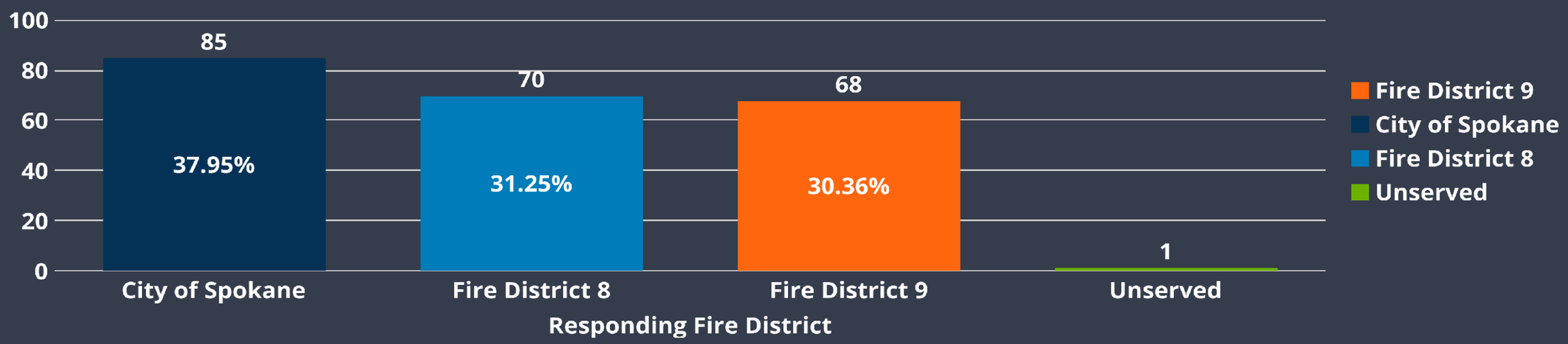


Incident Locations by Station Area - Last Quarter



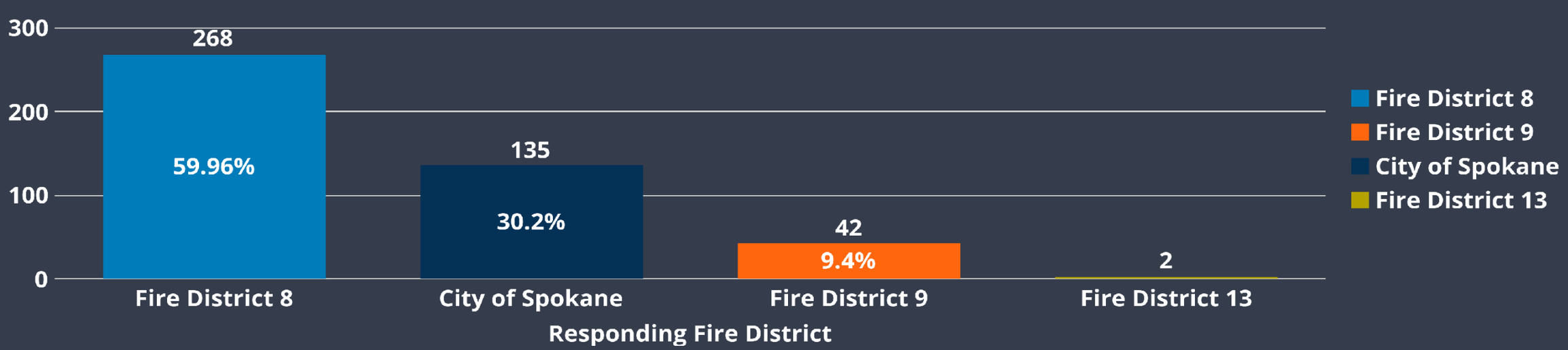
Total Responses from SVFD Into Another District - Last Quarter

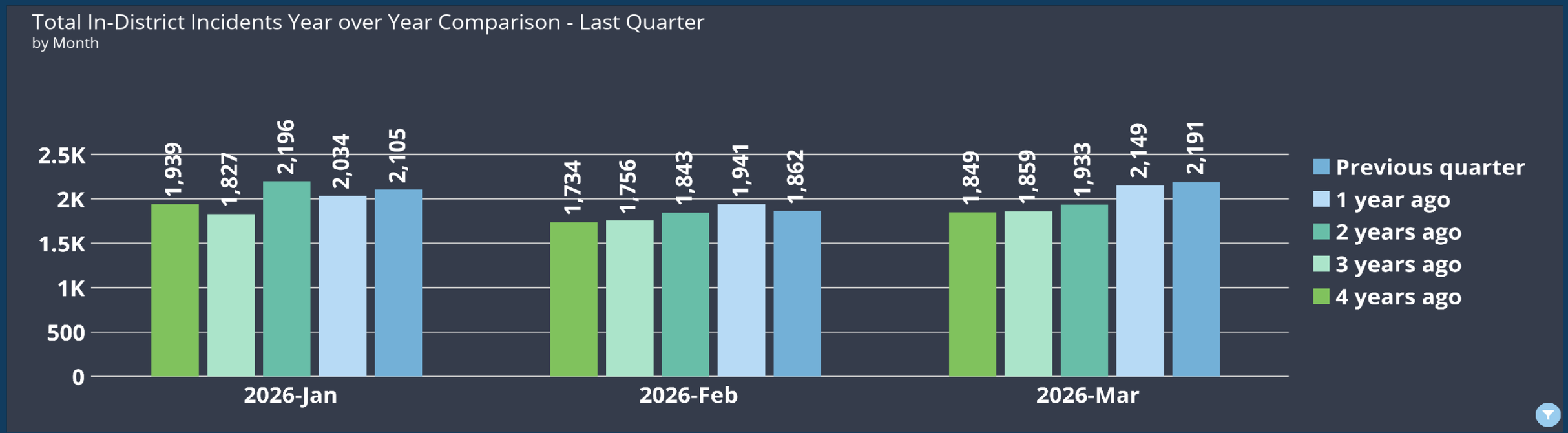
224 Total Responses

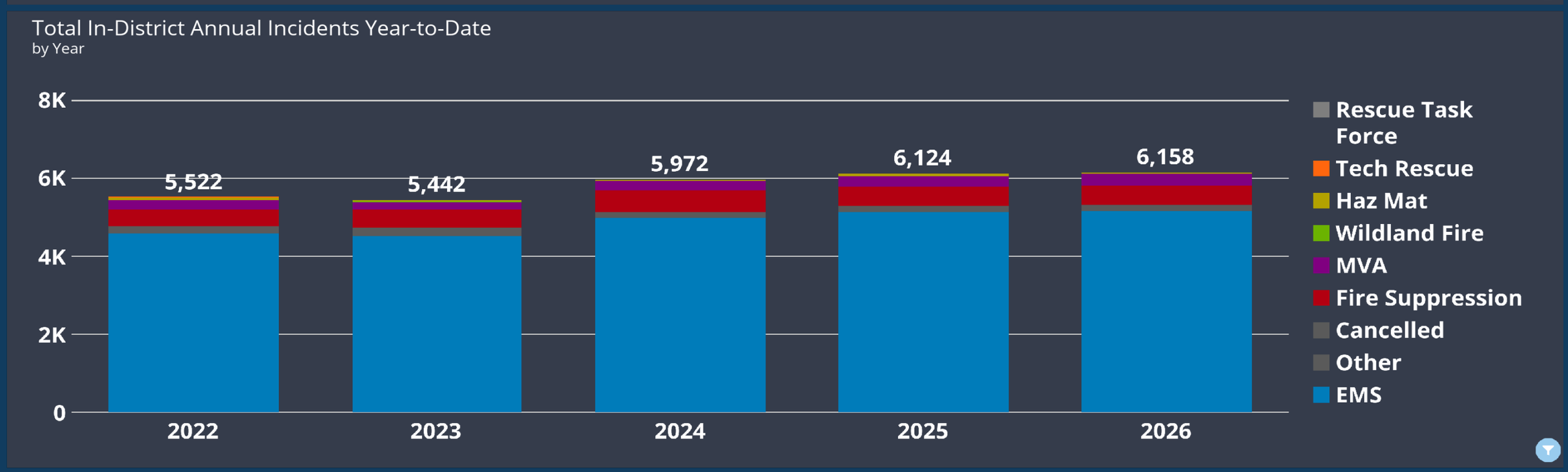


Total Responses from Other District Apparatus Into SVFD - Last Quarter

447 Total Responses







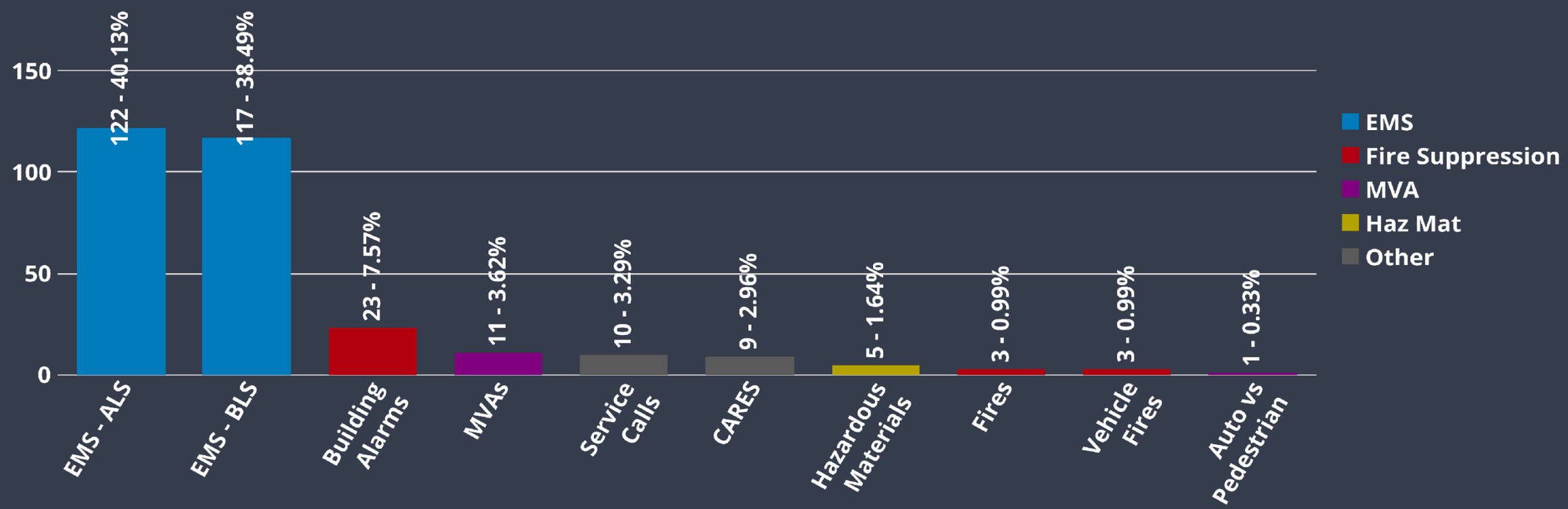
Busiest 1st Quarter on record – Busiest March
SVFD is 0.6% ahead of last year's call volume

Liberty Lake CC Run Report

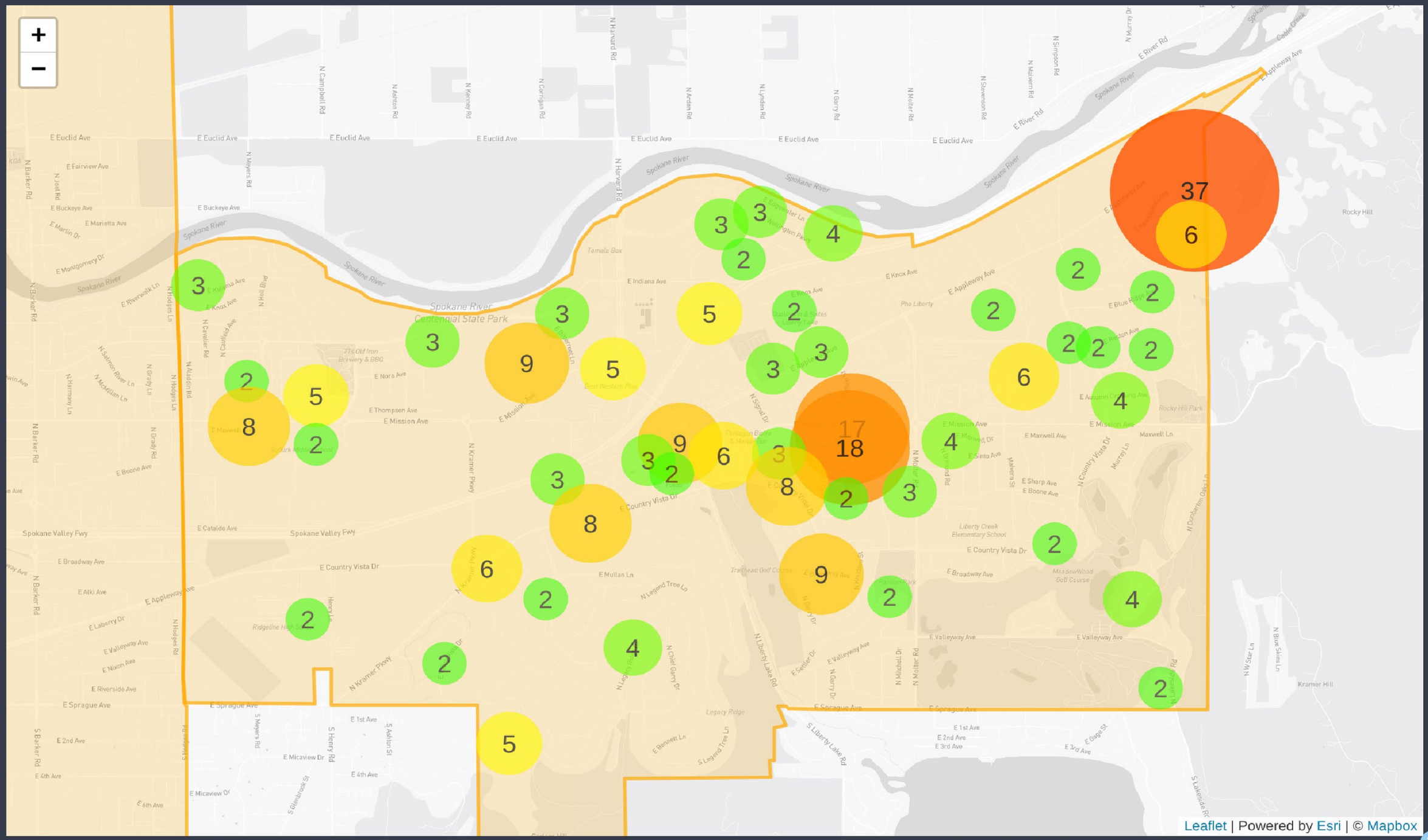
Total In-District Incidents - This Year

304

Total In-District Incidents by Incident Category - This Year



Incidents within the SVFD Boundary - This Year



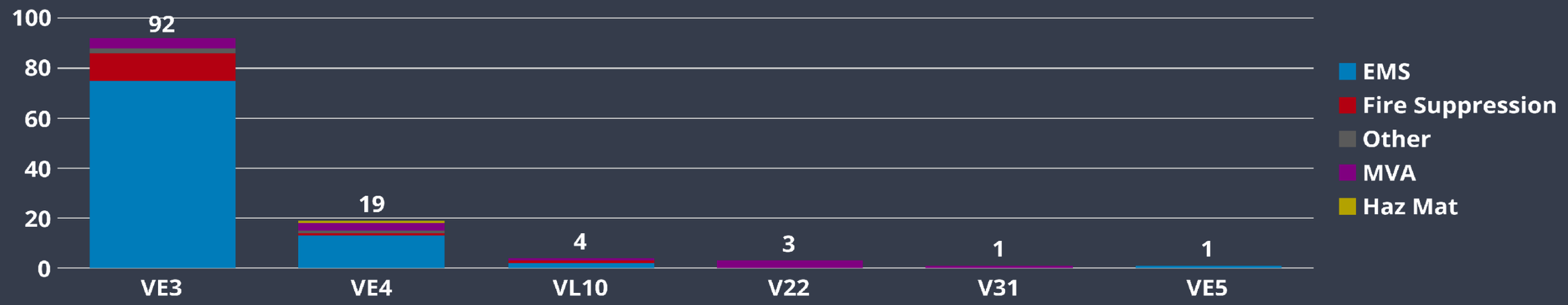
Response Summary

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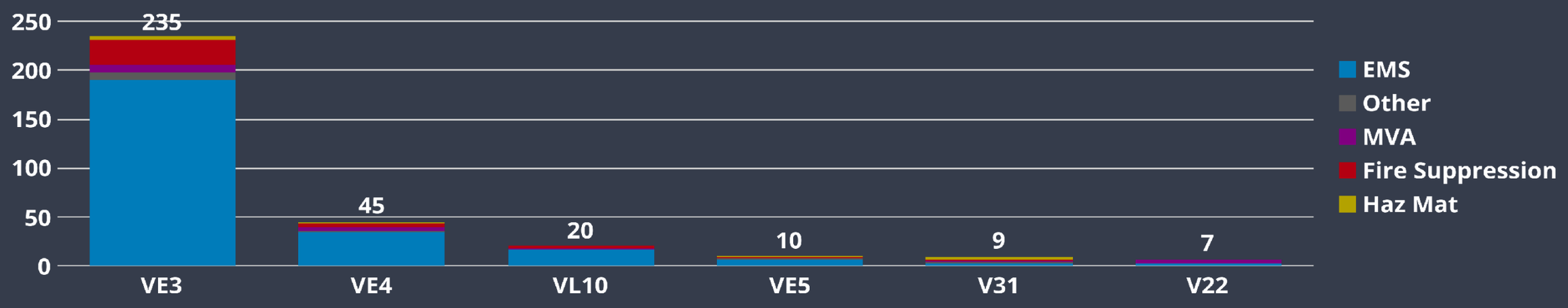
Total Responses - This Year

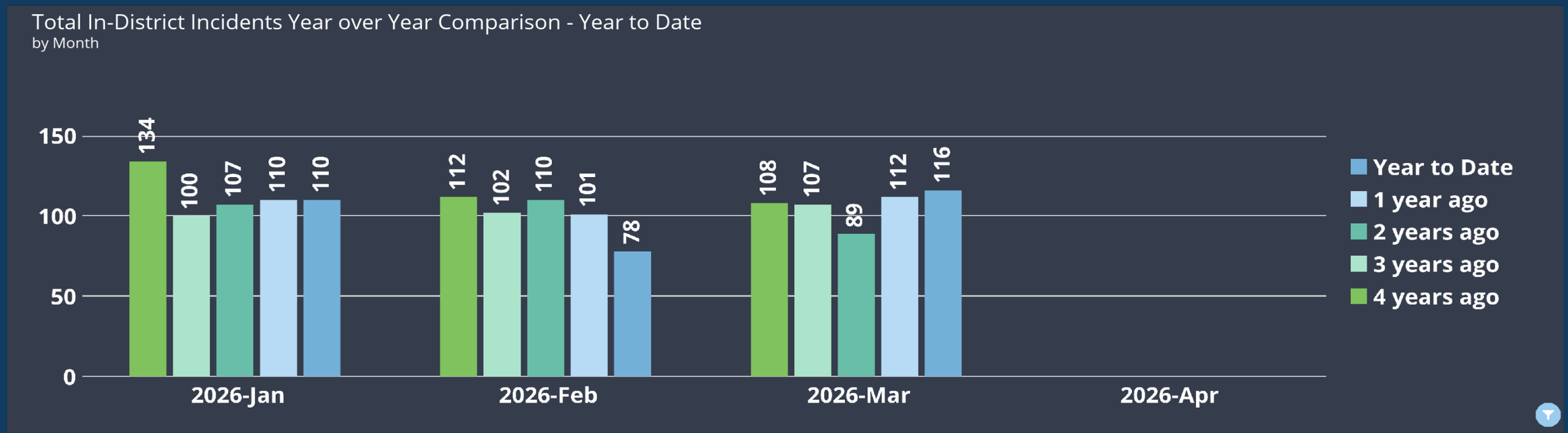
326

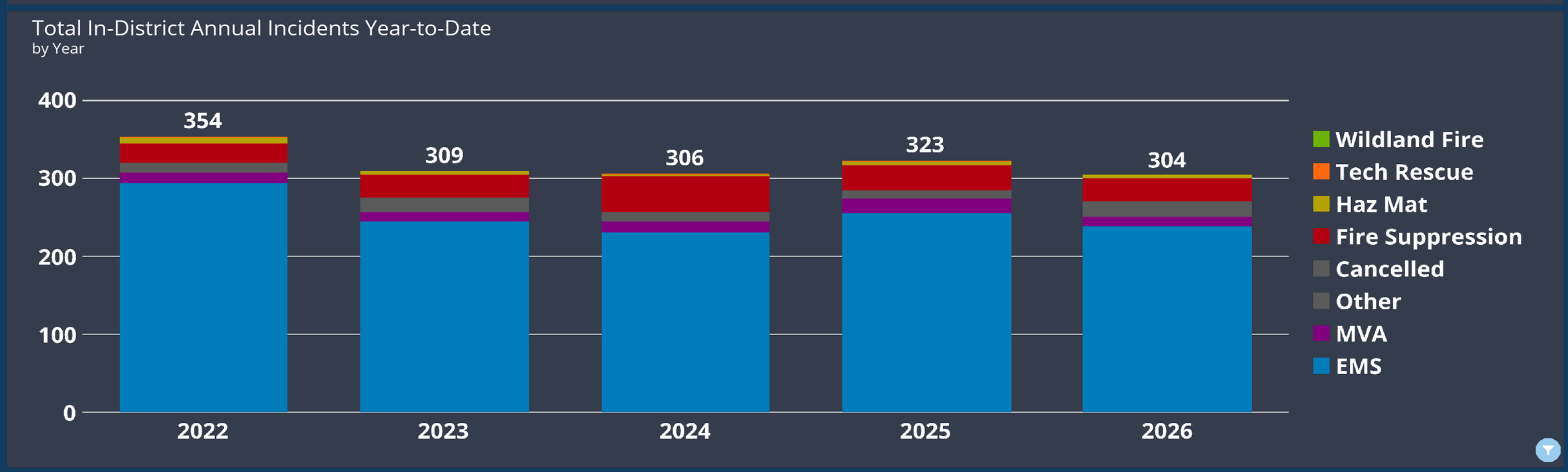
Total Responses by Frontline Apparatus - Last Month



Total Responses by Frontline Apparatus - This Year







Busiest March on Record
Liberty Lake is 6% below last year’s call volume

AGENDA ITEM NO.: 10.A.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Capital Investment Workshop

Dept of Origin: Finance/Admin Services **Dept. Head Approval:** Kyle Dixon

Exhibit(s):
None

Expenditure Required	No
Budgeted	N/A
City Program	Budget Development and Management; Capital Project Delivery

Summary Statement

On the heels of our first look at the 20-year capital facilities plan, finance will present strategies to fund infrastructure improvements identified in the plan.

Recommended Action

Workshop discussion

AGENDA ITEM NO.: 10.B.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Spokane County Hazard Mitigation Risk Plan

Dept of Origin: Executive **Dept. Head Approval:** Mark McAvoy

Exhibit(s):
SpokaneCountyHMPVol1_Draft, SpokaneCountyHMPVol2_Draft

Expenditure Required	No
Budgeted	N/a
City Program	Emergency Management

Summary Statement

The City Council will convene a workshop to review and discuss the draft Spokane County Hazard Mitigation Plan (HMP), which includes Volume 1 (countywide elements) and Volume 2 (jurisdiction-specific annexes). The workshop will be focused on policy discovery, technical understanding, and Council dialogue regarding the plan's content, assumptions, and priorities.

The Hazard Mitigation Plan is a federally required document under the Disaster Mitigation Act of 2000 and serves as the foundation for continued eligibility for FEMA hazard mitigation grant funding. The plan establishes a comprehensive, multi-jurisdictional framework to identify natural hazards, assess risks and vulnerabilities, and prioritize mitigation strategies aimed at reducing long-term impacts to life, property, infrastructure, and the local economy.

Volume 1 presents countywide information, including the planning process, hazard risk assessment, mitigation goals, and implementation strategy. It evaluates hazards such as wildfire, severe weather, flooding, earthquakes, and drought, and incorporates updated data, mapping, and methodologies consistent with current federal guidance. The draft also reflects expanded planning partnerships, enhanced risk assessment tools, and integration with related efforts such as the Community Wildfire Protection Plan.

Volume 2 provides jurisdiction-specific annexes for participating agencies, including the City of Liberty Lake, detailing localized risk profiles, capabilities, and proposed mitigation actions tailored to community conditions and priorities. Chapter 5 contains specific hazard mitigation planning elements specific to the City of Liberty Lake.

Recommended Action

No action recommended.

Spokane County

Hazard Mitigation Plan
Volume 1: County-Wide Elements

February 2026

Draft Version

BRIDGEVIEW CONSULTING

Spokane County
HAZARD MITIGATION PLAN
VOLUME 1: PLANNING-AREA-WIDE ELEMENTS

FEBRUARY 2026

DRAFT VERSION

Prepared for:
Spokane County Emergency Management
1121 W. Gardner
Spokane, WA 99201

Prepared by:

Bridgeview Consulting, LLC
1708 155th Street Northwest
Gig Harbor, Washington 98332
253.380.5736

Spokane County
Hazard Mitigation Plan;
Volume 1—Planning-Area-Wide Elements

TABLE OF CONTENTS

Executive Summary **ES-1**

Chapter 1. Introduction **1-1**

1.1 Authority 1-1

1.1.1 Local Concerns Associated with Growth 1-1

1.1.2 Purposes for Hazard Mitigation Planning 1-2

1.2 Plan Layout 1-3

1.3 Plan Integration 1-4

1.4 Plan Adoption 1-5

Chapter 2. Planning Process **2-1**

2.1 Plan Development 2-1

2.2 Changes in Development 2-2

2.3 Process Followed 2-3

2.4 Grant Funding 2-3

2.5 Formation of the Planning Team 2-3

2.6 Planning Partnership 2-4

2.7 Defining the Planning Area 2-7

2.8 Coordination with Other Agencies 2-7

2.9 Review of Existing reports, studies and Programs 2-9

2.9.1 Related Hazard Planning Documents 2-10

2.10 Public Involvement 2-11

2.10.1 Strategy 2-11

2.10.2 Hazard Survey 2-13

2.10.3 Survey Results 2-14

2.10.4 Internet 2-17

2.10.5 Social Media 2-18

2.10.6 Public Meetings 2-18

2.11 Plan Development - Chronology/Milestones 2-20

Chapter 3. Spokane County Profile **3-1**

3.1 Jurisdictions and Attractions 3-1

3.2 Historical Overview 3-4

3.3 Major Past Hazard Events 3-6

3.4 Physical Setting 3-11

3.4.1 Geology 3-12

3.4.2 Hydrology 3-15

3.4.3 Climate 3-16
3.5 Demographics 3-16
3.5.1 Population Characteristics 3-17
3.5.2 Income 3-20
3.5.3 Age Distribution 3-21
3.5.4 Language 3-22
3.5.5 Disabled Populations 3-22
3.6 Economy 3-23
3.6.1 Employment Trends 3-23
3.7 Land Use development 3-24
3.8 Housing Stock 3-30
3.8.1 Building Stock Age 3-31
3.9 Critical Facilities and Infrastructure 3-32
3.10 Future Trends in Development 3-38
Chapter 4. Risk Assessment Methodology 4-1
4.1 Overview 4-1
4.2 Methodology 4-1
4.2.1 Hazard Identification 4-2
4.2.2 Hazard Profiles 4-3
4.2.3 Risk Assessment Process 4-4
4.2.4 Hazus and GIS Applications 4-5
4.2.5 Calculated Priority Risk Index Scoring Criteria 4-8
4.3 Probability of Occurrence and Return Intervals 4-12
4.4 Community Variations to the Risk Assessment 4-13
4.5 Limitations 4-13
Chapter 5. Drought 5-1
5.1 General Background 5-1
5.2 Hazard Profile 5-2
5.2.1 Extent and Location 5-2
5.2.2 Previous Occurrence 5-4
5.2.3 Frequency 5-6
5.2.4 Severity 5-6
5.2.5 Warning Time 5-8
5.3 Secondary Hazards 5-8
5.4 Vulnerability 5-9
5.4.1 Overview 5-9
5.4.2 Impact on Life, Health, and Safety 5-9
5.4.2 Impact on Property 5-9
5.4.3 Impact on Critical Facilities 5-10
5.4.4 Impact on Economy 5-10
5.4.5 Impact on Environment 5-11

5.4.6 Impact from Climate Change 5-11
5.5 Future Trends in Development 5-12
5.6 Issues 5-12
5.7 Results 5-13
Chapter 6. Earthquake 6-1
6.1 General Background 6-1
6.1.1 How Earthquakes Happen 6-1
6.1.2 Earthquake Classifications 6-2
6.1.3 Ground Motion 6-4
6.1.4 Effect of Soil Types 6-5
6.2 Hazard Profile 6-7
6.2.1 Extent and Location 6-7
6.2.1 Previous Occurrence 6-16
6.2.2 Frequency 6-18
6.2.3 Severity 6-19
6.2.4 Warning Time 6-21
6.3 Secondary Hazards 6-21
6.4 Vulnerability Assessment 6-22
6.4.1 Overview 6-22
6.4.2 Impact on Life, Health and Safety 6-22
6.4.3 Impact on Property 6-23
6.4.4 Impact on Critical Facilities and Infrastructure 6-27
6.4.5 Impact on Economy 6-28
6.4.6 Impact on Environment 6-30
6.4.7 Impact from Climate Change 6-30
6.5 Future Trends in Development 6-31
6.6 Issues 6-31
6.7 Results 6-32
Chapter 7. Flood and Dam Failure 7-1
7.1 General Background 7-1
7.1.1 Flood 7-1
7.1.2 Flooding Types 7-2
7.1.3 National Flood Insurance Program 7-4
7.1.4 NFIP Program Overview 7-5
7.1.5 High Hazard Dams 7-9
7.1.6 Dam Hazard Classifications 7-12
7.2 Hazard Profile 7-15
7.2.1 Extent and Location - Flood 7-15
7.2.2 Previous Occurrence 7-17
7.2.3 Frequency 7-19
7.2.4 Severity 7-19

7.2.5 Warning Time 7-19
7.3 Secondary Hazards 7-24
7.3.1 Extent and Location – Dam Failure 7-24
7.3.2 Previous Occurrence 7-31
7.3.3 Frequency 7-31
7.3.4 Severity 7-31
7.3.5 Warning Time 7-31
7.4 Vulnerability Assessment 7-32
7.4.1 Overview 7-32
7.4.2 Impact on Life, Health, and Safety 7-33
7.4.3 Impact on Property 7-35
7.4.4 Impact on Critical Facilities and Infrastructure 7-38
7.4.5 Impact to the Economy 7-40
7.4.6 Impact on the Environment 7-40
7.4.7 Impact From Climate Change 7-41
7.5 Future Development Trends 7-42
7.6 Issues 7-42
7.7 Results 7-44
Chapter 8. Landslide 8-1
8.1 General Background 8-1
8.2 Hazard Profile 8-1
8.2.1 Extent and Location 8-3
8.2.2 Previous Occurrence 8-4
8.2.3 Frequency 8-4
8.2.4 Severity 8-5
8.2.5 Warning Time 8-8
8.3 Secondary Hazards 8-8
8.4 Vulnerability Assessment 8-9
8.4.1 Overview 8-9
8.4.2 Impact on Life, Health, and Safety 8-9
8.4.3 Impact on Property 8-10
8.4.4 Impact on Critical Facilities and Infrastructure 8-13
8.4.5 Impact on Economy 8-14
8.4.6 Impact on Environment 8-15
8.4.7 Impacts From Climate Change 8-15
8.5 Future Development Trends 8-15
8.6 Issues 8-16
8.7 Results 8-16
Chapter 9. Severe Weather 9-1
9.1 General Background 9-1
9.1.1 Damaging Winds 9-1

9.1.2 Tornado 9-2
9.1.3 Blizzards and Snowstorms 9-4
9.1.4 Ice Storms 9-5
9.1.5 Dust Storms 9-6
9.1.6 Thunderstorms 9-6
9.2 Hazard Profile 9-8
9.2.1 Extent and Location 9-8
9.2.2 Previous Occurrence 9-9
9.2.3 Frequency 9-15
9.2.4 Severity 9-16
9.2.5 Warning Time 9-17
9.3 Secondary Hazards 9-18
9.4 Vulnerability Assessment 9-18
9.4.1 Impact on Life, Health, and Safety 9-18
9.4.2 Impact on Property 9-19
9.4.3 Impact on Critical Facilities and Infrastructure 9-19
9.4.4 Impact on Economy 9-20
9.4.5 Impact on Environment 9-21
9.4.6 Impacts from Climate Change 9-21
9.5 Future Trends in Development 9-21
9.6 Scenario 9-21
9.7 Issues 9-22
9.8 Results 9-22
Chapter 10. Wildfire 10-1
10.1 Introduction 10-1
10.1.1 Purpose 10-3
10.1.2 History 10-4
10.1.3 Scope 10-5
10.1.4 Fire Management Planning Philosophy 10-5
10.1.5 CWPP Goals 10-6
10.1.6 Limitations and Restrictions 10-7
10.2 General Background 10-7
10.2.1 Wildland-Urban Interface Areas 10-7
10.2.2 Identifying Wildfire Risk 10-11
10.2.3 Wildfire Behavior 10-14
10.2.4 Wildfire Impact 10-17
10.2.5 Air Quality 10-19
10.3 Secondary Hazards 10-19
10.4 Hazard Profile 10-19
10.4.1 Extent and Location 10-19
10.4.2 Previous Occurrence 10-22

10.4.3 Frequency 10-27
10.4.4 Severity 10-40
10.4.5 Warning Time 10-44
10.5 Vulnerability Assessment 10-45
10.5.1 Overview 10-45
10.5.2 Strategic Planning Areas in Spokane County 10-46
10.5.3 Impact on Life, Health, and Safety 10-49
10.5.4 Impact on Property 10-50
10.5.5 Impact on Critical Facilities and Infrastructure 10-51
10.5.6 Impact on Economy 10-55
10.5.7 Impact on Environment 10-55
10.5.8 Impacts From Climate Change 10-56
10.6 Future Trends in Development 10-57
10.7 Issues and Gaps 10-57
10.8 Results 10-60
10.9 Mitigation Strategies - Increasing the Resilience of Landscapes 10-61
10.9.1 Additional Completed Mitigation Strategies 10-64
10.9.2 Capabilities 10-65
Chapter 11. Hazard Ranking 11-1
11.1 Calculated Priority Risk Index 11-1
11.2 Risk Ranking 11-3
Chapter 12. Mitigation Strategy 12-1
12.1 Hazard Mitigation Goals and Objectives 12-1
12.1.1 Guiding Principle, Goals and Objectives 12-1
12.2 Hazard Mitigation Initiatives 12-3
12.3 2026 Mitigation Initiatives And Status Update of 2020 Initiatives 12-3
12.4 Analysis of Mitigation Initiatives 12-5
12.5 Analysis of Mitigation Initiatives 12-20
12.6 Benefit/Cost Review 12-22
12.7 Prioritization of Initiatives 12-23
12.8 Funding Opportunities 12-25
Chapter 13. Capability Assessment 13-1
13.1 Laws and Ordinances 13-1
13.1.1 Federal 13-1
13.1.2 State-Level Planning Initiatives 13-2
13.1.3 Local Programs 13-6
13.2 Mitigation-Related Regulatory Authority 13-7
13.3 Washington State Rating Bureau Levels of Service 13-14
13.3.1 Public Protection Classification Program 13-14
13.3.2 Building Code Effectiveness Grading Schedule 13-16
13.3.3 Public Safety Programs 13-17

Chapter 14. Plan Maintenance 14-1
14.1.1 Plan Implementation and Maintenance 14-1
14.1.2 Annual Review 14-2
14.1.3 2025 Plan Maintenance Status Report of Annual Reviews 14-3
14.1.4 Future Plan Updates 14-4
14.1.5 Implementation through Existing Programs 14-4
14.1.6 Continued Public Involvement 14-5
References R-1
Appendices
A. Acronyms and Definitions
B. Annual Progress Report Template
C. Adoption Resolutions from Planning Partners

LIST OF TABLES

No. Title *Page No.*

Table 2-1. Hazard Mitigation Planning Partners and Level of Participation 2-5
Table 2-2. Hazard Mitigation Stakeholders and Areas of Participation 2-7
Table 2-3. Plan Development Milestones 2-21
Table 3-1. Disaster Declarations in Spokane County 1964-2024 3-8
Table 3-2 Disaster History by Month, Recurrence, and Probability of Occurrence 3-11
Table 3-3. Monthly Average Spokane River Flow at Long Lake Dam 3-15
Table 3-4. Spokane County Population by Jurisdiction 3-19
Table 3-5. Spokane County Population by Jurisdiction 3-20
Table 3-6. Disability By Age Group 3-23
Table 3-7. Existing Unincorporated Area Zoning By Acreage 3-27
Table 3-8. Spokane County Housing Units 3-30
Table 3-9. Spokane County Year Built Residential Structures* 3-31
Table 3-10. Spokane County Critical Facilities 3-35
Table 3-11. Spokane County Critical Infrastructure 3-35
Table 6-1. Earthquake Magnitude Classes 6-3
Table 6-2. Earthquake Magnitude and Intensity 6-4
Table 6-3. Mercalli Scale and Peak Ground Acceleration Comparison 6-5
Table 6-4. NEHRP Soil Classification System 6-6
Table 6-5. Acres of NEHRP Soils within Spokane County 6-6
Table 6-6. Earthquake Events M2 and Greater 2020-2025 6-16
Table 6-7. Estimated Earthquake Impact on Person and Households 6-23
Table 6-8. Age of Structures in Spokane County 6-25
Table 6-9. Earthquake Building Loss Potential—Probabilistic 6-26
Table 6-10. Estimated Earthquake-Caused Debris 6-27
Table 6-11. – Critical Facility Vulnerability and Functionality for Latah Creek Event 6-28
Table 7-1. NFIP Status of Spokane County and Incorporated Municipalities 7-6
Table 7-2. Flood Insurance Statistics for Spokane County 2017-2019 7-7
Table 7-3. Flood Insurance Statistics for Spokane County 2019-2025 7-7
Table 7-4. Repetitive and Severe Repetitive Loss Properties in Spokane County 7-9
Table 7-5 U.S. Army Corps of Engineers (USACE) Hazard Potential Classification 7-13
Table 7-6. Spokane County Flood Events 1964-2024 7-17
Table 7-7. Summary of Peak Discharges within Spokane County 7-22
Table 7-8. High or Significant Hazard Dams in Spokane County (Class 1 or 2) 7-25
Table 7-9. Residential Structures Within the 100-Year Floodplain 7-34
Table 7-10. Residential Structures Within the 500-Year Floodplain 7-34
Table 7-11. Area and Structures Within the 100-Year Floodplain 7-35
Table 7-12. Area and Structures Within the 500-Year Floodplain 7-36
Table 7-13. Value of Exposed Buildings Within the 100-Year Floodplain 7-36

Table 7-14. Value of Exposed Buildings Within the 500-Year Floodplain 7-37
Table 7-15. Critical Facilities in the 100-Year Floodplain 7-38
Table 7-16. Critical Infrastructure in the 100-Year Floodplain 7-39
Table 8-1. Populations and Residential Structure Impact in Landslide Risk Area* 8-9
Table 8-2. Percent of Land Area in Landslide Risk Area 8-11
Table 8-3. Spokane County Structures in Landslide Hazard Compilation Areas* 8-11
Table 8-4. Spokane County Structures in 15-30 Percent Slope* 8-12
Table 8-5. Spokane County Structures On Greater Than 30 Percent Slope* 8-13
Table 8-6. Critical Facilities Exposed to Landslide Hazards 8-14
Table 9-1. Severe Weather Events Impacting Planning Area Since 1993 9-9
Table 10-1. Summary of Ignitions Starts in Spokane County 2020-2024 10-23
Table 10-2. Summary of Acres Burned in Spokane County 2020-2024 10-24
Table 10-3. Summary of Ignitions in Spokane County 2008-2019 10-24
Table 10-4. LandFire Historic Fire Regimes 10-32
Table 10-5. LandFire - Fire Regime Group (FRG) 10-34
Table 10-6. Critical Facilities Exposed to Wildland Zones 10-53
Table 11-1. 2020 Spokane County Calculated Priority Risk Index Ranking Scores 11-1
Table 11-2. 2026 County Calculated Priority Risk Index Ranking Scores 11-2
Table 11-3. 2020 Countywide Calculated Priority Risk Index Score by Planning Partner 11-2
Table 11-4. 2026 Countywide Calculated Priority Risk Index Score by Planning Partner 11-3
Table 11-5. 2026 Countywide Hazard Ranking 11-4
Table 11-6. Countywide Risk Rating Summary 11-5
Table 12-3. Prioritization of Countywide Mitigation Initiatives 12-23
Table 12-5. Grant Opportunities 12-26
Table 12-6. Countywide Fiscal Capabilities which Support Mitigation Efforts 12-26
Table 13-1. Spokane County Legal and Regulatory Capability 13-8
Table 13-2. Administrative and Technical Capability 13-11
Table 13-3. Education and Outreach 13-13
Table 13-4. Countywide Public Protection Classification 13-15
Table 13-5. Countywide Building Code Effectiveness Grading 13-16

LIST OF FIGURES

No. Title *Page No.*

Figure 2-1 Survey Announcement 2-13
Figure 2-2 CWPP Survey 2-14
Figure 2-4 Spokane County HMP Survey Link 2-14
Figure 2-5 Spokane County HMP Website 2-17
Figure 2-6 Public Outreach Announcement 2-19
Figure 2-7 Countywide Presentation of Risk 2-19
Figure 3-1. Main Features of Spokane County 3-3
Figure 3-2 FEMA Disaster Incident by Type (2025) 3-10
Figure 3-3 Disaster Incidents by Month (2025) 3-10
Figure 3-4 WA OFM Population Density by County (2024) 3-18
Figure 3-5 Employment by Industry (2023) 3-23
Figure 3-6. Spokane County Land Distribution 3-28
Figure 3-7 Land Ownership 3-29
Figure 3-8. Spokane County Critical Facilities and Infrastructure 3-34
Figure 4-1. Calculated Priority Risk Index (CPRI) 4-9
Figure 5-1 Palmer Drought Severity Index (March 2025) 5-3
Figure 6-1. Earthquake Types in the Pacific Northwest 6-2
Figure 6-2. Peak Ground Acceleration; 100-Year Probability Event 6-10
Figure 6-3. Peak Ground Acceleration; 500-Year Probability Event 6-11
Figure 6-4. Peak Ground Acceleration Based on Latah Fault M6.8 Scenario (USGS) 6-12
Figure 6-5 Latah Fault M6.8 Earthquake Scenario Shaking 6-13
Figure 6-6. National Earthquake Hazard Reduction Program Soil Site Classes 6-14
Figure 6-7 Liquefaction Susceptibility 6-15
Figure 6-8 Recent Earthquakes Near Spokane (as of July 2, 2025) 6-16
Figure 6-9. Peak Acceleration (%g) with 10% Probability of Exceedance in 50 years 6-20
Figure 6-10. PGA with 2-Percent Probability of Exceedance in 50 Years, Northwest Region ... 6-20
Figure 6-11 Washington State URM Dashboard (2025) 6-24
Figure 6-12. Latah Creek Scenario Damage Categories by General Occupancy Type (2025) ... 6-26
Figure 6-13. Hazus Estimated Dollar Losses/Occupancy Type Latah Creek Scenario (2025) 6-29
Figure 6-14. Hazus Estimate of Percent of Losses/Type Latah Creek Scenario (2025) 6-30
Figure 7-1 Spokane County Dams with Classifications 7-14
Figure 7-2. FEMA Flood Hazard Areas 7-21
Figure 7-3. Spokane River Hydrograph at Spokane (USGS Station 12424000) 7-22
Figure 7-5 Ponderosa Dam Flow Path 7-27
Figure 7-6 Albeni Falls Dam looking upstream 7-28
Figure 7-7 Albeni Falls Inundation Map 7-30
Figure 8-1. Deep Seated Slide 8-2
Figure 8-2. Shallow Colluvial Slide 8-2

Figure 8-3. Bench Slide 8-2
Figure 8-4. Large Slide 8-2
Figure 8-5 Steep Slope 8-6
Figure 8-6. Historic Landslide Locations (WA DNR) 8-7
Figure 9-1. Fujita Scale 9-3
Figure 9-2 Potential Impact and Damage from a Tornado 9-3
Figure 9-3. Tornado Risk Areas in the United States (NRI, 2025) 9-4
Figure 9-4. Wind Zone Map of U.S. ..... **Error! Bookmark not defined.**
Figure 9-5. The Thunderstorm Life Cycle 9-7
Figure 9-6 Tornado Occurrences Nationwide by Month (2004-2023) 9-17
Figure 9-7. National Weather Service Weather Fatalities 2024 9-18
Figure 10-1 USFS Wildland Urban Interface Area for Spokane County (2023) 10-9
Figure 10-2 WUI Area Defined by WA DNR Data (2019) 10-10
Figure 10-3 US EPA Change in Burned Acreage by State 10-11
Figure 10-4 Land Ownership and Fuel Reduction Areas 10-13
Figure 10-5 Wildfire Behavior Triangle 10-14
Figure 10-6. Wildland Urban Interface and Level of Risk (USFS, 2024) 10-18
Figure 10-7 USFS Wildfire Risk to Homes (2024) 10-21
Figure 10-8 National Weather Service Red Flag Warning June. 2024 10-22
Figure 10-9 Historic Wildfire Locations 2005-2024 10-25
Figure 10-10 Gray Fire (2023) 10-26
Figure 10-11 Oregon Road Fire (2023) 10-26
Figure 10-12 Wildfire Likelihood 10-29
Figure 10-13 Direct or Indirect Exposure 10-30
Figure 10-14 Building Exposure Zones 10-31
Figure 10-15 Historic Fire Regime Groups (LandFire, 2025) 10-33
Figure 10-16 LandFire Mean Fire Return Interval 10-35
Figure 10-17 Vegetation Condition Class (Vegetation Departure) (2023) 10-38
Figure 10-18 Fuel Disturbance (2024) 10-39
Figure 10-19 Level 1 Evacuation Orders - Oregon Road Fire (2023) 10-43
Figure 10-20 Spokane County Deputy's Body Camera Footage (2023 Wildfires) 10-44
Figure 10-21 Wildfire Factors 10-45
Figure 10-22 Strategic Planning Areas 10-48
Figure 10-23 WDFW Hatchery and Rearing Facilities Statewide (2025) 10-50
Figure 10-24 Wildfire Risk to Communities Structure Exposure 10-52
Figure 10-25 Measures to Protect Homes from Wildfire 10-64
Figure 10-26 Wildfire Risk to Communities - Risk Reduction Zones 10-69

ACKNOWLEDGMENTS

County Hazard Mitigation Planning Team

Mark Conrad, Project Manager
Spokane County Emergency Management
1121 W. Gardner
Spokane, WA, 99201
Phone: (509) 477-3008
Cell: (509) 598-1486
Email: mconard@spokanecounty.org

Deputy Director Chandra Fox
Spokane County Emergency Management
1121 W. Gardner
Spokane, WA, 99201
Phone: (509) 477-7606
Cell: (509) 638-4627
Email: cefox@spokanecounty.org

Consultant

Beverly O'Dea, Project Manager
Bridgeview Consulting, LLC
1708 155th Street Northwest
Gig Harbor, WA 98332
(253) 380-5736
Email: bevodea@bridgeviewconsulting.org

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EXECUTIVE SUMMARY

The Disaster Mitigation Act (DMA) is federal legislation that requires proactive pre-disaster planning as a prerequisite for some funding available under the Robert T. Stafford Act. The DMA encourages state and local authorities to work together on pre-disaster planning. The enhanced planning network required by the DMA helps local governments articulate accurate needs for mitigation, resulting in faster allocation of funding and more cost-effective risk reduction projects.

Hazard mitigation is the use of long- and short-term strategies to reduce or alleviate the loss of life, personal injury, and property damage that can result from a disaster. It involves strategies such as planning, policy changes, programs, projects and other activities that can mitigate the impacts of hazards. It is impossible to predict exactly when and where disasters will occur or the extent to which they will impact an area, but with careful planning and collaboration among public agencies, stakeholders and citizens, it is possible to minimize losses that disasters can cause. The responsibility for hazard mitigation lies with many, including private property owners; business and industry; and local, state and federal government.

Spokane County and a partnership of local governments have developed and maintained a hazard mitigation plan to reduce risks from natural disasters and to comply with the DMA. This plan will, and has, acted as the keyway to federal funding afforded under FEMA hazard mitigation grant programs.

PLAN UPDATE – WHAT'S NEW – WHAT'S DIFFERENT

Federal regulations require monitoring, evaluation and updating of hazard mitigation plans. An update provides an opportunity to reevaluate recommendations, monitor the impacts of actions that have been accomplished, and determine if there is a need to change the focus of mitigation strategies. A jurisdiction covered by a plan that has expired is no longer in compliance with the DMA.

Initial Response to the DMA in Spokane County

On May 2, 2007, FEMA Region X approved the County's first multi-jurisdiction hazard mitigation plan for Spokane County and the cities of Spokane and Spokane Valley.

Recognizing limitations in the initial plan, the Spokane Department of Emergency Management (DEM) used the plan update requirements to significantly enhance the Spokane County Hazard Mitigation Plan in scope and content with development of the 2015 Multi-Jurisdiction Hazard Mitigation Plan, which greatly increased the planning partnership. In continuation of that effort, the County again moved forward with the 2020 update, inviting additional planning partners while also updating the scope and content of the new edition. This 2025 update incorporates the April 2023 guidance requirements established by FEMA, while also enhancing the risk assessment

to again expand the wildfire chapter to capture the requirements of Community Wildfire Protection Plan (CWPP). As of this writing, the current Presidential administration is reviewing the Hazard Mitigation Guidelines, with anticipated changes to that guidance to occur. Those changes, as applicable, will be addressed during future plan updates.

2025 Hazard Mitigation Plan Update - Changes

With development of the 2025 update, the County is again taking the initiative to increase the planning partnership to invite additional partners, as well as further expanding the data contained within the plan.

The 2025 updated plan differs from previous plan editions for the following reasons:

- Updated guidance on what is required to meet the intent of 44 CFR 201.6 (both 2023 and 2025 requirements).
- New data and tools provide for an enhanced risk assessment.
- Inclusion of new studies and reports completed since the 2020 plan, which will be integrated to the various hazards of concern as appropriate.
- All maps, charts, and census data information have been updated as appropriate. Pursuant to WAC 365-190-080, it is noted that all maps showing critical areas or areas of impact are for informational or illustrative purposes only and should not be used for any purpose other than planning. No life safety measures or land use planning should be based on the information illustrated in this plan.
- The risk assessment has again been prepared to better support future grant applications by providing risk and vulnerability information that will directly support the measurement of "cost-effectiveness" required under FEMA mitigation grant programs.
- The plan identifies mitigation action items which meet multiple objectives that are measurable, so that each planning partner can measure the effectiveness of their mitigation actions. Previous action items have been updated to their current status, and new action items have been developed for this update process.
- The hazards of concern were modified, with the Planning Team electing to no longer profile the Volcano hazard due to its limited impact. The County is not within the Lahar Zone, and previous ash impact was limited.
- At the onset of the project, the County received notification from FEMA that new flood insurance maps were under development through the Risk Map program. As such, it was determined that the Flood profile would not be updated in its entirety until such time as the new maps are completed. At that point in time, the County may elect to update the flood profile to incorporate the new impact data. Loss results

were updated to incorporate the identified critical facilities, as well as utilization of the 2025 Assessor's data to identify structure and population impact.

- Within the flood profile, the inclusion of additional dam data was incorporated, including identification of high hazard dams and dams known to be of risk in the County from dams in surrounding municipalities.
- The Planning Team Members felt it was appropriate to remove the Volcano hazard for this 2026 update, as the County is not within a Lahar zone, and previous impact was very limited based on the planning partners' recollection of the event. All of the remaining hazards previously identified in the 2020 HMP will be carried forward and updated as appropriate and as new data exists.

Updating the plan consisted of the following phases:

- **Phase 1, Organize and Review**—A planning workgroup was assembled to provide technical support for the plan update, consisting of key staff from Spokane County Emergency Management and a technical consultant. The first step in developing the plan update was to re-organize the planning partnership. The initial 2010 planning effort included 3 local governments. That partnership was increased in 2020. With the 2025 update, some of the municipal planning partners did not participate, as they were developing stand-alone plans, or had developed independent programs. All planning partners participating in this update are identified in Chapter 2.

  The first order of business was to develop a Planning Team to lead the plan update. That team consisted of both planning partners developing an annex to the HMP, as well as other stakeholders in the planning area. Coordination with other county, state and federal agencies involved in hazard mitigation occurred throughout the plan update process. This phase included a comprehensive review of the existing plan, the Washington State 2023 Enhanced Hazard Mitigation Plan, and existing programs that may support or enhance hazard mitigation actions.

- **Phase 2, Update the Risk Assessment**— Risk assessment is the process of measuring the potential loss of life, personal injury, economic impact, and property damage resulting from natural hazards. This process assesses the vulnerability of people, structures, and infrastructure from the natural hazards. Risk-informed, it focuses on:
  - Hazard identification and profiling to determine historic events, as well as the probability of the future occurrences;
  - Vulnerability identification, which includes impact on physical, social, and economic assets; and
  - Cost estimates of the potential damage or losses, many of which can be avoided through mitigation efforts.

The risk assessment for this hazard mitigation plan meets requirements outlined in Chapter 44 of the Code of Federal Regulations (44 CFR 201.6). Phase 2 was the most comprehensive phase of the plan update process. All facets of the risk assessment of the plan were visited by the Planning Team and updated with the best available data and technology.

- **Phase 3, Engage the Public**—A public involvement strategy developed by the Planning Team was implemented, and included public meetings to present the risk assessment as well as the draft plan, distribution of a hazard mitigation survey, a County-sponsored website for the plan update, in addition to multiple media releases.
- **Phase 4, Assemble the Updated Plan**—The Planning Team assembled key information into a document to meet the DMA requirements for all planning partners. The updated plan contains two volumes. Volume 1 contains components that apply to all partners and the broader planning area, serving as the County's plan. Volume 2 contains all components that are jurisdiction specific. Each planning partner has a dedicated chapter in Volume 2.
- **Phase 5, Plan Adoption/Implementation**—Once pre-adoption approval was granted by Washington State Emergency Management Division and FEMA Region X, the final adoption phase began. Each planning partner individually adopted the updated plan. The plan maintenance process includes a schedule for monitoring and evaluating the plan's progress periodically and producing a plan revision every 5 years. This plan maintenance strategy also includes process for continuing public involvement and integration with other programs that can support or enhance hazard mitigation.

IMPLEMENTATION

Full implementation of the recommendations of this plan will require time and resources. The measure of the plan's success will be its ability to adapt to the changing climate as well as the field of hazard mitigation. Funding resources are always evolving, as are state and federal mandates. Spokane County and its planning partners will assume responsibility for adopting the recommendations of this plan and committing resources toward implementation. The framework established by this plan and the incorporated Community Wildfire Protection Plan (CWPP) commits all planning partners to pursue initiatives when the benefits of a project exceed its costs. The planning partnership developed this plan with extensive public input, and public support of the actions identified in this plan will help ensure the plan's success, while also enhancing the resilience of the County and its citizens.

CHAPTER 1.
INTRODUCTION

Hazard mitigation is defined as the use of long- and short-term strategies to reduce or alleviate the loss of life, personal injury, and property damage that can result from a disaster. It involves strategies such as planning, policy changes, programs, projects and other activities that can mitigate the impacts of hazards. The responsibility for hazard mitigation lies with many, including private property owners; business and industry; and local, state and federal government.

1.1 AUTHORITY

The federal Disaster Mitigation Act (DMA) of 2000 (Public Law 106-390) requires state and local governments to develop hazard mitigation plans as a condition for federal disaster grant assistance. Prior to 2000, federal disaster funding focused on disaster relief and recovery, with limited funding for hazard mitigation planning. The DMA increased the emphasis on planning for disasters before they occur.

The DMA encourages state and local authorities to work together on pre-disaster planning, and it promotes sustainability for disaster resistance. Sustainable hazard mitigation includes the sound management of natural resources and the recognition that hazards and mitigation must be understood in the largest possible social and economic context. The enhanced planning network required by the DMA helps local governments articulate accurate needs for mitigation, resulting in faster allocation of funding and more cost-effective risk reduction projects.

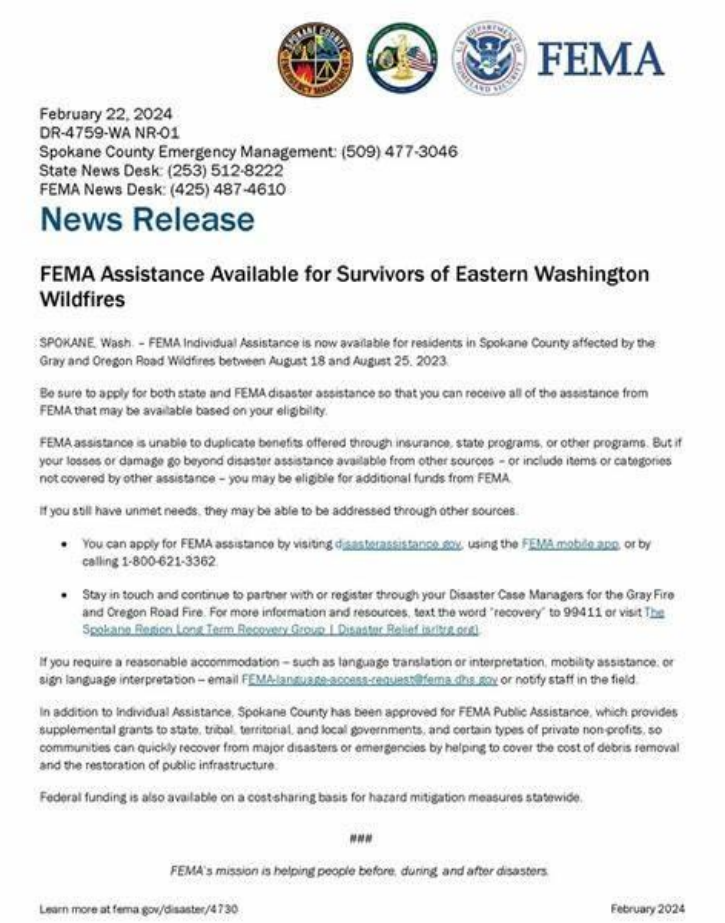
1.1.1 Local Concerns Associated with Growth

Natural hazards impact citizens, property, the environment, and the economy of Spokane County. Wildfires, flooding, landslides, windstorms, severe winter storms, and earthquakes all have exposed Spokane County residents and businesses to the financial and emotional costs of recovering after natural disasters. Other events, such as urban fire, terrorism and hazardous material spills, also pose dangers to the population of Spokane County.

The risk and vulnerability associated with natural hazards increases as more people move to areas affected by hazards not only in population count, but also in structure and infrastructure impact. With the significant growth that Spokane County has experienced since completion of

the 2020 plan in population, commercial ventures, and structures, the risk and vulnerability have increased significantly from the hazards of concern, particularly with respect to Wildfire, which has seen a significant increase in occurrences and extent.

The inevitability of natural hazards and the growing population and activity within Spokane County create an urgent need to develop strategies, coordinate resources, and increase public awareness to reduce risk and prevent loss from future hazard events. Identifying risks posed by hazards and developing strategies to reduce the impact of a hazard event can assist in protecting life and property of citizens and communities. Local residents and businesses can work together with the County to create a hazard mitigation plan that addresses the potential impacts of hazard events.



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News Release

FEMA Assistance Available for Survivors of Eastern Washington Wildfires

SPOKANE, Wash. – FEMA Individual Assistance is now available for residents in Spokane County affected by the Gray and Oregon Road Wildfires between August 18 and August 25, 2023.

Be sure to apply for both state and FEMA disaster assistance so that you can receive all of the assistance from FEMA that may be available based on your eligibility.

FEMA assistance is unable to duplicate benefits offered through insurance, state programs, or other programs. But if your losses or damage go beyond disaster assistance available from other sources – or include items or categories not covered by other assistance – you may be eligible for additional funds from FEMA.

If you still have unmet needs, they may be able to be addressed through other sources.

- You can apply for FEMA assistance by visiting disasterassistance.gov, using the FEMA mobile app, or by calling 1-800-621-3362.
- Stay in touch and continue to partner with or register through your Disaster Case Managers for the Gray Fire and Oregon Road Fire. For more information and resources, text the word "recovery" to 99411 or visit The Spokane Region Long Term Recovery Group | Disaster Relief (srltrg.org).

If you require a reasonable accommodation – such as language translation or interpretation, mobility assistance, or sign language interpretation – email FEMA-language-access-request@fema.dhs.gov or notify staff in the field.

In addition to Individual Assistance, Spokane County has been approved for FEMA Public Assistance, which provides supplemental grants to state, tribal, territorial, and local governments, and certain types of private non-profits, so communities can quickly recover from major disasters or emergencies by helping to cover the cost of debris removal and the restoration of public infrastructure.

Federal funding is also available on a cost-sharing basis for hazard mitigation measures statewide.

###

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Learn more at fema.gov/disaster/4730 February 2024

1.1.2 Purposes for Hazard Mitigation Planning

This hazard mitigation plan identifies resources, information and strategies for reducing risk from natural hazards. Elements and strategies in the plan were selected because they meet a program requirement and because they best meet the needs of the planning partners and their citizens. One of the benefits of multi-jurisdictional planning is the ability to pool resources and eliminate redundant activities within a planning area that has uniform risk exposure and vulnerabilities. The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning under its guidance for the DMA. The plan will help guide and coordinate mitigation activities throughout Spokane County. It was developed to meet the following objectives:

- Meet or exceed requirements of the DMA and Washington State Department of Natural Resources' Community Wildfire Protection Planning guidance.
- Enable all planning partners to continue using federal grant funding to reduce risk through mitigation.
- Meet the needs of each planning partner as well as state and federal requirements.

- Create a risk assessment that focuses on Spokane County hazards of concern.
- Create a single planning document that integrates all planning partners dependent on the county into a framework that supports partnerships within the county and puts all partners on the same planning cycle for future updates.
- Meet the planning requirements of FEMA's Community Rating System (CRS), allowing planning partners that wish to participate in the CRS program to maintain or enhance their CRS classifications (currently there are no CRS communities within Spokane County).[1]
- Coordinate existing plans and programs so that high-priority initiatives and projects to mitigate possible disaster impacts are funded and implemented.

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

1.2 PLAN LAYOUT

This plan has been set up in two volumes so that elements that are jurisdiction-specific can easily be distinguished from those that apply to the whole planning area:

- **Volume 1**—Volume 1 includes all federally required elements of a disaster mitigation plan that apply to the entire planning area. This includes the description of the planning process, public involvement strategy, goals and objectives, countywide hazard risk assessment, mitigation initiatives, and a plan maintenance strategy. Volume 1 constitutes Spokane County's Hazard Mitigation Plan, and the Spokane County Community Wildfire Protection Plan.
- **Volume 2**—Volume 2 includes all federally required jurisdiction-specific elements, in annexes for each participating jurisdiction. It includes a description of the participation requirements established by the Planning Team. Volume 2 also includes "linkage" procedures for eligible jurisdictions that did not participate in development of this plan but wish to adopt it in the future.

[1] FEMA CRS Community Status Book. Accessed 4 April 2025. Available online at: Community Status Book | FEMA.gov

All planning partners will adopt Volume 1 in its entirety, both the Hazard Mitigation Plan and the Community Wildfire Protection Plan, in addition to their jurisdiction-specific annex and the appendices contained in Volume 2.

The following appendices provided at the end of Volume 1 include information or explanations to support the main content of the plan:

- Appendix A — Glossary of acronyms and definitions
- Appendix B — A template for progress reports to be completed as this plan is implemented
- Appendix C — Plan Adoption Resolutions from Planning Partners remove and have county keep as a separate file with the HMP
- Appendix D – CWPP Signatures

1.3 PLAN INTEGRATION

This plan update includes the integration of other comprehensive planning documents (including studies and reports) that are in effect within the planning area. In addition to those plans, studies and reports identified in Section 2.9 of this document, these plans include, but are not limited to:

- The Spokane County Community Wildfire Protection Plan (CWPP), 2026 edition, as well as other local Wildland/Wildfire Management Plans);
- The Spokane County Threat and Hazard Identification and Risk Assessment; and
- The Comprehensive Land Use Plans for Spokane County and its incorporated cities within the County.

Spokane County previously completed a threat and hazard identification and risk assessment (THIRA) that was compliant with federal guidance. The THIRA was completed at both the County and Regional levels and included both natural and non-natural hazards of concern. Key components of the THIRA development were originally completed during the 2015 plan update process; updated in 2021, and again in 2024. These components, while not discoverable under public disclosure, serve as the County's documentation and analysis for the non-natural hazard. This linkage will continue through all subsequent updates to the Hazard Mitigation Plan (HMP). The THIRA will remain a stand-alone document for security purposes as the HMP and THIRA are two entirely different documents created for entirely different program directives.

Comprehensive Land Use Plans are mandated by Washington statute (Revised Code of Washington (RCW) 36.70A.070) adopted under its Growth Management Act. The comprehensive plan of a county or city that is required or chooses to plan under RCW 36.70A.040 shall consist of a map or maps, and descriptive text covering objectives, principles, and standards used to develop the comprehensive plan. The plan shall be an internally consistent document, and all

elements shall be consistent with the future land use map. All municipal planning partners have adopted comprehensive plans pursuant to the Growth Management Act. That plan as of this 2025 writing is currently under review and update by all municipal planning partners. Recognizing the value of the information contained in the Hazard Mitigation Plan in making wise land use decisions, each municipal planning partner has adopted action(s) that promote the integration of the Hazard Mitigation Plan, the Community Wildfire Protection Plan, and the comprehensive plans in effect within the planning area. These actions can be found in the jurisdictional annexes contained in Volume 2 of this plan.

1.4 PLAN ADOPTION

44 CFR Section 201.6(c)(5) requires documentation that a hazard mitigation plan has been formally adopted by the governing body of the jurisdiction requesting federal approval of the plan. For multi-jurisdictional plans, each jurisdiction requesting approval must document that has been formally adopted. This plan will be submitted for a pre-adoption review to the Washington State Division of Emergency Management and FEMA prior to adoption. Once pre-adoption approval has been provided, all planning partners will formally adopt the plan. All partners understand that DMA compliance and its benefits cannot be achieved until the plan is adopted. FEMA Region X previously granted final approval of the 2020 Hazard Mitigation Plan Update to Spokane County and its eligible planning partners in April 2020. Copies of the resolutions adopting the 2025 plan as well as the FEMA approval letter can be obtained via request to Spokane County Emergency Management.

CHAPTER 2.
PLANNING PROCESS

2.1 PLAN DEVELOPMENT

Spokane County's hazard planning process began in the fall of 2024 with the Department of Emergency Management, Washington State Department of Natural Resources, and several committee groups coordinating planning efforts to prepare an update to the Community Wildfire Protection Plan, which serves as the wildfire chapter of this HMP.

In January 2025, the HMP process began with the internal county Planning Team and consultant beginning to organize resources, identify planning partners, and assimilating critical facilities data from the previous plan update and the County's Assessor's data.

In March, the County and its planning partners were notified that FEMA was suspending plan review in an effort to review programmatic requirements and guidance associated with various programs under its authority under the new presidential administration. The internal Planning Team continued progress on development of the HMP and CWPP update while awaiting further information on potential revisions to the process.

During this time, an outreach effort soliciting plan participation was sent out to all planning partners that initially indicated their desire to be part of the County's Multi-Jurisdiction Hazard Mitigation Plan. This was done through a Letter of Intent to Participate, which provided a detailed description of the level of effort each planning partner could expect to incur in order to complete their annex document. Response in the form of a letter executed by the governing authority from each planning partner was requested, symbolizing their intent to participate and recognizing the level of work required in order to complete their respective annex document. The Local Emergency Planning Committee (LEPC) was utilized as a primary tool for dissemination of information to all entities and organizations countywide, including all municipal planning partners, special purpose districts, private industry, local stakeholder groups, academia, and involved citizens.

From that, in April 2025, the Hazard Mitigation Planning Team was formed, comprised of city and county departments, various special purpose districts in the county, disciplines that support emergency services, and citizens throughout the county.

The 2025 Spokane County Multi-Jurisdiction Hazard Mitigation Plan followed a similar process to that previously utilized for the 2015 and 2020 updates, with the exception that the County has elected to not pursue IAEM Accreditation of its Emergency Management Organization. As such, those references and requirements have been removed.

Prior to its initial kick-off meeting in May 2025, the Planning Team was provided with the critical infrastructure list utilized for the 2020 plan update, along with the critical facilities definition, and was asked to begin updating the list with new structures, as well as updating existing structures with values or other building attributes as available.

This data was further enhanced through review of the various annual reports (such as the County Assessor's Annual Reports for the periods covering 2020-2024), and discussions with the various planning partners. The county is developing a specific initiative for maintenance of the critical facilities list, which will ensure continuation of an up-to-date document for use in other emergency management and public safety initiatives.

2.2 CHANGES IN DEVELOPMENT

44 CFR Section 201.6(d)(3) requires that plan updates be revised to reflect changes in development that occurred within the planning area during the past performance period of the plan. The plan must describe changes in development that have occurred in hazard prone areas and increased or decreased the vulnerability of each jurisdiction since the last plan was approved. If no changes in development impacted the jurisdiction's overall vulnerability, plan updates may validate the information in the previously approved plan. The intent of this requirement is to ensure that the mitigation strategy continues to address the risk and vulnerabilities to existing and potential development and takes into consideration possible future conditions that can impact the vulnerability of the community.

The planning area previously experienced a 13.80 percent increase in population between 2000 and 2012. During the time period of 2010-2018, population increased 9.2 percent. During the period 2020 to 2024, the U.S. Census reports that Spokane County saw a 3.1 percent increase, with population countywide now estimated at 555,947. The City of Spokane (not a member of this planning process) has the highest municipal population base of 229,447 residents, seeing a .02 percent increase. The City of Spokane Valley, which is the second largest municipality in the County, saw an increase of 5.1 percent, with a population of 108,235. In order of growth, based on Washington State Office of Financial Management data, the cities that saw the highest percentage of increase in population are Deer Park (16.36 percent), Spangle (15.9 percent), and Liberty Lake (15.55 percent). Medical Lake (not a member of this planning process) saw a decrease in population of 0.80 percent, or the loss of 39 residents between 2020 and 2024. Population in Latah remained unchanged. The remaining municipalities saw a modest increase.[2]

[2] There is (slight) variation in numbers between the U.S. Census data and data from the Washington State Office of Financial Management, which data is also utilized for various purposes throughout this plan. As such, depending on the source of available information, the numbers may vary slightly.

The county and its municipalities have adopted comprehensive plans that govern land use decision and policy making in their jurisdictions as well as building codes and specialty ordinances based on state and federal mandates. Decisions on land use are governed by these programs. It has been assumed by this planning process that new development triggered by this increase in population interfaced with hazard areas assessed by this plan. All new development is regulated pursuant to the programs and initiatives discussed throughout this plan, including flood, landslide, wildfire, and load capacity for wind, snow and ash. Therefore, even though exposure has increased due to the increased population and structures, the planning partners feel they are well equipped to manage the increased vulnerability in part, due to the strength of these land use regulations and programs.

2.3 PROCESS FOLLOWED

To develop the Spokane County Hazard Mitigation Plan and the Community Wildfire Protection Plan, the County followed a process that had the following primary objectives:

- Secure grant funding;
- Form a core planning work group within the County (as grant recipient) to lead the effort;
- Establish a planning partnership of municipalities, special purpose districts, and stakeholders in the planning area;
- Define the planning area;
- Establish a Planning Team of who will develop annex templates;
- Coordinate with other agencies to gain information and stakeholder involvement;
- Review of existing programs, plans, and studies in place, and
- Engage the public.

These objectives are discussed in the following sections.

2.4 GRANT FUNDING

This planning effort was supplemented by a Fire Management Assistance Grant (FMAG). Spokane County was the applicant agent for the grant. The grant was applied for in 2023, and funding was appropriated in 2025. It covered 75 percent of the cost for development of this plan; the County and its planning partners covered the balance of the cost through in-kind contributions.

2.5 FORMATION OF THE PLANNING TEAM

Spokane County hired Bridgeview Consulting, LLC., to assist with development and implementation of the plan. The Bridgeview Consulting project manager assumed the role of the

lead planner, reporting directly to a County-designated project manager. An internal Planning Team was formed to lead the planning effort, made up of the following members:

- Mark Conrad, Spokane County Project Manager, Spokane County Emergency Management;
- Chandra Fox, Deputy Director, Spokane County Emergency Management, Alternate Project Manager;
- Beverly O'Dea, Bridgeview Consulting, Lead Project Planner.

2.6 PLANNING PARTNERSHIP

Spokane County opened this planning effort to all eligible local governments and tribes within the county. Combined, these members formed the Hazard Mitigation Planning Team. During the County's kick-off meeting, County representatives and Consultant made a presentation to all planning partners on May 21, 2025, to introduce the mitigation planning process and solicit additional planning partners. Key meeting objectives were as follows:

- Provide an overview of the Disaster Mitigation Act.
- Describe the reasons for the plan.
- Outline the County workplan.
- Outline planning partner expectations.
- Seek commitment to the planning partnership.

Each jurisdiction wishing to join the planning partnership was asked to provide a "letter of intent" to participate in the planning process. That letter designated a point of contact for the jurisdiction and confirmed the jurisdiction's commitment to the process and understanding of expectations. Linkage procedures have been established (see Volume 2 of this plan) for any jurisdiction wishing to link to the Spokane County plan in the future. The planning partners covered under this plan are shown in Table 2-1.

Table 2-1.
Hazard Mitigation Planning Partners and Level of Participation

County, City, Town or Entity Represented	Primary Point of Contact	Alternate Point(s) of Contact	Date of Previous Plan	Letter of Participation	Kick-Off Meeting	Completed Risk Ranking	Completed Annex Template	Draft Plan Review	Final Plan Review	Adoption Month
Spokane County Emergency Management	Mark Conrad, Project Manager	Chandra Fox, Deputy Director		X	X	X	X	X	X	
Spokane County IT/GIS	Kirsten Frost-Anderson									
Spokane County (Various)	Nicole Henson Floodplain Project Manager	Matt Zarecor County Engineer								
Municipalities										
Airway Heights, City of	Albert Tripp, City Manager Chief Mitch Metzger	A/Chief Mike Makela		X	X	X	X	X	X	
Cheney, City of	Chief Tom Jenkins	Mayor Chris Grover Deputy Chief Jeff Anderson		X	X	X	X	X	X	
Deer Park, City of	Dan Pratt, Project Manager/Engineering Services Coordinator	Mayor Tim Verzal		X	X	X	X	X	X	
Fairfield, Town of										
Liberty Lake, City of	Lisa Key, Community Development Director	Mayor Cris Kaminskas Mark McAvoy, City Administrator		X	X	X	X	X	X	
Town of Rockford	Carrie Roecks, Mayor Heidi Johnson, Town Clerk	Micki Harnois, Councilmember Dave Thompson, Public Works Director		X	X					
Spokane Valley, City of	Virginia Clough, Legislative Policy	John Hohman, City Manager		X	X	X	X	X	X	

Table 2-1.
Hazard Mitigation Planning Partners and Level of Participation

County, City, Town or Entity Represented	Primary Point of Contact	Alternate Point(s) of Contact	Date of Previous Plan	Letter of Participation	Kick-Off Meeting	Completed Risk Ranking	Completed Annex Template	Draft Plan Review	Final Plan Review	Adoption Month
	Coordinator/Project Manager									
Special Purpose Districts and Stakeholders										
Spokane County Conservation District	Garth Davis Forestry Program Manager			X	X	X	X	X	X	
Newman Lake Flood Control Zone District	Derek Vilar	Jacob Laraway Jessica Burton		X	X					
Fire Districts										
Spokane Valley Fire	Chief Brian Treffry			X	X	X	X	X	X	
Spokane County FD 3	Chief Cody Rohrbach			X	X	X	X	X	X	
Spokane County FD 4	Chief Mike Nokes	A/Chief Howard Johnson		X	X	X	X	X	X	
Spokane County FD 5	Bethany McCann, FD #5 Administration			X	X	X	X	X	X	
Spokane County FD 8	Chief Chris Wyrobek			X	X	X	X	X	X	
Spokane County FD 9 (New to this 2025 update)	Chief Matt Vinci									
Spokane County FD 10	Chief Don Malone	A/Chief Orlando Sandavol		X	X	X	X	X	X	
Consultants and Planning Team Facilitators										
Bridgeview Consulting, LLC **Beverly O'Dea, Project Manager and Lead Planner**										

2.7 DEFINING THE PLANNING AREA

The planning area consists of all of Spokane County. All partners to this plan have jurisdictional authority over specific locations within this planning area.

2.8 COORDINATION WITH OTHER AGENCIES

Title 44 of the Code of Federal Regulations (44 CFR) requires that opportunities for involvement in the planning process be provided to neighboring communities, local and regional agencies involved in hazard mitigation, agencies with authority to regulate development, businesses, academia, and other private and nonprofit interests (Section 201.6.b.2). Involvement by various agencies and stakeholders is identified in the table below, but included hazard input information, invitation to serve on the Planning Team, review of data, information and the draft and pre-adopted plan. Those identified were provided an opportunity to provide input, review and/or comment on this plan throughout the effort as they elected to do so, with information provided via the hazard mitigation plan website (see Section 2.10.1), at various public outreach efforts, or via email. It should be noted that this is an overview and is not all-encompassing.

Table 2-2.
Hazard Mitigation Stakeholders and Areas of Participation

Stakeholders			Data and/or Information Provided
Eastern WA University	Geology Dept.		Earthquake Data
Avista Utilities	Brett Beagley		Assisted with public outreach events; provided information on power outage history; provided information on wildfire risk associated with power lines. Provided information which supported the risk assessment, with specific emphasis on the Community Wildfire Protection Plan; meeting attendance; plan review.
Bureau of Land Management	Whitney Machado, Fire Management Specialist, Spokane District BLM	Lonnie Newton, Fire Management Officer _____ Tom Hall, Fire Management Officer	Provided information and data for CWPP update. Served as agency representative for the Spokane District BLM.
Inland Power and Light	Patrick Larsen		Provided information included in Risk Assessment; provided opportunity to review CWPP and HMP.

Table 2-2.
Hazard Mitigation Stakeholders and Areas of Participation

Stakeholders			Data and/or Information Provided
FEMA/FEMA Region X	Joseph Green, Mitigation Plan Review - FEMA Region X	Marshall Rivers, RiskMap/Flood RiskMap updates	Plan Review, National Flood Hazard Data – NFIP map updates
Spokane Regional Health District	Rebecca MacMullan, Emergency Preparedness & Response Specialist		Provided information on the 2021 Heat Dome, and its impacts within Spokane County. Assisted with distribution of the HMP process and survey information.
National Earthquake Hazard Reduction Program (NEHRP)			Earthquake, Liquefaction, Soils data information https://www.nehrp.gov/
Pend Oreille County	JoAnn Bogs, Emergency Management Deputy Director		Region 9 HLS and LEPC plan discussions, review opportunity, public outreach attendance
Red Cross of Spokane			(Invited but declined to participate; did receiving briefings during various meetings)
USGS			Earthquake, Liquefaction Data; Earthquake Scenarios https://www.usgs.gov/natural-hazards/earthquake-hazards/research
Washington State Department of Agriculture	Erin Coyle, Emergency Management Program Manager		Soils survey data.
WA Department of Emergency Management	Kevin Zerbe, Hazards Analysis & Resilience Planning Program Supervisor		Provided information concerning strategies, grant opportunities, NFIP, RFC/SRL data, plan review input.
WA DNR	Myron Boles, Dst. Mgr., Service Forestry - Northeast Region Office; Jessica Walston,	Steve Harris, Wildfire & Forest Practices Asst. Manager Guy Gifford, Asst. Division Manager,	Landslide data and information; Wildfire data for CWPP

Table 2-2.
Hazard Mitigation Stakeholders and Areas of Participation

Stakeholders			Data and/or Information Provided
	Acting Assistant Division Manager, NE WA Forest Health Planner	Community Resiliency & Prevention;	
Washington State Department of Ecology	Jerry Franklin, RiskMap Coordinator	Jodi Goodman, Dam Grants and Compliance	Flood data, SRL and CRS data and information Dam data/information
Washington State Department of Ecology	Diane Fowler, Community Right to Know Specialist		Reporting Hazmat sites in county
Washington State Office of Financial Management			Census Data; Growth Management - growth projection data; housing stock data; economic data
Washington State Surveying and Rating Bureau (WSRB)	Andrea Mangialardi, Public Protection Specialist		Provided Protection Class and Building Code Effective Rating Scale information for each Planning Team member as it relates to wildfire, and the communities standing within the two programs. Data provides insight into the fire-defense capabilities of a local community.
Whitman County DEM	Bill Tensfeld, Emergency Management Director		Region 9 HLS and LEPC plan discussions, review opportunity, public outreach attendance

2.9 REVIEW OF EXISTING REPORTS, STUDIES AND PROGRAMS

44 CFR states that hazard mitigation planning must include review and incorporation, if appropriate, of existing plans, studies, reports and technical information (Section 201.6.b(3)). Chapter 3 of this plan provides a review of laws and ordinances in effect within the planning area that can affect hazard mitigation initiatives. In addition, the following programs can affect mitigation within the planning area:

- Spokane County Comprehensive Land Use Plan (2018 plus updates 2022, 2023, 2024; draft revisions w/final plan to be completed 2026)
- Spokane County WRIA Plans (34, 43, 54, 55, 56, 57) (Reviewed 2019, 2025)

- Spokane County Critical Areas Ordinance
- Spokane County Code (Titles 1-20)
- Spokane County Shorelines Master Program (2021 Periodic Update)
- Spokane County Comprehensive Emergency Management Plan (1999, 2021)
- Spokane County Recovery Annex
- Spokane County Soil Survey (USDA) (2011, 2016, 2024)
- Spokane County Community Wildfire Protection Plan (2015 Update occurring with this 2025 HMP update)
- Washington State Enhanced Hazard Mitigation Plan (2018, 2023)
- Comprehensive plans for each incorporated planning partner
- Spokane County Comprehensive Solid Waste and Moderate Risk Waste Management Plan (2021)
- Spokane County Assessor's Annual Reports (2020-2025)
- Liberty Lake Climate Vulnerability and Risk Assessment Report
- Avista Wildfire Resiliency Plan (2025)
- Inland Light & Power Wildfire Mitigation Plan (2024)
- Turnbull National Wildlife Refuge Wildland Fire Mitigation Plan

An assessment of all planning partners' regulatory, technical and financial capabilities to implement hazard mitigation initiatives is presented in the individual jurisdiction-specific annexes in Volume 2. Many of these relevant plans, studies and regulations are cited in the capability assessment.

2.9.1 Related Hazard Planning Documents

To leverage the planning process and technical resources utilized for the plan update process, the County also maintains its Community Wildfire Protection Plan and has previously developed a regional and county-specific threat hazard identification and risk assessment, and a county level, FEMA approved debris management plan.

Community Wildfire Protection Plan (CWPP)

The CWPP for Spokane County is the result of analyses and collaboration with state, county and local agencies, and includes an assessment of the wildfire risk with the intent to reduce the potential for wildfires which threaten people, structures, infrastructure and unique ecosystems in Spokane County. The CWPP, in its entirety, exists as the wildfire chapter of Spokane County's Hazard Mitigation Plan (2025).

Threat and Hazard Identification and Risk Assessment (THIRA)

The THIRA is a tool that allows a jurisdiction to understand its threats and hazards, and how the impacts may vary according to time of occurrence, season, location, and other community factors. The THIRA document, while risk-based, was completed utilizing a different type of analysis to determine the level and probability of risk based on established criticality factors when assessed against core capabilities and target capabilities established by the Planning Team during assessment. The THIRA is intended to inform risk-based decision making with respect to capabilities of the jurisdiction. While there are distinct overlaps between a THIRA and a local hazard mitigation plan, they are two very distinctly different documents. While a mitigation plan is developed via an open public process, the THIRA is fact-based on previous incidents, and because of the confidential information, the process and end document were developed in a more secure environment due to the sensitivity of the information being collected and analyzed. As the THIRA document was updated during the life cycle of the 2020 plan, data used in the development of the hazard mitigation plan was used to support the development of the THIRA as it related to the natural hazards, with the non-natural hazards maintained wholly in the THIRA. As such, the two documents will be kept and maintained separately by Spokane County Emergency Management, with the THIRA document not available for public review. As of this 2026 update, going forward, the THIRA document will be replaced with the Community/County Emergency Preparedness Assessment (CEPA).

2.10 PUBLIC INVOLVEMENT

Broad public participation in the planning process helps ensure that diverse points of view about the planning area's needs are considered and addressed. 44 CFR requires that the public have opportunities to comment on disaster mitigation plans during the drafting stages and prior to plan approval (Section 201.6.b.1).

2.10.1 Strategy

The County and its planning partners did extensive outreach and used different methods to increase involvement, such as pairing meetings with existing council and commission meetings, holding web-based meetings, and scheduling conference calls that allowed participation by agencies and individuals. Interviews with individuals and specialists from outside organizations identified common concerns related to natural and manmade hazards, and key long- and short-term activities to reduce risk. Interviews included public safety personnel, planning department personnel, natural resources personnel, cultural resource personnel, and representatives from other government agencies from surrounding jurisdictions. The public outreach strategy for involving the public in this plan emphasized the following elements:

- Include members of the public on the Planning Team.

- Use a questionnaire to determine general perceptions of risk and support for hazard mitigation and to solicit direction on alternatives. The questionnaire was available to anyone wishing to respond via the website and was distributed by hard copy for those without computer access (hard-copy results were entered by the consultant).
- Several Planning Team Members throughout the County posted links to the survey and information concerning the mitigation planning effort on their various Facebook and Twitter accounts.
- The Planning Team attempted to reach as many citizens as possible using multiple formats. This is important because of the somewhat geographically remote areas in the county.
- Identify and involve planning area stakeholders.
- Newsletter articles about mitigation efforts, such as the of FEMA flood maps, National Flood Insurance Program, Community Wildfire Protection Plan, and other hazard-specific outreach were provided and distributed at various outreach events which occurred during the plan development period.

One element addressed within the County's survey involved citizens' identification of the various means they felt were most appropriate for obtaining disaster-related information, or information about the hazards of concern. Of the survey respondents, 73 percent identified the use of the Internet as being the most effective, followed by social media at 64 percent. Approximately less than one-third of the respondents indicated that a separate public meeting was an effective tool to disseminate related information. Such information assisted in validating the public outreach strategy identified at the onset of the planning process as being effective for the planning area. Such information will further help support the planning partners in their continued public outreach efforts related to the Plan Maintenance Strategy for the HMP.

2.10.2 Hazard Survey

A web-based hazard mitigation plan survey was developed by the Planning Team. The survey was used to evaluate household preparedness for natural hazards and the level of knowledge of tools and techniques that assist in reducing risk and loss from natural hazards. This survey was also designed to help identify areas vulnerable to one or more natural hazards.

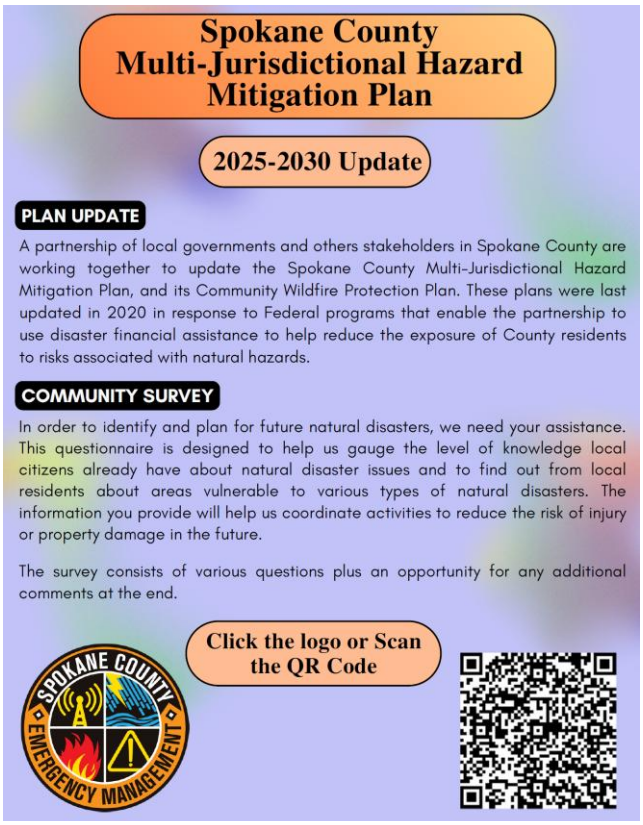
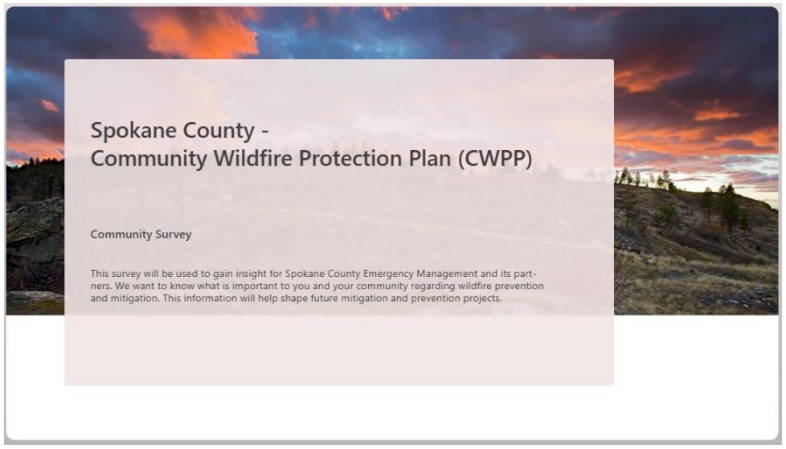


Figure 2-1 Survey Announcement

Hard copies of the survey were made available and discussed at public meetings. The survey was advertised via press releases, flyers (see Figure 2-1), and advertised on the various planning partners' websites and social media accounts.

The survey also provided an opportunity for citizens to provide comments during the entire process, from the initial drafting stages when the survey was deployed, until the draft plan was available for review. Over 230 questionnaires for the HMP were completed during the course of this planning process.

In addition to the HMP survey, the County also launched a separate survey specifically for the CWPP development process due to the delay in starting the HMP process (Figure 2-2). In excess of 195 people responded to that survey. Relevant comments received for both of the surveys were incorporated as appropriate.



2.10.3 Survey Results

Points of interest from the survey results include:

Figure 2-2 CWPP Survey



Figure 2-3 Spokane County HMP Survey Link

- In excess of 55 percent of respondents have resided in the county for 20+ years;
- Of those taking the survey, 50 percent were age 61 or older, followed by 18 percent 51-60 years of age;
- In excess of 98 percent had regular access to the internet;
- The internet (73 percent), social media (64 percent), and TV News (55 percent) were the avenues identified as the most effective sources for gaining information on the hazards of concern, notifications, etc.
- Wildfire and Severe Weather (including ice storms) are the hazards of greatest concern to citizens, with the prioritized scoring mirroring that identified by the HMP/CWPP Planning Team.
- Drought rose as a hazard of concern within the citizen's responses when compared to previous plan editions, with it also being of greater concern to respondents than an earthquake.
- Flood ranked in the lower percentage, with 49 percent of respondents indicating they were not concerned about flood events.
- Hazardous materials incidents/releases and train derailments ranked higher than some of the natural hazards of concern.
    - The HMP and CWPP do include an analysis of hazmat facilities as they relate to the natural hazards of concern. The HMP does discuss rail shipments occurring in the county with respect to the shipment of oil and other hazardous materials on the rail lines specifically as they relate to ingress and egress of certain areas within the county, such as Cheney.
- 22 percent of respondents have experienced an earthquake; 76 percent have experienced a severe weather event; 52 percent have experienced wildland fire. Several comments also reflected impact from wildfire smoke, which was included within the HMP/CWPP.

Several meaningful comments and questions were also received within the survey responses, as well as respondents identifying the various groups and organizations to which they belong, as follows (direct quotes):

- The Home Ignition Zone inspections provided free by the Spokane Conservation District are extremely helpful in preparing for wildfire in our area. [This is a strategy identified within the HMP.]
- Most homes are within hearing distance of trains. Train derailments and chemical spills are one of our biggest risks and one we are least prepared for -think toxic chlorine gas cloud. We implemented FireWise zones around our home to decrease the risk from wildfire. We live in the greater Yellowstone Caldera and are at risk from massive volcanic explosion [sic] (we'll all die so we don't need to prepare for this). We also live in the area that would be the rescue zone for the Pacific Coastal subduction earthquake where the west coast falls into the ocean.
- Would encourage the formation of community (neighborhood) action response groups for developing neighborhood action plans. Emergency preparedness with help from fire fighters in the planning would be helpful. For example, my (200 household+) neighborhood has no HOA (so no neighborhood-wide communication channels), and only one bridge in/out. There is a conservation area which could be used to evacuate in an emergency (maybe?) if there were a plan for using it. We and our neighbors are fearful of wildfire, and feel unprepared. It'd be nice if we knew who we could talk to about what our neighborhood will do in time of emergency. Additionally, such a local group could help with keeping the conservation area clear of dead brush, since the county is slow to do so. If we had training on identifying and clearing brush appropriately, we could help as a neighborhood.
- It's hard to dispose of yard and forest debris during burn bans (pine needles, branches, etc.). [This particular issue was one discussed during development of the CWPP, as in many instances, debris burning is the only viable option for many homeowners attempting to maintain defensible spaces without creating an additional ignition source with the accumulated debris piles.]
- Part of the Church of Jesus Christ of Latter Dat Saints Emergency Communications Group.
- I would love more information about specifics on how to be emergency prepared, especially because we have medically fragile people in our home.
- Cities in Spokane County should have published evacuation routes in case of a natural disaster. There is currently nothing published for example the City of Medical Lake. During the Gray Fire the majority of individuals try to evacuate down 902 causing a traffic jam the fire was moving toward exit 272 where 902 meets I-90. I think city planners should develop evacuation routes for neighborhoods to prevent traffic

jamming and possibly having people get stuck in the natural disaster for example a wildfire.

- It has come to my attention that the County does not have an adequate emergency operations center. I believe that as a taxpayer, a county of this size should have an appropriate facility to conduct emergency operations. Please make this a priority, thank you.
- I feel if someone chooses to live in a natural hazardous zone, in the event of a natural disaster, taxpayer money should NOT be spent to rebuild, reconstruct, or repair those peoples homes or property. They know they risk yet choose to live in it
- Best use of funds would be to provide property tax breaks for people who keep a significant green space and or manage timber land to reduce fuel load. [Incentivizing mitigation projects by homeowners, or the ability to provide grant funds, is one of the strategies identified within the HMP.]
- In case of fire, it would be difficult to leave. Barker is main exit from my neighborhood; it is a two-lane road. Density of housing new and existing is concerning. City of Spokane Valley just approved the building of a 38 lot subdivision in my existing neighborhood. Getting out is a problem yet the city continues to approve additional housing units. There is no exit plan by the city.
- Even though housing is needed it needs to be better controlled. Quality materials, quality building, better/more inspectors, stop encroaching on prairie, wetlands and other wildlands. [Discussed during CWPP development, with supporting strategies identified to increase building codes and enhance land use development within the high-hazard areas.]
- Lost our home in the Oregon Rd. fire of 2023. From this experience, I would say there needs to be a better plan in place for mitigating the disaster clean-up and debris removal. This whole area was full of toxic debris and assistance with the clean up and removal of hazardous debris should have been automatic and immediate. [This issue was identified within the After-Action Review conducted by the County and its impacted communities. The ability to obtain a FEMA declaration is not an easy task, with there being stringent restrictions with respect to allowable debris removal on

private property. The County continues to address this issue for all hazards that result in a disaster declaration and include debris removal.]

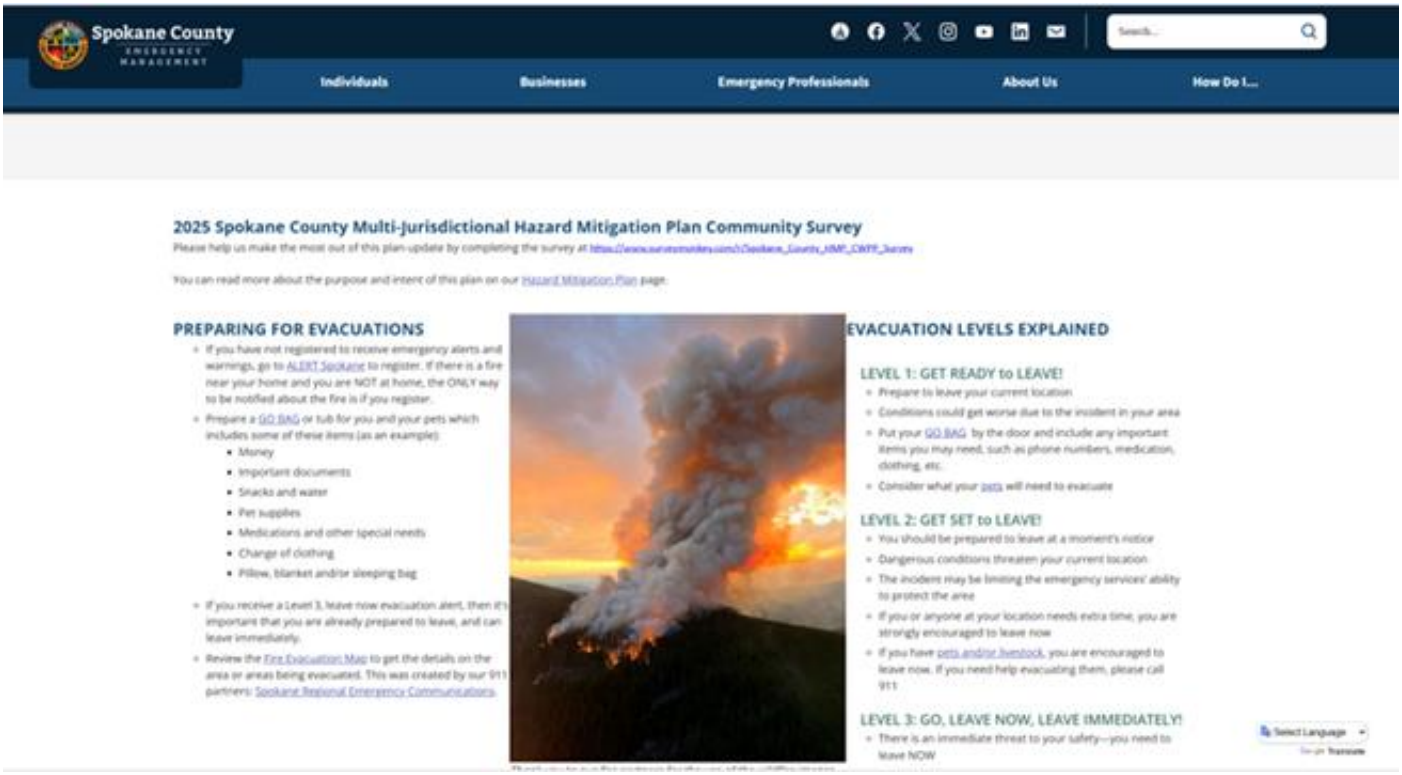


Figure 2-4 Spokane County HMP Website

2.10.4 Internet

At the beginning of the plan development process, a website was created to keep the public posted on plan development milestones and to solicit input. The plan was provided via a file-transfer site, which allowed for the plan downloading for review. The County intends to keep a website active after the plan's completion to keep the public informed about successful mitigation projects and future plan updates.

The County's website address was publicized in all press releases, mailings, questionnaires and public meetings. Information on the plan development process, the use of a Planning Team, the questionnaire and phased drafts of the plan were made available to the public on the site

throughout the process. Hazard maps were published on this site, and were available for download. A link was also made available to the County's survey.

In addition, several of the planning partners also posted information on their respective websites, posting frequently asked questions, and asking for citizen comments. As comments were received, they were reviewed by the Planning Team and integrated into the plan as appropriate.

2.10.5 Social Media

In addition to the website, the County also has a Twitter account and a Facebook account which has approximately 5,000 followers. Both were utilized to distribute information concerning the plan's update; to distribute information concerning the survey; advise citizens of the availability of the hazard maps for review and comment; announcing public outreach events, and when the final plan was complete, alerting citizens to the draft plan, asking for review and comment during the open public comment period.

Various Planning Team Members also utilized established accounts to distribute information and provided updated information on their Facebook and Twitter accounts.

2.10.6 Public Meetings

Several meetings and events which were open to the public were held during this effort, including regular use of the LEPC meetings, council/commissioner/board meetings, and presentations at various other types of events, such as the countywide Comprehensive Land Use Plan (COMP) update, which was occurring simultaneously with this 2026 HMP update. Each municipal Planning Team member was also in the update cycle for their COMP. During those meetings, the facilitator utilized and/or presented information from the hazard mitigation plan and risk assessment to present to the public.

All planning meetings were open to the public, and citizens did attend those meetings, providing information and input. In addition, several public meetings were held in conjunction with County Commissioner's or City Council Meetings, many of which are recorded for viewing at a later date by citizens or other interested parties.

The various Fire Districts held regular monthly and quarterly meetings, all of which were open to the public, during which various elements of the HMP process were discussed, in addition to the hazard risks associated with each district, and potential mitigation strategies. These sessions

were advertised via the website, press coverage, social media, and flyers posted throughout the planning area.

The LEPC was also involved in this process. Project Manager Mark Conrad and Deputy Direct Chandra Fox regularly updated the LEPC members during the entire process, giving regular updates at every meeting, and presenting risk information and posters, soliciting input and information from all LEPC members and citizens in attendance. As all planning partners are also LEPC members, these meetings also served as Planning Team meetings at various times throughout the process.



Figure 2-5 Public Outreach Announcement

Occurring simultaneously with the HMP update was the update to the County's Community Wildfire Protection Plan (CWPP). As a result of the very active fire seasons occurring within Spokane County in which more than 300 citizens lost their homes and businesses to the 2023 fires, outreach for the plans' development continued to ensure information on all hazards was provided, with the initial focus of those meetings being on the wildfire recovery effort. Later those meetings evolved into the CWPP development (see Figure 2-5).

During the September 17, 2025, Community Engagement Event (Figure 2-6), maps and various hazard information were presented via a Power Point presentation illustrating hazard areas of concern, impact data, and the completed risk ranking of those hazards by each planning partner. Printed maps and hazard profiles were also available for review and comment. The event was open for two hours, allowing citizens time to listen to the presentations, and thereafter, view the risk maps for each municipality or special purpose district. All planning partners were in attendance. Similar meetings also occurred on September 16, 2025, within the City of Spokane Valley and City of Liberty Lake.



Figure 2-6 Countywide Presentation of Risk

The meeting format allowed attendees to examine maps and handouts and have direct conversations with project staff and planning partners, who answered questions specific to their entity. Each citizen attending the open houses was also asked to complete the survey, and each was given an opportunity to provide written comments to the Planning Team. Local media outlets were

informed of the open houses via various sources, including by press releases from the County, and were in attendance when meetings occurred.

During the various events, information was provided with respect to the availability of the draft plan for public review and comment. In addition to a press release issued by the County announcing the plan's availability, notice was also distributed via various social media.

Planning Team Members also utilized other existing meetings and forums to announce the availability of the plan, inviting citizens to review the plan by downloading it from the County's website. A hard copy was also printed and available for review and comment at the various meetings.

Comments received from citizens were favorable with respect to the data presented. A few comments/questions (paraphrased) include:

- Risk ranking looks right.
- We appreciate your work to keep us safe.
- Thanks for the handouts (e.g., Free Home Site Assessment from FireWise).
- Wildfires are getting worse so it's good to see it ranked #1 (or higher than previously) *(several similar comments).*
- What happens here if the west side of the state has a major earthquake?
- Generally agreeable comments about flooding being isolated and minimal risk in certain portions of the county.
- General questions that were more applicable to other emergency plans.
- Statement concerning the need to improve outreach efforts to get more people involved (the County has identified this as a strategy).
- Who was involved as part of this process?
- Good idea to add hazardous materials. Lots of freight going through each day.
- Discussion about emergency communications.

Press Releases and News Media

Press releases were distributed to all media outlets over the course of the plan's development as key milestones were achieved. Initial press releases focused on the Community Wildfire Protection Plan, as that process began prior to the HMP update. Interviews with Spokane County Emergency Management Project Manager Mark Conrad and Deputy Director Chandra Fox also occurred concerning various aspects of the plan development, including identification of hazards of concern, information on the mitigation planning process, and availability of the survey.

2.11 PLAN DEVELOPMENT - CHRONOLOGY/MILESTONES

Table 2.2 summaries important milestones in the development of the plan. This list is not exhaustive but represents efforts by all of the planning partners.

Table 2-3.
Plan Development Milestones

Date	Event	Description
2024		
Dec	Public Outreach (CWPP)	Public Meetings were held on multiple dates to discuss the wildfire hazard within the County. State DNR assisted with providing risk maps and identifying areas of concern, providing a Scaled Quantitative Wildfire Risk Assessment Summary in December 2024, to each Fire District within the County. That information was distributed at various community and planning meetings, including the LEPC and Coalition meetings.
2025		
Jan	Contractor Selection	County selected Bridgeview Consulting, LLC to facilitate the development of the mitigation plan update.
Jan-March	Public Outreach	Public meetings were held on multiple dates to discuss the wildfire hazard within the County. State DNR and other stakeholders provided information to begin the update of the CWPP document, with continued meetings occurring throughout the County.
March 6	Media Interview	Deputy Director Chandra Fox was interviewed concerning the various public outreach efforts related to evacuation plans, wildfire risk, and mitigation efforts to help reduce the risk of impact.
March 22	Planning Meeting	Planning meeting with internal Planning Team to discuss hazards of concern and the current status of planning initiatives under current Federal administration.
April 23	Planning Meeting	Establish kick-off day for remaining planning partners initially delayed due to FEMA review of HMP guidance.
April	Public Outreach Strategy	Initial press release on the HMP planning process disseminated by Spokane Department of Emergency Management
May 21	Kick-off meeting	Kick-off meeting held to organize planning partnership – Confirmed Goals & Objectives – Confirmed Hazards – Confirmed definition of Critical Facility – Provided information on methodology for Risk Assessment – Identified Public Outreach Strategy
June 3	Public Presentation	At its regularly occurring Council Meeting, the City of Spokane Valley Planning Team Member and County Project Manager Mark Conrad presented information on the hazard mitigation (and other) plan update; responded to questions concerning the effort; identified hazards to be addressed, and provided information on future public outreach efforts, and the availability of the HMP survey.
June 30	Public Outreach Strategy	Hazard Mitigation Plan website established on Spokane Department of Emergency Management website; Facebook and Twitter Accounts utilized to announce effort.
June 30	Public Outreach Strategy	Hazard Mitigation survey posted on Spokane Department of Emergency Management website.
July, Sept and Oct. 2025	Spokane Valley Fire Dept.	Conducted public outreach via social media and websites. Information included the release of the survey, risk assessment data, meeting notices, and notice of final plan review.

Table 2-3.
Plan Development Milestones

Date	Event	Description
Quarterly beginning 4th Quarter 2024	LEPC Meetings	Project Manager Mark Conrad and Deputy Chief Chandra Fox presented information concerning the HMP update, planning process, requirements, risk data (as completed), CWPP project and status. Once completed, the LEPC was briefed on the natural hazards of concern.
July 7	Public Outreach (City of Spokane Valley)	City of Spokane Valley utilized their weekly E-Newsletter to discuss the HMP process and invite constituents to take the County's Survey.
July 21, 2025	Planning Team Meeting	The risk assessment consisting of hazard profiles and ranking were sent to internal Planning Team Members for initial review of the hazards of concern, and the County's ranking of the hazards in order of magnitude.
July 25, 2025	Spokane Regional Health District	Information on the HMP process and the HMP survey were included in the Spokane Regional Health District Community Newsletter.
Aug 12	Commissioner's Presentation	During the regularly scheduled Commissioner's Meeting, Deputy Director Fox presented the risk findings for the County, while also providing a general update to the planning process. Copies of the hazard profiles were available for citizens to review and comment, as were various hazard maps on display.
Aug 25	Council Presentation – Airway Heights	Chief Metzger presented risk information to those in attendance at the regularly scheduled City Council Study Session. This meeting is regularly scheduled and advertised, and open to the public wishing to attend. Risk data was presented during a power point presentation, with council and citizens provided an opportunity to ask questions or provide comments. Citizens and council were briefed on the hazard ranking, and provided an overview of the HMP process, again inviting citizens to view the HMP data on the County's website
Sept 3	Planning Team Meeting	Planning team members met to discuss the upcoming public outreach effort for presentation of risk, and to determine data which will be presented. Status update for planning partners was also discussed to determine inclusion in the September 17th presentation of risk meeting. Strategy development and the status of the previous strategies identified in the 2020 HMP were also discussed.
Sept 9	Town of Latah	Announced risk assessment findings and public outreach event at City Council Meeting. Posted to Facebook and physical posting of notice public outreach effort for presentation of risk at Town Hall and Post Office locations.
Sept 16	Public Outreach – Presentation of Risk City of Spokane Valley	The City of Spokane Valley utilized its regularly scheduled Community Conversations public form (which occurs immediately prior to the City Council Meetings) to present various maps and risk assessment data to Council, city staff, and constituents in attendance. Information included a display of hazard maps, a hard copy of the hazard profiles, and the City's hazard rankings. The City also presented additional information on Climate Change to support its on-going Comprehensive Land Use Plan update. Planning team members also had available information on the public survey, encouraging attendees to take the survey. Citizens were invited to provide comments on sign-in sheets, via email, or speak to Planning Team Members in attendance. The City has previously received feedback from constituents that these types of meetings are preferred over formal Council Meetings as attendees feel more at ease in speaking to the various Planning Team Members and providing direct feedback.

Table 2-3.
Plan Development Milestones

Date	Event	Description	
Sept 16	Public Outreach – Presentation of Risk City of Liberty Lake	The Planning Team Members utilized the regularly scheduled City Council workshop meeting for its presentation of risk, and to provide a status update on the 2026 HMP. Hazard maps were available for review and comment. Citizens in attendance were provided with an opportunity to review risk data and provide comments and input. Risk Assessment survey was posted 9/25/2025-9/29/2025, with 264 views and 38 responses. In addition to the hazards identified in the HMP, the City also conducted various outreach efforts related to climate change and the impacts therefrom. An additional 10 meetings were held, reaching more than 900 citizens, Planning Team Members, and stakeholders.	
Sept 17	LEPC Meeting – Presentation of Risk – Countywide Planning Partners	During the regularly scheduled and open LEPC meeting, Project Manager Mark Conrad made a presentation on the risk findings, risk maps, and the risk ranking information for the County and the planning partners. Various maps and risk data for all planning partners were presented. The information was also posted to the County's website, as well as various planning partners' websites and social media accounts. Newsletters were also utilized to present information and invite reviewers to view the hazard profiles, risk ranking, and hazard maps. Topics also involved the strategy development, and availability of the draft plan for review by citizens.	
Sept 18	Countywide	Spokane County provided data links for the risk assessment information, hazard maps, and survey through their HR News Flash, reaching all county employees.	
Various	Public Outreach Strategy	Public notices via County website of upcoming meetings, Facebook and Twitter posters, and website announcements were made concerning the open houses to review the various hazards maps and provide input to the Planning Team Members.	N/A
2026			
Jan 2026	Planning Team Review	The draft of the base plan was provided to the Planning Team Members, with a two-week period provided for comments.	
Jan 2026	Public Outreach Strategy	Initiation of final public comment period. Various Planning Team Members made announcements of the plan's availability during open meetings; the County issued a separate press release announcing that the draft plan was available for review and comment for a 14-day period.	N/A
Feb 2026	Public Outreach Strategy	End of final public comment period	N/A
Feb 2026	Plan submittal	Draft plan submitted to the Washington Emergency Management Division for pre-adoption review and approval.	N/A
March 2026	Plan submittal	Draft plan submitted to FEMA	N/A
xxx	Pre-adoption approval	Approval Pending Adoption (APA) letter issued by FEMA	N/A
xxx	Adoption	Adoption window of final plan opens	N/A
	Plan approved	Final plan approved by FEMA	N/A

CHAPTER 3.
SPOKANE COUNTY PROFILE

Spokane County is located in northeastern Washington adjacent to the Idaho border (see Figure 3.1). The County has an array of landscapes ranging from the mountainous area in the northeast, including Mount Spokane, to the semi-arid basalt plains in the southwest. Between these extremes are the rolling wheat lands of the Palouse area, the channeled scablands created by the glacial floods, and the Spokane metropolitan area. The total County area is approximately 1,763 square miles, making it 19th in size among the state's counties, with a population of 559,400 (2024 OFM data).

Spokane County is rectangular, except for the northwest corner, which is bounded by the Spokane River (see Figure 3-1). Pend Oreille and Stevens Counties provide its northern boundary, Lincoln County its western boundary, Whitman County its southern boundary, and the State of Idaho its eastern boundary.

3.1 JURISDICTIONS AND ATTRACTIONS

Spokane County has 13 incorporated communities:

- City of Airway Heights
- City of Cheney
- City of Deer Park
- Town of Fairfield
- Town of Latah
- City of Liberty Lake
- City of Medical Lake
- City of Millwood
- Town of Rockford
- City of Spangle
- City of Spokane
- City of Spokane Valley
- Town of Waverly

The County also has multiple special purpose districts, including 11 Fire, 6 Cemetery, 19 School, a Library, and a Park District, all of which are governed by locally elected boards.

Spokane County has many unique landscapes and landforms which were created by past geologic processes. The features and soils seen now are the result of past cataclysmic events of floods, uplift (mountain building) and volcanic activity. The county is divided in two parts by the Spokane River flowing east to west, eventually joining the Columbia River. The river, having carved its path through the basalt, is flanked above by outwash terraces and plains in the valleys to the north and the scoured basalt plateau to the south. Also, in the southern part of the county there are the fertile, rolling, loess hills of the Palouse.

Multiple flood events from glacial Lake Missoula have made their mark in Spokane County. They have sculpted the basalt plateau by scouring and depositing soil material along the way, leaving in their wake, a wide swath of unique features, called the channeled scablands.

The southeastern part of the county is in the Palouse Hills Region, which is characterized by rolling to hilly topography and deep soils that formed in silty material deposited by wind. Basalt is the base rock, but there are a few promontories of quartzite, shale and sandstone in the region. Tekoa Mountain, the highest part of this region, rises to an elevation of 3,900 feet.

The Northern part of the county is in the Okanogan Highlands. This region consists of mountains, foot slopes, glaciated valleys, broad glacial lake terraces, and outwash terraces. It includes Mount Spokane, the highest point in the county, which has an elevation of 5,882 feet. Glacial scouring and damming by deposits by glacial meltwater created Newman, Liberty, and Eloika Lakes. With its unique range of outdoor recreational opportunities, Spokane County has much to offer outdoor enthusiasts. The four distinct seasons and holdings of public lands have made this area an increasingly popular place in which to recreate. Fishing and hunting, skiing, equestrian activities, snowmobiling, hiking and biking are some of the more popular types of outings.

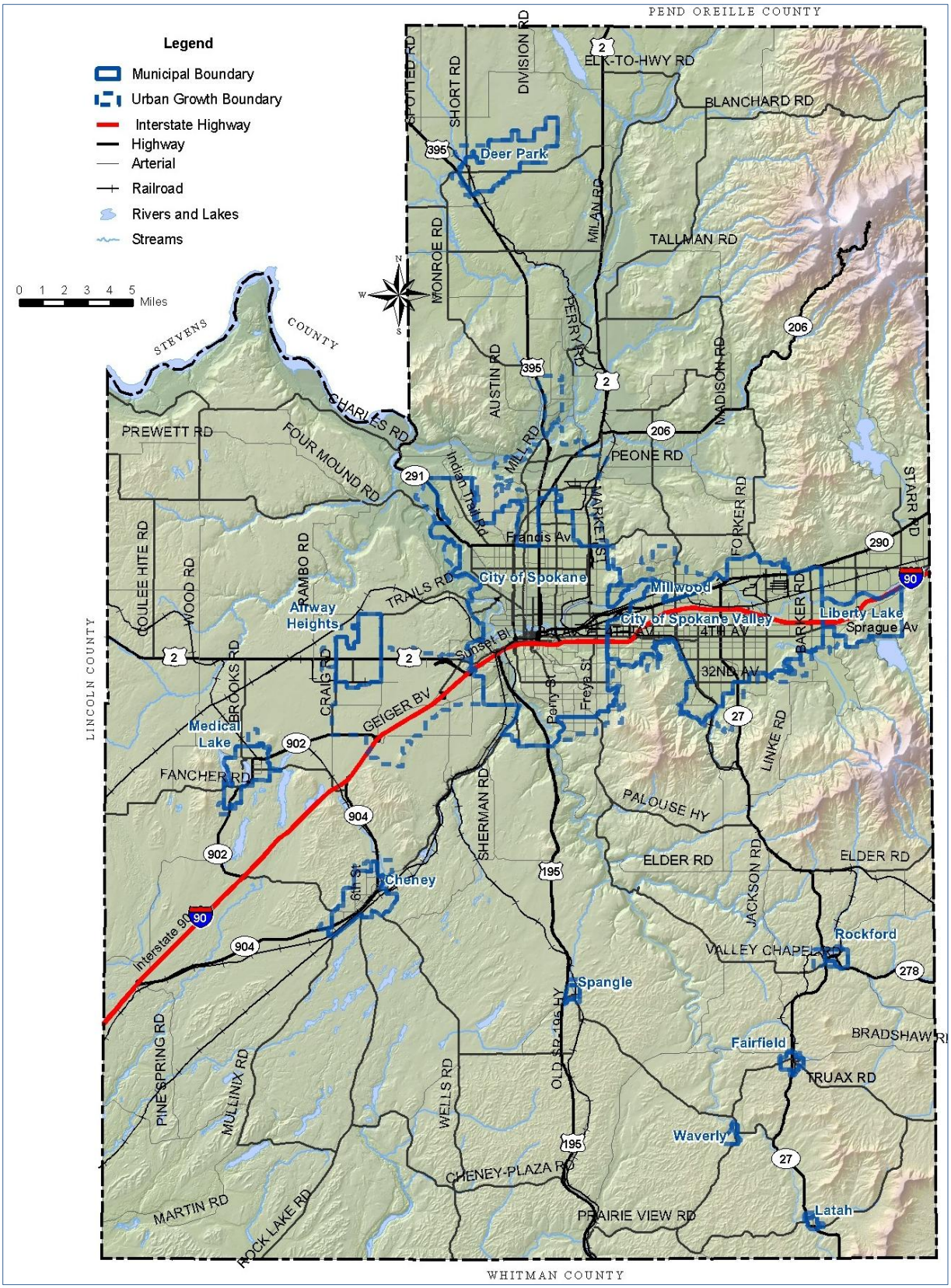


Figure 3-1. Main Features of Spokane County

3.2 HISTORICAL OVERVIEW

The City of Spokane was an early hub for the mining, timber and railroad industries of the Inland Northwest, while cattle ranging and wheat farming became important in the surrounding areas. Today, the city and county of Spokane serve as medical, financial, and commercial centers for region from the Cascades to western Montana. Fairchild Air Force Base is the county's largest employer, and agriculture remains important. The following are key events in the history of the Spokane County area (HistoryLink.org, 2012 and Spokane County, 2012b):

- Before European and American settlement of the area, three bands of Spokane Indians—Upper, Middle and Lower—lived in the Spokane River watershed and the Coeur d'Alene Tribe lived along the river near the present-day border with Idaho.
- In 1810, the British fur-trading North West Company sent two men to establish a trading house in the territory. They built Spokane House at the confluence of the Spokane and Little Spokane Rivers, the first long-term European settlement in what is now Washington.
- European/American settlement of the area through the 1840s and 1850s led to a period of conflicts with the Native American population. The end of hostilities in 1858 opened the region to further American settlement and development.
- On January 29, 1858, Spokane County was created by the Territorial Assembly. Pinkney City, a small trading post near Colville, was the first county seat.
- In 1863, Idaho Territory was created, cutting off two-thirds of Spokane County.
- On January 19, 1864, Spokane County was annexed to Stevens County by act of the Territorial Legislature.
- The 1870s saw the rise of Spokane Falls from a homestead and gristmill to a village to a city of a few hundred by the time of incorporation in 1881.
- In 1879, Spokane County was again established as a separate county.
- In 1880, the first county seat election was held, and the City of Cheney became the county seat for six years.
- Spokane County boomed during the 1880s with the arrival of the Northern Pacific Railroad in 1881 and with mining in the mountains to the north and east. Although no mining took place in Spokane County itself, the city of Spokane became the commercial and residential center for the mining industry and the railroads in the Inland Northwest.
- In 1883, Lincoln County was subdivided from Spokane County, establishing the present county boundaries.
- In 1886, the county seat was moved to Spokane after a second election.

- In 1893, construction of the present County Courthouse began. Its initial cost was $273,600. All county officials moved into quarters in the new courthouse by November 20, 1895.
- By 1900, Spokane County had a population of 57,500 in more than 20 towns.
- The area's economic growth slowed by the 1920s, as older mines in Idaho that had contributed wealth to Spokane began to play out. With the Great Depression, the area entered a long period of economic stagnation and lack of growth.
- During the 1930s, construction of the Grand Coulee Dam, 75 miles to the west, and other New Deal programs drew people to the area and provided employment for those already in the county.
- During the early years of World War II, several units of the Army Air Corps occupied the newly completed Geiger Field, just west of Spokane. Three years after the war, the War Department returned Geiger Field to the city; it would become Spokane International Airport.
- In 1943 the War Department opened the Galena aircraft maintenance and supply depot on donated farmland. The depot's mission changed and grew during the postwar years and in 1951 it became Fairchild Air Force Base.
- The Spokane County Courthouse was extensively remodeled in 1946, and a new wing was added in 1956, which cost more than the original building: $525,000.
- In recent decades, the population growth of Spokane County has been largely outside the City of Spokane; between 1970 and 2000, the population of Spokane grew 15 percent while the population in other areas of the county increased 90 percent.
- The county is drained by two principal streams: the Palouse and Spokane Rivers. All the water ultimately drains into the Columbia River. Approximately 400 square miles of the southwestern part of the county lie within the Palouse River basin. All streams in this part of the county, except North Pine Creek, are intermittent. This area has many lakes and poorly drained depressions.[3]
- The Spokane River has only two perennial tributaries: the Little Spokane River from the north and Hangman Creek from the south. The little Spokane River drains the entire northern part of the county through Dragoon, Dry, Deer and Deadman Creeks.

[3] USDA Soil Survey, Spokane County, WA. (1968). Accessed 17 April 2025. Available at: https://books.google.com/books?id=vKIMcjrd1j8C&pg=PA1&lpg=PA1&dq=spokane+county+is+drained+by+two+principal+streams&source=bl&ots=RNLEJDrc2j&sig=ACfU3U0klgCrGHzSTFvHnBrcGGbZW2f9gg&hl=en&sa=X&ved=2ahUKEwisyYn5i43lAhXXjp4KHaKxDYwQ6AEwCHoECAcQAg#v=onepage&q=spokane%20county%20is%20drained%20by%20two%20principal%20streams&f=false

Hangman Creek drains all of the southeastern part of the county, but it discharges very little water into the Spokane River except spring runoff from melting snow.

- The City of Spokane straddles the Spokane River from approximately two river miles downstream from its confluence with Hangman Creek to approximately nine river miles upstream from the confluence. Except for the southern part, the city is located almost entirely on the surface of the gravel fill of the Spokane Valley. Most of the city lies at elevations from 1900 to 2100. The City of Spokane consists of rich farmlands, both non-irrigated and irrigated, extensive mineral deposits, and thousands of acres of commercial timber. However, the city is not noted for employment in these fields of activity, but rather the secondary type industries, such as trade, transportation, finance and services. Historically, these areas of employment tend to experience a relatively stable existence. As a result, variations in business activity within Spokane have been less pronounced than elsewhere in Washington. These conditions are expected to continue relatively unchanged.

3.3 MAJOR PAST HAZARD EVENTS

Major hazard events are often identified by federal disaster declarations, which are issued for hazard events that cause more damage than state and local governments can handle without assistance. FEMA categorizes disaster declarations as one of three types (FEMA, 2012a):

- **Presidential major disaster declaration**—Major disasters are hurricanes, earthquakes, floods, tornados or major fires that the President determines warrant supplemental federal aid. The event must be clearly more than state or local governments can handle alone. Funding comes from the President's Disaster Relief Fund, managed by FEMA and disaster aid programs of other participating federal agencies. A presidential major disaster declaration puts into motion long-term federal recovery programs, some of which are matched by state programs, to help disaster victims, businesses and public entities.
- **Emergency declaration**—An emergency declaration is more limited in scope and without the long-term federal recovery programs of a presidential major disaster declaration. Generally, federal assistance and funding are provided to meet a specific emergency need or to help prevent a major disaster from occurring.
- **Fire management assistance declaration** (44 CFR 204.21)—FEMA approves declarations for fire management assistance when a fire constitutes a major disaster, based on the following criteria:
  - Threat to lives and improved property, including threats to critical facilities and critical watershed areas
  - Availability of state and local firefighting resources

- High fire danger conditions, as indicated by nationally accepted indices such as the National Fire Danger Ratings System
- Potential major economic impact.

In addition, there are also state and county issued proclamations and declarations. Since 1964, 14 federal disaster declarations have affected Spokane County as listed in Table 3-1 (FEMA, 2025)[4]. There are five Emergency Management Declarations for the County, which did not rise to the level of a Federal Declaration but did cause significant impact, as well as an Emergency Declaration for COVID, which was also a declared Federal Declaration. There are also nine Fire Mobilization Declarations which occurred.

Review of these events helps identify targets for risk reduction and ways to increase a community's capability to avoid large-scale events in the future. Still, many natural hazard events do not trigger federal disaster declaration protocol while still having significant impacts on their communities. Several of those events which impacted Spokane County are identified in Governor's Proclamations, also identified in Table 3-1. In some instances, the Governor's Proclamations may have also led to a Federal Disaster Declaration. These events are also important to consider in establishing recurrence intervals for hazards of concern.

Based on FEMA typing, the most common disasters to occur in the area are wildfire, followed by severe storm (inclusive of various types of weather events), and flooding.[5] These hazards are further broken down by month, year, recurrence intervals, and probability of occurrence as illustrated in Table 3-2. It should be noted that in some instances, the dates may be skewed due to the declaration date and the event date, but for planning purposes, the data in the table identifies a snapshot view of the frequency of events, and the months in which most events occurred.

For generalized purposes, recurrence intervals for wildfire, severe storm/weather (all types), and floods are determined by the total number of events divided by the number of years to obtain an average. In some instances, recurrence intervals based on magnitude are contained within the hazard profiles. The recurrence intervals are not based on the order of magnitude (e.g., a 100-year storm), but rather on the fact that the event occurred, which rose to the level of a disaster declaration. The Percent Probability of Occurrence is calculated by dividing the number of events by years and then multiplying that sum by 100 to create the percent probability of an event occurring in any given year. In determining the probability of occurrence and recurrence intervals for wildfire, the lack of data does not support the time period of 1964-2024. As such,

[4] FEMA Disaster Declarations Summary. Accessed 16 April 2025. Available at: Disasters and Other Declarations | FEMA.gov

[5] It should be noted that the typing of the incident is sometimes misleading. The typing of the incident refers to FEMA's classification of the hazard involved. For instance, of the severe storm events, some also include flooding, but are not listed under the Flood incident type as other hazards were also involved.

the focus is on the last 20 years (2000-2024) as better wildfire tracking data for significant (disaster-level) events was available.

Table 3-1.
Disaster Declarations in Spokane County 1964-2024

Disaster Number[a, b]	Declaration Date	Incident Type/ Title
DR-185	12/29/1964	Flood/ Heavy Rains & Flooding
DR-623	5/21/1980	Volcano/ Volcanic Eruption, Mt. St. Helens
DR-769	7/26/1986	Flood/ Severe Storms and Flooding
DR-922	11/13/1991	Fire/ Fires
DR-1100	2/9/1996	Flood/ High Winds, Severe Storms and Flooding
DR-1152	1/7/1997	Snow/ Severe Ice Storm
DR-1159	1/17/1997	Severe Storm/ Severe Winter Storms, Land- and Mud-slides, Flooding
DR-1172	4/2/1997	Flood/ Heavy Rains, Snow Melt, Flooding, Land- and Mud-slides
DR-1825	3/2/2009	Severe Storm/ Severe Winter Storm And Record and Near-Record Snow
DR-4249	1/15/2016	Severe Storms, Straight-line winds, Flooding, Landslides and Mudslides
DR-4309	4/21/2017	Severe Winter Storms, Flooding, Land- and Mud-slides
DR-4481	3/22/2020	COVID
FM-5355	7/17/2020	Fire
DR-4593	4/8/2021	Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides
FM-5395	7/6/2021	Fire
FM-5479	8/18/2023	Fire
FM-5481	8/19/2023	Fire
DR-4759	3/25/2024	Washington Wildfires (August 18-25, 2023)
Emergency Declarations Issued by FEMA		
EM-3037	3/31/1977	Drought/ Drought
EM-3086	8/19/1982	Flood/ Threat Of Flooding At Spirit Lake
EM-3227	9/7/2005	Coastal Storm/ Hurricane Katrina Evacuation
EM-3372	8/21/2015	Wildfires
EM-3427	3/13/2020	Biological / COVID
Fire Mobilization		
FM-2783	7/11/2008	Spokane Valley Fire

Table 3-1.
Disaster Declarations in Spokane County 1964-2024

Disaster Number[a, b]	Declaration Date	Incident Type/ Title
FM-5063	7/19/2014	Watermelon Hill Fire
FM-5149	8/22/2016	Yale Fire
FM-5148	8/22/2016	Wellesley Fire
FM-5254	7/17/2018	Upriver Beacon Fire
FM-5355	9/8/2020	Babb Fire
FM-5395	7/6/2021	Andrus Fire
FM-5479	8/18/2023	Gray Fire
FM-5481	8/18/2023	Oregon Fire
State Proclamations for Natural Hazards of Concern Impacting Spokane County (2018-2025)		
18-03	5/11/18	Snow Melt Causing Flooding
20-68	8/19/2020	Eastern WA Wildfires – Activation of National Guard
20-72	10/9/2020	Statewide Wildfire Temporary Assistance to Families
21-10[c]	7/6/2021	Statewide Burn Ban
21-12	9/1/2021	Excess Heat
22-01	1/7/2022	Statewide Road Impact from Winter Weather, Rain, Snow and Flooding
23-06	9/19/2023	Statewide Wildfires – Family Emergency Assistance
25-02	4/3/2025	Atmospheric River – Straight-line winds, heavy rainfall, and above-average temperatures leading to snow and ice melt, flooding, downed trees, landslides, and rockslides.

a. Declaration number codes as follows: DR = Major disaster declaration; EM = Emergency declaration; FM = Fire management assistance declaration
b. Declarations prior to 1964 are Washington-statewide, not Spokane County specific; FEMA did not begin distinguishing declarations by county until 1964
c. Multiple declarations issued under primary declaration

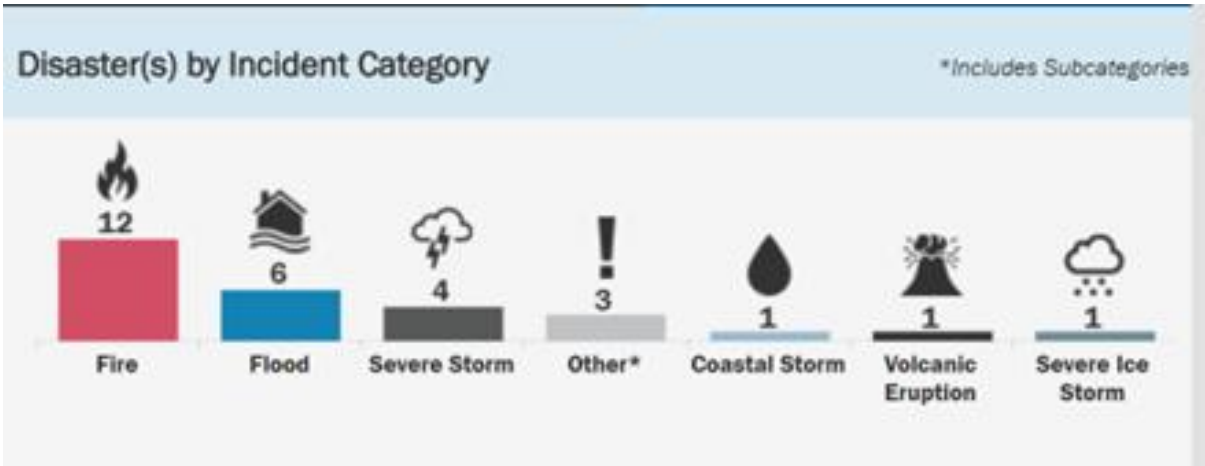


Figure 3-2 FEMA Disaster Incident by Type (2025)

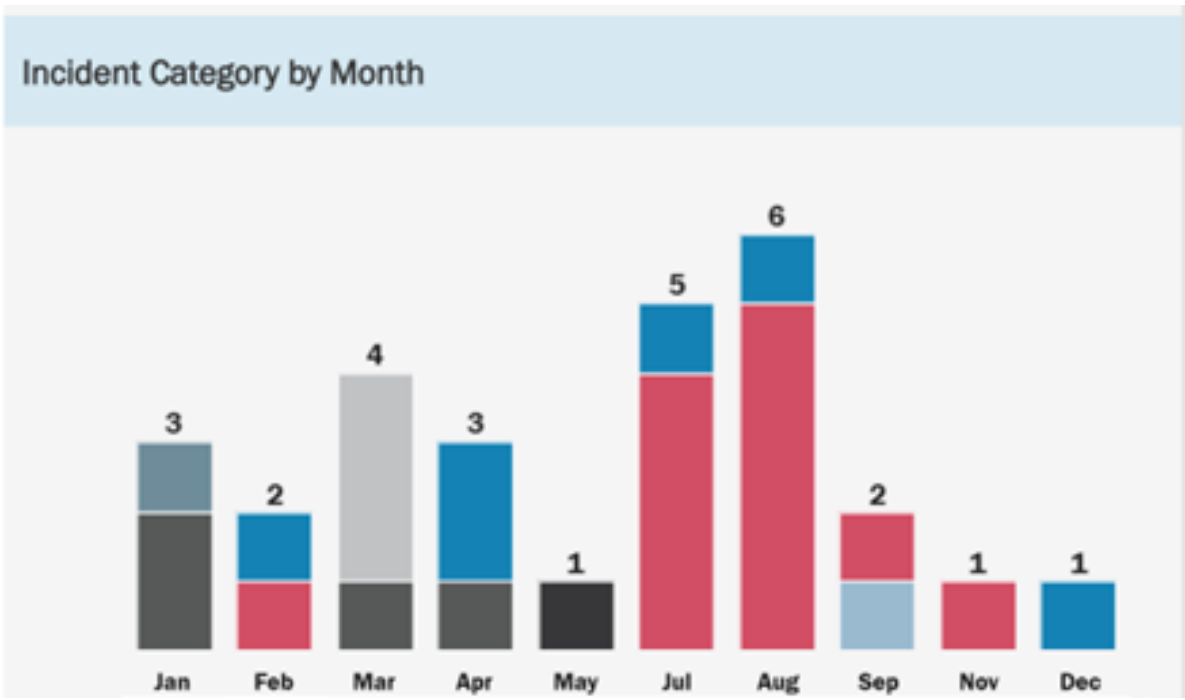


Figure 3-3 Disaster Incidents by Month (2025)

Table 3-2
Disaster History by Month, Recurrence, and Probability of Occurrence

1964-2024

Hazard Type	Jan	Feb	Mar	Ap	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Years of Occurrence	Recurrence / Years (No Order of Magnitude)[c]	Probability/ (Percent risk that an event may occur)
Flood		1		2			1	1				1	6	1964, 1982, 1986, 1996, 1997, 2017	~10	10%
Severe Storms and Ice Storm	3		1	1									5	1997(x2), 2009, 2016, 2021	~12	8.3%
Wildfire							4	5[a]	1		1		11	1991, 2008, 2014, 2015, 2016(x2), 2018, 2020, 2021, 2023(x2)*[b]	~2.2[b]	46%
TOTAL	3	1	1	3	0	0	5	6	1	0	1	1	22			

Based on FEMA designation and dates (1964-2024)
a=Includes August 23 Gray and Oregon fires which were not declared until February 2024
b=Due to the lack of reporting data, the outlying 1991 was not included in calculation; rather, for this calculation, the year 2000 was used as the beginning of the reporting period.
c=No order of magnitude beyond a qualifying declared event

3.4 PHYSICAL SETTING

Spokane County's terrain is varied. The northern county is forested and rugged. Mount Spokane, the highest point in the county, is 5,878 feet. The southeast county is a rich agricultural area among fertile Palouse soils. The southwest county has channeled-scabland rock outcroppings and big lakes. Much of this region is part of the Turnbull National Wildlife Refuge.

The diversity of Spokane County's natural environment is illustrated by ecosystems that range from sub-alpine forests to semi-desert scablands. This diversity supports a broad spectrum of wildlife, from the moose of Mt. Spokane to the western painted turtles of Granite Lake. Numerous lakes, rivers and wetland areas provide linkages and corridors for wildlife. Spokane County's natural environment also includes the Spokane-Rathdrum aquifer, which is one of the most productive aquifers in the United States (Spokane County, 2012a).

The county has two rivers. The Little Spokane River flows south from Pend Oreille County to the Spokane River in the center of the county. The Spokane River, outlet for Lake Coeur d'Alene, flows west from Idaho into central Spokane County and through the cities of Spokane and Spokane Valley. The river turns to the northwest, joining the Little Spokane River at the northwestern boundary of the county, eventually emptying into the Columbia River.

The lowest point in the county is the Spokane River behind Long Lake Dam (boundary of Stevens County) at 1538 feet (468 m) above sea level. (There is virtually no change in elevation between the dam and the mouth of the Little Spokane River inside Riverside State Park.) The highest point in the county is the summit of Mount Spokane at 5,883 feet (1793 m).

The Spokane River originates in Coeur d'Alene Lake in Idaho, which is fed by the Coeur d'Alene and St. Joe Rivers. The watershed of the Spokane River in Idaho is largely forested mountains. From the Washington-Idaho border, the Spokane River flows westerly across Spokane County through a flat alluvial valley, averaging from 2-3 miles in width, to the eastern corporate limits of the City of Spokane. There it enters a canyon that extends through the city. The tributary area of Coeur d'Alene Lake is approximately 3,700 square miles, and it drains mountainous, forested area with elevations ranging from 2,120 feet at Coeur d'Alene Lake to 6,500 at the crest of the Bitterroot Mountains. Coeur d'Alene Lake is a natural lake and has a natural outlet; it can regulate flows of up to 15,000 cubic feet per second (cfs) at a lake level of 2,131.9 feet. When the lake stage exceeds 2,131.9 feet, the control passes from the dam to the natural lake outlet.

Hangman Creek drains an area that is predominantly dry farmed in wheat on Palouse soils with rolling topography. Its total basin above the confluence with the Spokane River is 689 square miles, of which 203 square miles are in Idaho. It enters Spokane in the southwestern part of the city and flows north-northwesterly to the confluence with the Spokane River.

3.4.1 Geology

The structural features of the Spokane Valley are the result of a complex sequence of intense folding and faulting. Geologic structures within the planning area fall into two units based on their permeability. The consolidated Precambrian and Tertiary rocks, composing one unit, are relatively impermeable and allow delineation of the bottom and the sides of the valley. Unconsolidated Quaternary deposits compose the second unit and define the extent and thickness of the valley fill. This unit consists mainly of poorly sorted, reworked, glaciofluvial deposits of sand and gravel.

Over time, local geology and the dry, temperate climate have developed soils, aquifers and water bodies that interact in complex ways. Groundwater is located in soil pore spaces and in the fractures of rock formations. In addition to supplying water for human needs such as drinking, crop irrigation and industrial use, groundwater plays a critical role in the environment. Water that moves from the subsurface into streams maintains a base level of flow in the streams during

the summer when there is relatively little contribution from precipitation and snowmelt. Therefore, increased use of groundwater could impact surface water resources, where there is hydraulic continuity. Management of the watershed's water resources requires a thorough understanding of the watershed's hydrogeology. Generally, principal aquifers in the watershed lie within unconsolidated sands and gravels, basalt, and basement rocks. The unconsolidated and basalt aquifers are the most suitable for extracting groundwater of sufficient quantity for municipal distribution systems.

Spokane County possesses a diverse topography that is dominated by the Cascade and Wenatchee Mountains. From the high Cascades, the land slopes generally downward to the east and south to the Columbia River. The eastern part of the county consists of low, rolling to moderately steep glacial terraces and long, narrow valleys. The southeast section of the county is characterized by moderately steep to steep glacial terraces and steep, rough, broken mountain foothills. The Spokane Valley- Rathdrum Prairie Aquifer in Washington and Idaho study area has undergone a complex series of geologic events that have resulted in the surface and subsurface geologic framework that exists today.

Seismic Features

The structural features of the Spokane Valley are the result of a complex sequence of intense folding and faulting. Geologic structures within the planning area fall into two units based on their permeability. The consolidated Precambrian and Tertiary rocks, composing one unit, are relatively impermeable and allow delineation of the bottom and the sides of the valley. Unconsolidated Quaternary deposits compose the second unit and define the extent and thickness of the valley fill. This unit consists mainly of poorly sorted, reworked, glaciofluvial deposits of sand and gravel.

Geologically hazardous areas are susceptible to earthquakes, erosion, landslides or other geologic events. Typically, they are not suited for commercial, residential or industrial development without mitigation. Geologic hazards are categorized as critical and sensitive areas under the Critical Areas Ordinance. Geologic hazards and constraints include erodible soils, alluvium, landslide deposits and Latah formation. Spokane County is in a region with a moderate risk of seismic activity. The Uniform Building Code classifies the area as Seismic Zone 2B.

Erosion

Spokane County defines erodible soils as those soil associations which have been found to have severe potential of erosion according to the U.S. Soil Conservation Service and/or which have a slope of 30 percent or greater. There are a few small areas of erodible soil located along the planning area border, primarily northwest of Mica Peak, east of Millwood, and in the northern portion of the North Spokane service area. Erodible soil types are found primarily in the northeastern and southeastern portions of the County. Small areas with these characteristics can

also be found northeast and southeast of the City of Spokane, north and west of the City of Cheney, and west of the City of Medical Lake.

Landslide

Landslide hazard areas have been defined by areas with a history of landslide deposits, Alluvium, or the Latah formation. Landslide hazard areas are primarily located in pockets in the northern and central portions of the County. These areas are associated with the Little Spokane River and with the foothills and mountainous areas north of the City of Spokane. Small areas are also present in the north and west of the City of Cheney. There are no Latah formations within the planning area boundaries; however, landslide deposits are found in a few areas bordering the planning area.

Soils

The planning area follows the Spokane River, resulting in level to gently sloping topography and consistent soil types. The soils of this area consist of the Garrison Marble-Springdale soil association, which is excessively drained sandy and gravelly soils formed in glacial outwash. The soil within the planning area are very porous in nature with a rapid water-intake rate and low water-holding capacity. These soils also have moderate resistance to erosion, high shear strength, and high load-carrying capacity. The high level of permeability is a concern for aquifer health, which is located directly under the planning area.

Soils characteristics in other parts of the County outside of the planning area may be relevant to some wastewater management alternatives. These characteristics are described below.

- The southwestern part of the County consists of a broad basalt plateau. Only small remnants of pre-glacial soils, characterized by deep to shallow, gravelly or rocky soils with moderate permeability and low water-holding capacity, remain from the glacial floods.
- The southeastern part of the County is described by rolling to hilly topography with deep soils that formed from wind deposits of silty material. The soils are characterized as medium to fine-textured soils with moderate to slow permeability and high to moderate water-holding capacity. Basalt is the most prominent geologic formation, with quartzite, shale and sandstone also found in the region. The area consists of rolling loess uplands, glacial till plains, and mountain foot slopes.
- The Okanogan Highlands makes up the northern part of the County and consists of mountains, foot slopes, glaciated valleys, broad glacial lake terraces, and outwash terraces. Soils in the eastern area are characteristically deep, medium-textured soils of the hilly and mountainous areas with moderately rapid permeability and moderate water-holding capacity. Soils in the northwest consist of gravelly and sandy soils with

rapid permeability and moderate water-holding capacity that formed in glacial materials.

3.4.2 Hydrology

Spokane County has a large number of surface water bodies that provide a variety of economic, recreational and aesthetic benefits and use. The county has two rivers. The Little Spokane River flows south from Pend Oreille County to the Spokane River in the center of the county. The Spokane River, which serves as an outlet for Coeur d'Alene Lake, flows west from Idaho into central Spokane County and through the cities of Spokane and Spokane Valley. The river turns to the northwest, joining the Little Spokane River at the northwestern boundary of the county, eventually emptying into the Columbia River.

Flow on the Spokane River is regulated by a series of dams. There are seven hydroelectric dams on the Spokane River, from Post Falls Dam at the outlet from Lake Coeur d'Alene to Little Falls Dam at river mile 29. One dam, the Upriver Dam, is owned and operated by the City of Spokane Water Department; the others are owned by Avista Corporation. Other major dams along the Spokane River include the Nine Mile Dam, Long Lake Dam and Little Falls Dam. They were constructed in 1908, 1915 and 1910, respectively. Grand Coulee Dam is located on the Columbia River and creates the Spokane Arm of Lake Roosevelt. Four smaller dams listed in the Ecology dam database are associated with mining ponds—two in the Chamokane Creek drainage; one in an unnamed drainage within the Spokane Indian Reservation, and one along the south shoreline of Lake Spokane.

Grand Coulee Dam has a significant effect on the watershed, with backwater from Lake Roosevelt impacting the lower 30 miles of the Spokane River. Water levels throughout this lower reach fluctuate throughout the year, with levels reaching a low point in the spring before refilling to a maximum level, usually by July 4. Monthly average flows on the Spokane River are shown in Table 3-3.

Table 3-3.
Monthly Average Spokane River Flow at Long Lake Dam

Month	Average Flow (cfs)	Month	Average Flow (cfs)
January	7,112	July	3,454
February	8,860	August	2,019
March	10,589	September	2,276
April	15,350	October	2,909
May	18,308	November	4,033
June	11,302	December	6,334

Bodies of water with a mean annual flow of greater than 20 cubic feet per second (in the case of flowing water) and an area greater than 20 acres (in the case of standing water) are considered Shorelines of the State and are subject to the Shoreline Management Act. The Act's area of jurisdiction is the body of water together with an adjacent strip of land generally 200 feet wide, measured landward from the ordinary high watermark. In compliance with the Shoreline Management Act, Spokane County adopted a Shoreline Management Program in 1975. The Shoreline Management Program established goals, policies and regulations to protect shoreline areas. Developments after 1975 have been conditioned to comply with the Shoreline Master Program.

3.4.3 Climate

The climate pattern in the County is related to a gradual increase in elevation from west to east. The County lies between the Rocky Mountains on the east, the Cascade Mountains on the west, mountains near the Canadian border on the north and Blue Mountains on the south. Eastern Washington climate is a function of maritime and continental influences. The marine influence is most noticeable in winter when the prevailing westerly winds are strongest and most persistent.

The County generally experiences seasonable weather patterns characteristic of Eastern Washington. Warm, dry summers are usually experienced, although heavy rain and hail infrequently accompany thunderstorm activity. Mid-summer temperatures range in the middle and upper 80s; winter highs are usually in the 30s. Extreme temperatures can range from 110ºF to -30ºF.

The average annual precipitation is 16 inches; approximately half of that amount falls as snow, which peaks between October and the end of March. November is the wettest month. July, August and September are the driest months.[6]

Snow, the dominant form of precipitation due to winter coinciding with the rainy season, accumulates to a depth of 10 to 15 inches and remains on the ground from December through February. Annual average precipitation increases from west to east, with the western portion of the County receiving less than 12 inches and the eastern part receiving over 24 inches. The average amount of snowfall that Spokane County receives annually is about 28 inches. [7]

3.5 DEMOGRAPHICS

Some populations are at greater risk from hazard events because of decreased resources or physical abilities. Elderly people, for example, may be more likely to require additional assistance. Research has shown that people living near or below the poverty line, the elderly (especially older

[6] US Climate Data. Accessed multiple times. Available online at: Climate Spokane - Washington and Weather averages Spokane

[7] WRIA 54 (Lower Spokane) Watershed Plan. Accessed 21 April 2025. Available online at: WRIA54_Cover_final.psd

single men), the disabled, women, children, ethnic minorities and renters all experience, to some degree, more severe effects from disasters than the general population. These vulnerable populations may vary from the general population in risk perception, living conditions, access to information before, during and after a hazard event, capabilities during an event, and access to resources for post-disaster recovery. Indicators of vulnerability—such as disability, age, and poverty—often overlap spatially and often in the geographically most vulnerable locations.

3.5.1 Population Characteristics

Knowledge of the composition of the population and how it has changed in the past and how it may change in the future is needed for making informed decisions about the future. Information about population is a critical part of planning because it directly relates to land needs such as housing, industry, stores, public facilities and services, and transportation.

In 2017, Spokane County was the fourth largest county in the state by population, with 499,800 residents, and the eighth most densely populated county in the state, with 283 residents per square mile. For this 2025 update, based on Office of Financial Management data (2024), Spokane County is again the fourth largest county in the state by population, with 559,400 residents, with King, Pierce and Snohomish Counties placing first, second and third largest, respectively. Spokane is now the seventh most densely populated county in the state, with 317 residents per square mile (see Figure 3-4).

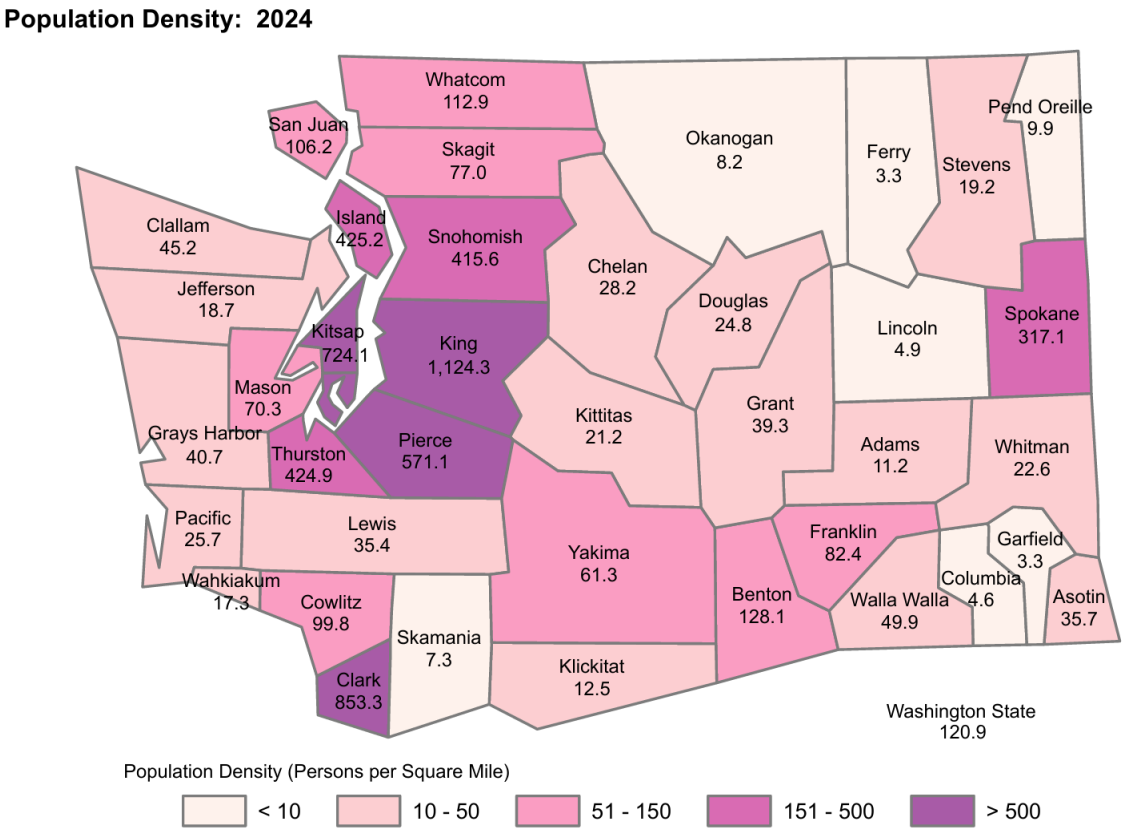


Figure 3-4 WA OFM Population Density by County (2024)

The planning area previously experienced a 13.80 percent increase in population between 2000 and 2012. During the time period of 2010-2018, population increased 9.2 percent. During the period 2020 to 2024, Washington State OFM indicates that Spokane County saw a 3.72 percent increase, with population countywide in 2024 estimated at 559,400. (US Census data identifies the county population at 555,947, with 3,453 fewer residents, or a 3.1 percent increase rather than the 3.72 percent identified by OFM).

Population changes are useful socio-economic indicators as a growing population generally indicates a growing economy, while a decreasing population signifies economic decline. Table 3-4 summarizes the 2017 and 2024 population in the county by jurisdiction, as well as the percent growth during 2020-2024.

As identified in Table 3-5, the City of Spokane (not a member of this planning process) has the highest municipal population base of 229,447 residents, seeing a .02 percent increase. The City of Spokane Valley, which is the second largest municipality in the County, saw an increase of 5.1 percent, with a population of 108,235, and ranks fifth among the top 10 cities for population

growth statewide.[8] In order of growth, based on Washington State Office of Financial Management data, the cities that saw the highest percent of increase in population are Deer Park (16.36 percent), Spangle (15.9 percent), and Liberty Lake (15.55 percent). Medical Lake saw a decrease in population of 0.80 percent, or the loss of 39 residents between 2020 and 2024. Population in Latah remained unchanged. The remaining municipalities saw a modest increase.[9] The average number of people per household in Spokane County is 2.45, which remains very close to the 2017 count of 2.43 persons per household.

Table 3-4.
Spokane County Population by Jurisdiction

Jurisdiction	Population as of April 1, 2017	Population as of April 1, 2024	Percent Growth 2020-2024
Airway Heights	8,460	12,070	3.99
Cheney	11,800	13,150	3.61
Deer Park	4,105	5,100	12.21
Fairfield	620	600	-0.79
Latah	195	185	16.36
Liberty Lake	9,910	13,870	1.87
Medical Lake	4,990	4,835	0
Millwood	1,790	1,925	15.55
Rockford	480	605	-0.80
Spangle (declined by 5)	275	285	2.34
Spokane	217,300	233,000	15.9
Spokane Valley	94,890	108,800	1.79
Waverly	117	125	1.75
Unincorporated	144,788	164,850	5.66
Total	**499,720**	**559,400**	**3.31**

Source: Washington State Office of Financial Management, 2019 (2017 data was most current); 2025 (2024 data was most current) https://www.ofm.wa.gov/sites/default/files/public/dataresearch/databook/pdf/53063.pdf

[8] Washington State Office of Financial Management. June 2024. Washington state tops 8 million residents in 2024. Accessed 15 April 2025. Available online at April 1 population estimates press release

[9] There are (slight) variations in numbers between the U.S. Census data and data from the Washington State Office of Financial Management, which data is also utilized for various purposes throughout this plan. As such, depending on the source of available information, the numbers may vary slightly.

Table 3-5.
Spokane County Population by Jurisdiction

Jurisdiction	2020 Census	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate
Spokane County	539,339	542,100	550,700	554,600	559,400
Unincorporated Spokane County	158,524	159,560	162,715	163,390	164,850
Incorporated Spokane County	380,815	382,540	387,985	391,210	394,550
Airway Heights	10,757	10,760	11,040	11,280	12,070
Cheney	13,255	12,390	12,920	13,160	13,150
Deer Park	4,383	4,520	4,670	4,925	5,100
Fairfield	589	600	600	600	600
Latah	185	185	185	185	185
Liberty Lake	12,003	12,480	12,870	13,150	13,870
Medical Lake	4,874	4,870	4,840	4,915	4,835
Millwood	1,881	1,915	1,915	1,925	1,925
Rockford	522	520	545	570	605
Spangle	280	280	280	280	285
Spokane	228,989	229,400	230,900	232,700	233,000
Spokane Valley	102,976	104,500	107,100	107,400	108,800
Waverly	121	120	120	120	125

Source: Washington State Office of Financial Management, 2025 (2024 data most current)
ofm_april1_population_final.xlsx

3.5.2 Income

In the United States, individual households are expected to use private resources to prepare for, respond to and recover from disasters to some extent. This means that households living in poverty are automatically disadvantaged when confronting hazards. Additionally, the poor typically occupy more poorly built and inadequately maintained housing. Mobile or modular homes, for example, are more susceptible to damage in earthquakes and floods than other types of housing. In urban areas, the poor often live in older houses and apartment complexes, which are more likely to be made of un-reinforced masonry, a building type that is particularly susceptible to damage during earthquakes. Furthermore, residents below the poverty level are less likely to have insurance to compensate for losses incurred from natural disasters. This means that residents below the poverty level have a great deal to lose during an event and are the least prepared to deal with potential losses. Personal household economics also significantly impact people's decisions on evacuation. Individuals who cannot afford gas for their cars will likely decide not to evacuate.

Based on the U.S. Census Bureau's American Community Survey (ACS) estimates, per capita income reached $39,879 in 2023 within Spokane County, with the State average at $51,493.

Median household income over the period 2019 -2023 was $73,513, well below the state's $94,952, according to the U.S. Census Bureau QuickFacts. Over the period 2019 to 2023, 12.5 percent of the population was living below the poverty level in Spokane County. This is 2.2 percent above the 10.3 percent experienced by the state.[10]

3.5.3 Age Distribution

As a group, the elderly are more apt to lack the physical and economic resources necessary for response to hazard events and are more likely to suffer health-related consequences making recovery slower. They are more likely to be vision, hearing and/or mobility impaired, and more likely to experience mental impairment or dementia. Additionally, the elderly are more likely to live in assisted-living facilities where emergency preparedness occurs at the discretion of facility operators. These facilities are typically identified as "critical facilities" by emergency managers because they require extra notice to implement evacuation.

Elderly residents (65 and over) living in their own homes may have more difficulty evacuating their homes and could be stranded in dangerous situations. This population group is more likely to need special medical attention, which may not be readily available during natural disasters due to isolation caused by the event. Specific planning attention for the elderly is an important consideration given the current aging of the American population.

Based on 2025 U.S. Census estimates, 17.8 percent of Spokane County's population is 65 or older, compared to the state average of 17.1 percent. Based on 2017 U.S. Census data, 15.7 percent of Spokane County's was population 65 or older, compared to the 2017 state average of 15.1 percent. Within Spokane County, that represented a 2.4 percent higher percentage than in 2015, which identified 13.3 percent of the population 65 or older, demonstrating an aging population. This represents an increase of 4.5 percent during the period 2015-2025, demonstrating an increase in aging population.

Children under 5 years of age are also particularly vulnerable to disaster events because of their young age and dependence on others for necessities. Very young children may additionally be vulnerable to injury or sickness; this vulnerability can be worsened during a natural disaster because they may not understand the measures that need to be taken to protect themselves from hazards.

U.S. Census data estimates that 5.1 percent of the County's population is 5 or younger, equal to the state average. 21.3 percent represent people under the age of 18 years within the County, similar to the state average of 21.1 percent. When reviewing 2017 and previous years' data, 6.1

[10] Washington State Employment Security Department. Accessed 21 April 2025. Available online at: Spokane County profile | Employment Security Department
US Census Data. Accessed 21 April 2025. Available online at: U.S. Census Bureau QuickFacts: Spokane County, Washington

percent of the county's population was 5 or younger, compared to the state average of 6.2 percent and 22.2 percent of the county's population is 18 or younger, which was the same as the state's average of 22.2 percent (US Census QuickFacts).

3.5.4 Language

Language access is a critical component of equal access to local government services and improved civic engagement. Effective communication allows individuals to obtain and provide critical information across all sectors of government. This is especially important for individuals with Limited English Proficiency (LEP) or for whom English is not their native language.

Research has also demonstrated that minorities are less likely to be involved in pre-disaster planning and experience higher mortality rates during a disaster event. Post-disaster recovery can be ineffective. Since higher proportions of ethnic minorities live below the poverty line than the majority white population, poverty can compound vulnerability.

According to the 2024 U.S. Census QuickFacts, the racial composition of Spokane County is predominantly white, at about 87.8 percent. The largest minority population is Hispanic or Latino, at about 7.3 percent. Other than English, the most spoken language in Spokane County is Spanish. The Census estimates 7.5 percent of the county's residents indicate that "Language other than English spoken at home".

In Washington, statutes, regulations, as well as guidance documents establish the regulatory framework and best practices for providing language access to all citizens. This includes translation services, interpreters, the requirement for language access plans, and public outreach. Spokane County currently provides emergency (and other) messaging for nine language groups countywide, helping to ensure that all citizens are provided with necessary information.

3.5.5 Disabled Populations

People with disabilities are more likely than the general population to have difficulty responding to a hazard event. As disabled populations are increasingly integrated into society, they are more likely to require assistance during the 72 hours after a hazard event, the period generally reserved for self-help. There is no "typical" disabled person, which can complicate disaster-planning processes that attempt to incorporate them. Disability is likely to be compounded with other vulnerabilities, such as age, economic disadvantages and ethnicity. Table 3-6 identifies disability by age group within Spokane County as of 2022.

Table 3-6. Disability By Age Group		
Age	**County (Percent)**	**State (Percent)**
Under 5 years	2.1	0.6
5-17 years	7.1	5.5
18-34 years	11.1	9.3
35-64 years	17.3	12.4
65-74 years	28.8	24.8
75+ years	47.8	47.7
All ages	16.6	13.5
Source: 2024-2025 Community Health Needs Assessment Available at: 2024-2025 Spokane County Community Health Needs Assessment *new* - County Health Insights		

3.6 ECONOMY

3.6.1 Employment Trends

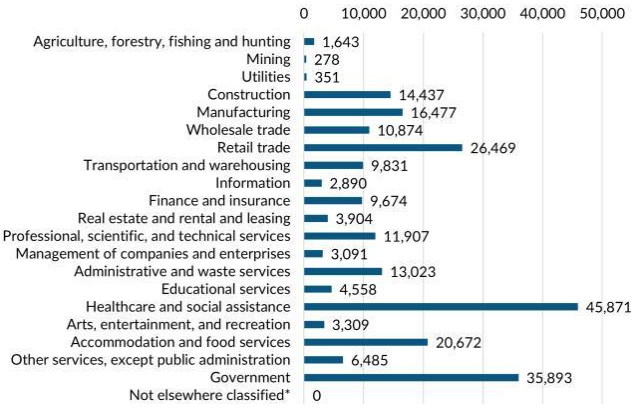


Figure 3-5 Employment by Industry (2023)

Spokane County is the economic hub of the area known as the Inland Northwest. Major economic sectors are government, higher education, medical services, and retail trade. It also has strong and diversified manufacturing, wholesale trade and finance sectors (see Figure 3-5).[11] The City of Spokane is the retail trade and services hub, and a regional center for arts and entertainment. Spokane County is also the home of Fairchild Air Force Base, the home of a refueling tanker unit, located in the western part of the county, which also serves as the largest employer and is expected to continue to grow. Recent areas of growth include a health sciences campus, Amazon fulfillment centers, and biotechnology firms.

Spokane is attracting investments from tourism, conventions, military, and research, supporting a diversified economy. As of February 2025, Spokane County has experienced notable employment and unemployment trends. Employment levels remain relatively stable, with a slight decrease in total labor force, employment, and unemployment.

[11] Washington Employment Security Department. Accessed 21 April 2025. Available online at: Spokane County profile | Employment Security Department

- The unemployment rate in the county was 5.7% in February 2025, which increased from 5.1% in January 2025.
- The labor force decreased by 2,392 workers from August 2024 to August 2025.
- The total employed workers decreased by 1,298 workers from August 2024 to August 2025.

3.7 LAND USE DEVELOPMENT

The County and its cities have adopted comprehensive plans that govern land use decisions and policy making within their jurisdictions. As of this update, all municipal planning partners are in the process of updating their respective plans. All municipal planning partners have adopted building codes and specialty ordinances based on state and federal mandates. Decisions on land use are governed by these programs. This plan will work together with these programs to support future development by providing vital information on the risk associated with natural hazards in Spokane County.

All municipal planning partners will seek to incorporate by reference the Spokane County Hazard Mitigation Plan in their comprehensive plans and will utilize the risk data identified as applicable. This will ensure that all future trends in development can be established with the benefits of the information on risk and vulnerability to natural hazards identified in this plan.

One of the first questions posed during the plan development at the kick-off meeting was the element of growth and expansion throughout the county and its municipalities. This was also particularly relevant with respect to the update of the critical facilities list which was used in this update process.

During this process, all planning partners collectively participated in discussions regarding the hazards of concern, and issues which specifically impacted their own municipalities. Such discussions included land use development trends that have occurred since the last plan was completed specific to their jurisdictions, or special purpose district whose service trends are impacted by growth and development. These discussions also included future land use trends, specifically as they relate to the built environment within hazard-prone areas.[12]

All municipal planning partners, with the exception of one - the City of Cheney, have indicated that development such that has occurred since completion of their last plan has not negatively impacted their municipalities with respect to any new hazards, or increased hazard risk with

[12] As of this 2025 HMP update, the County, and all of the municipal planning partners are in the process of updating their Comprehensive Land Use Plan, with an anticipated completion date in 2026.

respect to the likelihood of an event occurring, but it has impacted the potential consequence of the event insofar as it relates to the increased structures and people at risk.

The one notable exception is the City of Cheney, where access to a housing development could be hindered by trains traveling on existing railroad tracks. As a result of the potential impact, the City of Cheney placed a moratorium on expanding into certain areas of the City, but as of the 2026 update, that moratorium is no longer in place. While this does not signify an increased risk from the broader range of hazards, it does amplify vulnerability due to limited response capabilities while a train (or multiple trains) are on the tracks which (potentially) restrict evacuation routes in the event such was needed.

There is also the increased risk for a hazardous material incident stemming from the cargo carried on the rail tracks. There are three sets of tracks which travel along the City's main street. Were a hazardous material incident to occur, evacuation and/or response could be restricted, requiring the need to divert traffic out of the City back on to Interstate 90. This shared concern has spurred both the City of Cheney and Spokane County to strategize with the rail transportation carrier to develop a solution. Addressing this issue effectively could mitigate potential impacts on public safety and ensure smoother emergency response operations.

On further discussion, the general consensus by all Planning Team Members, both municipal and special purpose districts, is that while the expansion and growth experienced throughout the county is welcomed, that growth has increased their respective *exposure* as it relates to not only citizens, but also additional structure count and potentially economic losses, as well the associated service requirements for both the increased population and structures. This was particularly of concern with respect to wildfire, due to the increased density of structures in certain areas of the county. Discussion by Planning Team Members included the potential for enhanced building codes which directly address wildfire mitigation, such as utilization of fire-resistant buildings materials or requiring defensible space and sprinkler systems. Other items identified included conducting wildfire assessments for homes and businesses and increasing wildfire awareness campaigns throughout communities with high risk. These are also all items identified within the County's Community Wildfire Protection Plan as potential mitigation projects. The Spokane County Wildfire Mitigation Coalition (SCWMC) is working to identify a cooperative strategy for policy change across multiple jurisdictions within Spokane County.

The Planning Team Members felt that for the remaining hazards of concern, existing land use regulations would continue to ensure that new development was constructed in such a way as to not increase vulnerability, but still allow the municipalities to grow and expand, increasing their economic vitality. Planning Team Members also felt that the integration of planning efforts in place with respect to growth management and the review of the hazard areas identified within this document would also help ensure compliance, and the least negative impact with respect to identification of the hazard areas. Such discussions were particularly relevant as the risk assessment was developed to ensure that the planning partnership was addressing and

identifying specific geographic areas of concern not previously identified in earlier plans, including impact from land use development.

Throughout the County, there have been large-area development projects that have occurred since completion of the last plan. In some cases, new Public Development Authorities (PDA) have been created, such as the West Plains/Airport Area Public Development Authority.

While West Plains PDA is but one example of such entities in place throughout Spokane County (there are multiple), in general, the purpose of Authorities such as this is to provide a legal entity organized under RCW 35.21.730 - .757 to undertake, assist with and otherwise facilitate the acquisition, construction, development, leasing, operation and maintenance of public benefit projects within the PDA boundaries in order to assist all parties involved in their ability to improve the economic conditions in and around their specific areas of authority. Such Authorities, during their development phases, conduct extensive outreach with the public, local land use planners, tribal partners, and state agencies to ensure compliance of all regulatory authority in place, including land use to ensure minimal negative impact in all areas of the community's development.

In the case of the West Plains area, this is the portion of the County where the largest amount of commercial development has occurred, including two new Amazon Fulfillment Centers. The surrounding area is primarily encompassed by Airway Heights and Medical Lake (not a planning partner). These areas, referred to as the "northern side of the freeway" have experienced the most rapid and largest amount of commercial expansion since the last plan's completion. Similarly, the "southside of the freeway," which encompasses primarily the City of Cheney, has been and continues to be the area designated primarily for residential development. The City of Deer Park in the northern portion of the County has also increased in size since the last plan's completion, with approximately 300 new residential structures. The City of Liberty Lake near the County's eastern border has also increased its number of multi-family housing units at a moderate growth.

As a result of the development of the Amazon Fulfillment Center, Fire District 3 has been impacted with respect to increased service calls in general. Fire District 3 has also been impacted as a result of the City of Medical Lake's election to no longer provide fire services, thereby annexing its boundaries into Fire District 3's response areas.

In addition to the items identified in this section of the plan, each planning partner has prepared a jurisdiction-specific annex to this plan. In preparing these annexes, each partner completed a capability assessment that looked at its regulatory, technical and financial capability to carry out proactive hazard mitigation, including the ability of the planning partners to address future land use development in such a manner so as to not increase the risk or exposure from the hazards of concern. Such information, is contained in these annexes, which identify regulatory codes and

ordinances applicable to each planning partner. Each hazard profile also provides information on countywide land use development trends.

Existing Land Use and Growth

The various land use categories within Spokane County are shown in Table 3-7 and illustrated in Figure 3-6.

There is prime farmland scattered throughout the County. Prime farmland consists of rural land with excellent physical and chemical characteristics for production of food, feed, forage, fiber, and oilseed crops. High quality agricultural soils in portions of southern and western Spokane County sustain dry land crops such as wheat in those areas. Much of the agricultural land in Spokane County has been protected from development under the Comprehensive Plan, but that appears to be changing as the number of operating farms has decreased, with 2,386, farms in 2022, down from 2,425 in 2019.[13] Urban uses have replaced farms in the urban core of Spokane County, and is particularly evident in the center of the County along the Interstate 90 corridor.

Under current zoning, densities range from fifteen units per acre to one unit per 40 acres. The High-Density Residential zone allows a density of fifteen units per acre. The Low-Density Residential, Rural-5, Small Tract Agricultural, Rural Conservation, and large tract agricultural allows for a density range of six structures per acre to one unit per 40 acres. The lowest density in the county is in the Large Tract Agricultural Zone, where the assigned density is one unit per 40 acres. Land ownership throughout the county is identified in Figure 3-7, and includes federal, state, tribal, and local lands management.

Table 3-7.
Existing Unincorporated Area Zoning By Acreage

Zone	Area (Acres)	Zone	Area (Acres)
Community Commercial	76	Mineral Land	3,510
Forest Land	48,392	Mixed Use Area	695
Heavy Industrial	1,611	Neighborhood Commercial	64
High Density Residential	434	Regional Commercial	864
Large Tract Agricultural	289,700	Rural – 5	5,206
Light Industrial	4,586	Rural Activity Center	1,051
Limited Development Area Commercial	125	Rural Conservation	323,874
Low Density Residential	13,082	Rural Traditional	243,853
Low Density Residential Plus	295	Small Tract Agricultural	52,817
Medium Density Residential	496	Urban Reserve	20,222

[13] USDA Agricultural Publications (2022). Accessed 21 April 2025. Available at: st53_2_001_001.pdf

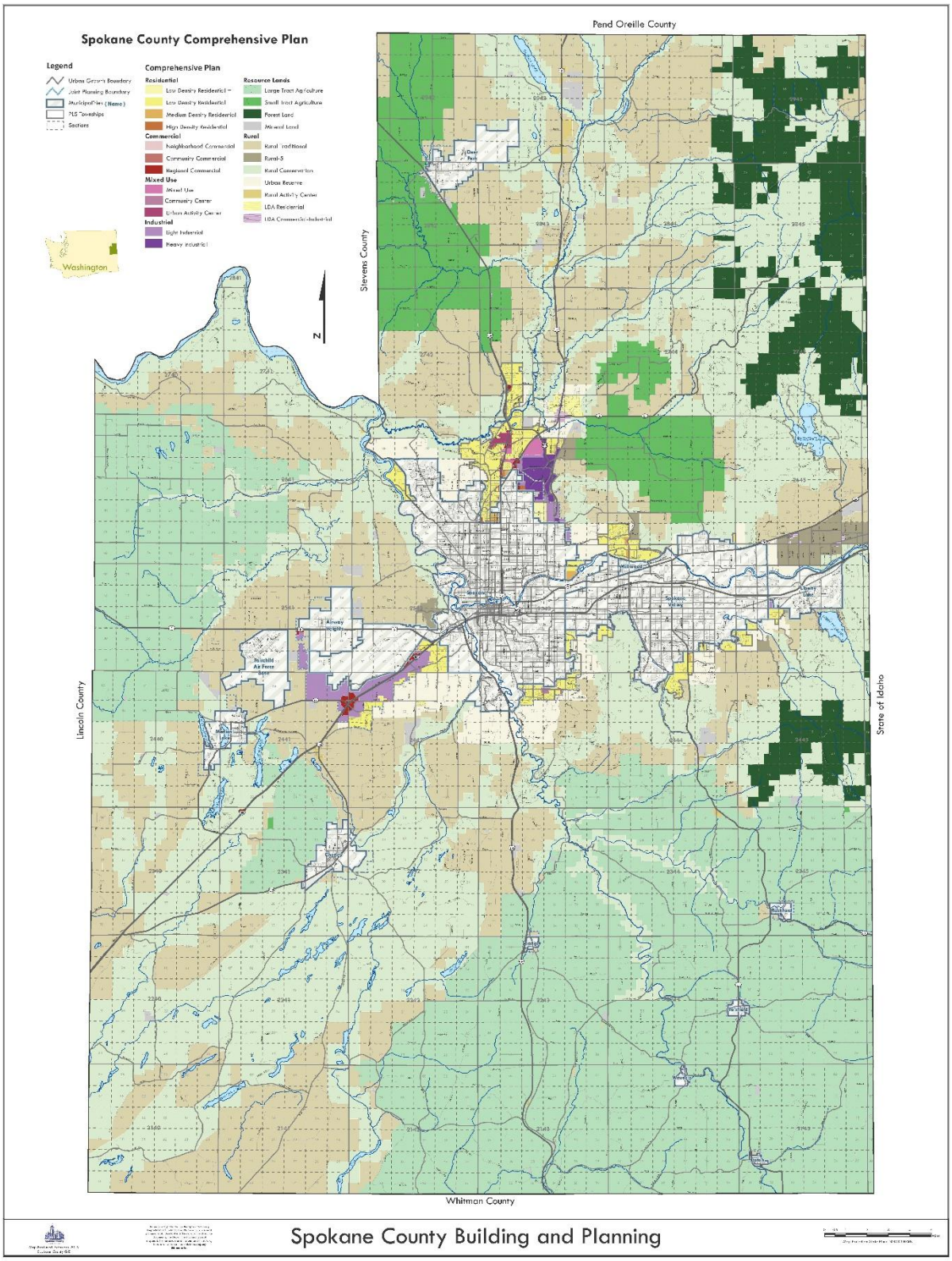


Figure 3-6. Spokane County Land Distribution
Source: Spokane County Comprehensive Land Use Plan (Currently being updated with 2026 completion)

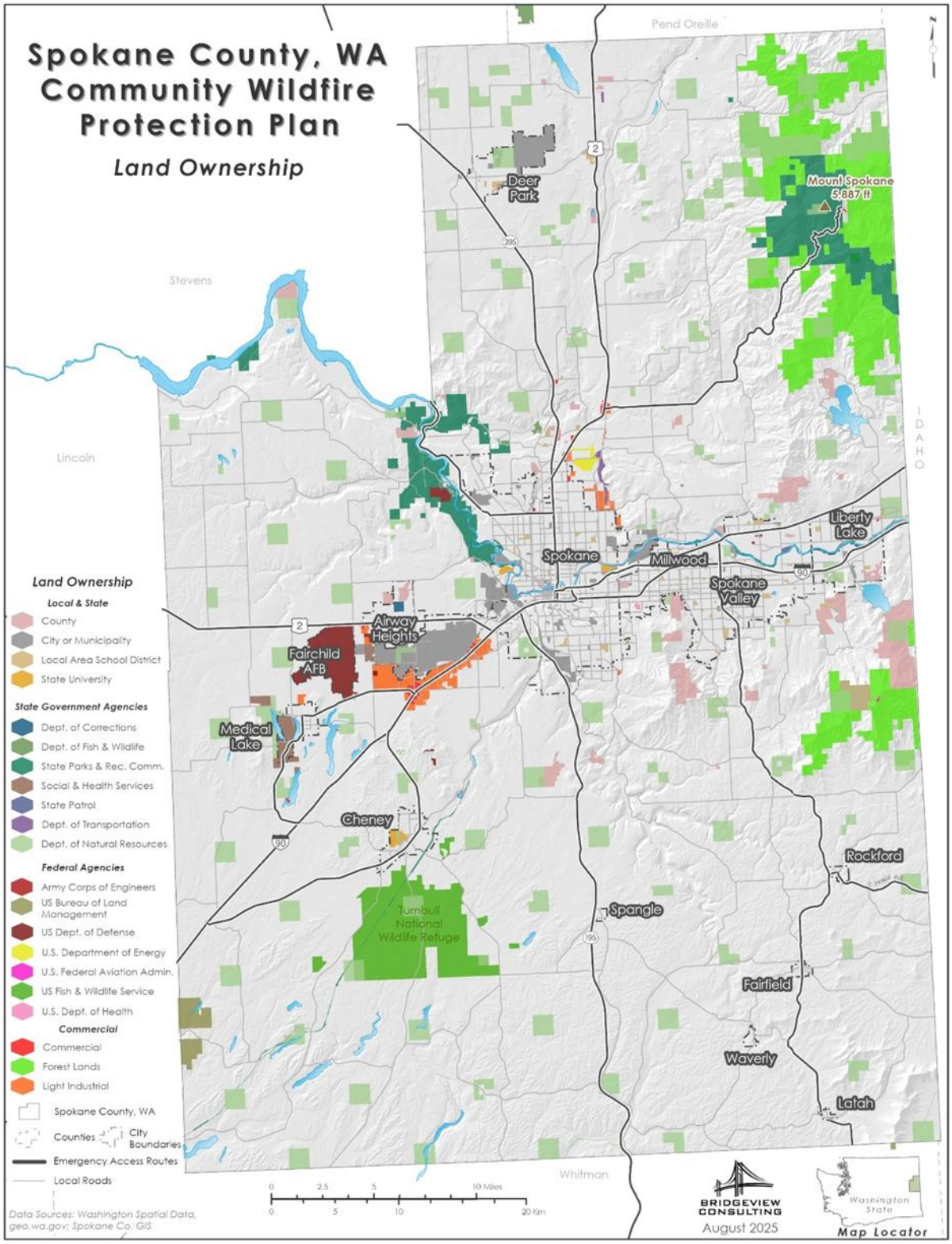


Figure 3-7 Land Ownership

3.8 HOUSING STOCK

Housing quality is an important factor in assessing disaster vulnerability. It is closely tied to personal wealth: people in lower income brackets often live in more poorly constructed homes that are especially vulnerable to strong storms or earthquakes. Mobile homes are not designed to withstand severe weather or flooding and typically do not have basements. They are frequently found outside of metropolitan areas and, therefore, may not be readily accessible by interstate highways or public transportation. Also, because mobile homes are often clustered in communities, their overall vulnerability is increased. Washington State's Office of Financial Management Forecasting Division provides data on Housing Units by Structure Type for Spokane County and its cities, as identified in Table 3-8. For planning purposes, the number of residential structures with an occupancy of 2.5 persons per structure was utilized to establish impact to people.

Table 3-8.
Spokane County Housing Units

Jurisdiction	Total All Types* (2018)	Mobile Home/Special (2018)	Total All Types* (2024)	Mobile Home/Special (2024)
Unincorporated Spokane County	59,196	9,592	64,441	9,706
Incorporated Spokane County	158,625	4,398	171,057	4,669
Airway Heights	3,389	531	4,341	537
Cheney	5,026	128	5,603	136
Deer Park	1,741	172	2,248	179
Fairfield	238	43	236	49
Latah	90	9	88	9
Liberty Lake	4,511	132	5,766	133
Medical Lake	1,874	133	1,847	132
Millwood	789	14	845	13
Rockford	214	61	229	74
Spangle	125	42	130	42
Spokane	98,630	1,570	102,198	1,656
Spokane Valley	41,943	1,534	47,470	1,679
Waverly	55	29	56	30
TOTAL *Inclusive of all types of residences	**217,821**	**13,990**	**235,498**	**14,375**

Source: Office of Financial Management Forecasting Division April 2025. Data available at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fofm.wa.gov%2Fsites%2Fdefault%2Ffiles%2Fpublic%2Fdataresearch%2Fpop%2Fapril1%2Fofm_april1_housing.xlsx&wdOrigin=BROWSELINK

3.8.1 Building Stock Age

The age of a building in determining vulnerability is a significant factor, as it helps identify the building code to which a structure was built. Homes built prior to 1975 are considered pre-code since there was no statewide requirement to include specific standards to address the various hazards of concern (e.g., there were no seismic provisions contained within the building code). Structures built after 1975 are considered of moderate code. It was at that point in time in which all Washington jurisdictions were required to adhere to the provision of the most recently adopted version of the Uniform Building Code (UBC) (Noson et al., 1988). Table 3-9 identifies the number of homes constructed by year based on the Assessor's 2025 data utilized for this HMP.

It should be noted that the data may be slightly skewed due to the fact that actual building code adoption dates may vary slightly by jurisdiction. Also, structures may have undergone remodel, or improvements which changed the building code classification, increasing the level of code applied. That data may not have been captured or applied in a manner which would reflect a change in the year of construction. Additionally, while building codes may not have been in place, houses may have been constructed to higher standards. Therefore, this data should be used for planning purposes only. Questions concerning actual structural integrity should be determined by appropriate subject matter experts in the field.

Table 3-9.
Spokane County Year Built Residential Structures*

Year Structure Built	Total Number
Built 2020 or later	10,509
Built 2010 to 2019	18,607
Built 2000 to 2009	28,179
Built 1990 to 1999	25,845
Built 1980 to 1989	14,982
Built 1970 to 1979	21,790
Built 1960 to 1969	8,615
Built 1950 to 1959	15,203
Built 1940 to 1949	9,349
Built 1939 or earlier	16,727

* Excludes Manufactured/Mobile Homes

3.9 CRITICAL FACILITIES AND INFRASTRUCTURE

Critical facilities and infrastructure are those that are essential to the health and welfare of the population. These become especially important after a hazard event. Critical facilities are typically defined to include police and fire stations, schools and emergency operations centers. Critical infrastructure can include the roads and bridges that provide ingress and egress and allow emergency vehicles access to those in need and the utilities that provide water, electricity and communication services to the community. Also included are "Tier II" facilities and railroads, which hold or carry significant amounts of hazardous materials with a potential to impact public health and welfare in a hazard event.

The Planning Team reviewed the 2020 definition of critical facility, and confirmed its application for this 2025 update with slight modifications, as follows:

- Police stations, fire stations, city/county/tribal government facilities (including those that house critical information technology and communication infrastructure), vehicle and equipment storage facilities, communications center (dispatch), and emergency operations centers needed for disaster response before, during, and after hazard events.
- Public and private utilities and infrastructure vital to maintaining or restoring normal services to areas damaged by hazard events. These facilities include but are not limited to:

Public and private water supply infrastructure, water and wastewater treatment facilities and infrastructure, potable water pumping, dams, flow regulation, distribution and storage facilities and infrastructure.

Public and private power generation (electrical and non-electrical), regulation and distribution facilities and infrastructure.

Data and server communication facilities (all types).

Structures that manage or limit the impacts of hazards of concern.

Major road and rail systems to include critical bridges, airports, bus and marine terminal facilities.

- Educational facilities, including K-12 and colleges.
- Community gathering places, such as libraries, community centers, senior centers, veterans' halls, and the County fairground.
- Hospitals and major medical/health care facilities.
- Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic, and/or water-reactive materials.
- Cultural and natural resources of significance to a community.

Once the definition of critical facilities was confirmed, facilities within the planning area that fit the definition were inventoried. Data was further enhanced and collected from a variety of sources. Data attributes on identified critical facilities were provided to the Planning Team, who reviewed and updated the data as appropriate. For this 2025 update, all planning partners were asked to update their respective lists, including new construction, and providing updated values, where appropriate. Almost all planning partners provided updated data. The County will utilize this 2025 list as a starting point for continued, annual enhancements by the Planning Team.

To maintain confidentiality, the risk to these facilities is presented generically without giving location or estimated replacement costs. These data are presented by broad planning areas. This list of critical facilities resides with the Department of Emergency Management, who over the course of time, will continue to update the list with new structures as they are identified or constructed. The Planning Team is aware that there may be structures currently not included on the list and have established a means to ensure new structures are added for future evaluation.

Figure 3-8 identifies the location of critical facilities and infrastructure in the planning area. Table 3-10 and Table 3-11 provide summaries of the general types of critical facilities and infrastructure. All critical facilities/infrastructure were analyzed in the risk assessment process to help rank risk and identify mitigation actions. The risk assessment for each hazard qualitatively discusses critical facilities with regard to that hazard. In total, 593 critical facilities were identified by the planning partners for assessment in this update as critical facilities. These are in addition to the general building stock data assimilated from the 2025 Assessor's database and assessed during the risk assessment process. Values provided by planning partners was limited due to the time constraints associated with completion of the plan, and the plan's expiration in March 2025. The County will work with the planning partners to enhance the data for future plan updates, and has identified this again as a mitigation strategy moving forward.

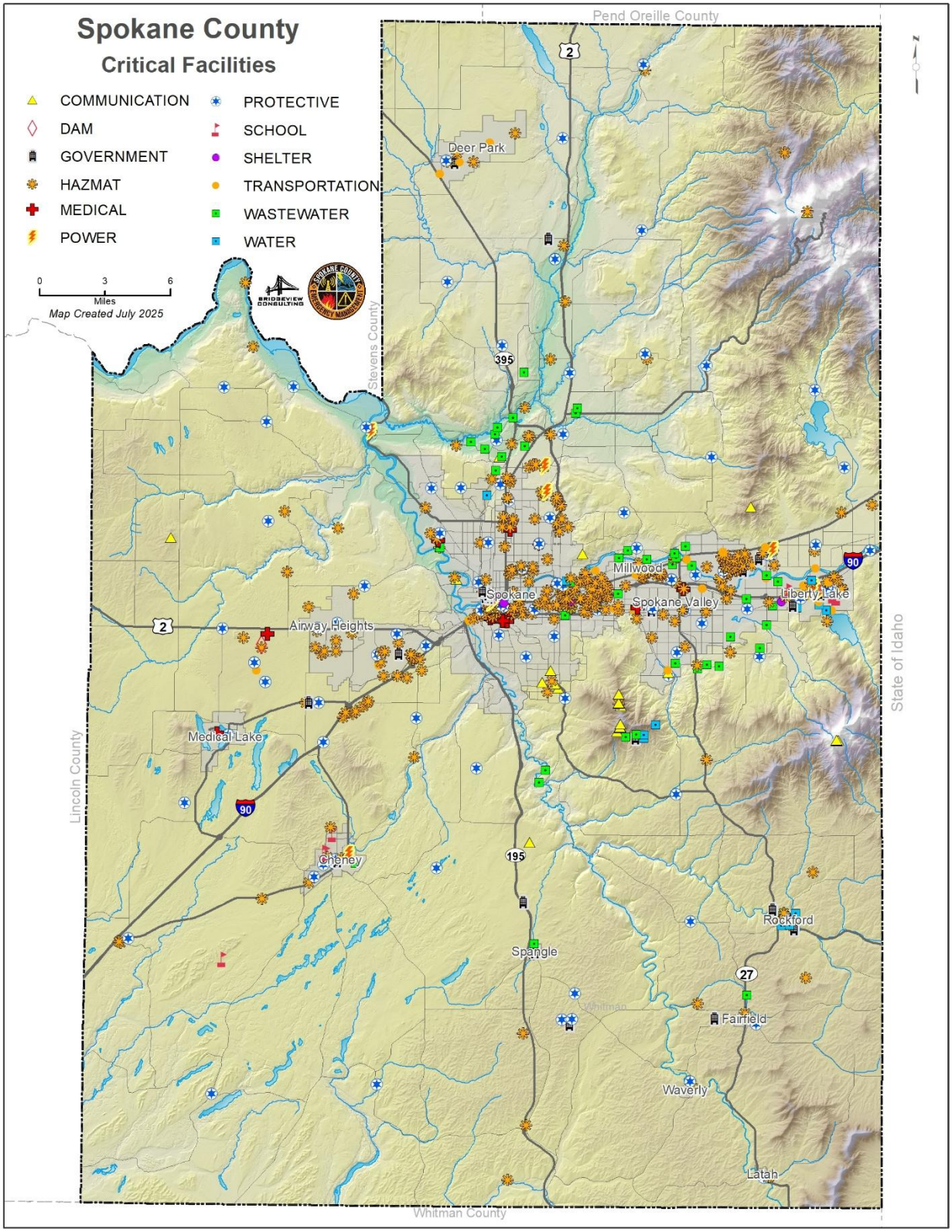


Figure 3-8. Spokane County Critical Facilities and Infrastructure

Table 3-10.
Spokane County Critical Facilities

Jurisdiction	Medical and Health	Government Functions	Protective Functions	Schools*	Hazmat**	Other Critical Functions	**Total**
Airway Heights	0	1	6	0	7	0	**14**
Cheney	0	1	9	4	4	0	**18**
Deer Park	0	2	2	0	4	0	**8**
Fairfield	0	0	2	0	1	0	**3**
Latah	0	0	1	0	1	0	**2**
Liberty Lake	0	2	5	3	8	0	**18**
Medical Lake	1	0	2	0	0	0	**3**
Millwood	0	0	1	0	1	0	**2**
Rockford	0	3	1	0	3	0	**7**
Spangle	0	2	2	0	1	0	**5**
Spokane	7	3	40	0	100	0	**150**
Spokane Valley	2	4	14	0	91	0	**110**
Waverly	0	0	1	0	1	0	**2**
Unincorporated	1	6	25	0	71	0	**103**
Total	**11**	**244**	**110**	**7**	**293**	**0**	**446**

*Only schools identified by planning partners were included. No school districts participated in the HMP process or update.

**Includes Hazmat Tier II Reporting sites (from WA DOE, 2023) and planning partner owned facilities which have been identified (e.g., some public works facilities, etc.)

Table 3-11.
Spokane County Critical Infrastructure

Jurisdiction	Trans.*	Water Supply	Wastewater	Power	Communications	Other**	**Total**
Airway Heights	0	0	0	0	0	1	**1**
Cheney	0	0	1	1	0	0	**2**
Deer Park	3	0	0	0	0	0	**3**
Fairfield	0	0	0	0	0	0	**0**
Latah	0	0	0	0	0	0	**0**
Liberty Lake	6	6	1	2	0	1	**16**
Medical Lake	0	0	0	0	0	0	**0**
Millwood	0	0	0	0	0	0	**0**

Table 3-11.
Spokane County Critical Infrastructure

Jurisdiction	Trans.*	Water Supply	Wastewater	Power	Communications	Other**	**Total**
Rockford	0	5	0	0	0	0	**5**
Spangle	0	0	0	0	0	0	**0**
Spokane	8	1	3	2	11	3	**28**
Spokane Valley	15	0	12	1	1	1	**30**
Waverly	0	0	0	0	0	0	**0**
Unincorporated	1	5	27	3	26	0	**62**
Total	**33**	**17**	**44**	**9**	**38**	**6**	**147**

*Transportation Infrastructure includes airport facilities and runways, bus facilities, bridges identified by planning partner, and rail.

** Other includes dam and shelter locations identified by planning partners.

Power, Natural Gas, and Communications

Spokane County has several energy providers operating throughout the county, including Avista Utilities, Cheney Electric, Inland Light & Power, Vera Water and Power, and Modern Electric Water Company. Avista Utilities also provides natural gas to certain areas.

Societal norms indicate that we are fully dependent upon information technology and the communications infrastructure. At the core of the communications infrastructure upon which we rely is the Internet, which connects one computer to another, networking the nation's infrastructure and essential services. Services such as electrical transforms, water distribution centers, security systems (radar), and economic sectors (stock markets) all exist with the infrastructure at its nexus.

Sewer and Water

There are several municipal and private wastewater/sewer and water providers throughout the County, with some areas being supplied by wells and septic systems.

Health Care

Spokane County is home to several state-of-the-art medical facilities and hospitals, including Providence Sacred Hart Medical Center, Providence Holy Family Hospital, Shriners Children's Hospital, MultiCare Valley Hospital, MultiCare Deaconess Hospital, and St. Lukes Hospital, as well as several additional specialty medical facilities. Eastern State Hospital, one of two state-owned psychiatric hospitals, is located in Medical Lake and provides long-term inpatient treatment for individuals with mental illness.

Educational Facilities

The Washington State University is located in Spokane, with its Extension Center offering clinics, consultations, and workshops on agriculture, forestry (including wildfire), horticulture, family living, and community development to residents of the county. Eastern Washington University, Gonzaga and Whitworth Universities are also within Spokane County.

The Spokane Colleges provide both in-person and online programs, providing allied health, transfer degrees, and career technical programs. Community colleges include Spokane and Spokane Falls. The Spokane Community College - Building 6 serves as the alternate EOC for the State of Washington Emergency Management Division.

The County also has multiple Head Start facilities which promote the school readiness of children from birth to age five from low-income families by enhancing their cognitive, social, and emotional development. Head Start programs provide a learning environment that supports children's growth in many areas such as language, literacy, and social and emotional development.

Spokane County has 19 school districts which service the County, including: Central Valley School District, Cheney School District, Deer Park School District, East Valley School District, Freeman School District, Great Northern School District, Liberty School District, Mead School District, Newport School District, Nine Mile Falls School District, Orchard Prairie School District, Reardan-Edwall School District, Riverside School District, Rosalia School District, Spokane Public Schools, St. John School District, Tekoa School District and West Valley School District.

Transportation

The Spokane County transportation network is comprised of roadways, freight corridors, railways and air travel facilities, pedestrian and bicycle facilities, and public transit. The County has developed a transportation element to the Spokane County Comprehensive Plan. The last update to the Transportation element occurred in December 2019, and is available for further review at Chapter 5 Transportation Element.docx.

The range of magnitude of impact from transportation incidents varies depending upon the mode of transportation involved. Incidents involving commercial vehicles carrying hazardous materials; impact from incidents involving structural integrity of bridges; air traffic traveling over jurisdictions, or railway incidents carrying passengers during rush hour traffic can have a devastating impact on the County. Given the amount of rail freight and other cargo moved over public access routes, the potential for a major transportation issue is relatively high.

Hazardous Materials

For the 2025 update, the FY2023 Hazardous Material Facility Report generated by the Washington State Department of Ecology was utilized and assessed as part of the hazard profile

development. There are a total of 327 reporting facilities throughout the County, many of which contain a multitude of different chemicals at each location.

In general, all communities located near Spokane County's major transportation corridors (land, rail and air) are subject to the probability of a significant hazardous materials release. Hazardous materials are transported over or near numerous wetlands, environmentally sensitive areas, and through densely populated centers. For example, the major east-west rail corridor is three blocks and Interstate 9 is one-half block north of a high school and both major regional hospitals. In addition, the rail lines pass near residential development areas, blocking traffic into/out of the developments. This is particularly true within Cheney, who has identified this issue as a mitigation strategy to potentially develop an alternate route for ingress and egress into areas which are daily impacted by rail lines when they load and unload cargo with rail cars blocking intersections. Since 2012, oil from North Dakota has been shipped through Spokane County to the refineries in Anacortes on a daily basis, with 1-1.5 loaded trains going through daily.[14]

The various fire departments throughout the County do respond on a fairly regular basis to spill calls, but fortunately, these have been fairly routine in nature, and not of major significance. While no significant events have occurred to date within Spokane County, given the high farm and agricultural areas and the use of chemicals in those industries, when coupled with the major transportation routes being utilized, the potential for a significant type event does exist due to both the amount of chemicals stored and transported throughout the region.

Airport

The Spokane International Airport is located between Highway 2 and I-90 just west of the City of Spokane. The Spokane Airport supports eight passenger carrier airlines as well as three air cargo carriers. The airport has two runways that are 11,002' and 8,199' long, is equipped with instrument landing systems supporting all-weather operations, and has ample aircraft parking areas available. There are also numerous municipal airports serving many of the smaller communities in rural Spokane County. Felts Field is the current location utilized by the Spokane County Sherriff's Department for its helicopters.

3.10 FUTURE TRENDS IN DEVELOPMENT

The County and its cities have adopted comprehensive plans that govern land use decisions and policy making within their jurisdictions. They have also adopted building codes and specialty ordinances based on state and federal mandates. Decisions on land use are governed by these

[14] Data provided via personal communication with Justin Piper, CHMM, Director, Hazardous Materials, BNSF Railway. 23 May 2025.

programs. This plan will work together with these programs to support wise land use in the future by providing vital information on the risk associated with natural hazards in Spokane County.

As the 2020 HMP identified, there were two on-going efforts which clearly demonstrated the connection between mitigation planning efforts, and land use development trends.

- Within both the unincorporated county below Cheney and within the City of Cheney, an area of land was being reviewed for future residential development. That area had a high probability of being impacted by the rail lines traveling through the County, as the only ingress and egress to the planned development required the crossing of the rail lines, which as of this 2025 update, continue to be shut down several times daily for extended periods of time when the rail system loads and unloads its train cars. Those cars also carry Bakken Oil. This has been and continues to be of particular concern to emergency management and first responders due to the potential need for evacuation, and the limited capacity to do that if the rail line has the access roads blocked. Since completion of the 2020 plan, the City of Cheney placed a moratorium on new construction in that area of concern, but as of this 2026 update, the moratorium has been lifted.
- Prior to the 2020 update, the City of Liberty Lake had annexed additional land to its City boundary. That area included (among other things) a new school. Those areas were included in our 2020 risk assessment and determined that none of those areas were within identified hazard areas of concern. In an effort to be proactive, since completion of the 2020 plan, the City established regulatory authority with respect to development in the floodplain in its quest to become an NFIP Community. The City became an NFIP community in February 2020 (after completion of the 2020 HMP).

During this 2026 HMP update, the County and all municipal planning partners are in the process of updating their Comprehensive Land Use Plans, which include an element of climate change adaptation. All partners will continue to incorporate by reference the Spokane County Hazard Mitigation Plan in their comprehensive plans and will utilize the risk data identified as applicable. This will assure that all future trends in development can be established with the benefits of the information on risk and vulnerability to natural hazards identified in this plan.

CHAPTER 4.
RISK ASSESSMENT METHODOLOGY

4.1 OVERVIEW

The DMA requires measuring potential losses to critical facilities and property resulting from natural hazards. A hazard is an act or phenomenon that has the potential to produce harm or other undesirable consequences to a person or thing. Natural hazards can exist with or without the presence of people and land development. However, hazards can be exacerbated by societal behavior and practice, such as building in a floodplain, along a sea cliff, or on an earthquake fault. Natural disasters are inevitable, but the impacts of natural hazards can, at a minimum, be mitigated or, in some instances, prevented entirely.

The goal of the risk assessment is to determine which hazards present the greatest risk and what areas are the most vulnerable to hazards. Spokane County and its planning partners are exposed to many hazards. The risk assessment and vulnerability analysis help identify where mitigation measures could reduce loss of life or damage to property in the planning region. Each hazard-specific risk assessment provides risk-based information to assist Spokane County and its planning partners in determining priorities for implementing mitigation measures.

4.2 METHODOLOGY

The risk assessment for this hazard mitigation plan evaluates the risk of natural hazards prevalent in Spokane County and meets requirements of the DMA (44 CFR, Section 201.6(c)(2)). The risk assessment approach used for this plan entailed using geographic information system (GIS), Hazus hazard-modeling software, and hazard-impact data to develop vulnerability models for people, structures and critical facilities, and evaluating those vulnerabilities in relation to hazard profiles that model where hazards exist. This approach is dependent on the detail and accuracy of the data used. In all instances, this assessment used Best Available Science and data to ensure the highest level of accuracy possible. The output of the data allows emergency management personnel the ability to plan by identifying potential hazards and vulnerable assets. The process focuses on the following elements:

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

Utilizing those three phases of assessment, information was developed which identifies the hazards that affect the planning area, the likely location of natural hazard impact, the severity of the impact, previous occurrences, and the probability of future hazard events. That data, once complete, is utilized to complete the Risk Ranking process described in Chapter 12, which applies all of the data capture to the Calculated Priority Risk Index (CPRI). Each planning partner completes this process for their own community, as well as conducting the analysis on a countywide level.

The following elements were utilized in the risk assessment process, and provided the foundation for the standardized risk terminology:

- Hazard: Natural (or human caused) source or cause of harm or damage, demonstrated as actual (deterministic/historical events) or potential (probabilistic) events.
- Risk: The potential for an unwanted outcome resulting from a hazard event, as determined by its likelihood and associated consequences. For this plan, where possible, risk includes potential future losses based on probability, severity and vulnerability, expressed in dollar losses when possible. In some instances, dollar losses are based on actual demonstrated impact, such as through the use of the Hazus model. In other cases, losses are demonstrated through exposure analysis due to the inability to determine the extent to which a structure is impacted.
- Location/Extent: The area of potential or demonstrated impact within the area in which the analysis is being conducted. In some instances, the area of impact is within a geographically defined area, such as a floodplain. In other instances, such as for severe weather, there is no established geographic boundary associated with the hazard, as it can impact the entire area.
- Severity/Magnitude: The extent or magnitude upon which a hazard is ranked, demonstrated in various means, e.g., Richter Scale.
- Vulnerability: The degree of damage, e.g., building damage or the number of people injured.
- Probability of Occurrence and Return Intervals: These terms are used as a synonym for likelihood, or the estimation of the potential of an incident to occur.

4.2.1 Hazard Identification

For this plan, the Planning Team considered the full range of natural hazards that could impact the planning area and then listed hazards that present the greatest concern. This plan does not include non-natural (human caused) hazards, as they are addressed by the THIRA (now the County Emergency Preparedness Assessment). The process incorporated review of state and local hazard planning documents, as well as information on the frequency, magnitude and costs associated with hazards that have impacted or could impact the planning area. Anecdotal

information regarding natural hazards and the perceived vulnerability of the planning area's assets to them was also used. Based on the review, the Planning Team confirmed the hazards to be addressed and the hazards to be removed are as follows:

- Drought
- Earthquake
- Flood (to include High Hazard Dam information)
- Landslide
- Severe weather
- Volcano/Ash Fall – removed for 2025 update
- Wildfire – the Wildfire chapter serves as the County's 2026 Community Wildfire Protection Plan.

Climate Change

Climate change will affect communities in a variety of ways. Impacts could include an increased risk for extreme events such as drought, storms, flooding and forest fires; more heat-related stress; and the spread of existing or new vector-born disease into a community. In many cases, communities are already facing these problems to some degree. Climate change may influence the frequency, intensity, extent and/or magnitude of the problems.

Within the hazard mitigation plan, climate change is addressed as a secondary impact for each evaluated hazard of concern. Each chapter addressing one of the hazards of concern includes a section with a qualitative discussion on the probable impacts of climate change for that hazard.

4.2.2 Hazard Profiles

The hazard profiles describe the risks associated with identified hazards of concern. Each chapter describes the hazard and the planning area's vulnerabilities. For those municipal planning partners with defined geographic boundaries, this data is identified within the associated tables in the base plan in which the risk at the county level is also identified. The following steps were used to define the risk of each hazard:

- General overview and description of hazard;
- Identification of previous occurrences;
- Geographic areas most affected by the hazard;
- Event frequency estimates;
- Severity estimates;
- Warning time likely to be available for response;

- Risk and vulnerability assessment, which includes identification of impact on people, property, economy and the environment.

4.2.3 Risk Assessment Process

Once the profiles identified above were completed, the following steps were used by each planning partner to define the risk of each hazard:

- Determine exposure to each hazard—Exposure was determined by overlaying hazard maps with an inventory of structures, facilities, and systems to determine which of them would be exposed to each hazard.
- Assess the vulnerability of exposed facilities—Vulnerability of exposed structures and infrastructure was determined by interpreting the probability of occurrence of each event and assessing structures, facilities, and systems that are exposed to each hazard. Tools such as GIS and Hazus were used in this assessment.
- Where specific quantitative assessments could not be completed, vulnerability was measured in general, qualitative terms, summarizing the potential impact based on past occurrences, spatial extent, and subjective damage and casualty potential. Those items were categorized and definitively explained utilizing the criteria established in the Calculated Priority Risk Index (CPRI).
- The final step in the process was to determine the cumulative results of vulnerability based on the risk assessment and CPRI scoring, assigning a final qualitative assessment based on the following classifications:
  - Extremely Low—The occurrence and potential cost of damage to life and property is very minimal to nonexistent.
  - Low—Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal.
  - Medium—Moderate potential impact. This ranking carries a moderate threat level to the general population and/or built environment. Here the potential damage is more isolated and less costly than a more widespread disaster. Occurrences are frequent, with more documented historic events.
  - High—Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category have occurred in the past, and have a high probability of reoccurring.

- Extremely High—Very widespread with catastrophic impact. Hazards in this category may have occurred in the past and have a high probability for reoccurring.

4.2.4 Hazus and GIS Applications

Earthquake and Flood Modeling Overview

Hazus is a GIS-based software program used to support risk assessments for certain types of hazards, mitigation planning, and emergency planning and response. It provides a wide range of inventory data, such as demographics, building stock, critical facility, transportation and utility lifeline, and multiple models to estimate potential losses from natural disasters. The program maps and displays hazard data and the results of damage and economic loss estimates for buildings and infrastructure for certain types of hazards – not all hazards can be addressed utilizing Hazus.

Building Inventory

The Spokane County parcel layer was utilized to the extent possible. The parcel layer consists of in excess of 183,000 structures (all types). In order to be able to work with this large amount of data, the parcel data layer was converted from a polygon layer to a point layer. From this new point layer representing each of the structures, the exposure to each hazard included in this plan was determined using spatial queries to determine whether the parcel was inside or outside of the hazard zone for each hazard.

For the Flood hazard zones, the most current flood hazard data layer was downloaded from the FEMA map service center which was dated to be current as of March 15, 2019. The 100- and 500-year flood zones were determined based on the attributes of the Special Flood Hazard polygon layer contained in the data downloaded from FEMA. Spokane County parcels were determined to be inside and or outside the 100- and 500-year flood zones using spatial query methods within ArcGIS Desktop.

A critical facilities analysis was also conducted and was based on general exposure rather than estimated losses for some hazards of concern. Risk to structures is identified based on the structure location and the corresponding exposure to hazard location, where geographically established. An updated 2025 list of critical facilities developed by the County and its planning partners included geospatial data for fire, police, schools, medical facilities, etc.

On completion of the analysis, each planning partner was provided with the critical facilities list, on which impact from each hazard is identified for each critical facility. That data was then utilized by each planning partner to determine dollar impact (e.g., magnitude and severity within the Calculated Priority Risk Index discussed below). The critical facilities list as a whole is considered privileged in nature from public disclosure; however, each planning partner was left

to make the determination as to how they wished to identify specific structures based on their policies in place. In addition, specific critical facility structure impact data is further identified within the various Critical Facilities tables contained in each hazard profile, identified by critical facility type, e.g., power, water, wastewater, etc.

Building impact was further identified in Loss Matrix Tables, which provide the breakdown to each of the jurisdictional planning partners for use in completing their risk assessment. That data further identifies the number of structures impacted and the population impacted (where possible) based on the specific hazard of concern. As appropriate, that data is also identified within the various public outreach documents and posters developed for the public outreach efforts. It should be noted that with all data, the critical facilities list is continually in an update process and should not be considered to be all-encompassing.

Hazus Application for this Plan

The following methods were used to assess specific hazards for this plan:

- **Flood**—A Hazus (modified) analysis was performed for the 2020 plan. Analysis was based on FEMA's regulatory 100- and 500-year flood hazard data based on the 2010 Flood Study. No new FEMA flood study existed at the time of this update, and therefore the Planning Team felt it was not relevant to re-do the similar Hazus analysis for the 2025 update. Instead, focus was placed on a GIS exposure analysis to identify structures, population and critical infrastructure at risk based on the established list and utilizing the County's 2025 Assessor's database. (Flood Insurance maps are available on the County's website here, as well as being downloadable from the FEMA Map Center). As of this 2025 update, FEMA is in the process of developing flood studies for additional reaches of the various rivers and streams in the County. That data, once available, will be utilized to update the loss data based on FEMA's RiskMap (or other) reports developed.
- **Earthquake**—A Hazus analysis was performed to assess earthquake risk and exposure. An Earthquake Shake Map prepared by the U.S. Geological Survey (USGS) was used for the analysis of this hazard. A modified version of the National Earthquake Hazard Reduction Program (NEHRP) soils inventory was also used. The scenario-based shake map event utilized was the M6.8 Latah Fault event, with the epicenter in Spokane, at a depth of 7.5km. The 2020 plan focused on the Spokane Fault, but that scenario was not updated by USGS as recently as the Latah Fault, which was updated in February 2024.

GIS Application for this Plan

Dam, Hazardous Materials, Landslide, Severe Weather, and Wildfire **-** For these hazards, historical data is not adequate to model future losses as no specific damage functions have been developed. However, GIS is able to map hazard areas and calculate exposure if geographic

information is available with respect to the location of the hazard and critical facilities inventory data. Areas and inventory susceptible to some of the hazards of concern were mapped and exposure was evaluated. For other hazards, a qualitative analysis was conducted using the best available data and professional judgment. Locally relevant information was gathered from a variety of sources. Frequency and severity indicators include past events and the expert opinions of geologists, staff, emergency management personnel, and others. The primary data source was Spokane County GIS data, augmented with state and federal data sets, including FEMA, USGS, NOAA, WADOE, and WADNR data. Additional data sources for specific hazards are identified within the various profiles. In general analysis was completed as follows:

- **Climate Change** – Existing information was utilized to present future impact of climate change on the planning area. No specific analysis was conducted; however, existing data which illustrates potential impact was incorporated to the greatest extent possible in a qualitative manner.
- **Dam Failure**—Inundation data was unavailable for all of the high- or medium-hazard dams in the County. Therefore, available dam data was used to identify the location and hazard classification of dams located within the planning area.
- **Hazardous Materials** – Hazardous materials data was utilized, captured from the Department of Ecology's FY2024 Tier II reporting data, which requires updates by March of each year within the State of Washington Rail lines were also illustrated, as they many times transport chemicals into the area. Hazardous materials sites were incorporated into the critical facilities data.
- **Landslide**—Historic landslide hazard data was used to assess exposure to landslides using Washington DNR Landslide Susceptibility data, in conjunction with Spokane County landslide data. This data depicts landslide susceptibility at a 10 meter resolution across the state of Washington. Landslide damages are illustrated based on the number of parcels intersecting the landslide zone.
- **Severe Weather**—Severe weather data was downloaded from various sources, including the Natural Resources Conservation Service and the National Climatic Data Center, as well as PRISM Precipitation, Average Low, and Average High data. Tornado Project data was utilized to identify any events which have occurred in the planning area.
- **Wildfire**—Information on wildfire analysis was captured from various sources, including Washington DNR Wildfire History data, Wildfire Protection data, US Forest Service data, and LandFIRE data, among other sources. The Wildfire Chapter of this HMP update serves as the County's Community Wildfire Protection Plan (CWPP). Readers should view the CWPP to obtain additional information.

4.2.5 Calculated Priority Risk Index Scoring Criteria

For the 2020 update, the Planning Team utilized a Calculated Priority Risk Index (CPRI) score for each hazard of concern, addressing impact both at the county level, and at the planning partner level. The same process was followed for both the County and by each planning partner for the 2025 update. While the base plan defines the process followed, each jurisdictional annex provides only the outputs rather than re-describing the entire process.

Vulnerabilities are described in terms of impact to critical facilities, structures, population, economic values, and environment which can be affected by the hazard event as identified in the below tables.

Hazard impact areas describe the geographic extent a hazard can impact a jurisdiction and are uniquely defined on a hazard-by-hazard basis. Mapping of the hazards, where spatial differences exist, allows for hazard analysis by geographic location. Some hazards can have varying levels of risk based on location. Other hazards cover larger geographic areas and affect the area uniformly. Therefore, a system must be established which addresses all elements (people, property, economy, continuity of government) in order to rate each hazard consistently, and in a manner which addresses the functionality of each planning partner involved (e.g., municipality, fire district, public utility district, etc.).

The use of the Calculated Priority Risk Index allows such application, based on established criteria of application to determine the risk factor. For identification purposes, the five criteria on which the CPRI is based are probability, magnitude, geographic extent and location, warning time/speed of onset, and duration of the event (see Figure 4-1).

CPRI Category	Calculated Priority Risk Index Degree of Risk			Assigned Weighting Factor
	Impact/ Level ID	Description	Impact Factor	
Probability	Unlikely	• Rare with no documented history of occurrences or events. • Annual probability of less than 1% (~100 years or more).	1	40%
	Possible	• Infrequent occurrences; at least one documented or anecdotal historic event. • Annual probability that is between 1% and 10% (~10 years or more).	2	
	Likely	• Frequent occurrences with at least two or more documented historic events. • Annual probability that is between 10% and 90% (~10 years or less).	3	
	Highly Likely	• Common events with a well-documented history of occurrence. • Annual probability of occurring. (1% chance or 100% Annually).	4	
Magnitude/ Severity	Negligible	• People – Injuries and illnesses are treatable with first aid; minimal hospital impact; no deaths. Negligible impact to quality of life. • Property – Less than 5% of critical facilities and infrastructure impacted and only for a short duration (less than 24-36 hours); no loss of facilities, with only very minor damage/clean-up. • Economy – Negligible economic impact. • Continuity of government operating at 90% of normal operations; only slight modifications due to diversion of normal work for short-term response activity. Disruption lasts ~ 24-36 hours. • Special Purpose Districts: No Functional Downtime.	1	25%
	Limited	• People – Injuries or illness predominantly minor in nature and do not result in permanent disability; some increased calls for service at hospitals; no deaths; 14% or less of the population impacted. Moderate impact to quality of life. • Property – Slight property damage -greater than 5% and less than 25% of critical and non-critical facilities and infrastructure. • Economy – Impact associated with loss property tax base limited; impact results primarily from lost revenue/tax base from businesses shut down during duration of event and short-term cleanup; increased calls for emergency services result in increased wages. • Continuity of government impacted slightly; 80% of normal operations; most essential services being provided. Disruption lasts >36 hours, but <1 week. • Special Purpose Districts: Functional downtime 179 days or less.	2	
	Critical	• People – Injuries or illness results in some permanent disability or significant injury; hospital calls for service increased significantly; no deaths. 25% to 49% of the population impacted. • Property – Moderate property damage (greater than 25% and less than 50% of critical and non-critical facilities and infrastructure). • Economy - Moderate impact as a result of critical and non-critical facilities and infrastructure impact, loss of revenue associated with tax base, lost income. • Continuity of government ~50% operational capacity; limited delivery of essential services. Services interrupted for more than 1 week, but <1 month. • Special Purpose Districts: Functional downtime 180-364 days.	3	
	Catastrophic	• People - Injuries or illnesses result in permanent disability and death to a significant amount of the population exposed to a hazard. Greater than 50% of the population impacted. • Property – Severe property damage greater than 50% of critical and non-critical facilities. • Economy – Significant impact - loss of buildings /content, inventory, lost revenue, lost income. • Continuity of government significantly impacted; limited services provided (life safety and mandated measures only). Services disrupted for > than 1 month. • Special Purpose Districts: Functional Downtime 365 days or more.	4	
Geographic Extent and Location	Limited	Less than 10% of area impacted.	1	20%
	Moderate	10%-24% of area impacted.	2	
	Significant	25%-49% of area impacted.	3	
	Extensive	50% or more of area impacted.	4	
Warning Time / Speed of Onset (in hours)	<6 hours	Self-explanatory.	4	10%
	6 to 12	Self-explanatory.	3	
	12 to 24	Self-explanatory.	2	
	> 24 hours	Self-explanatory.	1	
Duration	< 6 hours	Self-explanatory.	1	5%
	< 24 hours	Self-explanatory.	2	
	<1 week	Self-explanatory.	3	
	>1 week	Self-explanatory.	4	

Figure 4-1. Calculated Priority Risk Index (CPRI)

Those elements are further defined as follows:

Probability

Probability of a hazard event occurring in the future was assessed based on hazard frequency over a 100- year period (where available). Hazard frequency was based on the number of times the hazard event occurred divided by the period of record. If the hazard lacked a definitive historical record, the probability was assessed qualitatively based on regional history and other contributing factors. Probability of occurrence was assigned a 40% weighting factor, and was broken down as follows:

Rating	Likelihood	Frequency of Occurrence
1	Unlikely	Less than 1% probability in the next 100 years.
2	Possible	Between 1% and 10% probability in the next year, or at least one chance in the next 100 years.
3	Likely	Between 10% and 100% probability in next year, or at least one chance in the next 10 years.
4	Highly Likely	Greater than 1 event per year (frequency greater than 1).

Magnitude

The magnitude of potential hazard events was evaluated for each hazard. Magnitude is a measure of the strength of a hazard event and is usually determined using technical measures specific to the hazard. Magnitude was calculated for each hazard where property damage data was available, and was assigned a 25% weighting factor. Magnitude calculation was determined using the following: *Property Damage / Number of Incidents) / $ of Building Stock Exposure = Magnitude.* In some cases, the Hazus model provided specific people/dollar impact data. For other hazards, a GIS exposure analysis was conducted. Magnitude was broken down as follows:

Rating	Magnitude	Percentage of People and Property Affected
1	Negligible	Less than 5% Very minor impact to people, property, economy, and continuity of government at 90%.
2	Limited	6% to 24% Injuries or illnesses minor in nature, with only slight property damage and minimal loss associated with economic impact; continuity of government only slightly impacted, with 80% functionality.
3	Critical	25% to 49% Injuries result in some permanent disability; 25-49% of population impacted; moderate property damage ; moderate impact to economy, with loss of revenue

Rating	Magnitude	Percentage of People and Property Affected
		and facility impact; government at 50% operational capacity with service disruption more than one week, but less than a month.
4	Catastrophic	More than 50% Injuries and illness resulting in permanent disability and death to more than 50% of the population; severe property damage greater than 50%; economy significantly impacted as a result of loss of buildings, content, inventory; government significantly impacted; limited services provided, with disruption anticipated to last beyond one month.

Extent and Location

The measure of the percentage of the people and property within the planning area impacted by the event, and the extent (degree) to which they are impacted. Extent and location were assigned a weighting factor of 20%, and broken down as follows:

Rating	Magnitude	Percentage of People and Property Affected
1	Negligible	Less than 10% Few if any injuries or illness. Minor quality of life lost with little or no property damage. Brief interruption of essential facilities and services for less than four hours.
2	Limited	10% to 24% Minor injuries and illness. Minor, short term property damage that does not threaten structural stability. Shutdown of essential facilities and services for 4 to 24 hours.
3	Critical	25% to 49% Serious injury and illness. Major or long term property damage, that threatens structural stability. Shutdown of essential facilities and services for 24 to 72 hours.
4	Catastrophic	More than 50% Multiple deaths Property destroyed or damaged beyond repair Complete shutdown of essential facilities and services for 3 days or more.

Warning Time/Speed of Onset

The rate at which a hazard occurs, or the time provided in advance of a situation occurring (e.g., notice of a cold front approaching or a potential hurricane, etc.) provides the time necessary to prepare for such an event. Sudden-impact hazards with no advanced warning are of greater concern. Warning Time/Speed of onset was assigned a 10% weighting factor, and broken down as follows:

Rating	Probable amount of warning time
1	More than 24 hours warning time.
2	12-24 hours warning time.
3	5-12 hours warning time.
4	Minimal or no warning time.

Duration

The time span associated with an event was also considered, the concept being the longer an event occurs, the greater the threat or potential for injuries and damages. Duration was assigned a weighting factor of 5%, and was broken down as follows:

Rating	Duration of Event
1	6-24 hours
2	More than 24 hours
3	Less than 1 week
4	More than 1 week

Chapter 12 summarizes all of the analysis conducted by way of completion of the Calculated Priority Risk Index (CPRI) for hazard ranking. It should again be emphasized that each planning partner utilized the outputs from the risk assessment to compute their CPRI for their own respective jurisdiction, following the process identified.

In completion of this scoring process, each planning partner is provided not only the hazard profiles completed during this process, but also a summary report, various loss matrix tables, maps, charts and graphics identifying information at the jurisdiction-level, and also a copy of the critical facilities and infrastructure table established at the onset of the process. The critical facilities spreadsheet is not published within the document due to its confidential nature; however, each planning partner is provided the list for use in identifying specific structures within their planning area which are at risk. The rating is then incorporated into an Excel Workbook, which calculates the CPRI Score. Each planning partner's worksheet is summarized in Chapter 11.

4.3 PROBABILITY OF OCCURRENCE AND RETURN INTERVALS

Natural hazard events with relatively long return periods, such as a 100-year flood or a 500- or 1,000-year earthquake, are often thought to be very unlikely. In reality, the probability that such events occur over the next 30 or 50 years is relatively high, having significant probabilities of occurring during the lifetime of a building:

- Hazard events with return periods of 100 years have probabilities of occurring in the next 30 or 50 years of about 26 percent and about 40 percent, respectively.
- Hazard events with return periods of 500 years have about a 6 percent and about a 10 percent chance of occurring over the next 30 or 50 years, respectively.
- Hazard events with return periods of 1,000 years have about a 3 percent chance and about a 5 percent chance of occurring over the next 30 or 50 years, respectively.

For life safety considerations, even natural hazard events with return periods of more than 1,000 years are often deemed significant if the consequences of the event happening are very severe (extremely high damage and/or substantial loss of life). For example, the seismic design requirements for new construction are based on the level of ground shaking with a return period of 2,475 years (2 percent probability in 50 years). Providing life safety for this level of ground shaking is deemed necessary for seismic design of new buildings to minimize life safety risk. Of course, a hazard event with a relatively long return period may occur tomorrow, next year, or within a few years. Return periods of 100 years, 500 years, or 1,000 years mean that such events have a 1 percent, a 0.2 percent or a 0.1 percent chance of occurring in any given year.

Seismic Design Categories based on statewide site class map assess for Spokane County are Categories B and C for residential construction.[15]

Chapter 3, Section 3.3 further discusses probability of occurrence and return intervals for the hazards of greatest concern throughout the county.

4.4 COMMUNITY VARIATIONS TO THE RISK ASSESSMENT

Each planning partner within their respective annex describes where or how their risk varies from what is described in the hazard profiles and risk ranking. Variations are documented in the risk assessment section in their annex to the plan, if appropriate. In some instances, declared disaster events may not have impacted a specific jurisdiction or entity. Similarly, there may have been incidents of significance which did not rise to a level of a disaster declaration, but were nonetheless significant to the jurisdiction or entity. As such, those differences are noted where applicable. For some planning partners, additional hazards were included within their annex.

4.5 LIMITATIONS

Various data sets were utilized in developing the risk assessment incorporated into this planning effort. In attempting to utilize the various sources, discrepancies may exist. The models and information presented in this document does not replace or supersede any official document or

[15] https://www.dnr.wa.gov/programs-and-services/geology/geologic-hazards/geologic-hazard-maps#seismic-design-categories

product generated to meet the requirements of any state, federal, or local program, which may be much more detailed and encompassing beyond the scope of this project. This document is intended for planning purposes only. This document and its contents have been prepared and are intended solely for Spokane County and its planning partners' information and use with respect to hazard mitigation planning, incorporating other relevant data into other planning mechanisms as appropriate. While this process utilized best available science and scientific data, the Planning Team, consultant, nor any of the planning partners conducted any scientific analysis within this document, and none should be construed. The process reproduced existing data only in different ways to meet the guidelines and requirements of 44 CFR 201.6. All data layers utilized are identified within the various sections of this document should reviewers wish greater clarification and information.

Loss estimates, exposure assessments, and hazard-specific vulnerability evaluations rely on the best available data and methodologies. Uncertainties are inherent in any loss estimation methodology and arise in part from incomplete scientific knowledge concerning natural hazards and their effects on the built environment. Uncertainties also result from the following:

- Approximations and simplifications necessary to conduct a study;
- Incomplete or outdated inventory, demographic or economic parameter data;
- The unique nature, geographic extent and severity of each hazard;
- Mitigation measures already employed; and
- The amount of advance notice residents have available to prepare for a specific hazard event.

These factors can affect loss estimates by a factor of two or more. Therefore, potential exposure and loss estimates are approximate and are for planning purposes only; not life safety measures. The results do not predict precise results and should be used only to understand relative risk. Over the long term, as is customary with all such planning efforts, Spokane County and its planning partners will continue to collect additional data to assist in better estimating potential losses associated with other hazards as science increases the validity of data.

Some assumptions were made by the planning partnership in an effort to capture as much data as necessary to supplant any significant data gaps. One example of this is the valuation for structures within the assessed data. For structures for which data was not provided, the missing information was determined using averages of similar types of structures, determining square footage and applying a multiplier. This process is identified in the Hazus User's Guide.

Some hazards, such as earthquakes, are pre-loaded with scientifically determined scenarios which are used during the modeling process. This does not allow for manipulation of the data as with other hazards, such as flood. In the case of earthquake, greater reliance existed on the use

of the Hazus default data, which is known to be less accurate, most often causing higher loss values. Therefore, while loss estimates are provided, they should be viewed with this flaw in mind. A much more in-depth scientific analysis is necessary to rely on this type of data with a high degree of accuracy. Readers should view this document as a baseline or starting point, and information should be further studied and analyzed by scientists and other subject matter experts in specific hazard fields.

CHAPTER 5.
DROUGHT

5.1 GENERAL BACKGROUND

DEFINITIONS

Drought—The cumulative impacts of several dry years on water users. It can include deficiencies in surface and subsurface water supplies and generally impacts health, well-being, and quality of life.

Hydrological Drought—Deficiencies in surface and subsurface water supplies.

Socioeconomic Drought—Drought impacts on health, well-being and quality of life.

Drought is a prolonged period of dryness severe enough to reduce soil moisture, water and snow levels below the minimum necessary for sustaining plant, animal and economic systems. Washington has a statutory definition of drought (Revised Code of Washington Chapter 43.83B.400). According to state law, an area is in a drought condition when:

- The water supply for the area is below 75 percent of normal.
- Water uses and users in the area will likely incur undue hardships because of the water shortage.

Drought is a normal phase in the climatic cycle of most geographical regions. According to the National Drought Mitigation Center, drought originates from a deficiency of precipitation over an extended period of time, usually a season or more. This results in a water shortage for some activity, group or environmental sector.

Drought is the result of a significant decrease in water supply relative to what is "normal" in a given location. There are four generally accepted "operational" definitions of drought (National Drought Mitigation Center, 2006):

- **Meteorological drought** is an expression of precipitation's departure from normal over some period of time. Meteorological measurements are the first indicators of drought. Definitions are usually region-specific, and based on an understanding of regional climatology. A definition of drought developed in one part of the world may not apply to another, given the wide range of meteorological definitions.
- **Agricultural drought** occurs when there is not enough soil moisture to meet the needs of a particular crop at a particular time. Agricultural drought happens after meteorological drought but before hydrological drought. Agriculture is usually the first economic sector to be affected by drought.
- **Hydrological drought** refers to deficiencies in surface and subsurface water supplies. It is measured as stream flow and as lake, reservoir and groundwater levels. There is a time lag between lack of rain and less water in streams, rivers, lakes and reservoirs, so hydrological measurements are not the earliest indicators of drought. After

precipitation has been reduced or deficient over an extended period of time, this shortage is reflected in declining surface and subsurface water levels.

- **Socioeconomic drought** occurs when a physical water shortage starts to affect people, individually and collectively. Most socioeconomic definitions of drought associate it with the supply and demand of an economic good.

Washington has a statutory definition of drought (RCW 43.83B.400, RCW 43.83B011), defining an area as being in a drought condition when the water supply for the area is below 75 percent of normal and water uses and users in the area are likely to incur undue hardships because of the water shortage.

5.2 HAZARD PROFILE

5.2.1 Extent and Location

Droughts originate from a deficiency of precipitation resulting from an unusual weather pattern. If the weather pattern lasts a short time (a few weeks or a couple of months), the drought is considered short-term. If the weather pattern becomes entrenched and the precipitation deficits last for several months or years, the drought is considered to be long-term. It is possible for a region to experience a long-term circulation pattern that produces drought, and to have short-term changes in this long-term pattern that result in short-term wet spells. Likewise, it is possible for a long-term wet circulation pattern to be interrupted by short-term weather spells that result in short-term drought.

The hydrological impacts of drought (e.g., reservoir levels, groundwater levels, etc.) take longer to develop, while also taking areas longer to recover. Long-term droughts are cumulative, so the intensity of drought during a given month is dependent on the current weather patterns plus the cumulative patterns of previous months. Weather patterns can change quickly from a long-term drought pattern to a long-term wet pattern. Water supply is controlled not only by precipitation, but also by other factors, including evaporation (which is increased by higher-than-normal heat and winds), transpiration (the use of water by plants), and human use. Empirical studies conducted over the past century have shown that meteorological drought is never the result of a single cause. It is the result of many causes, often synergistic in nature; these include global weather patterns that produce persistent, upper-level high-pressure systems along the West Coast with warm, dry air resulting in less precipitation.

The National Oceanic and Atmospheric Administration (NOAA) has developed several indices to measure drought impacts and severity, and to map their extent and locations.[16] One example of data and maps developed by NOAA is the Palmer Drought Severity Index, which measures the duration and intensity of long-term drought-inducing circulation patterns (see Figure 5-1). Other indices include the *Palmer Hydrological Drought Index, the Palmer Crop Moisture Index and the Standardized Precipitation Index,* among many others.

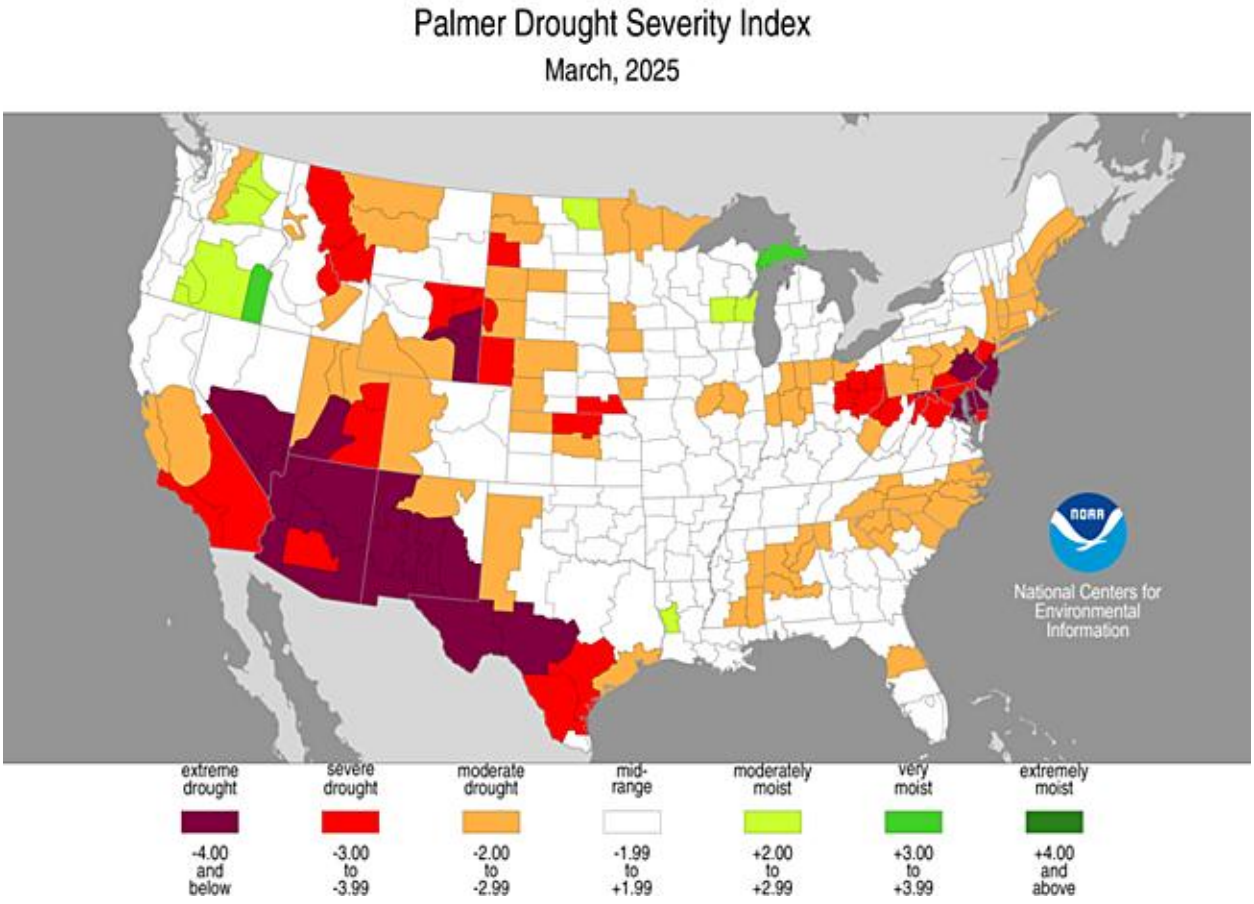


Figure 5-1 Palmer Drought Severity Index (March 2025)

Nearly all areas of Washington are vulnerable to drought. While the coastal areas of Washington, the Olympic Peninsula, and areas in Central Washington just east of the Cascades are particularly vulnerable, the high quality agricultural soils that exist in portions of southern and western Spokane County are also vulnerable. These areas of the county sustain dry land crops such as wheat that are dependent upon moisture through the winter and spring and dry arid conditions in the summer.

[16] Reviewers wishing current, weekly, or monthly data can view additional information at NOAA's Climate Prediction Center, available at: Surface Hydrology: Snow Water Equivalent Anomaly

5.2.2 Previous Occurrence

In the past century, Washington State has experienced a number of drought episodes, including several that lasted for more than a single season: 1928 to 1932, 1992 to 1994, and 1996 to 1997. The droughts of 1977 and 2001, some of the worst in state history, provide good examples of how drought can affect the state. The following are some of the more notable droughts recorded in Washington:

- **June – August 1922—**From June 10 to August 20, the statewide precipitation average was only 0.10 inches.
- **April 1934 – March 1937—**The mid-1930s saw the longest drought in the region's history. The driest periods were April to August 1934, September to December 1935, and July 1936 to January 1937.
- **1977—**The 1977 drought led to widespread water shortages and severe water conservation measures throughout Washington. More than 70 public and private drinking-water operations reported water-supply problems. Wheat and cattle were the most seriously affected agricultural products in the state. The Federal Power Commission ordered public utilities on the Columbia River to release water to help fish survive. Agriculture experienced drought-related losses of more than $400 million.
- **2001**—The 2001 drought came on fairly rapidly. Between November 2000 and March 2001, most of the state's rainfall and snowpack totals were only about 60 percent of normal. The 2001 event was a result of warm weather melting snowpack into streams a month earlier than normal. Nine large utility companies statewide advised the Washington State Department of Health that they were highly vulnerable to the drought. Washington declared a statewide drought emergency on March 14, 2001. As a result of the 2001 drought, 90,000 acres of agricultural land were taken out of production; thousands of acres of orchards were unused, and the sugar beet industry was out of production.
- **2005**— Water year 2005 (October 1, 2004, through September 30, 2005) got off to a good start. October precipitation ranged from normal to well-above normal for most of the state. However, precipitation was below average for much of the state from November through February, and the fall and winter were extremely warm, which adversely affected the state's mountain snowpack. A warm mid-January storm removed much of the remaining snowpack. February was warm and dry, and by early March projections showed Washington might be facing a drought as bad as or worse than the 1977 drought. A statewide drought emergency was declared on March 10, 2005. The state Legislature approved a $12 million supplemental budget request that provided funds for buying water, improving wells, implementing other emergency

water-supply projects, and hiring temporary state staff to respond to the drought emergency. The emergency proclamation expired on December 31, 2005.

2019 – As of May 20, 2019, Governor Jay Inslee issued an emergency drought declaration in 24 watersheds statewide. According to the Washington State Department of Ecology, very dry conditions over the last several months and a diminished snowpack impacted streamflow, which was identified to be well below normal conditions across most of the state. Watersheds west of the Cascades crest, which are more rain dependent than rivers on the east side, flowed at much below normal levels. Some rivers set record daily lows for historic May flows. Statewide, only four (4) percent of rivers were flowing at levels above normal. Stream flows were strong in the southeast corner of the state. Twenty-seven out of 62 watersheds were declared for drought as of May 20, 2019. Spokane County was not among the Counties identified as having a drought emergency. As an agricultural area, droughts do have an impact on the County as a whole.

2020 - Several months in a row of below-average precipitation brought drought to the Pacific Northwest in spring 2020, with only the northwestern corner of Washington, around Seattle, free of any kind of drought or abnormal dryness. As the region's dry summer approached, the winter and spring precipitation deficits posed a threat to livestock operators, farmers, and fish, and heightened the risk of wildfires. In this event, while precipitation falling as snow was initially at normal levels, the higher-than-average temperatures caused rapid snow melt, with runoff coming earlier in the year causing high rates of soil moisture evaporation.

2021 - The spring of 2021 was the second driest on record, and then an unprecedented late-June heatwave smashed temperature records across the state. In response, Washington State Department of Ecology issued an emergency drought declaration in July 2021 covering 96 percent of the state. Only Seattle, Everett, and Tacoma – cities with ample water storage – escaped the designation. Exceptional drought conditions continued to impact 36% of the state in 2021, including every county in the Eastern region. Extreme drought impacted 45% of the state (again including every Eastern region county), while severe drought impacted 53% of the state and included numerous central and western Washington counties. The USDA also designated 14 Washington counties as primary natural disaster areas due to the 2021 drought, opening emergency loans to farmers. 8742495_disaster_WA_signed.pdf

2022 - Historically low water levels closed most recreational fishing on most streams of the Olympic Peninsula, as well as other areas of the state. The Small Business Administration provided economic injury disaster loans to 20 Washington counties. While Spokane County was not one of the declared counties, other counties which border Spokane were included. SBA Economic Injury Disaster Loans Available to Washington Small Businesses Due to Drought | U.S. Small Business Administration

2024 - On April 16, 2024, the state issued a Drought Declaration due to the low levels of precipitation (both snow and rain) throughout the state. All but limited areas of Seattle, Tacoma, and Everett were impacted as of this writing (May 2024).

Review of NOAA data from the Storm Events Database, during the period of 2012-2024, no drought incidents were reported to have occurred within the County.

5.2.3 Frequency

Drought occurrences have increased within Washington since completion of the last plan, with some level of drought occurring annually, although in some cases, Spokane County has not been included in the declared event (either presidentially declared or through the Washington State Department of Ecology).

Review of the 2010 Washington State Enhanced Hazard Mitigation Plan, Spokane County has experienced serious or extreme drought conditions 10 to 15 percent of the time from 1895 to 1995 and 20 to 30 percent of the time from 1985 to 1995. Review of the State's 2023 Enhanced Hazard Mitigation Plan identifies a 24 percent probability for a drought occurring in every given year, with the Central part of the state being the most impacted. Thus, it can be predicted that Spokane County (or portions thereof) may also experience the effects of drought more frequently.

Review of National Risk Index (NRI) data for Spokane County, the annual frequency for a drought occurrence is 14.9 events days per year. Total events on record based on NRI data is 413 days over the period 2000-2021 (22 total years).

5.2.4 Severity

The severity of a drought depends on the degree of moisture deficiency, the duration, and the size and location of the affected area. The longer the duration of the drought and the larger the area impacted, the more severe the potential impacts. Droughts are not usually associated with direct impacts on people or property, but they can have significant impacts on agriculture, which can impact people indirectly.

Unlike most disasters, droughts normally occur slowly but can last a long time. Drought can have a widespread impact on the environment and the economy, depending upon its severity, although it typically does not result in loss of life or damage to property, as do other natural disasters. The National Drought Mitigation Center uses three categories to describe likely drought impacts:

- Water supply—Drought threatens supplies of water for irrigated crops and for communities.
- Agricultural—Drought threatens crops that rely on natural precipitation.

- Fire hazard—Drought increases the threat of wildfires in forest and rangelands.

Drought generally does not affect groundwater sources as quickly as surface water supplies, although groundwater supplies generally take longer to recover. Drought conditions increase the demand for irrigation and begin to deplete underground aquifers as deep as 100 feet. Reduced precipitation during a drought means that groundwater supplies are not replenished at a normal rate. This can lead to a reduction in groundwater levels and problems such as reduced pumping capacity or wells going dry. Shallow wells are more susceptible than deep wells. About 16,000 drinking water systems in Washington get water from the ground; these systems serve about 5.2 million people. Reduced replenishment of groundwater affects streams. Much of the flow in streams comes from groundwater, especially during the summer when there is less precipitation and after snowmelt ends. Reduced groundwater levels mean that even less water will enter streams when steam flows are lowest.

The most direct impact of drought is economic rather than loss of life or immediate destruction of property. A drought directly or indirectly impacts all people in affected areas:

- In every drought, agriculture is adversely impacted, especially in non-irrigated areas such as dry land farms and rangelands. A drought can result in farmers not being able to plant crops or the failure of planted crops. This results in loss of work for farm workers and those in related food processing jobs.
- Other water- or electricity-dependent industries are commonly forced to shut down all or a portion of their facilities, resulting in further layoffs.
- A drought can harm recreational companies that use water (e.g., swimming pools, water parks and river rafting companies) as well as landscape and nursery businesses because people will not invest in new plants if water is not available to sustain them. A lack of snowpack has forced ski resorts into bankruptcy.
- In Washington, where hydroelectric power plants generate nearly three-quarters of the electricity produced, a drought means less inexpensive electricity coming from dams and probably higher electric bills. All people could pay more for water if utilities increase their rates.
- Fire dangers, which are extremely high in the normal dry seasons, become more hazardous under drought conditions. Control of fires strains the budgets of fire districts. This increases manpower and equipment use and equipment failure. Millions of board feet of timber have been lost, and in many cases, erosion occurred, which caused serious damage to aquatic life, irrigation and power production by heavy silting of streams, reservoirs and rivers.

The Spokane Valley–Rathdrum Prairie aquifer is the sole source of drinking water for over 400,000 residents in Spokane County, Washington, and in Bonner and Kootenai Counties in Idaho. Recent and projected urban, suburban and industrial/commercial growth has raised

concerns about potential future effects on water availability and water quality in the aquifer and the Spokane and Little Spokane Rivers.

While Spokane County does experience droughts, they are generally mild and do not cause damage to the area. Thus, the likelihood of severe hardship due to drought in Spokane County is more limited in nature. Crop losses would more than likely be isolated to the southern and western portions of the county. Cities could experience water shortages.

Review of NRI data indicates that exposed agricultural value (crops only) is $100,033,685 countywide based on the Census of Agriculture, with $19,365 anticipated in potential annual loss resulting from a drought. The NRI indicates the hazard type having a very low loss rating.[17]

5.2.5 Warning Time

Droughts are climatic patterns that occur over long periods. Meteorological drought is the result of many causes, including global weather patterns that produce persistent, upper-level high-pressure systems along the West Coast resulting in less precipitation. Only generalized warning can take place due to the numerous variables that scientists have not pieced together well enough to make accurate and precise predictions. It is often difficult to recognize a drought before being in the middle of it. Droughts do not occur spontaneously; they evolve over time as certain conditions are met.

Scientists do not know how to predict droughts more than a month in advance for most locations. Predicting drought depends on the ability to forecast precipitation and temperature. Weather anomalies may last from several months to several decades. How long they last depend on interactions between the atmosphere and the oceans, soil moisture and land surface processes, topography, internal dynamics, and the accumulated influence of weather systems on the global scale. In temperate regions such as Washington, long-range forecasts of drought have limited reliability. Meteorologists do not believe that reliable forecasts are attainable at this time a season or more in advance for temperate regions.

5.3 SECONDARY HAZARDS

The secondary hazard most commonly associated with drought is wildfire. A prolonged lack of precipitation dries out vegetation, which becomes increasingly susceptible to ignition as the duration of the drought extends. Loss of forests and trees increases erosion, causing serious damage to aquatic life, irrigation and power development by heavy silting of streams, reservoirs and rivers. Low stream flows have created high temperatures, oxygen depletion, disease and lack of spawning areas for our fish resources.

[17] NRI data released March 2023 is based on 2017 Census of Agriculture.

Often, drought is accompanied by extreme heat. When temperatures reach 90ºF and above, people are vulnerable to sunstroke, heat cramps and heat exhaustion. Pets and livestock are also vulnerable to heat-related injuries. Crops can be vulnerable as well. In past Washington state droughts, wheat has been scorched, apples have sunburned and peeled and yields were significantly lessened.

5.4 VULNERABILITY

5.4.1 Overview

Drought produces impacts that span many sectors of the economy and reach well beyond the physical area experiencing the drought. This complexity exists because water is integral to the ability to produce goods and provide services. The vulnerability of an activity to the effects of drought usually depends on its water demand, how the demand is met, and what water supplies are available to meet the demand. At present, Spokane County has six Water Resource Inventory Areas (WIRA) (34, 43, 54, 55, 56, and 57) within its boundaries, which include Hangman Creek, Little Spokane, Lower Spokane, Middle Spokane, and Palouse Rivers, and the Upper Crab-Wilson Watershed areas.

Droughts customarily do not impact property directly but do impact the economy and environment. Being both a high tourist county with respect to water related-activities, as well as a high agricultural county, the Spokane County planning area would sustain negative impact as a result of moderate to extreme drought conditions, which last for an extended period.

5.4.2 Impact on Life, Health, and Safety

The planning partnership has the ability to minimize impacts on residents and water consumers in the county should several consecutive dry years occur. No significant life or health impacts are anticipated as a result of drought within the planning area. While the entire population is at risk to being exposed to a drought impact, Spokane County has less than five (5) percent of its population ranked medium or higher when considering the social vulnerability impacts. Review of the 2023 NRI data identifies that expected annual loss or impact to the population are minimal.

5.4.2 Impact on Property

No structures will be directly affected by drought conditions, though some structures may become vulnerable to wildfires, which are more likely following years of drought. Droughts can also have significant impacts on landscapes, which could cause a financial burden to property owners. However, these impacts are not considered critical in planning for impacts from the drought hazard. NRI building impact data identifies minimal structure impact, reporting below threshold indicators.

5.4.3 Impact on Critical Facilities

Critical facilities as defined for this plan will continue to be operational during a drought. Critical facility elements such as landscaping may not be maintained due to limited resources, but the risk to the planning area's critical facilities inventory will be largely aesthetic. For example, when water conservation measures are in place, landscaped areas will not be watered and may die. These aesthetic impacts are not considered significant. Also of concern would be any limitations with respect to water availability to fight wildfires.

5.4.4 Impact on Economy

Economic impact will be largely associated with industries that use water or depend on water for their business. For example, agricultural/farm areas will be significantly impacted. Likewise, landscaping businesses historically were affected in the droughts of the past as the demand for service significantly declined because landscaping was not watered. Agricultural industries will continue to be impacted if water usage is restricted for irrigation.

Review of Spokane County Census of Agriculture data (2017 – most recent available for 2025 update), the County ranks 14th among the top producers statewide in production of agricultural products and livestock, with over 548,535 acres of farmland and over 2,425 farms (down 3 percent from 2012).[18] The County is considered a top producer nationwide in several products. Combined, the impact from a drought situation on the County's export markets for economic sustainability could be high. NRI data identifies potential exposure to agricultural crops valued at $110,033,685.31, with an annualized loss potential of $19,365.

In addition to agricultural loss, economic impact also stems from the potential loss of critical infrastructure due to fire damage and impacts on industries that depend on water for their business, such as fishing industries, water-based recreational activities, and public facilities and recreational areas.

Problems of domestic and municipal water supplies have historically been corrected by building another reservoir, a larger pipeline, new well, or some other facility. Resultant reductions or restrictions on economic growth and development could occur as a result of lower availability of water supplies. Given potential political issues, a drought situation, if prolonged, could restrict building within specific areas due to lack of supporting infrastructure, thereby impacting the tax base and economy of the region by limiting growth. In addition, impact to or the lack of hydroelectric generating capacity associated with drought conditions as a result of reduced precipitation levels could raise electric prices throughout the region.

[18] 2017 Census of Agriculture. County Profile. Accessed 29 April 2025. Available online at: https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Washington/cp53063.pdf

5.4.5 Impact on Environment

Environmental losses from drought are associated with damage to plants, animals, wildlife habitat, and air and water quality; forest and range fires; degradation of landscape quality; loss of biodiversity; and soil erosion. Some of the effects are short-term and conditions quickly return to normal following the end of the drought. Other environmental effects linger for some time or may even become permanent. Wildlife habitat, for example, may be degraded through the loss of wetlands, lakes and vegetation. However, many species will eventually recover from this temporary aberration. The degradation of landscape quality, including increased soil erosion, may lead to a more permanent loss of biological productivity. Although environmental losses are difficult to quantify, growing public awareness and concern for environmental quality has forced public officials to focus greater attention and resources on these effects.

5.4.6 Impact from Climate Change

Research conducted by the Climate Impacts Group at the University of Washington indicates that the temperature of Eastern Washington is increasing. As temperatures increase there will be less water stored as ice and snow. This reduction may not result in a net change in annual precipitation, but it will result in lower late spring and summer river flows. Accordingly, there will be increased competition between power, sport fishing and environmentalists, and farmers dependent on irritation.

The long-term effects of climate change on regional water resources are unknown, but global water resources are already experiencing the following stresses without climate change:

- Growing populations
- Increased competition for available water
- Poor water quality
- Environmental claims
- Uncertain reserved water rights
- Groundwater overdraft
- Aging urban water infrastructure.

With a warmer climate, droughts have become more frequent, more severe, and longer-lasting. More frequent extreme events could end up being more cause for concern than the long-term change in temperature and precipitation averages. This would be the result of less water stored as ice and snow in the hills and mountains to the east. This would ultimately result in decreased stream flows in the spring in local rivers. Competition for water would increase. Spokane County farmers and residents may be less affected than those depending on irrigation for their water source. Crop insurance has provided the cushion to mitigate the most adverse impacts of drought in the County. As the effects of regionally based changes in climate begin to be felt, the County

may consider building structures that compensate for the expected reduction in natural storage and enhance aquifer recharge.

5.5 FUTURE TRENDS IN DEVELOPMENT

The U.S. Geological Survey's water use figures for Washington State show that public supply—domestic, commercial, industrial, and thermoelectric generation—uses about one gallon of every eight. Growing counties will find their rate of water use grow as their population grows. Spokane County's average annual growth rate is above the state average. This rate of growth is anticipated to remain consistent during the performance period of this plan update due to economic growth which the County is currently experiencing.

Each municipal planning partner in this effort has an established comprehensive plan that includes policies directing land use and dealing with issues of water supply and the protection of water resources. These plans provide the capability at the local municipal level to protect future development from the impacts of drought. All planning partners reviewed their general plans under the capability assessments performed for this effort. Deficiencies identified by these reviews can be identified as mitigation actions to increase the capability to deal with future trends in development.

At present, neither the County nor its planning partners maintain separate Water Shortage Response Plans. During the course of the 2023 wildfires, Medical Lake did have some issues with water availability for firefighting needs, but the determination for that incident relates to homeowners turning on sprinkler systems when they were ordered to evacuate their residences, which depleted supply levels.

An extreme multiyear drought more intense than, for example, the 1977 drought could impact the region with little warning. Combinations of low precipitation and unusually high temperatures could occur over several consecutive years. Intensified by such conditions, extreme wildfires could break out throughout Spokane County, increasing the need for water. Surrounding communities, also in drought conditions, could increase their demand for water supplies relied upon by the planning partnership, causing social and political conflicts. If such conditions persisted for several years, the economy of Spokane County could experience setbacks, especially in water dependent industries. Spokane County may experience a period of prolonged drought. The lack of precipitation would not only impact crops and domestic water supplies, but will also increase the risk of wildfires. Finally, electric utility rates could also be impacted by a drought.

5.6 ISSUES

The Planning Team has identified the following drought-related issues:

- Identification and development of alternative water supplies
- Use of groundwater recharge techniques to stabilize the groundwater supply
- The probability of increased drought frequencies and durations due to climate change
- The promotion of active water conservation even during non-drought periods.

5.7 RESULTS

Washington State Department of Ecology has issued several springtime drought advisories since completion of the 2019 plan, which are being issued earlier in the year due to limited snowpack, which feed watersheds statewide, and increase the occurrence of drought.

Combinations of low precipitation and unusually high temperatures associated with drought conditions have now occurred over several consecutive years, with 2020, 2021 and 2023 experiencing an increase in wildfires requiring Fire Mobilization, and 2021 and 2022 recording record-setting high temperatures. Intensified by such conditions, extreme wildfires such as the two experienced in 2023 could again break out throughout Spokane County, increasing the need for water.

When taking into account the impact of a drought situation on the high wildfire danger throughout the eastern portion of the state over the course of the last several years, it is clear that drought is a significant hazard of concern as the impact would also affect the agricultural community (both crops and livestock) and the tourism industry. Such losses could be substantial. Based on those findings, the Planning Team determined the Drought Hazard to be of medium concern, ranking a score of 2.75.

CHAPTER 6.
EARTHQUAKE

6.1 GENERAL BACKGROUND

6.1.1 How Earthquakes Happen

An earthquake is the vibration of the earth's surface following a release of energy in the earth's crust. This energy can be generated by a sudden dislocation of the crust or by a volcanic eruption. Most destructive quakes are caused by dislocations of the crust. The crust may first bend and then, when the stress exceeds the strength of the rocks, break and snap to a new position. In the process of breaking, vibrations called "seismic waves" are generated. These waves travel outward from the source of the earthquake at varying speeds.

DEFINITIONS

Earthquake—The shaking of the ground caused by an abrupt shift of rock along a fracture in the earth or a contact zone between tectonic plates.

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

Fault—A fracture in the earth's crust along which two blocks of the crust have slipped with respect to each other.

Focal Depth—The depth from the earth's surface to the hypocenter.

Hypocenter—The region underground where an earthquake's energy originates

Liquefaction—Loosely packed, water-logged sediments losing their strength in response to strong shaking, causing major damage during earthquakes.

Earthquakes tend to reoccur along faults, which are zones of weakness in the crust. Even if a fault zone has recently experienced an earthquake, there is no guarantee that all the stress has been relieved. Another earthquake could still occur.

Earthquakes in the Pacific Northwest have been studied extensively. It is generally agreed that three source zones exist for Pacific Northwest quakes: a shallow (crustal) zone; the Cascadia Subduction Zone; and a deep, intraplate "Benioff" zone. These are shown in Figure 6-1. More than 90 percent of Pacific Northwest earthquakes occur along the boundary between the Juan de Fuca plate and the North American plate.

Geologists classify faults by their relative hazards. Active faults, which represent the highest hazard, are those that have ruptured to the ground surface during the Holocene period (about the last 11,000 years). Potentially active faults are those that displaced layers of rock from the Quaternary period (the last 1,800,000 years). Determining if a fault is "active" or "potentially active" depends on geologic evidence, which may not be available for every fault. Although there are probably still some unrecognized active faults, nearly all the movement between the two plates, and therefore the majority of the seismic hazards, are on the well-known active faults.

Faults are more likely to have earthquakes on them if they have more rapid rates of movement, have had recent earthquakes along them, experience greater total displacements, and are aligned so that movement can relieve accumulating tectonic stresses. A direct relationship exists

between a fault's length and location and its ability to generate damaging ground motion at a given site. In some areas, smaller, local faults produce lower magnitude quakes, but ground shaking can be strong, and damage can be significant as a result of the fault's proximity to the area. In contrast, large regional faults can generate great magnitudes but, because of their distance and depth, may result in only moderate shaking in the area.

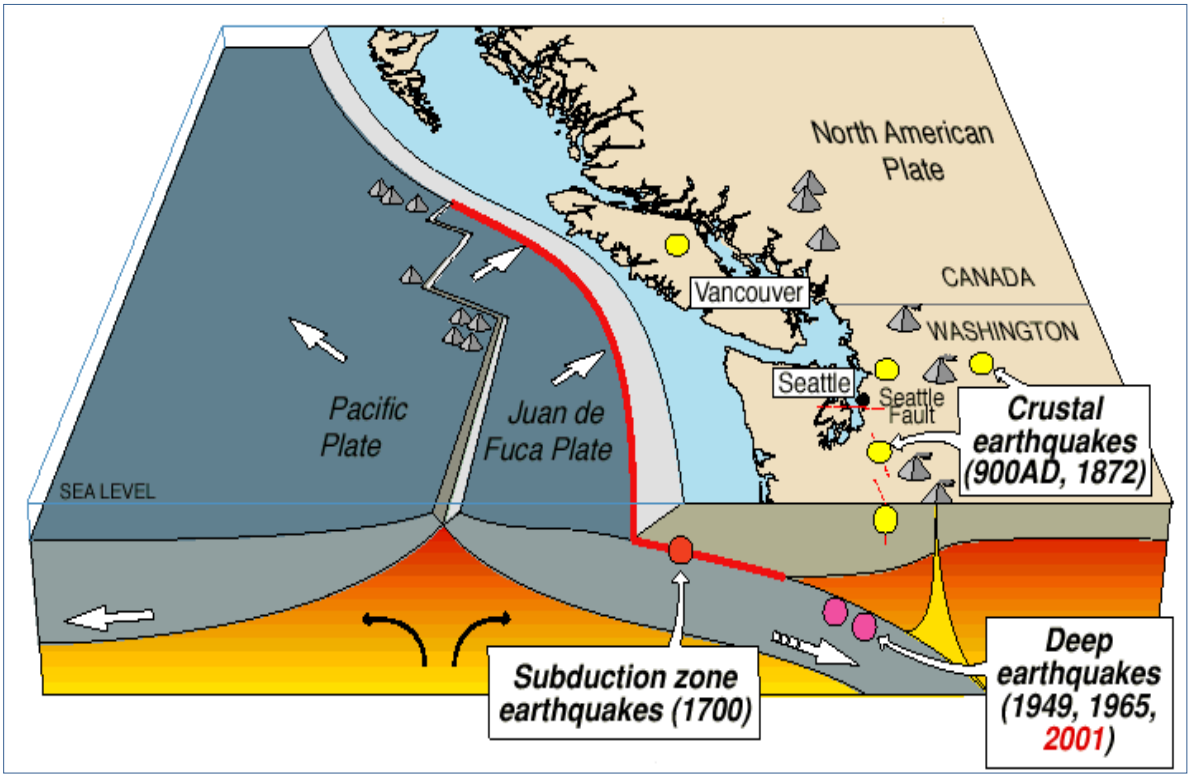


Figure 6-1. Earthquake Types in the Pacific Northwest

Earthquakes can last from a few seconds to over five minutes; they may also occur as a series of tremors over several days. The actual movement of the ground in an earthquake is seldom the direct cause of injury or death. Casualties generally result from falling objects and debris, because the shocks shake, damage or demolish buildings and other structures. Disruption of communications, electrical power supplies and gas, sewer and water lines should be expected. Earthquakes may trigger fires, dam failures, landslides or releases of hazardous material, compounding their disastrous effects.

6.1.2 Earthquake Classifications

Earthquakes are classified according to the amount of energy released as measured by magnitude or intensity scales. Currently the most commonly used scales are the moment magnitude (Mw) scale, and the modified Mercalli intensity scale. Estimates of moment magnitude roughly match the local magnitude scale (ML) commonly called the Richter scale. One advantage of the moment magnitude scale is that, unlike other magnitude scales, it does not

saturate at the upper end. That is, there is no value beyond which all large earthquakes have about the same magnitude. For this reason, moment magnitude is now the most often used estimate of large earthquake magnitudes. Table 6-1 presents a classification of earthquakes according to their magnitude. Table 6-2 compares the moment magnitude scale to the modified Mercalli intensity scale.

Table 6-1.
Earthquake Magnitude Classes

Magnitude Class	Magnitude Range (M = magnitude)
Great	M > 8
Major	7 <= M < 7.9
Strong	6 <= M < 6.9
Moderate	5 <= M < 5.9
Light	4 <= M < 4.9
Minor	3 <= M < 3.9
Micro	M < 3

Table 6-2.
Earthquake Magnitude and Intensity

Magnitude (Mw)	Intensity (Modified Mercalli)	Description
1.0—3.0	I	I. Not felt except by a very few under especially favorable conditions
3.0—3.9	II—III	II. Felt only by a few persons at rest, especially on upper floors of buildings. III. Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it is an earthquake. Standing cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
4.0—4.9	IV—V	IV. Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like a heavy truck striking building. Standing cars rocked noticeably.
5.0—5.9	VI—VII	VI. Felt by all; many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight. VII. Damage negligible in buildings of good design and construction; slight in well-built ordinary structures; considerable in poorly built or badly designed structures. Some chimneys broken.
6.0—6.9	VII—IX	VIII. Damage slight in specially designed structures; considerable damage in ordinary buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. IX. Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
7.0 and higher	VIII and higher	X. Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent. XI. Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly. XII. Damage total. Lines of sight and level are distorted. Objects thrown into the air.

6.1.3 Ground Motion

Earthquake hazard assessment is also based on expected ground motion. This involves determining the annual probability that certain ground motion accelerations will be exceeded, then summing the annual probabilities over the time period of interest. The most commonly mapped ground motion parameters are the horizontal and vertical peak ground accelerations (PGA) for a given soil or rock type. Instruments called accelerographs record levels of ground motion due to earthquakes at stations throughout a region. These readings are recorded by state and federal agencies that monitor and predict seismic activity.

Maps of PGA values form the basis of seismic zone maps that are included in building codes such as the International Building Code. Building codes that include seismic provisions specify the horizontal force due to lateral acceleration that a building should be able to withstand during an earthquake. PGA values are directly related to these lateral forces that could damage "short period structures" (e.g. single-family dwellings). Longer period response components determine the lateral forces that damage larger structures with longer natural periods (apartment buildings, factories, high-rises, bridges). Table 6-3 lists damage potential and perceived shaking by PGA factors, compared to the Mercalli scale.

Table 6-3.
Mercalli Scale and Peak Ground Acceleration Comparison

Modified Mercalli Scale	Perceived Shaking	Potential Structure Damage		Estimated PGA[a] (%g)
		Resistant Buildings	Vulnerable Buildings	
I	Not Felt	None	None	<0.17%
II-III	Weak	None	None	0.17%—1.4%
IV	Light	None	None	1.4%—3.9%
V	Moderate	Very Light	Light	3.9%—9.2%
VI	Strong	Light	Moderate	9.2%—18%
VII	Very Strong	Moderate	Moderate/Heavy	18%—34%
VIII	Severe	Moderate/Heavy	Heavy	34%—65%
IX	Violent	Heavy	Very Heavy	65%—124%
X—XII	Extreme	Very Heavy	Very Heavy	>124%

a. PGA measured in percent of g, where g is the acceleration of gravity

Sources: USGS, 2008; USGS, 2010

6.1.4 Effect of Soil Types

The impact of an earthquake on structures and infrastructure is largely a function of ground shaking, distance from the source of the quake, and liquefaction, a secondary effect of an earthquake in which soils lose their shear strength and flow or behave as liquid, thereby damaging structures that derive their support from the soil. Liquefaction generally occurs in soft, unconsolidated sedimentary soils. A program called the National Earthquake Hazard Reduction Program (NEHRP) creates maps based on soil characteristics to help identify locations subject to liquefaction. Table 6-4 summarizes NEHRP soil classifications system. NEHRP Soils B and C typically can sustain ground shaking without much effect, dependent on the earthquake magnitude. The areas that are commonly most affected by ground shaking have NEHRP Soils D, E and F. In general, these areas are also most susceptible to liquefaction. Table 6-5 summarizes the NEHRP soils classifications countywide.

Table 6-4.
NEHRP Soil Classification System

NEHRP Soil Type	Description	Mean Shear Velocity to 30 m (m/s)
A	Hard Rock	1,500
B	Firm to Hard Rock	760-1,500
C	Dense Soil/Soft Rock	360-760
D	Stiff Soil	180-360
E	Soft Clays	< 180
F	Special Study Soils (liquefiable soils, sensitive clays, organic soils, soft clays >36 m thick)	

Table 6-5.
Acres of NEHRP Soils within Spokane County

Jurisdiction	B	C	D	D-E	F	Water	Total
Airway Heights	287.09	3,532.90	0	0	0	0	3,819.98
Cheney	765.16	1,431.70	538.46	39.65	0	22.41	2,797.39
Deer Park	0	4,562.82	0	44.70	0	0	4,607.53
Fairfield	0	0	289.13	106.20	0	0	395.33
Latah	70.38	0	106.28	27.92	0	0	204.58
Liberty Lake	652.20	2,948.19	338.98	117.42	0	0	4,056.79
Medical Lake	1,945.99	149.69	72.43	0	0	125.65	2,293.76
Millwood	0	438.26	0	0	0	0.11	438.36
Rockford	172.59	0	129.56	123.87	0	0	426.02
Spangle	0	0	188.74	35.76	0	0	224.50
Spokane	7,442.09	29,367.01	7,244.49	45.25	0	432.69	44,531.53
Spokane Valley	1,285.10	22,033.26	856.11	0.21	0	178.99	24,353.67
Waverly	46.30	0	129.20	86.85	0	0	262.35
Unincorporated Spokane Co.	429,232.97	227,165.18	336,797.79	44,300.21	3,934.62	10,140.23	1,051,570.99
Total (Acres)	441,899.87	291,629.00	346,691.16	44,928.05	3,934.62	10,900.07	1,139,982.77

*Planning area for Spokane County calculated in acres has slight variations due to land annexations which may have occurred during the 2020-2024 timeframe.

6.2 HAZARD PROFILE

The seismic history of the Spokane area is poorly understood since past events did not result in any major property damage and distant seismograph stations did not pick up many of the low-magnitude earthquakes. Newspaper reports indicate that between 1915 and 1962 nine earthquakes were felt only in the Spokane area (indicating a local source), but none had the characteristics of the 2001 swarm sequence. A number of these historical earthquakes were felt most strongly in the area of the Hangman Creek lineament. Many geologists have mapped the Spokane area, but none had confirmed the presence of any major faults with demonstrated offset that might be capable of producing earthquakes. The linear trace of Hangman Creek, however, was noted by Griggs (1973). It can be traced for nearly 50 miles from the Tekoa Mountain area on the south to beyond Nine Mile Falls on the north. The logical explanation for this was that the creek followed the trace of a fault.

Geologists in the Spokane office of the Division of Geology and Earth Resources have been mapping the geology of four quadrangles west and southwest of downtown Spokane. During the winter of 2013-2014, the geologists evaluated results of whole rock geochemistry tests on basalt samples that were collected to determine basalt stratigraphy in the Hangman Creek area, and found that basalt formations on the west side of the lineament did not correspond directly to those on the east side. The lack of lateral continuity in basalt flows could be attributed to erosion prior to deposition of younger flows. Alternatively, the lack of continuity could be attributed to movement on a fault roughly paralleling the lineament. This proposed fault has been informally named the Latah fault.

6.2.1 Extent and Location

In Eastern Washington, geologists have uncovered evidence of a number of surface faults; however, they have not yet determined how active the faults are, nor determined the extent of the risk they pose to the public. One fault, Toppenish Ridge, appears to have been the source of two earthquakes with magnitudes of 6.5 to 7.3 in the past 10,000 years.

For most residents in the planning area, the 2001 Spokane earthquake swarm is the most memorable. Earthquake swarms are events where a local area experiences sequences of many earthquakes striking in a relatively short period of time, with the length of time used to define the swarm itself varying by days or weeks. The quakes involved in the 2001 swarm were very shallow, with most events within a few miles of the surface. The events occurred near a suspected fault referred to as the Latah Fault; however, the relation between the fault and the swarm is uncertain. State geologists continue to investigate the geology and earthquake risk in Spokane.

Identifying the extent and location of an earthquake is not as simple as it is for other hazards such as floods, landslides or wildfire. The impact of an earthquake is largely a function of the following components:

- Ground shaking (ground motion accelerations)
- Liquefaction (soil instability)
- Distance from the source (both horizontally and vertically).

Mapping that shows the impacts of these components was used to assess the risk of earthquakes within the planning area. While the impacts from each of these components can build upon each other during an earthquake event, the mapping looks at each component individually. The mapping used in this assessment is described below.

Shake Maps

A shake map is a representation of ground shaking produced by an earthquake. The information it presents is different from the earthquake magnitude and epicenter that are released after an earthquake because shake maps focus on the ground shaking resulting from the earthquake, rather than the parameters describing the earthquake source. An earthquake has only one magnitude and one epicenter, but it produces a range of ground shaking at sites throughout the region, depending on the distance from the earthquake, the rock and soil conditions at sites, and variations in the propagation of seismic waves from the earthquake due to complexities in the structure of the earth's crust. A shake map shows the extent and variation of ground shaking in a region immediately following significant earthquakes.

Ground motion and intensity maps are derived from peak ground motion amplitudes recorded on seismic sensors (accelerometers), with interpolation based on estimated amplitudes where data are lacking, and site amplification corrections. Color-coded instrumental intensity maps are derived from empirical relations between peak ground motions and Modified Mercalli intensity. Two types of shake maps are typically generated from the data:

- A probabilistic seismic hazard map shows the hazard from earthquakes that geologists and seismologists agree could occur. The maps are expressed in terms of probability of exceeding a certain ground motion, such as the 10-percent probability of exceedance in 50 years. This level of ground shaking has been used for designing buildings in high seismic areas. Figure 6-2 and Figure 6-3 show the estimated ground motion for the 100-year and 500-year probabilistic earthquakes in Spokane County. The analysis completed during the 2020 update remained sound with no new data available on which to enhance the analysis, and as such, the data was determined current for this 2025 update.
- Earthquake scenario maps describe the expected ground motions and effects of hypothetical large earthquakes for a region. Maps of these scenarios can be used to support all phases of emergency management. For this 2025 update, one scenario was chosen: a M6.8 event on the Latah Fault with a shallow depth and epicenter in Spokane County (see Figure 6-4). The Latah Fault data, updated in February 2024, is the most current data available for the Spokane region, and illustrated in Figure 6-5.

NEHRP Soil Maps

NEHRP soil types define the locations that will be significantly impacted by an earthquake. NEHRP Soils B and C typically can sustain low-magnitude ground shaking without much effect. The areas that are most commonly affected by ground shaking have NEHRP Soils D, E and F. Figure 6-6 shows NEHRP soil classifications in the county.

Liquefaction Maps

Soil liquefaction maps are useful tools to assess potential damage from earthquakes. When the ground liquefies, sandy or silty materials saturated with water behave like a liquid, causing pipes to leak, roads and airport runways to buckle, and building foundations to be damaged. In general, areas with NEHRP Soils D, E and F are also susceptible to liquefaction. If there is a dry soil crust, excess water will sometimes come to the surface through cracks in the confining layer, bringing liquefied sand with it, creating sand boils. Figure 6-7 illustrates the liquefaction susceptibility in Spokane County.

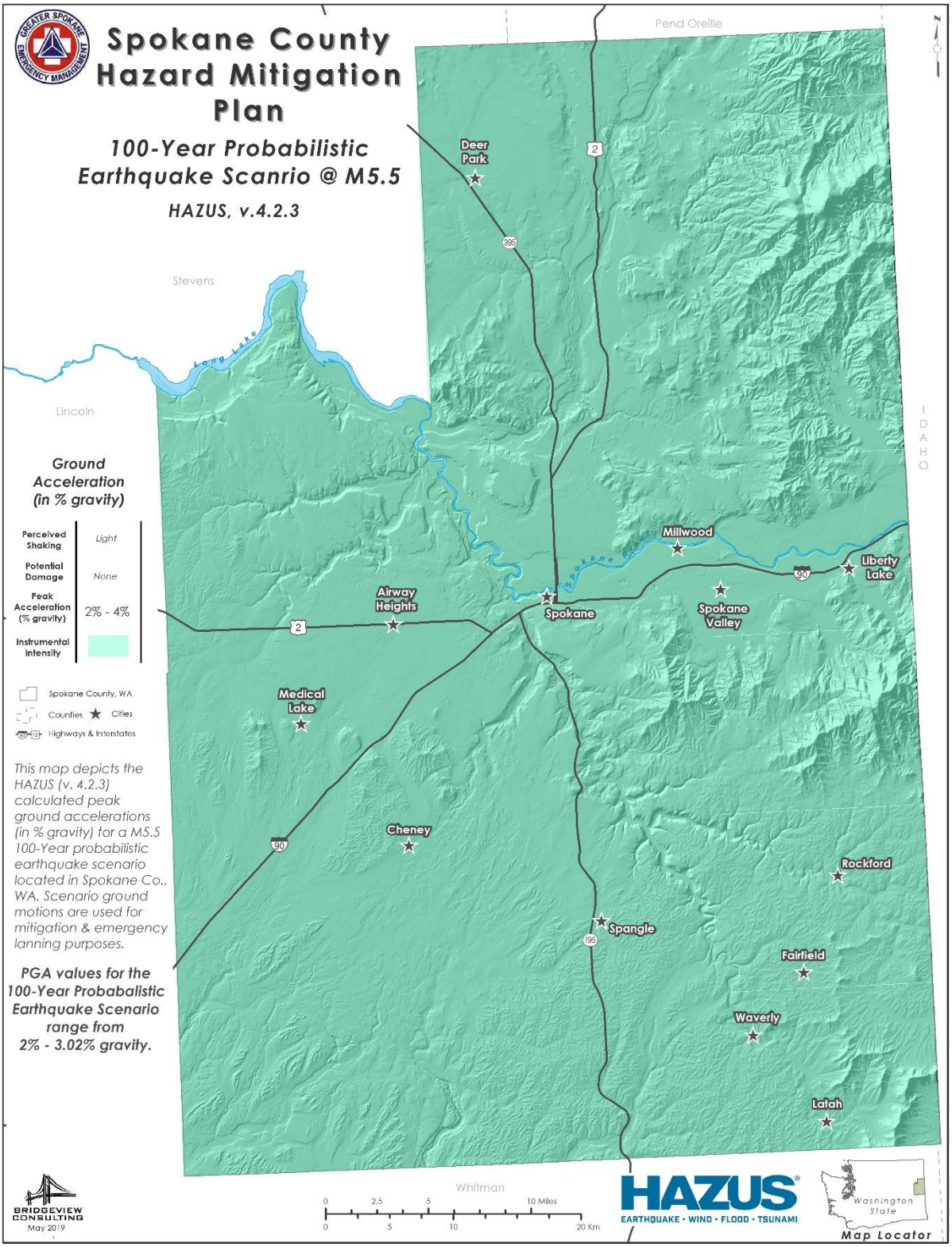


Figure 6-2. Peak Ground Acceleration; 100-Year Probability Event

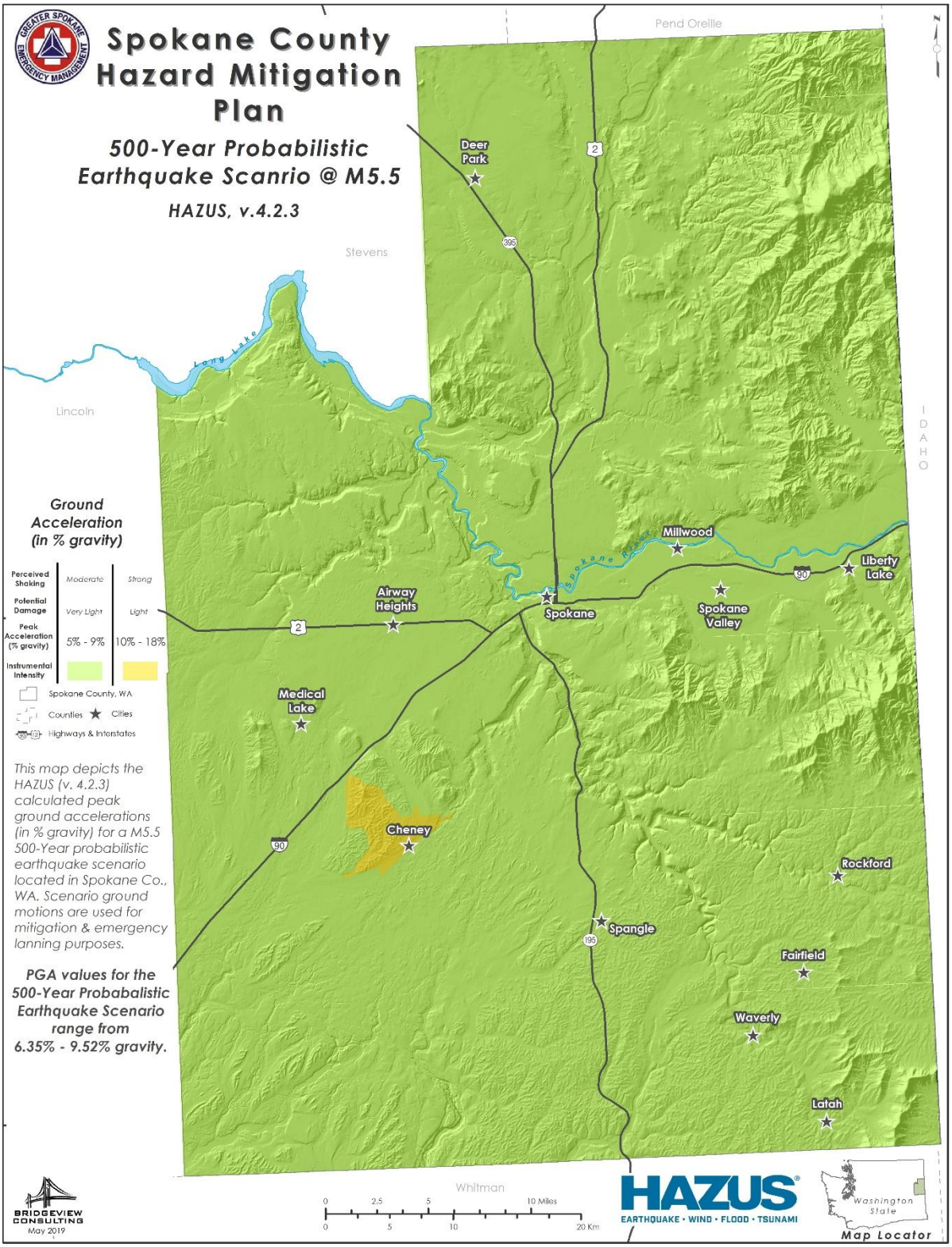
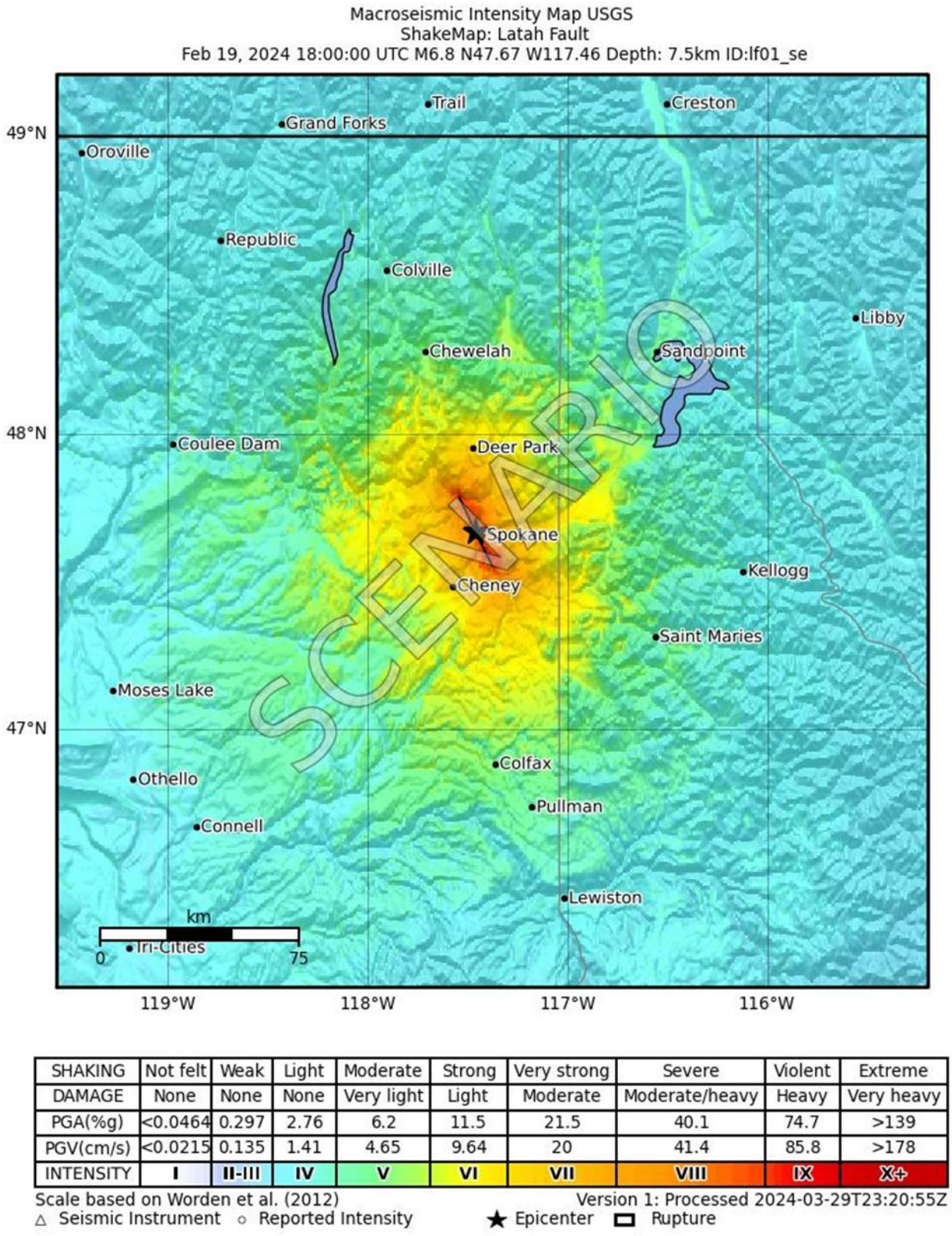


Figure 6-3. Peak Ground Acceleration; 500-Year Probability Event



SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
DAMAGE	None	None	None	Very light	Light	Moderate	Moderate/heavy	Heavy	Very heavy
PGA(%g)	<0.0464	0.297	2.76	6.2	11.5	21.5	40.1	74.7	>139
PGV(cm/s)	<0.0215	0.135	1.41	4.65	9.64	20	41.4	85.8	>178
INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Scale based on Worden et al. (2012) Version 1: Processed 2024-03-29T23:20:55Z
△ Seismic Instrument ○ Reported Intensity ★ Epicenter ▭ Rupture

Figure 6-4. Peak Ground Acceleration Based on Latah Fault M6.8 Scenario (USGS)

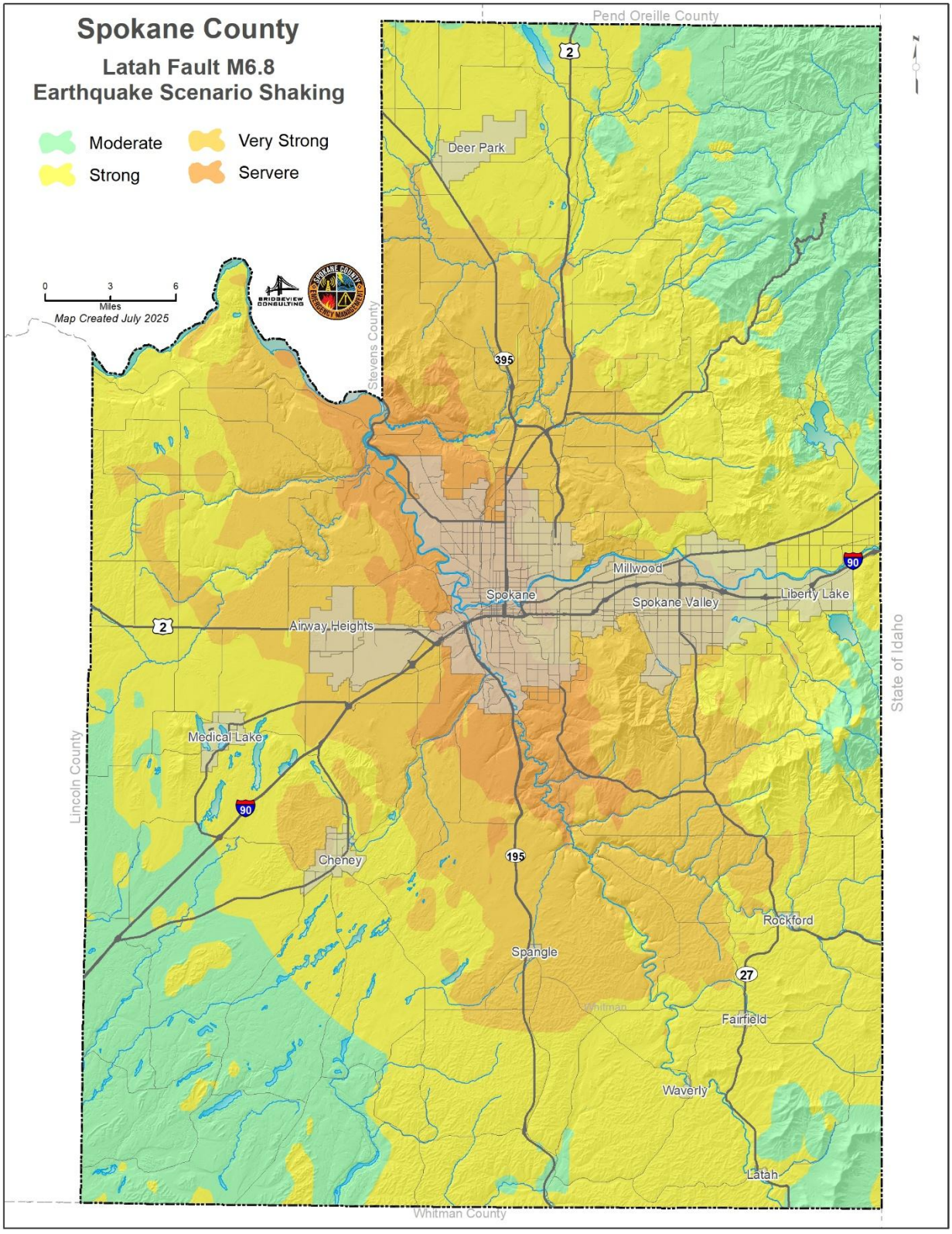


Figure 6-5 Latah Fault M6.8 Earthquake Scenario Shaking

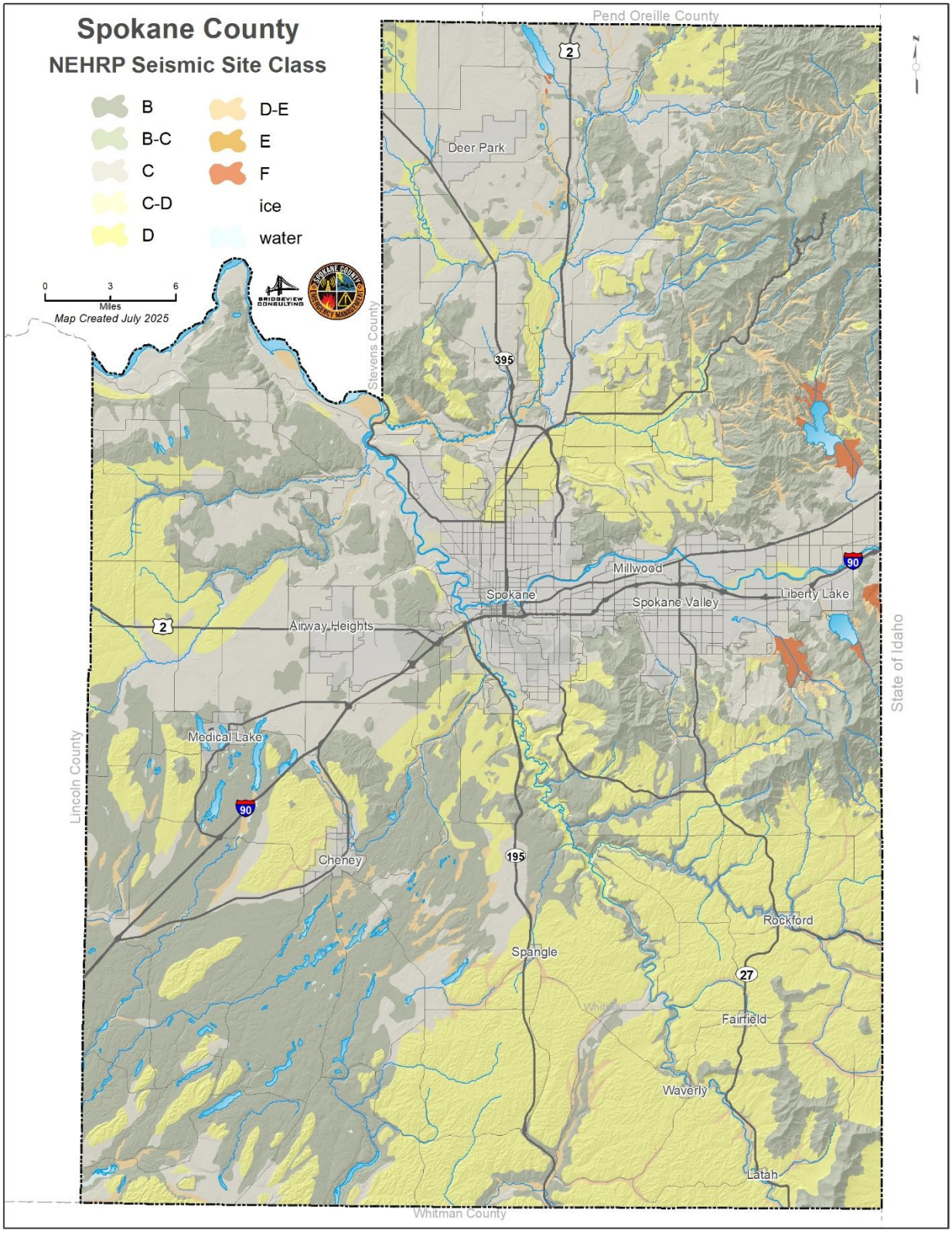


Figure 6-6. National Earthquake Hazard Reduction Program Soil Site Classes

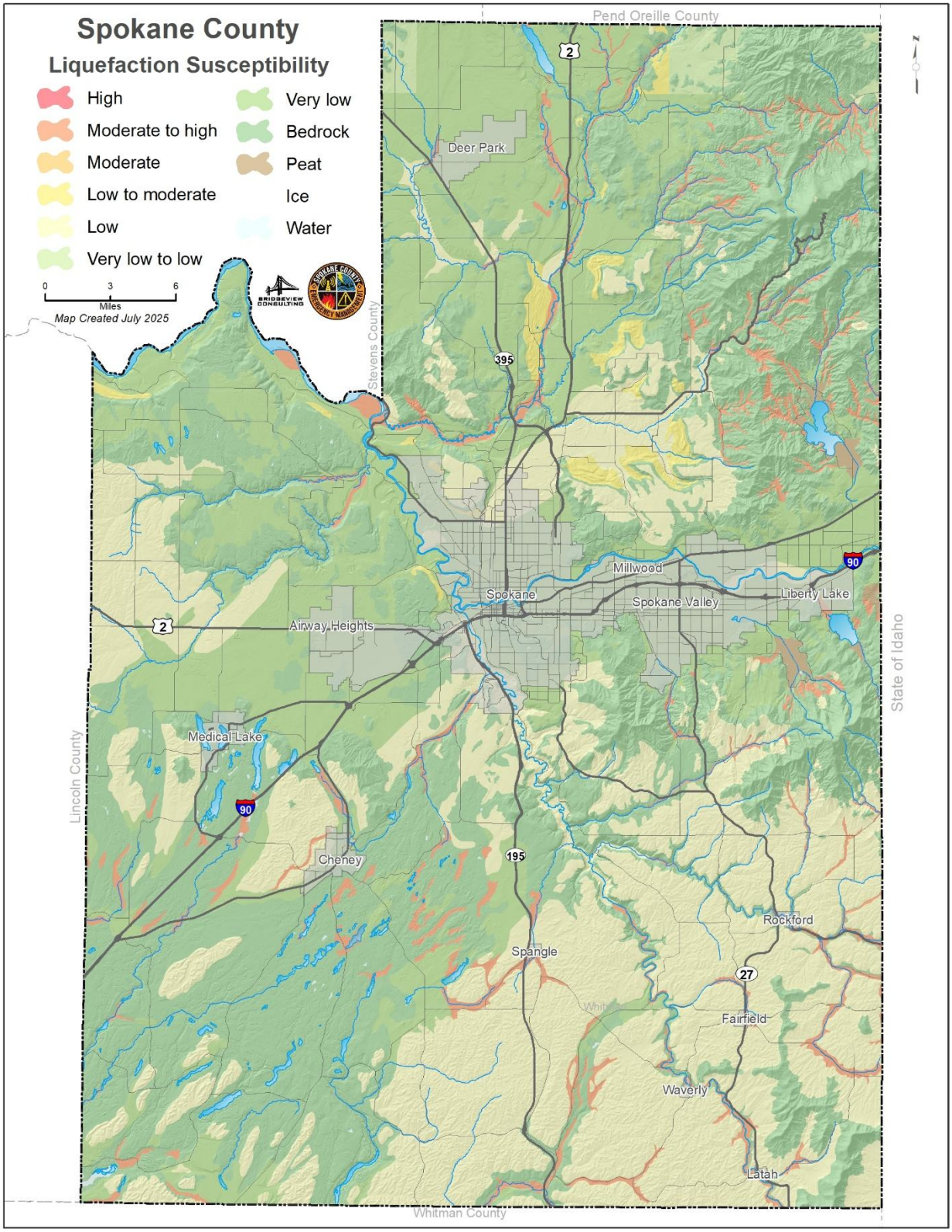


Figure 6-7 Liquefaction Susceptibility

6.2.1 Previous Occurrence

While earthquakes do occur within Spokane County, they are customarily of a lower magnitude as recorded by the U.S. Geological Survey (USGS) (see Figure 6-8)[19].

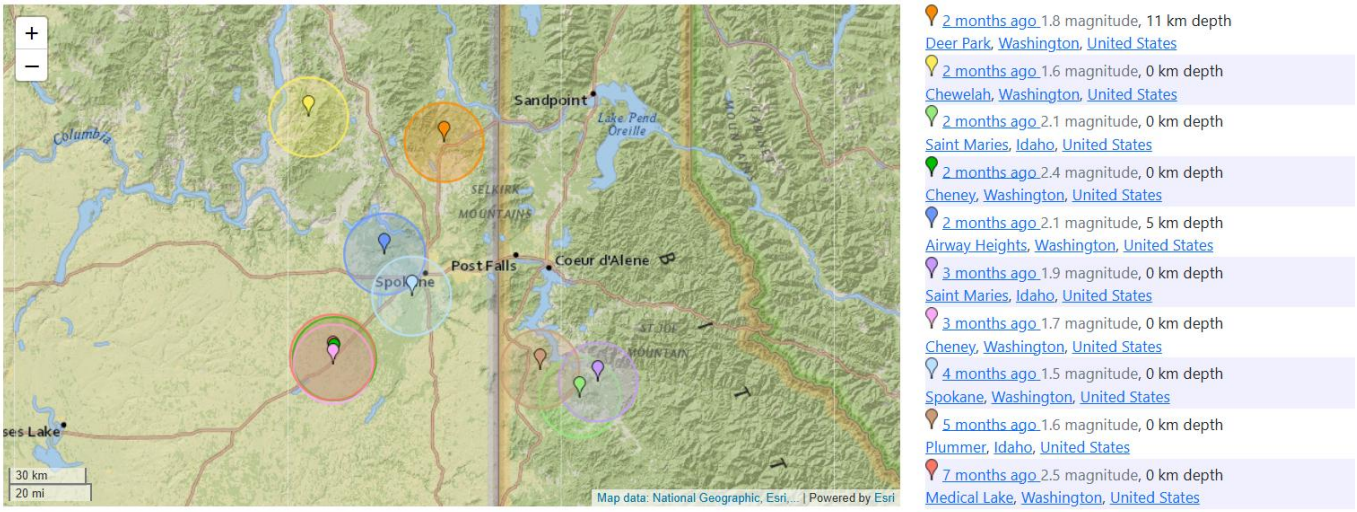


Figure 6-8 Recent Earthquakes Near Spokane (as of July 2, 2025)

The most recent earthquake event of a magnitude 4 or higher occurred in 2001, when the county experienced a swarm of earthquakes. The largest earthquake in that swarm had a magnitude of 4.0. Within the planning region, Washington's two largest crustal earthquakes since European settlement occurred in Eastern Washington: the 1872 quake near Lake Chelan and the 1936 earthquake near Walla Walla. Of these two, only the Walla Walla earthquake caused any damage in Spokane County. Since completion of the last plan, review of USGS data indicates that there have been four earthquakes occurring in the County, the majority of which were a M2.8 or below (see Table 6-6).[20] Additional data and impact for historic earthquake events are discussed below.

Table 6-6.
Earthquake Events M2 and Greater 2020-2025

Date	Depth	Magnitude
4/5/2024	5.8	2.08
9/12/2023	7.7	2.73
8/7/2022	0.5	2.12
5/15/2020	17.25	2.81

[19] Earthquake Track. Accessed 2 July 2025. Available online at: https://earthquaketrack.com/us-wa-spokane/recent
[20] USGS Earthquake Database. Accessed 30 April 2025. Available at: Latest Earthquakes

Lake Chelan, December 14, 1872

The magnitude 6.8 (estimated) Lake Chelan earthquake occurred about 9:40 p.m. and was felt from British Columbia to Oregon, and from the Pacific Ocean to Montana. It occurred in a wilderness area that had only a few inhabitants. Reported effects included the following:

- Extensive landslides occurred on shorelines of the Columbia River. One slide, at Ribbon Cliff between Entiat and Winesap, blocked the Columbia River for several hours. Other slides occurred throughout the Cascade Mountains.
- Ground fissures occurred at the east end of Lake Chelan near the Indian camp area; in the Chelan Landing-Chelan Falls area; on a mountain about 12 miles west of the Indian camp area; on the east side of the Columbia River (where three springs formed); and near the top of a ridge on the east side of the Columbia River.
- Water spouted as much as 27 feet in the air from a fissure at Chelan Falls. The geyser activity continued for several days, and, after diminishing, left permanent springs.
- In the area of the epicenter, the quake damaged one log building near the mouth of the Wenatchee River. Ground shaking threw people to the floor, waves were observed in the ground, and loud detonations were heard. The logs on another cabin caved in about 2 miles above the Ribbon Cliff slide area.
- Damaging ground shaking of intensity VI extended throughout the Puget Sound basin and to the southeast beyond the Hanford Site. Individuals in Idaho, Montana, Oregon and Canada felt the earthquake. Aftershocks occurred in the area for two years.

Walla Walla Earthquake, July 15, 1936

This magnitude 6.1 earthquake occurred at 11:05 a.m. about 5 miles south-southeast of Walla Walla. It was widely felt in Oregon, Washington and northern Idaho, with the greatest shaking in northeast Oregon. Property damage was estimated at $100,000 (~$1.35M in 2004 dollars), with most impact and damages reported near Walla Walla. Reported effects include the following:

- Small objects were moved, windows rattled, and plaster cracked in Colfax, Hooper, Page, Pomeroy, Prescott, Touchet, Wallula, and Wheeler.
- A few chimneys were toppled, and many loose chimney bricks fell.
- A brick home used by the warden at the State Penitentiary was damaged and ultimately declared unsafe and condemned.
- The local railroad station was damaged.
- Several homes were moved off of their foundations.
- Five miles southwest of Walla Walla, the quake restored the flow of a weakened 600-foot deep artesian well to close to original strength; the flow had not diminished after several months.
- Walla Walla residents reported about 15 or 20 aftershocks.

Hebgen Lake (Montana), August 18, 1959

The Hebgen Lake earthquake in Montana was felt in parts of Eastern Washington. The magnitude 7.5 event generated Intensity X shaking, killing 28 people. A resulting landslide formed "Quake Lake," and did $11 million in damage to roads and timber. Many campers in the Yellowstone area were trapped for days and a fishing lodge dropped into a lake. There were six aftershocks of magnitude 5.5 or greater within one day. The initial earthquake was felt in an area of over 450,000 square miles.

Borah Peak (Idaho), October 28, 1983

The Borah Peak earthquake was the largest recorded in Idaho, both in magnitude and in the amount of property damage. At a magnitude 7.3, it was also the largest earthquake to hit the continental United States since the Hebgen Lake earthquake. The epicenter was in the Barton Flats area, 10 miles northwest of Mackay and 30 miles southeast of Challis. The maximum observed Intensity was IX (based on surface faulting), and the earthquake was felt in an area over 330,000 square miles. Four aftershocks of magnitude 5.5 or greater were recorded within 1 year.

Spokane Earthquake Swarm, 2001

Spokane in 2001 had the most noticed earthquake swarm in the Northwest in recent decades. Scientists at the Pacific Northwest Seismograph Network in Seattle said the epicenter of the events was 1 mile north of Gonzaga University and 2.9 miles underground. The U.S. Geological Survey stated that a sequence of 105 small (less than magnitude 4) earthquakes occurred beneath Spokane, accompanied by a small increase (1/2 inch) in ground elevation. The shape of the deforming ground surface was consistent with movement on a northeast-trending fault beneath Spokane, yet no known mapped faults in Spokane have been active in the last 1.6 million years."[21] The largest of the quakes was less than a Magnitude 4 event, so little damage done. No property damage or casualties were reported as a result of the events. However, because the fault whose movement caused the swarm was very shallow, even earthquakes of Magnitude 2 and less were felt. In June and November, there were days with numerous quakes.

6.2.2 Frequency

The majority of Eastern Washington, including Spokane County, is in a lower risk area as defined by the National Earthquake Reduction Program, and is supported by the fact that few earthquakes of significance have occurred in the County. Review of the National Risk Index places the county at a moderate risk level, with an annual frequency at 0.110 percent chance of a significant earthquake occurring each year. USGS data identifies a 10.03% probability of a 5.0 earthquake occurring in the County within the next 50 years.

[21] USGS Geophysical Study. Accessed 25 June 2019. Available at: https://www.usgs.gov/news/geophysical-studies-reveal-potential-quake-hazard-spokane-area

While the County itself may be at lower risk, the impact from earthquakes in the western portion of the state will impact Spokane County, and it is therefore important to recognize the frequency of earthquakes in the western portion of the state as well.

The USGS estimated that a Cascadia Subduction Zone earthquake has a 10 to 15 percent probability of occurrence in 50 years, and a crustal zone earthquake has a recurrence interval of about 500 to 600 years. In general, it is difficult to estimate the probability of occurrence of crustal earthquake events. The best estimate for a major crustal earthquake to occur is once every 1,000 years. A Benioff zone earthquake has an 85 percent probability of occurrence in 50 years, making it the most likely of the three types.

Because of its location at the boundary of two major tectonic plates, Washington State is particularly vulnerable to earthquakes. FEMA has determined that Washington State ranks second (behind only California) among states most susceptible to damaging earthquakes. According to the Washington State Enhanced Hazard Mitigation Plan, the probability of future occurrence for earthquakes similar to the 1965 Magnitude 6.5 Seattle-Tacoma event and the 2001 Magnitude 6.8 Nisqually event is about once every 35 years. The USGS has estimated that there is an 84-percent chance of a Magnitude 6.5 or greater deep earthquake occurring in Western Washington over the next 50 years.

6.2.3 Severity

Earthquake severity can be expressed in terms of intensity or magnitude. Intensity represents the observed effects of ground shaking on people, buildings and natural features. The USGS has created ground motion maps based on current information for several fault zones. These maps show the PGA that has a certain probability (2 percent or 10 percent) of being exceeded in a 50-year period. The PGA is measured in numbers of “g’s” (the acceleration associated with gravity). Figure 6-9 shows the PGAs with a 2-percent exceedance chance in 50 years Nationwide. The Eastern Washington area illustrated in Figure 6-10, which includes Spokane County, is in a lower-risk area, with a 2 percent probability in a 50-year period of ground shaking from a seismic event exceeding ~0.16g.

Magnitude is related to the amount of seismic energy released at the hypocenter of an earthquake. It is determined by the amplitude of the earthquake waves recorded on instruments. Whereas intensity varies depending on location with respect to the earthquake epicenter, magnitude is represented by a single, instrumentally determined value for each earthquake event.

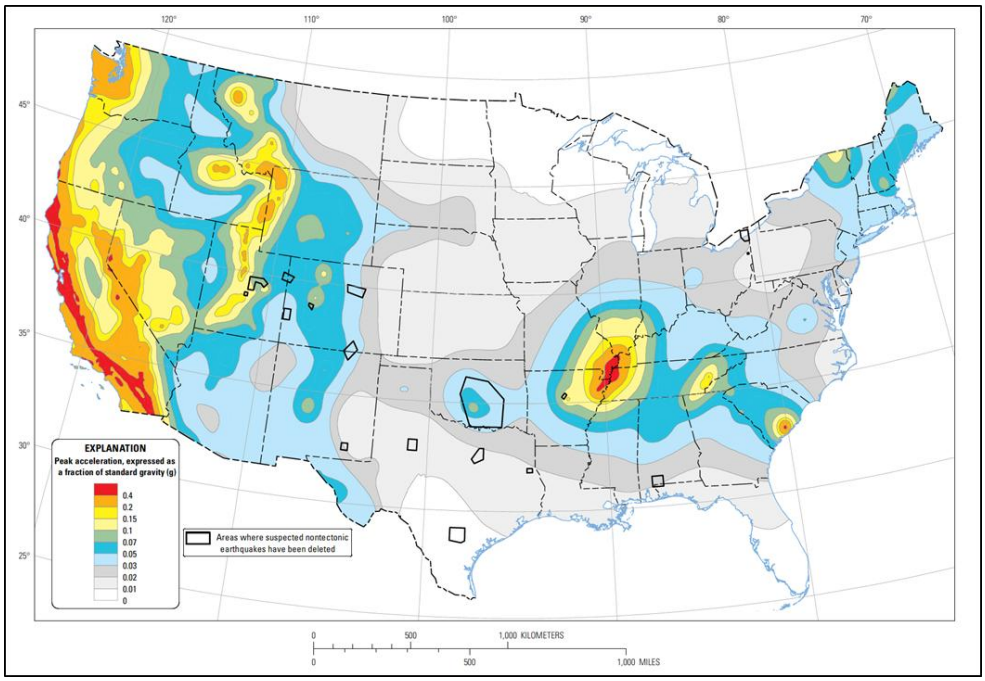


Figure 6-9. Peak Acceleration (%g) with 10% Probability of Exceedance in 50 years - Nationwide

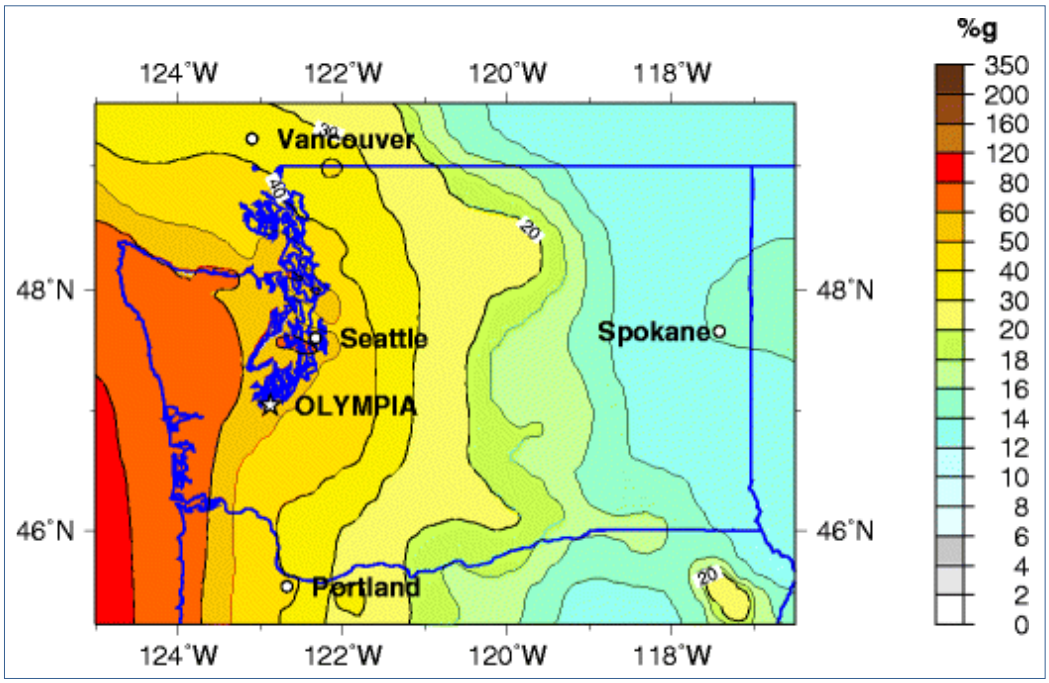


Figure 6-10. PGA with 2-Percent Probability of Exceedance in 50 Years, Northwest Region

In simplistic terms, the severity of an earthquake event can be measured in the following ways:

- How hard did the ground shake?
- How did the ground move (horizontally or vertically)?
- How stable was the soil?
- How fragile is the built environment in the area of impact?

Past events have indicated that an earthquake in the Spokane County area would cause little or no damage. Most crustal earthquakes are in 5.0 to 5.5 magnitude range, and do not have a history of occurrence in the planning area. Nonetheless severity can increase in areas that have softer soils such as the unconsolidated sediments found in the Spokane River Valley.

6.2.4 Warning Time

There is currently no reliable way to predict the day or month that an earthquake will occur at any given location. Researchers have developed an early warning system that uses the low energy waves that precede major earthquakes. This system gives some advanced notice that a major earthquake is about to occur. While the warning time is short, it allows for some response activities, such as, for example, during surgical procedures, allowing equipment to be shut down, or providing additional time to allow people to get under a desk or step away from a window.

6.3 SECONDARY HAZARDS

Earthquakes can cause large and sometimes disastrous landslides and mudslides. River valleys are vulnerable to slope failure, often as a result of loss of cohesion in clay-rich soils. Soil liquefaction occurs when water-saturated sands, silts or gravelly soils are shaken so violently that the individual grains lose contact with one another and float freely in the water, turning the ground into a pudding-like liquid. Building and road foundations lose load-bearing strength and may sink into what was previously solid ground. Unless properly secured, hazardous materials can be released, causing significant damage to the environment and people. Earthen dams and levees are highly susceptible to seismic events and the impacts of their eventual failures can be considered secondary risks for earthquakes.

Additional secondary impacts could include leaking gas lines, which could be ignited, starting fires. Many people may be left homeless. Likewise, there may be a shortage of clean water and a lack of proper sanitation, making it easier for diseases to spread. As a result of roads blocked or destroyed, medical aid and emergency vehicles cannot get through. Businesses or supply chains may be damaged or destroyed causing unemployment and disruption in availability of food, medical supplies/equipment, etc.

6.4 VULNERABILITY ASSESSMENT

6.4.1 Overview

Several faults within the planning region have the potential to cause direct impact. The area also is vulnerable to impact from an event outside the County, although the intensity of ground motions diminishes with increasing distance from the epicenter. As a result, the entire population of the planning area is exposed to both direct and indirect impacts from earthquakes. The degree of direct impact and exposure is dependent on factors including the soil type on which homes are constructed, the proximity to fault location, the type of materials used to construct residences and facilities, etc.

Indirect impacts are associated with elements such as the inability to evacuate the area as a result of earthquakes occurring in other regions of the state as well as impact on commodity flow for goods and services into the area, many of which are serviced only by one roadway in or out. Impact from other parts of the state could require shipment of supplies via rail (if available) or via a barge to different destinations. Evacuation routes from the western portion of the state through Spokane are also of potential concern as a result of the nature of the transient population, and the potential for increased supply and demand for goods and services from evacuees, and more significantly, medical treatment.

6.4.2 Impact on Life, Health and Safety

The entire population of Spokane County is potentially exposed to direct and indirect impacts from earthquakes. As indicated, the degree of exposure is dependent on many factors, including the age and construction type of the structures people live in, the soil type on which homes are constructed, their proximity to fault location, etc.

Whether directly or indirectly impacted, the entire population will have to deal with the impact of an earthquake to some degree if it is of significant magnitude. Business interruption could keep people from working, road closures could isolate populations, and loss of functions of utilities could impact populations that suffered no direct damage from an event itself.

Impacts on persons and households in the planning area were estimated for the 100-year and 500-year earthquakes and the scenario event through the use of Hazus analysis. Table 6-7 summarizes the results.

Table 6-7.
Estimated Earthquake Impact on Person and Households

	Number of Displaced Households	Number of Persons Requiring Short-Term Shelter
100-Year Earthquake (2020 Data)	5	3
500-year Earthquake (2020 Data)	88	52
Latah Creek M6.8 Scenario	10,557	5,672

6.4.3 Impact on Property

All structures in the planning area are susceptible to earthquake impacts to varying degrees. NRI and FEMA's Hazus data indicate the value of those structures exceeds $87.5 (millions of dollars) (2022 values). Many structures throughout the county are aged, increasing the potential exposure due to less stringent building codes. While most structures in the county are residential in nature, in some cases, retrofits or remodels may have occurred which have increased building codes, thereby lowering potential exposure, but such information is not identifiable with a high degree of accuracy based on when the retrofit was completed, and the permitting process in place at the time.

While the majority of building construction types found in the region is comprised of wood frame construction (making up 79 percent of the building inventory based on FEMA's Hazus outputs), in a study completed by Washington State utilizing the Washington Unreinforced Masonry (URM) Dashboard, over 727 structures (public and private) were identified with a potential composition of unreinforced masonry and susceptible to damage from earthquakes (see Figure 6-11).[22] Of those, approximately 10 are identified as emergency facilities, including hospitals, police and fire stations, etc. The Washington URM Dashboard provides additional information for readers wishing to research structures further.

[22] Washington State URM Dashboard. Accessed 21 July 2025. Available online at: Washington URM Dashboard The data identifies all types of structures, but further analysis is required to determine their exact composition.

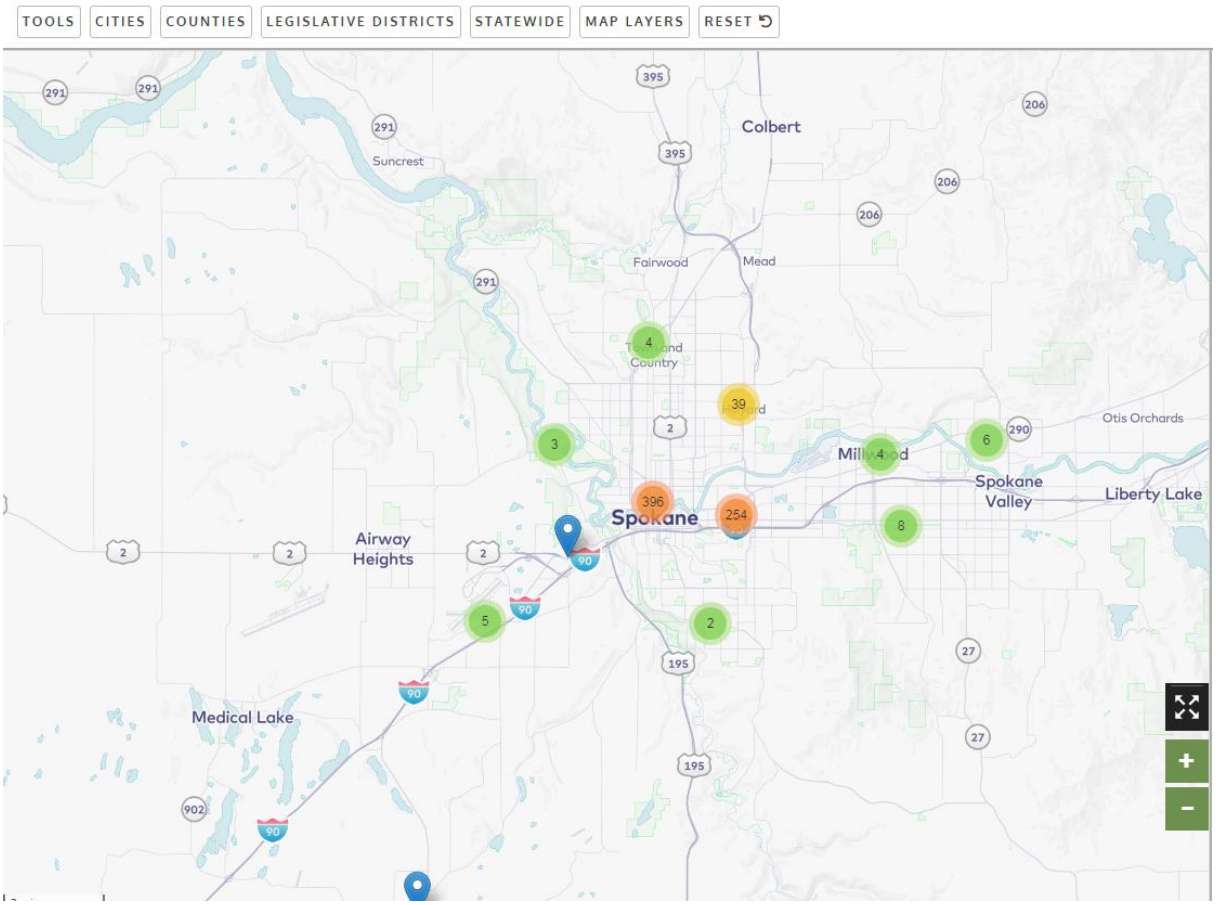


Figure 6-11 Washington State URM Dashboard (2025)

Building Age

Structures that are in compliance with the Uniform Building Code (UBC) of 1970 or later are generally less vulnerable to seismic damage due to the UBC's inclusion of seismic construction standards based on regional location. This stipulated that all structures be constructed to at least seismic risk Zone 2 standards.

The State of Washington adopted the UBC as its state building code in 1972, so it is assumed that buildings in the planning area built after 1972 were built in conformance with UBC seismic standards and have less vulnerability. Issues such as code enforcement and code compliance could impact this assumption. Construction material is also important when determining the potential risk to a structure. However, for planning purposes, establishing this line of demarcation can be an effective tool for estimating vulnerability.

In 1994, seismic risk Zone 3 standards of the UBC went into effect in Washington, requiring all new construction to be capable of withstanding the effects of 0.3 times the force of gravity. More recent housing stock is in compliance with Zone 3 standards. In July 2004, the state again upgraded the building code to follow International Building Code Standards.

Based on U.S. Census data, Table 6-8 illustrates the results of this analysis for all structure types. It should be noted that these are estimates only.

Housing stock and the age of those structures is discussed in Section 3.8 and 3.8.1 of this 2025 update, and is based on the 2025 Spokane County Assessor's Data, which provides additional year-built data.

Table 6-8.
Age of Structures in Spokane County

Time Period	Number of Structures Built in Period Prior to 2004	Significance of Time Frame
Pre-1972	90,082	No explicit earthquake requirements in building codes. State law did not require local governments to have building officials or issue building permits.
1972-1994	51,329	UBC seismic construction standards adopted in Washington in 1972.
1994-2004	47,418	Seismic risk Zone 3 standards of the UBC went into effect in Washington in 1994
2004 - present	(Not identified in Census Data)	Washington upgraded the building code to follow International Building Code Standards in 2004

Due to descriptions within the Assessor's database, these numbers are estimates only and are not inclusive of all types of structures captured in the Census data. The Assessor's database contains a category named "Other" which includes, among others, items such as barns, sheds, carports and general-purpose wood pole frame buildings which may or may not be included in this table from the U.S. Census.

Loss Potential

Property losses for the 100-year and 500-year earthquakes events were estimated through the 2025 HAZUS analysis process. Table 6-9 shows the results for those Hazus runs, broken down as follows:

- Structural loss, representing damage to building structures
- Non-structural loss, representing the value of lost contents and inventory, relocation, income loss, rental loss, and wage loss.

In addition to the 2020 probabilistic earthquakes, loss potential for the Latah Creek M6.8 ShakeMap scenario was also completed. Results from that analysis are illustrated in Figure 6-12, Figure 6-13, and Figure 6-14.

Table 6-9.
Earthquake Building Loss Potential—Probabilistic

	Estimated Earthquake Loss Value					
	100- Year Probabilistic Earthquake			500- Year Probabilistic Earthquake		
Jurisdiction	Structural	Non-Structural	**Total**	Structural	Non-Structural	**Total**
Airway Heights	$95,540	$7,201	**$102,741**	$1,236,014	$300,714	**$1,536,728**
Cheney	$165,704	$20,690	**$186,394**	$2,148,836	$694,975	**$2,843,811**
Deer Park	$52,774	$5,043	**$57,817**	$754,163	$218,704	**$972,866**
Fairfield	$1,806	$448	**$2,254**	$20,579	$6,461	**$27,039**
Latah	$934	$232	**$1,166**	$10,648	$3,343	**$13,991**
Liberty Lake	$416,047	$106,586	**$522,633**	$5,623,903	$1,931,706	**$7,555,608**
Medical Lake	$9,799	$769	**$10,568**	$157,013	$41,125	**$198,137**
Millwood	$40,988	$6,367	**$47,355**	$694,953	$248,392	**$943,345**
Rockford	$1,946	$483	**$2,429**	$22,177	$6,963	**$29,139**
Spangle	$1,025	$255	**$1,280**	$11,687	$3,669	**$15,356**
Spokane	$4,818,546	$531,584	**$5,350,130**	$69,574,102	$20,423,752	**$89,997,855**
Spokane Valley	$2,339,761	$227,938	**$2,567,699**	$32,758,742	$9,668,369	**$42,427,112**
Waverly	$1,199	$298	**$1,496**	$13,660	$4,289	**$17,948**
Unincorporated	$8,337,242	$1,523,494	**$9,860,736.00**	$110,575,963	$33,748,414	**$144,713,977**
Total	**$16,283,311**	**$2,431,388**	$18,714,698	**$223,602,440**	**$67,300,876**	$291,292,912

*(Spokane County 2020 HMP)

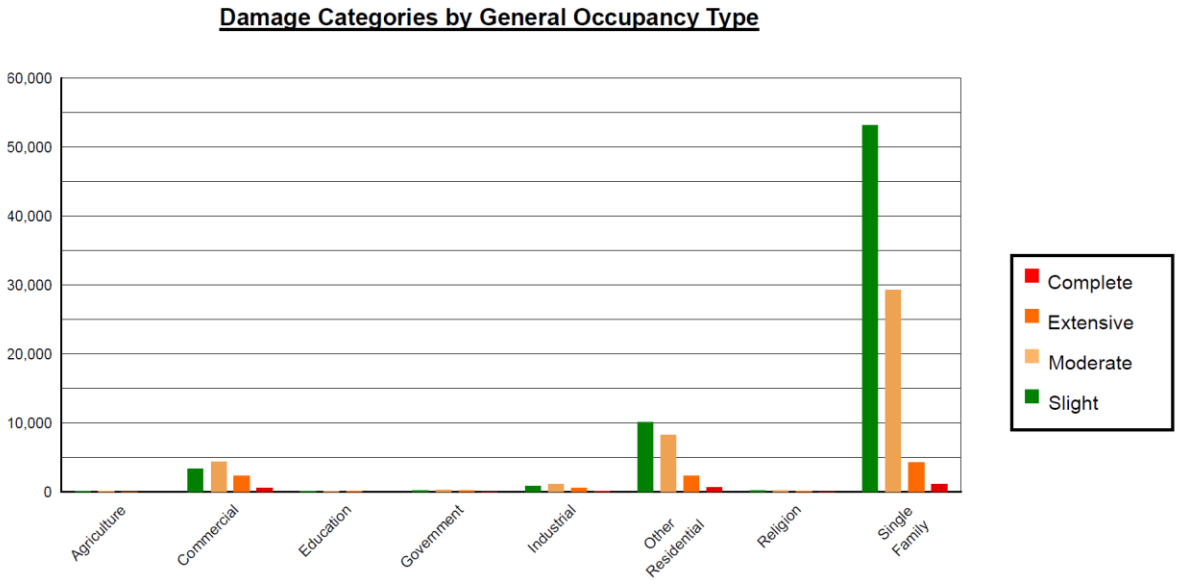


Figure 6-12. M6.8 Latah Creek Scenario Damage Categories by General Occupancy Type (2025)

Debris Tonnage

The Hazus analysis also estimated the amount of earthquake-caused debris in the planning area for the M6.8 scenario event, as summarized in Table 6-10. The majority of the debris consists of reinforced concrete/steel, followed by Brick/Wood. The distinction is made because of the different types of material handling equipment required for debris removal.

Table 6-10.
Estimated Earthquake-Caused Debris

	Debris to Be Removed (tons)
M6.8 Latah Creek Earthquake Event	2,651,000

6.4.4 Impact on Critical Facilities and Infrastructure

All critical facilities in Spokane County are exposed to the earthquake hazard to some degree, either directly, or through secondary impacts such as power loss, or the spread of fire from one structure to another. Contained within Chapter 3, Table 3-10 and Table 3-11 are the number of each type of facility by structure type which could potentially be impacted.

In addition, hazardous materials releases can also occur during an earthquake from fixed facilities or transportation-related incidents. Transportation corridors can be disrupted during an earthquake, leading to the release of materials to the surrounding environment. Facilities holding hazardous materials are of particular concern because of possible isolation of neighborhoods surrounding them. During an earthquake, structures storing these materials could rupture and leak into the surrounding area or an adjacent waterway, having a disastrous effect on the environment.

Level of Damage

Hazus uses five categories of vulnerability of critical facilities to earthquake: no damage, slight damage, moderate damage, extensive damage, or complete damage. The model was used to assign a category to each critical facility in the planning area except hazmat facilities and "other infrastructure" facilities, for which there are no established damage functions. The analysis was performed for the Latah Creek event.

Time to Return to Functionality

Hazus estimates the time to restore critical facilities to fully functional use. Results are presented as probability of being functional at specified time increments in days after the event. For example, Hazus may estimate that a facility has 5 percent chance of being fully functional on Day 3, and a 95-percent chance of being fully functional at Day 90. The analysis of critical facilities in the planning area was performed for the M6.8 Latah Creek earthquake event.

Table 6-11 summarizes both the Level of Damages and Time to Return to Functionality from the Hazus scenario event. Additional information is contained in the *Hazus Global Summary Report*, which is available on request from the Spokane County Emergency Management.

Table 6-11. – Critical Facility Vulnerability and Functionality for Latah Creek Event

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	163.05	0.21	119.62	0.18	100.63	0.23	44.37	0.45	11.34	0.44
Commercial	3499.75	4.51	3379.13	4.96	4411.17	10.06	2346.24	23.68	533.70	20.71
Education	126.86	0.16	75.34	0.11	100.35	0.23	65.88	0.66	18.57	0.72
Government	451.44	0.58	242.94	0.36	295.27	0.67	149.14	1.51	39.21	1.52
Industrial	1035.84	1.33	862.19	1.26	1128.55	2.57	562.88	5.68	105.54	4.10
Other Residential	11573.74	14.90	10139.71	14.87	8295.24	18.92	2371.13	23.93	673.19	26.12
Religion	173.13	0.22	163.61	0.24	220.30	0.50	131.48	1.33	31.47	1.22
Single Family	60652.71	78.08	53212.33	78.03	29293.34	66.81	4238.61	42.77	1164.02	45.17
Total	**77,677**		**68,195**		**43,845**		**9,910**		**2,577**	

Classification	Total	# Facilities		
		At Least Moderate Damage > 50%	Complete Damage > 50%	With Functionality > 50% on day 1
Hospitals	10	7	0	2
Schools	235	141	1	42
EOCs	2	1	0	1
PoliceStations	11	4	0	5
FireStations	76	27	0	36

6.4.5 Impact on Economy

Economic losses due to earthquake damage include damage to buildings, including the cost of structural and non-structural damage, damage to contents, and loss of inventory, loss of wages and loss of income. Loss of tax base both from revenue and lack of improved land values will increase the economic loss to the County and its planning partners. In addition, loss of goods and services may hamper recovery efforts, and even prevent residents from rebuilding within the area.

Available loss data generated by Hazus is identified in Figures 6-11 and 6-12, illustrating economic losses by structure, as well as percentage of losses to inventory, wages, or loss of income based on the M6.8 Latah Creek ShakeMap scenario event. Total building-related losses were $11,864.15 (millions of dollars), with 24 percent of the estimated losses related to business interruption of the region. The largest loss was sustained by the residential occupancies, which made up over 42% of the total loss. Direct building losses include cost of repair/replacement. Business interruption losses also include the temporary living expenses for those people displaced from their residences because of the earthquake.

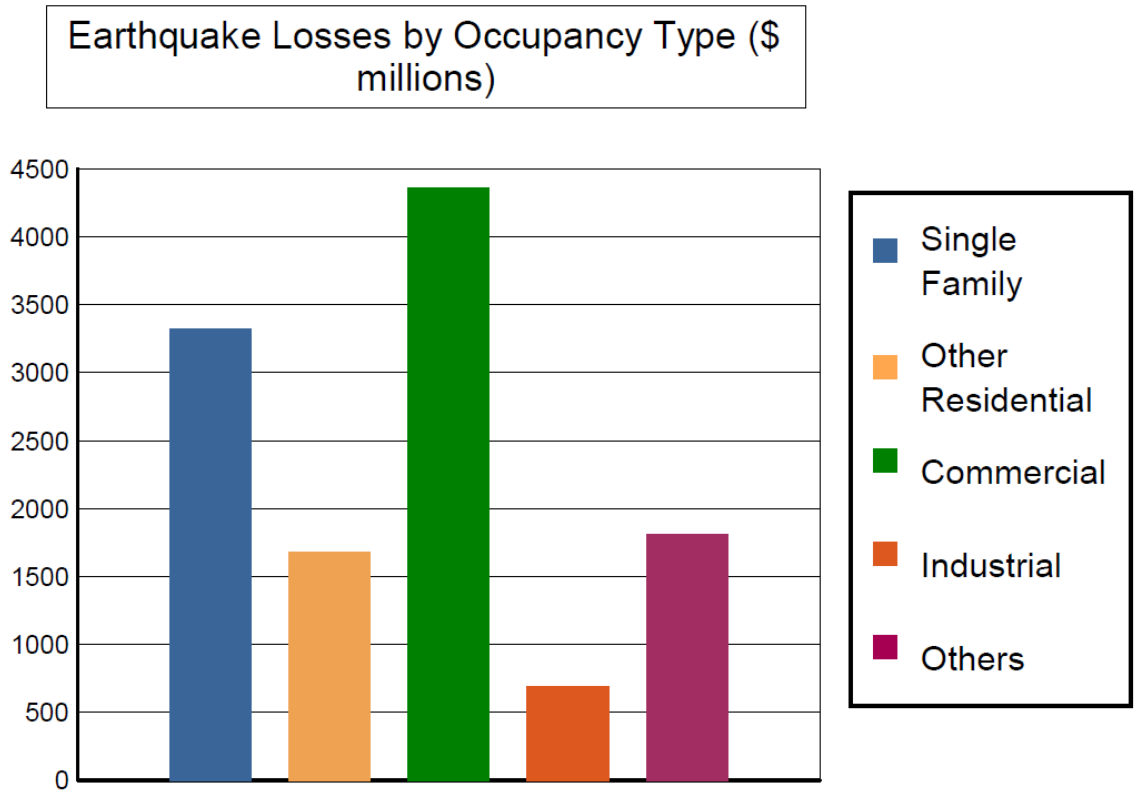


Figure 6-13. Hazus Estimated Dollar Losses by Occupancy Type M6.8 Latah Creek Scenario (2025)

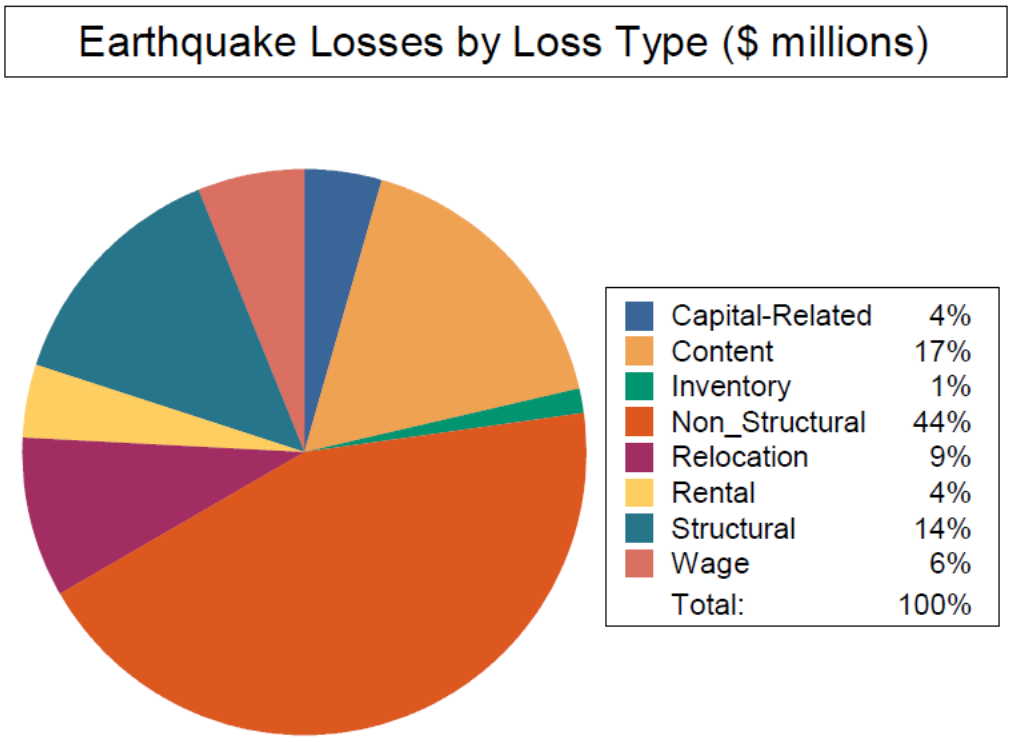


Figure 6-14. Hazus Estimate of Percent of Losses by Type for M6.8 Latah Creek Scenario (2025)

6.4.6 Impact on Environment

Secondary hazards associated with earthquakes will likely have some of the most damaging effects on the environment. Earthquake-induced landslides can significantly impact surrounding habitat. It is also possible for streams to be rerouted after an earthquake. This can change the water quality, possibly damaging habitat and feeding areas. There is a possibility of streams fed by groundwater drying up because of changes in underlying geology.

6.4.7 Impact from Climate Change

The impacts of global climate change on earthquake probability are unknown. Scientists indicate that melting glaciers could induce tectonic activity. As ice melts and water runs off, tremendous amounts of weight are shifted on the earth's crust. As newly freed crust returns to its original, pre-glacier shape, it could cause seismic plates to slip and stimulate volcanic activity according to research into prehistoric earthquakes and volcanic activity. NASA and USGS scientists found that retreating glaciers in southern Alaska may be opening the way for future earthquakes (NASA, 2004).

Secondary impacts of earthquakes could be magnified by climate change. Soils saturated by repetitive storms could experience liquefaction during seismic activity due to the increased

saturation. Dams storing increased volumes of water due to changes in the hydrograph could fail during seismic events.

6.5 FUTURE TRENDS IN DEVELOPMENT

As the population and structure count continues to grow and expand throughout the County, so does the risk and vulnerability. The land use elements of the comprehensive plans adopted by the municipal planning partners provide a long-range guide to the physical development of the planning area and its urban growth area. As one of the fastest growing counties in Washington, Spokane County and its planning partners will need to continue to manage growth in a way that accounts for impacts from potential earthquakes, including enforcement of strong building codes, and other mitigation efforts which have the ability to reduce impact from an earthquake hazard. With tools such as the Washington State Building Code, application of the International Building Codes, and local critical areas ordinances that define seismic hazard areas, the planning partners are prepared to deal with future growth.

6.6 ISSUES

More research needs to be conducted to determine the exposure and vulnerability of Spokane County and the Columbia Plateau region in general to earthquakes. As of this 2025 update, data for the earthquake hazard in the County remains limited with respect to USGS updates to the existing scenario maps, or the development of new data from state and federal subject matter experts.

Utilizing the data which does exist, such as the URM data, the County and its communities could inventory and assess older structures and seek ways to retrofit those that are determined most likely to be damaged during an earthquake. Unfortunately, with limited staffing and subject matter expertise in this area, the County and its planning partners will need to rely on grants to help gain funds with which to conduct such analysis, either through increased staffing with the required expertise, or through hiring a consultant to conduct an assessment of the URM.

Until additional data on the impacts of events typical for this region are developed, non-structural retrofitting techniques should be considered and promoted by the partnership. Important issues associated with earthquakes include the following:

- A more robust assessor data set would significantly enhance the partnership's ability to assess seismic risk.
- More scenario-based shake map data is needed for the region.
- More information is needed on the exposure and performance of soft-story construction within the planning area.

- According to the U.S. Census data, a significant percentage of the planning area's building stock was built prior to 1972, when seismic provisions became uniformly applied through building code applications.
- Critical facility owners should be encouraged to create or enhance Continuity of Operations Plans or response plans using the information on risk and vulnerability contained in this plan.
- Geotechnical standards should be established that take into account the probable impacts from earthquakes in the design and construction of new or enhanced facilities.
- Earthquakes could trigger other natural hazard events such as dam failures and landslides, which could severely impact the county.

6.7 RESULTS

There are numerous crustal faults throughout the Columbia Plateau and in areas north and south. These have not been mapped sufficiently for scientists to make any conclusions about the effect they can have on earthquakes, but it is possible that a fault near Spokane County could rupture, causing an earthquake in the County.

Based on review and analysis of the data, the Planning Team has determined that the Latah Creek M6.8 event, such as that utilized as one of the scenarios modeled for this update, has a medium probability of occurring within the region.

Any seismic activity of Magnitude 6.0 or greater on faults within the planning area would have significant impacts. Earthquakes of this magnitude or higher could lead to significant structural failure of property on unstable soils.

Damage would most likely occur to older structures in the downtown areas of some communities located on softer (NEHRP D and E) soils. The majority of the area falls within the NEHRP soils B and C, with the unincorporated areas of Spokane County having a fair amount of type D soils. Review of the NEHRP soils data indicates that there is no land with an E soils classification, and limited amounts of D-E. The County does have a significant number of unreinforced masonry structures, however, which would also increase vulnerability.

There is a fair amount (~40 percent) of dated construction (pre-1972) which would increase vulnerability, even from a fairly small earthquake. Falling debris from older buildings would increase the potential for risk to citizens and first responders required to assist in evacuations from older structures. Current building codes are of a higher caliber than previous construction standards.

Injuries may occur from debris, such as parapets and chimneys that could topple or be shaken loose and fall on those walking or driving below. With existing areas of the floodplain in the planning area, liquefaction impacts could be more widespread in those areas, as could landslide danger. An earthquake may also cause landslides along unstable slopes. This would be even more likely if an earthquake occurred during the rainy or snowy winter and early spring months.

Spokane County is in a low-risk area with respect to PGA, with a 2 percent probability in a 50-year period of ground shaking from a seismic event exceeding 0.15 g. Limited area falls within the high-hazard soils classifications, with the majority of the area falling in soils types B, or C, with limited D soils type. This equates to very low to a few areas of low-to-moderate liquefaction susceptibility, and only a relatively small area in the moderate area, mostly along waterbodies, river valleys, and streams, etc., which would also be more likely to experience a landslide as a result of earthquakes.

Concern within the planning area also includes impact from the Cascadia M9.0 earthquake scenario, which generates the largest amount of damage on the west side of the mountains. While a Cascadia-type earthquake itself is not anticipated to impact the county, the influx of residents evacuating the west side to Spokane, which is the second or third largest populated municipality in the state, is expected. Likewise, citizens traveling through Spokane to other parts of the country would also tax local resources. The interruption to commodity flow from a Cascadia-type event, coupled with increased calls for assistance for mutual aid, would impact local-area commodities. Concern also exists with respect to the impacts associated with Spokane County serving as the devolution site for Washington State Emergency Management Division, as well as a primary route of travel for response and recovery resources moving from the East. All of these issues are of significant concern to the planning partnership.

Based on the potential impact, the Planning Team determined the CPRI score to be 2.85, with overall vulnerability determined to be a medium level.

CHAPTER 7.
FLOOD AND DAM FAILURE

7.1 GENERAL BACKGROUND

Floods are one of the most common natural hazards in the U.S. They can develop slowly over a period of days or develop quickly, with disastrous effects that can be local (impacting a neighborhood or community) or regional (affecting entire river basins, coastlines and multiple counties or states) (FEMA, 2010). Most communities in the U.S. have experienced some kind of flooding, after spring rains, heavy thunderstorms, coastal storms, or winter snow thaws. Floods are one of the most frequent and costly natural hazards in terms of human hardship and economic loss, particularly to communities that lie within flood-prone areas or floodplains of a major water source.

7.1.1 Flood

Flooding is a general and temporary condition of partial or complete inundation on normally dry land from the following:

- Riverine flooding, including overflow from a river channel, flash floods, alluvial fan floods, dam-break floods, and ice jam floods;
- Local drainage or high groundwater levels;
- Fluctuating lake levels;
- Coastal flooding;
- Coastal erosion;
- Unusual and rapid accumulation or runoff of surface waters from any source;
- Mudflows (or mudslides);

DEFINITIONS

Dam—Any artificial barrier and/or any controlling works, together with appurtenant works, that can or does impound or divert water. (Washington Administrative Code, Title 173, Chapter 175.)

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

High Hazard Dam—Dams where failure or operational error will probably cause loss of human life. (FEMA 333)

Significant Hazard Dam—Dams where failure or operational error will result in no probable loss of human life but can cause economic loss, environmental damage or disruption of lifeline facilities, or can impact other concerns. Significant hazard dams are often located in rural or agricultural areas but could be located in areas with population and significant infrastructure. (FEMA 333)

Flood—The inundation of normally dry land resulting from the rising and overflowing of a body of water.

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

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

Riparian Zone—The area along the banks of a natural watercourse.

- Collapse or subsidence of land along the shore of a lake or similar body of water that result in a flood, caused by erosion, waves or currents of water exceeding anticipated levels (Floodsmart.gov, 2012);
- Sea level rise;
- Climate Change (USEPA, 2012).

A floodplain is the area adjacent to a river, creek or lake that becomes inundated during a flood. Floodplains may be broad, as when a river crosses an extensive flat landscape, or narrow, as when a river is confined in a canyon.

When floodwaters recede after a flood event, they leave behind layers of rock and mud. These gradually build up to create a new floor of the floodplain. Floodplains generally contain unconsolidated sediments (accumulations of sand, gravel, loam, silt, and/or clay), often extending below the bed of the stream. These sediments provide a natural filtering system, with water percolating back into the ground and replenishing groundwater. These are often important aquifers, the water drawn from them being filtered compared to the water in the stream. Fertile, flat reclaimed floodplain lands are commonly used for agriculture, commerce and residential development.

Connections between a river and its floodplain are most apparent during and after major flood events. These areas form a complex physical and biological system that not only supports a variety of natural resources but also provides natural flood and erosion control. When a river is separated from its floodplain with levees and other flood control facilities, natural, built-in benefits can be lost, altered, or significantly reduced.

7.1.2 Flooding Types

Many floods fall into one of three categories: riverine, coastal, or shallow (FEMA, 2005). Other types of floods include alluvial fan floods, dam failure floods, and floods associated with local drainage or high groundwater. For this hazard mitigation plan and as deemed appropriate by the County, riverine/stormwater flooding are the main flood types of concern for the planning area.

Riverine

Riverine floods are the most common flood type. They occur along a channel and include overbank and flash flooding. Channels consist of defined ground features that carry water through and out of a watershed. They may be called rivers, creeks, streams, or ditches. When a channel receives too much water, the excess water flows over its banks and inundates low-lying areas.

Flash Floods

A flash flood is a rapid, extreme flow of high water into a normally dry area, or a rapid water level rise in a stream or creek above a predetermined flood level, beginning within six hours of the causative event (e.g., intense rainfall, dam failure, ice jam). The time may vary in different areas. Ongoing flooding can intensify to flash flooding in cases where intense rainfall results in a rapid surge of rising floodwaters (NWS, 2009).

Measuring Floods and Floodplains

The frequency and severity of flooding are measured using a discharge probability, which is a statistical tool used to define the probability that a certain river discharge (flow) level will be equaled or exceeded within a given year. Flood studies use historical records to determine the probability of occurrence for the different discharge levels. The flood frequency equals 100 divided by the discharge probability. For example, the 100-year discharge has a 1-percent chance of being equaled or exceeded in any given year. The "annual flood" is the greatest flood event expected to occur in a typical year. These measurements reflect statistical averages only; it is possible for two or more floods with a 100-year or higher recurrence interval to occur in a short time period. The same flood can have different recurrence intervals at different points on a river.

The extent of flooding associated with a 1-percent annual probability of occurrence (the base flood or 100-year flood) is used as the regulatory boundary by many agencies. Also referred to as the special flood hazard area (SFHA), this boundary is a convenient tool for assessing vulnerability and risk in flood-prone communities. Many communities have maps that show the extent and likely depth of flooding for the base flood. Corresponding water-surface elevations describe the elevation of water that will result from a given discharge level, which is one of the most important factors used in estimating flood damage.

Floodplain Ecosystems

Floodplains can support ecosystems that are rich in quantity and diversity of plant and animal species. A floodplain can contain 100 or even 1000 times as many species as a river. Wetting of the floodplain soil releases an immediate surge of nutrients: those left over from the last flood, and those that result from the rapid decomposition of organic matter that has accumulated since then. Microscopic organisms thrive and larger species enter a rapid breeding cycle. Opportunistic feeders (particularly birds) move in to take advantage. The production of nutrients peaks and falls away quickly; however, the surge of new growth endures for some time. This makes floodplains particularly valuable for agriculture. Species growing in floodplains are markedly different from those that grow outside floodplains. For instance, riparian trees (trees that grow in floodplains) tend to be very tolerant of root disturbance and very quick-growing compared to non-riparian trees.

Effects of Human Activities

Because they border water bodies, floodplains have historically been popular sites to establish settlements. Human activities tend to concentrate in floodplains for a number of reasons: water is readily available; land is fertile and suitable for farming; transportation by water is easily accessible; and land is flatter and easier to develop. But human activity in floodplains frequently interferes with the natural function of floodplains. It can affect the distribution and timing of drainage, thereby increasing flood problems. Human development can create local flooding problems by altering or confining drainage channels. This increases flood potential in two ways: it reduces the stream's capacity to contain flows, and it increases flow rates or velocities downstream during all stages of a flood event. Human activities can interface effectively with a floodplain as long as steps are taken to mitigate the activities' adverse impacts on floodplain functions.

7.1.3 National Flood Insurance Program

The National Flood Insurance Program (NFIP) makes federally backed flood insurance available to homeowners, renters and business owners in participating communities. For most participating communities, FEMA has prepared a detailed Flood Insurance Study. The study presents water surface elevations for floods of various magnitudes, including the 1-percent annual chance flood and the 0.2-percent annual chance flood (the 500-year flood). Base flood elevations and the boundaries of the 100- and 500-year floodplains are shown on Flood Insurance Rate Maps (FIRMs), which are the principle tool for identifying the extent and location of the flood hazard. FIRMs are the most detailed and consistent data source available, and for many communities they represent the minimum area of oversight under their floodplain management program.

Participants in the NFIP must, at a minimum, regulate development in floodplain areas in accordance with NFIP criteria. Before issuing a permit to build in a floodplain, participating jurisdictions must ensure that three criteria are met:

- New buildings and those undergoing substantial improvements must, at a minimum, be elevated to protect against damage by the 100-year flood.
- New floodplain development must not aggravate existing flood problems or increase damage to other properties.
- New floodplain development must exercise a reasonable and prudent effort to reduce its adverse impacts on threatened salmonid species.

Spokane County entered the NFIP on May 17, 1988. Structures permitted or built in the county before then are called "pre-FIRM" structures, and structures built afterwards are called "post-FIRM." The insurance rate is different for the two types of structures. The effective date for the

current countywide FIRM is July 6, 2010, which is also the County's DFIRM (digital flood insurance rate map).

Occurring simultaneously with this 2025 update, the County was advised by FEMA that additional flood studies were to occur commencing in 2025, with the final maps delivered after completion of this plan. As such, the County elected to minimally update this flood profile at this point in time and will instead update the data as it is made available and is adopted by the County and its planning partners.

7.1.4 NFIP Program Overview

Nine communities within Spokane County participate in the NFIP, as shown in Table 7-1. According to the Washington Department of Ecology, the county and cities are in good standing with the provisions of the NFIP as of this plan update. Program compliance is monitored by the Department of Ecology through Community Assistance Visits (CAV). Specific CAV information, as applicable, is contained within each jurisdictional annex document.

Maintaining compliance under the NFIP is an important component of flood risk reduction. All planning partners that participate in the NFIP have identified initiatives to maintain their compliance and good standing and are committed to doing so through enforcement of programs that at a minimum, meet the NFIP participation requirements. Enforcement may include items such as restricting development in the floodplain, or requiring structures to be built at a higher elevation to avoid impact from flood waters, among other enforcement regulations.

For Spokane County, the Public Works Department - Environmental Programs and Special Projects is tasked with management of the NFIP program. The County does have a dedicated floodplain manager. As a brief overview, in some cases, development is allowed in the floodplain; however, it is subject to the requirements of the Spokane County Flood Ordinance and the NFIP.

Developing property, all or a portion of which is in a regulated floodplain, requires a Floodplain Development Permit. This permit identifies the specific requirements for each proposed project. Prior to Floodplain Permit release, all plans must be reviewed to ensure that they meet the requirements of the Spokane County Flood Ordinance. Development includes, but is not limited to: buildings, homes, manufactured and mobile homes, other structures, bridges, culverts, dredging, filling, grading, paving, excavation, docks, boat lifts, seawalls, bulkheads, etc. Structures may also require floodproofing under the ordinance, which requires that residential homes be elevated above the level of the base flood elevation (BFE) and commercial structures have the option to flood proof above the BFE. A licensed engineer or landscape architect must design the flood proofing. The County's flood ordinance also requires Elevation Certificates. The purpose for an Elevation Certificate is to document compliance with permit conditions as Elevation Certificates are the only official document used by FEMA to determine whether a structure is inside or outside a floodplain, and are also used to determine the proper rate when

purchasing flood insurance. Elevation Certificates must be completed and stamped by a surveyor licensed in the State of Washington. Additional information on Spokane County's program is available at https://www.spokanecounty.org/Faq.aspx?QID=293

Table 7-1.
NFIP Status of Spokane County and Incorporated Municipalities

City	CID	Date of Entry into the NFIP	Current FIRM Effective Date
Cheney	530175	11/06/1979	7/06/2010 (M)
Deer Park	530176	12/26/1979	0//06/2010 (M)
Fairfield, Town of	530177	10/16/1979	07/06/2010 (M)
Liberty Lake	530162	2/18/2020	7/06/2010
Millwood	530180	06/15/1979	(NSFHA)
Rockford	530181	10/02/1979	07/06/2010
Spangle	530182	09/18/1979	07/06/2010 (M)
Spokane County	530174	05/17/1988	07/06/2010
Spokane Valley	530342	04/01/2004	07/06/2010
Spokane	530183	08/01/1980	07/06/2010

(M) = No elevations determined; All Zone A, C and X.
(C) = No Special Flood Hazard Area - All Zone C

The NFIP's Community Rating System (CRS) is a voluntary program that encourages expanded floodplain management activities, requiring increased compliance by participating jurisdictions beyond the minimum NFIP requirements. If jurisdictions exceed the minimum requirements, flood insurance premiums are discounted to reflect the reduced flood risk. At present, Spokane County nor any of its municipalities are part of the CRS program. The majority of the municipalities do not have the capacity to support the CRS activities without adding additional staff and resources.

Flood Insurance Statistics

Table 7-2 lists flood insurance statistics that help identify vulnerability in Spokane County. During the 2015 plan, ten communities in the planning area (including Spokane County) participated in the NFIP, with 420 flood insurance policies in force providing $86.5 million in coverage. The Town of Latah does not participate in the NFIP, although flood maps (dated July 6, 2010) do exist. Liberty Lake joined the NFIP after adoption of the 2020 HMP.

For the 2020 update, the County saw the number of policies in force decline to 335, providing $82.34 million in coverage. According to FEMA statistics, a total of 56 flood insurance claims

were paid between January 1, 1978 and September 30, 2018, for a total of $786,034, an average of $14,036 per claim.

For this 2025 update, Spokane County (unincorporated areas) and Spokane Valley both saw a decline of 63 and 24 policies, respectively. The remaining planning partners all increased the number of policies. Insurance in force also increased for all planning partners except Spokane County and Spokane Valley due to the reduction in the number of policies. As of this 2025 update, claim data is not currently available for inclusion.

Table 7-2.
Flood Insurance Statistics for Spokane County 2017-2019

Jurisdiction	Date of Entry Initial FIRM Effective Date	# of Flood Insurance Policies as of 3/28/19	Insurance In Force	Claims 1/1/1978 to 12/31/2013	New Claims, 12/31/2013 to 9/30/18	Value of Claims paid, 1/1/1978 to 9/30/18
Cheney	11/06/1979	3	$770,000	1	0	$0
Deer Park	12/26/1979	1	$350,000	0	0	$0
Fairfield	10/16/1979	2	$256,100	0	0	$0
Medical Lake	07/06/2010			0	1	
Millwood	06/15/1979	(NSFHA)		0	0	
Rockford	10/02/1979	2	$51,800	0	0	$0
Spangle	09/18/1979	2	$364,300	4	4	$276,767
Spokane County	05/17/1988	186	$49,049,000	20	11	$387,652
Spokane Valley	04/01/2004	65	$14,066,400	0	2	$8,636
Spokane City	08/01/1980	74	$17,437,200	12	1	$112,978
Total		**335**	**$80,968,700**	**37**	**19**	**$786,033**

Table 7-3.
Flood Insurance Statistics for Spokane County 2019-2025

Jurisdiction	Date of Entry Initial FIRM Effective Date	# of Flood Insurance Policies as of 3/31/25	Insurance In Force
Cheney	11/06/1979	3	$845,000
Deer Park	12/26/1979	1	$350,000
Fairfield	10/16/1979	3	$613,000
Liberty Lake		6	$2,080,000
Millwood	06/15/1979	4	$2,400,000
Rockford	10/02/1979	3	$1,235,000

Table 7-3.
Flood Insurance Statistics for Spokane County 2019-2025

Jurisdiction	Date of Entry Initial FIRM Effective Date	# of Flood Insurance Policies as of 3/31/25	Insurance In Force
Spangle	09/18/1979	5	$995,000
Spokane County	05/17/1988	123	$35,000,000
Spokane Valley	04/01/2004	41	$9,373,000
Total		**272**	**$79,029,000**

Gray Shading = Liberty Lake joined the NFIP in 2020

*Most recent data available

Note: Medical Lake and City of Spokane data is not included due to separate plan development initiatives for this 2025 update. As a result, values for policies and insurance in force appear lower, but insurance in force has increased for each municipality identified.

Properties constructed after a FIRM has been adopted are eligible for reduced flood insurance rates. Such structures are less vulnerable to flooding since they were constructed after regulations and codes were adopted to decrease vulnerability. Properties built before a FIRM is adopted are more vulnerable to flooding because they do not meet code or are located in hazardous areas.

Repetitive Loss and Severe Repetitive Loss Properties[23]

A repetitive loss property is defined by FEMA as an NFIP-insured property that has had 2 (or more) flood insurance claims over $1,000 in a 10-year span since 1978.

A severe repetitive loss property is defined by FEMA as an NFIP-insured property that has experienced any of the following since 1978, regardless of any changes in ownership:

- Four or more paid losses in excess of $5,000 each;
- Two or more separate flood insurance claims payments (building payments only), where the total of the payments is greater than the property's current value. These

[23] Repetitive Loss (RL) and Severe Repetitive Loss (SRL) designations only apply to structures with NFIP flood insurance policies. A community may have structures that sustain recurring flooding but are not considered RL or SRL properties because they are not insured by NFIP policies. This becomes important when statistics on repetitive loss are used for planning and/or decision-making purposes. Repetitive Loss (RL) and Severe Repetitive Loss (SRL) designations primarily affect mitigation grant prioritization and cost share allowances.

claims must occur within a rolling ten-year period before the current policy effective date.

Repetitive loss properties make up only 1 to 2 percent of flood insurance policies in force nationally, yet they account for 40 percent of the nation's flood insurance claim payments.

FEMA-sponsored programs, such as the CRS, require participating communities to identify repetitive loss areas. A repetitive loss area is the portion of a floodplain holding structures that FEMA has identified as meeting the definition of repetitive loss. Identifying repetitive loss areas helps to identify structures that are at risk but are not on FEMA's list of repetitive loss structures because no flood insurance policy was in force at the time of loss.

FEMA's list of repetitive loss properties identified three such properties in the Spokane County planning area as of May 8, 2019. One property in Spangle was identified as "severe repetitive loss" according to FEMA criteria.

For the 2025 update, two properties in Spangle have been identified, one a repetitive loss structure, and one a severe repetitive loss structure. The breakdown of the properties by jurisdiction is presented in Table 7-4. It should be noted that the Spokane loss is dated 1996; the Spangle losses were in 2014, and two losses were identified as of 2022 (most recent data available). All structures are single family residential in nature.[24]

Table 7-4.
Repetitive and Severe Repetitive Loss Properties in Spokane County

Jurisdiction	Repetitive Loss (RL) Properties	RL Properties That Have Been Mitigated	Severe Repetitive Loss (SRL) Properties	SRL Properties that Have Been Mitigated
Spangle (2014-2022)	3	0	2	0
Spokane (1996 loss)	1	0	0	0
Total	**4**	**0**	**2**	**0**

Based on FEMA Report of Repetitive Losses as of 05/02/2025 provided by WA EMD, with reporting only through 2022.

7.1.5 High Hazard Dams

Dam failures in the United States typically occur in one of four ways (Association of State Dam Safety Officials):

[24] Washington State Emergency Management Division (Kevin Zerbe). Obtained 1 May 2025.

- Overtopping of the primary dam structure, which accounts for 34 percent of all dam failures, can occur due to inadequate spillway design, settlement of the dam crest, blockage of spillways, and other factors.
- Foundation defects due to differential settlement, slides, slope instability, uplift pressures, and foundation seepage can also cause dam failure. These account for 30 percent of all dam failures.
- Failure due to piping and seepage accounts for 20 percent of all failures. These are caused by internal erosion due to piping and seepage, erosion along hydraulic structures such as spillways, erosion due to animal burrows, and cracks in the dam structure.
- Failure due to problems with conduits and valves, typically caused by the piping of embankment material into conduits through joints or cracks, constitutes 10 percent of all failures.

The remaining 6 percent of U.S. dam failures are due to miscellaneous causes. Many dam failures in the United States have been secondary results of other disasters. The prominent causes are earthquakes, landslides, extreme storms, massive snowmelt, equipment malfunction, structural damage, foundation failures, and sabotage. The most likely disaster-related causes of dam failure in Spokane County are earthquakes.

Poor construction, lack of maintenance and repair, and deficient operational procedures are preventable or correctable by a program of regular inspections. Terrorism and vandalism are serious concerns for which all operators of public facilities must plan.

Regulatory Oversight

The potential for catastrophic flooding due to dam failures led to passage of the National Dam Safety Act (Public Law 92-367). The National Dam Safety Program requires a periodic engineering analysis of every major dam in the country. The goal of this FEMA-monitored effort is to identify and mitigate the risk of dam failure so as to protect the lives and property of the public.

Washington Department of Ecology Dam Safety Program

The Dam Safety Office (DSO) of the Washington Department of Ecology regulates over 1,000 dams in the state that impound at least 10 acre-feet of water. The DSO has developed dam safety guidelines to provide dam owners, operators, and design engineers with information on activities, procedures, and requirements involved in the planning, design, construction, operation and maintenance of dams in Washington. The authority to regulate dams in Washington and to provide for public safety is contained in the following laws:

- State Water Code (1917)—RCW 90.03
- Flood Control Act (1935)—RCW 86.16

- Department of Ecology (1970)—RCW 43.21A.

Where water projects involve dams and reservoirs with a storage volume of 10 acre-feet or more, the laws provide for the Department of Ecology to conduct engineering review of the construction plans and specifications, to inspect the dams, and to require remedial action, as necessary, to ensure proper operation, maintenance, and safe performance. The DSO was established within Ecology's Water Resources Program to carry out these responsibilities.

U.S. Army Corps of Engineers Dam Safety Program

The U.S. Army Corps of Engineers is responsible for safety inspections of some federal and non-federal dams in the United States that meet the size and storage limitations specified in the National Dam Safety Act. The Corps has inventoried dams; surveyed each state and federal agency's capabilities, practices and regulations regarding design, construction, operation and maintenance of the dams; and developed guidelines for inspection and evaluation of dam safety (U.S. Army Corps of Engineers, 1997).

Federal Energy Regulatory Commission Dam Safety Program

The Federal Energy Regulatory Commission (FERC) cooperates with a large number of federal and state agencies to ensure and promote dam safety. There are 3,036 dams that are part of regulated hydroelectric projects in the FERC program. Two-thirds of these are more than 50 years old. As dams age, concern about their safety and integrity grows, so oversight and regular inspection are important. FERC staff inspects hydroelectric projects on an unscheduled basis to investigate the following:

- Potential dam safety problems
- Complaints about constructing and operating a project
- Safety concerns related to natural disasters
- Issues concerning compliance with the terms and conditions of a license.

Every five years, an independent engineer approved by the FERC must inspect and evaluate projects with dams higher than 32.8 feet (10 meters) or with a total storage capacity of more than 2,000 acre-feet.

FERC staff monitors and evaluates seismic research and applies it in investigating and performing structural analyses of hydroelectric projects. FERC staff also evaluates the effects of potential and actual large floods on the safety of dams. During and following floods, FERC staff visits dams and licensed projects, determines the extent of damage, if any, and directs any necessary studies or remedial measures the licensee must undertake. The FERC publication *Engineering Guidelines for the Evaluation of Hydropower Projects* guides the FERC engineering staff and licensees in evaluating dam safety. The publication is frequently revised to reflect current information and methodologies.

The FERC requires licensees to prepare emergency action plans and conducts training sessions on how to develop and test these plans. The plans outline an early warning system if there is an actual or potential sudden release of water from a dam due to failure. The plans include operational procedures that may be used, such as reducing reservoir levels and reducing downstream flows, as well as procedures for notifying affected residents and agencies responsible for emergency management. These plans are frequently updated and tested to ensure that everyone knows what to do in emergency situations.

7.1.6 Dam Hazard Classifications

The Washington State Dept. of Ecology Dam Safety Office classifies dams and reservoirs in a hazard rating system based solely on the potential consequences to downstream life and property that would result from a failure of the dam and sudden release of water. The following codes are used as an index of the potential consequences in the downstream valley if the dam were to fail and release the reservoir water:

- 1A = Greater than 300 lives at risk (High hazard);
- 1B = From 31 to 300 lives at risk (High hazard);
- 1C = From 7 to 30 lives at risk (High hazard);
- 2 = From 1 to 6 lives at risk (Significant hazard);
- 3 = No lives at risk (Low hazard).

The Corps of Engineers developed the hazard classification system for dam failures shown in Table 7-5. The Washington State Dam Safety Office and Corps of Engineers hazard rating systems are both based only on the potential consequences of a dam failure; neither systems take into account the probability of such failures.

Spokane County has 37 dams within its boundaries identified by the Washington State Department of Ecology Dam Safety Program.[25] Figure 7-1 illustrates the dam location countywide, as well as the hazard class. It should be noted that no GIS dam inundation or other analysis was completed as a result of this HMP project. Rather, the Planning Team attempted to obtain emergency action plans from the dam owners for review to identify lives/people and structures at risk based on the dam owners' reporting criteria or based on the potential lives and structures at risk as identified by the DSO.

[25] Washington State Department of Ecology. Inventory of Dams Report. Accessed 1 May 2025. Available online at: 94016.pdf (wa.gov)

Table 7-5
U.S. Army Corps of Engineers (USACE) Hazard Potential Classification

Hazard Category[a]	Direct Loss of Life[b]	Lifeline Losses[c]	Property Losses[d]	Environmental Losses[e]
Low (Class 3)	None (rural location, no permanent structures for human habitation).	No disruption of services (cosmetic or rapidly repairable damage).	Private agricultural lands, equipment, and isolated buildings.	Minimal incremental damage.
Significant (Class 2)	Rural location, only transient or day-use facilities.	Disruption of essential facilities and access.	Major public and private facilities.	Major mitigation required.
High (Class 1)	Certain (one or more) extensive residential, commercial, or industrial development.	Disruption of essential facilities and access.	Extensive public and private facilities.	Extensive mitigation cost or impossible to mitigate.

a. Categories are assigned to overall projects, not individual structures at a project.
b. Loss of life potential based on inundation mapping of area downstream of the project. Analyses of loss of life potential should take into account the population at risk, time of flood wave travel, and warning time.
c. Indirect threats to life caused by the interruption of lifeline services due to project failure or operational disruption; for example, loss of critical medical facilities or access to them.
d. Damage to project facilities and downstream property and indirect impact due to loss of project services, such as impact due to loss of a dam and navigation pool, or impact due to loss of water or power supply.
e. Environmental impact downstream caused by the incremental flood wave produced by the project failure, beyond what would normally be expected for the magnitude flood event under which the failure occurs.

Source: U.S. Army Corps of Engineers, 1995

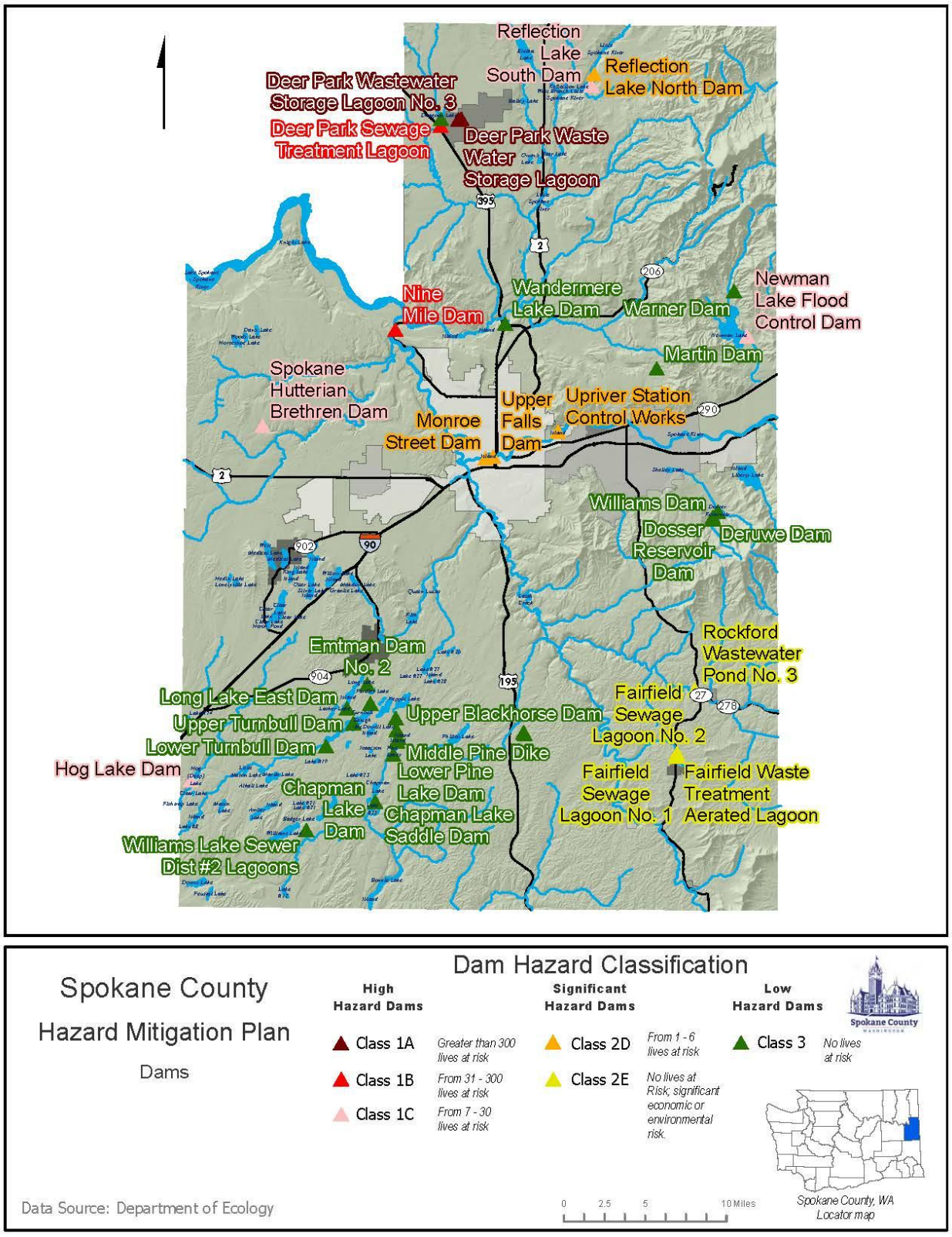


Figure 7-1 Spokane County Dams with Classifications

Based on review of the data, there are eight (8) high hazard (1A or 1B) dams within its boundary, none of which are owned by the county itself. The City of Deer Park owns three high hazard Dams (1A and 1B). Washington State Department of Fish and Wildlife owns one high hazard dam (1C). Avista Utilities owns one high hazard dam (1B) and two significant hazard dams (2D). Newman Lake Flood Control District owns one high hazard dam (1C). Reflection Lake Community Association and Spokane Hutterian Brethren each own a high hazard dam (1C). The City of Fairfield owns two significant hazard dams (2E). The US Fish and Wildlife Service also owns multiple dams throughout the county, all low-risk hazard dams (3).

7.2 HAZARD PROFILE

7.2.1 Extent and Location - Flood

The major floods in Spokane County have resulted from intense weather rainstorms or the combination of rain on snow events between November and March. The flooding that has occurred in portions of the county has been extensively documented by gauge records, high water marks, damage surveys and personal accounts. This documentation was the basis for the June 6, 2010 FIRMs generated by FEMA for Spokane County. As of this 2025 update, FEMA is in the process of updating NFIP maps, as well as developing additional flood maps on areas not previously completed. The new map project will be completed after this 2025 update. As such, the 2010 Flood Insurance Study remains the sole source of data used in this risk assessment to map the extent and location of the flood hazard, as shown in Figure 7-2. Once the on-going NFIP study is completed, the County and its planning partners may elect to update the flood profile with the new data provided by FEMA.

The principal cause of flooding in Spokane County is heavy rainfall brought in with warm Chinook winds, usually in combination with snowmelt over a frozen impermeable ground during the winter or early spring. The sudden increase in runoff overwhelms rivers and creeks, which typically overtop. The Spokane River, for instance, has an average annual discharge of 7,946 cfs, but can experience peak flows of 49,000 cfs. Floods can also be intensified by ice jams against low clearance railroad and road bridges. Floods in Spokane County are typically of short duration, usually less than one day, and flood stages rise and fall rapidly.

Erosion and transported sediment are major secondary hazards of flooding. The intense runoff can strip away topsoil and deposit it elsewhere, usually where it is impeded, such as at bridge abutments. The erosion can deposit sediment in river and creek beds, decreasing their capacity to transport water.

The Spokane River, which derives most of its flow from snowmelt in Idaho, is influenced by Coeur d'Alene Lake, resulting in a relatively stabilized flow condition free from the extreme peaks that would result if the lake did not exist; however, damaging floods have occurred. Climate and

stream flow records for the Spokane River basin indicate that the region experiences spring snowmelt and winter rain floods. Winter rain floods are caused by warm temperatures and rainfalls that accompany intense Pacific Ocean storms which sometimes move eastward across Washington and Idaho. In such cases, rainfall, snowmelt, and occasionally frozen soil conditions combine to produce short-duration, intense runoff. In most cases, peaks on the lower Spokane River are reduced by the large storage volume normally available in Coeur d'Alene Lake. The large size of the upper Spokane River basin also tends to moderate the effect of winter floods. Hangman Creek normally experiences its greatest flood peaks during winter storms.

Statistical analysis of stream flow records shows that the 1% annual chance flood discharge on the Spokane River at Spokane is 52,000 cfs. Several historical floods of record have approached this magnitude, including the flood of January 1974, which had a peak discharge of 45,600 cfs. The largest flood for which water-surface data are available is the flood of December 1933, which had a peak discharge of 47,800 cfs.

Flooding along the Little Spokane River is similar to that on Hangman Creek. Statistical analysis of the lower gage on the Little Spokane River gives a 1% annual chance flood flow of 4,355 cfs; the drainage area covered by this gage is 665 square miles. The flood of record was recorded on February 17, 1970, and had a peak discharge of 3,170 cfs. The record flow at the gage located further upstream, at Elk, was 205 cfs on January 16, 1974. The drainage area covered by the upstream gage is 115 square miles.

Extremely high peak flows can be generated on Hangman Creek with little advance warning. The soils in the Hangman Creek valley provide essentially no ground water to sustain flow when there is no precipitation or snowmelt. Also, there are no artificial impoundments. The net result is a stream characterized by extremes. Most of Hangman Creek flows through rural areas where encroachment on the flood plain is minimal.

Flood problems experienced in 1974 are typical of flood damage on Hangman Creek throughout the urban area. Problems in the City of Spokane extended from the vicinity of the 11th Street bridge upstream to a point approximately 1,500 feet south of U.S. Highway 195 and consisted of limited inundation of individual residences and failure of poorly constructed levees subjected to high stream flow velocities. In addition, the Hangman Valley Golf Course, which was constructed with full knowledge of flood problems, suffered extensive damage in 1974. Silt was deposited on fairways, and two pedestrian bridges were destroyed. Flooding problems on Hangman Creek involve bank erosion and undercutting as well as inundation. The flood of record was recorded at 20,600 cfs in February 1963.

Urban flooding can also occur within Spokane County. This type of flooding occurs outside of mapped floodplains, where rainfall/snowmelt runoff exceeds the design capacity of stormwater conveyance facilities or flows overland when no conveyance facilities are available. Urban drainage issues are often exacerbated by increases in impervious areas that can increase runoff

rates, or when the ground becomes frozen, allowing for no ground infiltration rainfall runoff. Urban drainage flooding can have significant impacts on the built environment and this hazard can be difficult to assess because of the lack of hazard mapping.

The County has also experienced several events of flash flooding in the areas of Dartford, Spangle, Country Homes, Yardley, Wayside, Hamann Corner, and Elk, among other areas.

7.2.2 Previous Occurrence

Since 1971 every county within Washington State has received a federal disaster declaration for flooding. Spokane County has 11 declared federal disasters for flooding since 1964. Table 3-1 in Chapter 3 and Table 7-6 identify these events since 1964. Review of the FEMA data indicates the addition of one declared severe weather event which included flooding has occurred since completion of the last plan, that event occurring on April 6, 2021. One flash flood event occurred in the Elk area on June 5, 2022. In addition, there was one new Governor's Proclamation issued for an event which did not rise to the level of a disaster declaration for roadway impact from flooding statewide.

Table 7-6.
Spokane County Flood Events 1964-2024

Date	Declaration #	Type of event	Estimated Damage[a]
6/5/2022		Flash Flood in the Elk area; no injuries or deaths.	$190,000 in property damage.
4/6/2021	4309	Severe Winter Storms, Flooding, Land- and Mud-slides.	Unknown
1/30/2017	4309	Severe Winter Storms, Flooding, Landslides	N/A
5/21/2016		Flash Flood in Nine Mile Falls area; no reports of damages or injuries.	
11/12/2015	4249	Severe Storms, Straight-Line Winds, Flooding	N/A
6/1/2015		Flash flood near Hamann Corner/Wayside; $210,000 in reported damages. No deaths or injuries.	
7/14/2012		Flash flood near Yardley. $5,000 in damages. No deaths or injuries reported.	
6/1/2011	--	Flooding / Flash flood	$200,000[a]
5/19/2008	--	Flooding	$1,000,000[a]
6/13/2006		Flash Flood in Spokane (unclear if City, Valley or County - no additional data); no reports of damages or injuries	
6/10/2006		Flash flood in Spangle; no reports of damages, injuries or deaths.	

Table 7-6.
Spokane County Flood Events 1964-2024

Date	Declaration #	Type of event	Estimated Damage[a]
3-2-1999	--	Flooding	$700,000[a]
3/18/1997	DR-1172	Storms/Flooding/Landslides/Mudslides	N/A
1/17/1997	DR-1159	Severe Winter Storms/Flooding	N/A
2/9/1996	DR-1100	Severe Storms/Flooding	$33.7 Million for the state
5/20/1986	DR-769	Washington Severe Storms, Flooding	N/A
12/29/1964	DR-185	Heavy Rains & Flooding	N/A

a. Data obtained from Spatial Hazard Events and Losses Database for the United States or NOAA Storm Events Database.
N/A = Information is not available

The following is an overview of the more significant events during this timeframe in Spokane County.

- March 1963—Flooding occurred in the counties of Columbia, Garfield, Grant, Whitman, and Spokane. Federal disaster number 146 was assigned for the event.
- February 1996—Heavy rains caused flooding in the several counties including Spokane. Snowfall beginning January 26, 1996, followed by heavy rain in February, mild temperatures, and mountain snow melt caused severe flooding throughout the entire northwest. Record floods occurred on Latah Creek. Federal disaster number 1100 was assigned for the event.
- December 1996 - January 1997—Rain, ice, and snow caused flooding. Federal disaster number 1159 was assigned for several counties including Spokane. The Town of Rockford experienced damage to 11 buildings with their sanitary sewer line and streets sustaining $367,860 worth of damage.

Flash Floods

In addition, between 1998 - 2025, the County experienced several flash flood events. Thankfully, there were no reported deaths or injuries, but the floods did cause approximately $1.58 million in property damage.[26] The events occurred in 1998, 1999, 2000, 2006, 2011, 2012, 2015, 2016 and 2022. Due to the dates maintained in the NOAA site being reported dates, they may not necessarily be the date the event occurred. As such, it is unclear whether

[26] NOAA Storm Events Database. Accessed 3 July 2025. Some of the data appears to be duplicates, and as such, the loss values may be extensively lower. Available at: Storm Events Database - Search Results | National Centers for Environmental Information

those events correspond with disaster declared events as there are no corresponding disaster declarations occurring in proximity to the dates referenced. As indicated in Table 7-6, one of those events occurred since completion of the 2020 plan on June 5, 2022 in Elk, Washington, which caused $190,000 in damage. Elk was also the location of the declared wildfires in 2023.

7.2.3 Frequency

Spokane County experiences episodes of river flooding almost every winter at some degree. Large floods of any magnitude that cause property damage typically occur every seven to ten years, with a 10 percent chance of occurrence in any given year. When grouped with severe weather events which include flooding, the recurrence interval ranges from three to seven years. Urban portions of the county annually experience nuisance flooding related to drainage issues.

7.2.4 Severity

The principal factors affecting flood damage are flood depth and velocity. The deeper and faster flood flows become, the more damage they can cause. Shallow flooding with high velocities can cause as much damage as deep flooding with slow velocity. This is especially true when a channel migrates over a broad floodplain, redirecting high velocity flows and transporting debris and sediment. Flood severity is often evaluated by examining peak discharges; Table 7-7 lists peak flows used by FEMA to map the floodplains of Spokane County (pre-2025 on-going flood study).

7.2.5 Warning Time

Floods are the number one natural disaster in the United States in terms of loss of life and property. Floods are generally classed as either slow-rise or flash floods. Slow-rise may be preceded by a warning time from several hours, to days, to possibly weeks. Evacuation and sandbagging for a slow-rise flood may lessen flood damage. Flash floods are the most difficult to prepare for, due to the extremely short warning time, if any is given at all. Flash flood warnings usually require evacuation within an hour.

Each watershed has unique qualities that affect its response to rainfall. A hydrograph, which is a graph or chart illustrating stream flow in relation to time (see Figure 7-3), is a useful tool for examining a stream's response to rainfall. Once rainfall starts falling over a watershed, runoff begins and the stream begins to rise. Water depth in the stream channel (stage of flow) will continue to rise in response to runoff even after rainfall ends. Eventually, the runoff will reach a peak and the stage of flow will crest. It is at this point that the stream stage will remain the most stable, exhibiting little change over time until it begins to fall and eventually subside to a level below flooding stage.

The potential warning time a community has to respond to a flooding threat is a function of the time between the first measurable rainfall and the first occurrence of flooding. The time it takes to recognize a flooding threat reduces the potential warning time to the time that a community

has to take actions to protect lives and property. Another element that characterizes a community's flood threat is the length of time floodwater remains above flood stage.

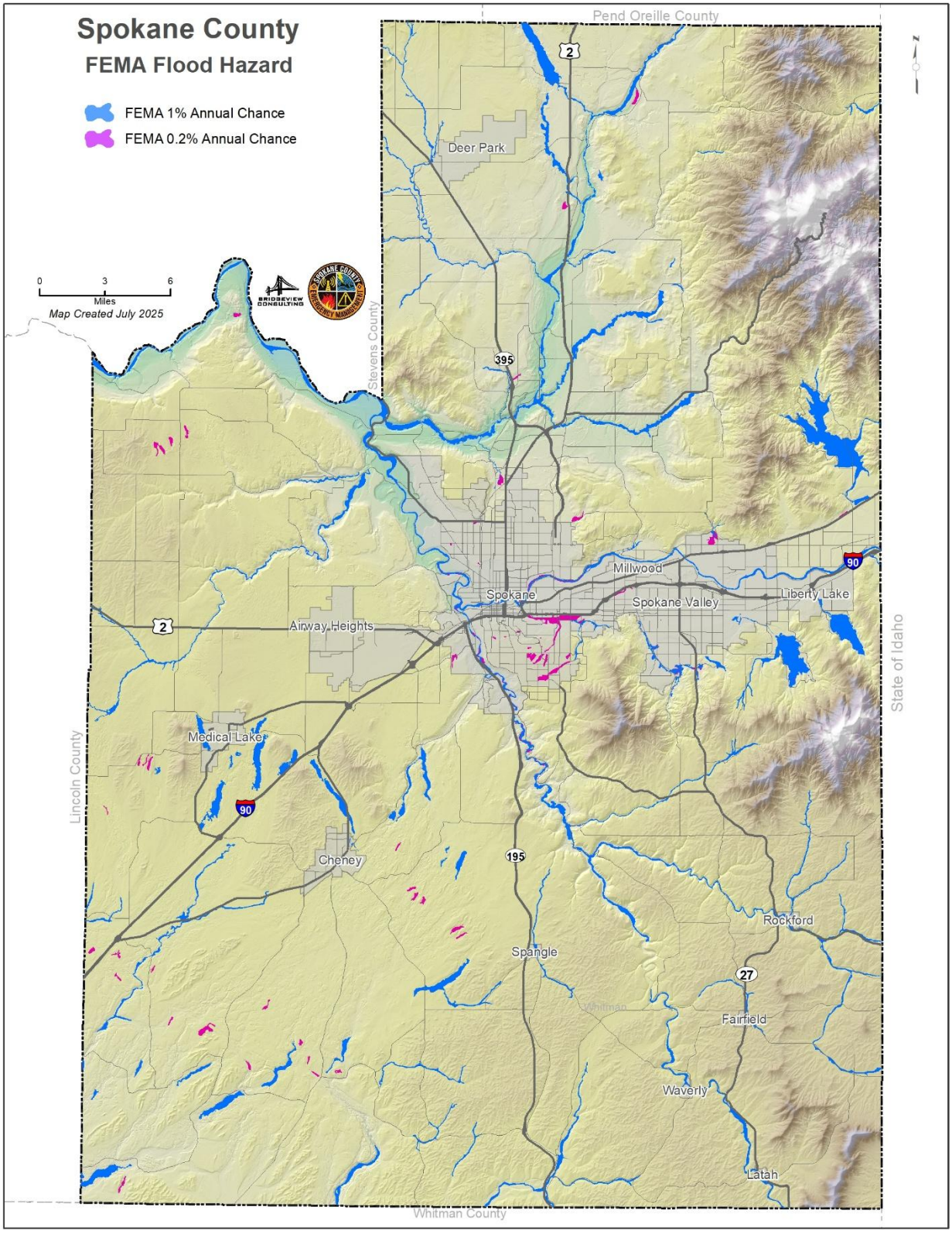


Figure 7-2. FEMA Flood Hazard Areas

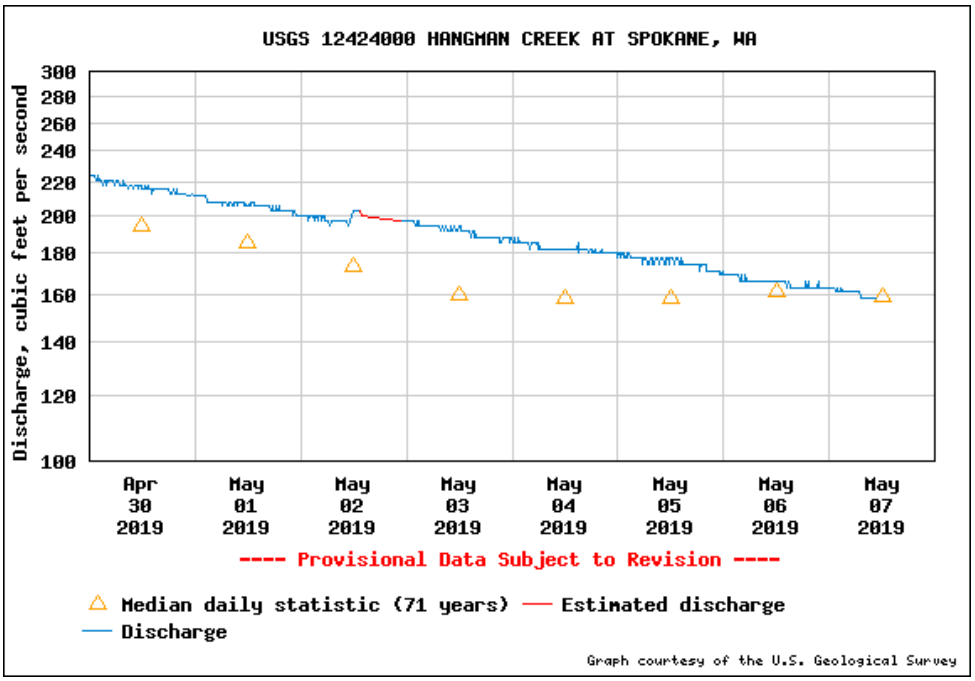


Figure 7-3. Spokane River Hydrograph at Spokane (USGS Station 12424000)

Table 7-7.
Summary of Peak Discharges within Spokane County

Source/Location	Discharge (cubic feet/second) 10-Year	50-Year	100-Year	500-Year
Argone Drainage				
At North Boeing Rd	80	140	173	214
At East Upriver Drive	102	180	222	274
Chester Creek				
Near 24th Ave	14	26	34	44
Near Schafer Road	113	137	147	169
Near Thorpe Road	75	104	116	144
Chester Creek Golf Course Overflow				
At Chester Creek	30	54	64	88
Country Homes Drainage				
At Highland Road At Hawthorne Road	165	311	370	551
At Hawthorne Road	138 [a]	249 [a]	293 [a]	349 [a]
At Cascade Way	142	284	293	408
Hangman Creek				
At USGS Gage	14,300	22,200	26,000	36,300
At Hatch Road	12,100	18,800	22,000	37,000
Little Spokane River Near Mouth	2,366 [b]	3,491 [b]	3,884 [b]	5,009 [b]
At USGS Gage Near Dartford	2,589	3,487	4,288	5,563
Above Confluence with Deep Creek	2,545	3,761	4,194	5,454

Table 7-7.
Summary of Peak Discharges within Spokane County

Source/Location	Discharge (cubic feet/second) 10-Year	50-Year	100-Year	500-Year
Below Confluence with Dragoon Creek	2,054	3,011	3,372	4,452
Below Chatteroy	1,001	1,436	1,611	2,166
Below Confluence with Eloika Lake	892	1,260	1,415	1,917
At Milan	727	1,006	1,137	1,590
Saltese Creek				
At Steen Road	65	215	--	531
At Baker Road	31	66	--	101
Spokane River				
At USGS Gage Near Otis Orchard	37,500	47,000	--	65,000
Forker Draw				
At Bigelow Gulch Road	49	88	109	135
Below East Jacob Road	60	108	134	166
At Chursh Driveway	117	209	259	321
Rock Creek				
Below Confluence with Mica Creek	5,190	9,590	11,500	15.900
Above Confluence with Mica Creek	4,410	8,060	9,640	12,990
Mica Creek				
At its mouth	1,190	2,290	--	3,840
Unnamed Tributary to Chester Creek				
At Storage Area	10	14	16	20
At Pines Road	12	24	30	46
At E. 46th Ave.	11	22	28	45
At S. Tolbert Lane	7	14	18	28

a. Decrease Due to Ponding, Pervious Soils, and Storage in Overbanks
b. Not Calculated

The Spokane County flood threat recognition system consists of a network of precipitation gages throughout the watershed and stream gages at strategic locations on the Spokane River that constantly monitor and report stream levels. This information is fed into a USGS forecasting program, which assesses the flood threat based on the amount of flow in the stream (measured in cubic feet per second as demonstrated in Figure 7-3 above). In addition to this program, data and flood warning information is provided by the National Weather Service. All of this information is analyzed to evaluate the flood threat and possible evacuation needs.

Due to the sequential pattern of meteorological conditions needed to cause serious flooding, it is unusual for a riverine flood to occur without warning. Warning times for floods can be between

24 and 48 hours. However, as we have seen with the July 2025 flash floods occurring in Texas, flash flooding can be much less predictable, but potential hazard areas can be warned in advanced of the potential flash flooding danger.

7.3 SECONDARY HAZARDS

The most problematic secondary hazard for flooding is bank erosion, which in some cases can be more harmful than actual flooding. This is especially true in the upper courses of rivers with steep gradients, where floodwaters may pass quickly and without much damage, but scour the banks, edging properties closer to the floodplain or causing them to fall in. Flooding is also responsible for hazards such as landslides when high flows over-saturate soils on steep slopes, causing them to fail. Hazardous materials spills are also a secondary hazard of flooding if storage tanks rupture and spill into streams, rivers or storm sewers.

7.3.1 Extent and Location – Dam Failure

The run-of-the-river dams along the main stem of the Spokane River are Post Falls Dams, Spokane Dam, Upper Falls Dam, Monroe Street Dam, Upriver Dam, Nine Mile Falls Dam and Little Falls Dam. With the exception of Upriver Dam (pictured right), which is operated by the City of Spokane's Water Department, these facilities are operated by Avista Utilities.



Figure 7-4 City of Spokane Upriver Dam

Of these dams, the Post Falls Dam located downstream from the outlet of Lake Coeur d'Alene has the greatest effect on the river hydrograph. Flow through the dam regulates Spokane River flow for four to six months a year during the low flow period. The dam regulates flow to maintain the level of Lake Coeur d'Alene at the agreed upon ordinary high-water mark of 2,128 feet. Storing water that would have naturally drained from the lake during the summer modifies the flow characteristics of the river. The current hydrograph shows minimum flows occurring in late August or early September compared to the pre dam hydrograph where minimum occurred in late September of early October. Long Lake Dam, located downstream of the study area, also has a storage reservoir adequate to allow minor effects on flow.

The Spokane River flows 112 miles from Post Falls Dam in Idaho to Lake Roosevelt (the Upper Columbia River) in Washington. The river basin encompasses over 6,000 square miles in

Washington and Idaho. There are two major tributaries, Latah (Hangman) Creek and the Little Spokane River. There are seven municipal and industrial dischargers with permits to put wastewater into the Spokane River. Water conservation measures have been studied to preserve stream flows for fish, habitat, and recreation.

As indicated, the Washington State Dam Safety Office (DSO) oversees 37 dams of varying types in Spokane County. Table 7-8 lists the high and significant hazard dams within Spokane County.

Table 7-8.
High or Significant Hazard Dams in Spokane County (Class 1 or 2)

Name	National ID #	Water Course	Owner	Year Built	Dam Type[a]	Crest Length (feet)	Height (feet)	Surface Area (acres)	Drainage area (sq. mi.)	Hazard Class[b]
Deer Park Sewage Treatment Lagoon	WA00303	Tr-Dragoon Creek	Deer Park	1984	RE	1340	14	21	0.01	2
Deer Park Wastewater Storage Lagoon	WA01468	Tr-Dragoon Creek	Deer Park	1984	RE	3300	14	176.0	0.07	1C
Deer Park Wastewater Storage Lagoon #3	WA0065	Tr-Dragoon Creek	Deer Park	1996	RE	1300	13	3.0	0.00	1C
Fairfield Waste Treatment Aerated Lagoon 1	WA01849	--	Fairfield	2003	RE	650	14	2.0	0.00	2E
Fairfield Waste Treatment Aerated Lagoon 2	WA01528	--	Fairfield	1966	RE	650	12	6.4	0.01	2E
Hog Lake Dam	WA00056	Fishtrap Creek	Washington State	1957	RE	330	20	40.0	48	1C
Monroe Street Dam	WA00039	Spokane River	Avista Utilities	1973	PG	217	28	30	4,290	2D
Newman Lake Flood Control Dam	WA00396	Thompson Creek	Newman Lake Flood Control District	1976	RE	8400	13	1200	27.86	1C
Nine Mile Dam	WA00068	Spokane River	Avista Utilities	1908	PG	464	68	440	5110	1B

Table 7-8.
High or Significant Hazard Dams in Spokane County (Class 1 or 2)

Name	National ID #	Water Course	Owner	Year Built	Dam Type[a]	Crest Length (feet)	Height (feet)	Surface Area (acres)	Drainage area (sq. mi.)	Hazard Class[b]
Reflection Lake North Dam	WA00362	Sheets Creek	Reflection Lake Homeowners Association	1955	RE	200	8	58	0.54	2D
Reflection Lake South Dam	WA00050	Sheets Creek	Reflection Lake Comm. Inc.	1955	RE	710	28	58	0.54	1C
Rockford Wastewater Pond No. 3	WA00050	Rock Creek – Offstream	Rockford, Town	1999	RE	NA	23.5	NA	0.01	2E
Spokane Hutterian Brethern Dam	WA00720	Unnamed Trib-Deep Creek	Spokane Hutterian Brethren	2006	RE	480	34	3	0.94	1C
Upper Falls Dam	WA00038	Spokane River	Avista Utilities	1922	PG	366	30	135	4290	2D
Upriver Station Control Works	WA00074	Spokane River	Spokane	1935	CN, PG, RE	725	54	160	4215	2

a. RE = Earth Fill Dam; CN, PG = Concrete Gravity Dam
b. See severity discussion for definition of hazard classes

Source: WA DOE. Accessed 5 May 2025.

Review of (some) dams in the surrounding counties demonstrate the potential to impact Spokane County. Two examples of this involve the Ponderosa Dam (see Figure 7-5) and the Albini Dam (see Figure 7-6).

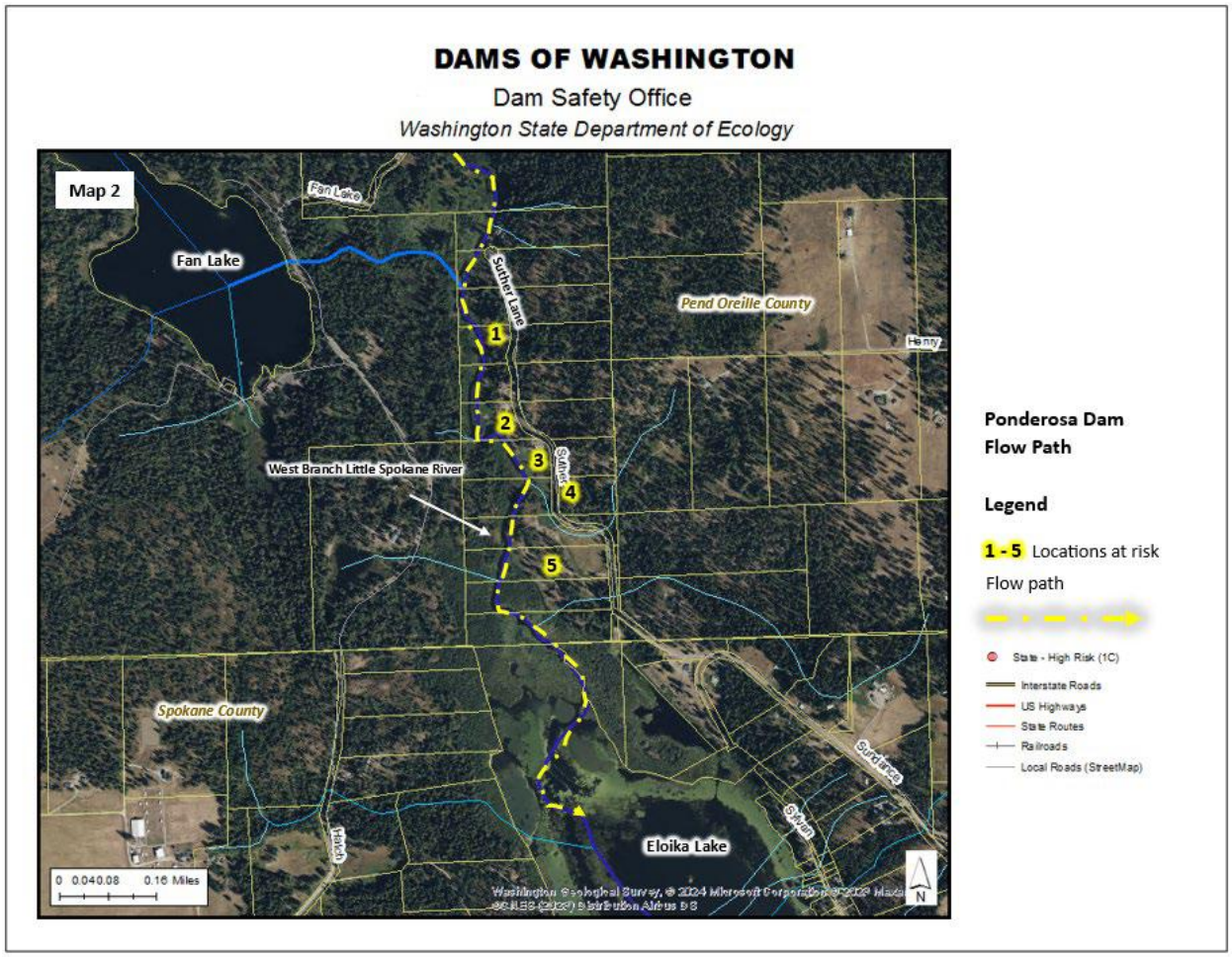


Figure 7-5 Ponderosa Dam Flow Path

Ponderosa Lake Dam (Stevens County)[27]

Ponderosa Lake Dam is a high hazard (1-C) dam located on Beaver Creek in Stevens County, Washington. The dam is an earth-filled 60-foot-high dam, with a maximum storage capacity of 1,400 acres. Based on review of the EAP, there are potentially 3-5 homes at risk should the dam fail. Depending on the level of failure, areas of Pend Oreille County could be impacted, including Horseshoe Lake Road (potential depth of 12 feet over the roadway within 65 minutes of failure), Fan Lake Road, and Sutter Road (both with the potential depth of 3 feet over road within 92 minutes of failure). Review of Figure 7-5 also indicates that flow path would continue down the west branch of the Little Spokane River, traveling into Spokane County.

[27] Ponderosa Lake Dam Emergency Action Plan. (2024). Washington State Dept. of Ecology.



Figure 7-6 Albeni Falls Dam looking upstream

Albeni Falls Dam

The Albeni Falls Dam (see Figure 7-6, photo courtesy of USACE), which is located in Bonner County, Idaho, also has the potential to cause significant flooding in portions of Spokane County. In 2019, the dam owner applied for and received a grant to upgrade its flood gates, which were severely dated and in poor condition. As work commenced, it was determined that the gates could not be reused, and new gates would be required. With the noted deficiencies, the USACE made the determination that the original capacity associated with retainage behind the flood gates would need to be lowered. At the time of this update (spring 2025), the dam continues to operate with spill gate restrictions. The Seattle office of the USACE has scheduled multiple outreach efforts within the impacted areas to provide information to citizens.[28]

Dam Inundation Maps

The owner of a dam is responsible for developing an inundation map, which is used in determining exposure to a potential dam failure or breech during development of dam response plans. One of those maps is represented below (see Figure 7-7). The representation is dated and should be viewed as informational only as the landscape and development in the areas will undoubtedly have changed. In many instances, such inundation maps are not available for public release as the maps are considered privileged information. Therefore, in many instances, it is

[28] US Army Corps of Engineers. (2025). Accessed 5 May 2025. Available online at: Army Corps announces refill date, hosts spring operations public information meetings > Seattle District > Seattle District News Releases

difficult to estimate the population living within the inundation zone beyond the information designated in the dam classification analysis. Without the ability to perform an inundation study, it is also not possible to estimate property losses from a dam failure which could ultimately affect the planning area. The County has identified their continued efforts to work with dam owners to obtain relevant information as a strategy.

For those dams for which no additional dam failure inundation studies or maps are available, in some instances those inundation areas coincide with flood hazard areas. Review of the flood profile may provide a general concept of structures at risk, although, based on the size of the dams, damage would vary. As development occurs downstream of dams, it is necessary to review the dams' emergency action plans and inundation maps to determine whether the dams require reclassification based on the established standards. The County and its planning partners will continue to work to gain additional and updated information for high hazard dams and have identified this as a mitigation strategy.

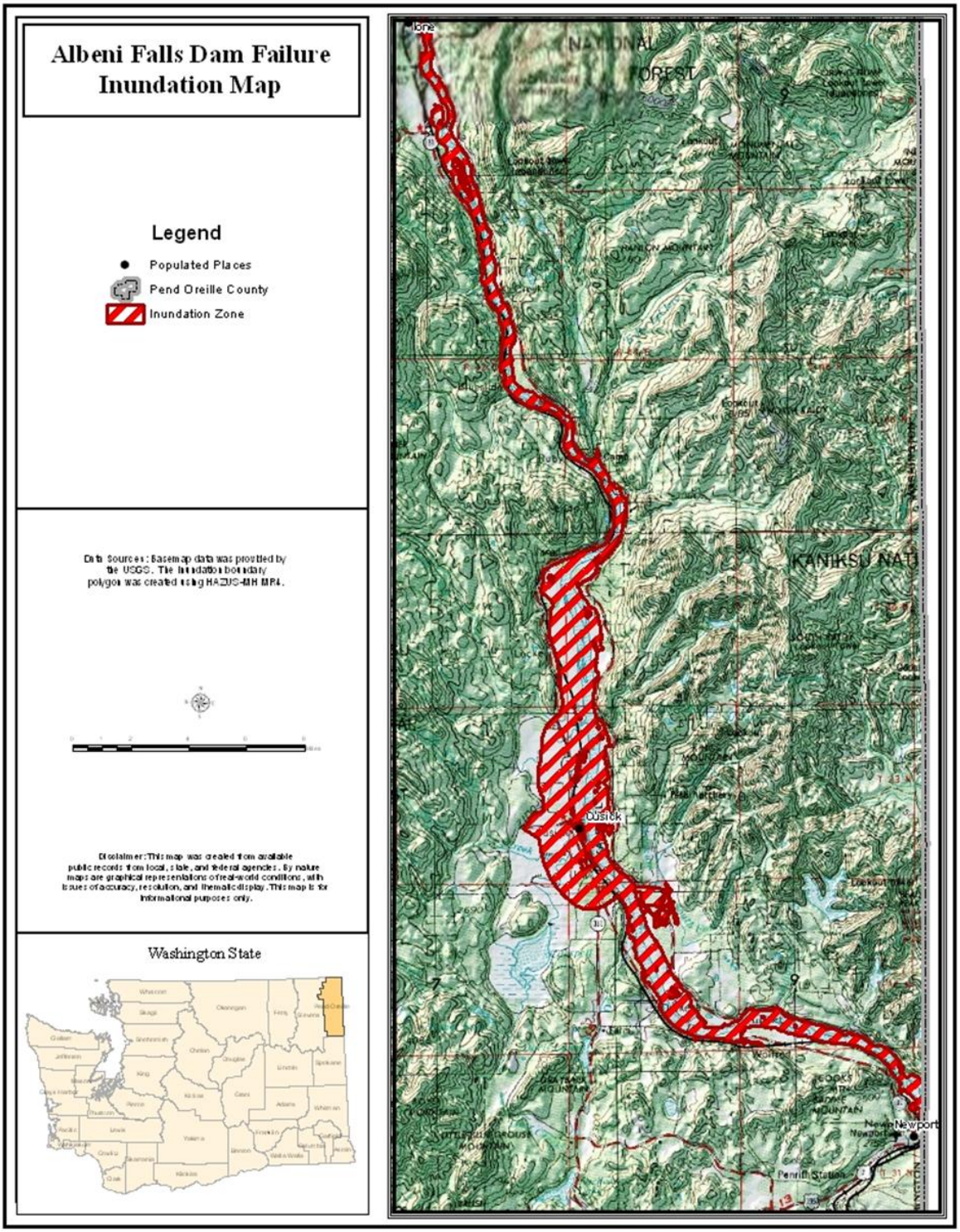


Figure 7-7 Albeni Falls Inundation Map

7.3.2 Previous Occurrence

In May 1986, the Upriver Dam located in the County near Spokane failed by overtopping when lightning struck the system and the turbine shut down. Water continued to rise behind the dam as officials tried to restart the turbine. The backup power systems also failed, and water could not be timely released from the spillway gates. The incident caused ~$11 million in damage to the facility.[29] No injuries were reported. No other dam failure events have occurred within Spokane County.

7.3.3 Frequency

Dam failures are infrequent and usually coincide with events that cause them, such as earthquakes or excessive rainfall. The probability of any type of dam failure is low in today's regulatory environment. There is a "residual risk" associated with dams that remains after safeguards have been implemented. The residual risk is associated with events beyond those that the facility was designed to withstand.

7.3.4 Severity

The DSO classifies dams and reservoirs in a hazard rating system based solely on the potential consequences to downstream life and property that would result from a failure of the dam and sudden release of water. Table 7-5 above identifies the potential consequences in the downstream valley if a dam were to fail and release the reservoir water. The Army Corps of Engineers hazard rating systems are based only on the potential consequences of a dam failure; however, neither system takes into account the probability of such failures – only the consequences thereof should a failure occur.

7.3.5 Warning Time

Warning time for dam failure varies depending on the cause of the failure. In events of extreme precipitation or massive snowmelt, evacuations can be planned with sufficient time. In the event of a structural failure due to earthquake, there may be no warning time. A dam's structural type also affects warning time. Earthen dams do not tend to fail completely or instantaneously. Once a breach is initiated, discharging water erodes the breach until either the reservoir water is depleted or the breach resists further erosion. Concrete gravity dams also tend to have a partial breach as one or more monolith sections are forced apart by escaping water. The time of breach formation ranges from a few minutes to a few hours (U.S. Army Corps of Engineers, 1997).

Spokane County and its planning partners have established protocols for flood warning and response to imminent dam failure in the flood warning portion of adopted emergency operations plans. These protocols are tied to emergency action plans created by the dam owners. Not all

[29] https://fortress.wa.gov/ecy/wrdocs/WaterRights/wrwebpdf/damfailure-ws.pdf

dams have emergency action plans; only those rated as high hazard are mandated to do so by state and federal regulations.

Secondary Hazards

Dam failure can cause severe downstream flooding, depending on the magnitude of the failure. Other potential secondary hazards of dam failure are landslides around the reservoir perimeter, bank erosion on the rivers, and destruction of downstream habitat. The hazard descriptions in Table 7-5 (above) include secondary hazards of dam failures.

Climate Change Impacts

Potential changes to the hydrographs used to design dams due to the impacts of climate change are a growing concern for the safety of our nation's dams. Dams are designed partly based on assumptions about a river's flow behavior, expressed as hydrographs. Changes in weather patterns can have significant effects on the hydrograph used for the design of a dam. If the hydrograph changes, it is conceivable that the dam can lose some or all of its designed margin of safety, also known as freeboard. If freeboard is reduced, dam operators may be forced to release increased volumes earlier in a storm cycle in order to maintain the required margins of safety. Such early releases of increased volumes can increase flood potential downstream. Throughout the west, communities downstream of dams are already experiencing increases in stream flows from earlier releases from dams.

Dams are constructed with safety features known as "spillways." Spillways are put in place on dams as a safety measure in the event of the reservoir filling too quickly. Spillway overflow events, often referred to as "design failures," result in increased discharges downstream and increased flooding potential. Although climate change will not increase the probability of catastrophic dam failure, it may increase the probability of design failures.

7.4 VULNERABILITY ASSESSMENT

To understand risk, a community must evaluate what assets are exposed or vulnerable in the identified hazard area. For this planning purpose, the flood hazard areas identified include the 1-percent (100-year) and 0.2 % (500-year) floodplains. These events are generally those considered by planners and evaluated under federal programs such as the NFIP. The following text evaluates and estimates the potential impact of flooding in Spokane County.

7.4.1 Overview

All types of flooding can cause widespread damage throughout rural and urban areas, including but not limited to: water-related damage to the interior and exterior of buildings; destruction of electrical and other expensive and difficult-to-replace equipment; injury and loss of life; proliferation of disease vectors; disruption of utilities, including water, sewer, electricity, communications networks and facilities; loss of agricultural crops and livestock; placement of

stress on emergency response and healthcare facilities and personnel; loss of productivity; and displacement of persons from homes and places of employment.

Methodology

The following sections assess the vulnerability to the flood hazard only. This assessment did not include data for dam failure due to the unavailability of dam failure inundation mapping for dams within the planning area. Readers should consider the flood hazard areas near the dam when attempting to identify the impact potential for dam failure. Flood exposure numbers were generated using 2025 Spokane County Assessor and parcel data, overlaid with the adopted NFIP flood maps. The County's 2025 Critical Facilities list was also utilized to identify exposure to those facilities. All data sources have a level of accuracy acceptable for planning purposes. At the completion of on-going Risk Map/NFIP flood map project, the County may elect to enhance this information to reflect changes associated with the study.

7.4.2 Impact on Life, Health, and Safety

The impact of flooding on life, health, and safety is dependent upon several factors, including the severity of the event and whether adequate warning time is provided to residents. Exposure represents the population living in or near floodplain areas that could be impacted should a flood event occur. However, exposure should not be limited to only those who reside in a defined hazard zone, but everyone who may be affected by the hazard event (e.g., people are at risk while traveling in flooded areas, or their access to emergency services is compromised during an event). The degree of that impact will vary and is not measurable. Of additional concern within the planning area is the number of tourists who can be impacted during periods of flooding, particularly in high-capacity structures (e.g., Northern Quest Casino, Amazon Fulfillment Centers) or events which have high turnout, such as Hoopfest. There are also residential structures in the path of potential waterflow with respect to the various dams throughout the County.

While existing data identifies structures at risk, impact to businesses in the area are also of concern, as some businesses have a large number of employees in attendance on a daily basis, such as the Northern Quest Casino and the two Amazon Fulfillment Centers. Therefore, consideration should also be given to employees working in those potential inundation areas who would also be at potential risk.

Of the population exposed, the most vulnerable include the economically disadvantaged and those over 65 years of age. Economically disadvantaged populations are more vulnerable because they are likely to evaluate risk and make decisions to evacuate based on familial net economic impact. The population over the age of 65 is more vulnerable because they are more likely to seek or need medical attention which may not be available due to isolation during a flood event and they may have more difficulty evacuating.

The number of injuries and casualties resulting from flooding is generally limited based on advance weather forecasting, blockades, and warnings. Therefore, injuries and deaths generally are not anticipated if proper warning and precautions are in place. Ongoing mitigation efforts should help to avoid the most likely cause of injury, which results from persons trying to cross flooded roadways or channels during a flood.

Population counts of those living in the floodplain were generated by analyzing County Assessor's parcel data that intersect with the 100-year and 500-year floodplains identified on FIRMs. Using GIS, residential structures that intersected the 100-year and 500-year floodplain were identified. An estimate of population was calculated as identified in Table 7-9 and Table 7-10.

Table 7-9.
Residential Structures Within the 100-Year Floodplain

	Buildings Exposed	Population Exposed*
Airway Heights	0	0
Cheney	1	3
Deer Park	0	0
Fairfield	4	10
Latah	1	3
Liberty Lake	0	0
Millwood	3	8
Rockford	7	18
Spangle	11	28
Spokane Valley	162	405
Waverly	0	0
Unincorporated	816	2,353
Total	1,005	2,825

Residential Structures included multi-family residential and single-family units. For planning purposes, population exposed is based on the number of unit dwellings (including multi-family based on Assessor's capacity indicated), and single-family residential times 2.5/person/unit or structure.

Table 7-10.
Residential Structures Within the 500-Year Floodplain

	Buildings Exposed	Population Exposed*
Airway Heights	0	0
Cheney	0	0
Deer Park	0	0
Fairfield	0	0

Table 7-10.
Residential Structures Within the 500-Year Floodplain

	Buildings Exposed	Population Exposed*
Latah	0	0
Liberty Lake	0	0
Millwood	0	0
Rockford	0	0
Spangle	0	0
Spokane Valley	383	1,040
Waverly	0	0
Unincorporated	187	468
Total	570	1,508

Residential Structures included multi-family residential and single-family units. For planning purposes, population exposed is based on the number of unit dwellings (including multi-family based on Assessor's capacity indicated), and single-family residential times 2.5/person/unit or structure.

7.4.3 Impact on Property

Table 7-11 and Table 7-12 summarize the total area and number of structures in the 100- and 500-year floodplains by municipality (not ownership) based on 2025 Assessor's data. Table 7-13 and Table 7-14 summarize the estimated value of exposed buildings in the planning area by 100- and 500-year floodplains.

Table 7-11.
Area and Structures Within the 100-Year Floodplain

	Area in Floodplain (Acres)	Number of Structures in Floodplain							
		Residential	Commercial	Industrial	Agriculture	Religion	Government	Education	**Total**
Airway Heights	0	0	0	0	0	0	0	0	0
Cheney	29	1	0	0	0	0	0	0	1
Deer Park	4	0	0	0	0	0	0	0	0
Fairfield	32	4	17	0	0	0	0	0	21
Latah	28	1	1	1	0	0	0	0	3
Liberty Lake	32	0	1	0	0	0	0	0	1
Millwood	6	3	0	0	0	0	0	0	3
Rockford	75	7	18	0	0	0	2	0	27
Spangle	29	11	3	0	0	0	1	0	15
Spokane Valley	631	162	6	0	0	1	0	1	170

Table 7-11.
Area and Structures Within the 100-Year Floodplain

	Area in Floodplain (Acres)	Number of Structures in Floodplain							
		Residential	Commercial	Industrial	Agriculture	Religion	Government	Education	**Total**
Waverly	18	0	1	0	0	0	0	0	1
Unincorporated	27,289	816	19	1	0	4	0	1	841
Total	28,173	1,005	66	2	0	5	3	2	1083

Table 7-12.
Area and Structures Within the 500-Year Floodplain

	Area in Floodplain (Acres)	Number of Structures in Floodplain							
		Residential	Commercial	Industrial	Agriculture	Religion	Government	Education	**Total**
Airway Heights	0	0	0	0	0	0	0	0	0
Cheney	0	0	0	0	0	0	0	0	0
Deer Park	0	0	0	0	0	0	0	0	0
Fairfield	0	0	0	0	0	0	0	0	0
Latah	0	0	0	0	0	0	0	0	0
Liberty Lake	0	0	0	0	0	0	0	0	0
Millwood	0	0	0	0	0	0	0	0	0
Rockford	0	0	0	0	0	0	0	0	0
Spangle	0	0	0	0	0	0	0	0	0
Spokane Valley	208	383	6	0	0	0	0	2	391
Waverly	0	0	0	0	0	0	0	0	0
Unincorporated	1,180	187	2	1	0	0	0	0	190
Total	1,388	570	8	1	0	0	0	2	581

Table 7-13.
Value of Exposed Buildings Within the 100-Year Floodplain

	Estimated Flood Exposure			Percent of Total
	Structure	Contents	**Total**	**Assessed Value**
Airway Heights	$0	$0	$0	0.0%
Cheney	$240,020	$120,010	$360,030	0.0%
Deer Park	$0	$0	$0	0.0%

Table 7-13.
Value of Exposed Buildings Within the 100-Year Floodplain

	Estimated Flood Exposure			Percent of Total
	Structure	Contents	**Total**	**Assessed Value**
Fairfield	$3,490,559	$3,082,199	$6,572,758	6.6%
Latah	$581,250	$547,673	$1,128,923	3.8%
Liberty Lake	$8,988,250	$8,988,250	$17,976,500	0.3%
Millwood	$2,159,700	$1,079,850	$3,239,550	0.5%
Rockford	$4,907,440	$4,096,430	$9,003,870	8.7%
Spangle	$3,242,370	$2,114,685	$5,357,055	10.1%
Spokane Valley	$64,464,780	$34,446,580	$98,911,360	0.3%
Waverly	$118,980	$118,980	$237,960	1.7%
Unincorporated	$481,663,707	$254,800,860	$736,464,567	1.5%
Total	$569,857,056	$309,395,517	$879,252,573	0.9%

Table 7-14.
Value of Exposed Buildings Within the 500-Year Floodplain

	Estimated Flood Exposure			Percent of Total
	Structure	Contents	**Total**	**Assessed Value**
Airway Heights	$0	$0	$0	0.0%
Cheney	$0	$0	$0	0.0%
Deer Park	$0	$0	$0	0.0%
Fairfield	$0	$0	$0	0.0%
Latah	$0	$0	$0	0.0%
Liberty Lake	$0	$0	$0	0.0%
Millwood	$0	$0	$0	0.0%
Rockford	$0	$0	$0	0.0%
Spangle	$0	$0	$0	0.0%
Spokane Valley	$142,364,323	$76,110,934	$218,475,257	0.7%
Waverly	$0	$0	$0	0.0%
Unincorporated	$81,515,430	$40,959,899	$122,475,329	0.2%
Total	$223,879,753	$117,070,833	$340,950,586	0.4%

7.4.4 Impact on Critical Facilities and Infrastructure

Table 7-15 and Table 7-16 summarize the critical facilities and infrastructure in the 100-year floodplain of Spokane County. Only one structure owned by Fire District 9 falls within the 500-year floodplain. In cases where short-term functionality is impacted by a hazard, other facilities of neighboring municipalities may need to increase support response functions during a disaster event. Mitigation planning should consider means to reduce impact on critical facilities and ensure sufficient emergency and school services remain when a significant event occurs. Details are provided in the following sections.

Table 7-15.
Critical Facilities in the 100-Year Floodplain

Jurisdiction	Medical and Health Services	Government Function	Protective	Hazardous Materials	Schools	Other	**Total**
Airway Heights	0	0	0	0	0	0	**0**
Cheney	0	0	0	0	0	0	**0**
Deer Park	0	0	0	0	0	0	**0**
Fairfield	0	0	0	1	0	0	**1**
Latah	0	0	0	0	0	0	**0**
Liberty Lake	0	0	0	0	0	0	**0**
Millwood	0	0	0	0	0	0	**0**
Rockford	0	2	1	1	0	0	**4**
Spangle	0	0	0	1	0	0	**1**
Spokane Valley	0	0	0	1	0	0	**1**
Waverly	0	0	0	0	0	0	**0**
Unincorporated	0	1	0	1	0	0	**2**
Total	**0**	**3**	**1**	**5**	**0**	**0**	**9**

In some instances, structures serve multiple purposes and are indicated multiple times (e.g., public works facility also maintains hazardous materials).

Table 7-16.
Critical Infrastructure in the 100-Year Floodplain

Jurisdiction	Bridges*	Water Supply	Wastewater	Power	Communications	Other**	**Total**
Airway Heights	0	0	0	0	0	0	**0**
Cheney	0	0	0	0	0	0	**0**
Deer Park	0	0	0	0	0	0	**0**
Fairfield	0	0	0	0	0	0	**0**
Latah	0	0	0	0	0	0	**0**
Liberty Lake	0	0	0	0	0	0	**0**
Millwood	0	0	0	0	0	0	**0**
Rockford	0	1	0	0	0	0	**1**
Spangle	0	0	0	0	0	0	**0**
Spokane Valley	4	0	0	0	0	0	**4**
Waverly	0	0	0	0	0	0	**0**
Unincorporated	1	0	4	1	0	0	**6**
Total	**5**	**1**	**4**	**1**	**0**	**0**	**11**

*Bridges include both highway and railway bridges; **Other Infrastructure includes dams and natural gas facilities.

Utilities and Infrastructure

Roads

The following major roads in Spokane County pass through 100-year floodplains:

- Interstate 90
- State Route 27
- State Route 206
- State Route 290
- State Route 291
- State Route 902
- State Route 904
- U.S. Route 2
- U.S. Route 195
- U.S. Route 395

Some of these roads are built above the flood level, and others function as levees to prevent flooding. Still, in severe flood events these roads can be blocked or damaged, preventing access to some areas.

Bridges

Flooding events can significantly impact road bridges. These are important because often they provide the only ingress and egress to some neighborhoods. An analysis showed that there are four bridges that are in or cross over the 100-year floodplain and five bridges in the 500-year floodplain.

Water and Sewer Infrastructure

Water and sewer systems can be affected by flooding. Floodwaters can back up drainage systems, causing localized flooding. Culverts can be blocked by debris from flood events, also causing localized urban flooding. Floodwaters can get into drinking water supplies, causing contamination. Sewer systems can be backed up, causing wastewater to spill into homes, neighborhoods, rivers and streams.

7.4.5 Impact to the Economy

Impact on the economy related to a flood event in Spokane County would include loss of property and associated tax revenue, as well as potential loss of businesses. Depending on the duration between onset of the event and recovery, businesses within the area may not be able to sustain the economic loss of their business being disrupted for an extended period of time. Historical data has demonstrated that those businesses impacted by a disaster are less likely to reopen after an event. Flooding also has impacts on agricultural and forestland. Agricultural land in the County are subject to flooding. Likewise, inundation frequently affects croplands, something on which the County relies as a source of income. Forestland is also vulnerable to floods due to erosion when river and stream banks fail and overflow.

The County has a large amount of commercial and industrial development disbursed countywide. This includes a major rail line traveling across the United States, through Spokane to other areas of the State. Much of the County's transportation and communication infrastructure also falls within the floodplain in certain areas in order to serve the needs of the community. A flood could impact infrastructure supporting the commercial and industrial areas, causing impact not only within Spokane, but statewide if rail lines or major transportation routes are impacted.

7.4.6 Impact on the Environment

Flooding is a natural event, and floodplains provide many natural and beneficial functions. Nonetheless, with human development factored in, flooding can impact the environment in negative ways. Migrating fish can wash into roads or over dikes into flooded areas, with no possibility of escape. Pollution from roads, such as oil, and hazardous materials can wash into rivers and streams. During floods, these can settle onto normally dry soils, polluting them for agricultural uses. Human development such as bridge abutments and levees, and logjams from timber harvesting can increase stream bank erosion, causing rivers and streams to migrate into non-natural courses.

7.4.7 Impact From Climate Change

Use of historical hydrologic data has long been the standard of practice for designing and operating water supply and flood protection projects. For example, historical data are used for flood forecasting models and to forecast snowmelt runoff for water supply. This method of forecasting assumes that the climate of the future will be similar to that of the period of historical record. However, the hydrologic record cannot be used to predict changes in frequency and severity of extreme climate events such as floods. Going forward, model calibration or statistical relation development must happen more frequently, new forecast-based tools must be developed, and a standard of practice that explicitly considers climate change must be adopted. Climate change is already impacting water resources, and resource managers have observed the following:

- Historical hydrologic patterns can no longer be solely relied upon to forecast the water future.
- Precipitation and runoff patterns are changing, increasing the uncertainty for water supply and quality, flood management and ecosystem functions.
- Extreme climatic events will become more frequent, necessitating improvement in flood protection, drought preparedness and emergency response.

The amount of snow is critical for water supply and environmental needs, but so is the timing of snowmelt runoff into rivers and streams. Rising snowlines caused by climate change will allow more mountain area to contribute to peak storm runoff. High frequency flood events (e.g. 10-year floods) will likely increase with a changing climate. Along with reductions in the amount of the snowpack and accelerated snowmelt, scientists project greater storm intensity, resulting in more direct runoff and flooding. Changes in watershed vegetation and soil moisture conditions will likewise change runoff and recharge patterns. As stream flows and velocities change, erosion patterns will also change, altering channel shapes and depths, possibly increasing sedimentation behind dams, and affecting habitat and water quality. With potential increases in the frequency and intensity of wildfires due to climate change, there is potential for more floods following fire, causing increased sediment loads and other water quality impacts.

As hydrology changes, what is currently considered a 100-year flood may strike more often, leaving many communities at greater risk. Planners will need to factor a new level of safety into the design, operation, and regulation of flood protection facilities such as dams, floodways, bypass channels and levees, as well as the design of local sewers and storm drains. The planning area's location on the western flank of the Rocky Mountains gives the area a temperate climate. Summer is mostly warm and dry, interspersed with a few cool, damp days. Winter weather is often damp and foggy, with below-freezing temperatures, characteristic of maritime Polar air mass. Generally, the prime growing season is from mid-April to mid-October.

Annual precipitation in Spokane County ranges from less than 15 inches in the semi-arid western edge of the County to more than 25 inches in the hills and mountains on the east side of the County. The annual precipitation in the planning area is approximately 17 to 21 inches.

7.5 FUTURE DEVELOPMENT TRENDS

Spokane County and its planning partner cities are subject to the provisions of the Washington GMA, which regulates identified critical areas. County critical areas regulations include frequently flooded areas, defined as the FEMA 100-year mapped floodplain. The GMA establishes programs to monitor the densities at which commercial, residential and industrial development occurs under local GMA comprehensive plans and development regulations.

As participants in the NFIP, Spokane County and the partner municipalities have adopted flood damage prevention ordinances pursuant to the participation requirements. While these ordinances do not prohibit new development within the floodplain, they include new development provisions that account for the risk inherent to the floodplain.

The combination of the GMA provisions, critical areas regulations and NFIP flood damage prevention provisions equips the municipal planning partners with adequate tools to address new development in the floodplain. As pressures mount for growth into areas with flood risk, these tools could be enhanced with higher regulatory standards to increase the level of risk reduction on new development.

7.6 ISSUES

Homes located in a floodplain are vulnerable to flood damage. Adding to this vulnerability is new growth creating pressure to develop marginal land located near floodplains. As development increases, drainage basins are “built-out,” and the volume of storm water runoff and the area that it floods will increase. As a result, homes that were once outside mapped floodplain face a threat of flooding. Currently, 35-40 percent of the National Flood Insurance claims come from outside the mapped floodplains. Human-made developments within floodplains should be limited to non-structures such as parks, golf courses, and farms. These facilities have the least potential for damage but maximize land use.

The public should be made aware of hazardous areas and given information on flood insurance, mitigation, preparedness, response, and recovery. Local jurisdiction emergency management plans should establish warning, evacuation, housing, and other emergency procedures.

The National Weather Service has an extensive river and weather monitoring system and provides flood watch and warning information to the public via radio, television, internet, social media, and telephone.

The United States Army Corps of Engineers, under PL 84-99, has the authority to assist public entities in flood fighting and rescue operations and to protect, repair, and restore federally constructed flood control works threatened, damaged, or destroyed by a flood.

The Planning Team has identified the following flood-related issues relevant to the planning area:

- The accuracy of the existing flood hazard mapping produced by FEMA in reflecting the true flood risk within the planning area is questionable. Flood maps need to be updated utilizing the best available data, science and technology
- The extent of flood-protection provided by flood control facilities (dams, dikes and levees) is not known due to the lack of an established national policy on flood protection standards.
- The risk associated with the flood hazard overlaps the risk associated with other hazards such as earthquake, landslide, and economic losses (impacted industries). This provides an opportunity to seek mitigation alternatives with multiple objectives that can reduce risk for multiple hazards.
- There is no consistency of land-use practices within the planning area or the scope of regulatory floodplain management beyond the minimum requirements of the NFIP.
- Climate change could alter flood conditions in Spokane County.
- More information is needed on flood risk to support the concept of risk-based analysis of capital projects.
- There needs to be a sustained effort to gather historical damage data, such as high-water marks on structures and damage reports, to measure the cost-effectiveness of future mitigation projects.
- Ongoing flood hazard mitigation will require funding from multiple sources.
- There needs to be a coordinated hazard mitigation effort between jurisdictions affected by flood hazards in the county.
- Floodplain residents need to continue to be educated about flood preparedness and the resources available during and after floods.
- The concept of residual risk should be considered in the design of future capital flood control projects and should be communicated with residents living in the floodplain.
- The promotion of flood insurance as a means of protecting private property owners from the economic impacts of frequent flood events should continue.
- Existing floodplain-compatible uses such as agricultural and open space need to be maintained. There is constant pressure to convert these existing uses to more intense uses within the planning area during times of moderate to high growth.

- The economy affects a jurisdiction's ability to manage its floodplains. Budget cuts and personnel losses can strain resources needed to support floodplain management.
- A buildable-lands analysis that looks at vacant lands and their designated land use would be valuable in helping make wise decisions about future development.
- Dam Failure inundation data needs to be obtained to support future risk assessments of the Dam Failure hazard.

7.7 RESULTS

The primary water courses in Spokane County have the potential to flood at irregular intervals, generally in response to a succession of intense winter rainstorms. Storm patterns of warm, moist air usually occur between early November and late March. A series of such weather events can cause severe flooding in the planning area.

The worst-case scenario is a series of storms that flood numerous drainage basins in a short time. This could overwhelm the response and floodplain management capability within the planning area. Major roads could be blocked, preventing critical access for many residents and critical functions. High in-channel flows could cause water courses to scour, possibly washing out roads and creating more isolation problems. In the case of multi-basin flooding, the County may not be able to make repairs quickly enough to restore critical facilities and infrastructure.

Areas within the floodplain are limited in nature when compared to other jurisdictions. Much of the flooding within the urban areas is due to issues with storm drains and culvert capacity.

Citizens customarily are forewarned of severe weather events such as potential heavy rains which could lead to flooding. The county does have plans in place to address response to such events. Historically, impact to structures has been somewhat limited in nature, but events have risen to the level of disaster declarations. Impact to roadways is of concern, potentially impacting first responders, although in most instances, alternate routes are available. While travel time may increase, in most instances, responders would still be able to respond to the call(s), unless secondary hazards such as landslides have also occurred which further block ingress and egress.

Based on review and analysis of the data, the Planning Team has determined that the probability for impact from flood throughout the area is highly likely. The area experiences some level of flood annually, albeit not necessarily to the level of a disaster declaration, and in many instances, creates more of a nuisance flooding than a significant hazard. While structural damage may vary due to flood depths and existing floodplain management regulations, the actual area within the floodplain is limited in nature, with fewer structures exposed; however, there is a fairly high rate of property ownership that does not have flood insurance. Based on the potential impact, the Planning Team determined the CPRI score to be 3.0, with overall vulnerability determined to be a medium level.

CHAPTER 8.
LANDSLIDE

8.1 GENERAL BACKGROUND

DEFINITIONS

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

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

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

A landslide is a mass of rock, earth or debris moving down a slope. Landslides may be minor or very large, and can move at slow to very high speeds. They can be initiated by storms, earthquakes, fires, volcanic eruptions or human modification of the land.

Mudslides (or mudflows or debris flows) are rivers of rock, earth, organic matter and other soil materials saturated with water. They develop in the soil overlying bedrock on sloping surfaces when water rapidly accumulates in the ground, such as during heavy rainfall or rapid snowmelt. Water pressure in the pore spaces of the material increases to the point that the internal strength of the soil is drastically weakened. The soil's reduced resistance can then easily be overcome by gravity, changing the earth into a flowing river of mud or "slurry." A debris flow or mudflow can move rapidly down slopes or through channels, and can strike with little or no warning at avalanche speeds. The slurry can travel miles from its source, growing as it descends, picking up trees, boulders, cars and anything else in its path. Although these slides behave as fluids, they pack many times the hydraulic force of water due to the mass of material included in them. They can be some of the most destructive events in nature.

All mass movements are caused by a combination of geological and climate conditions, as well as the encroaching influence of urbanization. Vulnerable natural conditions are affected by human residential, agricultural, commercial and industrial development and the infrastructure that supports it.

8.2 HAZARD PROFILE

Landslides are caused by one or a combination of the following factors: change in slope of the terrain, increased load on the land, shocks and vibrations, change in water content, groundwater movement, frost action, weathering of rocks, and removing or changing the type of vegetation covering slopes. In general, landslide hazard areas are where the land has characteristics that contribute to the risk of the downhill movement of material, such as the following:

- A slope greater than 30 percent as identified in Spokane County's Critical Areas Ordinance.[30]
- A history of landslide activity or movement during the last 10,000 years.
- Stream or wave activity, which has caused erosion, undercut a bank or cut into a bank to cause the surrounding land to be unstable.
- The presence or potential for snow avalanches.
- The presence of an alluvial fan, indicating vulnerability to the flow of debris or sediments.
- The presence of impermeable soils, such as silt or clay, which are mixed with granular soils such as sand and gravel.

Flows and slides are commonly categorized by the form of initial ground failure. Figure 8-1 through Figure 8-4 show common types of slides. The most common is the shallow colluvial slide, occurring particularly in response to intense, short-duration storms. The largest and most destructive are deep-seated slides, although they are less common than other types.

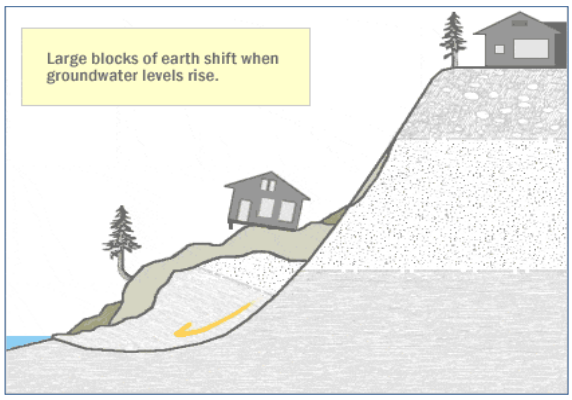


Figure 8-1. Deep Seated Slide

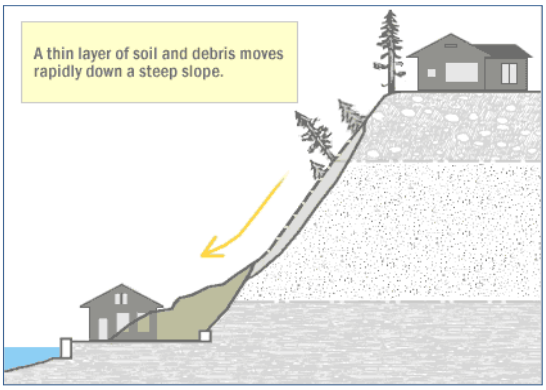


Figure 8-2. Shallow Colluvial Slide

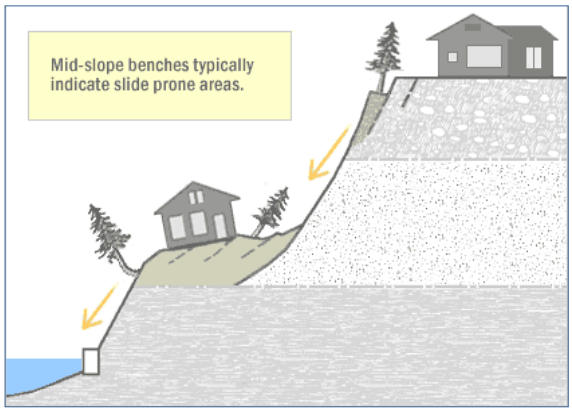


Figure 8-3. Bench Slide

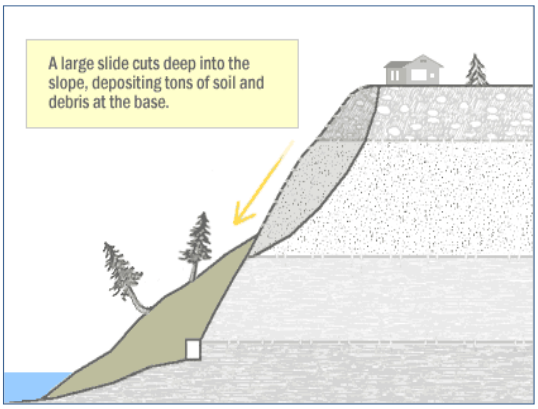


Figure 8-4. Large Slide

[30] Spokane County Critical Areas Ordinance. CAO-2018-final (Accessed 30 June 2025).

Slides and earth flows can pose serious hazard to property in hillside terrain. They tend to move slowly and thus rarely threaten life directly. When they move—in response to such changes as increased water content, earthquake shaking, addition of load, or removal of downslope support—they deform and tilt the ground surface. The result can be destruction of foundations, offset of roads, breaking of underground pipes, or overriding of downslope property and structures.

8.2.1 Extent and Location

The best available predictor of where movement of slides and earth flows might occur is the location of past movements. Past landslides can be recognized by their distinctive topographic shapes, which can remain in place for thousands of years. Most landslides recognizable in this fashion range from a few acres to several square miles. Most show no evidence of recent movement and are not currently active. A small proportion of them may become active in any given year, with movements concentrated within all or part of the landslide masses or around their edges.

The recognition of ancient dormant mass movement sites is important in the identification of areas susceptible to flows and slides because they can be reactivated by earthquakes or by exceptionally wet weather. Also, because they consist of broken materials and frequently involve disruption of groundwater flow, these dormant sites are vulnerable to construction-triggered sliding.

Identifying unstable slopes to aid in mitigating landslide hazards is an integral part of land management and regulation in Washington through the Landslide Hazard Zonation Project prepared by the Forest Practices Division of the Washington Department of Natural Resources. Permanent rules adopted by the Washington Forest Practices Board in 2001 address landslide hazards from specific landforms across the state (WAC 222-16-050 (1)(d)). This methodology was developed to provide standardized methods for landslide inventories and for producing hazard maps to identify unstable slopes in support of forest practices rules. It also provides a framework for monitoring the success of new forest practices related to unstable slopes. At present, there are no Landslide Hazard Zonation maps for the Spokane County planning area. The County has identified the collection of LiDAR data as a mitigation strategy to support future development of Landside Hazard Zonation areas within Spokane County. Once collected, future landslide risk assessments should use this data as it becomes available.

While no landslide hazard zonation maps exist, as of this 2025 update, Washington State Department of Natural Resources, in conjunction with USGS (and others) has captured some landslide information for Spokane County, although the data is limited. Review of the Washington Geological Information Portal Natural Hazards Layer indicates the collection of data began in 2017. Readers may wish to continue to check this website as data is updated. https://geologyportal.dnr.wa.gov/#natural_hazards

Landslide hazard areas were defined as all areas with slopes of 30 percent or more in accordance with DNR identification and the County's Critical Areas Ordinance. Figure 8-5 illustrates potential hazard areas based on steep slope.

8.2.2 Previous Occurrence

While landslide events do occur, there is little recorded information regarding landslides in Spokane County. The Spatial Hazard Events and Losses Database for the United States (SHELDUS) has a record of one landslide event in Spokane County since 1960—on December 10, 1977. This event coincided with a presidential disaster declaration for severe storms and flooding.

During the January 30, 2017 severe weather (flood) event which resulted in a Presidential Declaration (DR 4309), the County experienced a landslide event which impacted two residential structures. Impact in large part was due to the fact that the structures were not affixed to the foundation, causing the houses to slide off of their foundations.

In April 2019, a Mead-area home (which had been previously abandoned for several years) was partially destroyed by a small landslide occurring along a steep hillside behind the residence. At the time that event occurred, it was not as a result of ground saturation. The incident was reported by an Avista employee who was inspecting gas meters in the area.

One small landslide event occurred as a result of the May 16, 2019 thunderstorm event, but no property was damaged.

Since completion of the 2020 plan, there have been a number of incidents of lake bluff erosion on Long Lake along the Spokane River. Those incidents occurred during the month of January, when water tables are high. There are no associated reports of impact from those events.[31] Since completion of the last plan, one declared landslide event was included with the Severe Winter Storm event (DR-4593). There are no records in the county of fatalities attributed to mass movement. Figure 8-6 illustrates previous landslide events occurring in the County as documented by Washington State Department of Natural Resources.

8.2.3 Frequency

Landslides are often triggered by other natural hazards such as earthquakes, heavy rain, floods or wildfires, so landslide frequency often coincides with the occurrence of sequential hazards. In Spokane County, landslides typically occur during and after major storms, so the potential for landslides largely coincides with the potential for sequential severe storms that saturate steep, vulnerable soils. Landslide events occurred during the winter storms of 2009, 2011, 2016, 2017

[31] Washington State Department of Natural Resources, Geological Survey. Accessed 6 May 2025. Available online at: Reported Landslides in Washington State

and 2019. As indicated, since completion of the last plan, one declared landslide event was included with the Severe Winter Storm event (DR-4593).

According to NOAA and SHELDUS records, the planning area has been impacted by some form of severe storms at least once every other year since 1960, although most have not reached the level of a disaster declaration. Those severe weather events many times include mud- or landslide events. Review of FEMA's National Risk Index data, frequency is established as "0". As such, until better data is generated specifically for landslide hazards, the severe storm frequency is appropriate for the purpose of ranking risk associated with the landslide hazard (see Section 9.2.3).

In general, landslides are most likely during periods of higher-than-average rainfall. The ground must be saturated prior to the onset of a major storm for significant landsliding to occur. Most local landslides occur in January after the water table has risen during the wet months of November and December. Water is involved in nearly all cases; and human influence has been identified in more than 80 percent of reported slides.

8.2.4 Severity

Landslides destroy property and infrastructure and can take the lives of people. Landslides range from shallow debris flows to deep-seated slumps. They typically occur where there is a presence of elevated slopes and fine-grade soil such as sand, which has been oversaturated by heavy rains or flooding. They destroy homes, businesses, and public buildings, undermine bridges, derail railroad cars, interrupt transportation infrastructure, damage utilities, and take lives. Sinkholes, a type of landslide, affect roads and utilities. In many instances, landslide losses often go unrecorded because no claims are filed, no reports are made, or roadway damage, which is the most frequent issue, is recorded as repair/maintenance, and not landslide.

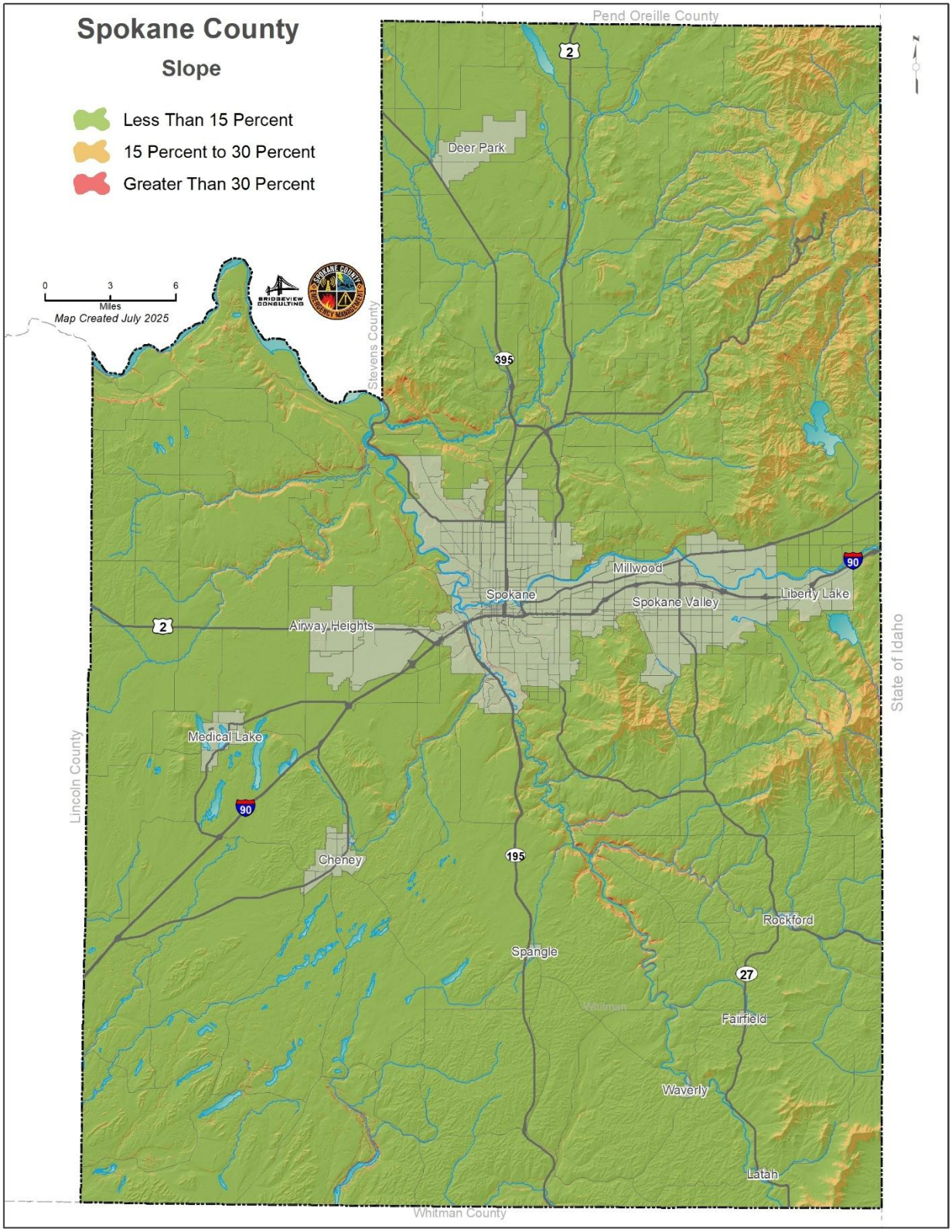


Figure 8-5 Steep Slope

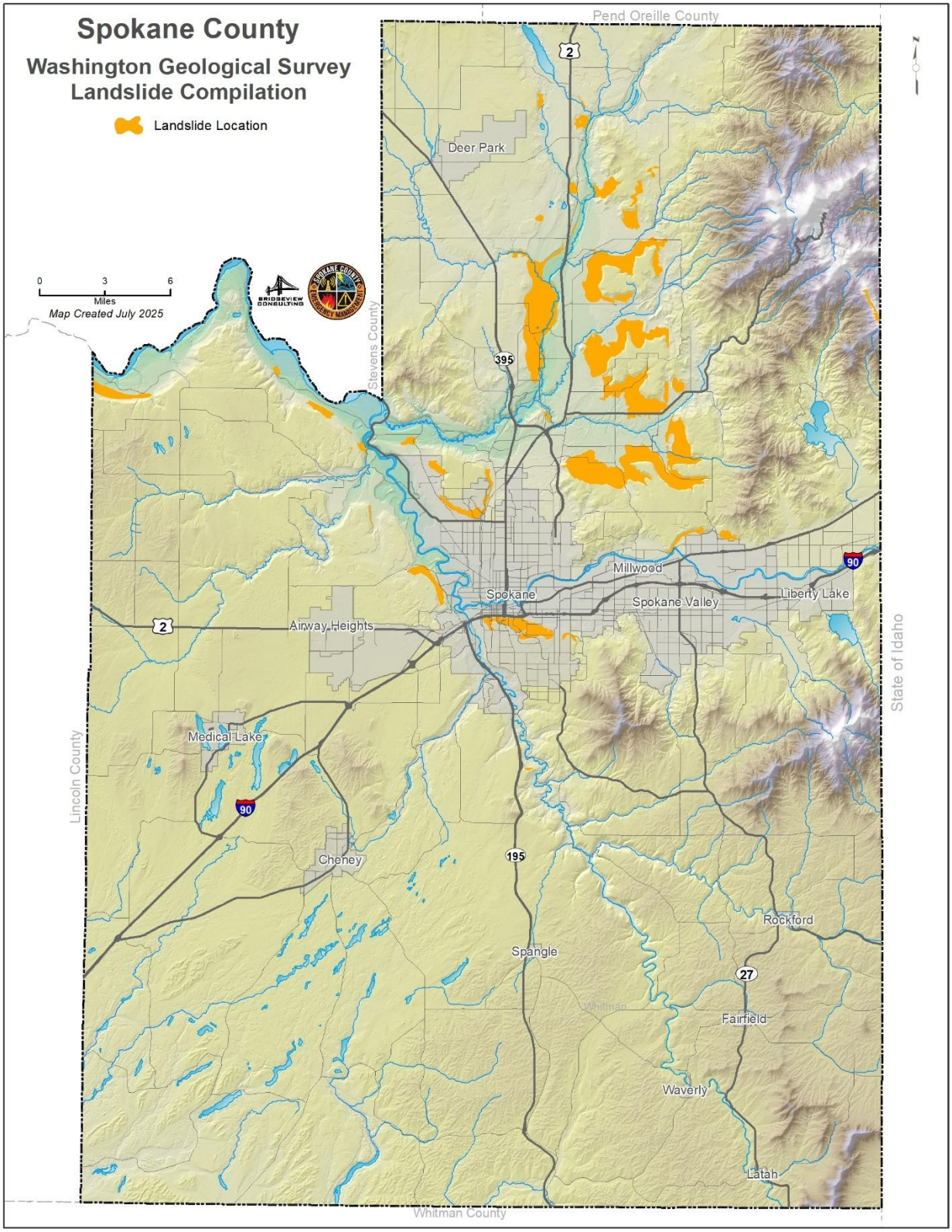


Figure 8-6. Historic Landslide Locations (WA DNR)

8.2.5 Warning Time

Mass movements can occur suddenly or slowly. The velocity of movement may range from a slow creep of inches per year to many feet per second, depending on slope angle, material and water content. Some methods used to monitor mass movements can provide an idea of the type of movement and the amount of time prior to failure. It is also possible to determine what areas are at risk during general time periods. Assessing the geology, vegetation and amount of predicted precipitation for an area can help in these predictions. However, there is no practical warning system for individual landslides. The current standard operating procedure is to monitor situations on a case-by-case basis, and respond after the event has occurred. Generally accepted warning signs for landslide activity include:

- Springs, seeps, or saturated ground in areas that have not typically been wet before
- New cracks or unusual bulges in the ground, street pavements or sidewalks
- Soil moving away from foundations
- Ancillary structures such as decks and patios tilting and/or moving relative to the main house
- Tilting or cracking of concrete floors and foundations
- Broken water lines and other underground utilities
- Leaning telephone poles, trees, retaining walls or fences
- Offset fence lines
- Sunken or down-dropped roadbeds
- Rapid increase in creek water levels, possibly accompanied by increased turbidity (soil content)
- Sudden decrease in creek water levels though rain is still falling or just recently stopped
- Sticking doors and windows, and visible open spaces indicating jambs and frames out of plumb
- A faint rumbling sound that increases in volume as the landslide nears
- Unusual sounds, such as trees cracking or boulders knocking together.

8.3 SECONDARY HAZARDS

Landslides can cause several types of secondary effects, such as blocking access to roads, which can isolate residents and businesses and delay commercial, public and private transportation. This could result in economic losses for businesses. Other potential problems resulting from landslides are power and communication failures. Vegetation or poles on slopes can be knocked

over, resulting in possible losses to power and communication lines. Landslides also have the potential of destabilizing the foundation of structures, which may result in monetary loss for residents. They also can damage rivers or streams, potentially harming water quality, fisheries and spawning habitat.

8.4 VULNERABILITY ASSESSMENT

8.4.1 Overview

Landslides have the potential to cause widespread damage throughout both rural and urban areas. While some landslides are more of a nuisance-type event, even the smallest of slides has the potential to injure or kill individuals and damage infrastructure.

8.4.2 Impact on Life, Health, and Safety

A population estimate was made using the structure count of residential buildings intersecting the known landslide hazard areas and applying the census value of 2.5 persons per household for Spokane County. Using this approach, the population living in the landside risk area is identified in Table 8-1. It should be noted that areas identified within this document were based on existing data; no geotechnical or scientific analyses were conducted for development of this hazard mitigation plan as such far exceeds the intent of this document; therefore, included data should not be relied upon for life safety measures, or anything other than informing emergency managers of potential risk for planning purposes.

Also to be taken into account when determining affected population are the area-wide impacts on transportation systems and the isolation of residents who may not be directly impacted but whose ability to ingress and egress is restricted, or areas which have a high transient population of tourists, especially during summertime months. Finally, Spokane County's population of retirees may increase the level of first-responder requirements for residents whose structures were not directly impacted but who were affected by power outages, lack of logistical support, etc. Landslides can also damage water treatment (and other lifeline) facilities, potentially harming the quality of water consumed.

Table 8-1.
Populations and Residential Structure Impact in Landslide Risk Area*

Jurisdiction	Building Count	Population Exposed**
Airway Heights	0	0
Cheney	0	0
Deer Park	0	0
Fairfield	0	0
Latah	0	0

Table 8-1. Populations and Residential Structure Impact in Landslide Risk Area*		
Jurisdiction	**Building Count**	**Population Exposed****
Liberty Lake	0	0
Millwood	0	0
Rockford	0	0
Spangle	0	0
Spokane Valley	0	0
Waverly	0	0
Unincorporated	1,263	3,370
Total	**1,263**	**3,370**

** For these planning purposes, risk area is identified through application of the WA DNR's Landslide Compilation Data of mapped historic landslides. Neither Medical Lake nor City of Spokane were part of the planning process and data is not inclusive of those municipalities.*

***Population is based on each typed residential structure as identified by the Assessor's data. An attempt was made to identify population based on multi-residential structures, but counts may be low based on multi-family residential structures being grouped, with lowest number in grouping being utilized.*

8.4.3 Impact on Property

Landslides affect private property and public infrastructure and facilities. The predominant land use in the planning area is single-family residential, much of it supporting multiple families. In addition, there are many small businesses in the area as well as large commercial industries and government facilities. Development in landslide hazard area is guided by building code and the critical area ordinance to prevent the acceleration of manmade and natural geological hazards, and to neutralize or reduce the risk to the property owner or adjacent properties from development activities.

Due to population density and desire of people to have a home with a view, an increasing number of structures are built on top of or below slopes subject to land sliding. Inconsistent slope mapping and land use regulations in landslide areas make the public unaware of the risk associated in building in potentially vulnerable areas. Land is not stable indefinitely. People believe that if a bluff has remained stable for the last 50 years, it will remain so for the next 50 years regardless of the development or maintenance. In addition, the different types of soil further increase the danger.

Loss estimations for the landslide hazard are not based on modeling utilizing damage functions, because no such damage functions have been generated. For mitigation planning purposes only, the Washington State Department of Natural Resources Landslide Dataset was utilized to identify areas of historic events. In addition, based on the County's Critical Areas Ordinance, slopes identified as being 30 percent or steeper were included in this analysis. The area of the total

planning area exposed to the landslide hazard in the planning area are summarized in Table 8-2. The landslide compilation data allows identification in areas previously experiencing some form of landslide as identified in Table 8-3.

Review of the 15-30 percent and 30 percent slope allows assessment of the potential structures within the landslide hazard areas as identified in Table 8-4 and Table 8-5. Data presented in these maps and tables are not a substitute for site-specific investigations by qualified practitioners.

Table 8-2.
Percent of Land Area in Landslide Risk Area

Jurisdiction	Area in Landslide Risk (Acres)
Airway Heights	0.0
Cheney	0.00
Deer Park	0.00
Fairfield	0.00
Latah	0.00
Liberty Lake	0.0
Millwood	0.00
Rockford	0.00
Spangle	0.00
Spokane Valley	4.37
Waverly	0.00
Unincorporated	24,736.39
Total	**24,740.76**

** For these planning purposes, risk area is identified through application of the County's defined steep slope of 30% and above, and areas identified within WADNR mapped historic landslides compilation. No scientific analysis was conducted as that exceeds the intent of this plan, nor should life-safety measures be determined by the values.*

Table 8-3.
Spokane County Structures in Landslide Hazard Compilation Areas*

Jurisdiction	Buildings Exposed*	Assessed Value		
		Structure	Contents	**Total**
Airway Heights	0	$0	$0	$0
Cheney	0	$0	$0	$0
Deer Park	0	$0	$0	$0
Fairfield	0	$0	$0	$0
Latah	0	$0	$0	$0

Table 8-3.
Spokane County Structures in Landslide Hazard Compilation Areas*

Jurisdiction	Buildings Exposed*	Assessed Value		
		Structure	Contents	**Total**
Liberty Lake	0	$0	$0	$0
Millwood	0	$0	$0	$0
Rockford	0	$0	$0	$0
Spangle	0	$0	$0	$0
Spokane Valley	0	0	0	0
Waverly	0	$0	$0	$0
Unincorporated	1,263	$805,370,080	$413,125,506	$1,218,495,586
Total	**1,263**	**$805,370,080**	**$423,125,506**	**$1,218,495,586**

*Buildings exposed includes of all types of buildings – residential, commercial, industrial, government, etc. Based on WADNR Landslide Compilation Data

Table 8-4.
Spokane County Structures in 15-30 Percent Slope*

Jurisdiction	Buildings Exposed*	Assessed Value		
		Structure	Contents	**Total**
Airway Heights	2	$2,191,310	$2,191,310	$4,382,620
Cheney	3	$1,063,800	$531,900	$1,595,700
Deer Park	0	$0	$0	$0
Fairfield	2	$343,360	$171,680	$515,040
Latah	0	$0	$0	$0
Liberty Lake	34	$36,328,200	$18,164,100	$54,492,300
Millwood	0	$0	$0	$0
Rockford	2	$361,900	$244,750	$606,650
Spangle	0	$0	$0	$0
Spokane Valley	64	$34,458,770	$17,229,385	$51,688,155
Waverly	1	$419,670	$209,835	$629,505
Unincorporated	1,819	$1,099,902,759	$565,109,635	$1,665,012,394
Total	**1,927**	**$1,175,069,769**	**$603,852,595**	**$1,778,922,364**

*Structures exposed includes of all types of buildings – residential, commercial, industrial, government, etc. Based on Spokane County Assessor's Data for location and value.

Table 8-5.
Spokane County Structures On Greater Than 30 Percent Slope*

Jurisdiction	Buildings Exposed*	Assessed Value		
		Structure	Contents	**Total**
Airway Heights	0	$0	$0	$0
Cheney	0	$0	$0	$0
Deer Park	0	$0	$0	$0
Fairfield	0	$0	$0	$0
Latah	0	$0	$0	$0
Liberty Lake	0	$0	$0	$0
Millwood	0	$0	$0	$0
Rockford	0	$0	$0	$0
Spangle	0	$0	$0	$0
Spokane Valley	0	$0	$0	$0
Waverly	0	$0	$0	$0
Unincorporated	33	$19,572,220	$9,789,989	$29,362,209
Total	**33**	**$19,572,220**	**$9,789,989**	**$29,362,209**

*Structures exposed includes of all types of buildings – residential, commercial, industrial, government, etc. Based on Spokane County Assessor's Data for location and value.

8.4.4 Impact on Critical Facilities and Infrastructure

Table 8-6 identifies the critical facilities exposed to landslide hazard based on slope and previous landslide occurrences as recorded by Washington State Department of Natural Resources. There are five critical facilities identified which fall within the area of DNR's landslide compilation, four of which are identified as being on a less than 15 percent slope. There are an additional eight structures on slopes 15 percent or greater, all of which are potentially exposed to the landslide hazard to some degree. A more in-depth analysis of the mitigation measures taken by these facilities to prevent damage from mass movements should be done to determine if they could withstand impacts of a mass movement. Highly susceptible areas of the county also include transportation infrastructure.[32]

A significant amount of infrastructure can be exposed to mass movements:

[32] Limited building values were provided by the planning partners for most of these structures. The County and its planning partners acknowledge this deficiency and have developed a strategy to develop a more robust critical facilities list during the lifecycle of this plan, focusing on specific structure details, including valuation.

- **Roads**—Access to major roads is crucial to life-safety after a disaster event and to response and recovery operations. Landslides can block egress and ingress on roads, causing isolation for neighborhoods, traffic problems and delays for public and private transportation. This can result in economic losses for businesses.
- **Bridges**—Landslides can significantly impact road bridges. Mass movements can knock out abutments or significantly weaken the soil supporting them, making them hazardous for use.
- **Power Lines**—Power lines are generally elevated above steep slopes; but the towers supporting them can be subject to landslides. A landslide could trigger failure of the soil under a tower, causing it to collapse and ripping down the lines. Power and communication failures due to landslides can create problems for vulnerable populations and businesses.

Table 8-6.
Critical Facilities Exposed to Landslide Hazards

Facility Type	Number of Exposed Critical Facilities in Risk Area
Medical and Health Services	3
Government Function	0
Protective Function	0
Schools	0
Hazmat	4
Other Critical Function	0
Water	4
Wastewater	0
Power	2
Communications	0
Total	**13**

8.4.5 Impact on Economy

A landslide can have catastrophic impact on both the private sector and governmental agencies. Economic losses include damage costs as well as lost revenue and taxes. Damaged bridges, roadways, marinas, boat docks, municipal airports all can have a significant impact on the economy. Damages in this capacity could have a significant economic impact on not only Spokane County, but also other areas of the state. Spokane County is a major transportation corridor with both Interstate highways and primary railway lines, and disruptions to either would cause significant impact to commodity flows across the region.

The impact on commodity flow from a significant landslide shutting down major access routes would not only limit the resources available for citizens' use but also would cause economic impact on businesses in the area. Debris could impact cargo staging areas and lands needed for business operations. With Interstate 90 (among other major roadways) serving as a primary transportation route, use of the major highways reduces travel times and serves as more direct access. Impacts would also significantly reduce the tourism industry not only within Spokane County, but also vehicles traveling to Pend Oreille County (and others), Idaho, and Canada.

8.4.6 Impact on Environment

Environmental problems as a result of mass movements can be numerous. Landslides that fall into streams may significantly impact fish and wildlife habitat, as well as affecting water quality. Hillsides that provide wildlife habitat can be lost for prolong periods of time due to landslides.

8.4.7 Impacts From Climate Change

Climate change may impact storm patterns, increasing the probability of more frequent, intense storms with varying duration. Increase in global temperature could affect the snowpack and its ability to hold and store water. Warming temperatures also could increase the occurrence and duration of droughts, which would increase the probability of wildfire, reducing the vegetation that helps to support steep slopes. All of these factors would increase the probability for landslide occurrences.

8.5 FUTURE DEVELOPMENT TRENDS

Landslide hazard areas are included in "geologically hazardous areas," one category of critical areas regulated under the state GMA for Spokane County. They are defined as follows:

- Areas potentially subject to mass earth movement based on a combination of geologic, topographic, and hydrologic factors, with a vertical height of 10 feet or more.
- Areas of historical landslides as evidenced by landslide deposits, avalanche tracks, and areas susceptible to basal undercutting by streams, rivers or waves
- Areas with slopes steeper than 30 percent that intersect geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock, and which contain springs or groundwater seeps
- Areas located in a canyon or an active alluvial fan, susceptible to inundation by debris flows or catastrophic flooding.

Spokane County and its planning partners appear to be well equipped to deal with future growth and development within the planning area. The landslide hazard portions of the planning area are regulated by land use development codes, as well as by the International Building Code.

Development will occur in landslide hazards within the planning area, but it will be regulated such that the degree of risk will be reduced through building standards and performance measures.

By studying the effects of landslides in slide prone areas, we can plan for the future. More needs to be done to educate the public and to prevent development in vulnerable areas. WAC 365-190-080 states that geologically hazardous areas pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Some hazards can be mitigated by engineering, design, or construction so that risks are acceptable. When technology cannot reduce the risk to acceptable levels, building in hazardous areas should be avoided. The least expensive and most effective landslide loss reduction measure is by avoidance.

8.6 ISSUES

Important issues associated with landslides in Spokane County include the following:

- There are existing homes in landslide risk areas throughout the county. The degree of vulnerability of these structures depends on the codes and standards to which the structures were constructed. Information at this level of detail is not currently available.
- Future development could lead to more homes in landslide risk areas.
- Mapping and assessment of landslide hazards are constantly evolving. As new data and science become available, assessments of landslide risk should be reevaluated. Maps depicting landslide hazard areas, or other critical areas, are for information or illustrative purposes only, and are not adequate for permitting purposes.
- The impact of climate change on landslides is uncertain. If climate change impacts atmospheric conditions, then exposure to landslide risks is likely to increase.
- Landslides may cause negative environmental consequences, including water quality degradation.
- The risk associated with the landslide hazard overlaps the risk associated with other hazards such as earthquake, flood, and wildfire. This provides an opportunity to seek mitigation alternatives with multiple objectives that can reduce risk for multiple hazards.

8.7 RESULTS

Major landslides in Spokane County could occur as a result of soil conditions that have been affected by severe storms, groundwater or human development. The worst-case scenario for landslide hazards in the planning area would generally correspond to a severe storm that had heavy rain and caused flooding. Landslides are most likely to occur during late winter when the water table is high. After heavy rains from November to December, soils become saturated with water. As water seeps downward through upper soils that may consist of permeable sands and gravels and accumulates on impermeable silt, it will cause weakness and destabilization in the

slope. A short intense storm could cause saturated soil to move, resulting in landslides. As rain continues, the groundwater table rises, adding to the weakening of the slope. Gravity, poor drainage, a rising groundwater table and poor soil exacerbate hazardous conditions.

Mass movements are becoming more of a concern as development moves outside of city centers and into areas less developed in terms of infrastructure. Most mass movements would be isolated events affecting specific areas. It is probable that private and public property, including infrastructure, will be affected. Mass movements could affect bridges that pass over landslide prone ravines and knock out rail service through the county. Road obstructions caused by mass movements would create isolation problems for residents and businesses in sparsely developed areas. Property owners exposed to steep slopes may suffer damage to property or structures. Landslides carrying vegetation such as shrubs and trees may cause a break in utility lines, cutting off power and communication access to residents.

Continued heavy rains and flooding will complicate the problem further. As emergency response resources are applied to problems with flooding, it is possible they will be unavailable to assist with landslides occurring all over Spokane County.

Based on review and analysis of the data, the Planning Team has determined that the probability for impact from a landslide throughout the area is highly likely. The area experiences some level of landslide activity annually, although in many instances, there is no structural impact. Thankfully, no injuries have been reported to have occurred as a result of a landslide event, but, there are a fair number of residential structures whose access could be impacted within a relatively short distance from previous slide events. The 30 percent slope restrictions with respect to development within the critical area does help reduce the exposure to citizens significantly by limiting construction in high hazard areas.

Customarily, landslide events occur in conjunction with other weather events, such as flooding, earthquake, or other severe weather. As emergency response resources may be applied to the primary issue causing the landslide, it is possible that first responders may be taxed, with response times impacted. Likewise, impact from a landslide to roadways could also increase response times due to related issues with ingress and egress to areas. Based on the potential impact, the Planning Team determined the CPRI score to be 3.1, with overall vulnerability determined to be a medium level.

CHAPTER 9.
SEVERE WEATHER

9.1 GENERAL BACKGROUND

Severe weather refers to any dangerous meteorological phenomena with the potential to cause damage, serious social disruption, or loss of human life. It includes thunderstorms, downbursts, tornadoes, waterspouts, snowstorms, ice storms, and dust storms. Severe weather can be categorized into two groups: those that form over wide geographic areas are classified as general severe weather; those with a more limited geographic area are classified as localized severe weather. Severe weather, technically, is different from extreme weather, which refers to unusual weather events that are at the extremes of the historical distribution for a given area.

9.1.1 Damaging Winds

Damaging winds are classified as those exceeding 60 mph. Damage from such winds accounts for half of all severe weather reports in the lower 48 states and is more common than damage from tornadoes. Wind speeds can reach up to 100 mph and can produce a damage path extending for hundreds of miles. There are seven types of damaging winds:

- **Straight-line winds**—Any thunderstorm wind that is not associated with rotation; this term is used mainly to differentiate from tornado winds. Most thunderstorms produce some straight-line winds as a result of outflow generated by the thunderstorm downdraft.
- **Downdrafts**—A small-scale column of air that rapidly sinks toward the ground.
- **Downbursts**—A strong downdraft with horizontal dimensions larger than 2.5 miles resulting in an outward burst of damaging winds on or near the

DEFINITIONS

Freezing Rain—The result of rain occurring when the temperature is below the freezing point. The rain freezes on impact, resulting in a layer of glaze ice up to an inch thick. In a severe ice storm, an evergreen tree 60 feet high and 30 feet wide can be burdened with up to six tons of ice, creating a threat to power and telephone lines and transportation routes.

Severe Local Storm—"Microscale" atmospheric systems, including tornadoes, thunderstorms, windstorms, ice storms and snowstorms. These storms may cause a great deal of destruction and even death, but their impact is generally confined to a small area. Typical impacts are on transportation infrastructure and utilities.

Thunderstorm—A storm featuring heavy rains, strong winds, thunder and lightning, typically about 15 miles in diameter and lasting about 30 minutes. Hail and tornadoes are also dangers associated with thunderstorms. Lightning is a serious threat to human life. Heavy rains over a small area in a short time can lead to flash flooding.

Tornado—Funnel clouds that generate winds up to 500 miles per hour. They can affect an area up to three-quarters of a mile wide, with a path of varying length. Tornadoes can come from lines of cumulonimbus clouds or from a single storm cloud. They are measured using the Fujita Scale, ranging from F0 to F5.

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

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

ground. Downburst winds may begin as a microburst and spread out over a wider area, sometimes producing damage similar to a strong tornado.

- **Microbursts—**A small concentrated downburst that produces an outward burst of damaging winds at the surface. Microbursts are generally less than 2.5 miles across and short-lived, lasting only 5 to 10 minutes, with maximum wind speeds up to 168 mph. There are two kinds of microbursts: wet and dry. A wet microburst is accompanied by heavy precipitation at the surface. Dry microbursts, common in places like the high plains and the intermountain west, occur with little or no precipitation reaching the ground.
- **Gust front—**A gust front is the leading edge of rain-cooled air that clashes with warmer thunderstorm inflow. Gust fronts are characterized by a wind shift, temperature drop, and gusty winds out ahead of a thunderstorm. Sometimes the winds push up air above them, forming a shelf cloud or detached roll cloud.
- **Derecho—**A derecho is a widespread thunderstorm wind caused when new thunderstorms form along the leading edge of an outflow boundary (the boundary formed by horizontal spreading of thunderstorm-cooled air). The word "derecho" is of Spanish origin and means "straight ahead." Thunderstorms feed on the boundary and continue to reproduce. Derechos typically occur in summer when complexes of thunderstorms form over plains, producing heavy rain and severe wind. The damaging winds can last a long time and cover a large area.
- **Bow Echo—**A bow echo is a linear wind front bent outward in a bow shape. Damaging straight-line winds often occur near the center of a bow echo. Bow echoes can be 200 miles long, last for several hours, and produce extensive wind damage at the ground.

9.1.2 Tornado

A tornado is a violently rotating column of air extending between, and in contact with, a cloud and the surface of the earth. Tornadoes are often (but not always) visible as a funnel cloud. Tornadoes are rated by their intensity and damage to vegetation and property. There are two common rating scales, the Fujita scale (F-Scale) and the Enhanced Fujita Scale (EF-Scale). The Fujita scale is a tornado scale introduced in 1971 by Tetsuya Fujita and the scale evaluates total damage. In the United States the Fujita scale was replaced with the Enhanced Fujita scale, which is now the primary scale used the United Sites and Canada. The Enhanced Fujita scale not only considers damage but also takes into account wind speed. Figure 9-1 illustrates the two tornado rating scales. Figure 9-2 illustrates the potential impacts and damage from tornadoes.

On a local-scale, tornadoes are the most intense of all atmospheric circulations and wind can reach destructive speeds of more than 300 mph. A tornado's vortex is typically a few hundred meters in diameter, and damage paths can be up to 1 mile wide and 50 miles long.

Tornadoes can occur throughout the year at any time of day but are most frequent in the spring during the late afternoon. As shown in Figure 9-3, Washington has a very low risk compared to states in the Midwestern and Southern U.S.; however, the County does have recorded Tornado events. The Tornado Wind Zone Map in Figure 9-4 illustrates the variations in wind speeds, which correlate to the building code requirements.

Enhanced Fujita Scale	
EF-0	65 - 85 mph winds
EF-1	86 - 110 mph
EF-2	111 - 135 mph
EF-3	136 - 165 mph
EF-4	166 - 200 mph
EF-3	>200 mph

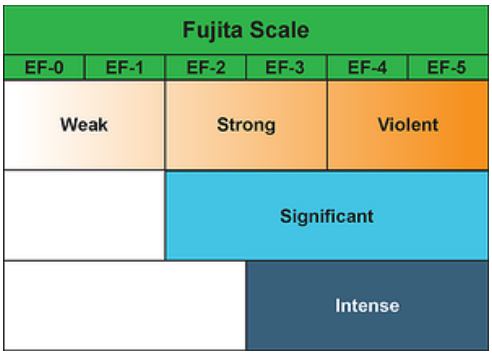


Figure 9-1. Fujita Scale

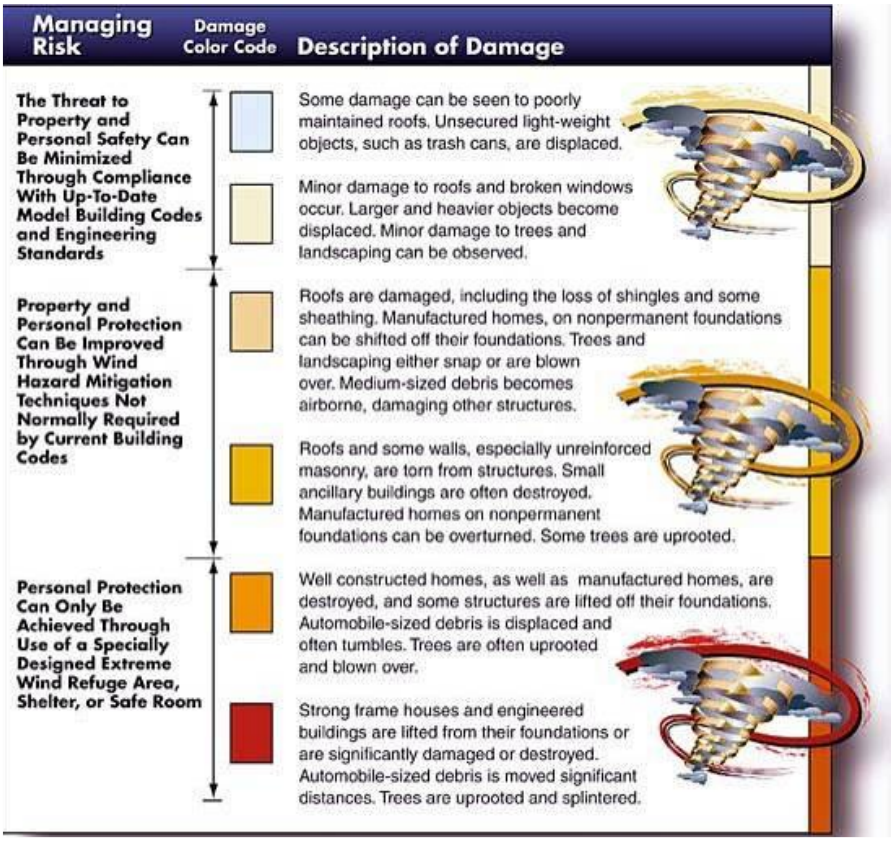


Figure 9-2 Potential Impact and Damage from a Tornado

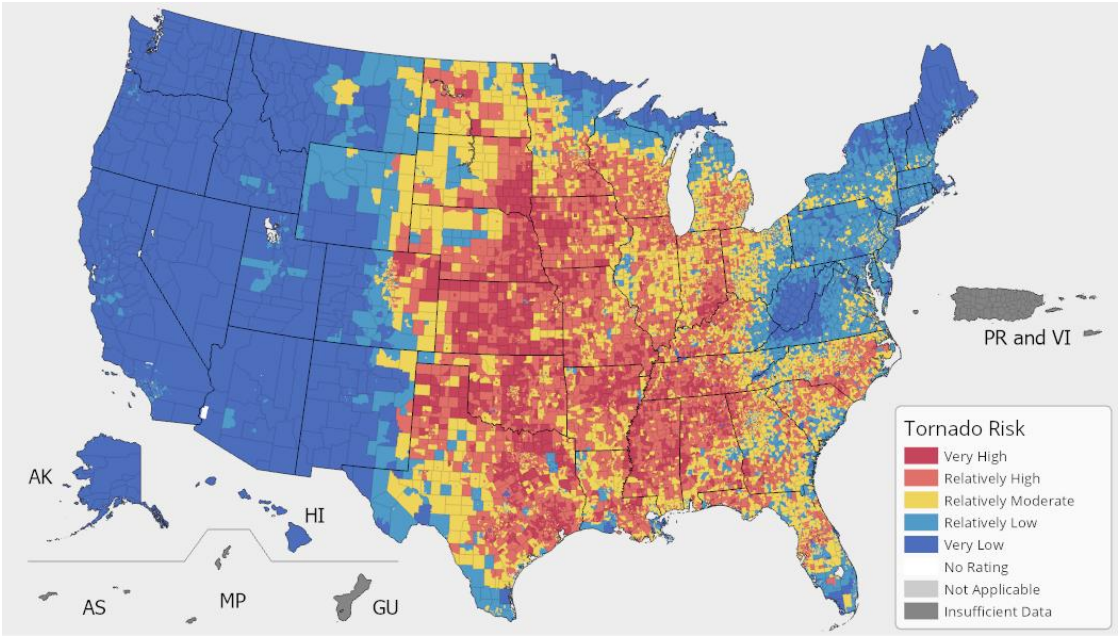


Figure 9-3. Tornado Risk Areas in the United States (NRI, 2025)

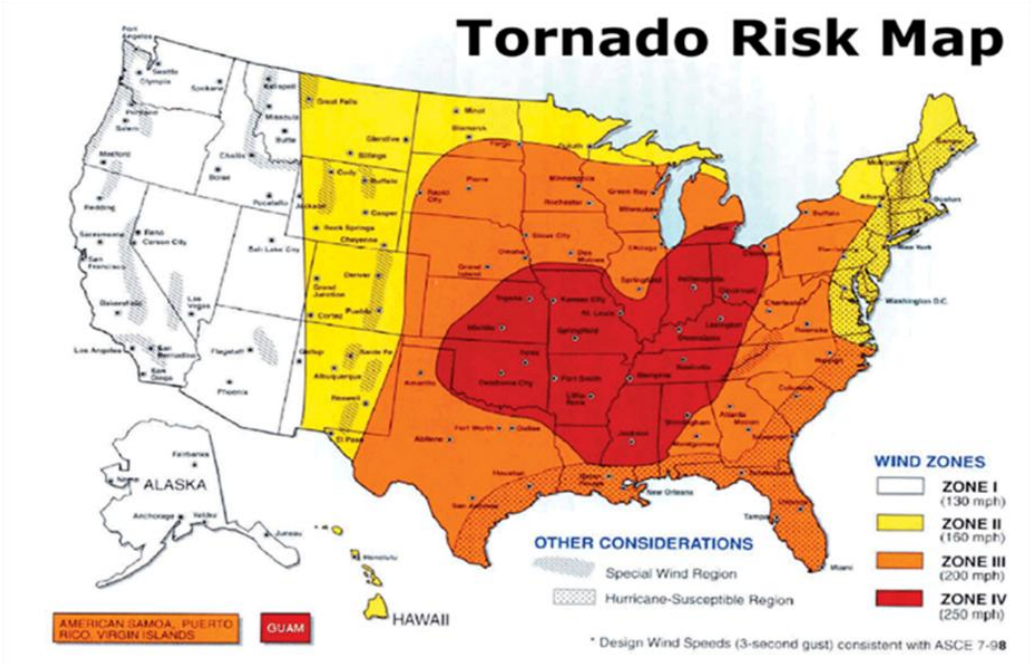


Figure 9-4 Tornado Wind Zone Map of U.S.

9.1.3 Blizzards and Snowstorms

The National Weather Service defines a winter storm as having significant snowfall, ice and/or freezing rain; the quantity of precipitation varies by elevation. Heavy snowfall is 4 inches or more in a 12-hour period, or 6 inches or more in a 24-hour period in non-mountainous areas; and 12

inches or more in a 12-hour period or 18 inches or more in a 24-hour period in mountainous areas. There are three key ingredients to a severe winter storm:

- Cold Air—Below-freezing temperatures in the clouds and near the ground are necessary to make snow and/or ice.
- Moisture—Moisture is required in order to form clouds and precipitation. Air blowing across a body of water, such as a large lake or the ocean, is an excellent source of moisture.
- Lift—Lift is required in order to raise the moist air to form the clouds and cause precipitation. An example of lift is warm air colliding with cold air and being forced to rise over the cold dome. The boundary between the warm and cold air masses is called a front. Another example of lift is air flowing up a mountain side.

Strong storms crossing the North Pacific sometimes slam into the coast from California to Washington. The Pacific provides a virtually unlimited source of moisture for storms. If the air is cold enough, snow falls over Washington and Oregon and sometimes in California. As the moisture rises into the mountains, heavy snow closes the mountain passes and can cause avalanches. Cold air from the north has to filter through mountain canyons into the basins and valleys to the south. If the cold air is deep enough, it can spill over the mountain ridge. As the air funnels through canyons and over ridges, wind speeds can reach 100 mph, damaging roofs and taking down power and telephone lines. Combining these winds with snow results in a blizzard.

Heavy snow can immobilize a region and paralyze a city, stranding commuters, stopping the flow of supplies, and disrupting emergency and medical services. Accumulations of snow can collapse buildings and knock down trees and power lines. In rural areas, homes and farms may be isolated for days, and unprotected livestock may be lost. In the mountains, heavy snow can lead to avalanches. The cost of snow removal, repairing damages, and loss of business can have large economic impacts on cities and towns.

Areas most vulnerable to winter storms are those affected by convergence of dry, cold air from the interior of the North American continent, and warm, moist air off the Pacific Ocean. Typically, significant winter storms occur during the transition between cold and warm periods.

9.1.4 Ice Storms

Ice storms occur when rain falls from a warm, moist, layer of atmosphere into a below freezing, drier layer near the ground. The rain freezes on contact with the cold ground and exposed surfaces causing damage to trees, utility wires, and structures.

With an average elevation over 1,800 feet, Spokane is located on the edge of the Columbia Basin in Eastern Washington State. Its location, between the Cascades Range to the west and Rocky

Mountains to the east and north, allows cold air to settle into the basin, frequently creating prime conditions for winter weather.

November 19, 1996, produced one of the region's worst ice storms in 60 years. Before the freezing rain hit, there was already between 2 and 4 inches of snow on the ground around the city. Later that day, up to an inch and a half of freezing rain fell, coating trees, roads, buildings, vehicles, and power lines in a dense slippery glaze. The official weather station for the city of Spokane at Spokane International Airport recorded a high temperature of only 33°F and 1.24 inches of precipitation, which fell in the form of rain, freezing rain, freezing drizzle (which are smaller drops than those of rain), snow, and mist. The station also reported freezing fog in the city that day.

Trees came crashing down everywhere under the immense weight of the ice. The mayor of Spokane declared a state of emergency as over half the city's residents lost electricity—their worst power outage in 108 years. Three days after the storm, 100,000 people in the surrounding county were without power, and six days after the storm, 20,000 were still without power. Some area residents were without electricity for up to two weeks following the record-breaking storm.

Throughout the devastating ice storm and its aftermath, four people lost their lives in and around Spokane and Kootenai counties, and total damages were estimated at over $22 million in 1996 dollars. This ice storm remains one of the most severe on record for the area.

9.1.5 Dust Storms

Dust storms occur east of the Cascades. Wind, following dry periods, blows dirt and light debris aloft. Haboobs are dramatic dust storms produced by strong winds that are generally associated with thunderstorm gust fronts or very strong cold fronts. While Haboobs still occasionally occur, they are becoming less frequent in Eastern Washington as farmers practice better soil conservation techniques.

9.1.6 Thunderstorms

A thunderstorm is a rain event that includes thunder and lightning. A thunderstorm is classified as "severe" when it contains one or more of the following: hail with a diameter of three-quarter inch or greater, winds gusting in excess of 50 knots (57.5 mph), or tornado.

Three factors cause thunderstorms to form: moisture, rising unstable air (air that keeps rising when disturbed), and a lifting mechanism to provide the disturbance. The sun heats the surface of the earth, which warms the air above it. If this warm surface air is forced to rise (hills or mountains can cause rising motion, as can the interaction of warm air and cold air or wet air and dry air) it will continue to rise as long as it weighs less and stays warmer than the air around it. As the air rises, it transfers heat from the surface of the earth to the upper levels of the atmosphere (the process of convection). The water vapor it contains begins to cool and it

condenses into a cloud. The cloud eventually grows upward into areas where the temperature is below freezing. Some of the water vapor turns to ice and some of it turns into water droplets. Both have electrical charges. Ice particles usually have positive charges, and rain droplets usually have negative charges. When the charges build up enough, they are discharged in a bolt of lightning, which causes the sound waves we hear as thunder.

Thunderstorms have three stages (see Figure 9-5):

- The **developing stage** of a thunderstorm is marked by a cumulus cloud that is being pushed upward by a rising column of air (updraft). The cumulus cloud soon looks like a tower (called towering cumulus) as the updraft continues to develop. There is little to no rain during this stage but occasional lightning. The developing stage lasts about 10 minutes.
- The thunderstorm enters the **mature stage** when the updraft continues to feed the storm, but precipitation begins to fall out of the storm, and a downdraft begins (a column of air pushing downward). When the downdraft and rain-cooled air spread out along the ground, they form a gust front, or a line of gusty winds. The mature stage is the most likely time for hail, heavy rain, frequent lightning, strong winds, and tornadoes. The storm occasionally has a black or dark green appearance.
- Eventually, a large amount of precipitation is produced and the updraft is overcome by the downdraft beginning the **dissipating stage**. At the ground, the gust front moves out a long distance from the storm and cuts off the warm moist air that was feeding the thunderstorm. Rainfall decreases in intensity, but lightning remains a danger.

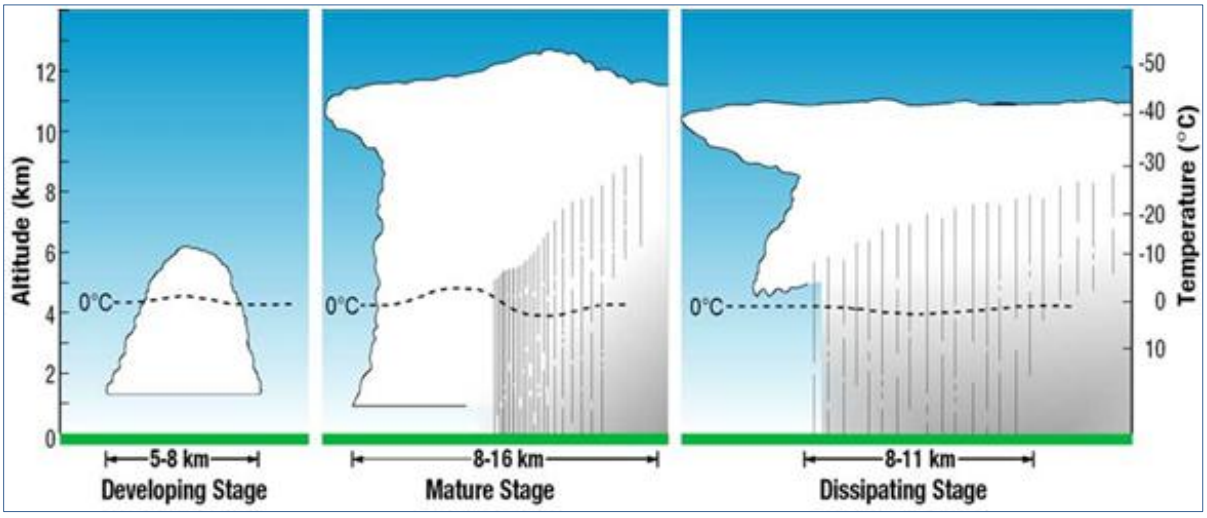


Figure 9-5. The Thunderstorm Life Cycle

There are four types of thunderstorms:

- **Single-Cell Thunderstorms—**Single-cell thunderstorms usually last 20 to 30 minutes. A true single-cell storm is rare, because the gust front of one cell often triggers the growth of another. Most single-cell storms are not usually severe, but a single-cell storm can produce a brief severe weather event. When this happens, it is called a pulse severe storm.
- **Multi-Cell Cluster Storm—**A multi-cell cluster is the most common type of thunderstorm. The multi-cell cluster consists of a group of cells, moving as one unit, with each cell in a different phase of the thunderstorm life cycle. Mature cells are usually found at the center of the cluster and dissipating cells at the downwind edge. Multi-cell cluster storms can produce moderate-size hail, flash floods and weak tornadoes. Each cell in a multi-cell cluster lasts only about 20 minutes; the multi-cell cluster itself may persist for several hours. This type of storm is usually more intense than a single cell storm.
- **Multi-Cell Squall Line—**A multi-cell line storm, or squall line, consists of a long line of storms with a continuous well-developed gust front at the leading edge. The line of storms can be solid, or there can be gaps and breaks in the line. Squall lines can produce hail up to golf-ball size, heavy rainfall, and weak tornadoes, but they are best known as the producers of strong downdrafts. Occasionally, a strong downburst will accelerate a portion of the squall line ahead of the rest of the line. This produces what is called a bow echo. Bow echoes can develop with isolated cells as well as squall lines. Bow echoes are easily detected on radar but are difficult to observe visually.
- **Super-Cell Storm—**A super-cell is a highly organized thunderstorm that poses a high threat to life and property. It is similar to a single-cell storm in that it has one main updraft, but the updraft is extremely strong, reaching speeds of 150 to 175 miles per hour. Super-cells are rare. The main characteristic that sets them apart from other thunderstorms is the presence of rotation. The rotating updraft of a super-cell (called a mesocyclone when visible on radar) helps the super-cell to produce extreme weather events, such as giant hail (more than 2 inches in diameter), strong downbursts of 80 miles an hour or more, and strong to violent tornadoes.

9.2 HAZARD PROFILE

9.2.1 Extent and Location

The entire planning area is susceptible to the impacts of severe weather. Severe weather events customarily occur during the months of October to April, although they have occurred year-round. The County has been impacted by strong winds, rain, snow, or other precipitation, which are often accompanied by thunder or lightning. While considerable snowfall does not customarily occur throughout the region, it does occur on a regular basis and has resulted in significant accumulations on some occasions. Communities in low-lying areas next to rivers, streams, or

lakes are more susceptible to flooding. For the planning region as a whole, wind events are one of the most common weather-related incidents to occur, particularly in the more densely or heavily wooded areas. These events have left areas without power, although typically not for long, extended periods. Severe storms and weather also impact transportation and utilities.

9.2.2 Previous Occurrence

Table 9-1 summarizes severe weather events in Spokane County since 1993, as recorded by FEMA, SHELDUS, and NOAA's National Centers for Environmental Information. [33] Information was also provided by the National Weather Service serving the Spokane area.

Table 9-1.
Severe Weather Events Impacting Planning Area Since 1993

Date	Type	Deaths or Injuries	Property and Crop Damages
12/18/2024	Strong Wind	2	$13,000
Description: *The region saw widespread snow with a strong moist system moving through the Pacific Northwest. It brought near a foot of snow to portions of the Cascades and northern mountains of Washington on December 17 - 18. It was followed by gusty winds near 60 MPH Thursday afternoon. Spokane Airport ASOS reported a gust of 68 MPH. Reports of trees down at Grant Elementary, along US-195, and Rutter Parkway. Parts of a downtown parking garage facade were blown off. 875 customers were reported without power.* *At approximately 0625 PST, SPD responded to a commercial vehicle versus tree collision at Highway 2 near Sunset Frontage Road. Initial callers reported that a tree had fallen onto the highway and struck an eastbound truck, causing the truck to leave the roadway. Spokane Police and Washington State Patrol responded and found that the two occupants of the truck were deceased at the scene. Collision investigators with the SPD Major Crimes Unit (MCU) also responded to assist with the investigation. Highway 2 (eastbound) was briefly shutdown during the investigation. At this time, investigators believe that heavy winds caused the tree to dislodge from the ground and fall across the roadway. Spokane Airport ASOS recorded a gusts of 30 MPH at the time of incident.*			
4/18/2024	Tornado EF 0	0	0
Description: *Weak convective cell generated a very small, weak landspout in Airway Heights. An observer reported a small stationary landspout.*			
7/10/2023	Hail 1.25"	0	0
Description: *A strong system moved through Eastern Washington and brought scattered thunderstorms. The main areas stretched along Highway 2 from Waterville Plateau to Northern Spokane County. Hail of varying sizes of dimes to half dollars reported East and Southeast of Elk.*			
8/24/2022	Hail 1.25"	0	0

[33] NOAA. Storm Events Database - Search Page | National Centers for Environmental Information Accessed multiple times.

Table 9-1.
Severe Weather Events Impacting Planning Area Since 1993

Date	Type	Deaths or Injuries	Property and Crop Damages
Description: *A closed Low over the region shifted over North Idaho and increased instability over the area. The instability mixed with afternoon convection to develop isolated thunderstorms in North Spokane, which produced large hail. The hail size ranged from half an inch to one and quarter inch. Picture relayed to television media of hailstones estimated to be between the size of pennies and half dollars. Time estimated from radar at 1712PST.*			
			$150,000 crop damage
8/11-12/2022	Hail 2.75 and 1.5"	0	$200,000 property damage
Description*: As the slow moving Low continued through the region, another round of thunderstorms over the Eastern Washington produced large hail and strong winds to the region. Storms impacted extreme Eastern WA and the North ID Panhandle. Thunderstorms developed along an axis of instability stretching along the border between WA and ID.* *A strong thunderstorm dropped hail ranging from half an inch to 2.75. Most hail reports ranged from 0.75 to 1.5. A 2.75 size was reported around Newman Lake at 1700PST. It traveled from Albion WA to Newman Lake WA around 1525PST to 1715PST. It damaged at least 15,000 acres of crops, broke windows and damaged siding of homes in Liberty Lake, and dented numerous vehicles. An additional thunderstorm formed near Malden and moved Northeast near Plaza. It produced hail the size of half an inch to 1.5 inch.*			
5/6/2022	Tornado EF0	0	$50,000
Description*: Strong storms developed to the west of Spokane during the early evening hours of 6 May 2022. As they approached the west side of the metropolitan area, the storms became more organized. The strongest cell developed rotation periodically as it moved from the Airway Heights area eastward through Spokane and Spokane Valley. Two distinct areas of damage occurred due to two tornadoes as the storm moved through the region.* *The first tornado followed a due west-to-east path along W. Greenwood Road. The damage indicators along the road mainly consisted of trees that were uprooted or snapped. Several powerline poles were brought down by fallen trees toward the middle of the damage path. No substantial damage was noted to structures along the path. A video that was shared by a resident near N. Kynan Rd. showed a very weak circulation moving due east along W. Greenwood Rd. This video footage confirms the timing and width of the tornado. Residents in the vicinity of Russell Rd. confirmed no further damage beyond this point.* *The second tornado generated a discontinuous line of damage first observed near the intersection of E. 9th Avenue and S. Cuba St. Video footage confirms a funnel cloud lowered at times and was disorganized as it moved from west to east. A second area of more significant damage was observed along 6th Avenue that included roof damage and many trees uprooted or snapped at the base. The third and longest track of damage began near E. 5th Ave and S. McKinnon Rd and included significant damage to trees and unsecured items along E 4th Avenue. The most noteworthy damage along E. 4th Ave was to a line of travel trailers, vehicles, and boats, several of which were tossed or displaced. Numerous large ponderosa pine trees were uprooted or snapped along E. 4th Avenue before the tornado again lifted. The final isolated area of damage was located along E. 5th Avenue between S. Coleman Rd and S Grand Rd. Security camera footage confirmed brief circulation at the surface along with two downed trees along the southern edge of the track before the tornado lifted for the final time.*			
11/15/2021	High Winds	0	$200,000

Table 9-1.
Severe Weather Events Impacting Planning Area Since 1993

Date	Type	Deaths or Injuries	Property and Crop Damages
***Description**: The wind event of Nov 15, 2021 was a warm sector wind event, which are characterized by the Inland Northwest being in the warm sector of an atmospheric river event for multiple days and lead to high winds. Most damage to the region were trees down, power lines down, and roof damage. Avista Utilities and Inland Power reported that approximately 50,000 customers were without power in the height of the storm in the evening.* *Strong, gusty winds created widespread damage across Spokane County. With winds ranging from 50-62 mph, the peak gusts 62 mph were reached at the Spokane International Airport in the late afternoon. There was a portion of the metal roof ripped off the Fed-Ex building at the airport. There were numerous reports of obstructing trees and power lines down leading to widespread outages. The winds led to damage to buildings' siding and large signs across Spokane.*			
6/26/2021	Excessive Heat	0	0
***Description**: During the period June 26-July 2, 2021, the National Weather Service in Seattle reported a long-duration, unprecedented heat dome throughout the Pacific Northwest with areas experiencing temperatures which shattered previously established high-temperature records. During that time period, Spokane County reported 19 deaths associated with the heat event. Cooling centers were established at various locations throughout the County to assist citizens.*			
3/28/2021	High Winds		$250,000
***Description**: **Episode Narrative---**A passing cold front produced strong winds in eastern Washington on March 28th. Winds reached gusts of 50-65 mph. These powerful winds produced blowing dust in the dry Columbia Basin and damage due to downed trees in much of far eastern Washington. Blowing dust had significant impact on travel creating poor visibility on major interstates and highways. The strongest winds and damage occurred in the late afternoon and early evening which created hazardous roadways for the evening commute.* *The National Weather Service in Spokane recorded a wind gust of 58 mph. There were many other local sites in Spokane County with 45-50 mph gusts. The strong winds downed many large trees across the county causing power lines down, power outages, and hazardous roadways due to blockages. There was extensive damage in northern Spokane, including two homes which were damaged from downed trees.*			
1/13/2021 DR 4593	Severe weather - High Winds	1 death and 1 injury	$300M (statewide)
***Description**: A powerful windstorm equal to the 2015 wind event rolled through the Pacific Northwest, killing one person in Spokane and leaving a trail of damage—including a highway shut down after a landslide and a tractor-trailer that was nearly blown off a bridge. More than 500,000 people lost power. The death occurred when a woman in her 40s died after a tree fell on her car and trapped her inside.*			
7/22/2016 Not Declared.	Tornado EF0	0	$50,000 (Crop) plus five mobile homes destroyed from fire.

Table 9-1.
Severe Weather Events Impacting Planning Area Since 1993

Date	Type	Deaths or Injuries	Property and Crop Damages
Description: *A Canadian cold front moved across northeast Washington during the early afternoon hours of the 12th of August. There were a few embedded thunderstorms with the front that brought severe weather to Spokane, Whitman and Lincoln counties. In Spokane County, a severe thunderstorm dropped 3/4 inch diameter hail across eastern Spokane County. The severe thunderstorm also brought damaging winds to most of the county that same evening, with at least 29 fires started in Spokane County. An estimated 10,000 customers were without power along with numerous accidents due to visibility reduced to less than a quarter of a mile in blowing dust. Numerous trees fell due to the severe wind causing property damage and a few injuries. The severe wind caused a fire to start in a mobile home Park near Silver Lake destroying five homes. Property damage throughout the county was estimated to be one hundred thousand dollars. In Whitman county, the severe storm caused numerous power outages along with some property damage due to fallen trees. Crop damage was estimated to be around $50,000 due to the severe thunderstorm's wind. In Lincoln county, the severe wind caused numerous power outages and some downed trees caused property damage. The wind also caused some crop damage. The width was estimated to be approximately 50 yards wide at its widest path. No injuries or fatalities were reported.*			
8/09/2016 Not Declared.	Tornado EF0	0	--
Description: *A tornado was reported at approximately 6:35 on the evening of August 9th. The width was estimated to be approximately 25 yards wide, at its widest path, with its length of travel approximately 0.2 tenths of a mile long. No injuries or fatalities were reported. The tornado did not have a rating on the Fujita scale.*			
11/12/15 DR 4249	Severe Storms, Winds, Flooding, Landslide	2 deaths (Spokane and Cheney – falling trees) / 3 later died from hypothermia due to lack of power/heat	+$33M statewide ; $5m Spokane of which $2m was for damaged utilities
Description*: This storm brought the highest wind recorded in Spokane from a large Pacific cyclone, the type of storm that customarily prevails from early autumn through early spring, reaching wind gusts of 71 mph, slightly below the hurricane speed of 75 mph. Only a gust from the thunderstorms in 2005 had a stronger gust at 77 mph. Previously, the highest non-thunderstorm wind at Spokane had been 67 mph in January 1972. What made the 2015 windstorm so damaging was the persistence of the lashing winds. The duration allowed damage to pile on top of damage. More than 250,000 customers lost electrical power from Spokane into North Idaho. Many were without power for a week or more. Avista alone reported 180,000 outages. Below the high winds, a low-pressure system developed off the British Columbia coast and tracked inland. High winds cresting over the Cascades gained momentum as they crested the eastern slopes. Mild temperatures in the Columbia Basin allowed warm air to rise from the ground, creating a vacuum to draw the already ferocious winds swooping down from aloft.*			
9/15/2013	Thunderstorm Wind	0	--

Table 9-1.
Severe Weather Events Impacting Planning Area Since 1993

Date	Type	Deaths or Injuries	Property and Crop Damages
Description: *Numerous reports of trees falling onto power lines resulting in over a thousand customers losing power. Damage was reported in Cheney, to Spokane, to Mead and in Deer Park. A large tree toppled over at 21st Street and High Drive in Spokane on South Hill. Other trees reported down or snapped off resulting in damage to homes and/or vehicles. Many tents at the Spokane County Interstate Fair were damaged or flipped over due to the strong winds from the gust front.*			
8/25/2012	Thunderstorm Wind	0	$80,000
Description*: The Spokane NWS clocked a wind gust of 62 mph. Numerous trees, some large, were downed in Nine Mile Falls area, especially along West Charles Road. Some trees were uprooted and others were snapped halfway up the trunk. Trees fell on a combination of roofs, outbuildings, fences and power lines resulting in multiple power outages. A large tree was uprooted along Highway 2 in the Deep Creek community. A large tree fell on a power line in Chattaroy leading to 178 power outages.*			
12/12/2008	Severe Winter Storm	0	$770,000
DR 1825 ***Description:*** *Heavy snow and winter storm condition blanketed the Spokane area for 4 days causing damage. Known as the start of the snowiest winter on record, the four day accumulation equaled the same amount of snow that is typical for an average winter in the area. Approximately 24 inches of snow fell within a 24 hour period. Spokane Public Schools and the Spokane Transit Authority shut down operations, as did most businesses.*			
8/31/2007	Hail	0	$10,000
Description: *Data from SHELDUS, No narrative available.*			
12/15/2006	High Winds	0	$207,000
Description: *Data from SHELDUS, No narrative available.*			
8/12/2005	Thunderstorm	0	$100,000
Description: *A Canadian cold front moved across northeast Washington during the early afternoon hours of the 12th of August. There were a few embedded thunderstorms with the front that brought severe weather to Spokane, Whitman and Lincoln counties. In Spokane County, a severe thunderstorm dropped 3/4 inch diameter hail across eastern Spokane County. The severe thunderstorm also brought damaging winds to most of the county that same evening. There were at least 29 fires started in Spokane county. An estimated 10,000 customers were without power along with numerous accidents due to visibilities reduced to less than a quarter of a mile in blowing dust. Numerous trees fell due to the severe wind causing property damage and a few injuries. The severe wind caused a fire to start in a mobile home Park near Silver Lake destroying five homes. Property damage throughout the county was estimated to be one hundred thousand dollars. In Whitman county, the severe storm caused numerous power outages along with some property damage due to fallen trees. Crop damage was estimated to be around fifty thousand dollars due to the severe thunderstorm's wind. In Lincoln county, the severe wind caused numerous power outages and some downed trees caused property damage. The wind also caused some crop damage.*			

Table 9-1. Severe Weather Events Impacting Planning Area Since 1993			
Date	**Type**	**Deaths or Injuries**	**Property and Crop Damages**
9/16/2003	Hail	0	$50,000
Description: *During the afternoon of September 19th an isolated rain shower with small hail moved over the Spokane area. On the westbound lane of Interstate 90 drivers were blinded by the low sun shining in their eyes while small hail created slippery conditions. Over 50 cars and trucks were involved in numerous accidents and pileups along a four mile stretch of westbound I-90 in the city of Spokane.*			
7/7/2002	Lightning	0	$18,000
Description: *Lightning struck the roof of an apartment building north of the intersection of Sprague and Argonne, igniting a fire that burned a 6-by-22 foot hole in the roof of the apartment. The residents of the apartment escaped without injury**.***			
4/4/2000	Thunderstorm Wind	0	$80,000
Description: *Data from SHELDUS, No narrative available.*			
2/2/1999	High Winds	0	$360,000
Description: *Data from SHELDUS, No narrative available.*			
5/31/1997	Tornado	0	$350,000
Description: *NWS survey team concluded that an F1 tornado touched down and pulled up numerous times as it traveled from Pruffer and Walbridge in SE Stevens county to near Riverside in Spokane county*			
12/26/1996	Severe Storm	Unknown	Unknown
DR 1159 ***Description:****. After up to a foot of snow fell on the day after Christmas, heavy rains came a few days later that caused epic slush and flooding.*			
11/19/1996	Ice Storm	1	$1.3 million
DR 1152 ***Description:****. Ranked as one of the worst storms in modern memory, a significant ice storm plummeted most of the state. The ice storm on Nov. 19, 1996 ranks as Avista Utilities' second-worst outage event with connections cut to 100,000-plus homes and businesses.*			
11/28/1993	Ice Storm	0	$500,000
Description: *Data from SHELDUS, No narrative available.*			

In addition to the items listed above, the following incidents have occurred since completion of the 2020 plan:

- One report of a cold/wind chill event which resulted in one death on December 27, 2021.

- No dense fog events.
- Dust Storms occurred on April 27, 2020, May 2, 2020, May 5, 2020, April 18, 2021, and September 29, 2024. No reports of any type of associated losses.
- In addition to the declared severe weather events inclusive of high winds identified in the Table 9-1, the County experienced:
    - 2021 - three additional windstorm events;
    - 2022 - experienced three windstorm events;
    - 2023 - experienced two windstorm events, and
    - 2024 - experienced one windstorm on December 18, 2024, which caused two deaths (identified in Table 9-1); one in Spokane and one in Idaho (reported by NOAA). The County experienced 19 days with high wind events.
- Two lightning events have occurred:
    - July 23, 2019, which caused $200,000 worth of damage; and
    - July 27, 2023, which caused $25,000 worth of damages.
- One severe thunderstorm wind event on September 25, 2024, which caused damage to crops and agriculture in several areas throughout the county in excess of $20,000.
- Multiple reports of heavy snow over two-three days occurred in 2020 and 2021, with no reports of damages or losses.
- No ice storm events have occurred during the reporting period 2019-2024.
    - Review of NRI data identifies a total of 23 events occurring during the period 1946-2014 (67 years of recorded events).
- The County experienced two winter storms in 2021 (no damages or injuries reported) and one incident in 2022, with no death or injuries, but approximately $10,000 in damages.
    - Review of NRI data identifies ~6 events per year occurring, with 97 events total being reported during the period of 2005-2021 (16 years of recorded events).

9.2.3 Frequency

The severe weather events for Spokane County shown in Table 9-1 are often related to high winds associated with severe storms, severe winter storms, and thunderstorms. The planning area has experienced some variation of severe weather event at least three times annually since completion of the 2020 HMP.

Review of the National Risk Index report (2025), annualized frequency for the various types of weather events included in the Severe Weather Hazard range from 0.3 events per year (Cold Wave, Ice Storm, and Hail) to three Lightning events annually, and six Winter Weather events annually. Tornado frequency is 0.1 event annually, with eight events occurring during the period of 1950-2021 (72 years of recorded events).

The NRI data also identifies strong wind events occurring at a frequency rate of 0.3 events per year; however, given the history of wind events occurring throughout the area, the Planning Team does feel that is significantly understated.

9.2.4 Severity

The most common problems associated with severe storms are immobility and loss of utilities. Fatalities are uncommon but have occurred as a result of severe weather incidents, particularly high winds. Roads may also become impassable due to flooding, downed trees, ice or snow, or a landslide.

Power lines may be downed due to high winds or ice accumulation, and services such as water or phone may also not be able to operate without power.[34] While lightning can cause severe damage and injury, to date, impact has been related to associated winds. No deaths have been reported as a result of lightning. Hail has occurred, causing crop damage, but no deaths or injuries.

Windstorms are a frequent problem in the planning area and have been known to cause death and injuries, as well as damage to utility infrastructure. The predicted wind speed given in wind warnings issued by the National Weather Service is for a one-minute average; gusts may be 25 to 30 percent higher. Under most conditions the County's highest winds come from the south or southwest, with many events being 50 knots or higher, which is approximately 58 miles per hour.

Tornadoes are potentially the most dangerous of local storms, but large events are not common in the planning area, although they have occurred. The majority of tornadoes nationwide occur in May, which historically has been the most active month for tornadoes (see Figure 9-6).[35] Approximately 80 percent of tornadoes in the United States are either EF0 or EF1, with less than 1 percent reading an EF4 or stronger.[36]

[34] http://mynorthwest.com/1220169/common-tornadoes-washington-state/

[35] Weather Channel. (2025). Accessed 12 May 2025. Available online at: Why April, May, June Are Most Active For Tornadoes | Weather.com

[36] https://www1.wsrb.com/blog/tornadoes-in-washington-how-common-are-they

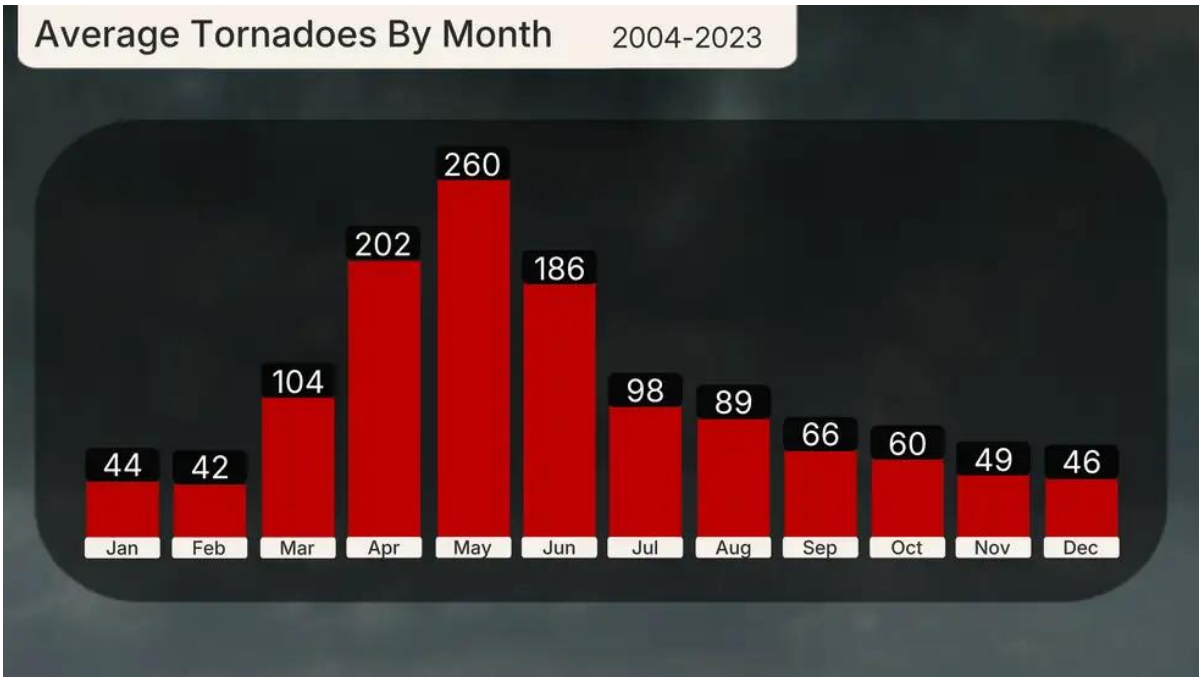


Figure 9-6 Tornado Occurrences Nationwide by Month (2004-2023)

Days with higher heat have been on the rise, but none as significant as that experienced statewide in 2021. During the 2021 event, multiple cooling shelters were open countywide to provide relief to citizens. As indicated, the County had 19 deaths which were a result of the 2021 event.[37] The Palouse area of the County did have another high heat event in June 2024, but no reports of death were reported. Nationwide, heat remains the number one cause of death. Figure 9-7 illustrates the primary of cause of severe weather fatalities nationwide.

9.2.5 Warning Time

Meteorologists can often predict the likelihood of a severe storm. This can give several days of warning time. However, meteorologists cannot predict the exact time of onset or severity of the storm. Some storms may come on more quickly and have only a few hours of warning time. As in the case of tornadoes, there may be little warning time, and due to the rare nature in Washington, are not something which citizens would be particularly aware of until the tornado is upon them.

[37] Heat Dome | Gonzaga University. Accessed 18 June 2025.

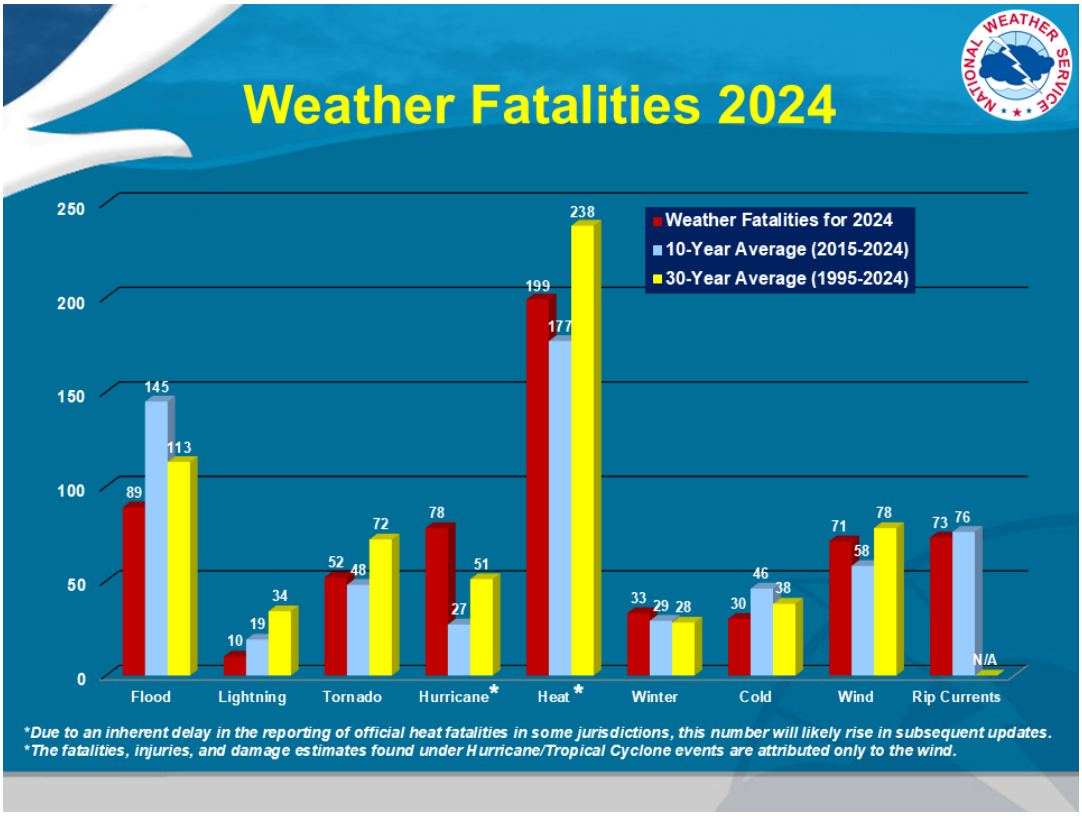


Figure 9-7. National Weather Service Weather Fatalities 2024

9.3 SECONDARY HAZARDS

The most significant secondary hazards associated with severe local storms are floods, falling and downed trees, landslides and downed power lines. Rapidly melting snow combined with heavy rain can overwhelm both natural and man-made drainage systems, causing overflow and property destruction. Landslides occur when the soil on slopes becomes oversaturated and fails.

9.4 VULNERABILITY ASSESSMENT

9.4.1 Impact on Life, Health, and Safety

A lack of data separating severe weather damage from other types of hazards damage (e.g., flooding, landslide, etc.) prevent a detailed analysis for exposure and vulnerability. However, it can be assumed that the entire planning area is exposed to severe weather events to some extent, with certain areas more exposed than others due to geographic location and local weather patterns. Populations living at higher elevations with large stands of trees or power lines may be more susceptible to wind damage and black out, while populations in low-lying areas are at risk for possible flooding.

Vulnerable populations include the elderly, low income or linguistically isolated populations, people with life-threatening illnesses, and residents living in areas that are not served by major roads. Power outages can be life threatening to those dependent on electricity for life support or other medical equipment dependent on electricity. Isolation of these populations is a significant concern. These populations face isolation and exposure during severe weather events and could suffer more secondary effects of the hazard. Demographic data contained in Chapter 3 identifies 559,400 people living within Spokane County. Section 3.5 of Chapter 3 does illustrate that the County has a higher-than-average population of retirees, as well as individuals with disabilities, increasing vulnerability of the population. These numbers have increased since completion of the 2020 HMP.

9.4.2 Impact on Property

According to the Spokane County Assessor, there are well over 200,000 buildings (all types including separate garage units, sheds, lean-tos, etc.) within the census tracts that define the planning area. The NRI identifies total building value potentially exposed to a severe weather event throughout the county to exceed $87.5 billion. Most of these buildings are residential, and all are considered to be exposed to the severe weather hazard. Properties in poor condition or in particularly vulnerable locations may risk the most damage. The age of the structure is also significant, with a large number of structures being built prior to more effective building codes being in place. Structures in higher elevations and on ridges may also be more prone to wind damage. Those that are located under or near overhead lines or near large trees may be vulnerable to falling ice or may be damaged in the event of a collapse.

For planning purposes, all properties and buildings within the planning area are considered to be exposed to the severe weather hazard and at risk for damage. The frequency and degree of damage will depend on specific locations and severity of the weather pattern impacting the region. It is improbable to determine the exact number of structures susceptible to a weather event, and therefore emergency managers and public officials should establish a maximum threshold, or worst-case scenario, of susceptible structures.

9.4.3 Impact on Critical Facilities and Infrastructure

No loss estimation of critical facilities was performed due to the lack of established damage functions for the severe weather hazard. Therefore, it should be assumed that all critical facilities are vulnerable to some degree. As many of the severe weather events include multiple hazards, information such as that identifying facilities exposed to flooding or landslides (see Flood and Landslide profiles) are also likely exposed to severe weather.

All critical facilities exposed to flooding are also likely exposed to severe weather. Additional facilities on higher ground may also be exposed to wind damage or damage from falling trees. The most common problems associated with severe weather are loss of utilities. Downed power

lines can cause blackouts, leaving large areas isolated. Phone, water and sewer systems may not function. Roads may become impassable due to ice or snow or from secondary hazards such as landslides.

Within the planning region, power generation on the dams produce a significant amount of power to areas well outside of the planning area. Major power lines travel from the various dams through a large swath of the County. As such, wind events occurring also have the potential to impact power supplies in large metropolitan areas well outside of the County.

Incapacity and loss of roads are the primary transportation failures, most of which are associated with secondary hazards. Landslides that block roads are caused by heavy prolonged rains. In addition to power generation, high winds can cause significant damage to trees, further impacting local-area power lines, with obstructing debris blocking roads, incapacitating transportation, isolating population, and disrupting ingress and egress. Snowstorms can impact the transportation system and the availability of public safety services. Of particular concern are roads providing access to isolated areas and to the elderly.

Severe windstorms, downed trees, and ice can create serious impacts on above-ground communication lines. Freezing power and communication lines can cause them to break, disrupting both electricity and communication for households and businesses. Loss of electricity and phone connection would result in isolation because some people will be unable to call for assistance.

9.4.4 Impact on Economy

Prolonged obstruction of major routes due to severe weather can disrupt the shipment of goods and other commerce. As indicated, severe windstorms, downed trees, and ice can create serious impacts on power and above-ground communication lines. Prolonged outages would impact consumer and tax base as a result of lost revenue, food spoilage, lack of production, etc. Large, prolonged storms can have negative economic impacts for an entire region. All severe weather events also have the potential to also impact tourism.

Accommodation and food services, retail trade, and manufacturing account for a large percentage of the County's economy, as does agricultural activities, an economic area which is highly susceptible to severe weather incidents of all types.[38] Combined, these occupation categories account for over almost 60 percent of the County's economy. Each of these occupation classes are highly vulnerable to impacts from severe weather events.

[38] Washington State Employment Security Department. Spokane County Profile. Accessed 12 May 2025. Available online at: Spokane County profile | Employment Security Department

9.4.5 Impact on Environment

The environment is highly exposed to severe weather events. Natural habitats such as streams and trees are exposed to the elements during a severe storm and risk major damage and destruction. Prolonged rains can saturate soils and lead to slope failure. Flooding events caused by severe weather or snowmelt can produce river channel migration or damage riparian habitat.

9.4.6 Impacts from Climate Change

Climate change presents a significant challenge for risk management associated with severe weather. The frequency of severe weather events has increased steadily over the last century. Historical data shows that the probability for severe weather events increases in a warmer climate. The changing hydrograph caused by climate change could have a significant impact on the intensity, duration and frequency of storm events. All of these impacts could have significant economic consequences.

9.5 FUTURE TRENDS IN DEVELOPMENT

All future development will be affected by severe storms. The ability to withstand impacts lies in sound land use practices and consistent enforcement of codes and regulations for new construction. The planning partners have adopted the International Building Code in response to Washington mandates. This code provides guidelines for areas such as structural strength which address wind speeds and snow loads. Land use policies identified in comprehensive plans within the planning area also address many of the secondary impacts (flood and landslide) of the severe weather hazard. With these tools, the planning partnership is well equipped to deal with future growth and the associated impacts of severe weather.

9.6 SCENARIO

Severe weather could occur during the winter when Chinook winds accompanied by heavy rains drop precipitation over frozen snow and cause heavy runoff and eventually flooding. This scenario could also generate freezing rain that can cause the accumulation of ice on power lines and other ice-related issues. The heavy rain may also knock down ice covered power lines. Also during the winter, Spokane County may experience a blizzard that causes white-out conditions, blocking roads and isolating scattered rural homes and communities. During the summer, an isolated thunderstorm can produce a tornado that occurs near a population center and cause significant damage to property. Lightning strikes during the dry, hot summer can cause wildfires that may spread out of control. Wind events can knock down power and phone lines, cutting off communication and electricity.

9.7 ISSUES

Severe weather cannot be prevented, but measures can be taken to mitigate the effects. Critical infrastructure and utilities can be hardened to prevent damage during an event. The secondary effect of flooding can be addressed through decreasing runoff and water velocity. Important issues associated with a severe weather in the Spokane County planning area include the following:

- Older building stock in the planning area is built to low code standards or none at all. These structures could be highly vulnerable to severe weather events such as windstorms.
- Redundancy of power supply must be evaluated.
- The capacity for backup power generation is limited.
- The County has numerous isolated population centers.
- Public education on dealing with the impacts of severe weather needs to be provided
- Snow removal measures are required.
- Debris management (downed trees, etc.) must be addressed.

9.8 RESULTS

Severe storms have the potential to impact every area of the county in various ways. In areas of steeper slopes, landslides could occur as a result of soil conditions that have been affected by severe storms, groundwater, or human development.

The worst-case scenario for the severe weather hazard in the planning area would generally correspond to a severe storm that had heavy rain, which caused flooding and landslides, followed by a strong wind event.

As landslides occur most likely during late winter when the water table is high, a short intense storm could cause saturated soil to move. As rain continues, the groundwater table rises, flash flooding could occur, causing roadways to flood and potentially wash out, restricting ingress and egress to areas, including response capabilities by first responders.

Strong winds can occur any time of the year, but after heavy rains, when soils become more saturated with water and the potential for trees to still maintain a canopy, there is increased potential for risk and damage. The area has experienced tornadoes, although impact has been minimal, with no loss of life or injury reported, although property damage has occurred as a result of tornadoes.

The power distributors maintain excellent records for low incidents of long-term power outages, but the possibility does exist. While snow does occur, it customarily does not snow beyond the

capacity of the County to maintain roadways, although there is the potential for increased traffic accidents and calls for service by responders. Impact from a power outage during a snow or cold weather event would exacerbate the issue, increasing potential vulnerability of citizens.

The County is equipped with both cooling and warming shelters, although temperatures customarily are not so significant or of such a long duration that the potential for death increases. The County has a robust public information network that distributes public safety broadcasts to citizens in advance of severe weather events, allowing for preparedness measures by citizens at least to some extent.

Road obstructions caused by mass movements or flooding could create isolation problems for residents and businesses in sparsely developed areas. Property owners may suffer damage to property or structures due to severe weather events impacting trees, while landslides carrying vegetation such as shrubs and trees may cause a break in utility lines, cutting off power and communication access to residents. Severe weather events and the associated secondary hazards could also affect bridges or overpasses, knocking out rail service or other transportation routes. Commodity flow may be impacted for a short duration due to water over roadways or a landslide event, but historically, no event has ever lasted to such an extent that supplies were not available.

Severe weather events, if they stall, could affect only specific areas, but it is probable that private and public property, including infrastructure, will be affected; however, the degree to that impact is unknown.

Based on review and analysis of the data, the Planning Team has determined that the probability for impact from a severe weather event throughout the area is highly likely, as the area experiences some severe storm event multiple times annually as has been demonstrated since completion of the last plan. While in many cases the impact is more limited with respect to geographic extent when removing resulting flood and landslide events from the severe weather category, incidents not rising to the level of a disaster declaration are occurring more frequently. While snow and ice do occur, impact is also somewhat limited. The more significant issue would be a severe storm with high winds, and which also causes a landslide or flood event, all having the ability to isolate areas and block ingress and egress. While wind also causes power outages, historically such power outages have not been for a significant period of time. Based on the potential impact, the Planning Team determined the CPRI score to be 3.4, with overall vulnerability determined to be a high level.

CHAPTER 10.
WILDFIRE

10.1 INTRODUCTION

Spokane County and the surrounding landscape exhibits a complex wildfire environment that presents a significant risk to the public, emergency response personnel, and the built and natural environments.

Washington State is subject to damaging wildfires, influenced by extreme local wind and weather conditions, varied terrain and different vegetation types. In addition to these characteristics, Spokane County exhibits wildland urban interface (WUI) development patterns which exacerbate wildfire risk.

As a key component of the Healthy Forest Restoration Act of 2003, a Community Wildfire Protection Plan (CWPP) serves as a mechanism for community input and identification of areas presenting high wildfire risk, as well as identification of potential projects intended to mitigate such risk. Further, the CWPP process is intended to provide the community with a forum for identifying values at risk from wildfire, which may include people, property, natural resources, cultural values, economic interests, and infrastructure.

The identification of these values at risk by the community strongly influences the potential wildfire hazard mitigation projects identified in this CWPP.

This CWPP was developed by Spokane County includes input and direction from stakeholders and the community. The purpose of this collaboratively prepared CWPP is to serve as a fire protection planning document that presents the County's physical characteristics, wildfire hazard, assets at risk from wildfire, vegetation/fuel management projects and specifications, and goals and action

DEFINITIONS

Brush fire—A fast-moving fire that ignites grass, shrubs, bushes, scrub oak, chaparral, marsh grass (cattails), and grain fields. This is the type of wildfire most likely to affect Whitman County.

Conflagration—A fire that grows beyond its original source area to engulf adjoining regions. Wind, extremely dry or hazardous weather conditions, excessive fuel buildup and explosions are usually the elements behind a wildfire conflagration.

Firestorm—A fire that expands to cover a large area, often more than a square mile, when many individual fires grow together. Temperatures may exceed 1000°C. Superheated air and hot gases of combustion rise over the fire zone, drawing surface winds in from all sides, often at velocities approaching 50 miles per hour. Although firestorms seldom spread because of the inward direction of the winds, once started there is no known way of stopping them. Lethal concentrations of carbon monoxide, combined with the intense heat, pose a serious life threat to responding fire fighters. In very large events, the rising column of heated air carries enough particulate matter into the upper atmosphere to cause cloud nucleation, creating a thunderstorm and the hazard of lightning strikes.

Interface Area—An area where vegetation susceptible to wildfires and urban or suburban development occur together.

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

items intended to reduce wildfire risk in the County. The ultimate goal of this CWPP is to protect lives, property, and natural resources threatened by wildland fire. Additional goals for this HMP/CWPP document are contained in Chapter 12.

This section of the plan serves a dual purpose, serving both as Spokane County's Wildfire profile within the Hazard Mitigation Plan, and also as the Spokane County Community Wildfire Protection Plan. As such, additional data and information has been incorporated within this profile to meet the requirements of both planning efforts. Adoption by each respective planning partner also signifies their adoption of this portion of the plan as their CWPP (unless identified otherwise by a planning partner who has a separate document which they are utilizing as their CWPP).

A wildfire is any uncontrolled fire on undeveloped land that requires fire suppression. Wildfires can be ignited by lightning or by human activity such as smoking, campfires, equipment use and arson. Wildfires occur when all of the necessary elements of a fire come together in a wooded or grassy area: an ignition source is brought into contact with a combustible material such as vegetation that is subjected to sufficient heat and has an adequate supply of oxygen from the ambient air.

A wildfire front is the portion of a wildfire sustaining continuous flaming combustion, where unburned material meets active flames. As the front approaches, the fire heats both the surrounding air and woody material through convection and thermal radiation. First, wood is dried as water in it is vaporized. Next, the wood releases flammable gases. Finally, wood can smolder and ignite. Before the flames of a wildfire arrive at a particular location, heat transfer from the wildfire front will warm the air, which pre-heats and dries flammable materials, causing them to ignite faster and allowing the fire to spread faster. High temperature and long-duration surface wildfires may encourage flashover or *torching*: the drying of tree canopies and their subsequent ignition.

Large wildfires may affect air currents by the stack effect: air rises as it is heated, so large wildfires create powerful updrafts that draw in new, cooler air from surrounding areas in thermal columns. Great vertical differences in temperature and humidity encourage fire-created clouds, strong winds and fire whirls with the force of tornadoes at speeds of more than 50 mph. Rapid rates of spread, prolific crowning or spotting, the presence of fire whirls, and strong convection columns signify extreme conditions.

10.1.1 Purpose

In response to several significant fires occurring throughout the United States from 1995 to 2000, in 2009, Congress passed the Federal Land Assistance, Management, and Enhancement Act (FLAME Act), which directed the U.S. Department of Agriculture (USDA) and the Department of Interior (DOI) to develop a national cohesive wildland fire management strategy. The Cohesive Strategy is centered around three goals to achieve its vision:

What are the benefits of developing a CWPP?

- *Reducing the direct and indirect social, economic, and environmental costs of wildfire.*
- *Coordinating wildfire risk reduction with other community values and priorities.*
- *Bringing together diverse interests to tackle local wildfire challenges and opportunities.*
- *Identifying potential resources and funding for mitigation activities.*
- *Increasing community awareness and engagement in risk reduction.*

1) Restore and maintain landscapes: Landscapes across all jurisdictions are resilient to fire-related disturbances in accordance with management objectives.
2) Fire adapted communities: Human populations and infrastructure can withstand a wildfire without loss of life and property.
3) Wildfire response: All jurisdictions participate in making and implementing safe, effective, efficient, risk-based wildfire management decisions.

In furtherance of that strategy, in a 2012 USFS Technical Report NRS-89, it was recommended that a Community Wildfire Protection Plan should fit into the larger picture of planning for natural disasters as a best practice. As such, it was recommended that a CWPP should be incorporated within the Natural Hazards Mitigation Plan. Benefits illustrated in the report include the use of "a variety of data already collected" for the HMP process, making it "easier to link the CWPP to other planning efforts."[39] As such, for ease in use and to reduce redundant information, certain areas of this plan will reference sections of the 2026 Hazard Mitigation Plan. Those areas should be considered as though they are fully incorporated within the body of this document.

Spokane County and its planning partners recognize the potential for significant loss of life, property, cultural and natural resources from wildland fire. In an effort to align with the Cohesive Strategy, Spokane County stakeholders expressed an interest in formally organizing this CWPP process, and a coalition of stakeholders was formed, which undertook its development. Spokane County Emergency Management began the process of local-area public outreach to establish FireWise Communities throughout the County, conducting various public outreach efforts defined in Chapter 2. This alignment reinforces the importance of collaboration among all local, state, tribal, and federal partners, and helps organize the multi-faceted nature of wildfire topics and mitigation strategies under the most appropriate goal. This CWPP identifies communities at

[39] USFS. (2012). Accessed 6 May 2024. Available on-line at: Best management practices for creating a community wildfire protection plan (usda.gov)

risk, identifies fuel treatments as a priority strategy, and further recommends ways to reduce structural ignitability by developing risk-reducing strategies at the community-level based on capabilities.

10.1.2 History

Community Wildfire Protection Plans have been in place since shortly after the Healthy Forests Restoration Act (HFRA) was signed into law in 2009. HFRA legislation included incentives for the United States Forest Service (USFS) and the Bureau of Land Management (BLM) to give consideration to local community priorities when developing forest management and hazardous fuels reduction projects.

The National Cohesive Wildland Fire Management Strategy is a collaborative process to seek national, all-lands solutions to wildland fire management issues.[40] The Cohesive Strategy has a long list of goals and performance measures establishing a common understanding among all entities interacting in the wildland-urban interface. The Cohesive Strategy required that all wildland fire protection entities assist in the development and implementation of Community Wildfire Protection Plans and comparable land resource management plans to create fire-adaptive communities.

In 2023, the Wildland Fire Leadership Council presented an Addendum to the strategy to identify critical emphasis areas and challenges which were not previously identified or addressed in the 2014 National Cohesive Wildland Fire Management Strategy framework to now include:[41]

1. Climate change;
2. Workforce capacity, health, and well-being;
3. Community resilience (preparation, response, and recovery); and
4. Diversity, equity, inclusion, and environmental justice.

CWPPs are the primary tools that communities use to prioritize wildfire risk reduction and resilience. They can bring together multiple sources of information, activities, and interests into one document, while focusing on the reduction activities at the local, community level.

There are three minimum requirements for a CWPP according to HFRA:

1. Show collaboration between tribal, local, and state agencies, in consultation with federal agencies and other interested parties;
2. Identify and prioritize fuel treatments to reduce hazardous fuel areas; and
3. Recommend strategies to reduce the ignitibility of structures.

[40] U.S. Forest Service. Accessed 6 May 2024. Available online at: The National Cohesive Wildland Fire Management Strategy and Risk Analysis – Phase III Report (forestsandrangelands.gov)

[41] U.S. Forest Service. Accessed 2 September 2025. National Cohesive Wildland Fire Management Strategy Addendum Update (forestsandrangelands.gov) (2023 Update)

Those requirements have been met through this HMP process. While CWPPs are not legally binding documents, given changing climate conditions and national budgets, they are an effective local tool to help communities plan for unknowns with respect to wildfire, while increasing wildfire resilience through established mitigation strategies that provide long-term benefits.

10.1.3 Scope

The landscape for the planning area boundary was established to include all of the properties within Spokane County distributed through the wide-spread areas of the wildland-urban interface - utilizing the same defined planning area boundaries as those identified in the Hazard Mitigation Plan to which this document is a component. This includes all planning partner areas.

This CWPP is a strategic document that assesses the countywide landscape, identifying areas with fire risk based on available wildfire information from the various subject matter experts such as Washington State Department of Natural Resources (WDNR), and the U.S. Forest Service (USFS) and the U.S. Department of Agriculture (USDA), among others. The intent is to provide generalized information and over-arching strategies with the expectation that local fire service agencies, CWPP coordinators, and the communities with which they work focus on their immediate areas of concern, identifying additional assets or values at risk and strategies to reduce the potential for and impact from wildfires within their specific communities as each community has its own unique qualities. It is a starting point for additional community input in the quest to establish more resilient communities. This provides all of the communities with the ability to customize their approach based on the community's unique needs and capabilities.

Similar to the HMP development process, a CWPP also utilizes a collaborative process involving various organizations and agencies described in Chapter 2 of this document. The CWPP planning process included five steps:

1. Collection of data about the extent and periodicity of hazards.
2. Observations and estimations about risks, structures and infrastructure to risk areas, access, and potential treatments.
3. Mapping or identification of data relevant to pre-disaster mitigation control and treatments, structures, resource values, infrastructure, risk assessments, and related data.
4. Facilitation of public involvement utilizing a public survey, news release, public meeting, public review of draft documents, and acknowledgement of the final plan by the signatory representatives.
5. Final drafting of the report compiling the first four steps into one final document.

10.1.4 Fire Management Planning Philosophy

The goals of this planning process provide for the integration of the County's update to the Hazard Mitigation Plan, National Fire Plan, the Washington Statewide Implementation Strategy,

the National Association of State Foresters guidelines, and the Healthy Forests Restoration Act. This CWPP is compatible with the guidelines proposed in those documents. Likewise, this effort will utilize the best and most appropriate science from all partners and integrate local and regional knowledge about wildfire risks and fire behavior while meeting the needs of local citizens, the regional economy, and the significance of this region to the rest of Washington and the Inland Northwest.

The objective of combining these guidelines is to facilitate an integrated wildland fire risk assessment, identify pre-hazard mitigation activities, and prioritize activities and efforts to achieve the protection of people, structures, the environment, and significant infrastructure in Spokane County while facilitating new opportunities for pre-disaster mitigation funding and cooperation.

10.1.5 CWPP Goals

In addition to the Hazard Mitigation Plan Goals identified in Chapter 12, the specific goals of this CWPP are to:

- Prioritize the protection of people, structures, infrastructure, natural resources, and unique ecosystems that contribute to and enrich the lives of the population, and the sustainability of the local and regional economy.
- Support opportunities for meaningful discussions among community members, land developers, homeowner's associations, local, state, tribal, and federal agency representatives regarding priorities for local fire protection, wildfire prevention and mitigation efforts, and forest management practices.
- Strategically prioritize locations to improve suppression opportunities for private, state and federal lands, and moderate fire behavior close to values at risk through vegetation manipulation and appropriate prescribed fire with the intent of reducing wildfire intensity.
- Reduce the area of WUI land burned with moderate to high severity and losses experienced as a result of wildfires threatening communities in the wildland-urban interface.
- Encourage private landowners to take proactive mitigation approaches, which focus on wildfire resistant construction materials, defensible space, and community preparedness while recognizing equitable access to opportunities.
- Improve awareness of wildland fire threats and vulnerabilities, as well as eligibility for funding assistance to reduce the risk and better prepare residents for wildfire situations, while also enhancing fire agency response capabilities.

10.1.6 Limitations and Restrictions

Wildfire planning is a precise science. During an active fire, data changes frequently based on weather, topography, wind, vegetation, previous wildfires, accessibility to areas, land use, and available resources used for firefighting, among other factors. Likewise, the landscape in Spokane County changes regularly, making annual review of this hazard profile paramount.

This project presents existing data developed by various subject-matter expert agencies (as referenced and cited) to identify areas where wildfires may occur based on established criteria. As this plan remains in place for five years before its next significant update, the websites and data referenced and utilized within this profile should be reviewed regularly by readers.

During the final stages of this HMP/CWPP update, the County was notified that Washington State Department of Natural Resources is in the process of completing a new study focusing on their previous risk data, some of which is contained in this plan. As such, reviewers are encouraged to check DNR's website to ensure they are reviewing the most up-to-date information, allowing readers the ability to view new data, which many times, is also presented in different formats. Readers are encouraged to review the various sources referenced to gain greater understanding and perspective of the data presented.

10.2 GENERAL BACKGROUND

10.2.1 Wildland-Urban Interface Areas

In 2001, Congress mandated the establishment of a Federal Register which identifies all urban wildland interface communities within the vicinity of Federal lands, including Indian trust and restricted lands that are at high-risk from wildfire. The list assimilated information provided from States and Tribes and is intended to identify those communities considered at risk. Review of the Federal Registry list identified only "Fairchild" as a community at risk when the list was originally established in 2001.[42]

The wildland urban-interface (WUI) is the area where development meets wildland areas. This can mean structures built in or near natural forests, or areas next to active timber and rangelands. The federal definition of a WUI community is *an area where development densities are at least three residential, business, or public building structures per acre. For less developed areas, the wildland-intermix community has development densities of at least one structure per 40 acres.* Spokane County does have identified WUI Communities.

Figure 10-1 identifies the WUI boundaries throughout Spokane County as established by the U.S. Forest Service (USFS). Figure 10-2 identifies the WUI boundaries throughout Spokane County as

[42] https://www.federalregister.gov/documents/2001/01/04/01-52/urban-wildland-interface-communities-within-the-vicinity-of-federal-lands-that-are-at-high-risk-from

established by the Washington State Department of Natural Resources (2019 last update). Because Wildland Urban Interface maps are based primarily on population density as described, all of the communities and the populated areas surrounding the defined WUI are within the Spokane County Wildland-Urban Interface.

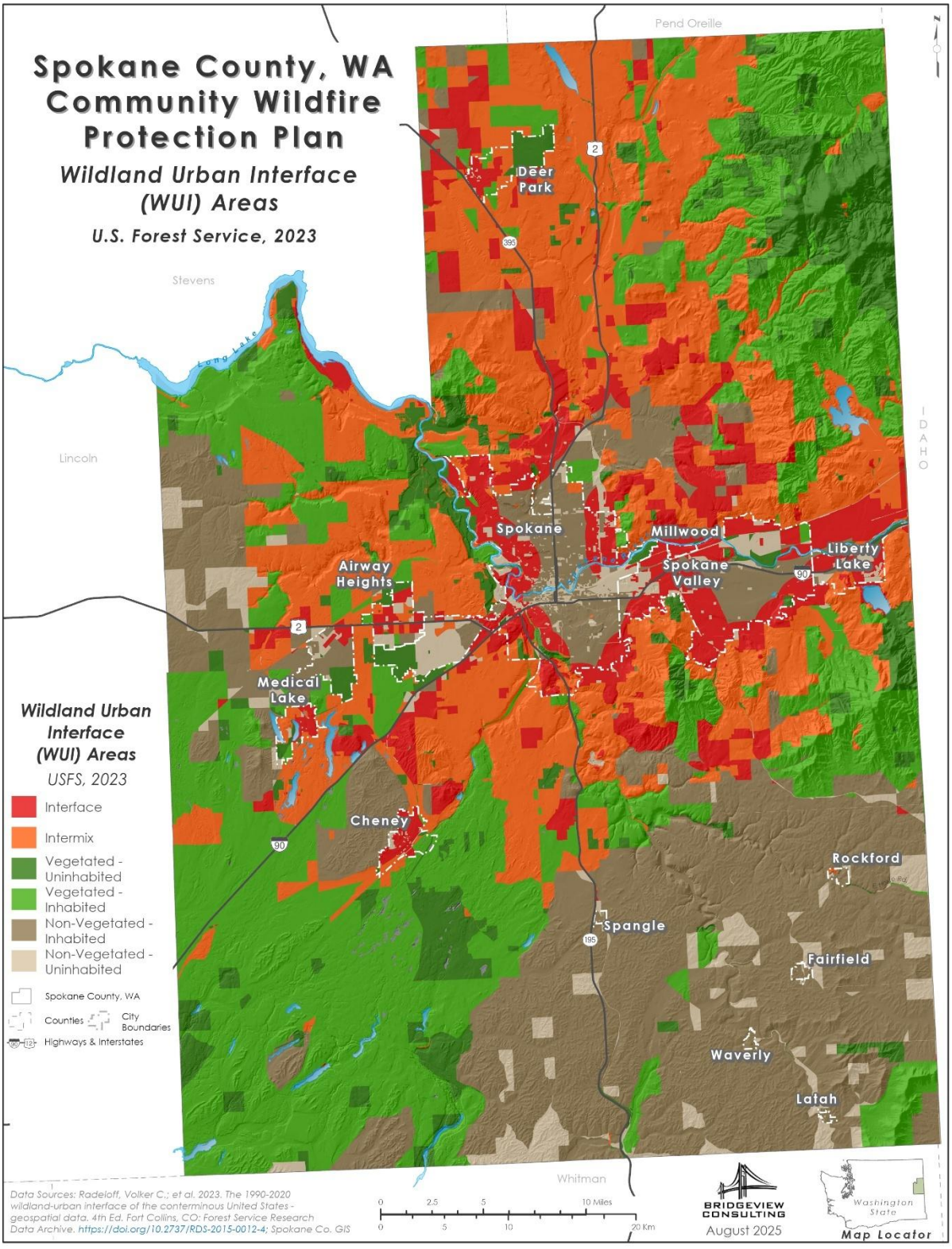


Figure 10-1 USFS Wildland Urban Interface Area for Spokane County (2023)

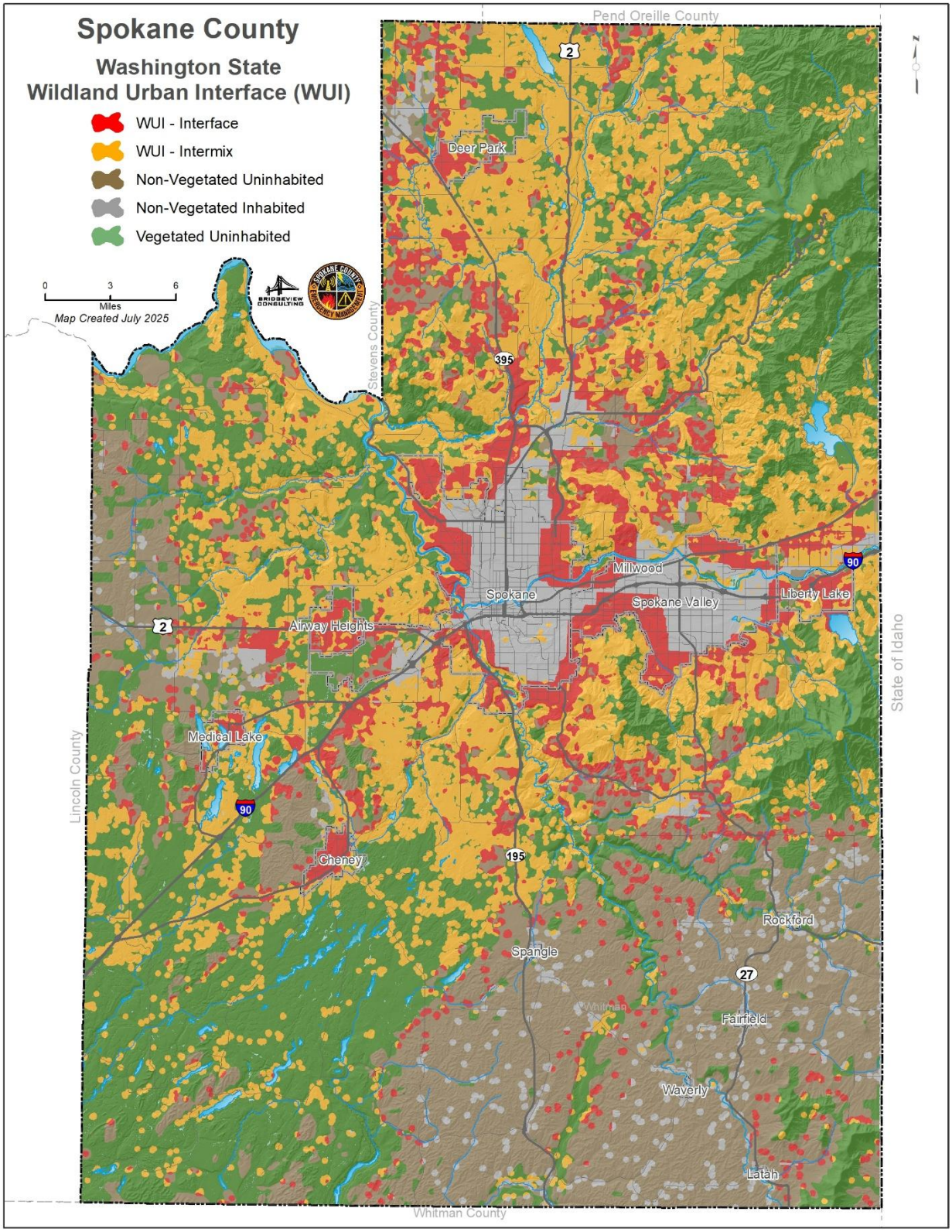


Figure 10-2 WUI Area Defined by WA DNR Data (2019)

10.2.2 Identifying Wildfire Risk

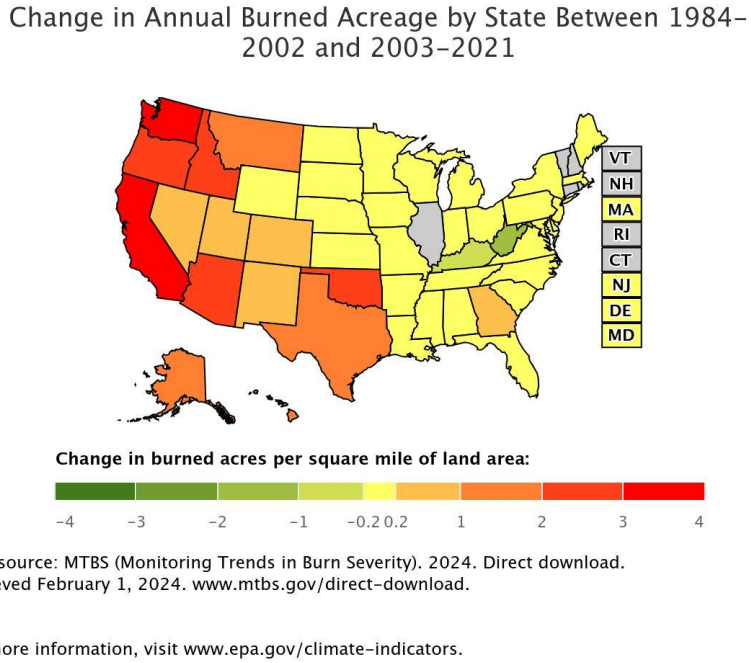


Figure 10-3 US EPA Change in Burned Acreage by State

The wildfire season has been extended in many areas due to factors including warmer springs, longer summer dry seasons, and the resulting drier soils and vegetation. Similarly, climate change has increased the frequency, extent, and severity of fires through higher temperatures and expanded drought.[43] Within Washington, as Figure 10-3 identifies, the U.S. Environmental Protection Agency estimates that the extent of burned land increased by 3.52 acres per square mile of land area in 2003-2021 as compared to 1984-2002 (ibid). Though the County has always faced the threat of wildfires, that threat is also increased as a result of population growth and population location. It has been estimated that 1 in 6 Americans now live in areas of significant wildfire risk.[44]

Risk to communities is generally determined by the number, size and types of wildfires that have historically affected an area; topography; fuel and weather; suppression capability of local and regional resources; where and what types of structures are in the WUI; and what types of pre-fire mitigation activities have been completed.

When identifying areas of fire concern, in addition to the Federal Register, the Washington Department of Natural Resources and its federal partners also determine communities at risk based on fire behavior potential, fire protection capability, and risk to social, cultural and community resources. These risk factors include areas with fire history, the type and density of vegetative fuels, extreme weather conditions, topography, number and density of structures and their distance from fuels, location of municipal watersheds, and likely loss of housing or business.

[43] United States EPA. July 2022. Climate Change Indicators: Wildfire. Accessed 2 Sept. 2025. Available at: Climate Change Indicators: Wildfires | US EPA

[44] Muyskens, John. Andrew Ba Tran, et al. 1 in 6 Americans live in areas with significant wildfire risk | The Seattle Times May 17, 2022.

Wildfires can occur on any lands—private, state, tribal, and federal land. Fires can spread across these multiple land ownerships. As a result, wildland firefighting is by necessity most often a multi-agency effort. Efforts to reduce the likelihood of a fire and its intensity (related to fuels and topography) can have significant consequences on homeowners and firefighter safety, as well as on the built environment, especially homes.

As with many hazards, wildfires do not respect property boundaries, burning across various types of land ownership (e.g., private, federal, state, tribal, etc.). Efforts to mitigate the likelihood or intensity of wildfires can have significant impact on lands and properties. Fuel treatments on specific lands can help lower the intensity of a wildfire, reducing the risk to surrounding homes and property.

One of the biggest land ownerships in the county is the U.S. Forest Service (USFS). Application of mitigation efforts on the USFS lands could help reduce impact on surrounding properties. At the local level, municipalities can help reduce the susceptibility of homes to wildfire through things such as land use planning or the application of building codes. Homeowners can focus on the areas immediately surrounding their homes by landscaping, or placing screens on eave vents, thereby reducing fuel sources or the spread of fire by limiting ignition by embers.

Figure 10-4 identifies land ownership throughout the county, as well as fuels reduction efforts recently completed, or currently in place for completion during the life cycle of this plan. Chapter 3 further identifies the existing land use throughout the county.

Chapter 16 identifies capabilities in place to help reduce the impact of wildfire. When viewing the capabilities in place, social, and economic factors must also be reviewed, as those elements can make it more difficult for some people to prepare for, respond to, and recover from wildfire. Vulnerable populations may lack access to resources, experience cultural and institutional barriers, have limited mobility, limited ability to speak or understand English, or have medical conditions which can influence their response to wildfire. Chapter 3 also discusses vulnerable populations throughout the county. Each municipal planning partner also has its own information concerning their capabilities in place within their respective annex documents contained in Volume 2.

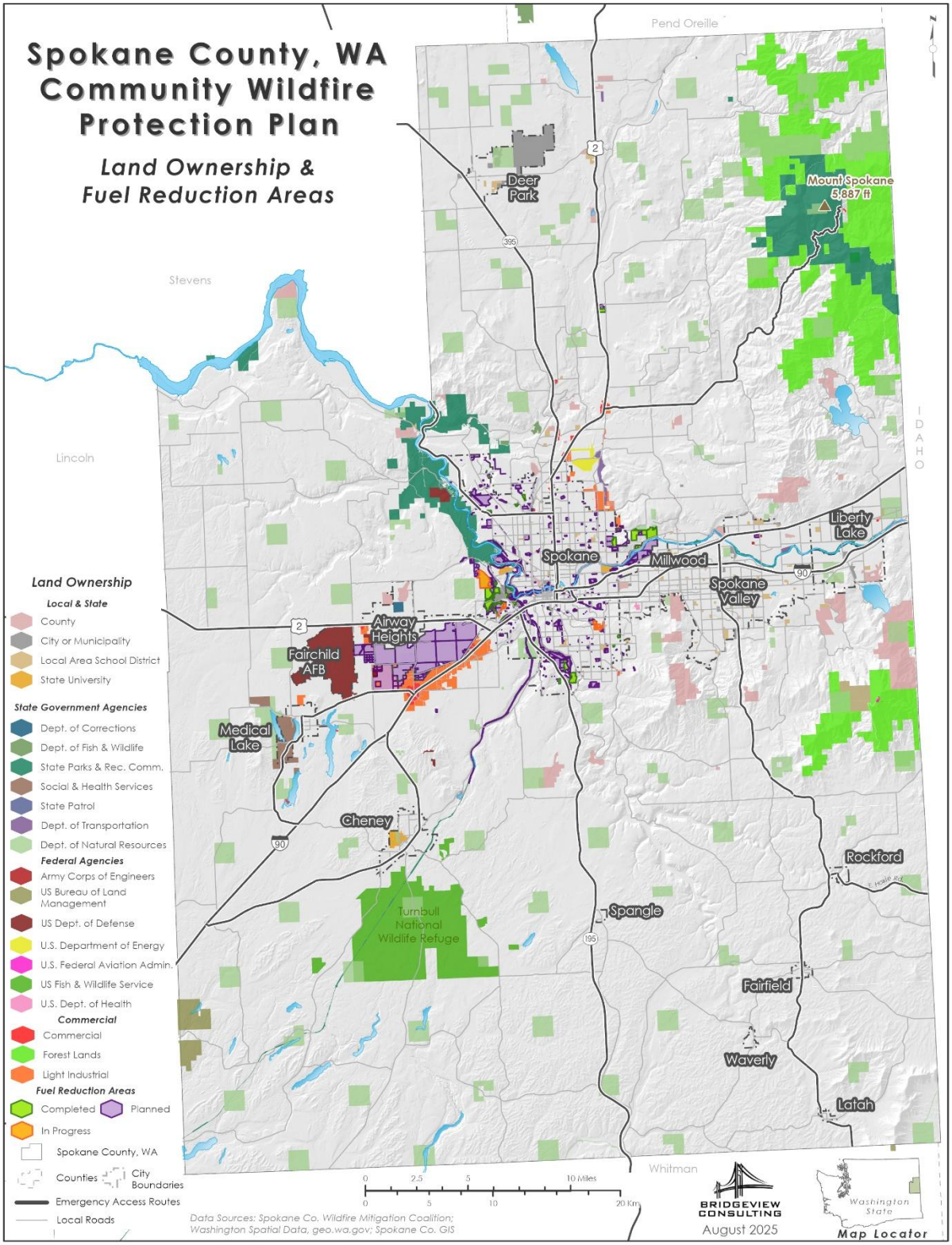


Figure 10-4 Land Ownership and Fuel Reduction Areas

10.2.3 Wildfire Behavior

The wildfire triangle (see Figure 10-5) is a simple graphic used in wildland firefighter training courses to illustrate how the environment affects fire behavior. Each point of the triangle represents one of three main factors that drive wildfire behavior: weather, vegetation type (which firefighters refer to as "fuels"), and topography.

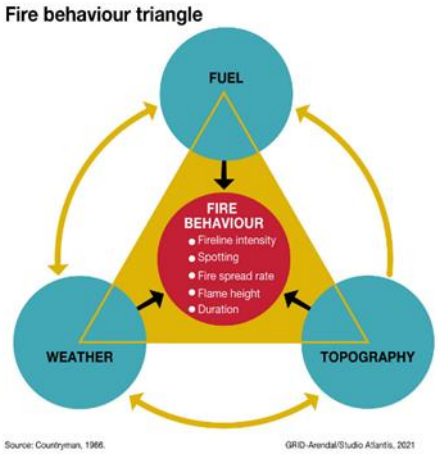


Figure 10-5 Wildfire Behavior Triangle

The following are key factors affecting wildfire behavior:

- **Fuel**—Lighter fuels such as grasses, leaves and needles quickly expel moisture and burn rapidly, while heavier fuels such as tree branches, logs and trunks take longer to warm and ignite.
    - Another essential factor is fuel moisture. Fuel moisture is expressed as a percentage of total saturation and varies with antecedent weather. Low fuel moisture indicates the probability of severe fires. Given the same weather conditions, moisture in fuels of different diameters changes at different rates. For example, a 1,000-hour fuel, which has a 3- to 8-inch diameter, changes more slowly than a 1- or 10-hour fuel.
- **Weather** - Of all the factors influencing wildfire behavior, weather is the most variable. Extreme weather leads to extreme events, and it is often a moderation of the weather that marks the end of a wildfire's growth and the beginning of successful containment. Relevant weather conditions include temperature, relative humidity, wind speed and direction, cloud cover, precipitation amount and duration, and the stability of the atmosphere.
    - High temperatures and low humidity can produce vigorous fire activity. The cooling and higher humidity brought by sunset can dramatically quiet fire behavior.
    - Fronts can produce winds that are capable of radical and sudden changes in speed and direction, causing changes in fire activity. The rate of spread of a fire varies directly with wind velocity. Winds play a dominant role in directing the course of a fire. The radical and devastating effect that wind can have on fire behavior is a primary safety concern for firefighters. The most damaging firestorms are usually marked by high winds. Such winds generally reach peak velocities during the night and early morning hours. East wind events can persist up to 48 hours, with wind speed reaching 60 miles per hour. The radical and devastating effect that wind can have on fire behavior is a primary safety concern for firefighters.

  - The thunderstorm season typically begins in June with wet storms and turns dry with little or no precipitation reaching the ground as the season progresses into July and August.

- **Topography—** Topography can have a powerful influence on wildfire behavior. Topography includes slope, elevation, and aspect. The topography of a region influences the amount and moisture of fuel; the impact of weather conditions such as temperature and wind; potential barriers to fire spread, such as highways and lakes; and elevation and slope of landforms (fire spreads more easily uphill than downhill).
  - The movement of air over the terrain tends to direct a fire's course. Gulches and canyons can funnel air and act as a chimney, intensifying fire behavior and inducing faster rates of spread. Saddles on ridge tops offer lower resistance to the passage of air and will draw fires. Solar heating of drier, south-facing slopes produces upslope thermal winds that can complicate behavior.
  - Slope is an important factor. If the percentage of uphill slope doubles, the rate of spread of wildfire will likely double. On steep slopes, fuels on the uphill side of the fire are closer physically to the source of heat. Radiation preheats and dries the fuel, thus intensifying fire behavior. Fire travels downslope much more slowly than it does upslope, and ridge tops often mark the end of wildfire's rapid spread.

- **Critical Facilities/Asset Location -** A spatial inventory of assets—including homes, roads, fire stations, and natural resources that need protection—in relation to wildfire hazard helps prioritize protection and mitigation efforts.
- **Time of Day**—A fire's peak burning period generally is between 1 p.m. and 6 p.m.
- **Forest Practices—**In densely forested areas, stands of mixed conifer, hardwood and softwood stands that have experienced thinning or clear-cut provide an opportunity for rapidly spreading, high-intensity fires that are sustained until a break in fuel is encountered.

Fires can be categorized by their fuel types as follows:

- **Ground fires** - Fed by subterranean roots, duff and other buried organic matter, this fuel type is especially susceptible to ignition due to spotting. Ground fires typically burn by smoldering and can burn very slowly for extended periods.
- **Smoldering**—Involves the slow combustion of surface fuels without generating flame, spreading slowly and steadily. Smoldering fires can linger for days or weeks after flaring has ceased, resulting in potential large quantities of fuel consumed. They heat the duff and mineral layers, affecting the roots, seeds, and plant stems in the ground. These are most common in peat bogs but are not exclusive to that vegetation.

- **Crawling**—Surface fires that consume low-lying grass, forest litter and debris.
- **Ladder**—Fires that consume material between low-level vegetation or forest floor debris and tree canopies, such as small trees, low branches, vines, and invasive plants.
- **Crown**—Fires that consume low-level surface fuels, transition to ladder fuels, and also consume suspended materials at the canopy level. These fires can spread rapidly through the top of a forest canopy, burning entire trees, and can be extremely dangerous (sometimes referred to as a "Firestorm").

Wildfires may spread by jumping or spotting, as burning materials are carried by wind or firestorm conditions. Burning materials can also jump over roadways, rivers, or even firebreaks and start distant fires. Updraft caused by large wildfire events draw air from surrounding area, and these self-generated winds can also lead to the phenomenon known as a firestorm.

Forestlands in the planning area are susceptible to disturbances such as those caused by logging slash accumulation, forest debris accumulations due to weather damage, and periods of drought and high temperature, which create additional fuels. Forest debris from western red cedar, western hemlock, and Sitka spruce can be especially problematic and at risk to wildfires when slash is accumulated on the forest floor, because such debris resists deterioration. When ignited, these fuels can be explosive and serve as ladder fuel carrying fire from the surface to the canopy.

Based on these criteria, the U.S. Forest Service has identified several areas in Spokane County considered to be at high risk for wildfires as identified in Figure 10-6.

Ignition (Direct and Indirect) and Conflagration

Buildings ignite during wildfires as a result of one or more of the three basic wildfire exposures, which include:

- Embers (or Firebrands) are small pieces of burning material that can travel more than a mile ahead of a wildfire. They can create spot fires when they land on combustible materials, such as leaves in gutters or plants beneath windows.
- Radiant heat generated from burning structures or plants can be hot enough to ignite a structure without direct flame contact. This is very challenging in densely populated areas, where the heat from one burning home or structure can ignite the next.
- Direct flame, depending on time and exposure, can ignite a structure. The flaming front of a wildfire is often not hot enough to ignite a structure, but plants under windows ignited by embers or direct flame can break glass, allowing the fire to enter the house.

Embers are light enough to be blown through the air and can result in the rapid spread of wildfire by spotting, during which embers are blown ahead of the main fire, starting other fires. Should these embers land on or near a structure or other type of fuel, they could easily ignite nearby vegetation or accumulated materials, entering a structure attic through openings or vents and igniting furnishing or combustible materials in those locations.

Near-home ignitions will subject some portion of a structure or home to either a direct flame contact exposure, where the flame touches a structure, or a radiant heat exposure, which is the heat felt when standing next to a campfire or fireplace. If the fire is close enough to a combustible material, or the radiant heat is high enough, an ignition will result. Even if the radiant exposure is not large enough or long enough to result in ignition, it can preheat surfaces, and, thus, make them more vulnerable to ignition from a flame contact exposure. With any one of these exposures, if no one is available to extinguish the fire and adequate fuel is available, the initially small fire will grow into a large one.

One misconception about the loss of a structure during wildfires is that the loss occurs as the main body of the fire passes. Research and observations during wildfires have both shown that the main flame front moves through an area in a very short time, customarily anywhere between 1 to 10 minutes, depending on the vegetation type. Homes do not spontaneously ignite—they are lost because of the growth of initially small fires, either in or around a home or structure. These smaller fires often lead to larger fires, or a conflagration which quickly engulfs entire areas.

In the built environment, a conflagration describes a fire that spreads quickly via structure to structure, with ignition due to radiant or convective heat, or ember transmission. An urban conflagration spreads beyond natural or artificial barriers and can destroy whole communities. The county experienced this with the 2023 Oregon and Gray fires. Occurring within forested or underdeveloped areas as well as developed areas, a conflagration is a particularly large and destructive fire. Experts say decades of suppressing fires have enabled a buildup of vegetation that is fueling larger and more frequent conflagrations in both rural and developed areas. In areas experiencing drought, the tinder-dry conditions regularly spark fear of a conflagration.

10.2.4 Wildfire Impact

The potential for significant loss of life or injuries and damage to property exists with all wildfires. Losses caused by a wildfire can include the destruction of many assets or values at risk, including homes, businesses, critical facilities and infrastructure, timber, wildlife habitat, scenic vistas, watersheds, and other natural and cultural resources, among others.

Long-term effects include smaller agricultural and timber harvests, reduced access to affected recreational areas, invasive species, and destruction of natural, cultural and economic resources and community infrastructure, among others. Vulnerability to flooding and landslides also increases due to the destruction of watersheds, which can then change the landscape of the community.

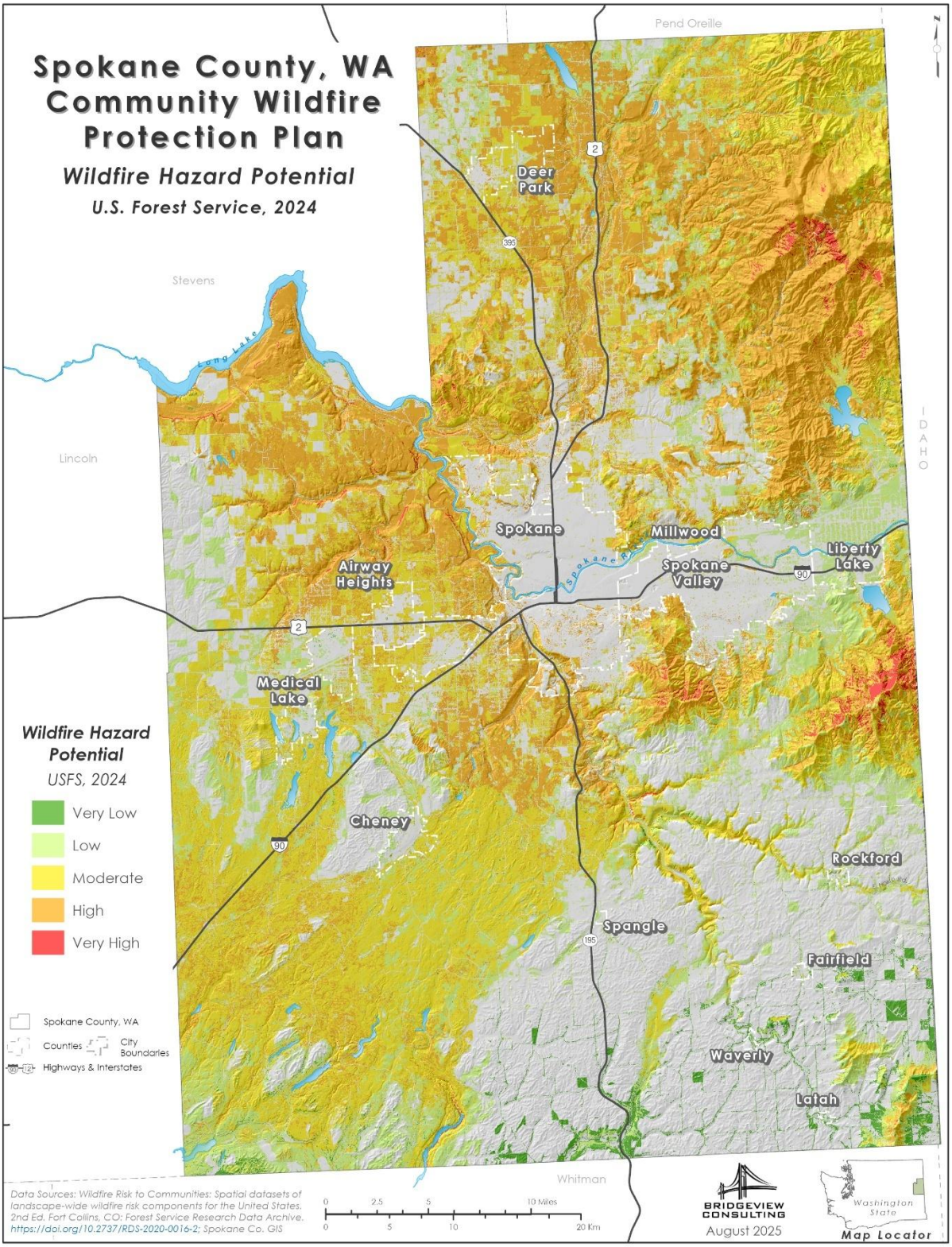


Figure 10-6. Wildland Urban Interface and Level of Risk (USFS, 2024)

10.2.5 Air Quality

Smoke and air pollution from wildfires can be a severe health hazard, especially for sensitive populations, including children, the elderly and those with respiratory and cardiovascular diseases. Spokane County has a high population of retirees and individuals over 65, further increasing the potential impact of the fire hazard. Smoke generated by wildfire consists of visible and invisible emissions that contain particulate matter (soot, tar, water vapor, and minerals), gases (carbon monoxide, carbon dioxide, nitrogen oxides), and toxics (formaldehyde, benzene). Emissions from wildfires depend on the type of fuel, the moisture content of the fuel, the efficiency (or temperature) of combustion, and the weather. Public health impacts associated with wildfire include difficulty in breathing, headache, eye irritation, and reduction in visibility (when driving). Wildfire also threatens the health and safety of those fighting fires, as well as those assisting with evacuation in high-hazard areas. First responders are exposed to the dangers from the initial incident and after-effects from smoke inhalation and heat stroke. Additional information on smoke impact is available in Section 10.4.4 – Severity.)

10.3 SECONDARY HAZARDS

Wildfires can generate a range of secondary effects, which in some cases may cause more widespread and prolonged damage than the fire itself. Fires can cause direct economic losses in the reduction of harvestable timber and indirect economic losses in reduced tourism. Wildfires cause the contamination of reservoirs, destroy transmission lines and contribute to flooding. They strip slopes of vegetation, exposing them to greater amounts of runoff. This in turn can weaken soils and cause failures on slopes. Major landslides can occur several years after a wildfire. Most wildfires burn hot and for long durations that can bake soil, especially those high in clay content, thus increasing the imperviousness of the ground. This increases the runoff generated by storm events, thus increasing the chance of flooding.

10.4 HAZARD PROFILE

10.4.1 Extent and Location

Spokane County's fire history is a mixture of events of varying size, severity and frequency. In the dry ponderosa pine forests dominant in the lower elevations, on south aspect slopes, and along the Spokane River, fire regimes have changed from frequent, low-severity fires to less frequent, high severity or stand replacing fires. In the more mixed conifer forests (Douglas fir, grand fir, ponderosa and lodgepole pine, larch, cedar, hemlock) typical of the higher elevations, on north slopes, and dominating much of the northeastern portion of Spokane County, fires were historically less frequent, but larger. Fire severity in these landscapes was varied, with infrequent stand replacing fires.

Population growth rates have been steadily increasing throughout the County and the region. The growing appreciation for seclusion has led to significant development in the most accessible forestland areas, particularly along the river and around several of the lakes. Frequently, this development is in the dry ponderosa/Douglas-fir forest types where grass, needle and brush surface litter create forest fuel conditions that are at a high propensity for fire occurrence. Human use is strongly correlated with fire frequency, with increasing numbers of fires as use increases. Discarded cigarettes, dragging tow chains, and hot catalytic converters increase the potential for fire ignition along roadways. Careless and unsupervised use of fireworks also contributes to unwanted and unexpected wildland fires. Further contributing to ignition sources are the debris burners (burn barrels) and people who use fire to rid ditches of weeds and other burnable materials. Farming and logging equipment have also been a source of accidental ignitions. The increased potential for fire starts and the fire- prone landscapes in which homes have been constructed greatly increases the potential for fires in interface areas.

The Washington State HMP does identify Spokane County as being at risk to wildfire danger, identified as a "hot spot" with a 99% confidence level to be prone to large fires in the future (WA State 2023 HMP, p. 76). This is also confirmed by the Washington State Department of Natural Resources, and all of the fire service agencies within the county.

Given the county's mixed land use complexity, including densely wooded areas, and proximity to large park systems (both federal and state), the entire region is susceptible to impact from wildfire, either as a direct result, or as a secondary result from health or economic impact.

Portions of Spokane County are more sparsely populated than other areas of the county, with larger tracts of land. Many areas also have a lower median household income, with higher rates of poverty when compared to the other areas of the state, potentially leading to increased vulnerability to wildfire risk. (See Chapter 3, Section 3.5 for demographic and income data.)

Figure 10-6 (above) identifies the wildfire hazard potential based on USFS data. Figure 10-7 identifies the *Wildfire Risk to Homes* as presented in the USDA's Wildfire Risk to Communities data.[45] The data measures the relative consequence of wildfire to residential structures everywhere on the landscape, whether a home actually exists or not. *Wildfire Risk to Homes* allows us to consider wildfire risk in places with homes in addition to places where new construction is proposed (future land use). Review of the data identifies the county at moderate-to-high risk level, with some areas identified as very high.

[45] Wildfire Risk to Communities data. Available at: Wildfire Risk in Spokane County, WA - Wildfire Risk to Communities

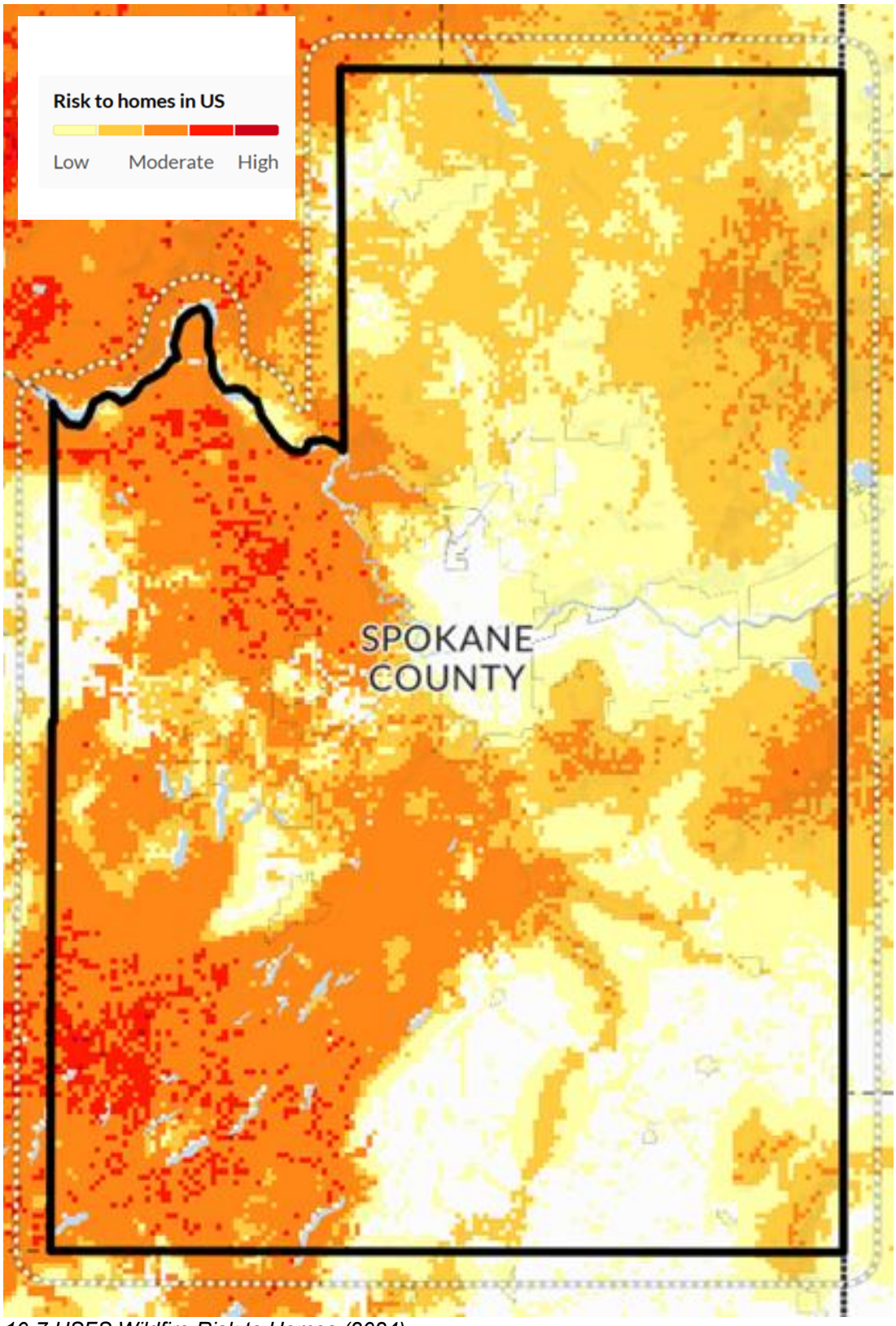


Figure 10-7 USFS Wildfire Risk to Homes (2024)

10.4.2 Previous Occurrence

Based on FEMA data, during the period 1964-2024, a total of 12 wildfires occurred in Spokane County. Since completion of the last plan (March 2019), the County has experienced four wildfires that have risen to the level of Fire Management declarations (FM-5255 – 9/8/2020 Babb Fire; FM-5395 – 7/6/2021 Andrus Fire; FM-5479 – 8/18/2024 Gray Fire; and FM-5481 – 8/18/23 Oregon Fire). There were also two fires which rose to the level of a declared disaster event (grouped as one under DR-4759), which occurred in 2023 with the Oregon and Gray Road fires.

Red flag warnings are issued when forecasts indicate that a combination of high temperatures, very low humidity and strong winds in a given location could create an environment that is conducive to dangerous fires, according to the National Weather Service (NWS). Of those fires occurring since 2020, three coincide with red flag warnings, which were issued by the NWS:

- September 7, 2020 (referred to as the Labor Day 2020 Firestorm)
- July 1 and 7, 2021
- August 17 and 18 2023, (leading to the Gray/Oregon Road fires)

A total of 34 red flag warnings were issued during the period covering 2020 through 2024, with warnings issued during the months of August (13 warnings), July (12 warnings), September (9 warnings), and June (1 warning).

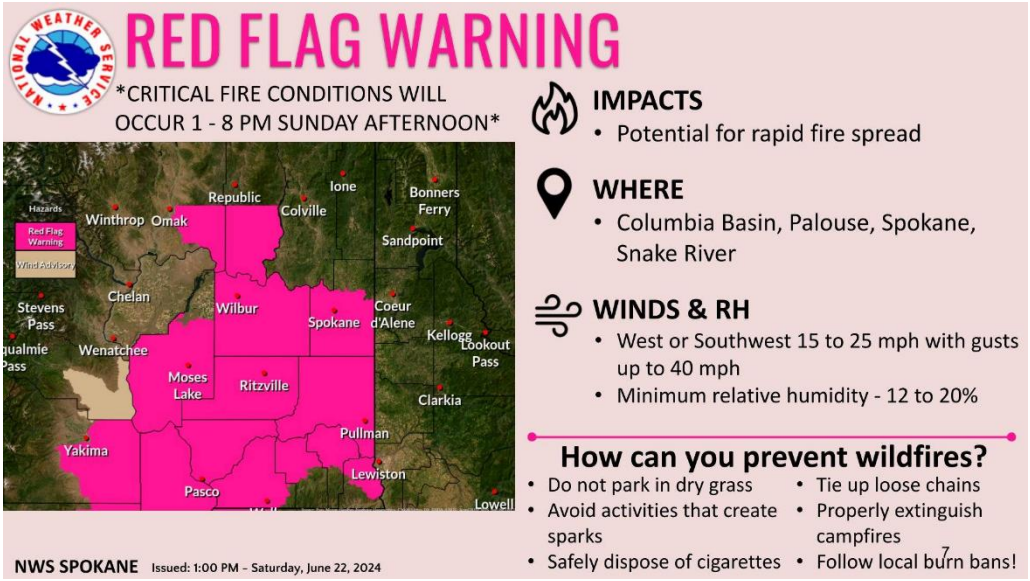


Figure 10-8 National Weather Service Red Flag Warning June. 2024

Of the red flag warnings issued, 2023 experienced 10 incidents; 2021 and 2024 each experienced seven incidents; 2022 experienced six incidents, and 2020 experienced four incidents.

Washington Department of Natural Resources' database used in this analysis includes ignition and extent data (expressed as acres) from 2020 through 2024 for wildfires occurring (see Table 10-1 and Table 10-2). For comparison purposes, Table 10-3, the 2009-2019 data, also remains in this update, although the 2024 updated data includes additional causes of fire ignition sources.

In addition to the above incidents, an analysis of the DNR-reported wildfire ignitions in Spokane County reveals that during the 2020-2024 period, there were approximately 41,232 acres burned, resulting from 1,412 ignitions.[46] Review of the 2008-2019 period indicates approximately 36,256.49 acres burned, resulting from 1,685 wildfire ignitions. This illustrates an increase in the number of acres burned, but a reduction in the actual number of fires occurring.

While statewide the number of wildfires annually has decreased over the last five years, the fire severity and acres burned has increased, causing more extensive property damage. Figure 10-9 illustrates the locations of the various wildfires occurring countywide during the 2005-2024 timeframe. Figure 10-10[47] and Figure 10-11[48] are photographs of the Gray (2023) and Oregon fires (2023).

Table 10-1.
Summary of Ignitions Starts in Spokane County 2020-2024

Cause	2020	2021	2022	2023	2024	5 Year Average	Percent
Arson	20	19	9	5	15	13.6	4.8%
Celebration	36	23	11	22	30	24.4	8.6%
Debris Burn	56	65	36	40	29	45.2	16.0%
Equip/Vehicle	18	15	27	11	29	20	7.1%
Firearms	1	1	2	3	2	1.8	0.6%
Fireworks	10	8	3	6	4	6.2	2.2%
Minor with Fire	8	5	0	1	4	3.6	1.3%
Miscellaneous	25	28	11	4	2	14	5.0%
Natural	5	10	14	12	0	8.2	2.9%
Power Generation	24	21	14	9	4	14.4	5.1%
Railroad	3	2	0	2	0	1.4	0.5%
Smoking	3	2	0	1	2	1.6	0.6%
Undetermined	135	211	139	76	79	128	45.3%
Grand Total	**344**	**410**	**266**	**192**	**200**	**282.4**	**100.0%**

[46] Data provided by Guy Gifford, Assistant Division Manager, Community Resilience Program, Wildland Fire Management Division, Washington State Department of Natural Resources (August 2025).

[47] Epperly, Emma. Spokesman Review (2023). *It was just raining fire*. Available at: 'It was just raining fire': The day the Gray fire changed a town forever

[48] Spokane Valley Fire Department.

Table 10-2.
Summary of Acres Burned in Spokane County 2020-2024

Cause	2020	2021	2022	2023	2024	5 Year Avg	Percent
Arson	5.40	12.00	26.90	8.00	320.80	74.62	0.9%
Celebration	4.62	97.60	1.40	50.30	9.30	32.64	0.4%
Debris Burn	29.79	38.21	13.30	78.85	100.80	52.19	0.6%
Equip/Vehicle	13.74	196.73	1,939.40	126.10	45.00	464.19	5.6%
Firearms	0.25	0.20	2.10	37.80	0.30	8.13	0.1%
Fireworks	0.60	2.50	0.30	4.40	0.60	1.68	0.0%
Minor with Fire	19.35	2.00	0.00	1.00	3.10	5.09	0.1%
Miscellaneous	323.34	597.40	54.60	10,825.60	0.20	2,360.23	28.2%
Natural	69.73	15.50	50.80	8.20	0.00	28.85	0.3%
Power Generation	371.60	61.30	3.20	10,077.20	1.40	2,102.94	25.2%
Railroad	11.52	14.70	0.00	0.40	0.00	5.32	0.1%
Smoking	0.47	0.30	0.00	0.10	1.90	0.55	0.0%
Undetermined	15,715.58	71.80	159.82	86.40	62.05	3,219.13	38.5%
Grand Total	**16,565.99**	**1,110.24**	**2,251.82**	**21,304.35**	**545.45**	**8,355.57**	**100.0%**

Table 10-3.
Summary of Ignitions in Spokane County 2008-2019

Cause	Acres Burned	Percent	Number of Ignitions	Percent
Arson	235.70	0.7	95	5.64%
Children	92.86	0.26	133	7.89%
Debris Burning	306.45	0.85	232	13.77%
Lightning	293.06	0.81	192	11.39%
Logging	0.63	0.00	5	0.30%
Miscellaneous	33,316.59	91.89	578	34.30%
Railroad	32.50	0.09	17	1.01%
Recreation	1141.44	3.15	198	11.75%
Smoking	43.52	0.12	41	2.43%
Under Investigation	181.29	0.50	39	2.31%
Undetermined	612.45	1.69	155	9.20%
Total	**36,256.49**	**100.00**	**1,685**	**100.00%**

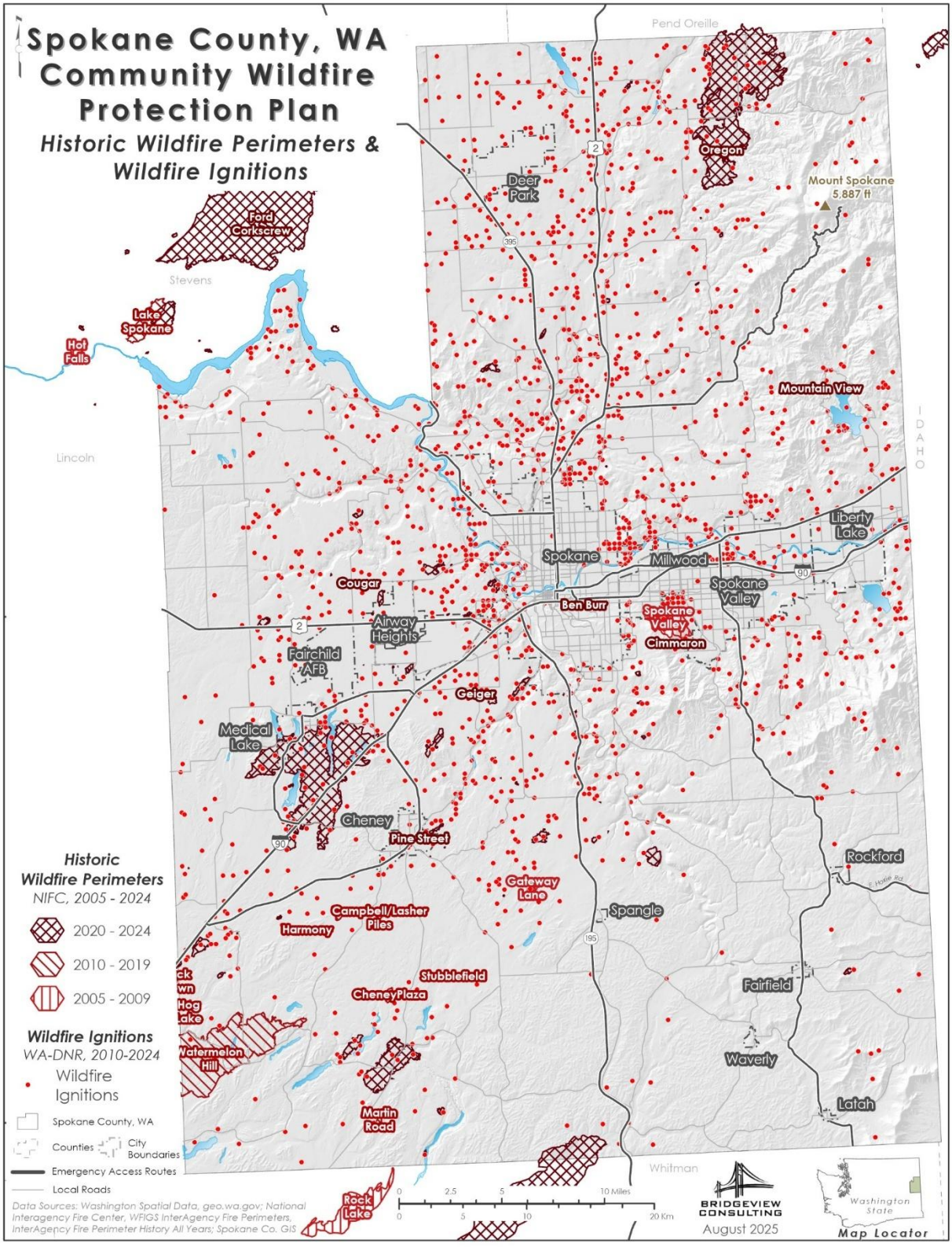


Figure 10-9 Historic Wildfire Locations 2005-2024



Figure 10-10 Gray Fire (2023)



Figure 10-11 Oregon Road Fire (2023)

10.4.3 Frequency

The State's 2023 Enhanced Hazard Mitigation Plan (EHMP) indicates a 70 percent annual probability for a wildfire declaration each year (p. 75). The demonstrated frequency of wildfires and their severity have increased significantly over the last 50 years, with large fires becoming more likely in Eastern Washington as well as Western Washington.

As previously indicated, the number of (reported) fires in the county has decreased over the course of the last five years, with 2021 seeing the highest number of fires reported since completion of the last plan.

Historically, drought patterns are related to large-scale climate patterns in the Pacific and Atlantic oceans. The El Niño–Southern Oscillation varies on a 5- to 7-year cycle, the Pacific Decadal Oscillation varies on a 20- to 30-year cycle, and the Atlantic Multidecadal Oscillation varies on a 65- to 80-year cycle. As these large-scale ocean climate patterns vary in relation to each other, drought conditions in the U.S. shift from region to region. El Niño years bring drier conditions to the Pacific Northwest and more fires. This pattern has remained consistent within Spokane County. However, we have also seen that as human development has expanded into the more fire-prone landscapes, the influence of human activities has begun to shadow climate change in effecting when and where wildfires occur, demonstrating the need to address the issue at policy or programmatic levels to address the socioeconomic influences associated with human ignitions.

Fires historically burn on a regular cycle, recycling carbon and nutrients stored in the ecosystem, and strongly affecting species within the ecosystem. Within Spokane County, while some areas are experiencing burns more frequently than previously, almost all fires have been at greater severity.[49] As human development expands further into fire-prone landscapes, the influence of human activities will impact when and where wildfire occurs, increasing both risk and vulnerability to people, property, the economy, and the environment.

The US Forest Service (USFS) and the US Department of Agriculture's (USDA) Wildfire Risk to Homes data illustrates the overall likelihood of the county experiencing a wildfire impacting residential structures is high - 82 percent greater than all counties in the United States. When compared statewide, homes in Spokane County have, on average, also have a high risk of occurrence - greater risk than 53 percent of other counties in the state to experience a

[49] The Risk to Homes data integrates wildfire likelihood and wildfire intensity from simulation modeling. Together, wildfire likelihood and intensity represent hazard. To translate this into terms specific to the effect of fire on homes, Wildfire Risk to Communities uses a generalized concept of susceptibility for all homes. In other words, Wildfire Risk to Communities assumes all homes that encounter wildfire will be damaged, and the degree of damage is directly related to wildfire intensity. Wildfire Risk to Communities does not account for homes that may have been mitigated. For more information, see: Wildfire Risk to Communities

wildfire.[50],[51] The likelihood of a wildfire occurring in the County is also 53 percent greater than other counties within Washington State (see Figure 10-12). Review of the data also indicates that the county is fairly close (within a margin of error) when reviewing the likely exposure to ignition from a direct source versus an indirect source. This means that homes are susceptible to being ignited either by adjacent flammable vegetation, or an indirect sources, such as embers causing home ignition (see Figure 10-13 and Figure 10-14).

[50] USDA, USFS – Wildfire Risk to Communities. Accessed 3 September 2025. Available online at: Wildfire Risk to Communities

[51] In calculating the Risk to Homes, USDA and USFS includes a 2.4 km or ~1.5-mile buffer around populated areas to incorporate the risk of embers.

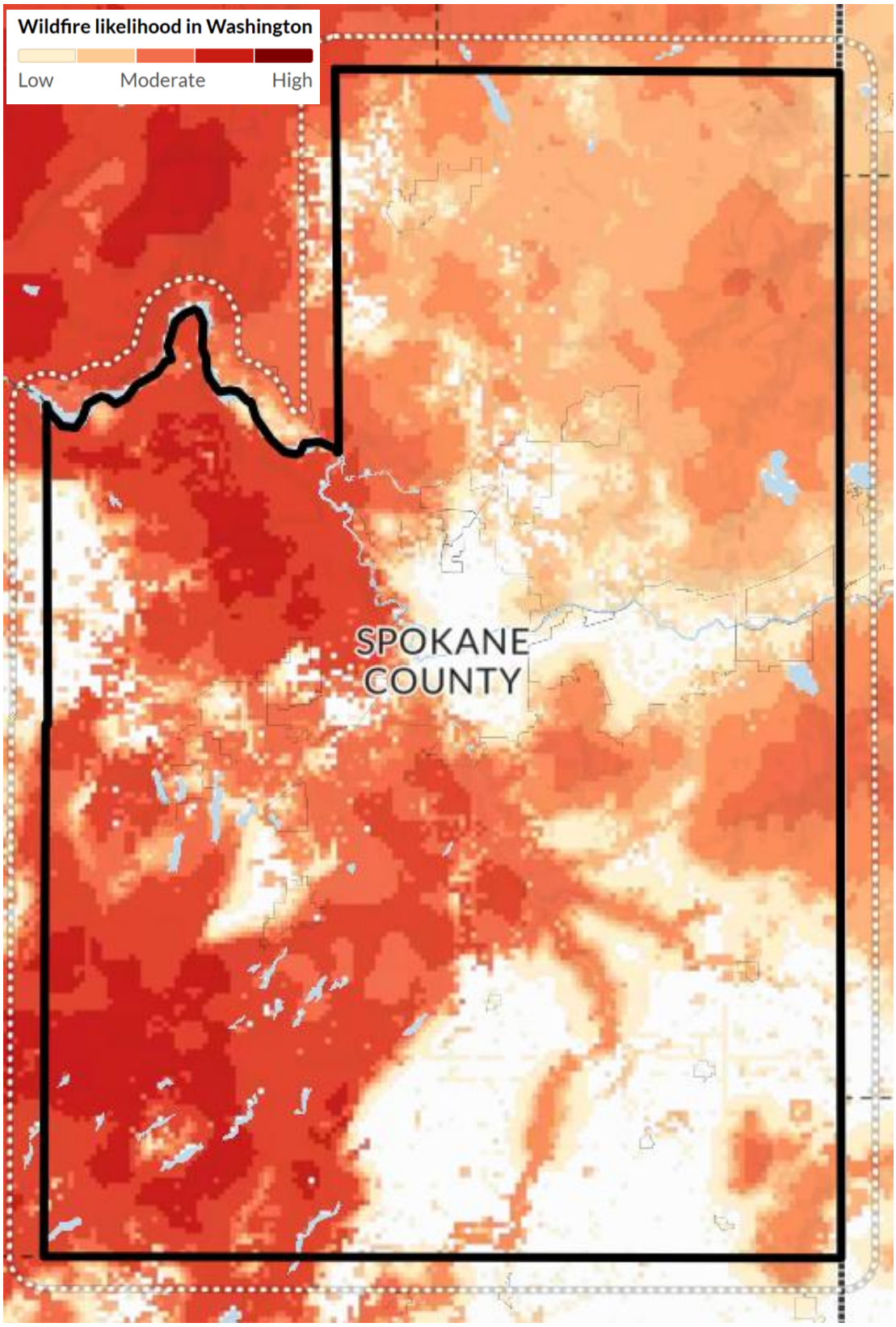


Figure 10-12 Wildfire Likelihood

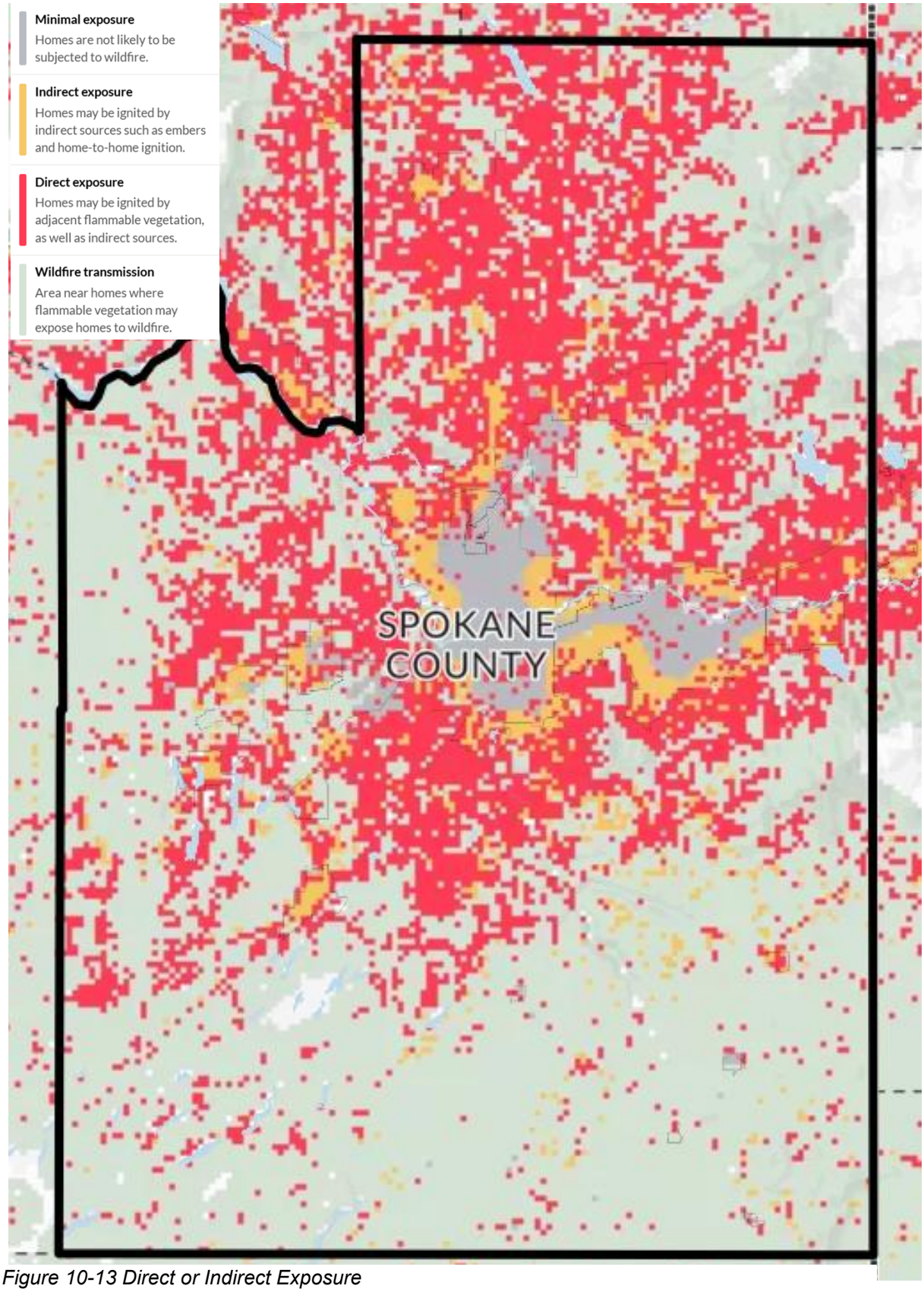


Figure 10-13 Direct or Indirect Exposure

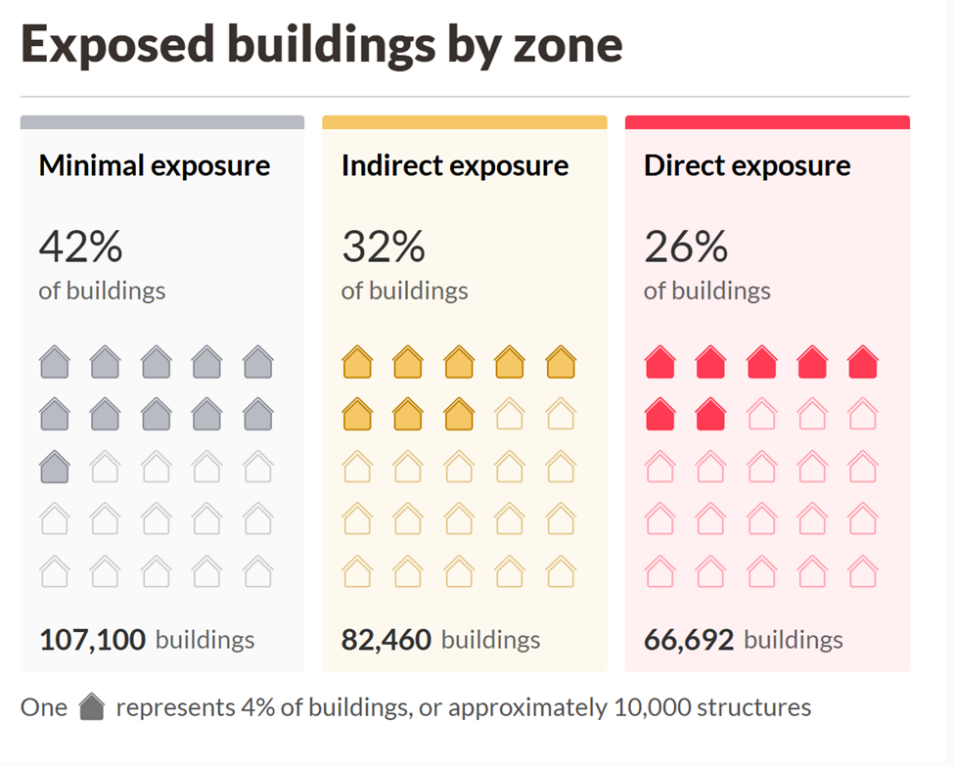


Figure 10-14 Building Exposure Zones

Landscape Fire and Resource Management Planning Tools (LandFire)

Landscape Fire and Resource Management Planning Tools is a shared program between the wildland fire management programs of the U.S. Department of Agriculture Forest Service and U.S. Department of the Interior, providing geo-spatial data and information utilized to support wildfire planning, management, and operations. The LandFire Project produces maps of simulated historical fire regimes and vegetation conditions (among others) using the LANDSUM landscape succession and disturbance dynamics model (see LandFire at Homepage | LandFire for additional information).

Historic Fire Regimes

Fire is the dominant disturbance process that manipulates vegetation patterns in Eastern Washington. The historic fire regime (HFR) data was prepared to supplement other data necessary to assess integrated risks and opportunities at regional and subregional scales. The HFR theme was derived specifically to estimate an index of the relative change of a disturbance process, and the subsequent patterns of vegetation composition and structure.

Many ecosystems are adapted to historical patterns of fire. These patterns, called “fire regimes,” include temporal attributes (e.g., frequency and seasonality), spatial attributes (e.g., size and spatial complexity), and magnitude attributes (e.g., intensity and severity), each of which have ranges of natural variability.

A fire regime refers to the frequency and intensity of natural fires occurring in various ecosystem types. Alterations of historical fire regimes and vegetation dynamics have occurred in many landscapes in the U.S. through the combined influence of land management practices, fire exclusion, insect and disease outbreaks, climate change, and the invasion of non-native plant species. Anthropogenic influences on wildfire occurrence have been witnessed through arson, incidental ignition from industry (e.g., logging, railroad, sporting activities), and other factors. Likewise, wildfire abatement practices have reduced the spread of wildfires after ignition, in theory reducing the risk to both the ecosystem and the urban populations living in or near forestlands.

LandFire's Fire Regime Groups identified in Table 10-4 provides information on the Vegetation Condition Class, the Fire Return Interval Years – Historic Fire Regimes, and impact for those associated regimes. Figure 10-15 illustrates the Fire Regimes for Spokane County.[52] Table 10-5 identifies the area/acres of each fire regime group within each municipality.

Table 10-4.
LandFire Historic Fire Regimes

Class	Vegetation Condition Class*	Historic Fire Regimes** (Fire Return Interval Years***)	Impact	Vegetation Departure (Percent)
1	1-A	0-5	Very Low	0-16
2	1-B	6-15	Low	17-33
	1-C	16-35		
3	2-A	0-5	Moderate to Low	34-50
4	2-B	6-15	Moderate to High	51-66
	2-C	16-35		
5	3-A	36-100	High	67-83
6	3-B	101-200	Very High	84-100
	4-A	36-100		
	4-B	101-200		
	V-A	201-500		
	V-B	501 or more		

* Vegetation Condition Class (VCC) represents a categorization of the associated Vegetation Departure. It indicates the general level to which current vegetation is different from the estimated modeled vegetation based on past reference conditions.
**Fire Regime Groups (FRG) characterize the presumed historical fire regimes within landscapes based on interactions between vegetation dynamics, fire spread, fire effects, and spatial context.
***Fire Return Interval (FRI) quantifies the average period between fires under the presumed historical fire regime.

[52] LandFire's Fire Regime Groups changed shortly after completion of Spokane County's 2020 HMP. The LandFire Fire Regime Groups dataset is dated 2020 but remains the most current available for this 2026 update.

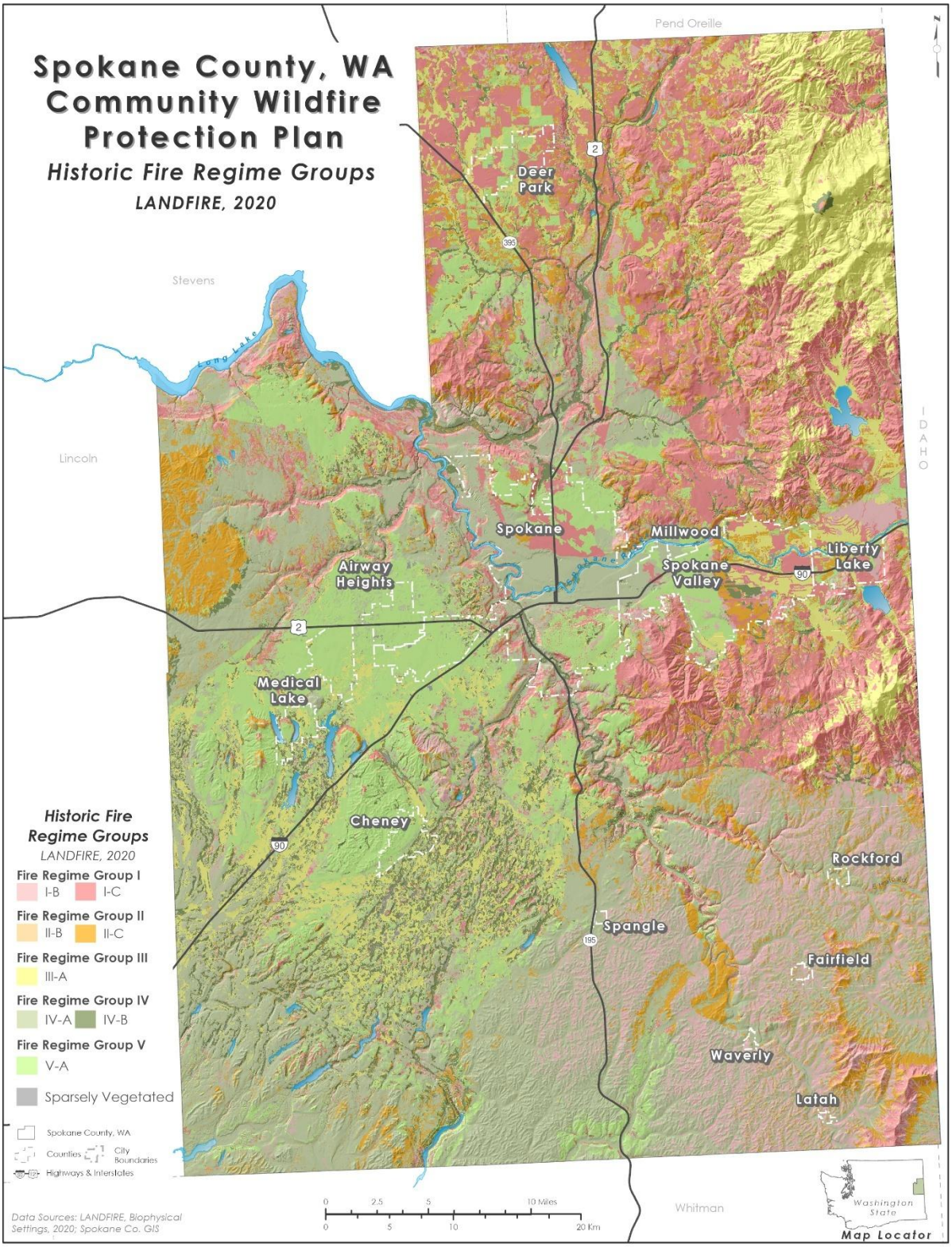


Figure 10-15 Historic Fire Regime Groups (LandFire, 2025)

Table 10-5.
LandFire - Fire Regime Group (FRG)

Area in Acres by Jurisdiction and Fire Regime Group Class*

Jurisdictions	Fire Regime Group									Total
	I-B	I-C	II-B	II-C	III-A	IV-A	IV-B	V-A	N/A	
Airway Heights	0.84	1.89			2.92	314.49	2.22	3,457.71	39.92	3,819.99
Cheney	26.30	20.96		9.38	259.76	317.59	317.08	1,816.44	29.88	2,797.38
Deer Park	9.08	2,263.24		183.61	643.85	3.29	15.01	1,471.42	18.00	4,607.50
Fairchild Air Force Base	1.53	2.88		0.51	479.32	80.73	42.36	3,603.28	3.63	4,214.23
Fairfield	184.33			41.07		169.93				395.33
Latah	88.37			13.63		102.21			0.37	204.58
Liberty Lake	475.32	1,597.44	0.67	641.02	378.83	218.17	12.16	728.48	4.44	4,056.54
Medical Lake	9.81	106.92		23.15	500.59	168.17	321.43	1,006.13	157.57	2,293.77
Millwood	8.06	2.45		0.22		283.82	19.39	123.74	0.67	438.36
Rockford	0.36	10.49		60.44		354.72				426.01
Spangle	21.51			5.39		197.46			0.15	224.50
Spokane	1,289.09	6,747.15		644.09	623.67	18,583.60	1,670.45	14,529.57	443.80	44,531.42
Spokane Valley	1,586.39	4,787.48	0.42	2,647.54	4,611.38	2,710.21	1,106.80	6,645.97	257.30	24,353.49
Waverly	79.60	0.37		6.61		175.77				262.35
Unincorporated Spokane Co.	94,537.94	208,237.77	25.28	95,192.24	137,497.41	294,986.16	62,459.42	142,697.32	10,697.93	1,046,331.49
Grand Total	**98,318.53**	**223,779.03**	**26.37**	**99,468.90**	**144,997.73**	**318,666.32**	**65,966.34**	**176,080.05**	**11,653.65**	**1,138,950.82**

***Only regimes and classes which apply to the county are identified.**

Mean Fire Return Interval

The simulated historical Mean Fire Return Interval (MFRI) data layer quantifies the average number of years between fires under the presumed historical fire regime. MFRI is intended to describe one component of historical fire regime characteristics. It is not a predictive model, and information presented should be used for reference only as the variables existing with respect to predictive wildfire planning continually change. Figure 10-16 illustrates the projected MFRI for Spokane County as illustrated by LandFire.

As illustrated, the Mean Fire Return Interval for Spokane County varies greatly, with much of the area in order of acres per yearly groupings in the 36-100-, 16-35-, and 201–500-year ranges, respectively.

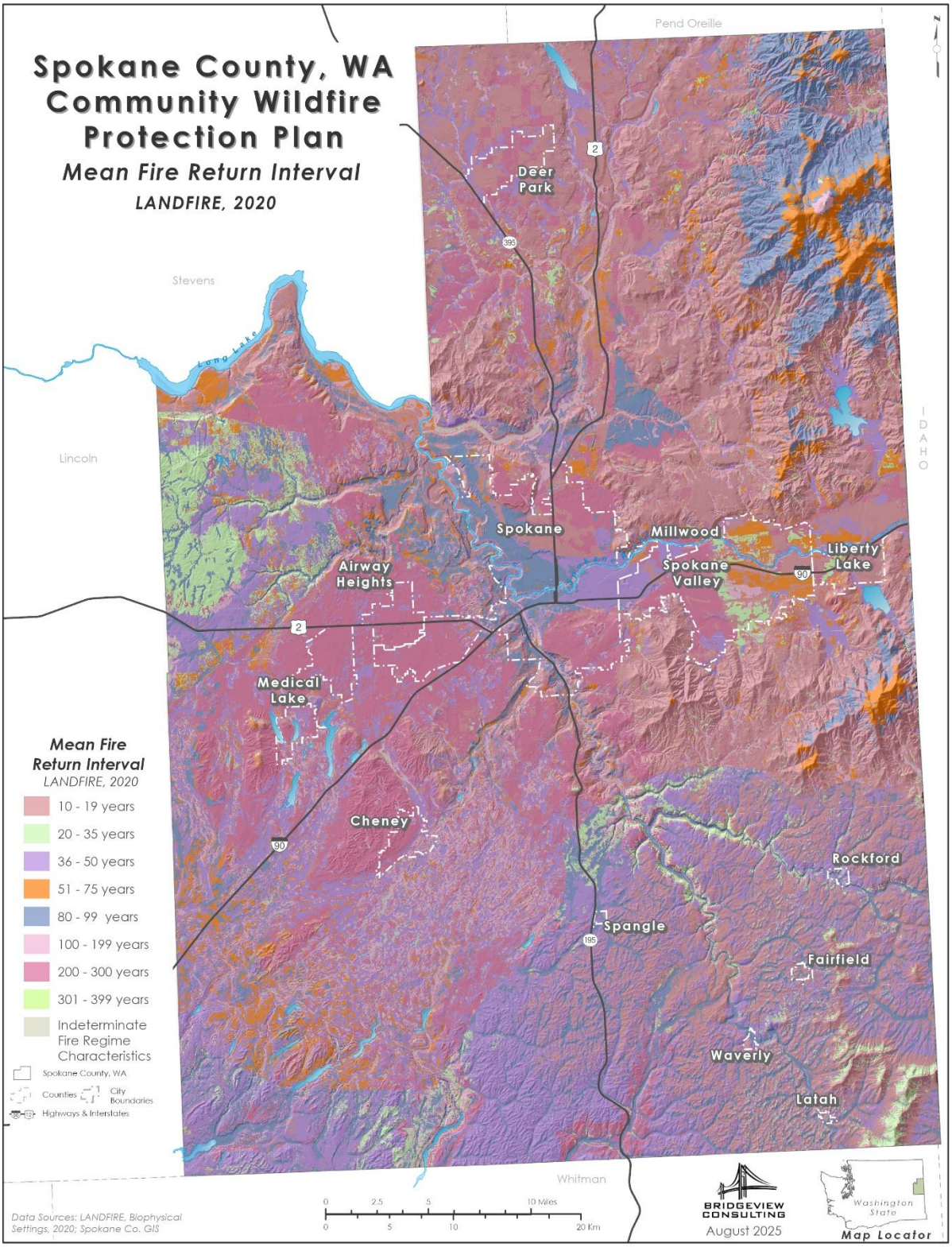


Figure 10-16 LandFire Mean Fire Return Interval

Vegetative Associations

Vegetative structure and composition in Spokane County are closely related to elevation, aspect, and precipitation. Relatively mild and dry environments characterize the undulating topography of the region which transitions from the forestland in the northern region to agricultural in the middle and eastern regions to scablands left over from the Missoula floods in the southwestern region. The higher elevation forest ecosystems in the north and northeast regions typically contain higher fuel accumulations that have the potential to burn at moderate to high intensities. The highly variable topography coupled with limited access is likely to make suppression difficult. The patchy forests occurring along the Spokane River and many of its tributaries as well as in the scabland areas are very different. These forests are much less productive due to the lack of soil. Scattered, lower density stands of primarily ponderosa pine and a minor component of Douglas fir are found in many of the sheltered drainages or where there are accumulations of loess due to topographic features. Under natural conditions, this type of forestland would burn at frequent intervals keeping brush and other ladder fuels to a minimum.

At higher elevation mountainous regions (Mt. Spokane being the highest point in the area at just over 5,000 feet), moisture becomes less limiting due to a combination of higher precipitation and reduced solar radiation. Therefore, vegetative patterns shift based on the elevation of the area and creates specific conditions which impact fuels and fire speed. In some instances, forested conditions possess a greater quantity of both dead and down fuels as well as live fuels. Rates of fire spread tend to be lower than those in the grasslands; however, intensities can escalate dramatically, especially under the effect of slope and wind. These conditions can lead to control problems and potentially threaten lives, structures and other valued resources.

As elevation and aspect increases available moisture, forest composition transitions to moister habitat types. Increases in moisture keep forest fuels unavailable to burn for longer periods during the summer. This increases the time between fire events, resulting in varying degrees of fuel accumulation. When these fuels do become available to burn, they typically burn in a mosaic pattern at mid elevations, where accumulations of forest fuels result in either single or group tree torching, and in some instances, short crown fire runs. At the highest elevations, fire events are typically stand replacing as years of accumulation of fuel creates large, intense wildfires.

Insects and disease can cause widespread mortality of forest stands in a very short amount of time. Pine bark beetle populations have continued to increase at epidemic levels throughout Washington State; however, mortality increases are most pronounced in Eastern Washington. Ponderosa pine and lodgepole pine seem to be the most affected species at all elevations in Spokane County. In general, bark beetles are not causing widespread mortality of forest stands but are generally causing pockets of mortality. The pine bark beetle is currently at an endemic level in Spokane county. The occurrence of *Ips Pini* , western pine beetle, Douglas-fir beetle, Douglas-fir tussock moth, and root disease have also been recorded in Eastern Washington (Washington Department of Natural Resources 2006). All these diseases and insects are currently

in Spokane County. Insects and disease often focus and cause the most mortality in forest stands that are overcrowded or otherwise stressed by drought, recent fires, or other factors. Large areas of dead trees are a significant fire hazard. Often, dry, dead needles hang on the killed trees for several years making them prime for a potential ignition and subsequent crown fire. Thinning overcrowded stands can help reduce stress on individual trees allowing them to better withstand insect attacks. Planting of appropriate species for the site and continual management can also help ward off future outbreaks.

Many lower elevation forested areas throughout Spokane County are highly valued for their scenic qualities as well as for their proximity to travel corridors and city services. These attributes have led to increased recreational home development and residential home construction in and around forest fuel complexes. The combination of highly flammable forest types and rapid home development will continue to challenge the ability to manage wildland fires in the wildland-urban interface.

Understanding ecosystem departures (how ecosystems have changed over time) provides a context for managing sustainable ecosystems. Broad-scale alterations of historical fire regimes and vegetation conditions have occurred in many landscapes in the U.S. through the combined influence of land management practices, fire prevention, livestock grazing, insect and disease outbreaks, climate change, and invasion of non-native plant species. These departures result in changes to one or more of the following ecological components:

- Vegetation characteristics (species composition, structural stages, stand age, canopy closure and mosaic pattern)
- Fuel composition
- Fire frequency, severity, and pattern
- Associated disturbances (e.g. insect and disease mortality, grazing, and drought).

Characteristic vegetation and fuel conditions are those that occurred within the historical fire regime. *Uncharacteristic* conditions are those that did not occur within the historical fire regime, such as invasive species (e.g. weeds, insects, and diseases), “high graded” forest composition and structure (e.g. large trees removed in a frequent surface fire regime), or repeated annual grazing that reduces grassy fuels across relatively large areas to levels that will not carry a surface fire.

Figure 10-17 identifies the Vegetation Condition Class for Spokane County. Vegetation Condition Class represents a simple categorization of the associated Vegetation Departure layer and indicates the general level to which current vegetation is different from the simulated historical vegetation, referenced as Fuel Disturbance. Fuel Disturbance classes of variation ranges are low, medium, and high. The variation of vegetation class directly influences fire through type of fuel, and the frequency at which such vegetation burns. Figure 10-18 identifies the fuel disturbance for Spokane County.

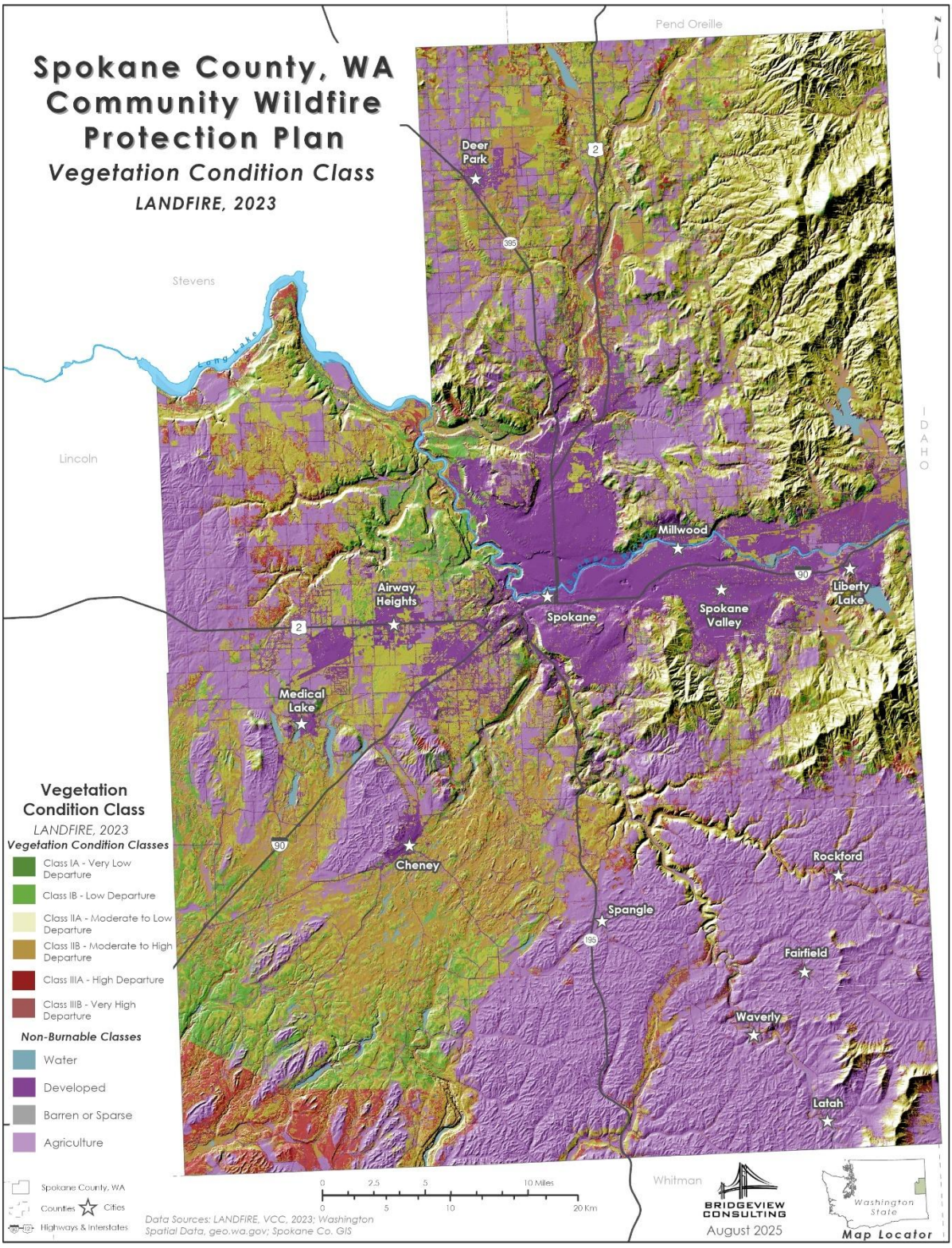


Figure 10-17 Vegetation Condition Class (Vegetation Departure) (2023)

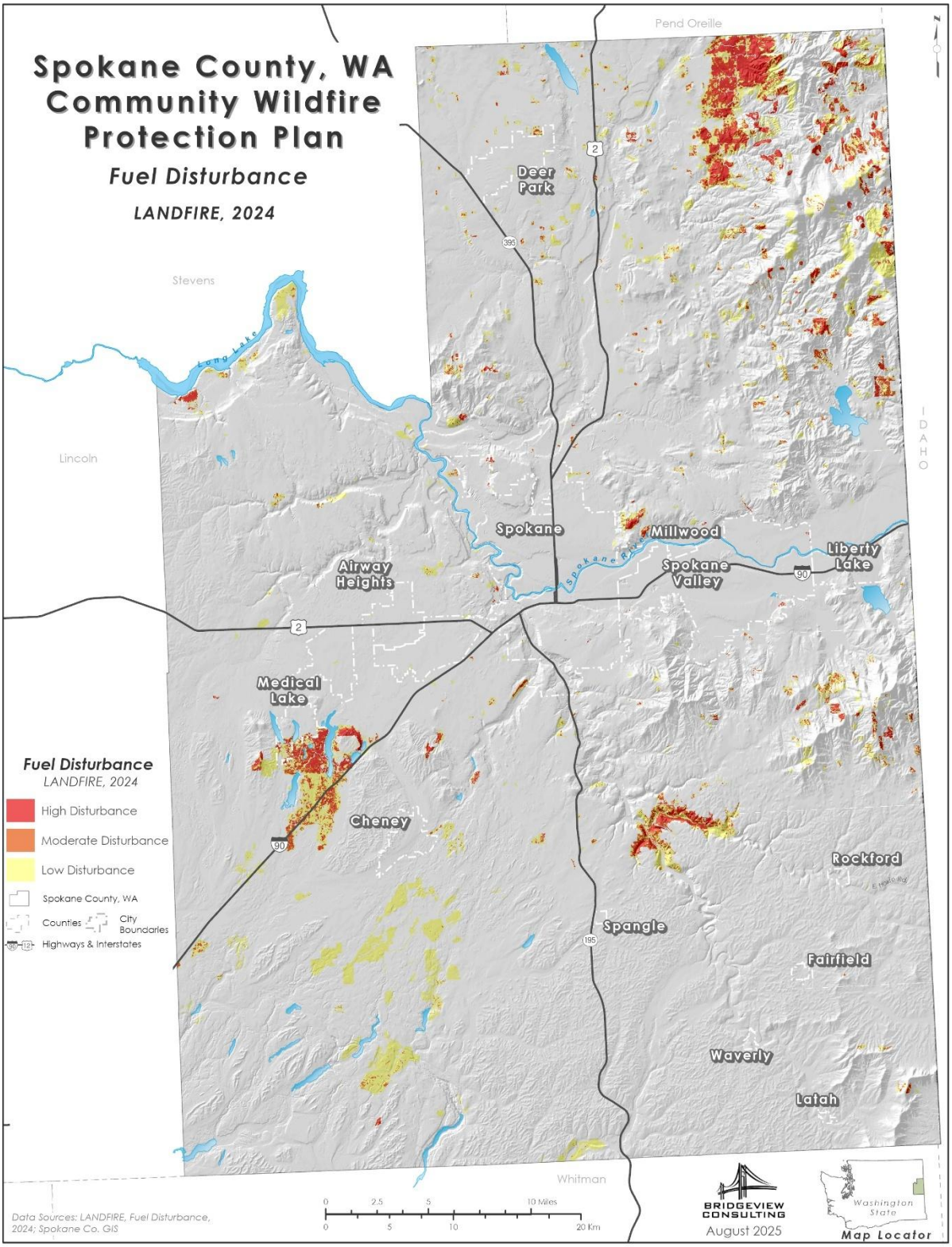


Figure 10-18 Fuel Disturbance (2024)

10.4.4 Severity

Potential losses from wildfire include human life, structures and other improvements, and natural resources. Beyond the impact from the fire itself, smoke and air pollution from wildfires can be a health hazard, especially for sensitive populations such as children, the elderly and those with respiratory and cardiovascular diseases, particularly if fine particulate matter, or particles smaller than 2.5 micrometers, are inhaled deeply into the lungs, which increases the severity of certain types of health concerns.

Between 2012 and 2022, there were four years when most of Washington's population lived in areas where there was "unhealthy" or worse air quality for at least one day according to the Washington State Department of Ecology's Air Quality Index.[53] Often when a larger population is exposed, it is due to smoke from distant wildfires that covers Washington (and beyond) for multiple days. Depending on the meteorological conditions, smoke from more local wildfires can also impact large population centers. The particulate matter in the atmosphere (smoke, dust, or pollution) can also block sunlight by absorbing or by scattering light. During the 2023 wildfires occurring in Canada, much of the United States was impacted by the wildfire smoke, with temperatures falling below projections as the smoke blocked the sunlight. Approximately 80 million people nationwide (as far south as the Carolinas) were affected by the smoke.

Within Spokane County, the Spokane Regional Clean Air Agency (SRCAA) enforces federal, state, and local air quality regulations. In addition to permitting commercial and industrial sources of air pollution, the agency regulates dust, asbestos during renovation and demolition activities, outdoor and agricultural burning, and indoor wood heating.

SRCAA operates a network of air quality monitoring stations throughout Spokane County which includes seven fine particulate matter (PM2.5) monitors and several lower-cost PM2.5 sensors. Air monitoring data, together with conditions predicted by air quality and meteorological models, provide the basis for the Agency's daily air quality forecasts and inform decisions to issue restrictions on burning. Particulate matter (PM10) and ground-level ozone are also monitored in Spokane County and, with PM2.5, are reported to the public - updated to the most recent hour on SRCAA's website (www.SpokaneCleanAir.org). However, only PM2.5 serves as a basis for issuing burn bans.

SRCAA's designated Restricted Burn Area (RBA), prohibits certain types of burning and must be updated every three years per WAC 173-425-040(5). Residential yard and garden debris burning is restricted throughout the county, except within Fire Districts #2, 5, 11, and 12, which have an MOU with SRCAA. For the abatement of fire hazards where DNR does not have jurisdiction, a fire district may enter into a Fire Hazard Abatement Burning Agreement with SRCAA.

[53] Washington State Department of Ecology – Air Quality Program Interactive Map. Smoke Forecast (wa.gov)

SRCAA also regulates asbestos pertaining to structures destroyed by wildfires. Structure ash and debris left behind after a wildfire must either be sampled for asbestos prior to cleanup or presumed to contain asbestos-containing materials (ACM). If ACM is found or the ash and debris are presumed to be ACM, a Washington-certified asbestos abatement company must be used. A Notice of Intent (NOI) from SRCAA is required for cleanup of the ash and debris.

In addition to SRCAA, Washington State Smoke Management Plan also establishes and maintains an outdoor burning program in conjunction with the Washington State DNR, DOE, U.S. Forest Service (USDA), National Park Service (NPS), Bureau of Land Management (BLM), U.S Fish and Wildlife Service (USFWS), participating Indian nations, military installations (DoD), and small and large forest landowners, who work together to deal with the effect of outdoor burning on air. The Washington State Smoke Management Plan pertains to DNR-regulated silvicultural outdoor burning only, and does not include agricultural outdoor burning or outdoor burning that occurs on improved property. Although the portion of total outdoor burning covered by this plan is a small percentage of the total air pollution in Washington, it remains a significant and visible source for smoke management.

Wildfire may also threaten the health and safety of those fighting the fires. Wildfire can also lead to ancillary impacts such as landslides in steep ravine areas and flooding due to the impacts of silt in local watersheds. A large-scale wildfire would destroy the natural habitat for generations.

Extreme fires, when they occur, are characterized by more intense heat and preheating of surrounding fuels, stronger flame runs, potential tree crowning, increased likelihood of significant spot fires, and fire-induced weather (e.g., strong winds, lightning cells). Extreme fire behavior is significantly more difficult to combat and suppress and can drastically increase the threat to homes and communities.

Due to many years of fire suppression, logging, and other human activities, the forests and rangelands of the planning area have changed. Areas that historically experienced frequent, low-severity wildfires now burn with much greater intensity due to the build-up of understory brush and trees. At times, this equates to fires which are larger and more severe, killing the trees and vegetation at all levels. The combination of steep slopes, canyons, open rangeland, and fuel type have a history and potential for fast moving and fast spreading wildfires.

The severity of a fire season can usually be determined in the spring by how much precipitation is received, which in turn determines how much fine fuel growth there is and how long it takes this growth to cure out. These factors, combined with annual wind events in late summer, drastically increase the chance a fire start will grow and resist suppression activities. Furthermore, harvest is also occurring at this time. Occasionally, harvesting equipment causes an ignition that can spread into populated areas and timberlands. Typical summer conditions prove to be problematic due to fires moving uphill from a structure fire on a lower slope, or from a wildland fire pushing upslope through the trees on a windy day.

The Spokane County planning area is extremely vulnerable to wind-driven fires, whose embers could ignite grass and weeds, and cause spot fires in more populated areas. There have been 34 red flag warnings which include winds issued during the 2020-2024 period.

Since update of the last plan, in August 2023, the county experienced two wind-driven wildfires which led to two federal disaster declarations for both the Grey Fire and the Oregon Road Fire (also known as the Elk fire). For the Oregon Road Fire, the County was under a Red Flag Warning with significant wind and single-digit humidity. More than 11,000 acres were burned, with 126 primary residences and ~260 outbuildings destroyed. Level 1 evacuation orders remained in place for several days (see Figure 10-19).

As a result of its landscape and climate, large and fast-spreading destructive fires (conflagrations) continue to occur. In many instances, Level 3 (GO! Leave Immediately!) evacuation orders are issued, providing residents with short notice of an approaching fire. With a fairly large agricultural base including crops and animal herds which may require evacuation, economic impact could also be severe. Those areas also include culturally significant places, structures, and species.

Based on USFS data, much of the county is classified as "wildland-urban interface communities" susceptible to a higher fire risk (see Figure 10-1 and Figure 10-6 above). For certain areas within the county, wildfire risk is even more pronounced as the combination of steep terrain and heavily wooded areas make it a prime target for major wildfires. Many homes also reside on hillsides with little or limited roadway access, which makes it almost impossible to save homes or ensure residents get out safely if evacuation is required. One example of this is the Mount Spokane area. There are also several small areas scattered throughout the County that are completely unserved by any fire response services – no local fire agency, nor Washington State Department of Natural Resources response. In addition to the above data, each Fire District's annex also illustrates similar data developed by the Washington Department of Natural Resources.

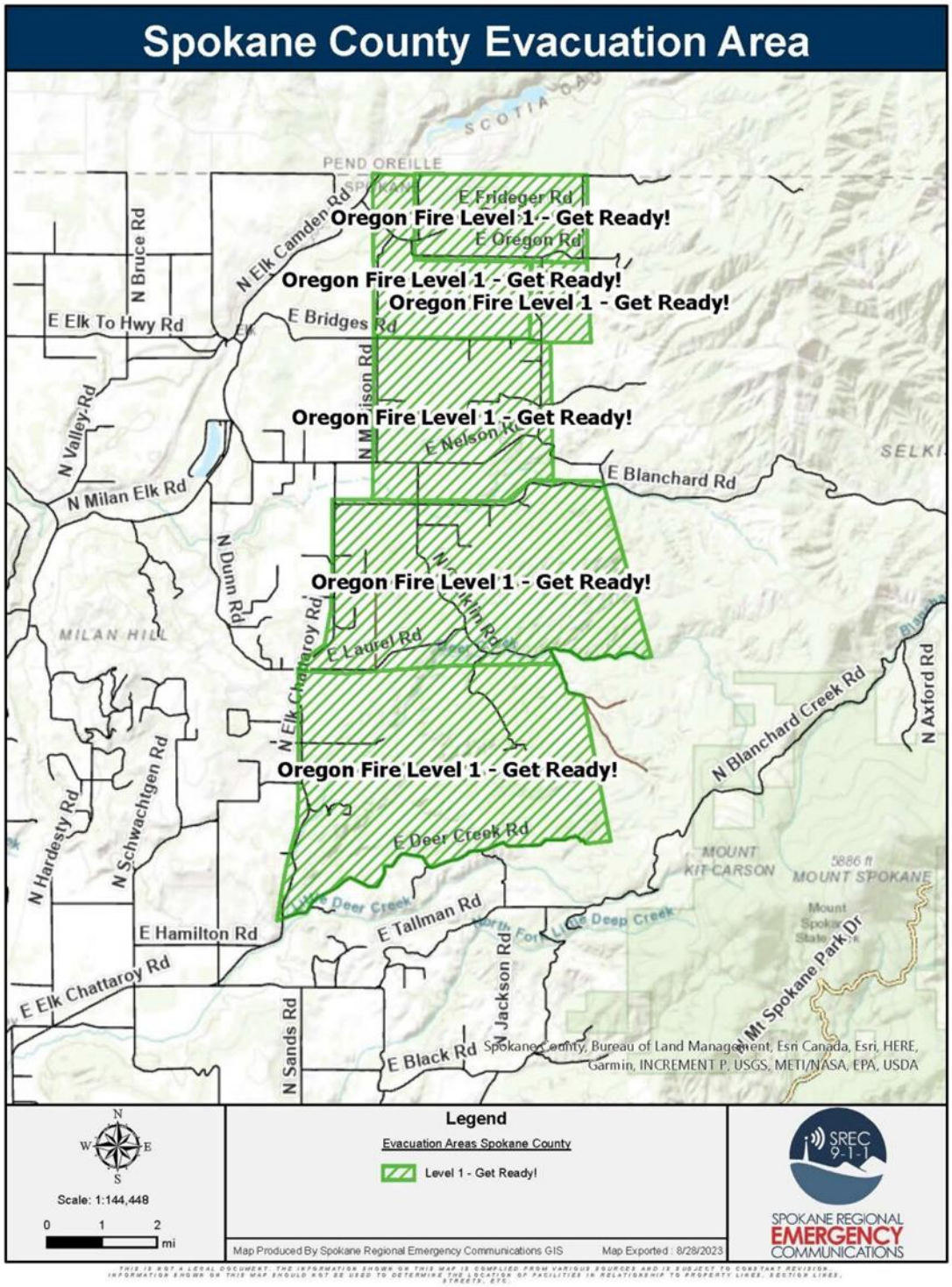


Figure 10-19 Level 1 Evacuation Orders - Oregon Road Fire (2023)

10.4.5 Warning Time

Wildfires are often caused by humans, intentionally or accidentally. While there is no way to predict when one might break out, certain events are known to exacerbate wildfire occurrences. Since fireworks often cause brush fires, extra diligence is warranted around the Fourth of July when the use of fireworks is highest. Dry seasons and droughts are factors that greatly increase fire likelihood. With continued impacts from climate change, fire occurrence and severity will increase. Dry lightning can also trigger wildfires. Severe weather can be predicted, so special attention should be paid during weather events that may include lightning. Reliable National Weather Service lightning warnings are available on average 24 to 48 hours prior to a significant storm.

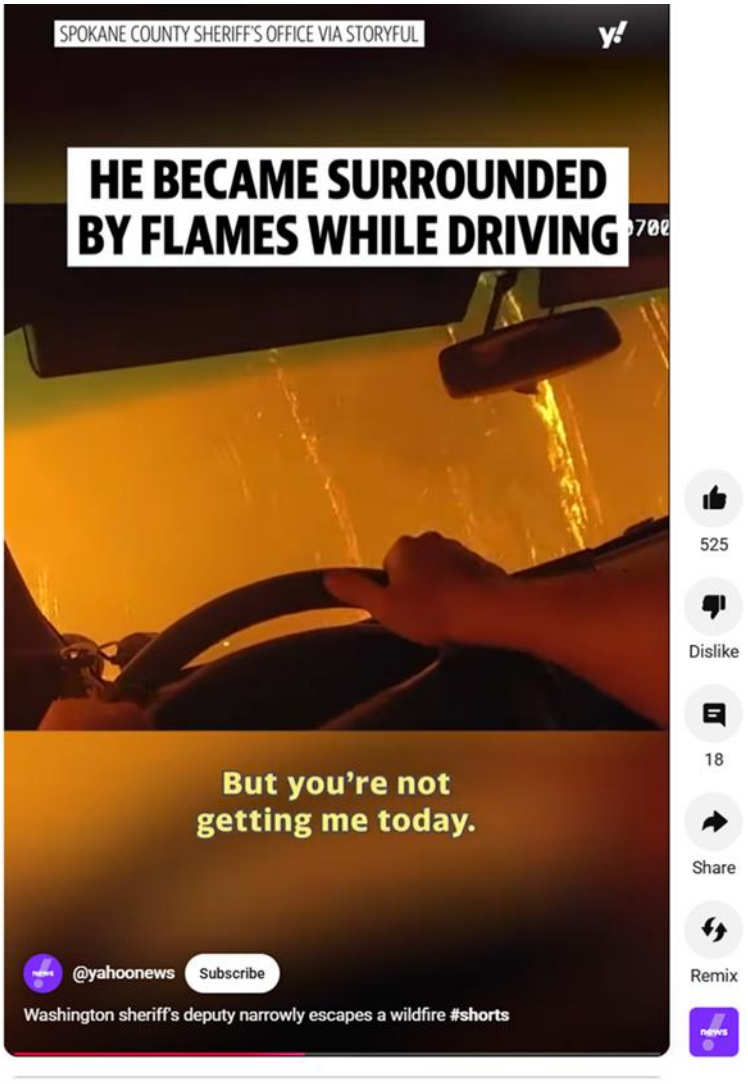


Figure 10-20 Spokane County Deputy's Body Camera Footage (2023 Wildfires)

If a fire does break out and spreads rapidly, residents may need to evacuate within minutes. Figure 10-20 is a snapshot of a Spokane County Sheriff Deputy's body camera footage, which was taken as the Deputy was going door to door during a Level 3 evacuation. The Deputy became fully surrounded by flames within minutes while attempting to assist a resident during the evacuation.

Once a fire has started, fire alerting is fairly rapid in most cases. With the spread of cellular and two-way radio communications, it has contributed to a significant improvement in warning time. Evacuation orders have been shown to save lives, and citizens are encouraged to sign up for local alerts and notifications through Spokane County Emergency Management.

10.5 VULNERABILITY ASSESSMENT

10.5.1 Overview

Structures, above-ground infrastructure, critical facilities and natural environments are all vulnerable to the wildfire hazard (see Figure 10-21). Understanding the relationship between weather, potential fire activity, and geographical features enhances the ability to prepare for the potential of wildfire events. This knowledge, when paired with emergency planning and appropriate mitigation measures, creates a safer environment.

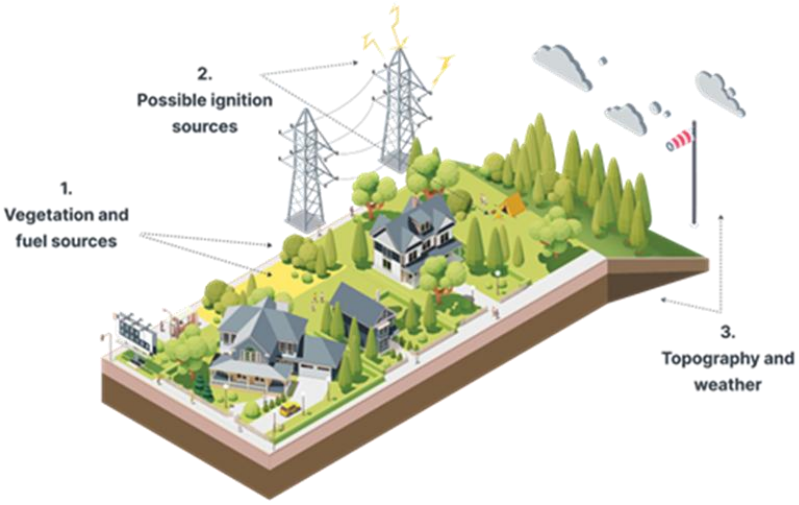


Figure 10-21 Wildfire Factors

Wildfire studies can analyze weather data to assist firefighters in understanding the relationship between weather patterns and potential fire behavior. Fire forecasting examines similarities between historical fire weather and existing weather and climate values. These studies have determined that for areas such as Spokane County, any combination of two of the following factors can create more intense and potentially destructive fire behavior, known as extreme fire behavior:

- Sustained winds
- Relative humidity less than 40 percent
- Temperature greater than 72º Fahrenheit
- Periods without precipitation greater than 14 days in duration
- 1,000-hour fuel moisture less than 17 percent.

If a fire breaks out and spreads rapidly, residents may need to evacuate within a short timeframe. The County does have an evacuation notification system in place to provide early notice to its residents if residents elect to sign up for the notification. That evacuation notice consists of a Level 1, Level 2, and Level 3 evacuation orders, with Level 3 being the most significant. One significant factor which can hinder evacuation is the non-English speaking populations, who may not understand the notice, those with health or mobility issues, or those without available transportation. Customarily, a fire's peak burning period generally is between 1 p.m. and 6 p.m. In normal situations, fire alerting would commence quickly, helping to reduce the risk. However, in more remote locations of the county, or in areas where cell phone services are sporadic at times, warning time and calls for assistance may be reduced.

Methodology

There is currently no validated damage function available on which to base wildfire analysis in the same manner as other hazards within this mitigation plan as no such damage functions have been generated. Instead, estimates to identify potential losses utilized the Wildfire at Risk Communities, and the LandFire Fire Regime datasets as cited. In addition, Washington State Department of Natural Resources also conducted a risk assessment countywide in 2024 as a result of the wildfires sustained by the county in 2023. Portions of that data were incorporated into the jurisdictional annexes as appropriate, with limited modifications made as it was determined to be the most up to date data available, completed by the State's subject matter experts. Reviewers wishing to see those reports in their entirety may contact Spokane County Emergency Management, or Washington State Department of Natural Resources. As indicated, as of this 2025 update, the State DNR is in the process of updating their study as well.

10.5.2 Strategic Planning Areas in Spokane County

In order to facilitate the mutual understanding of wildfire risks specific to commonly referred to areas in Spokane County, the Coalition previously identified sub-regions that they felt not only had similar fuel conditions but also would render similar initial attack techniques. These sub-regions, initially identified in 2005, are called *Strategic Planning Areas* (SPA) (see Figure 10-22). Typically, SPA boundaries lie along local fire district boundaries or known anchor points such as roads or ridgelines. In some cases, there are multiple fire districts or municipal departments within the SPA. All of the SPAs lie within or mostly within the Wildland Urban Interface and will typically include several Communities at Risk. Where the Wildland Urban Interface boundaries are primarily based on population density, the SPA boundaries are strategic boundaries based on fire suppression capabilities.

For this 2026 update, data for participating SPAs and fire service agencies are included within the primary fire district's annex document, with reference to such annex within the municipal partner's annex for ease of maintenance and update, and to eliminate redundancy. It should be noted that not all fire districts were part of this HMP process, and such, their data is not reflected. When reviewing the Vulnerability Assessment, readers should also review each individual annex document for additional impact data. The entire report completed by WA DNR is available upon request to Spokane County Emergency Management.

The SPA's fall within the following fire service agency(s):

- SPA 1 – Fire District 4 - includes City of Deer Park (contracted services with Fire District 4)
- SPA 2 – Fire District 13 – includes Town of Latah, Newman Lake, Blanchard Valley, Mount Spokane State Park, and additional portions of unincorporated county
- SPA 3 – Fire District 5 and Fire District 10 – includes City of Airway Heights

- SPA 4 – Spokane Valley Fire Department – includes City of Spokane Valley, City of Liberty Lake (contracted services with Spokane Valley Fire Department)
- SPA 5 – Fire District 2, Fire District 11 and Fire District 12– includes the Town of Rockford and Town Fairfield
- SPA 6 – Fire District 3 – includes the City of Cheney
- SPA 7 – Fire District 9
- SPA 8 – Fire District 8

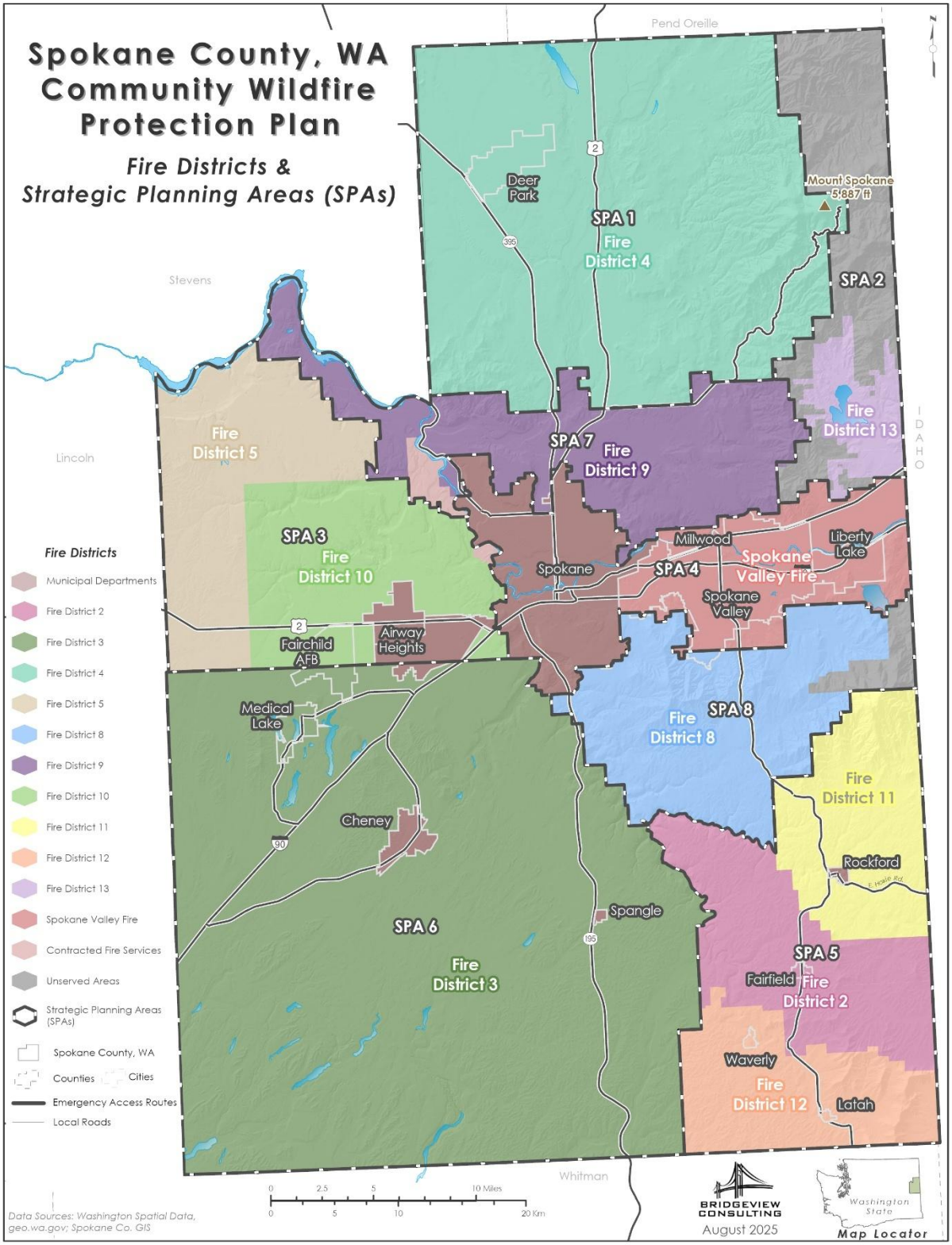


Figure 10-22 Strategic Planning Areas

10.5.3 Impact on Life, Health, and Safety

Since completion of the 2020 HMP, there have been two fatalities within Spokane County as a result of wildfires – one each for the Oregon and Gray fires.

Exposure to wildfire in Spokane County is dependent upon many factors. A statistical number of the population vulnerable to impact from fire is impossible to determine with any accuracy due to the high number of variables that impact fire scenarios.

The population at risk must also take into consideration tourists given the county's proximity to the campsites, parklands, and other Washington, Idaho, and Canadian high-tourist destinations. In addition, during summertime months, the County also hosts Hoopfest, which draws hundreds of thousands of people during the event annually.

With its high tourism rate during the summertime months, there is an increase in the population vulnerable to fire. When fire danger is at its greatest, increased consideration must be taken into account for fire response. During these periods, fire agencies in Spokane County work cooperatively to maximize availability of fire-fighting resources, while supporting increased aid calls from community events.

Smoke and air pollution from wildfires can be a severe health hazard, especially for sensitive populations, including children, the elderly and those with respiratory and cardiovascular diseases. Spokane County has a high population of retirees and individuals over 65, further increasing the potential impact on the fire hazard. Smoke generated by wildfire consists of visible and invisible emissions that contain particulate matter (soot, tar, water vapor, and minerals), gases (carbon monoxide, carbon dioxide, nitrogen oxides), and toxics (formaldehyde, benzene). Emissions from wildfires depend on the type of fuel, the moisture content of the fuel, the efficiency (or temperature) of combustion, and the weather. Public health impacts associated with wildfire include difficulty in breathing, headache, and eye irritation. Wildfire also threatens the health and safety of those fighting fires, as well as those assisting with evacuation in high-hazard areas. First responders are exposed to the dangers from the initial incident and after-effects from smoke inhalation and heat stroke.

The maps used in the analysis show areas of relative importance in determining fire risk, though they do not provide sufficient data for a statistical estimation of exposed population. There are also many unoccupied vacation homes in the area, which are in remote locations, impacting accessibility. The other significant variable is the deviation from historic vegetation which has occurred as a result of previous wildfires which have impacted the area, the most significant of which occurred in 2023, burning over 21,000 acres.

As part of the local community-level integration into this CWPP, in addition to the critical facilities and infrastructure identified for the overall HMP planning process, each local community should

also identify their own respective assets or values at risk within their community. Those are additional assets which must be taken into account for local wildfire planning initiatives. A few examples discussed during this update process include water supply/watersheds which provide municipal water, local area fish hatcheries (see Figure 10-23), historic structures, the Spokane House Interpretive Center and the Indian Painted Rocks, both in the Nine Mile area, as well as other natural and cultural areas. As that data becomes available, Planning Team Members will continue to capture that information for future CWPP updates, and for inclusion in annual granting opportunities.

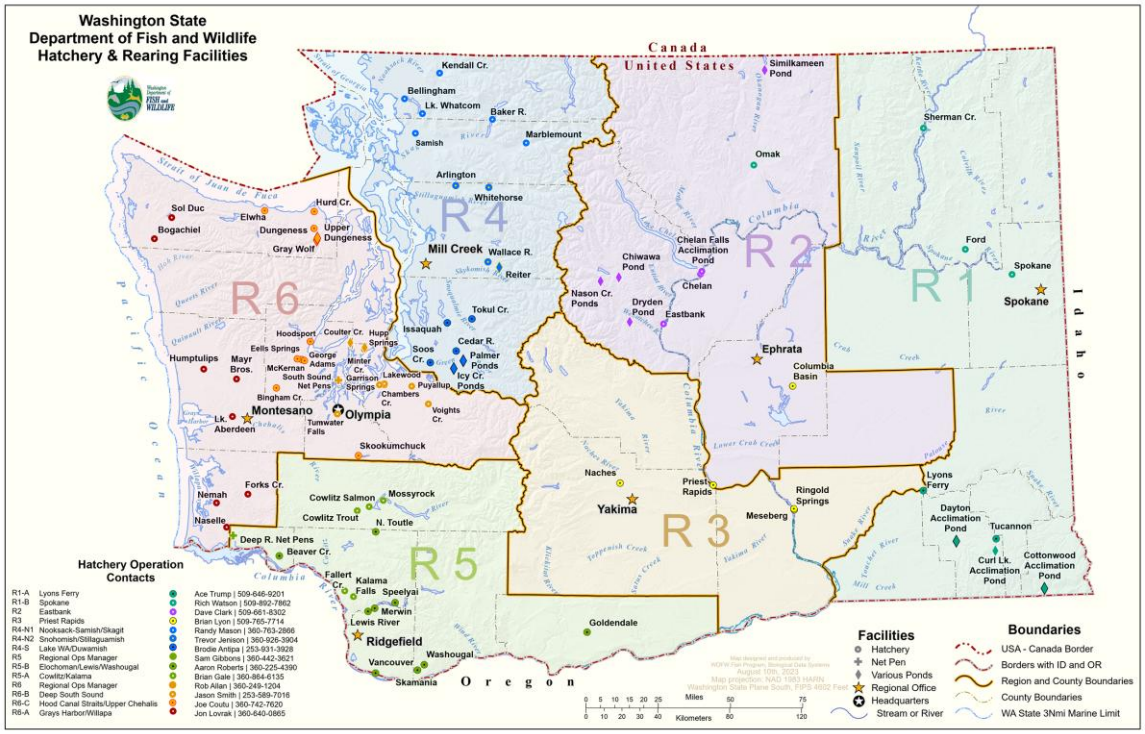


Figure 10-23 WDFW Hatchery and Rearing Facilities Statewide (2025)

10.5.4 Impact on Property

Property damage from wildfires can be severe and can significantly alter entire communities as the County experienced during the 2023 wildfire season. The potential exposure of the structures in the County should a fire occur is high, particularly when looking at more remote areas. The unincorporated county and all planning partners have some degree of exposure to wildfire hazards, with the potential for embers sparking fires carried by winds at great distances from the original fire. This means that all structures within the County are vulnerable to wildfires – even areas with the lowest risk are vulnerable because any structure in the path of a wildfire, regardless of its severity, can be impacted. Table 10-5 (above) identifies the number of acres by planning partner within each Fire Regime.

Density and the age of building stock in Spokane County are contributing factors in determining property vulnerability to wildfire. Many of the buildings in the planning area are of significant age, with many being constructed with wood frames and shingle roofs. There are also many structures in remote areas, making access difficult. In some instances, access to structures is hampered by the size of the roadway, which restrict access of firefighting equipment to the area. As actively engaged CWPP planning partners, all planning partners have identified building materials as potential mitigation measures which can be taken to reduce the impact of wildfires on the communities. When granting opportunities avail themselves, the jurisdictions do look for funding opportunities to assist homeowners in such efforts.

Because the Wildland Urban Interface map for Spokane County was based primarily on population density as described above, all of these communities and the populated areas surrounding them are within the Spokane County Wildland-Urban Interface.

Review of USDA/USFS Wildfire at Risk Communities data illustrates that approximately 107,100 structures (42 percent) are at minimal risk for exposure.[54] For indirect exposure, approximately 82,460 structures (32 percent) are at risk, with 66,692 structures (26 percent) at risk from direct exposure. Figure 10-24 illustrates the disbursements of the exposure zones.

10.5.5 Impact on Critical Facilities and Infrastructure

Critical facilities of wood frame construction are especially vulnerable during wildfire events. During a wildfire event, materials located at these facilities could rupture due to excessive heat and act as fuel for the fire, causing rapid spreading and escalating the fire to unmanageable levels.

In the event of wildfire, there would likely be limited damage to most infrastructure. Most roads and railroads would be without damage except in the worst scenarios. Power lines are the most at risk from wildfire because most poles are made of wood and susceptible to burning. Fires can create conditions that block or prevent access and can isolate residents and emergency service providers. Wildfire typically does not have a major direct impact on bridges, but it can create conditions in which bridges are obstructed. Many bridges in areas of high to moderate fire risk are important because they provide the only ingress and egress to large areas and in some cases to isolated neighborhoods. During wildfires, pipelines could also provide a source of fuel and lead to a catastrophic explosion. Table 10-6 identifies critical facilities exposed to the wildfire hazard in the county.

[54] USDA, USFS Wildfire Risk to Communities. Accessed Multiple times. Available at: Wildfire Risk reduction zones in Spokane County, WA - Wildfire Risk to Communities

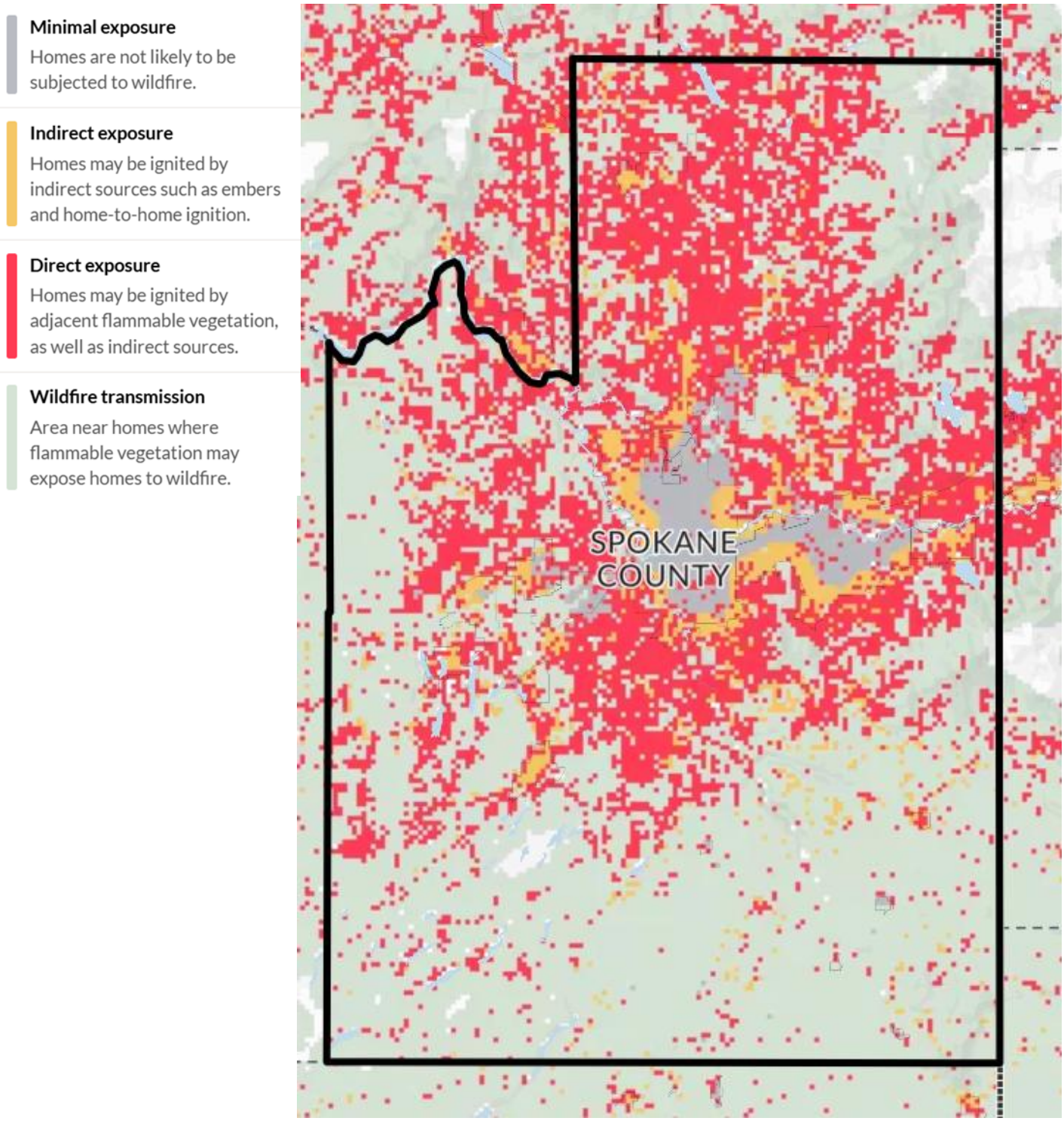


Figure 10-24 Wildfire Risk to Communities Structure Exposure

Table 10-6.
Critical Facilities Exposed to Wildland Zones

Critical Facilities/Critical Infrastructure	Non-Vegetated					Intermix				Interface				Other			
	Non-Vegetated Uninhabited	Non-Vegetated Very Low Structure Density	Non-Vegetated Low Structure Density	Non-Vegetated Medium Structure Density	Non-Vegetated High Structure Density	Intermix Very Low Structure Density	Intermix Low Structure Density	Intermix Medium Structure Density	Intermix High Structure Density	Interface Very Low Structure Density	Interface Low Structure Density	Interface Medium Structure Density	Interface High Structure Density	Vegetated Uninhabited	Vegetated Very Low Density	Water	Total
Communications	3	1	1	1	2		7					2	3	2	16		**38**
Dam											1						**1**
Government	7	3	1	5			2				1	3			2		**24**
Hazmat	123	22	6	25	12		16	2			19	40	4	11	11	2	**293**
Medical	9			1			1										**11**
Power	1	1									1		1	1	2	2	**9**
Protective	15	11	9	10	4		15	4			7	19	5	5	6		**110**
School	1											4	1		1		**7**
Shelter	3	1	1														**5**
Transportation	13	2		2				1			1	4	1	4	1	5	**34**
Wastewater	6	2	1	3			4	1				23		1	3		**44**
Water		1	4	2			1	2				2	1		3	1	**17**
Grand Total	**181**	**44**	**23**	**49**	**18**	**0**	**46**	**10**	**0**	**0**	**30**	**97**	**16**	**24**	**45**	**10**	**593**

Cultural Resources

Mitigation activities in and around cultural sites have the potential to affect historic places. In all cases, the mitigation work will be intended to reduce the potential of damaging the site. Areas where ground disturbance occurs will need to be inventoried depending on the location. Ground-disturbing actions may include, but are not limited to, constructed fire lines (hand line, mechanical line, etc.), new roads to creeks to fill water tankers, mechanical treatments, etc. Traditional Cultural Properties (TCPs) will also need to be identified. Potential impact to TCPs will depend on what values make the property important and will be assessed on an individual basis.

National Register of Historic Places

The National Park Service maintains the National Register of Historical Places as a repository of information on significant cultural locale. These may be buildings, roads or trails, places where historical events took place, or other noteworthy sites. As of 2025, there are approximately 158 properties and districts listed throughout the planning region. In addition, there are also other cultural resources in Spokane County that are not currently listed on the National Register of Historic Places, such as the Spokane House Interpretive Center and the Indian Painted Rocks, both in the Nine Mile area.[55]

Transportation & Infrastructure

The transportation system within the County is comprised of a significant number of roads, several airports, a rail line and an extensive trail system. Access is an important component in hazard mitigation planning.

Interstate 90 runs through the heart of Spokane County traveling through the major population and economic hubs of Spokane and Spokane Valley. Additionally, U.S. Highways 2, 195, and 395 and State Highways 27, 278, 290, 291, 902, and 904 provide paved linkages to many of the more rural communities throughout the County. There also are numerous county- and city-maintained routes accessing much of the unincorporated areas. While these routes are generally paved, there are a significant number of unimproved roadways throughout the county.

Primary and secondary access routes were identified by committee members and amended by the public during meetings. These routes identify the primary access routes into and out of the county that are relied on during emergencies. As such, they often receive prioritized treatment when allocating resources for hazard abatement. There are approximately 123 miles of interstate highway and 239 miles of state highways in Spokane County.

The Spokane International Airport is located between Highway 2 and I-90 just west of the City of Spokane. The Spokane Airport supports eight passenger carrier airlines as well as three air cargo carriers. The airport has two runways that are 11,002’ and 8,199’ long, is equipped with instrument landing systems supporting all-weather operations, and has ample aircraft parking areas available.

Burlington Northern Santa Fe and Union Pacific maintain several active railroad lines in Spokane County. These lines form a hub in Spokane with tracks running north along Highway 395, east towards Coeur d’Alene, Idaho, south along Highway 27, and southwest paralleling Highway 395. AmTrack also offers passenger services on their Chicago, St. Paul, Portland/Seattle route.

[55] NPGallery NRHP Archive Search Results. National Park Service, United States Department of the Interior. Retrieved on 10 Sept. 2025.

Communication Sites

A list of names and locations of communication sites throughout Spokane and neighboring counties is available in the Spokane County Field Operations Guide. Communications towers and sites were included within the risk assessment for this plan.

Hazardous Materials Sites

During a wildfire event, hazardous material storage containers could rupture due to excessive heat and act as fuel for the fire, causing rapid spreading and escalating the fire to unmanageable levels. In addition, the materials could leak into surrounding areas, saturating soils and seeping into surface waters, having a disastrous effect on the environment. Hazardous materials sites identified by Washington State Department of Ecology and by the planning partners were included in this risk assessment.

10.5.6 Impact on Economy

Wildfire impact on the economy can be far reaching, ranging from damage to transportation routes to non-use of park facilities and campsites impacting tourism. Loss of structures influencing tax base from lost revenue is also probable. Secondary hazards associated with wildfire, such as increased landslides and flooding potential, would further impact the economy. Review of FEMA's National Risk Index identifies the expected annual losses associated with a wildfire to be in excess of $10.5m.[56] Planning team members felt this figure was low based on the potential assets at risk, but due to the nature of the hazard and its unpredictable nature, more precise figures could not be determined with a high level of accuracy.

10.5.7 Impact on Environment

Fire is a natural and critical ecosystem process in most terrestrial ecosystems, dictating in part the types, structure and spatial extent of native vegetation. However, wildfires can cause severe environmental impacts:

- Flooding – Wildfires leave the ground charred, barren and unable to absorb water, creating conditions ripe for flash flooding and mudflow. Flooding is significantly more likely until vegetation is restored and can persist for five years or more after a wildfire.
- Damaged Fisheries—Critical fisheries can suffer from increased water temperatures, sedimentation and changes in water quality.
- Soil Erosion—The protective covering provided by foliage and dead organic matter is removed, leaving the soil fully exposed to wind and water erosion. Accelerated soil erosion occurs, causing landslides and threatening aquatic habitats.

[56] FEMA National Risk Index. Accessed multiple times. Available at: Map | National Risk Index

- Spread of Invasive Plant Species—Non-native woody plant species frequently invade burned areas. When weeds become established, they can dominate the plant cover over broad landscapes, and become difficult and costly to control.
- Disease and Insect Infestations—Unless diseased or insect-infested trees are swiftly removed, infestations and disease can spread to healthy forests and private lands. Timely active management actions are needed to remove diseased or infested trees.
- Destroyed Endangered Species Habitat—Catastrophic fires can have devastating consequences for endangered species.
- Soil Sterilization—Topsoil exposed to extreme heat can become water repellant, and soil nutrients may be lost. It can take decades or even centuries for ecosystems to recover from a fire. Some fires burn so hot that they can sterilize the soil.

Many ecosystems are adapted to historical patterns of fire occurrence. These patterns, called "fire regimes," include temporal attributes (e.g., frequency and seasonality), spatial attributes (e.g., size and spatial complexity), and magnitude attributes (e.g., intensity and severity), each of which have ranges of natural variability. Ecosystem stability is threatened when any of the attributes for a given fire regime diverge from its range of natural variability.

10.5.8 Impacts From Climate Change

Fire in western ecosystems is determined by climate variability, local topography and human intervention. Climate change has the potential to affect multiple elements of the wildfire system: fire behavior, ignitions, fire management, and vegetation fuels. Hot dry spells create the highest fire risk. Increased temperatures may intensify wildfire danger by warming and drying out vegetation. When climate alters fuel loads and fuel moisture, forest susceptibility to wildfires changes. Climate change also may increase winds that spread fires. Faster fires are harder to contain and, thus, are more likely to expand into residential neighborhoods.

Historically, drought patterns in the West are related to large-scale climate patterns in the Pacific and Atlantic oceans. The El Niño–Southern Oscillation in the Pacific varies on a 5- to 7-year cycle, the Pacific Decadal Oscillation varies on a 20- to 30-year cycle, and the Atlantic Multidecadal Oscillation varies on a 65- to 80-year cycle. As these large-scale ocean climate patterns vary in relation to each other, drought conditions in the U.S. shift from region to region. El Niño years bring drier conditions to the Pacific Northwest and more fires.

Climate scenarios project summer temperature increases between 2ºC and 5°C and precipitation decreases of up to 15 percent. Such conditions would exacerbate summer drought and further promote high-elevation wildfires, releasing stores of carbon and further contributing to the buildup of greenhouse gases. Forest response to increased atmospheric carbon dioxide—the so-called "fertilization effect"—could also contribute to more tree growth and thus more fuel for fires, but the effects of carbon dioxide on mature forests are still largely unknown. High carbon

dioxide levels should enhance tree recovery after fire and young forest regrowth, as long as sufficient nutrients and soil moisture are available, although the latter is in question for many parts of the western United States because of climate change.

10.6 FUTURE TRENDS IN DEVELOPMENT

Urbanization tends to alter the natural fire regime and can create the potential for the expansion of urbanized areas into wildland areas. The expansion of the wildland urban interface can be managed with strong land use and building codes. While the planning area does have some building codes which address wildfire mitigation tactics, more can be done to equip the county with these tools. This planning process has asked each planning partner to assess its capabilities and gaps with regards to the tools. The update of the Spokane County Community Wildfire Protection Plan has significantly enhanced the capability of the planning area to deal with future development as it interfaces with wildfire risk areas, as well as identifying gaps necessary to ensure future resilience. Several of the planning partners have identified the strengthening of land use development codes as they relate to wildfire risk as mitigation strategies.

10.7 ISSUES AND GAPS

During Coalition meetings for development of the CWPP, several issues and gaps impacting wildfire response and mitigation capabilities were identified. Many of the gaps were further addressed by identifying potential strategies or mitigation action items which, when implemented, would help reduce the impact from wildfires. Those strategies are included within Chapter 12 of the HMP. Examples of some of the deficiencies identified include the following:

- Many (five) of the fire districts throughout the County are volunteer departments. This in some instances increases response time if additional resources/personnel are required.
- There is a need for better hazard mapping within the planning area.
  - Mapping assessments such as the National Fire Protection Administration 299 risk assessment program would be a significant enhancement to the wildfire risk assessment for the County. In order to facilitate this, assets or values at risk must be identified. This includes a critical facilities data layer, which should be maintained on a more annual basis.
    - As of this 2026 update, WA DNR is in the process of updating wildfire risk data for the County and its planning partners. This will assist in addressing this gap.
    - The County has developed a strategy to work with the various planning partners to maintain the critical facilities list utilized for this process, with

regular updates occurring during the lifecycle of this plan based on data provided.

- Public education and outreach to people living in or near fire hazard zones should include information about, and assistance with, mitigation activities such as defensible space and advance identification of evacuation routes and safe zones.
  - Emergency managers and fire districts do regularly provide outreach to identify potential areas at risk, as well as providing regular updates on evacuation zones. Each outreach effort conducted does provide information for citizens to enroll in the County's emergency notification system.
  - With completion of this HMP/CWPP update, new risk data will continue to be presented to community members, as well as working with community members to identify mitigation efforts, such as fuels reduction, enhanced construction and landscaping initiatives which help reduce the spread of wildfire, and land use development guidelines.
- Limited capacity exists to conduct home site inspections, which could potentially identify areas where mitigation activities such as landscaping and open spaces, fuel treatments, or removal of vegetation/fuel next to structures, could be beneficial.
- Identifying the various mitigation zones within residential communities would help reduce the risk of wildfire spreading, but additional staffing, training, and resources would be needed to fully develop this type of activity.
- Wildfires could cause landslides and flash floods as a secondary natural hazard.
- Climate change will continue to affect the wildfire hazard.
- Future growth in the interface areas should continue to be managed.
- Area fire districts need to continue to train on wildland-urban interface events.
- Vegetation management activities should include enhancement through expansion of the targeted areas as well as additional resources.
- Regionally consistent higher building code standards are needed, such as residential sprinkler requirements and prohibitive combustible roof standards.
- Fire department water supplies must be maintained in high-risk wildfire areas. This may include some sort of storage capacity in some areas. In some areas, water availability relies on well systems, as well as local area creeks, ponds, and stock tanks.
- Certifications and qualifications for fire department personnel should be expanded. All firefighters should be trained in basic wildfire behavior and basic fire weather, and

all company officers and chief level officers should be trained to the wildland command and strike team leader level.

Additional items of concern by the Coalition include:

- An active fire season, including areas outside of the planning area, which would spread both local and national resources thin. Firefighting teams would be exhausted or unavailable. Many federal assets would be responding to other fires that started earlier in the season. While local fire districts would be extremely useful in the urban interface areas, they have limited wildfire capabilities, and they would have a difficult time responding to the ignition zones. Even though the existence and spread of the fire is known, it may not be possible to respond to it adequately, so an initially manageable fire can become out of control before resources are dispatched.
- A wildfire in Spokane County can occur at any time but would most likely occur during the spring/summer months, when it is hot and dry, perhaps during a period of prolonged drought. There could be numerous causes: people playing with fireworks, sparks from machinery, such as farm equipment or automobiles, or a lightning strike during a summer thunderstorm. Whatever the cause, a small local brush fire, fanned by heavy winds, could disperse embers, triggering more fires that could eventually merge into one or many large fires that don't burn out on their own. These brush fires could eventually reach scattered homes and farms, or even spread to some of the small communities in the area, such as Latah or Rockford. These fires could overwhelm emergency responders and resources and could lead to the evacuation of towns and possibly to some structures being destroyed.
- To further complicate the problem, heavy rains could follow, causing flooding and landslides and releasing tons of sediment into rivers, permanently changing floodplains and damaging sensitive habitat and riparian areas. Such a fire followed by rain could release millions of cubic yards of sediment into streams for years, creating new floodplains and changing existing ones. With the forests removed from the watershed, stream flows could easily double. Floods that could be expected every 50 years may occur every couple of years. With the streambeds unable to carry the increased discharge because of increased sediment, the floodplains and floodplain elevations would increase.
- Ingress and egress into subdivisions in most cases are typically well-developed due to urban planning and building codes. This minimizes hazards associated with emergency access in the residential areas and provides multiple emergency escape routes. However, many rural areas are accessed via unimproved, narrow roads accessible only by small emergency vehicles. In these areas, roads and driveways are often lined with shrubs and mature trees that can limit or prohibit access during a wildfire. Many of these roads lack adequate turnout and turn-around areas for emergency vehicles. The inability of emergency response resources to safely access structures reduces or may even eliminate

suppression capability. Roads in newer subdivisions have been designed to accommodate emergency vehicles with either loop roads or cul-de-sacs with wide turning radii and easily negotiable grades for large emergency equipment.

- In some areas of the County, municipal water systems do not exist, with development relying on personal or multiple home well systems. Public fire hydrants are available to an extent throughout the community and within newer subdivisions, but not all areas. In those cases, creeks, ponds, and stock tanks provide additional water sources for emergency fire suppression in the rural areas.
- Spokane County has a 911 Emergency Communication System in place to link citizens with emergency response agencies. The system receives telephone requests for fire, medical or police services and directs those calls via telephone transfers and/or sophisticated computer systems to the appropriate agencies for dispatch. Referenced in this system is rural addressing that identifies home locations by address. Rural address numbers are displayed at the entrance of many home sites along access routes to assist in emergency response, but not all. Citizens should be encouraged to maintain adequate signage visible for first responders.
- Remote forested areas within the planning area, in general, have logging road access enabling ingress for fire suppression equipment as well.
- Above ground, high voltage transmission lines would be affected by a wildfire. Local public electrical utility lines travel along roads and highways, and are exposed to damage from falling trees in the forested areas. Power and phone service throughout the planning area are both above and below ground. Power and communications may be cut into some of these areas during a wildfire situation.

10.8 RESULTS

Based on review and analysis of the data, the Planning Team has determined that the probability for impact from Wildfire throughout the area is highly likely. The area experiences a significant number of wildfires annually, with the two wildfires occurring in 2023 taking two lives and over 100 structures. Beyond the 2023 fires, for the most part, the acreage burned has, thankfully, been more limited in nature due in large part to response activities. Wildfires can spread quickly, and a conflagration can occur within a short period as the County has previously experienced.

With the increased number of fires throughout not only the planning area, but the state as a whole, resources may become more limited in nature if an active wildfire season were to again occur, such as those within the last few years. That, when coupled with the increased number of drought situations occurring statewide and particularly in portions of Eastern Washington, with the continued impact from climate change, it is anticipated that the wildfire risk will only continue to increase with time.

Over the life cycle of this plan, there are two new housing areas which have been identified within the unincorporated areas of the County below the City of Cheney for potential development. While currently not identified as a WUI area by State DNR, once those developments are completed, they will undoubtedly be identified as such when the County next updates its CWPP. While the full aspect of the land use development is still being determined and under review, one element of concern for emergency management is the potential impact to citizens with respect to first responders being able to gain access to those areas.

Major rail lines travel through the area, delivering and picking up grain on a daily basis. The trains pull a significant number of cars. As the trains travel along the tracks, they regularly stop traffic along the major arterials, sometimes for extended periods of time. Should a wildfire occur within the intended areas of development, the potential exists for ingress and egress to be limited while rail cars pass. Likewise, the grain elevators or train cars themselves, which carry fertilizers and oil, are also of concern for combustion, and potential toxic smoke plumes.

Limitations along the roadways could not only restrict first responders from gaining access to those areas, but also impact evacuation of the area by the citizens. While the County is currently attempting to work with developers to identify potential solutions to this issue, for risk planning purposes, this has caused the Planning Team to elevate wildfire rank to #1 for this 2026 update. Based on the potential impact, the Planning Team determined the CPRI score to be 3.75, with overall vulnerability determined to be a high level.

10.9 MITIGATION STRATEGIES - INCREASING THE RESILIENCE OF LANDSCAPES

On completion of the risk analysis, the Planning Team/Coalition undertook the effort to identify potential strategies which could be implemented to mitigate wildfire risk. While general in nature, the intent was to develop different concepts and applications which could be implemented based on need annually. Within each Annex, each planning partner identified some additional and specific strategies. The status of the 2020 HMP/CWPP mitigation strategies developed during the last update cycle are contained in Chapter 12 of this document.[57]

[57] The 2026 update of the Hazard Mitigation Plan integrates the County's previous HMP and CWPP documents into one cohesive document. FEMA's guidelines require a method of prioritization of the mitigation strategies different from that used in the CWPP. In addition, due to the age of many of the previous strategies within the CWPP, the Planning Team determined it was most appropriate to remove all prior strategies, focusing instead on developing new, applicable strategies consistent with FEMA guidelines and involving planning partners developing an annex document. This will also allow for the appropriate application of the Plan Maintenance Section. This approach also removes projects assigned to state and federal agencies, who are outside the HMP's scope, ensuring future projects are properly identified, prioritized, and maintained. (For example, State DNR has several projects identified within the CWPP; while DNR is an important, active stakeholder in the HMP and CWPP development, the appropriate method for DNR to identify potential projects would be through the State's Enhanced Mitigation Plan, and not the County's HMP.) While it is understood that the projects may be focused on the needs of the County, such as areas for application of fuels treatment or vegetation control, those would be identified annually. Moving forward, for

As with all mitigation strategies, the intent is to take action in advance of a disaster or event to help reduce the impact when an event occurs, thereby increasing the resilience of the community in the aftermath of a fire. Increasing resilience of the landscapes within Spokane County involves and requires an integrated approach, involving all stakeholders.

We know factually that by applying various mitigation actions in advance of a fire, it reduces the potential vulnerability when a fire occurs. In some instances, this may mean allowing the fire to run its natural course, allowing resources to be redirected. By applying mitigation efforts in advance, in most instances, the risk or impact level is reduced. In so doing, it allows decision makers the opportunity to prioritize other areas and actions during times of fire.

The Planning Team/Coalition identified the following general mitigation strategies for use throughout the county. The list is not all-inclusive but serves as a starting point of available options for communities.

Fuels Reduction

- Design and prioritize fuel treatment options to reduce fire intensity, structure ignition, and negative wildfire impacts to assets. Examples include:
  - Slashing and under burning or pile burning
  - Commercial harvesting
  - Chipping
  - Thinning
- Where feasible, implement strategically placed fuel treatments to interrupt fire spread across landscapes.
- Use and expand fuel treatments involving mechanical, biological, or chemical methods where economically feasible and sustainable, and where they align with landowner objectives.
- Reduce the risk of wildfire by removing fuels, especially small-diameter trees, while maintaining forest structure to protect ecosystem components.

Municipal and Fire Service Agency Efforts (Capacity Building)

- Establish and maintain defensible spaces around critical facilities and infrastructure.
- Implement water source improvements for firefighting efforts.
- Install surveillance cameras in high-risk areas for early detection.
- Support the acquisition of firefighting equipment and resources.

this 2026 update, new projects will be identified, prioritized, and maintained in the manner consistent with FEMA's guidelines for approval of the HMP, while also meeting requirements for the CWPP.

- Develop and enforce development, building, and fire codes and standards to which new development occurs which helps reduce ignition and wildfire spread, and supports firefighting capabilities.
- Ensure parks and community gathering centers establish mechanisms to reduce the risk of wildfire ignition and spread, while also helping to ensure the safety of its occupants if a wildfire occurs (e.g., escape proof fire rings for campfires/BBQ areas; defensible spaces between campground areas; clearly identified evacuation routes and gathering areas; public notification sites, etc.)
- Seek out and secure financial assistance to support projects that enhance wildfire resilience and safety communitywide (e.g., fire-resistant home upgrades, widening of restrictive roadways, etc.).
- Implement post-fire recovery activities that provide opportunities to leverage long-term, post-fire planning that can support future wildfire reduction and prescribed fire activity.

Prescribed Fire

Recognize prescribed fires as an important fuel treatment and ecological restoration tool, where appropriate.

- Continue and expand the use of prescribed fire to meet landscape objectives, improve ecological conditions, and mitigate negative wildfire impacts on human development.
- Ensure that prescribed fire planning includes the management of smoke in accordance with the Clean Air Act and the regulations and policies of the Environmental Protection Agency (EPA)
- Ensure that prescribed fire planning follows state, tribal and local regulations

Community Involvement, Education, and Outreach

- Encourage community members to participate in wildfire prevention efforts around their homes and throughout their neighborhood.
- Upgrade or install fire-resistant roofing, siding, and windows - research suggests that the only effective home protection treatment is treatment in, on, and around the house (see Figure 10-25).
- Develop and implement a comprehensive wildfire education program, such as Firewise USA, Wildfire Ready Neighbors, and Ready, Set, Go!
- Establish community emergency response teams and associated training programs.
- Organize community events, workshops, seminars or other training sessions on wildfire preparedness, evacuation plans, and wildfire prevention activities.
- Develop emergency preparedness kits to include vital or critical documentation scanned to a thumb drive.
- Know main evacuation routes.
- Sign up for emergency alert notifications.

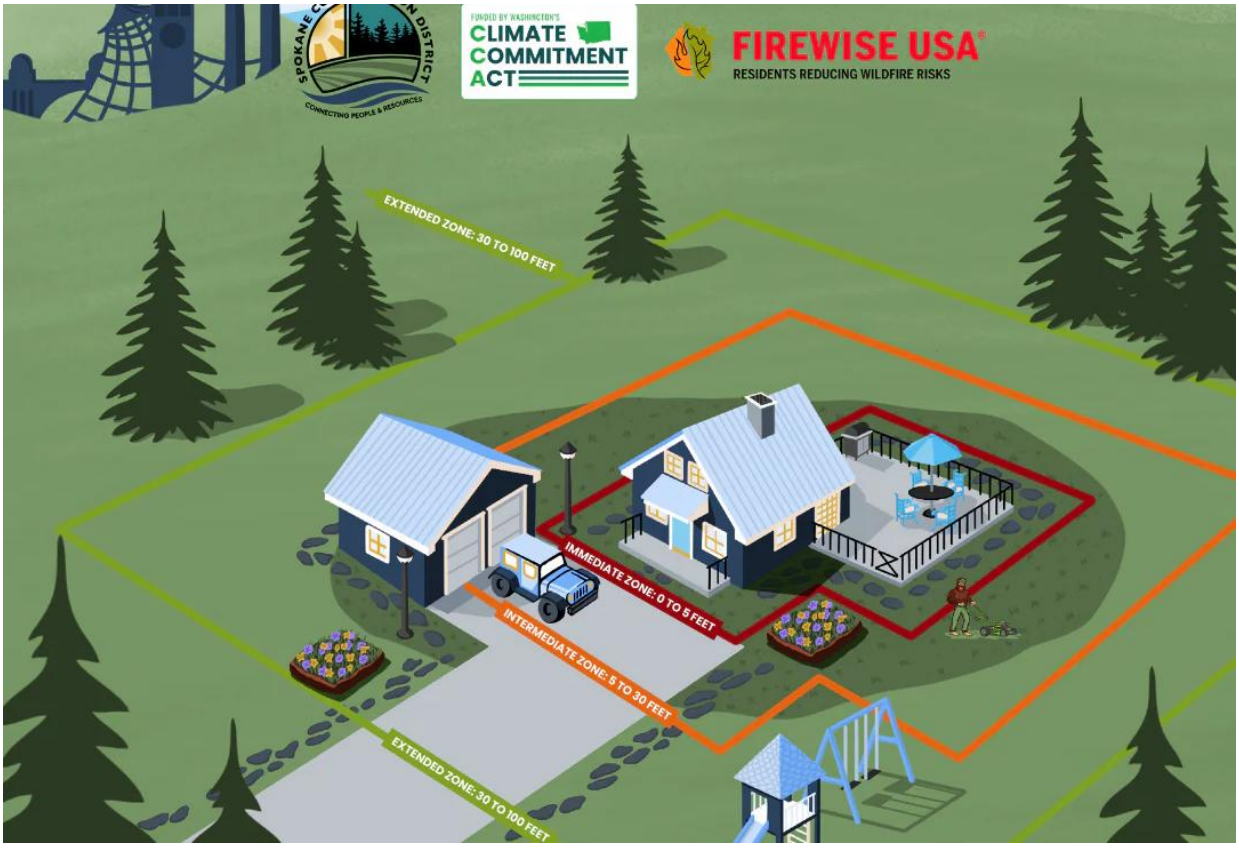


Figure 10-25 Measures to Protect Homes from Wildfire

10.9.1 Additional Completed Mitigation Strategies

In addition to those strategies identified within Chapter 12, during Coalition meetings and discussions, several additional mitigation projects were brought to light, which have been completed by Coalition members since the 2020 HMP. All of these efforts have had a positive impact on the wildfire resilience of the County. A few examples of the endeavors include:

- Completion of Wildfire Resiliency Plans by both Avista Corporation and Inland Power & Light to help identify wildfire risk and mitigation strategies by the County's two primary power utility providers.
- In 2024, Inland Power and Light (IP&L) was awarded a $10,000,000 grant from the United States Department of Agriculture, Forestry Service, to reduce fuel buildup in high wildfire risk areas through an intensive program of ROW clearing and hazard tree removal. The project spans 138 miles of power lines and will clear 582 acres. In addition to its ordinary vegetation management practices, IP&L will be utilizing $2,000,000 of grant funds per year over five years to accomplish the objectives of the grant award.
- Established the Spokane County Wildfire Mitigation Coalition (SCWMC): In September 2024, after sustaining significant impacts from wildfires fires which destroyed more than 300 homes, the Spokane County Wildfire Mitigation Coalition was established to increase

community resilience to wildfire by supporting a collaborative and strategic approach to planning, treating, and procuring funding; as well as providing education and technical assistance for implementing activities to assist and empower Spokane County communities to prepare for, respond to and recover from wildfire. The mission of the Coalition establishes: A coalition of partners collaborating to intentionally and strategically share resources, funds, and knowledge to reduce catastrophic wildfire risk and enhance community resilience.

- River Bluff Ranch in the southwestern part of Fire District #4 was part of the original group of Firewise USA Sites recognized in 2002. This development was in a heavily wooded area with little to no access. Since its initial enrollment into the Firewise USA program, the community now includes covenants restricting certain building materials; requires defensible space areas around the homes, and completed several fuel reduction efforts, which have provided defensible space around structures. It demonstrates a community coming together to increase their resilience to wildfire.
- The Spokane County Conservation District's home-hardening cost share program has used over $350,000 in the last biennium to assist more than 50 homeowners with their home hardening efforts.

10.9.2 Capabilities

Wildfire mitigation is most effective when multiple strategies are combined which, when applied, improve the capabilities and potential to reduce injury or death, reduce or eliminate ignition sources, disrupt the potential for wildfire spread, and reduce wildfire intensity, thereby reducing the impact on individuals and the community. Capabilities at the County level are identified in Chapter 13. Within each planning partner's annex, a list of capabilities is identified which helps mitigate or reduce the impacts of the various hazards of concern, including those specific to wildfire management and reduction.

In addition, the SCWMC in Spokane County actively works to support individual homeowners' efforts with respect to removing or reducing ignition sources, as well as actively training to ensure wildfire fighting capabilities by both volunteers and employees. In furtherance of this effort, there are several programs in place countywide supported by the Coalition which promote local community mitigation efforts. These include:

- ***Firewise USA Sites™:*** The NFPA's Firewise USA program encourages local solutions for safety by involving homeowners in taking individual responsibility for preparing their homes from the risk of wildfire. Firewise is a key component of Fire Adapted Communities – a collaborative approach that connects all those who play a role in wildfire education, planning, and action with comprehensive resources to help reduce risk. All of the Fire

Departments and Districts throughout the county encourage the Firewise Program.[58], [59] Several communities throughout the County are members of the Firewise Program, as follows:[60]

- Bridlewood HOA, Spokane
- Flowery Trail, Spokane
- Four Mound Community, Spokane
- Glenrose, Spokane
- Latah Bluff Natural Area, Spokane
- Little Spokane River Estates, Colbert
- Manito Place, Spokane
- Mullen Hill Terrace Mobile Home Park, Spokane
- Pine Bluff, Nine Mile Falls, Spokane County
- Ridge at Hangman HOA, Spokane
- Ridge Park Estates, Cheney
- River Bluff Ranch, Spokane
- Wilderness Lake HOA, Spokane

- ***Wildfire Risk to Communities – Risk Reduction Zones:*** The USDA's Wildfire Risk to Communities, which (among other things) has identified Risk Reduction Zones, or areas where mitigation activities will be most effective at protecting homes and other buildings from wildfires. Figure 10-26 identifies those zones. Each zone applies various types of potential mitigation efforts as follows:

  - *Indirect Exposure Zones* - Provides an opportunity to reduce places for embers to land and ignite. Mitigation activities include making homes more ignition resistant by, for example, establishing a 5-foot noncombustible zone around homes, or by applying land use planning strategies which disrupt the potential for a wildfire to spread and intensify, reducing risks to people and homes, while also making wildfire response safer and more effective.

[58] http://www.firewise.org/usa-recognition-program/state-listing-of-partcipants.aspx

[59] NFPA State Listing of Participants. Accessed 4 July 2019. Available online at: http://www.firewise.org/usa-recognition-program/state-listing-of-partcipants.aspx Those communities already part of Firewise USA® or which maintain a Firewise Action Plan or other approved community wildfire mitigation plan, regardless of the plan's status at the time of writing, are simultaneously incorporated into this Hazard Mitigation Plan by reference. Action or mitigation plans for communities that are drafted after this plan is adopted will also be considered a part of this plan and will be incorporated into this plan at the next scheduled update.

[60] Readers wishing to gain specific information on their communities involvement may gain additional information at: NFPA - Firewise USA®

- *Direct Exposure Zones* - Also includes reduction of vegetation to carry fire to homes, and reducing places for embers to land and ignite, but also includes reducing hazardous fuels to modify fire behavior or creating defensible spaces to help anchor wildfire response activities.
- *Wildfire Transmission Zones* – These areas reduce continuity of vegetative fuels to slow fire spread, and include reducing hazardous fuels through burning, thinning, pruning, chipping, and mechanically removing fuels to reduce the amount and continuity of burnable vegetation. Through the CWPP process, each community should annually identify priority areas within these zones to help reduce the impact of wildfire.

- ***Public Outreach*:** As more people move into the wildland urban interface of Spokane County, the need for a coordinated wildfire education program becomes paramount. Many new residents in high wildland fire risk areas are not aware of the potential threat, nor do they recognize the lack of defensibility and/or accessibility of their homes. General awareness of the risk, home defensible space, evacuation procedures, sheltering, and adequate access to structures are a few of the potential topics which need to be addressed. The County is committed to continuing its public outreach efforts to the best of its ability with Coalition members and other cooperating organizations to help ensure the public is aware of the wildfire threat (as well as other hazards) throughout the County.

On a statewide scale, Washington State Department of Natural Resources also has additional tools available to assist in suppression of wildfires when one occurs, as well as funding available to assist in fuels reduction prior to an event occurring. Those resources available within planning area include:

- **Fuels Reduction and Forest Health Projects:** State DNR provides a funded cost-share for multiple private landowners in Spokane County through the Forest Stewardship Program. Landowners are encouraged to complete and implement forest management plans and prescriptions that reduce the risk of fire and disease.
- **Fire Staff:** DNR uses full-time permanent fire staff to implement projects including the Arcadia 20 transition crew, permanent engine leader, heavy equipment operators and off-season engine staff to implement high priority projects for historically underserved landowners through an environmental justice program.
- **Helicopter:** The DNR has six Type-2 helicopters based out of Ellensburg, and they are staged throughout the state as needed. In times of high fire danger there is often a helicopter staged at Colville, Omak and occasionally at Deer Park.
- **Fixed-Wing:** The DNR Northeast Region often partakes in contracting a fixed-wing platform for Air-Attack during peak fire periods. This platform is often based out of the

Deer Park Airport. The DNR typically bases two contract single engine "Fire Boss" scoopers out of Deer Park from June through September.

- **Air Tankers:** The Arcadia district has access to federal tankers. Coeur d' Alene Air Tanker Base is nearby and often stages a tanker on base during high fire danger periods. In addition, the DNR is able to utilize Canadian air tankers through agreement.
- **Detection Cameras**: The DNR contracts with Pano AI to provide wildland fire detection cameras on Wrights Hill in Spokane County. Avista Utilities contracts with Pano AI to provide detection cameras on Mount Spokane, Layton Hill, and Krell Ridge in Spokane County and Scoop Mountain in Southern Stevens County. These cameras provide 24-hour, seven-day a week wildfire detection and real time fire intelligence service. Two cameras per site provide 360-degree visual coverage that is tied in with Pano AI and detection services to provide early wildfire alerts to dispatch centers and fire managers.

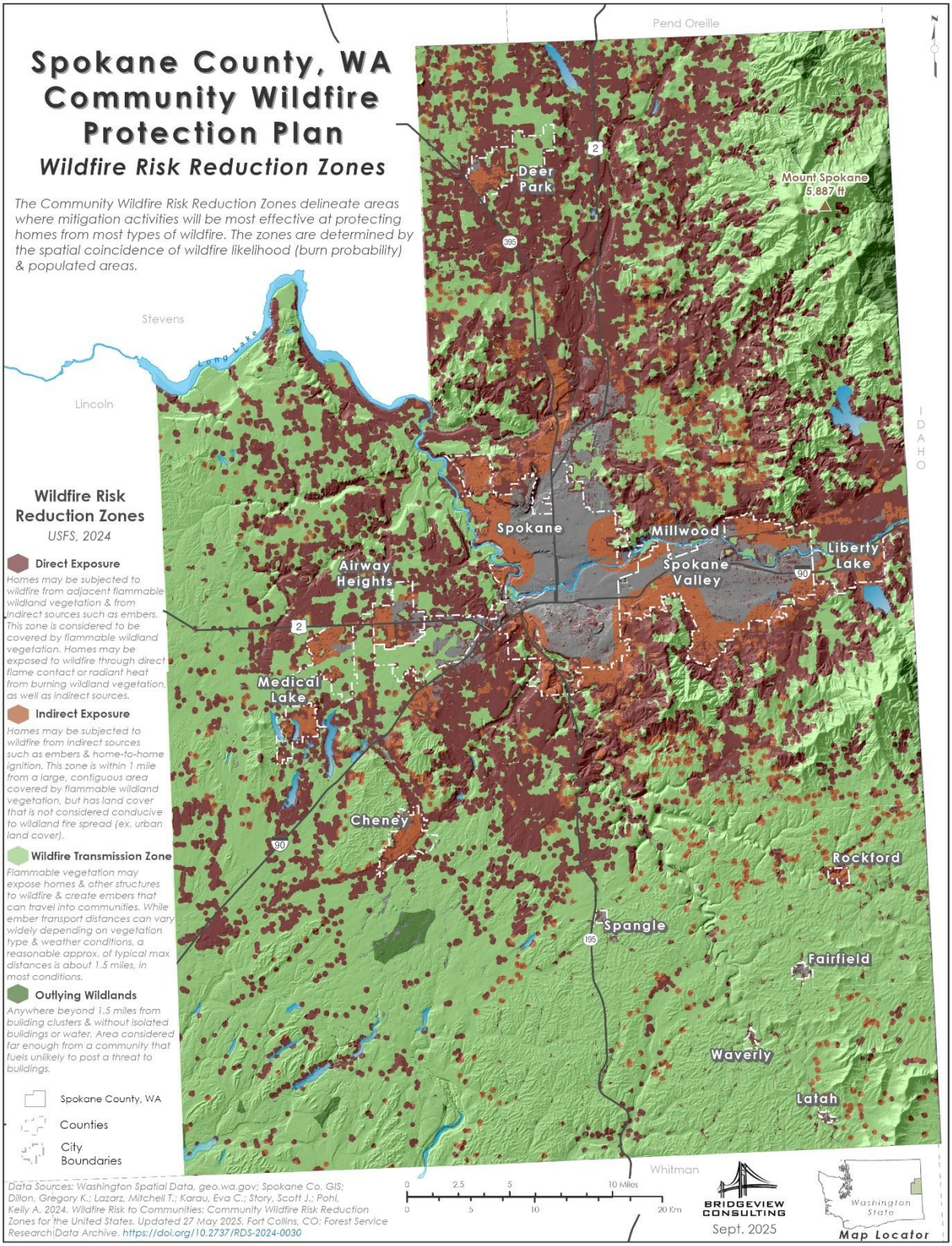


Figure 10-26 Wildfire Risk to Communities - Risk Reduction Zones

CHAPTER 11.
HAZARD RANKING

11.1 CALCULATED PRIORITY RISK INDEX

In ranking the hazards, the Planning Team utilized the Calculated Priority Risk Index (CPRI) to complete the Risk Ranking Workbook for each hazard identified, enabling the scoring of the hazards based on impact criteria (see Chapter 4, Figures 4-1 and 4-2 for samples).

The CPRI examines five criteria for each hazard as discussed in detail in Chapter 4 (probability, magnitude/severity, extent/location, warning time, and duration), defines a risk value for each according to four levels (e.g., 1-4), and then applies a weighting factor based on the significance of the criteria. The result is a score that has been used to rank the hazards equitably countywide.

In order to complete this process, the Planning Team was provided the hazard profiles, which includes loss data for the various hazards which identify impact to people, property, economy and environment at the local level, and the critical facilities list which was developed by the planning partners, and which identifies impact to each facility for each hazard of concern.

All planning partners completed their own hazard rankings, using the same process as the county. Table 11-1 presents the results of the 2020 Calculated Priority Risk Index scoring for all hazards impacting Spokane County. Table 11-2 presents the results of the 2026 Calculated Priority Risk Index scoring for all hazards impacting Spokane County. Table 11-3 is a summary of the hazard ranking results for the planning partners for 2020. Table 11-4 represents the 2026 summary of hazard rankings results for the planning partners. Each jurisdictional annex contains the individual scores established.

Table 11-1.
2020 Spokane County Calculated Priority Risk Index Ranking Scores

Hazard	Probability	Magnitude and/or Severity	Extent and Location	Warning Time	Duration	Calculated Priority Risk Index Score
Drought	4	2	2	1	4	2.75
Earthquake	3	3	2	4	1	2.85
Flood	4	2	3	2	2	3.0
Landslide	4	2	2	4	2	3.1
Severe Weather	4	3	4	2	2	3.4
Wildfire	4	3	2	4	2	3.30

The Calculated Priority Risk Index scoring method has a range from 0 to 4. “0” being the least hazardous and “4” being the most hazardous situation.

Table 11-2.
2026 County Calculated Priority Risk Index Ranking Scores

Hazard	Probability	Magnitude and/or Severity	Extent and Location	Warning Time	Duration	Calculated Priority Risk Index Score
Drought	4	2	2	1	4	2.75
Earthquake	3	3	3	4	1	3.05
Flood	4	2	3	2	2	3.0
Landslide	4	2	2	4	2	3.1
Severe Weather	4	3	4	2	2	3.4
Wildfire	4	3	4	4	3	3.75

The Calculated Priority Risk Index scoring method has a range from 0 to 4. "0" being the least hazardous and "4" being the most hazardous situation.

Table 11-3.
2020 Countywide Calculated Priority Risk Index Score by Planning Partner

Entity	Drought	Earthquake	Flood/ Dam	Landslide	Severe Weather	Wildfire
County	2.75	2.85	3.0	3.1	3.4	3.3
Airway Heights	2.4	2.25	0	0	2.55	2.3
Cheney	2.75	2.85	2.45	1.45	3.6	3.55
Deer Park	1.95	2.45	2.7	1.05	3.25	2.95
Fairfield	2.35	2.6	2.45	1.85	3.45	2.3
Liberty Lake	1.95	2.85	1.2	2.7	3.4	2.3
Spokane Valley	2.8	2.7	3.2	2.7	3.4	3.6
Spokane County Conservation District	2.75	2.85	2.1	1.65	3.15	3.65
Spokane Valley Fire	2.75	2.85	3	3.1	3.4	3.3
Spokane County FD 3	2.95	2.85	3.05	2.05	3.4	4
Spokane County FD 4	2.55	2.85	2.45	1.65	3.5	2.9
Spokane County FD 5	2.35	2.45	2.6	2.7	3.4	3.3
Spokane County FD 8	2.55	2.65	2.4	2.7	3.4	3.35
Spokane County FD 9	2.75	2.55	2.65	2.6	3.25	3.55
Spokane County FD 10	3.15	2.85	3.0	2.7	3.4	3.7
Newman Lake Flood Control Zone District	1.90	2.25	2.4	1.65	2.4	2.9

Table 11-4.
2026 Countywide Calculated Priority Risk Index Score by Planning Partner

Entity	Drought	Earthquake	Flood/ Dam	Landslide	Severe Weather	Wildfire
County	2.75	3.05	3.0	3.1	3.4	3.75
Airway Heights	1.95	2.25	NR	NR	2.7	2.3
Cheney*	2.75	2.85	2.45	1.45	3.6	3.55
Deer Park*	1.95	2.45	2.7	1.05	3.25	2.95
Fairfield (Pending)						
Liberty Lake*	2.35	2.65	1.2	1.9	3.4	3.55
Rockford (Pending)						
Spokane Valley*	2.75	2.65	1.8	2.25	3.25	3.55
Spokane County Conservation District	2.75	2.85	2.1	1.65	3.15	3.75
Spokane Valley Fire	2.75	2.85	3	3.1	3.4	3.3
Spokane County FD 3	2.95	2.85	3.05	2.05	3.4	4
Spokane County FD 4	2.75	2.85	2.7	1.65	3.7	3.5
Spokane County FD 5	2.35	2.45	2.6	2.7	3.4	3.3
Spokane County FD 8	2.55	2.35	2.4	2.5	3.4	4
Spokane County FD 9	2.35	2.25	2.3	1.5	3.3	3.8
Spokane County FD 10	3.15	2.85	3.0	2.7	3.4	3.7

*Additional hazards included within Jurisdictional Annex. Additional hazards include train derailment, public health, man-made disaster, excessive temperature (included for all in Severe Weather profile), hazardous materials (site specific, otherwise included for all hazard profiles), and wildfire smoke (included for all within the Wildfire hazard).

11.2 RISK RANKING

Once the CPRI calculations were determined, the Planning Team then prioritized the hazards of concern based on a numeric value. During this risk ranking process, Planning Team Members were asked to consider their experience and knowledge in identifying items which are relevant but not necessarily captured in other areas of the hazard profiles such as local capabilities, or gaps that may exist within their communities.

During the ranking process, in some cases, the hazards ranked equally even though their CPRI scores were different based on the application of subjectivity on the part of the team members. This provided an opportunity for the inclusion of information and detail that otherwise may not be included in the risk assessment. Each Planning Team Member identified those variations in their respective annex document. The results of the analysis are contained in Table 11-5.

Table 11-5.
2026 Countywide Hazard Ranking

Entity	Drought	Earthquake	Flood/ Dam	Landslide	Severe Weather	Wildfire
County	4	3	2	2	1	1
Airway Heights*	4	3	NH	NH	1	2
Cheney*	5	4	7	9	1	2
Deer Park	5	4	3	8	1	2
Fairfield (Pending)						
Liberty Lake*	6	4	9	8	2	1
Rockford (Pending)						
Spokane Valley*	3	4	7	6	2	1
Spokane County Conservation District*	4	3	5	6	2	1
Spokane Valley Fire	6	5	4	3	1	2
Spokane County FD 3*	4	5	3	9	2	1
Spokane County FD 4	4	3	5	6	1	2
Spokane County FD 5	4	3	2	2	1	1
Spokane County FD 8	3	6	5	4	2	1
Spokane County FD 9	3	5	4	6	2	1
Spokane County FD 10*	4	3	2	2	1	1

NR = Not Ranked / NH= No Hazard /

*Included additional hazards Identified within Jurisdictional Annex which impact ranking

The hazards ranked as being of highest concern countywide are wildfire and severe weather. Hazards ranked as being of medium concern are landslide, flood, earthquake, and drought.

The final step in the process provided for the application of a qualitative rating based on a priority of high, medium or low, etc. to allow for ease in application in identifying and prioritizing not only the hazards, but also when considering strategies. The Planning Team felt this summary was particularly beneficial when discussing the hazards of concern with the public, as it provided a manner in which to define the risk associated with the hazards in simple terminology.

The Planning Team established the following descriptors for application:

- Extremely Low—The occurrence and potential cost of damage to life and property is very minimal to nonexistent.
- Low—Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal.

- Medium—Moderate potential impact. This ranking carries a moderate threat level to the general population and/or built environment. Here the potential damage is more isolated and less costly than a more widespread disaster.
- High—Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past.
- Extremely High—Very widespread with catastrophic impact.

The end result of the process is illustrated in Table 11-6 . This information was presented at various public outreach efforts to help identify risk countywide. Utilizing a process such as this is beneficial when discussing risk with the public while attempting to gain their perspective as it provides a means for the Planning Team to describe risk in a manner which is easily applied and understood. It also provides a mechanism of determining how citizens view risk to help validate the information established throughout the planning process from the view of the citizens, further validated by the surveys completed, which utilize a high/medium/low priority rating.

Table 11-6.
Countywide Risk Rating Summary

Jurisdiction	Drought	Earthquake	Flood	Landslide	Severe Weather	Wildfire
County (Unincorporated)	Medium	Medium	Medium	Medium	High	High
Airway Heights	Medium	Medium	Medium	Medium	High	High
Cheney	Medium	Medium	Low	Ex Low	High	High
Deer Park	Low	Medium	Medium	Ex Low	High	High
Latah	Medium	Medium	Medium	Low	High	High
Liberty Lake	Medium	Medium	Low	Medium	High	High
Spokane Valley	Medium	Medium	Low	Medium	High	High
Spokane County Conservation District	Medium	Low	High	Low	High	High
Spokane Valley Fire	Medium	Medium	Medium	Medium	High	High
Spokane County FD 3	Medium	Medium	Medium	Low	High	High
Spokane County FD 4	Medium	High	Medium	Medium	High	High
Spokane County FD 5	Medium	Medium	Medium	Medium	High	High
Spokane County FD 8	Medium	Medium	Medium	Medium	High	Ex. High
Spokane County FD 9	Medium	Low	Medium	Low	High	High
Spokane County FD 10	Medium	Medium	Medium	Medium	High	High

CHAPTER 12.
MITIGATION STRATEGY

The development of a mitigation strategy allows the community to create a vision for preventing future disasters. This is accomplished by establishing a common set of mitigation goals and objectives, a common method to prioritize actions, and evaluation of the success of such actions. Specific mitigation goals, objectives and projects were developed for Spokane County and its planning partners by the Planning Team in their attempt to establish an overall mitigation strategy by which the jurisdictions would enhance resilience of the planning area.

12.1 HAZARD MITIGATION GOALS AND OBJECTIVES

During the kick-off meeting, the Planning Team reviewed the 2020 existing goals and objectives. The Planning Team felt the 2020 goals and objectives as stated support the countywide effort of enhanced capabilities which support resilience through protection of life, property, the economy and the environment, and confirmed the goals and objectives for use in the 2025 update with a few minor revisions to include natural and cultural resources. The goals as written accurately describe the overall direction that Spokane County and its planning partners can take to work toward mitigating risk from natural hazards and avoid long-term vulnerabilities to the hazards of concern.

12.1.1 Guiding Principle, Goals and Objectives

Guiding Principle

The following principle guided the planning partnership in selecting the initiatives contained in this plan update:

> *Utilizing community partnerships and planning, reduce the vulnerability to natural hazards in order to protect the health, safety, welfare, environment, and economy of the communities within Spokane County.*

Goals

The planning partnership again confirmed the goals for the plan update:

1. Ensure effective and efficient emergency response and recovery capabilities to reduce the loss of life, property, and natural and cultural resources during and after a disaster.
2. Protect property including critical public facilities and infrastructure, and natural and cultural resources from possible damage due to hazards.

3. Protect the continuity of local government to ensure no significant disruption of services during or due to a natural disaster.
4. Build and support local capacity to enable the whole community to prepare, respond, mitigate and recover from the impact of natural hazards.
5. Encourage the development and implementation of sustainable, cost-effective and environmentally sound mitigation projects.
6. Improve communication and information sharing within the community to support the planning for, response to, mitigation of and recovery from, the impacts of disasters.

Objectives

The following objectives were identified that meet multiple goals, acting as a bridge between the mitigation goals and actions and helping to establish priorities:

Objective Number	Objective Statement	Applicable Goals
O-1	Sustain continuity of local emergency and government operations, including the operation of identified critical facilities, during and after a disaster.	1, 2, 3, 4, 6
O-2	Reduce natural hazard-related risks to potentially isolated/vulnerable populations within the planning area.	1, 3, 4, 5, 6
O-3	Improve/protect systems and assets that provide warning and emergency communications.	2, 3, 4, 6
O-4	Utilizing the best available data and science, continually share updated information on hazards, risk and ways to reduce risk with all stakeholders within the planning area.	1, 2, 3, 4, 6
O-5	Strengthen codes, land use planning and their enforcement, so that new construction can avoid or withstand the impacts of natural hazards.	All
O-6	Provide/improve flood protection with flood mitigation measures and drainage system maintenance plans.	1, 2, 5
O-7	Provide/improve fire protection thru proactive fuels management and other wildfire reduction programs.	1, 2, 5
O-8	Assure coordination between participating planning partners and adjoining communities.	1, 4, 6

Objective Number	Objective Statement	Applicable Goals
O-9	Work to lower emergency service response times, including through improvement to transportation facilities.	1, 3, 4, 6
O-10	Retrofit, purchase or relocate structures based on one or more of the following criteria: level of exposure, repetitive loss history, and previous damage from natural hazards.	1, 2, 3, 4, 5
O-11	Seek mitigation projects that minimize environmental impacts, improve the environment's ability to absorb the impact of natural disasters, or seek ways to mitigate their impacts on the environment.	All
O-12	Encourage mitigation of private property through programs such as the Community Rating System, Firewise and Storm Ready programs.	2, 4, 6

12.2 HAZARD MITIGATION INITIATIVES

After the goals and objectives were established, the Planning Team developed specific action items to further increase resilience. FEMA's 2013 Catalog of *Mitigation Ideas* was presented to the Planning Team to provide ideas and concepts of possible action items. This document includes a broad range of alternatives to be considered for use in the planning area, in compliance with 44 CFR (Section 201.6.c.3.ii), and can be applied to both existing structures and new construction. The catalog provides a baseline of mitigation alternatives that are backed by a planning process, are consistent with the planning partners' goals and objectives, and are within the capabilities of the partners to implement.

Hazard mitigation initiatives recommended in this plan were selected from among the alternatives presented in the catalogs, as well as projects identified by the planning partners and interested stakeholders specific to their jurisdiction. Some were carried over from the previous plan. Some may not be feasible based on the selection criteria identified for this plan but are included nonetheless as the Planning Team felt they are viable actions to be taken to reduce hazard influence in some manner.

12.3 2026 MITIGATION INITIATIVES AND STATUS UPDATE OF 2020 INITIATIVES

For the 2025 update, particular attention was given to new and existing buildings and infrastructure and developing appropriate mitigation strategies for these facilities. The Planning Team determined that some initiatives from the mitigation catalog could be implemented to

provide hazard mitigation benefits countywide. Many of these initiatives are also identified by other planning partners who support the effort.

Previous plan editions contained two separate tables identifying County-specific initiatives with a separate table identifying Countywide initiatives. In many cases, those initiatives were redundant and identified in both tables. For this 2026 update, the County elected to consolidate the initiatives into one table, removing duplicates.

Since completion of the 2020 HMP, multiple county departments have experienced leadership change and/or loss of personnel. As a result, several of the projects have had no progress made, or the intent of the project is no longer a priority, and removed accordingly.

Error! Reference source not found. represents the recommended initiatives for 2026, while also providing the status of the 2020 initiatives. For this 2026 update, two new fields have also been added within Table 12-1. The first provides the *2026 Project Status* of the previous (2020) initiative, and the second a provides a descriptor, as follows:

- Carried Forward (CF)
    - Reflects that the project remains a valid project and is being carried forward into the 2026 update;
    - Is on-going in nature, and therefore carried forward;
    - Some action has been taken, and the project continues to be valid;
        - An example would be street or culvert enhancement projects, where some have been addressed, but others which also require repair or update remain.
- Completed (C)
    - The project was completed, and as a result, is being removed.
- Removed (R)
    - If a project is no longer relevant
    - Completed, and therefore is being removed
- Modified from original strategy (M)
    - The strategy was one previously identified, but has been modified slightly to remain in line with the County/Planning Partner's intent
- On-going (O)
    - Utilized to identify progress on specific initiative, but it is on-going in nature. Examples include
        - Public outreach efforts
        - Training, or
        - Programmatic or project-related strategies which will continue to evolve with continued enhancement.

- Merged (MRG #)
    - Projects which are similar in nature between the previous county-specific and countywide strategies were merged, with the corresponding strategy number(s) indicated.

12.4 ANALYSIS OF MITIGATION INITIATIVES

In addition to identifying potential funding sources available for each project, the Planning Team also developed strategies/action items that are categorized and assessed in several ways:

- By what the alternative would impact – new or existing structures, to include efforts which:
  - Manipulate/mitigate a hazard;
  - Reduce exposure to a hazard;
  - Reduce vulnerability to a hazard;
- By those who have responsibility for implementation (in some cases, including multiple partners):
  - Individuals;
  - Businesses;
  - Government (County, Local, State and/or Federal).
- By the timeline associated with completion of the project, based on the following parameters:
  - Short Term = to be completed in 1 to 5 years
  - Long Term = to be completed in greater than 5 years
  - Ongoing = currently being funded and implemented under existing programs.
- By identifying who would benefit from the initiative, as follows:
  - A specific structure or facility;
  - A local community;
  - County-level (e.g., multiple partners would benefit);
  - Regional level benefit.

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-1 Continue data gathering such as with LiDAR as well as additional facility information to continue to improve the risk assessment countywide, and to help support Hazus modeling used to develop plan updates.									
New/ Existing	All	1, 4, 10	EM, All HMP planning partners	Low	HLS/EMPG, HMGP, HUD, General Funds	Ongoing	Yes	Structural Projects, Property Protection	Regional
2025 Status: Due to staffing issues, the County was not able to make as much progress on this strategy as possible; however, the County does feel this is still a valid strategy and will carry it forward into the 2025 plan.									CF
SC-2 Work with County and state agencies to establish a protocol and advance permitting for transporting of hazardous materials for identification during an incident. Establish a countywide hazardous materials incident response team.									
New	Hazardous Materials	1, 3, 4, 8, 9, 10	PH, Fire, EM, PW, WSDOT, WDOE	High	General Funds, HLS (EMPG), CDC grants	Long-Term	No	Prevention, Public Information and Education, Natural Resource Protection, Emergency Services/ Response	Regional
2025 Status: The County continues to work with the state agencies responsible for issuing permits in an effort to move this strategy forward; however, no progress has been made. Some fire districts do maintain incident response capabilities; however, they are not at the level to be able to respond to any large incident.									CF
~~CW-3 Work on identifying points of distribution in areas of potential isolation.~~									
~~New~~	~~All~~	~~1, 2, 3, 4, 6, 7, 8, 11, 12~~	~~PH, EM, PW, Local EMs~~	~~Low~~	~~EMPG, HUD~~	~~Short-Term~~	~~No~~	~~Public Information and Education, Emergency Services / Response, Recovery~~	~~Regional~~
2025 Status: As a result of COVID response, the County and the planning partners have identified some PODs throughout the county. In addition, the County has developed a Points of Distribution Plan, which does identify areas for distribution, including areas which may be isolated due to the result of impact from the various hazards of concern.									C, R

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-3 Work with other county departments and local planning partners to capture historic hazard information utilized for future risk assessments, planning, grant and mitigation actions, including high water marks, identification of repetitive or severe repetitive loss properties (flood), location of wildfires, extent and location of hazard impact, and loss information.									
New and Existing	All	1, 2, 3, 4, 5, 6, 8, 10, 11	EM, PH, HS	Low	Health and Human Service Grants, HUD, HMGP	Long-Term	Yes – modified (2020 # SC-4)	Public Information and Education, Emergency Services / Response, Recovery	Community Level
2025 Status: Due to staffing issues, the County was not able to make as much progress on this strategy as possible; however, the County does feel this is still a valid strategy and will carry it forward into the 2026 plan.									CF
SC-4 Coordinating with Assessor's Office, Permitting and other County offices, update Assessor's parcel data to include more building-specific information which may be utilized within the GIS and HAZUS programs for enhanced risk assessments to provide a detailed loss estimation. [Examples of this include year of construction to include building codes in place for seismic and wind/snow load standards, types of construction materials for wildfire mitigation, etc.]									
New and Existing	All	1, 4, 5, 6, 10, 11	Assessor's Office; GIS; PW, EM; CD	Medium	General Fund, HMGP	Short-Term	Yes – (2020 #CW-5	Structural Projects, Property Protection, Recovery	County and Local
2025 Status: Due to staffing issues, the County was not able to make as much progress on this strategy as possible; however, the County does feel this is still a valid strategy and will carry it forward into the 2026 plan. Information which has been updated within the Assessor's database since completion of the 2020 HMP was incorporated into this 2026 HMP update within the risk assessment.									CF
SC-5 Coordinate among all jurisdictions to seek out and apply for grants for site hardening of facilities. This includes back-up power at critical facilities and resource locations.									
New/ Existing	E, EQ, F, LS, SW	1, 4, 5, 6, 7, 8, 9, 10, 11	EM	Medium	Earthquake and Tsunami Program, HMGP, PDM, HUD, DOT, EPA	Long-Term	Yes, modified	Structural Projects, Property Protection, Natural Resource Protection	Facility Specific
2025 Status: This is a viable strategy, but due to the uncertainty of federal funding, the County may or not be able to access federal programs to fund this initiative.									CF

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-6 Maintain and regularly update fire hydrant layer countywide.									
New/ Existing	WF	7, 8	EM, GIS, Fire	Low	HMGP, HUD, SAFER	Long-Term	Yes	Property Protection, Emergency Services/ Response	Countywide
2025 Status: The County has an existing layer and feels this is still a valid strategy and will carry it forward into the 2025 plan. This is particularly significant given the rapid growth experienced within some areas of the county.									CF
SC-7 Continue implementation of public information program within Spokane County to inform citizens about the hazards faced and the appropriate preparedness and response measures, including, but not limited to, Severe Weather, Wildfire/Fire Wise, NFIP, Earthquake and landslide information, insurance information, and structural projects which homeowners can undertake, such as affixing chimneys, foundations, fire-proof roofing materials, etc. This outreach program includes maintaining a Hazard Mitigation Plan website where the final plan and risk maps are presented.									
New/ Existing	All	All	EM and Local EM, Local and County Land Use Planning, Spokane County Engineering & Roads, private industry.	Low	EMPG, General Fund	Ongoing	Yes (CW-1, SC-11)	Prevention, Public Information and Education	County and Community
2025 Status: The County currently provides a robust public and education outreach effort for the residents of Spokane County and will continue to do so. This includes seasonal presentations on the various hazards of concern.									CF

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-8 Continue to expand disaster response volunteer training, involving local teams in exercises and training with first responders.									
New/ Existing	All	1, 2, 3, 4, 7, 8, 12	EM, Local EM, County Citizen Corps Groups,	Low	EMPG	Ongoing	Yes	Prevention, Public Information and Education, Emergency Services, Response, Recovery	County and Community
2025 Status: The County currently maintains a cadre of trained volunteers. Spokane County will continue to provide training and exercise opportunities, partnering with its local municipalities as appropriate.									CF
SC-9 Identify and designate emergency shelter structural and utility readiness for occupancy during or after a significant incident.									
New/ Existing	All	All	EM	Medium	HMGP, General Funds	Short-Term	Yes, modified	Prevention, Public Information Emergency Services/ Response	Regional
2025 Status: The County maintains a relationship with our regional chapter of the American Red Cross and the Spokane Public Facilities District. Through these relationships, the County shares this capability with the two partners.									CF
SC-10 Promote a "FireWise" program in County to increase fire safety zones around businesses and residences. Encourage owners to reduce woodland fuel loads on their property.									
New/ Existing	D, WF	7, 11, 12	EM, Local EM, Fire	Low	Fire Grants, HMGP	Ongoing	No	Property Protection, Natural Resource Protection, Prevention	Local
2025 Status: The County now has a wildfire mitigation coalition of partner agencies whose sole focus is the development, sustainment, and implementation of comprehensive wildland fire preparedness and mitigation strategies.									CF

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? / 2025 Project Status
SC-11 Work with local jurisdiction and planning partners to develop various emergency planning efforts to help ensure continuity of business and resiliency, and to develop mechanisms to ensure recovery efforts exist.									
New/ Existing	All	1, 3, 4, 7, 8, 9, 11, 12	EM, Local EM, ED, Chamber	Medium	EMPG Funds, General Funds	Long-Term	Yes, modified	Recovery	County, Local
2025 Status: The County continues to provide education and technical assistance as requested and as staffing levels permit.									CF
SC-12 Continue to promote and establish countywide emergency management actions, projects, and programs, working with the municipal planning partners and special purpose districts, to enhance resiliency and maintain consistency in mitigation activities, emergency management programs, and capabilities. This includes seeking grant funding to support such initiatives.									
New/ Existing	All	1, 3, 4, 8, 9, 11	EM, Local EM, Fire, Hospitals	Medium	General Funds, Grant Opportunities as they arise	Long-Term	Yes, modified	Prevention, Public Information/ Education, Emergency Services/ Response, Recovery	County and Local
2025 Status: The County continues to strive to provide professional full-spectrum Emergency Management services to build and sustain community resilience									CF
SC-13 Strive to capture time-sensitive, perishable data such as high-water marks, wildfire occurrences, extent and location of hazard, and loss information following hazard events to support future updates to the risk assessment and in support of future grant applications to demonstrate impact. County EM may seek out grant funding to assist in developing internal capabilities to capture this data in GIS format within Emergency Management.									
New/ Existing	All	1, 3, 4, 5, 6, 8, 10, 11	EM and Local EMs	Medium	General Funds	Long-Term	Yes, modified	Emergency Services/ Response, Recovery	County and Local
2025 Status: The County will continue to maintain appropriate incident data and records. This may include an enhanced level of participation utilizing GIS data to illustrate areas and levels of impact.									CF

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-14 Continue to enhance local emergency planning committee (LEPC) involvement with private industry and local jurisdictions throughout the County with the goal of monthly meetings.									
Existing	WF	1, 2, 3, 8,	EM, Local EM, Fire, Private Industry	Low	General Funds	Ongoing	Yes	Prevention, Emergency Services/ Response, Recovery	County and Local
2025 Status: The County will continue to facilitate and support the activities and engagement of our LEPC									CF
SC-15 Seek grant funding to develop a countywide mass care and evacuation exercise, which includes all fire and police departments, hospitals, Public Health, County Transit, Emergency Management and Search-and-Rescue, as well as other planning partners as identified during exercise design.									
New and Existing	All	8, 9, 10, 11	EM, Local EM, Fire, Hospitals, PH, PW, WSDOT; Sheriff, LE	High	EMPG, DOJ Grants, Fire Training Grants	Long-Term	Yes	Emergency Services/ Response, Recovery	County and Local
2025 Status: The County maintains a training and exercise calendar and coordinates and sponsors both functional and full-scale drills and exercises as funding permits. One example of this occurred during the update of this HMP when the County assisted with and evaluated an active shooter exercise at a local community college. The County finds this to be a valid strategy and will carry it forward.									CF
SC-16 Continue to integrate mitigation planning data into ongoing land-use planning to assist in providing information necessary to enforce existing building codes, floodplain and critical areas ordinances, and shoreline protection.									
New and Existing	F, E, EQ, LS, SW	4, 5, 6, 7	EM, PW	Low	FEMA	Short-Term	Yes	Prevention, Emergency Services, Planning, Response, Recovery	Local and County
2025 Status: As of this 2026 HMP update, the County is engaged in the update to the Comprehensive Plan and mitigation information is actively being shared.									CF

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? / 2025 Project Status
SC-17 Continue to develop and maintain countywide mutual aid agreements with both public and private agencies in support of preparedness and response activities.									
New	All	1, 3, 8, 9	EM	Medium	General Funds	Ongoing	Yes	Emergency Services/ Response, Recovery	County and Local
2025 Status: The County is engaged in this ongoing process.									CF
SC-18 Work with local school districts to study and retrofit school facilities to better withstand damage or impact from earthquake, flood, severe weather, wildfire (including smoke), and landslide events.									
New/ Existing	All	All	DEM, Local DEM, School Districts	High	HLS/EMPG, HMGP, Dept. of Education, Earthquake/ Tsunami Program	Ongoing	Yes, Expanded	Structural, Property Projection, Emergency Services/ Response, Recovery	Facility, County, and Local
2025 Status: The County continues to provide support and technical assistance to our school districts to achieve their goals and objectives.									CF
SC-19 (2020 Plan SC-1) Seek out and apply for grant funding for an appropriate EOC facility									
Existing	All	1, 2, 3, 4 5, 7, 8, 9	Emergency Management , Facilities, County Officials	High	HLS/EMPG, PDM, HMGP, HUD,	Short-Term	Yes	Structural Projects, Property Protection	Regional
2025 Status: The County recognizes the existing emergency management facility is inadequate; however, there is a lack of funding for capital improvements. This is a very valid concern and the strategy will be carried forward.									
~~(2020 plan SC-2) Reorganize the Roads Department, adding additional satellite shops to reduce response times during severe weather.~~									
~~New/ Existing~~	~~SW~~	~~1, 2, 8, 9~~	~~Spokane County, Public Works~~	~~High~~	~~Local/Grant~~	~~Long-Term~~	~~Yes (SC-1)~~	~~Property Protection, Structural Projects, Natural Resource Protection~~	~~County~~
2025 Status: This strategy is removed for this 2026 update.									R

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-20 Consider participation in the Community Rating System.									
New and Existing	F, SW	2, 4 5, 6, 8, 12,	Spokane County, Public Works	Low	Local	Short-Term	Yes (SC-4)	Property Protection, Structural Projects, Natural Resource Protection	County
2025 Status: Currently making progress to apply to be part of the Community Rating System.									Ongoing, CF
~~(SC-4.) Seek grant funding for acquisition of properties in high-hazard areas, with special attention to repetitive or severe loss properties.~~									
~~Existing~~	~~All~~	~~2, 10, 11~~	~~Spokane County, Public Works, and Emergency Management~~	~~High~~	~~PDM, HMGP, FMA~~	~~Long-Term~~	~~Yes~~	~~Property Protection, Structural Projects, Natural Resource Protection~~	~~Facility and County~~
2025 Status: No progress made since 2020 plan update, but the county feels this is a good project and will carry it forward. The initiative has been merged with a similar strategy (SC-4 above).									R
SC-21. Support and implement as appropriate wildfire mitigation recommendations identified in the Spokane County CWPP. This includes, among others, fuels reduction strategies, continued public outreach, wildfire home assessments, enhanced building codes, etc.									
New/ Existing	WF	*1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12*	Emergency Mgmt., Spokane, County Conservation District, Local Fire Districts and EM departments	Medium	Local, Fire Grants, FEMA Hazard Mitigation Grants	On-going	Yes	Protection, Response, Recovery, Natural Resource Protection	Local and County
2025 Status: With completion of this 2026 HMP, the Wildfire Chapter will now serve as the County's CWPP. County departments and planning stakeholders are actively engaged in management of identified wildland fire mitigation strategies.									CF

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-22. Develop an inventory of culverts that includes identification of existing conditions such as fish passage, vegetation status, evidence of scour, physical condition (i.e. rusted, crushed, split), etc. Further analysis includes identifying which can convey the 100-year flood, and which are not. And, with this information, develop a culvert ranking system that results in a culvert replacement priority list for future planning.									
Existing /New	F, LS, SW, WF,	2, 4, 5, 8, 11	Public Works; GIS	Medium	General Fund, DOE, WSDOT, HMGP, FMA	Long-Term	Yes	Prevention, Response, Recovery, Natural Resource Protection	County and Local
2025 Status: Ongoing									CF
SC-23 Study scour-critical (and other) bridges within floodplain or landslide hazard areas to identify which are at risk from the hazards of concern or capable of conveying the 100-year flood, and determine what can be done to mitigate those that are not. Develop a bridge ranking and priority replacement list / process / program.									
New/ Existing	Erosion/landslide, F, SW, WF	2, 4, 5, 8, 11	Spokane County, Public Works	Medium	General Fund	Long-Term	Yes, merged (previous SC 10)	Prevention, Mitigation	County
2025 Status: Ongoing; no action completed since 2020 update. With the 2025-2026 RiskMap project underway, the County feels that additional information will become available once the new maps are completed to assist in identifying susceptible bridges.									CF
SC-24 Continue to design and build facilities to meet or exceed seismic/geologic, flood and wildfire code standards, including redundant essential systems and equipment. Apply current building code standards to all renovations or replacement of existing facilities, and/or equipment.									
New/ Existing	EQ, LS, SW, WF	1, 2, 3, 4, 5, 6, 7, 8, 9	Planning, PW	High	LOCAL Possible Grants	Ongoing	Yes, modified	Structural Projects, Property Protection	County
2025 Status: Ongoing									CF

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-25 *Study floodplain areas that currently do not have detailed studies, using more current models, resulting in more accurate mapping for planning and design of future County Capital Projects, as well as private development.*									
New and Existing	F, SW	2, 4, 5, 8, 11	*Spokane County,* Public Works	Medium	General Fund, various grants.	Long Term	Yes (SC-8)	Structural Projects, Public Information and Education, Natural Resource Protection	County, Facility, Local
2025 Status: Currently working with FEMA for updated maps of the Special Flood Hazard Areas identified as Zone A. Funding has been granted for Preliminary Maps to be completed. Future funding to complete the project and release Effective Maps is unknown									CF
~~(SC-10) Provide scour protection for approximately 35 "scour critical" bridges in Spokane County.~~									
~~Existing~~	~~F/SW~~	~~1, 2, 6, 10, 11~~	~~Spokane County Public Works~~	~~High~~	~~General Funds, Grants~~	~~Short-Term~~	~~Yes~~	~~Prevention, Property Protection, Emergency Services~~	~~Regional~~
2025 Status: No action taken. Strategy merged with SC -23 to reduce redundancy.									R
SC-26 Update the Spokane Regional Stormwater Manual for compliance with the recently updated 2019 Washington State Department of Ecology Stormwater Management Manual for Eastern Washington. Ensuring that regional design thresholds and guidance are current with respect to State adopted regulations means that development is more consistent, structures and the environment have a higher degree of protection from flooding.									
New/	F, LS, SW,	2, 4, 5, 6, 8, 11	Spokane County Public Works	Low	Local / Ecology (or other) Grant Funding	Short Term	No	Structural Projects, Property Protection, Natural Resource Protection	County
2025 Status: The stormwater manual has received regular updates since completion of the 2020 HMP.									O

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-27 Assess the segment of the Country Homes Drainage between the Price and Wall Regional Stormwater Facility, through and beyond Whitworth University, for updated floodplain and floodway mapping boundaries; anticipate the need for both a CLOMR and LOMR to complete the mapping revisions. Once completed, seek grant funding to replace two weight-restricted bridges at Jay Avenue and Holland Avenue, which will require redesign and construction to incorporate large squash-pipe culverts to pass the appropriate 100-year flood flow.									
New/ Existing	All	All	Spokane County Public Works	Medium	Local / Ecology/ WSDOT / Grant Funding	Short-Term	Yes, modified	Structural Projects, Property Protection, Response, Recovery	County
2025 Status: A current floodplain study is being completed for Country Homes Drainage from Jay Ave to the Little Spokane River. A CLOMR and LOMR are required. It is anticipated that those will be completed during the life cycle of this 2026 HMP update.									CF
SC-28 Assess the "Shady Slope Road floodplain area." This area includes a confluence of three waterways – Little Spokane River, Deadman Creek, and Little Deep Creek, and is a very challenging area to predict flood boundaries and determining flood-related impacts due to the many unknowns in this vicinity.									
New/ Existing	EQ, F, LS, SW	2, 4, 5, 6, 11	Spokane County Public Works	Medium	Local / Ecology (or other) Grant Program, PDM, HMGP	Short-Term	Yes	Property Protection, Structural Projects, Natural Resource Protection	County
2025 Status: It is anticipated that these areas will be included in the ongoing RiskMap project currently underway by FEMA, with maps released after completion of this 2026 HMP update.									CF

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-29 Formulate a plan to research and identify those areas of Spokane County that are located within the rural/urban corridor where there is a high potential for flood debris flow during a flash flood after wildfire scarring. Once identified, consider a proactive plan for both pre-development (i.e. locate away from hazard-prone debris flow areas) and post-development (structures that are already existing within flow path) mitigation.									
New/ Existing	F, LS, SW, WF	1, 2, 3, 4, 5, 6, 7, 8, 9 10, 11	Spokane County Public Works, Emergency Mgmt., Spokane County Conservation District	High	Local / Ecology, HMGP, Fire Grants	Long-Term	No	Property Protection, Structural Project, Natural Resource Protection, Response, Recovery	County
2025 Status: No action taken since completion of the last HMP.									
SC-30 Replace undersized culverts where repeated flooding occurs; where in one case, is the only access to 10-15 residential properties, and in all cases, would cause significant inconvenience (time, terrain, road surface conditions, etc.) to traverse the detour route to reach their homes. Examples include Burroughs Road, Ballard Road (four culverts), Crosscut Road, Antler Road, Parker Road, Herman Road, and Bernhill Road.									
New	F, LS, SW, WF	All	Spokane County Public Works, Emergency Management	Medium	Ecology, HMGP, EMPG and General Funds	Long Term	Yes, modified	Property Protection, Response, Recovery, Natural Resource Protection	County
2025 Status: Ongoing									CF
SC-31 An emphasis will be placed on pre-project identification of natural drainage systems relative to the preservation of same systems during the process of updating County-wide watershed plans, reviewing private and commercial development projects/plans, and the design of new, or the repair/replacement of, County roads/bridges/culverts.									
New/ Existing	F, LS, SW	2, 4, 5, 6, 11	Spokane County Public Works	Low	Ecology, Grant Funding	Long-Term	No	Structural, Response, Recovery, Natural Resource Protection	County

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
~~Removed (SC-17) Replace Valley Chapel Road Bridge #3301 over Latah Creek. Reanalyze hydraulics for 100-year flood flow; design and install suitable engineered scour repair to address scour at Pier 3, with goal to protect foundation and exposed piling.~~									
~~Existing~~	~~EQ, F, SW~~	~~2, 6, 9, 10~~	~~Spokane County Public Works~~	~~High~~	~~PDM, HMGP, WSDOT~~	~~Short-Term~~	~~No~~	~~Structural, Emergency Services, Response~~	~~County~~
2025 Status No action taken. Strategy is removed to combine with similar initiatives.									
~~(SC-18) Replace Cheney Plaza Road Bridge #2101 over Bonnie Creek. Reanalyze hydraulics, dredge and/or replace to adequately convey 100-year flood flows, as roadway and bridge are frequently overtopped due to silt buildup and potential under-sizing of bridge.~~									
~~New/ Existing~~	~~EQ, F, SW~~	~~2, 4, 9, 10~~	~~Spokane County Public Works~~	~~High~~	~~PDM, HMGP, WSDOT~~	~~Short-Term~~	~~No~~	~~Structural, Emergency Services, Response, Recovery~~	~~County~~
2025 Status: No action taken. Strategy is removed to combine with similar initiatives.									R
~~(2020 SC-19) Replace Valley Chapel Road Bridge #3308 over California Creek. Remove aggregated material in front of Abutment 2 and repair scour at Abutment 1. Bridge is assumed to not have been sized to convey the 100-year flood flow, and will be re-analyzed as part of the replacement process.~~									
~~**Existing**~~	~~EQ, F, SW~~	~~2,6, 9, 10~~	~~Spokane County Public Works~~	~~High~~	~~PDM, HMGP, WSDOT~~	~~Short-Term~~	~~No~~	~~Structural, Emergency Services, Response and Recovery~~	~~County~~
2025 Status: No action taken. Strategy is removed and combined with similar initiatives.									R
SC-32 Reanalyze hydraulics on bridges that are frequently overtopped due to silt buildup and potential under-sizing of bridge. Dredge and/or replace to adequately convey 100-year flood flows.									
Existing	EQ, F, SW	2,6, 9, 10	Spokane County Public Works	High	HMGP, WSDOT	Short-Term	Yes	Structural, Emergency Services, Response and Recovery	County

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
SC-33 Maintain critical facilities list with addition of new critical facilities, including all attributes necessary to perform a risk assessment, including age of construction or major remodel, type of construction materials used, square footage, value (among other attributes). This project may include seeking grant funding to pay for personnel costs, equipment, and software necessary to maintain this data in a GIS format. The data could also be utilized in determining a rapid windshield assessment of impacted facilities during times of disasters.									
New and Existing	All	All	Spokane County Emergency Management	Medium	HMGP Grant, General Funds, Stone Garden	Short-term	No	Emergency Services, Response, Recovery, Property Protection	Regional
SC-34 Working with local fire service agencies and homeowners, conduct Home Ignition Zone inspections for homeowners throughout the County.									
New and Existing	WF	All	Spokane County Conservation District, local Fire Service Agencies, Spokane County Emergency Management	Low	HMGP Grant, Fire Grants, General Funds	Short-term	No	Emergency Services, Response, Recovery, Property Protection	Regional
SC-35 On an annual basis, work with state and federal fire agencies, local fire service agencies, homeowners, business owners, and county and local emergency managers to identify mitigation measures such as fuels reduction, reforestation projects, controlled burns, chipping or other efforts to be implemented during that year as funding allows. Once identified, seek out grant funding to support implementation of those efforts									

Table 12-1.
Spokane County Hazard Mitigation Initiatives

New or Existing assets	Hazards Mitigated	Objectives Met	Lead Agency[a]	Estimated Cost	Funding Sources	Timeline	In Previous Plan (y/n) or previous # if merged[b]	Initiative Type	Who Benefits? 2025 Project Status
New and Existing	WF	All	Spokane County Conservation District, federal, state, and local fire service agencies, Spokane County Emergency Management	High	HMGP, Fire Grants,	Short-term	No	Emergency Services, Response, Recovery, Property Protection	Regional
SC-36 Work with local public officials to determine the feasibility of establishing (tax or other) incentives for property owners applying mitigation efforts such as maintaining significant green space or management of timber lands to reduce fuel loads (among other potential projects).									
New and Existing	WF, F, LS	All	Spokane County Conservation District, local Fire Service Agencies, Spokane County Emergency Management	Low	General Funds	Long-term	No	Emergency Services, Response, Recovery, Property Protection	Regional

a: CD=Community Development; ED=Economic Development; EM= Emergency Management; Fire=Districts and Depts.; HS=Human Services; LE=Law Enforcement; PH=Public Health; PW=Public Works; WSDOT=Washington State Dept. of Transportation; WDOH=Washington State Dept. of Health; WDNR=Washington State Dept. of Natural Resources; WDOE=Washington Dept. of Ecology

b: Some strategies were merged to reduce redundancies; if merged, the previous strategy # is identified

12.5 ANALYSIS OF MITIGATION INITIATIVES

Each planning partner further reviewed its recommended initiatives to classify them based on the hazard it addresses and the type of mitigation it involves. This analysis incorporated, among

others, the Community Rating System scale, identifying each mitigation action item by type. Mitigation types used for this categorization are as follows.

- Prevention - Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. This includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- Public Information and Education - Public information campaigns or activities which inform citizens and elected officials about hazards and ways to mitigate them – a public education or awareness campaign, including efforts such as real estate disclosure, hazard information centers, and school-age and adult education, all of which bring awareness of the hazards of concern.
- Structural Projects —Efforts taken to secure against acts of terrorism, manmade, or natural disasters. Types of projects include levees, reservoirs, channel improvements, or barricades which stop vehicles from approaching structures to protect.
- Property Protection – Actions taken that protect the properties. Types of efforts include: structural retrofit, property acquisition, elevation, relocation, insurance, storm shutters, shatter-resistant glass, sediment and erosion control, stream corridor restoration, etc. Protection can be at the individual homeowner level, or a service provided by police, fire, emergency management, or other public safety entities.
- Emergency Services / Response —Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities (e.g., sandbagging).
- Natural Resource Protection – Wetlands and floodplain protection, natural and beneficial uses of the floodplain, and best management practices. These include actions that preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Recovery —Actions that involve the construction or re-construction of structures in such a way as to reduce the impact of a hazard, or that assist in rebuilding or re-establishing a community after a disaster incident. It also includes advance planning to address recovery efforts which will take place after a disaster. Efforts are focused on re-establishing the planning region in such a way to enhance resilience and reduce impacts to future incidents. Recovery differs from response, which occurs during, or immediately after an incident. Recovery views long-range, sustainable efforts.

12.6 BENEFIT/COST REVIEW

Once the general analysis was completed for each mitigation initiative, 44 CFR requires the prioritization of the initiatives or action items according to a benefit/cost analysis of the proposed projects and their associated costs (Section 201.6.c.3iii). The benefit/cost analysis conducted during this planning process is not of the detailed variety required by FEMA for project grant eligibility under the Hazard Mitigation Grant Program (HMGP) grant program. Rather, parameters were established for assigning subjective ratings (high, medium, and low) to the costs and benefits of these projects. Cost ratings were defined as follows:

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

Benefit ratings were defined as follows:

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

Using this approach, projects with positive benefit versus cost ratios (such as high over high, high over medium, medium over low, etc.) are considered cost-beneficial and are prioritized accordingly. Prioritization of the projects in such a manner serves as a guide for choosing and funding projects.

12.7 PRIORITIZATION OF INITIATIVES

The method for prioritizing initiatives for the 2020 update remains the same for the 2026 initiatives, applying a consistent rating or level (high/medium/low) assigned with those identified factors to ensure consistency. The priorities are defined as follows:

- **High Priority**—A project that meets multiple objectives (i.e., multiple hazards), has benefits that exceed cost, has funding secured or is an ongoing project and meets eligibility requirements for the HMGP or PDM grant program. High priority projects can be completed in the short term (1 to 5 years).
- **Medium Priority**—A project that meets goals and objectives, that has benefits that exceed costs, and for which funding has not been secured but that is grant eligible under HMGP, PDM or other grant programs. Project can be completed in the short term, once funding is secured. Medium priority projects will become high priority projects once funding is secured.
- **Low Priority**—A project that will mitigate the risk of a hazard, that has benefits that do not exceed the costs or are difficult to quantify, for which funding has not been secured, that is not eligible for HMGP or PDM grant funding, and for which the time line for completion is long term (1 to 10 years). Low priority projects may be eligible for other sources of grant funding from other programs.

Table 12-2lists the priority of each mitigation initiative. A qualitative benefit-cost review as described above was also performed for each of these initiatives. As indicated, for many of the strategies identified in this action plan, the partners may seek financial assistance under the HMGP or other programs which require detailed benefit/cost analyses. These analyses will be performed on projects at the time of application using the FEMA benefit-cost model. For projects not seeking financial assistance from grant programs that require detailed analysis, the partners reserve the right to define “benefits” according to parameters that meet the goals and objectives of this plan.

Table 12-2.
Prioritization of Countywide Mitigation Initiatives

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant Eligible?	Can Project Be Funded under Existing Programs/ Budgets?	Priority (High, Med., Low)
1	3	H	L	Y	Y	Y	H
2	6	H	H	Y	Y	Y	H
3	9	H	L	Y	Y	Y	H
4	6	H	M	Y	N	Y	M

Table 12-2.
Prioritization of Countywide Mitigation Initiatives

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant Eligible?	Can Project Be Funded under Existing Programs/ Budgets?	Priority (High, Med., Low)
5	9	H	M	Y	N	Y	M
6	2	M	L	Y	N	Y	M
7	12	H	L	Y	Y	Y	H
8	7	H	L	Y	Y	Y	H
9	12	H	M	Y	Y	Y	H
10	3	M	L	Y	Y	N	L
11	8	M	M	Y	Y	Y	M
12	6	M	M	Y	Y	N	M
13	8	H	M	Y	N	N	M
14	4	H	L	Y	Y	N	H
15	4	M	L	Y	N	Y	M
16	4	H	H	Y	Y	N	M
17	4	L	M	N	Y	N	L
18	12	H	M	Y	N	Y	M
19	8	H	H	Y	Y	N	H
20	6	H	L	Y	N	Y	H
21	11	H	M	Y	Y	N	H
22	5	H	M	Y	Y	N	H
23	5	H	M	Y	N	N	H
24	9	H	H	Y	Y	N	H
25	5	H	M	Y	N	N	H
26	6	M	L	Y	Y	N	M
27	12	M	M	Y	Y	N	M
28	5	H	M	Y	Y	N	H
29	11	H	H	Y	Y	N	M
30	12	H	M	Y	Y	N	H
31	5	H	L	Y	Y	N	H
32	4	H	H	Y	Y	Y	H
33	12	H	M	Y	Y	Y	H
34	12	H	L	Y	Y	Y	H
35	12	H	H	Y	Y	N	H

Table 12-2.
Prioritization of Countywide Mitigation Initiatives

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant Eligible?	Can Project Be Funded under Existing Programs/ Budgets?	Priority (High, Med., Low)
36	12	H	M	Y	N	Y	H

Because this is a multi-jurisdictional plan, the prioritization of initiatives specific to the remaining jurisdictions must also be done at the individual level based on the needs and programs of that body, and accomplished as resources can be secured. Funding to complete any initiative will likely be acquired from a variety of sources, with the lack of funding alone preventing an initiative from being implemented. As such, the less formal approach used during this process is more appropriate because some projects may not be implemented for up to 10 years, and associated costs and benefits could change dramatically in that time.

The method of prioritization utilized also allows for the inclusion of new projects throughout the life cycle of this plan without having to numerically re-value each of the projects based on a numerical value assigned. Further, it supports the plan maintenance strategy for review, addition, and reprioritization of initiatives on an annual basis, reducing the level of effort involved in a numeric system of ranking, and enhancing the likelihood that the annual review will occur as a reduced level of effort will be required.

12.8 FUNDING OPPORTUNITIES

Although several of the mitigation projects listed may not be eligible for FEMA funding, Spokane County and its planning partners may secure alternate funding sources to implement these projects in the future including federal and state grant programs, and funds made available through the county. In order to be eligible for some of those grant funds, completion of a hazard mitigation plan may be required. Table 12-3 identifies some of those grant requirements. Additional funding sources identified in Table 12-4 are also available which support various types of mitigation efforts on a countywide basis.

Table 12-3.
Grant Opportunities

Program	Enabling Legislation	Funding Authorization	Hazard Mitigation Plan Requirement	
			Grantee	Sub-Grantee
Public Assistance, Categories A-B (e.g., debris removal, emergency protective measures)	Stafford Act	Presidential Disaster Declaration	□	□
Public Assistance, Categories C-G (e.g., repair of damaged infrastructure, publicly owned buildings)	Stafford Act	Presidential Disaster Declaration	☑	□
Individual Assistance (IA)	Stafford Act	Presidential Disaster Declaration	□	□
Fire Management Assistance Grants	Stafford Act	Fire Management Assistance Declaration	☑	□
Hazard Mitigation Grant Program (HMGP) Planning Grant	Stafford Act	Presidential Disaster Declaration	☑	□
HMGP Project Grant	Stafford Act	Presidential Disaster Declaration	☑	☑
Flood Mitigation Assistance (FMA)	National Flood Insurance Act	Annual Appropriation	☑	☑
Severe Repetitive Loss (SRL)	National Flood Insurance Act	Annual Appropriation	☑	☑
Repetitive Flood Claims (RFC)	National Flood Insurance Act	Annual Appropriation	☑	□
Homeland Security	Dept. of Homeland Security	Annual Appropriation	☑	□

☑ = Hazard Mitigation Plan Required
□ = No Hazard Mitigation Plan Required

Table 12-4.
Countywide Fiscal Capabilities which Support Mitigation Efforts

Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Y
Capital Improvements Project Funding	Y
Authority to Levy Taxes for Specific Purposes	Y
User Fees for Water, Sewer, Gas or Electric Service	Y
Incur Debt through General Obligation Bonds	Y
Incur Debt through Special Tax Bonds	Y

Table 12-4.
Countywide Fiscal Capabilities which Support Mitigation Efforts

Financial Resources	Accessible or Eligible to Use?
Incur Debt through Private Activity Bonds	Y
Withhold Public Expenditures in Hazard-Prone Areas	Y
State Sponsored Grant Programs	Y
Development Impact Fees for Homebuyers or Developers	Y

CHAPTER 13.
CAPABILITY ASSESSMENT

13.1 LAWS AND ORDINANCES

Existing laws, ordinances and plans at the federal, state and local level can support or impact hazard mitigation initiatives identified in this plan. Hazard mitigation plans are required by 44 CFR to include a review and incorporation, if appropriate, of existing plans, studies, reports, and technical information as part of the planning process (Section 201.6.b(3)). Pertinent federal and state laws are described below, as are the County's capabilities. In addition, Section 2.9.1 further identifies plans in place which support Hazard Mitigation Planning and risk reduction. The CWPP also identifies additional capabilities. Each planning partner has also individually reviewed existing local plans, studies, reports, and technical information as referenced and identified in their specific jurisdictional annexes presented in Volume 2.

13.1.1 Federal

Disaster Mitigation Act

The DMA is the current federal legislation addressing hazard mitigation planning. It emphasizes planning for disasters before they occur. It specifically addresses planning at the local level, requiring plans to be in place before Hazard Mitigation Grant Program funds are available to communities. This plan is designed to meet the requirements of DMA, improving the planning partners' eligibility for future hazard mitigation funds.

The Clean Water Act

The federal Clean Water Act (CWA) employs regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's surface waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

National Flood Insurance Program

The National Flood Insurance Program (NFIP) provides federally backed flood insurance in exchange for communities enacting floodplain regulations. Participation and good standing under NFIP are prerequisites to grant funding eligibility under the Robert T. Stafford Act. Spokane County and its cities and towns participate in the NFIP and have adopted regulations that meet the NFIP requirements. Existing flood maps are dated. Additional NFIP data can be found within the Flood Hazard Profile, and within each partners' annex document.

Presidential Disaster Declarations

Presidentially declared disasters are disaster events that cause more damage than state and local governments/resources can handle without federal assistance. There is not generally a specific dollar threshold that must be met. A Presidential Major Disaster Declaration puts into motion long-term federal recovery programs, some of which are matched by state programs, and designed to help disaster victims, businesses, and public entities. A Presidential Emergency Declaration can also be declared, but assistance is limited to specific emergency needs.

13.1.2 State-Level Planning Initiatives

Washington State Enhanced Mitigation Plan

The Washington State Enhanced Hazard Mitigation Plan approved by FEMA in 2013 provides guidance for hazard mitigation throughout Washington. The plan identifies hazard mitigation goals, objectives, actions and initiatives for state government to reduce injury and damage from natural hazards. By meeting federal requirements for an enhanced state plan (44 CFR parts 201.4 and 201.5), the plan allows the state to seek significantly higher funding from the Hazard Mitigation Grant Program following presidential declared disasters (20 percent of federal disaster expenditures versus 15 percent with a standard plan).

Growth Management Act

The 1990 Washington State Growth Management Act (Revised Code of Washington (RCW) Chapter 36.70A) mandates that local jurisdictions adopt land use ordinances protect the following critical areas:

- Wetlands
- Critical aquifer recharge areas
- Fish and wildlife habitat conservation areas
- Frequently flooded areas
- Geologically hazardous areas.

The Growth Management Act (GMA) regulates development in these areas, and therefore has the potential to affect hazard vulnerability and exposure at the local level.

Coastal Zone Management Program

Washington State has established the Washington State Coastal Zone Management Program in conjunction with the federal Coastal Zone Management Act, which was approved by the federal government in 1976, making it the first to be approved, applying to 15 coastal counties which front on saltwater.

Shoreline Management Act

The 1971 Shoreline Management Act (RCW 90.58) was enacted to manage and protect the shorelines of the state by regulating development in the shoreline area. A major goal of the act is to prevent the "inherent harm in an uncoordinated and piecemeal development of the state's shorelines." Its jurisdiction includes the Pacific Ocean shoreline and the shorelines of Puget Sound, the Strait of Juan de Fuca, and rivers, streams and lakes above a certain size. It also regulates wetlands associated with these shorelines.

Wild and Scenic River

A federal designation that is intended to protect the natural character of rivers and their habitat without adversely affecting surrounding property.

Zero-Rise Floodway

A 'zero-rise' floodway is an area reserved to carry the discharge of a flood without raising the base flood elevation. Some communities have chosen to implement zero-rise floodways because they provide greater flood protection than the floodway described above, which allows a one foot rise in the base flood elevation.

Washington State Building Codes

The Washington State Building Code Council regularly adopts the most current editions of national model codes, sometimes with amendments, including Fire Codes, Air Quality, Energy Codes, and the International Wildland Urban Interface Code (RCW 19.27.560, among others. The Council has adopted changes to the Washington State Energy Code and Ventilation and Indoor Air Quality Code. Washington's state-developed codes are mandatory statewide for residential and commercial buildings.

The State Building Code Council (SBCC) voted in November 2022 to adopt the WUI Code in Washington State, taking effect in the state on October 29, 2023, along with the other state codes (this reflected a delay past the original July 1, 2023, date, due to pending litigation). The SBCC accepted the Technical Advisory Group's (TAG's) amendments to the WUI code for the 2021 code cycle. Among other things, the amendments offer more flexible framework based on site and construction specifics as an alternative to the straight requirements in RCW 19.27.560.

Because of the high risk of wildland fires in parts of Washington, and the benefit from taking steps to reduce these risks, the Washington State Association of Fire Marshalls (WSAFM) encourages member agencies to develop an enforcement strategy for wildland urban interface (WUI). This code affects most jurisdictions in Washington, including urban and rural, east and west, and makes the Washington State Department of Natural Resources responsible to develop the WUI map statewide.

Comprehensive Emergency Management Planning

Washington's Comprehensive Emergency Management Planning law (RCW 38.52) establishes parameters to ensure that preparations of the state will be adequate to deal with disasters, to ensure the administration of state and federal programs providing disaster relief to individuals, to ensure adequate support for search and rescue operations, to protect the public peace, health and safety, and to preserve the lives and property of the people of the state. It achieves the following:

- Provides for emergency management by the state, and authorizes the creation of local organizations for emergency management in political subdivisions of the state.
- Confers emergency powers upon the governor and upon the executive heads of political subdivisions of the state.
- Provides for the rendering of mutual aid among political subdivisions of the state and with other states and for cooperation with the federal government with respect to the carrying out of emergency management functions.
- Provides a means of compensating emergency management workers who may suffer any injury or death, who suffer economic harm including personal property damage or loss, or who incur expenses for transportation, telephone or other methods of communication, and the use of personal supplies as a result of participation in emergency management activities.
- Provides programs, with intergovernmental cooperation, to educate and train the public to be prepared for emergencies.

It is policy under this law that emergency management functions of the state and its political subdivisions be coordinated to the maximum extent with comparable functions of the federal government and agencies of other states and localities, and of private agencies of every type, to the end that the most effective preparation and use may be made of manpower, resources, and facilities for dealing with disasters.

Washington Administrative Code 118-30-060(1)

Washington Administrative Code (WAC) 118-30-060 (1) requires each political subdivision to base its comprehensive emergency management plan on a hazard analysis, and makes the following definitions related to hazards:

- Hazards are conditions that can threaten human life as the result of three main factors:
  - Natural conditions, such as weather and seismic activity

  - Human interference with natural processes, such as a levee that displaces the natural flow of floodwaters
  - Human activity and its products, such as homes on a floodplain.
- The definitions for hazard, hazard event, hazard identification, and flood hazard include related concepts:
  - A hazard may be connected to human activity.
  - Hazards are extreme events.

Hazards generally pose a risk of damage, loss, or harm to people and/or their property

Washington State Floodplain Management Law

Washington's floodplain management law (RCW 86.16, implemented through WAC 173-158) states that prevention of flood damage is a matter of statewide public concern and places regulatory control with the Department of Ecology. RCW 86.16 is cited in floodplain management literature, including FEMA's national assessment, as one of the first and strongest in the nation. A major challenge to the law in 1978, *Maple Leaf Investors v. Ecology,* is cited in legal references to floodplain management issues. The court upheld the law, declaring that denial of a permit to build residential structures in the floodway is a valid exercise of police power and did not constitute a taking. RCW Chapter 86.12 (Flood Control by Counties) authorizes county governments to levy taxes, condemn properties and undertake flood control activities directed toward a public purpose.

Flood Control Assistance Account Program

Washington's first flood control maintenance program was passed in 1951, and was called the Flood Control Maintenance Program (FCMP). In 1984, RCW 86.26 (State Participation in Flood Control Maintenance) established the Flood Control Assistance Account Program (FCAAP), which provides funding for local flood hazard management. FCAAP rules are found in WAC 173-145. Ecology distributes FCAAP matching grants to cities, counties and other special districts responsible for flood control. This is one of the few state programs in the U.S. that provides grant funding to local governments for floodplain management. The program has previously been funded for $4 million per biennium, with additional amounts provided after severe flooding events; however, those amounts can be modified by the state Legislature.

To be eligible for FCAAP assistance, flood hazard management activities must be approved by Ecology in consultation with the Washington Department of Fish and Wildlife (WDFW). A comprehensive flood hazard management plan must have been completed and adopted by the appropriate local authority or be in the process of being prepared in order to receive FCAAP flood damage reduction project funds. This policy evolved through years of the FCMP and early years

of FCAAP in response to the observation that poor management in one part of a watershed may cause flooding problems in another part.

Local jurisdictions must participate in the NFIP and be a member in good standing to qualify for an FCAAP grant. Grants up to 75 percent of total project cost are available for comprehensive flood hazard management planning. Flood damage reduction projects can receive grants up to 50 percent of total project cost, and must be consistent with the comprehensive flood hazard management plan. Emergency grants are available to respond to unusual flood conditions. FCAAP can also be used for the purchase of flood prone properties, for limited flood mapping and for flood warning systems.

13.1.3 Local Programs

Each planning partner has prepared a jurisdiction-specific annex to this plan contained in Volume 2, which identifies its regulatory, technical and financial capability to carry out proactive mitigation efforts. Additional jurisdiction-specific information is available for review within each of those annexes. The following sections present additional regulatory information that applies to the planning partnership.

Comprehensive Land Use Plans

Comprehensive plans are long-range in nature and serve as policy guides for how a jurisdiction plans to manage growth and development with respect to the natural environment and available resources. Washington State law (36.70A.040 RCW) requires that jurisdictions operating under the Growth Management Act develop comprehensive plans and development regulations that are consistent with the comprehensive plans and implement them (36.70A RCW).

The GMA requires that comprehensive plans consist of the following elements: land use, housing, capital facilities, utilities, rural (for counties), transportation, economic development, and park and recreation (RCW 36.70A.070). A comprehensive plan may also include additional optional elements that relate to physical development, such as conservation, historic preservation, and subarea plans (RCW 36.70A.080).

Spokane County's last completed an update to its Comprehensive Land Use Plan as required under the GMA was made in 2019. Since the original plan was written, amendments to various elements of the comprehensive plan have been made on an almost-annual basis as allowed by law (RCW 36.70A.130(2)(a)). The GMA requires that jurisdictions periodically review their comprehensive plans and implementing development regulations in their entirety and revise them if needed. Opportunities for public participation in this process will be provided (see RCW 36.70A.035). The County is currently in the process of updating its Comprehensive Land Use Plan. Information from this HMP is actively being shared and relevant data incorporated as appropriate.

Critical Areas Ordinance

Washington's Growth Management Act requires local governments to protect five types of critical areas: important fish and wildlife habitat areas, wetlands, critical aquifer recharge areas, frequently flooded areas, and geologically hazardous areas, such as bluffs. Spokane County's critical areas regulations are a response to that law; they regulate how development and redevelopment can safely occur on lands that contain critical areas. Chapter 11 of the Spokane County Code identifies the Critical Areas Ordinance (CAO) of Spokane County.[61]

Within the 2018 update of Spokane County's CAO, Chapter 11.20.080 provides incentives for landowners to maintain certain land classifications through property and income tax advantages, as well as making the transfer of development rights available for landowners wishing to preserve wetlands.

13.2 MITIGATION-RELATED REGULATORY AUTHORITY

Hazard mitigation builds on a community's existing capabilities, including financial, regulatory, programmatic and planning capabilities. The County's capabilities to implement mitigation projects include community planners, engineers, floodplain managers, GIS personnel, emergency managers, and financial, legal and regulatory requirements (zoning, building codes, subdivision regulations, and floodplain management ordinances). These resources have the responsibility to provide overview of past, current, and ongoing pre- and post-disaster mitigation planning projects, including capital improvement programs, wildfire mitigation programs, stormwater management programs, and NFIP compliance projects. The following information and tables identify the County's capabilities with respect to (mitigation) efforts of varying types. Each planning partner also completed the same tables within their respective Annex documents.

Building Codes

The Spokane County Building Division has adopted and enforces, as mandated by the State of Washington, the current editions of the International Code Council's Building, Residential, Fire, Wildland Fire, Mechanical, Fuel Gas and Existing Building Codes, the Washington State Energy Code and the Uniform Plumbing Code with State and local amendments.

Washington State Farmland Preservation

Washington State, through the Department of Revenue, provides tax incentives for open space enrollment of designated as farmlands. The program is one tool for making farmland more affordable, thus keeping it out of development.

[61] https://www.spokanecounty.org/DocumentCenter/View/20132/CAO-2018-final?bidId=

Current use classification lowers the taxable value of farm and agricultural lands and other resource lands relative to other land uses. Land that would be assessed at $10,000 an acre for its "highest and best use" might be valued at perhaps $3,000 an acre as farmland. The effect of this lower valuation is to lower the tax assessed on lands classified as "current use," thereby making the land more affordable to keep in farm production.

Regulatory, Technical, Community Organizations, Programs and Social Systems

Regulatory capabilities currently available are summarized in Table 13-1. In addition, the County also maintains administrative and technical capabilities, as identified in Table 13-2. These various programs and capabilities support the efforts of not only the County, but also many of the local municipalities and special purpose districts.

In addition, there are other programs available, some of which provide incentives for citizens. Such programs further enhance resiliency throughout the County. Two such programs include the National Flood Insurance Program, and the Community Rating System, both of which are discussed in detail in Chapter 7 – Flood.

Social systems can be defined as community organizations and programs that provide social and community-based services, such as health care or housing assistance, to the public. In planning for natural hazard mitigation, it is important to know what social systems exist within the community because of their existing connections to the public.

Table 13-1.
Spokane County Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements				
Building Code	Yes	Yes	Yes	SCC, Title 3 adopts 2021 International Building Code
Zoning Ordinance	Yes		Yes	SCC, Title 4 - Updated as required under GMA. Last review/update occurred 2019.
Subdivision Ordinance	Yes		Yes	SCC, Title 12 (1996) - Updated regularly through Comprehensive Land Use Plan.
Floodplain Ordinance	Yes	Yes	Yes	FEMA Requirements – Spokane County CAO & Flood Damage Protection Ordinance available at: https://www.spokanecounty.org/616/Shoreline-Master-Program

Table 13-1.
Spokane County Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Transfer of Development Rights	Yes	No	No	Section 11.20.080 of the Spokane County Critical Areas Ordinance (2018)
Stormwater Management	Yes	No	Yes	SCC, Title 3, Chapter 3.10
Real Estate Disclosure	No	No	Yes	Statewide
Growth Management	Yes		Yes	Updated 2016; partial update 2019; under current update with 2026 scheduled completion
Critical Areas Ordinance	Yes		Yes	Spokane County Code – Title 11 Critical Areas identified and regulatory authority established. https://www.spokanecounty.org/726/Critical-Areas-Ordinance
Site Plan Review	Yes	No	Yes	SCC, Title 12, Chapter 12.05, 1996
Public Health and Safety	Yes	Yes	Yes	SCC, Title 8, 1996
Shoreline Master Program / Shoreline Management Plan	Yes			Adopted within Comp Plan. Available at: https://www.spokanecounty.org/616/Shoreline-Master-Program
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire, etc.)	Yes		Yes	Reviewed and/or updated annually as needed.
Environmental Protection	Yes	Yes	Yes	SCC, Title 11, 1996. Administered through various departments and with other entities.
Planning Documents				
General or Comprehensive Plan	Yes	No	Yes	
Is the plan equipped to provide linkage to this mitigation plan? Yes				
Floodplain or Basin Plan	Yes		Yes	Various plans in place maintained by several departments throughout county including channel migration zone maps/plans, meander belts, etc..
Stormwater Plan	Yes	Yes	No	Various plans are in place
Capital Improvement Plan	Yes	Yes	Yes	Includes Roads, Stormwater, Facilities, and Sheriff's departments. Updated annually.

Table 13-1.
Spokane County Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Habitat Conservation Plan	Yes			Critical Areas Ordinance and Shoreline Master Plans.
Community Wildfire Protection Plan	Yes		Yes	2025 Currently in update process. Components of this plan will be utilized to support the CWPP.
Transportation Plan	Yes		Yes	2019 Update with Comprehensive Plan
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes		Yes	.
Threat and Hazard Identification and Risk Assessment	Yes		Yes	Spokane County EM and Regional Plan
Terrorism Plan	Yes			Law enforcement maintains
Post-Disaster Recovery Plan	Yes		No	
Continuity of Operations Plan	Yes			Various departments identified as COG-supporting or with essential services maintain COOP plans.
Public Health Plans	Yes			Various public health plans are in place both through the Health Department and through the hospitals.
Administration, Boards and Commission				
Planning Commission	Yes		Yes	
Mitigation Planning and Community Wildfire Protection Plan Committee	Yes		No	Planning Team established for HMP development and annual maintenance.
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems, chipping, addressing, etc.)	Yes		Yes	Various programs in place, including tree trimming, drainage systems, etc.

Table 13-2.
Administrative and Technical Capability

Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Y	Planning & Community Services
Professionals trained in building or infrastructure construction practices (building officials, fire inspectors, etc.)	Y	Planning & Community Services; Public Works
Engineers specializing in construction practices?	Y	
Planners or engineers with an understanding of natural hazards	Y	Floodplain Manager
Staff with training in benefit/cost analysis	Y	
Surveyors	Y	
Personnel skilled or trained in GIS applications	Y	
Personnel skilled or trained in Hazus use	N	Available under contract basis.
Scientist familiar with natural hazards in local area	Y	The county has hazard-specific subject matter experts on staff in various departments, available via contracting mechanisms, and available through state resources.
Emergency Manager	Y	Emergency Management Department with trained personnel and volunteers.
Grant writers	Y	Various County departments have internal personnel who write grants; county staff monitors grants.
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?)	Y	ALERT Spokane, powered by CodeRED Mass Notification Software. IPAWS also utilized. All Emergency Management Staff are trained on using CodeRED and IPAWS.
Hazard data and information available to public	Y	GIS maintains data for various departments which have knowledge of and responsibility for specific types of hazards, such as flood, landslide and other hazards of concern.
Maintain Elevation Certificates	Y	

Often, actions identified by the plan involve communicating with the public or specific subgroups within the population (e.g. elderly, children, low income). The County and its planning partners can use existing social systems as resources for implementing such communication-related

activities because these service providers already work directly with the public on a number of issues, one of which could be natural hazard preparedness and mitigation.

The following highlights organizations and programs that are active within Spokane County, which may be potential partners for implementing mitigation actions. The various tables include information on each organization or program's service area, types of services offered, populations served, and how the organization or program could be involved in natural hazard mitigation. The three involvement methods are defined below.

- Education and outreach – organizations could partner with the community to educate the public or provide outreach assistance on natural hazard preparedness and mitigation.
- Information dissemination – organizations could partner with the community to provide hazard-related information to target audiences.
- Plan/project implementation – organizations may have plans and/or policies that may be used to implement mitigation activities or the organization could serve as the coordinating or partner organization to implement mitigation actions. Table 13-3 identifies several of the ongoing efforts which assist in notification and social service programs, further enhancing the resilience of the County.

DAFN (Disability, Access & Functional Needs) Work Group – Spokane County Emergency Management is the lead for this group. DAFN includes any persons who may have additional needs before, during and/or after an emergency or disaster. This is a collaborative group formed to further the support and engagement of DAFN populations in Spokane County. The Group's objectives are to assess the needs of DAFN populations with regards to emergencies and disasters (before, during and/or after), and work to find and implement solutions.

Smoke Ready Spokane County, Community Partnership Planning – The Spokane Regional Clean Air Agency and the Spokane Regional Health District are the leads for this group. Smoke Ready Spokane County is a partnership of local agencies and organizations that are involved in some aspect(s) of wildfire smoke readiness and response in Spokane County. The group convenes monthly, from April through October, and more often as needed during wildfire smoke events. The purpose of the meetings is for partners to provide updates on their agency's efforts related to wildfire smoke readiness and response.

A Smoke Ready Community:

- Plans for the appropriate response
- Acts before and during a smoke event (e.g. Smoke Ready Week pre-season education, etc.)
- Has decision points for community actions (e.g. Closures guidance)
- Has strategies in place to reduce smoke exposures (e.g. Cleaner Air Shelters) for vulnerable and underserved residents

Spokane County Wildfire Mitigation Coalition (SCWMC) – Established in September 2024 after sustaining significant impacts from wildfires fires which destroyed more than 300 homes, the Spokane County Wildfire Mitigation Coalition is a coordinated alliance established to increase community resilience to wildfire by supporting a collaborative and strategic approach to planning, treating, and procuring funding; as well as providing education and technical assistance for implementing activities to assist and empower Spokane County communities to prepare for, respond to and recover from wildfire. The mission of the Coalition establishes: A coalition of partners collaborating to intentionally and strategically share resources, funds, and knowledge to reduce catastrophic wildfire risk and enhance community resilience.

Spokane County Yard and Garden Waste Burning Program – The burning of yard and garden waste is a vital part of many landowners' fuels reduction and property protection programs. In many cases this is the only option available for landowners to get rid of hazardous fuel loads on their property due to a variety of reasons including physical capacity, limited access to necessary hauling equipment, distance to disposal sites, and many others. Burning yard and garden waste is an efficient and effective tool for fire mitigation; however, homeowners must fully recognize the various smoke control zones and burning restrictions in place by SRCAA prior to initiating this type of initiative.

Spokane County 9-1-1 Emergency Communications System – The County has in place a 911 Emergency Communication System in place to link citizens with emergency response agencies. The system receives telephone requests for fire, medical or police services and directs those calls via telephone transfers and/or sophisticated computer systems to the appropriate agencies for dispatch. Referenced in this system is rural addressing that identifies home locations by address. Rural address numbers are displayed at the entrance of many home sites along access routes to assist in emergency response.

Table 13-3.
Education and Outreach

Program/Organization	Available?	Department/Agency/Position and Brief Description
Local citizen groups or non-profit organizations focused on emergency preparedness?	Y	CERT and SAR trained personnel; Wildfire Coalition
Local citizen groups or non-profit organizations focused on environmental protection?	Y	Spokane County Conservation District

Table 13-3.
Education and Outreach

Program/Organization	Available?	Department/Agency/Position and Brief Description
Organization focused on individuals with access and functional needs populations	Y	The County works closely with local advocacy groups, Access 4 All, and the Accessible Community Advisory Committee (ACAC)
Ongoing public education or information program (e.g., responsible water use, fire safety, wildfire mitigation, household preparedness, environmental education)	Y	Various agencies at the county, state and local levels promote educational efforts such as Firewise, Forestland-Urban Interface Fire Protection Act, and Fire Adapted Communities from the National Cohesive Wildfire Strategy.
Natural disaster or safety related school programs?	Y	Pursuant to the RCW, schools are required to develop and exercise hazard-specific response plans.
Multi-seasonal public awareness program?	Y	The County maintains information on its website to address specific hazards at issue; also, as situations arise, the website, email lists and local area broadcasting provides public service announcements and information.
Public-private partnership initiatives addressing disaster-related issues?	Y	Various public education outreach; provide information and presentations; NFIP insurance; outreach for Continuity Planning.

13.3 WASHINGTON STATE RATING BUREAU LEVELS OF SERVICE

In Washington, the Washington State Rating Bureau (WSRB) helps determine standards on which insurance rates are set. WSRB, like most other states, utilizes the Insurance Service Office, Inc. (ISO) to determine levels of protection based on a prescribed level of service. Two such levels of services assessed are the Public Protection Classification Program and the Building Code Effectiveness Grading Schedule.

13.3.1 Public Protection Classification Program

The Public Protection Classification (PPC) program recognizes the efforts of communities to provide fire protection services for citizens and property owners. A community's investment in fire mitigation is a proven and reliable predicator of future fire losses. Insurance companies use PPC information to help establish fair premiums for fire insurance — generally offering lower premiums in communities with better protection. By offering economic benefits for communities that invest in their firefighting services, the program provides an additional incentive for improving and maintaining public fire protection.

In order to establish appropriate fire insurance premiums for residential and commercial properties, insurance companies utilize up-to-date information about the Community's fire-protection services. Through analysis of relevant data, communities are able to evaluate their public fire-protection services, and secure lower fire insurance premiums for communities with better protection. This program provides incentives and rewards in those areas with improved firefighting services. This program has gathered extensive information on more than 46,000 fire-response jurisdictions. Once all of the data is reviewed and analyzed, communities are assigned a PPC from 1 to 10. Class 1 generally represents superior property fire protection, while Class 10 indicates that the area's fire-suppression program is not as robust.

The most significant benefit of the PPC program is its effect on losses. Statistical data on insurance losses bears out the relationship between excellent fire protection — as measured by the PPC program — and low fire losses. PPC helps communities prepare to fight fires effectively. The program also provides help for fire departments and other public officials as they plan, budget for, and justify improvements. Table 13-4 identifies the Public Protection Classification for Spokane County.

Table 13-4.
Countywide Public Protection Classification

Community	Protection Class Grade
Airway Heights	4
Cheney	4
Deer Park	4
Fairfield	6
Latah	6
Liberty Lake	2
Millwood	2
Rockford	6
Spangle	6
Spokane County	N/A
Spokane County F.P.D. 1	2
Spokane County F.P.D. 10	4
Spokane County F.P.D. 11	6
Spokane County F.P.D. 12	7
Spokane County F.P.D. 13	6
Spokane County F.P.D. 2	6
Spokane County F.P.D. 3	5
Spokane County F.P.D. 4	4

Table 13-4.
Countywide Public Protection Classification

Community	Protection Class Grade
Spokane County F.P.D. 5	8
Spokane County F.P.D. 8	4
Spokane County F.P.D. 9	4
Spokane Valley	2
Waverly	7

Data effective as of June 2025

13.3.2 Building Code Effectiveness Grading Schedule

The Building Code Effectiveness Grading Schedule (BCEGS) assesses building codes and amendments adopted in a community and evaluates that community's commitment to enforce them. The concept is simple: Municipalities with well-enforced, up-to-date codes should demonstrate better loss experience, and insurance rates can reflect that. The prospect of reducing damage and ultimately lowering insurance costs provides an incentive for communities to enforce their building codes rigorously. Table 13-5 identifies the BCEGS for the planning partnership.

Table 13-5.
Countywide Building Code Effectiveness Grading

Community	Commercial	Dwelling
Airway Heights	4	4
Cheney	4	4
Deer Park	4	4
Fairfield	4	4
Latah	4	4
Liberty Lake	4	4
Medical Lake	4	4
Millwood	4	4
Rockford	4	4
Spangle	4	4
Spokane	4	4
Spokane County	4	4
Spokane County F.P.D. 1	4	4

Table 13-5.
Countywide Building Code Effectiveness Grading

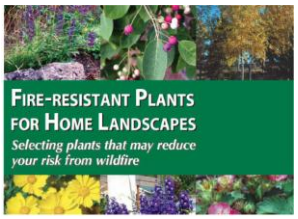
Community	Commercial	Dwelling
Spokane County F.P.D. 10	4	4
Spokane County F.P.D. 11	4	4
Spokane County F.P.D. 12	4	4
Spokane County F.P.D. 13	4	4
Spokane County F.P.D. 2	4	4
Spokane County F.P.D. 3	4	4
Spokane County F.P.D. 4	4	4
Spokane County F.P.D. 5	4	4
Spokane County F.P.D. 8	4	4
Spokane County F.P.D. 9	4	4
Spokane Valley	4	4
Waverly	4	4
Data effective as of June 2025		

13.3.3 Public Safety Programs

Access and Functional Needs

One of the most important roles of local government is to protect their citizens from harm, including helping people prepare for and respond to emergencies. Making local government emergency preparedness and response programs accessible to people with special needs is a critical part of this responsibility. Spokane County Emergency Management has the mission to assess and plan for all hazards and emergencies, and works with other public safety and local government agencies to ensure public welfare for all of its citizens.

Spokane County Fire Departments and Districts



Spokane County's fire departments and districts serve its citizens, in addition to the local municipalities' fire departments. The purpose of Spokane County Fire Districts is the provision of fire prevention services, fire suppression services, emergency medical services, and for the protection of life and property. Fire prevention in Spokane County is all-encompassing, including rural and wildland areas. The Firewise Community Program is administered in coordination with the WA DNR and USFS (among others). Public outreach efforts have also occurred throughout the County, including partnerships with the various school districts, where Firewise information and mitigation-related projects are presented.

Spokane County is a StormReady® County

Spokane County is also a recognized StormReady® County under the National Weather Service Program. Achieving such status requires a significant level of effort. Being part of a Weather-Ready Nation is about preparing for your community's increasing vulnerability to extreme weather events. The program helps arm America's communities with the communication and safety skills needed to save lives and property--before, during and after the event. StormReady helps community leaders and emergency managers strengthen local safety programs.

Response and Evacuation Plans

Spokane County and its jurisdictions have developed various response and evacuation plans to be utilized during incident-specific events. Such plans provide guidance to first responders and community members in what actions need to be taken during such event. These plans go through a training and exercise phase to help ensure quick response when the plans are activated.

CHAPTER 14.
PLAN MAINTENANCE

A hazard mitigation plan must present a plan maintenance process that includes the following (44 CFR Section 201.6.c.4):

- A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan over a 5-year cycle
- 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
- A discussion on how the community will continue public participation in the plan maintenance process.

This chapter details the formal process that will ensure that the Spokane County Hazard Mitigation Plan remains an active and relevant document and that the planning partners maintain their eligibility for applicable funding sources. The plan maintenance process includes a schedule for monitoring and evaluating the plan annually and producing an updated plan every five years. This chapter also describes how public participation will be integrated throughout the plan maintenance and implementation process. It also explains how the mitigation strategies outlined in this Plan will be incorporated into existing planning mechanisms and programs, such as comprehensive land-use planning processes, capital improvement planning, and building code enforcement and implementation. The Plan's format allows sections to be reviewed and updated when new data becomes available, resulting in a plan that will remain current and relevant.

14.1.1 Plan Implementation and Maintenance

The effectiveness of the hazard mitigation plan depends on its implementation and incorporation of its action items into partner jurisdictions' existing plans, policies and programs. Together, the action items in the Plan provide a framework for activities that the Partnership can implement over the next 5 years. The Planning Team and the steering committee have established goals and objectives and have prioritized mitigation actions that will be implemented through existing plans, policies and programs.

Spokane County Emergency Management will have lead responsibility for overseeing the plan implementation and maintenance strategy. Plan implementation and evaluation will be a shared responsibility among all planning partnership members and agencies identified as lead agencies in the mitigation action plans (see planning partner annexes in Volume 2 of this plan).

44 CFR requires that local hazard mitigation plans be reviewed, revised if appropriate, and resubmitted for approval in order to remain eligible for benefits under the DMA (Section

201.6.d.3). The Spokane County partnership intends to update the hazard mitigation plan on a 5-year cycle from the date of initial plan adoption. This cycle may be accelerated to less than 5 years based on the following triggers:

- A presidential disaster declaration that impacts the planning area.
- A hazard event that causes loss of life.
- A comprehensive update of the County or participating city/town's comprehensive plan.

It will not be the intent of future updates to develop a completely new hazard mitigation plan for the planning area. The update will, at a minimum, include the following elements:

- The update process will be convened through a Planning Team.
- The hazard risk assessment will be reviewed and, if necessary, updated using best available information and technologies.
- The action plans will be reviewed and revised to account for any initiatives completed, dropped, or changed and to account for changes in the risk assessment or new partnership policies identified under other planning mechanisms (such as the comprehensive plan).
- The draft update will be sent to appropriate agencies and organizations for comment.
- The public will be given an opportunity to comment on the update prior to adoption.
- The partnership governing bodies will adopt their portions of the updated plan.

14.1.2 Annual Review

The hazard mitigation plan will be reviewed annually and a progress report prepared. These reviews may be more or less frequent, as deemed necessary by the Emergency Management Deputy Director, but there will be a minimum of one review per year.

The minimum task of each planning partner will be the evaluation of the progress of its individual action plan during a 12-month performance period. This review will include the following:

- Summary of any hazard events that occurred during the performance period and the impact these events had on the planning area.
- Review of mitigation success stories.
- Review of continuing public involvement.
- Brief discussion about why targeted strategies were not completed.

- Re-evaluation of the action plan to determine if the timeline for identified projects needs to be amended (such as changing a long-term project to a short-term one because of new funding).
- Recommendations for new projects.
- Changes in, or potential for new funding options (grant opportunities).
- Impact of any other planning programs or initiatives that involve hazard mitigation.

A template to guide the planning partners in preparing a progress report has been created as part of this planning process (see Appendix B). The Emergency Management Planning Coordinator will then prepare a formal annual report on the progress of the plan. This report should be used as follows:

- Posted on the Spokane County website page dedicated to the hazard mitigation plan.
- Provided to the local media through a press release.
- Presented to planning partner governing bodies to inform them of the progress of actions implemented during the reporting period.

Use of the progress report will be at the discretion of each planning partner. Annual progress reporting is not a requirement specified under 44 CFR. However, it may enhance the planning partnership's opportunities for funding. While failure to implement this component of the plan maintenance strategy will not jeopardize a planning partner's compliance under the DMA, completion of the annual review will reduce the level of effort involved in future updates, and is highly encouraged by FEMA.

14.1.3 2025 Plan Maintenance Status Report of Annual Reviews

Since completion of the last plan in 2020, the Emergency Management Planning Coordinator did hold some annual meetings to discuss and review the mitigation plan, including progress made on various strategies, as well as discussions on the hazards of concern and impact from events that occurred since the 2020 plan was completed. The Coordinator also took part in various other plan update meetings, such as the on-going Community Wildfire Protection Plan, Climate Adaptation Plan (on-going effort as of this 2025 update), and the County's Comprehensive Land Use Plan update, which is on-going.

With the 2023 fires occurring in the County, and the change in staffing, written reports were not prepared (or cannot be located). The planning partners do, however, feel the process outlined for annual reviews is a good practice, and have again committed to following a similar process.

The current Emergency Management Planning Coordinator, in conjunction with the Deputy Director, will again begin the process of annual reviews and documenting the outcome of those

reviews for use in future plan updates. It is anticipated that the first annual review will occur approximately one year after adoption of this 2026 update.

14.1.4 Future Plan Updates

In addition to the annual review, three years after adoption of the hazard mitigation plan, the Deputy Director may decide to apply for a planning grant through FEMA to start the 2031 update. Upon receipt of funding, the County will solicit bids under applicable contracting procedures and hire a contractor to assist with the project. The proposed schedule for completion of the plan update is one year from award of a contract, to coincide with the five-year adoption date of the 2026 hazard mitigation plan update.

The Deputy Director will be responsible for the plan update. Before the end of the five-year period, the updated plan will be submitted to FEMA for approval. When concurrence is received that the updated plan complies with FEMA requirements, it will be submitted to the Board of County Commissioners, the local jurisdiction councils, and the Special Purpose District Commissioners for adoption. The County will send an e-mail to individuals and organizations on the stakeholder list to inform them that the updated plan is available on the County website.

14.1.5 Implementation through Existing Programs

Spokane County will have the opportunity to implement hazard mitigation projects through existing programs and procedures through plan revisions or amendments. The hazard mitigation plan will be incorporated into the plans, regulations and ordinances as they are updated in the future or when new plans are developed.

The Spokane County Comprehensive Plan and the comprehensive plans of the planning partners are considered to be integral parts of this plan. The County and its jurisdictional partners, through adoption of comprehensive plans and zoning ordinances, have planned for the impact of natural hazards. The plan development process provided the County and its cities with the opportunity to review and expand on policies contained within these planning mechanisms. The planning partners used their comprehensive plans and the hazard mitigation plan as complementary documents that work together to achieve the goal of reducing risk exposure to the citizens of the County. An update to a comprehensive plan for the county and all of its municipal planning partners is currently underway as of this HMP update, with an anticipated completion date in 2026. At that point in time, the county may elect to review the mitigation plan and make appropriate changes reflected in the Comprehensive Plan.

All planning partners are committed to creating a linkage between the hazard mitigation plan and their individual comprehensive and other plans by identifying a mitigation initiative to do so and giving that initiative a high priority. Other planning processes and programs to potentially be coordinated with the recommendations of the hazard mitigation plan include the following:

- Community Wildfire Protection Plan
- Wildfire Smoke Management Plan
- Partners' emergency response plans
- Climate change adaptation plans and programs
- Capital improvement programs
- Municipal codes
- Building codes
- Critical areas regulation
- Growth management
- Water resource inventory area planning
- Basin planning
- Community design guidelines
- Water-efficient and fire-resistant landscape design guidelines
- Stormwater management programs
- Water system vulnerability assessments
- Master fire protection plans
- Landslide reports and planning
- Evacuation planning
- Transportation planning

Some action items do not need to be implemented through regulation. Instead, these items can be implemented through the creation of new educational programs, continued interagency coordination, or improved public participation. As information becomes available from other planning mechanisms that can enhance this plan, that information will be incorporated via the update process.

14.1.6 Continued Public Involvement

Spokane County is dedicated to involving the public directly in review and updates of the hazard mitigation plan, as well as additional companion documents, such as the Community Wildfire Protection Plan, among others. The public will continue to be advised of the various plans' progress through the county's website and the annual progress reports that will be provided to the media.

All planning partners have agreed to provide links to the Hazard Mitigation Plan website on their websites to increase avenues of public access to the plan. The Spokane Department of Emergency Management has agreed to maintain the hazard mitigation plan website. This site will not only house the final plan, but it will also become the one-stop shop for information regarding the plan, the partnership and plan implementation. Upon initiation of future update processes, a new public involvement strategy will be initiated. This strategy will be based on the needs and capabilities of the planning partnership at the time of the update. At a minimum, this strategy will include the use of social media and local media outlets within the planning area.

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APPENDIX A.
ACRONYMS AND DEFINITIONS

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ACRONYMS

ASHRAE—American Society of Heating, Refrigerating, and Air-Conditioning Engineers
CFR—Code of Federal Regulations
cfs—cubic feet per second
CIP—Capital Improvement Plan
CRS—Community Rating System
CWPP—Community Wildfire Protection Plan
DEM—Spokane Department of Emergency Management
DFIRM—Digital Flood Insurance Rate Maps
DMA —Disaster Mitigation Act
DNA—Washington Department of Natural Resources
DSO—Dam Safety Office
EPA—U.S. Environmental Protection Agency
ESA—Endangered Species Act
FBFM—Fire Behavior Fuel Model
FCAAP—Flood Control Assistance Account Program
FEMA—Federal Emergency Management Agency
FERC—Federal Energy Regulatory Commission
FIRM—Flood Insurance Rate Map
FRCC—Fire regime condition class
GIS—Geographic Information System
GMA—Growth Management Act
HAZUS-MH—Hazards, United States-Multi Hazard
HMGP—Hazard Mitigation Grant Program
IBC—International Building Code
IRC—International Residential Code
MM—Modified Mercalli Scale
NEHRP—National Earthquake Hazards Reduction Program
NFIP—National Flood Insurance Program
NOAA—National Oceanic and Atmospheric Administration
NWS—National Weather Service
PDM—Pre-Disaster Mitigation Grant Program
PGA—Peak Ground Acceleration
RCW—Revised Code of Washington
SCS—U.S. Department of Agriculture Soil Conservation Service

SFHA—Special Flood Hazard Area
SHELDUS—Special Hazard Events and Losses Database for the US
THIRA— Threat and hazard identification and risk assessment
UBC—Uniform Building Code
URM—Unreinforced Masonry
USGS—U.S. Geological Survey
WAC—Washington Administrative Code
WRIA—Water Resource Inventory Area

DEFINITIONS

100-Year Flood: The term "100-year flood" can be misleading. The 100-year flood does not necessarily occur once every 100 years. Rather, it is the flood that has a 1 percent chance of being equaled or exceeded in any given year. Thus, the 100-year flood could occur more than once in a relatively short period of time. The Federal Emergency Management Agency (FEMA) defines it as the 1 percent annual chance flood, which is now the standard definition used by most federal and state agencies and by the National Flood Insurance Program.

Acre-Foot: An acre-foot is the amount of water it takes to cover 1 acre to a depth of 1 foot. This measure is used to describe the quantity of storage in a water reservoir. An acre-foot is a unit of volume. One acre foot equals 7,758 barrels; 325,829 gallons; or 43,560 cubic feet. An average household of four will use approximately 1 acre-foot of water per year.

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

Base Flood: The flood having a 1% chance of being equaled or exceeded in any given year, also known as the "100-year" or "1% chance" flood. The base flood is a statistical concept used to ensure that all properties subject to the National Flood Insurance Program are protected to the same degree against flooding.

Basin: A basin is the area within which all surface water—whether from rainfall, snowmelt, springs or other sources—flows to a single water body or watercourse. The boundary of a river basin is defined by natural topography, such as hills, mountains and ridges. Basins are also referred to as "watersheds" and "drainage basins."

Benefit: A benefit is a net project outcome and is usually defined in monetary terms. Benefits may include direct and indirect effects. For the purposes of benefit-cost analysis of proposed mitigation measures, benefits are limited to specific, measurable, risk reduction factors, including

reduction in expected property losses (buildings, contents and functions) and protection of human life.

Benefit/Cost Analysis: A benefit/cost analysis is a systematic, quantitative method of comparing projected benefits to projected costs of a project or policy. It is used as a measure of cost effectiveness.

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

Capability Assessment: A capability assessment provides a description and analysis of a community's current capacity to address threats associated with hazards. The assessment includes two components: an inventory of an agency's mission, programs and policies, and an analysis of its capacity to carry them out. A capability assessment is an integral part of the planning process in which a community's actions to reduce losses are identified, reviewed, and analyzed, and the framework for implementation is identified. The following capabilities were reviewed under this assessment:

- Legal and regulatory capability
- Administrative and technical capability
- Fiscal capability

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

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

Critical Facility: Facilities and infrastructure that are critical to the health and welfare of the population. These become especially important after any hazard event occurs. For the purposes of this plan, critical facilities include:

- Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic and/or water reactive materials;
- Hospitals, nursing homes and housing likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a hazard event.

- Police stations, fire stations, vehicle and equipment storage facilities, and emergency operations centers that are needed for disaster response before, during, and after hazard events, and
- Public and private utilities, facilities and infrastructure that are vital to maintaining or restoring normal services to areas damaged by hazard events.
- Government facilities.

Cubic Feet per Second: Common measurement for stream discharge or river flow. One cubic foot is about 7.5 gallons of liquid.

Dam: Any artificial barrier or controlling mechanism that can or does impound 10 acre-feet or more of water.

Dam Failure: Dam failure refers to a partial or complete breach in a dam (or levee) that impacts its integrity. Dam failures occur for a number of reasons, such as flash flooding, inadequate spillway size, mechanical failure of valves or other equipment, freezing and thawing cycles, earthquakes, and intentional destruction.

Debris Avalanche: Volcanoes are prone to debris and mountain rock avalanches that can approach speeds of 100 mph.

Debris Flow: Dense mixtures of water-saturated debris that move down-valley; looking and behaving much like flowing concrete. They form when loose masses of unconsolidated material are saturated, become unstable, and move down slope. The source of water varies but includes rainfall, melting snow or ice, and glacial outburst floods.

Debris Slide: Debris slides consist of unconsolidated rock or soil that has moved rapidly down slope. They occur on slopes greater than 65 percent.

Disaster Mitigation Act of 2000 (DMA); The DMA is Public Law 106-390 and is the latest federal legislation enacted to encourage and promote proactive, pre-disaster planning as a condition of receiving financial assistance under the Robert T. Stafford Act. The DMA emphasizes planning for disasters before they occur. Under the DMA, a pre-disaster hazard mitigation program and new requirements for the national post-disaster Hazard Mitigation Grant Program were established.

Drainage Basin: A basin is the area within which all surface water- whether from rainfall, snowmelt, springs or other sources- flows to a single water body or watercourse. The boundary of a river basin is defined by natural topography, such as hills, mountains and ridges. Drainage basins are also referred to as **watersheds** or **basins**.

Drought: Drought is a period of time without substantial rainfall or snowfall from one year to the next. Drought can also be defined as the cumulative impacts of several dry years or a deficiency

of precipitation over an extended period of time, which in turn results in water shortages for some activity, group or environmental function. A hydrological drought is caused by deficiencies in surface and subsurface water supplies. A socioeconomic drought impacts the health, well-being and quality of life or starts to have an adverse impact on a region. Drought is a normal, recurrent feature of climate and occurs almost everywhere.

Earthquake: An earthquake is defined as a sudden slip on a fault, volcanic or magmatic activity, and sudden stress changes in the earth that result in ground shaking and radiated seismic energy. Earthquakes can last from a few seconds to over 5 minutes, and have been known to occur as a series of tremors over a period of several days. The actual movement of the ground in an earthquake is seldom the direct cause of injury or death. Casualties may result from falling objects and debris as shocks shake, damage, or demolish buildings and other structures.

Exposure: Exposure is defined as the number and dollar value of assets considered to be at risk during the occurrence of a specific hazard.

Extent: The extent is the size of an area affected by a hazard.

Fire Behavior: Fire behavior refers to the physical characteristics of a fire and is a function of the interaction between the fuel characteristics (such as type of vegetation and structures that could burn), topography, and weather. Variables that affect fire behavior include the rate of spread, intensity, fuel consumption, and fire type (such as underbrush versus crown fire).

Fire Frequency: Fire frequency is the broad measure of the rate of fire occurrence in a particular area. An estimate of the areas most likely to burn is based on past fire history or fire rotation in the area, fuel conditions, weather, ignition sources (such as human or lightning), fire suppression response, and other factors.

Flash Flood: A flash flood occurs with little or no warning when water levels rise at an extremely fast rate

Flood Insurance Rate Map: Flood Insurance Rate Maps are the official maps on which the Federal Emergency Management Agency (FEMA) has delineated the Special Flood Hazard Area.

Flood Insurance Study: A report published by the Federal Insurance and Mitigation Administration for a community in conjunction with the community's Flood Insurance rate Map. The study contains such background data as the base flood discharges and water surface elevations that were used to prepare the Flood Insurance Rate Map. In most cases, a community Flood Insurance Rate Map with detailed mapping will have a corresponding flood insurance study.

Floodplain: Any land area susceptible to being inundated by flood waters from any source. A flood insurance rate map identifies most, but not necessarily all, of a community's floodplain as the Special Flood Hazard Area.

Floodway: Floodways are areas within a floodplain that are reserved for the purpose of conveying flood discharge without increasing the base flood elevation more than 1 foot. Generally speaking, no development is allowed in floodways, as any structures located there would block the flow of floodwaters.

Floodway Fringe: Floodway fringe areas are located in the floodplain but outside of the floodway. Some development is generally allowed in these areas, with a variety of restrictions. On maps that have identified and delineated a floodway, this would be the area beyond the floodway boundary that can be subject to different regulations.

Fog: Fog refers to a cloud (or condensed water droplets) near the ground. Fog forms when air close to the ground can no longer hold all the moisture it contains. Fog occurs either when air is cooled to its dew point or the amount of moisture in the air increases. Heavy fog is particularly hazardous because it can restrict surface visibility. Severe fog incidents can close roads, cause vehicle accidents, cause airport delays, and impair the effectiveness of emergency response. Financial losses associated with transportation delays caused by fog have not been calculated in the United States but are known to be substantial.

Freeboard: Freeboard is the margin of safety added to the base flood elevation.

Frequency: For the purposes of this plan, frequency refers to how often a hazard of specific magnitude, duration and/or extent is expected to occur on average. Statistically, a hazard with a 100-year frequency is expected to occur about once every 100 years on average and has a 1 percent chance of occurring any given year. Frequency reliability varies depending on the type of hazard considered.

Fujita Scale of Tornado Intensity: Tornado wind speeds are sometimes estimated on the basis of wind speed and damage sustained using the Fujita Scale. The scale rates the intensity or severity of tornado events using numeric values from F0 to F5 based on tornado wind speed and damage. An F0 tornado (wind speed less than 73 miles per hour (mph)) indicates minimal damage (such as broken tree limbs), and an F5 tornado (wind speeds of 261 to 318 mph) indicates severe damage.

Goal: A goal is a general guideline that explains what is to be achieved. Goals are usually broad-based, long-term, policy-type statements and represent global visions. Goals help define the benefits that a plan is trying to achieve. The success of a hazard mitigation plan is measured by the degree to which its goals have been met (that is, by the actual benefits in terms of actual hazard mitigation).

Geographic Information System (GIS): GIS is a computer software application that relates data regarding physical and other features on the earth to a database for mapping and analysis.

Hazard: A hazard is a source of potential danger or adverse condition that could harm people and/or cause property damage.

Hazard Mitigation Grant Program: Authorized under Section 202 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the program is administered by FEMA and provides grants to states, tribes and local governments to implement hazard mitigation actions after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to disasters and to enable mitigation activities to be implemented as a community recovers from a disaster

Hazards U.S. Multi-Hazard (HAZUS-MH) Loss Estimation Program: HAZUS-MH is a GIS-based program used to support the development of risk assessments as required under the DMA. The HAZUS-MH software program assesses risk in a quantitative manner to estimate damages and losses associated with natural hazards. HAZUS-MH is FEMA's nationally applicable, standardized methodology and software program and contains modules for estimating potential losses from earthquakes, floods and wind hazards. HAZUS-MH has also been used to assess vulnerability (exposure) for other hazards.

Hydraulics: Hydraulics is the branch of science or engineering that addresses fluids (especially water) in motion in rivers or canals, works and machinery for conducting or raising water, the use of water as a prime mover, and other fluid-related areas.

Hydrology: Hydrology is the analysis of waters of the earth. For example, a flood discharge estimate is developed by conducting a hydrologic study.

Intensity: For the purposes of this plan, intensity refers to the measure of the effects of a hazard.

Inventory: The assets identified in a study region comprise an inventory. Inventories include assets that could be lost when a disaster occurs and community resources are at risk. Assets include people, buildings, transportation and other valued community resources.

Landslide: Landslides can be described as the sliding movement of masses of loosened rock and soil down a hillside or slope. Fundamentally, slope failures occur when the strength of the soils forming the slope exceeds the pressure, such as weight or saturation, acting upon them.

Lightning: Lightning is an electrical discharge resulting from the buildup of positive and negative charges within a thunderstorm. When the buildup becomes strong enough, lightning appears as a "bolt," usually within or between clouds and the ground. A bolt of lightning instantaneously reaches temperatures approaching 50,000ºF. The rapid heating and cooling of air near lightning causes thunder. Lightning is a major threat during thunderstorms. In the United States, 75 to 100

Americans are struck and killed by lightning each year (see http://www.fema.gov/hazard/thunderstorms/thunder.shtm).

Liquefaction: Liquefaction is the complete failure of soils, occurring when soils lose shear strength and flow horizontally. It is most likely to occur in fine grain sands and silts, which behave like viscous fluids when liquefaction occurs. This situation is extremely hazardous to development on the soils that liquefy, and generally results in extreme property damage and threats to life and safety.

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

Magnitude: Magnitude is the measure of the strength of an earthquake, and is typically measured by the Richter scale. As an estimate of energy, each whole number step in the magnitude scale corresponds to the release of about 31 times more energy than the amount associated with the preceding whole number value.

Mass movement: A collective term for landslides, mudflows, debris flows, sinkholes and lahars.

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

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

Objective: For the purposes of this plan, an objective is defined as a short-term aim that, when combined with other objectives, forms a strategy or course of action to meet a goal. Unlike goals, objectives are specific and measurable.

Peak Ground Acceleration: Peak Ground Acceleration (PGA) is a measure of the highest amplitude of ground shaking that accompanies an earthquake, based on a percentage of the force of gravity.

Preparedness: Preparedness refers to actions that strengthen the capability of government, citizens and communities to respond to disasters.

Presidential Disaster Declaration: These declarations are typically made for events that cause more damage than state and local governments and resources can handle without federal government assistance. Generally, no specific dollar loss threshold has been established for such

declarations. A Presidential Disaster Declaration puts into motion long-term federal recovery programs, some of which are matched by state programs, designed to help disaster victims, businesses and public entities.

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

Repetitive Loss Property: Any National Flood Insurance Program-insured property that, since 1978 and regardless of any changes of ownership during that period, has experienced:

- Four or more paid flood losses in excess of $1000.00; or
- Two paid flood losses in excess of $1000.00 within any 10-year period since 1978 or
- Three or more paid losses that equal or exceed the current value of the insured property.

Return Period (or Mean Return Period): This term refers to the average period of time in years between occurrences of a particular hazard (equal to the inverse of the annual frequency of occurrence).

Riverine: Of or produced by a river. Riverine floodplains have readily identifiable channels. Floodway maps can only be prepared for riverine floodplains.

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

Risk Assessment: Risk assessment is the process of measuring potential loss of life, personal injury, economic injury, and property damage resulting from hazards. This process assesses the vulnerability of people, buildings and infrastructure to hazards and focuses on (1) hazard identification; (2) impacts of hazards on physical, social and economic assets; (3) vulnerability identification; and (4) estimates of the cost of damage or costs that could be avoided through mitigation.

Risk Ranking: This ranking serves two purposes, first to describe the probability that a hazard will occur, and second to describe the impact a hazard will have on people, property and the economy. Risk estimates for the City are based on the methodology that the City used to prepare the risk assessment for this plan. The following equation shows the risk ranking calculation:

Risk Ranking = Probability + Impact (people + property + economy)

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

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

Special Flood Hazard Area: The base floodplain delineated on a Flood Insurance Rate Map. The special flood hazard area is mapped as a Zone A in riverine situations and zone V in coastal situations. The special flood hazard area may or may not encompass all of a community's flood problems

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

Stream Bank Erosion: Stream bank erosion is common along rivers, streams and drains where banks have been eroded, sloughed or undercut. However, it is important to remember that a stream is a dynamic and constantly changing system. It is natural for a stream to want to meander, so not all eroding banks are "bad" and in need of repair. Generally, stream bank erosion becomes a problem where development has limited the meandering nature of streams, where streams have been channelized, or where stream bank structures (like bridges, culverts, etc.) are located in places where they can actually cause damage to downstream areas. Stabilizing these areas can help protect watercourses from continued sedimentation, damage to adjacent land uses, control unwanted meander, and improvement of habitat for fish and wildlife.

Steep Slope: Different communities and agencies define it differently, depending on what it is being applied to, but generally a steep slope is a slope in which the percent slope equals or exceeds 25%. For this study, steep slope is defined as slopes greater than 33%.

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

Thunderstorm: A thunderstorm is a storm with lightning and thunder produced by cumulonimbus clouds. Thunderstorms usually produce gusty winds, heavy rains, and sometimes hail. Thunderstorms are usually short in duration (seldom more than 2 hours). Heavy rains associated with thunderstorms can lead to flash flooding during the wet or dry seasons.

Tornado: A tornado is a violently rotating column of air extending between and in contact with a cloud and the surface of the earth. Tornadoes are often (but not always) visible as funnel clouds. On a local scale, tornadoes are the most intense of all atmospheric circulations, and winds can reach destructive speeds of more than 300 mph. A tornado's vortex is typically a few hundred meters in diameter, and damage paths can be up to 1 mile wide and 50 miles long.

Vulnerability: Vulnerability describes how exposed or susceptible an asset is to damage. Vulnerability depends on an asset's construction and contents and the economic value of its functions. Like indirect damages, the vulnerability of one element of the community is often related to the vulnerability of another. For example, many businesses depend on uninterrupted electrical power. Flooding of an electric substation would affect not only the substation itself but businesses as well. Often, indirect effects can be much more widespread and damaging than direct effects.

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

Wildfire: These terms refer to any uncontrolled fire occurring on undeveloped land that requires fire suppression. The potential for wildfire is influenced by three factors: the presence of fuel, topography and air mass. Fuel can include living and dead vegetation on the ground, along the surface as brush and small trees, and in the air such as tree canopies. Topography includes both slope and elevation. Air mass includes temperature, relative humidity, wind speed and direction, cloud cover, precipitation amount, duration, and the stability of the atmosphere at the time of the fire. Wildfires can be ignited by lightning and, most frequently, by human activity including smoking, campfires, equipment use and arson.

Windstorm: Windstorms are generally short-duration events involving straight-line winds or gusts exceeding 50 mph. These gusts can produce winds of sufficient strength to cause property damage. Windstorms are especially dangerous in areas with significant tree stands, exposed property, poorly constructed buildings, mobile homes (manufactured housing units), major infrastructure, and aboveground utility lines. A windstorm can topple trees and power lines; cause damage to residential, commercial, critical facilities; and leave tons of debris in its wake.

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

SPOKANE COUNTY 2026 HAZARD MITIGATION PLAN

APPENDIX B.
ANNUAL PROGRESS REPORT TEMPLATE

APPENDIX B.
ANNUAL PROGRESS REPORT TEMPLATE

Spokane County
Hazard Mitigation Plan
Annual Progress Report

Reporting Period: (Insert reporting period)

Background: Spokane County and participating cities and special purpose districts in the county developed a hazard mitigation plan to reduce risk from all hazards by identifying resources, information, and strategies for risk reduction. The federal Disaster Mitigation Act of 2000 requires state and local governments to develop hazard mitigation plans as a condition for federal disaster grant assistance. To prepare the plan, the participating partners organized resources, assessed risks from natural hazards within the county, developed planning goals and objectives, reviewed mitigation alternatives, and developed an action plan to address probable impacts from natural hazards. By completing this process, these jurisdictions maintained compliance with the Disaster Mitigation Act, achieving eligibility for mitigation grant funding opportunities afforded under the Robert T. Stafford Act. The plan can be viewed on-line at:

http://www.spokanecounty.org/emergencymgmt/content.aspx?c=2238

Summary Overview of the Plan's Progress: The performance period for the Hazard Mitigation Plan became effective on February 27, 2015, with the final approval of the plan by FEMA. The initial performance period for this plan will be 5 years, with an anticipated update to the plan to occur before _____ 2025. As of this reporting period, the performance period for this plan is considered to be __% complete. The Hazard Mitigation Plan has targeted _____ hazard mitigation initiatives to be pursued during the 5-year performance period. As of the reporting period, the following overall progress can be reported:

- __ initiatives (__%) reported ongoing action toward completion.
- __ initiatives (__%) were reported as being complete.
- __ initiatives (___%) reported no action taken.

Purpose: The purpose of this report is to provide an annual update on the implementation of the action plan identified in the Spokane County Hazard Mitigation Plan. The objective is to ensure that there is a continuing and responsive planning process that will keep the Hazard Mitigation Plan dynamic and responsive to the needs and capabilities of the partner jurisdictions. This report discusses the following:

- Natural hazard events that have occurred within the last year
- Changes in risk exposure within the planning area (all of Spokane County)
- Mitigation success stories
- Review of the action plan
- Changes in capabilities that could impact plan implementation
- Recommendations for changes/enhancement.

The Hazard Mitigation Plan Planning Team: The Hazard Mitigation Planning Team, made up of planning partners and stakeholders within the planning area, reviewed and approved this progress report at its annual meeting held on _____, 202_. It was determined through the plan's development process that a steering committee would remain in service to oversee maintenance of the plan. At a minimum, the steering committee will provide technical review and oversight on the development of the annual progress report. It is anticipated that there will be turnover in the membership annually, which will be documented in the progress reports. For this reporting period, the steering committee membership is as indicated in Table 1.

TABLE 1.
PLANNING TEAM MEMBERS

Name	Title	Jurisdiction/Agency

Natural Hazard Events within the Planning Area: During the reporting period, there were _____ natural hazard events in the planning area that had a measurable impact on people or property. A summary of these events is as follows:

- _____
- _____

Changes in Risk Exposure in the Planning Area: *(Insert brief overview of any natural hazard event in the planning area that changed the probability of occurrence or ranking of risk for the hazards addressed in the hazard mitigation plan)*

Mitigation Success Stories: *(Insert brief overview of mitigation accomplishments during the reporting period)*

Review of the Action Plan: Table 2 reviews the action plan, reporting the status of each initiative. Reviewers of this report should refer to the Hazard Mitigation Plan for more detailed descriptions of each initiative and the prioritization process.
Address the following in the "status" column of the following table:

- *Was any element of the initiative carried out during the reporting period?*
- *If no action was completed, why?*
- *Is the timeline for implementation for the initiative still appropriate?*
- *If the initiative was completed, does it need to be changed or removed from the action plan?*

TABLE 2.
ACTION PLAN MATRIX

Action Taken? (Yes or No)	Time Line	Priority	Status	Status (X, O,✓)
Initiative #__—_____[description]				
Initiative #__—_____[description]				
Initiative #__—_____[description]				
Initiative #__—_____[description]				
Initiative #__—_____[description]				
Initiative #__—_____[description]				
Initiative #__—_____[description]				

TABLE 2.
ACTION PLAN MATRIX

Action Taken? (Yes or No)	Time Line	Priority	Status	Status (X, O,✓)
Initiative #__—_____[description]				
Initiative #__—_____[description]				
Initiative #__—_____[description]				
Initiative #__—_____[description]				
Initiative #__—_____[description]				

Completion status legend:
- ✓= Project Completed
- O = Action ongoing toward completion
- X = No progress at this time

Changes That May Impact Implementation of the Plan: *(Insert brief overview of any significant changes in the planning area that would have a profound impact on the implementation of the plan. Specify any changes in technical, regulatory and financial capabilities identified during the plan's development)*

Recommendations for Changes or Enhancements: Based on the review of this report by the Hazard Mitigation Plan Steering Committee, the following recommendations will be noted for future updates or revisions to the plan:

- _____
- _____
- _____
- _____
- _____
- _____

Public review notice: *The contents of this report are considered to be public knowledge and have been prepared for total public disclosure. Copies of the report have been provided to the*

governing boards of all planning partners and to local media outlets and the report is posted on the Spokane County Hazard Mitigation Plan website. Any questions or comments regarding the contents of this report should be directed to:

Deputy Director Chandra Fox
Spokane County Emergency Management
1121 W. Gardner
Spokane, WA, 99201
Phone: (509) 477-7606
Email: CEFox@spokanecounty.gov

SPOKANE COUNTY 2026 HAZARD MITIGATION PLAN

APPENDIX C.
PLAN ADOPTION RESOLUTIONS

APPENDIX C.
PLAN ADOPTION RESOLUTIONS

APPENDIX D.
COMMUNITY WILDFIRE PROTECTION PLAN SIGNATORIES

APPENDIX D
CWPP SIGNATURES

To Be Provided With Final Release

Spokane County

HAZARD MITIGATION PLAN
VOLUME 2: PLANNING PARTNER ANNEXES

February 2026

Prepared for:
Spokane County Emergency Management
1121 W. Gardner
Spokane, WA 99201

Prepared by:

Bridgeview Consulting, LLC
1708 155th Street Northwest
Gig Harbor, Washington 98332
253.380.5736

Spokane County
Hazard Mitigation Plan
Volume 2—Planning Partner Annexes

TABLE OF CONTENTS

Chapter 1. Planning Partner Participation 1-1
1.1 Background 1-1
1.2 The Planning Partnership 1-1
1.3 Annex-Preparation Process 1-3
1.4 Level of Participation 1-7

Chapter 2. City of Airway Heights 2026 Annex Update 2-1
2.1 Introduction 2-1
2.2 Hazard Mitigation Planning Team Point(s) of Contact 2-1
2.3 Community Profile 2-2
2.4 Hazard Event History 2-4
2.5 Capability Assessment 2-5
2.6 National Flood Insurance Information 2-5
2.6.1 Regulatory Capability 2-6
2.6.2 Administrative and Technical Capabilities 2-7
2.6.3 Fiscal Capability 2-9
2.7 Hazard Risk and Vulerability Ranking 2-10
2.8 Community Wildfire Protection Planning and Analysis 2-13
2.9 Mitigation Goals and Objectives 2-13
2.10 Hazard Mitigation Action Plan 2-13
2.10.1 Prioritization of Mitigation Initiatives 2-14
2.11 Status of Previous Plan Initiatives 2-15
2.12 Hazard Maps – Extent and Location 2-16

Chapter 3. City of Cheney 2026 Annex Update 3-1
3.1 Introduction 3-1
3.2 Hazard Mitigation Planning Team Point(s) of Contact 3-1
3.3 Community Profile 3-2
3.4 Hazard Event History 3-3
3.5 Capability Assessment 3-3
3.5.1 National Flood Insurance Information 3-4
3.5.2 Regulatory Capability 3-5
3.5.3 Administrative and Technical Capabilities 3-7
3.5.4 Fiscal Capability 3-9
3.5.5 Community Classifications 3-10

3.6 Hazard Risk and Vulnerability Ranking 3-10
3.7 Community Wildfire Protection Planning and Analysis 3-13
3.8 Mitigation Goals and Objectives 3-13
3.9 Hazard Mitigation Action Plan 3-13
3.10 Prioritization of Mitigation Initiatives 3-18
3.11 Status of Previous Plan Initiatives 3-19
3.12 Hazard Maps – Extent and Location 3-23

Chapter 4. City of Deer Park 2026 Annex Update 4-1
4.1 Introduction 4-1
4.2 Hazard Mitigation Planning Team Point(s) of Contact 4-1
4.3 Community Profile 4-2
4.4 Hazard Event History 4-3
4.5 Capability Assessment 4-4
4.5.1 National Flood Insurance Information 4-5
4.5.2 Regulatory Capability 4-6
4.5.3 Administrative and Technical Capabilities 4-7
4.5.4 Fiscal Capability 4-9
4.5.5 Community Classifications 4-10
4.6 Hazard Risk and Vulerability Ranking 4-10
4.7 Community Wildfire Protection Planning and Analysis 4-13
4.8 Mitigation Goals and Objectives 4-13
4.9 Hazard Mitigation Action Plan 4-13
4.10 Prioritization of Mitigation Initiatives 4-16
4.11 Status of Previous Plan Initiatives 4-17
4.12 Hazard Area Extent and Location 4-19

Chapter 5. City of Liberty Lake 2026 Annex Update 5-1
5.1 Introduction 5-1
5.2 Hazard Mitigation Planning Team Point(s) of Contact 5-1
5.3 Community Profile 5-2
5.4 Hazard Event History 5-4
5.5 Capability Assessment 5-5
5.5.1 National Flood Insurance Information 5-5
5.5.2 Regulatory Capability 5-6
5.5.3 Administrative and Technical Capabilities 5-8
5.5.4 Fiscal Capability 5-10
5.5.5 Community Classifications 5-11
5.6 Hazard Risk and Vulerability Ranking 5-11
5.7 Community Wildfire Protection Planning and Analysis 5-14
5.8 Mitigation Goals and Objectives 5-14
5.9 Hazard Mitigation Action Plan 5-15

5.10 Prioritization of Mitigation Initiatives 5-17
5.11 Status of Previous Plan Initiatives 5-18
5.12 Additional Comments 5-20
5.13 Hazard Area Extent and Location 5-21
Chapter 6. City of Spokane Valley 2026 Annex Update 6-1
6.1 Introduction 6-1
6.2 Hazard Mitigation Planning Team Point(s) of Contact 6-1
6.3 Community Profile 6-2
6.4 Hazard Event History 6-5
6.5 Capability Assessment 6-6
6.5.1 National Flood Insurance Information 6-7
6.5.2 Regulatory Capability 6-8
6.5.3 Administrative and Technical Capabilities 6-10
6.5.4 Fiscal Capability 6-13
6.5.5 Community Classifications 6-14
6.6 Hazard Risk and VulNerability Ranking 6-14
6.7 Community Wildfire Protection Planning and Analysis 6-16
6.8 Public Outreach Events 6-16
6.9 Mitigation Goals and Objectives 6-17
6.10 Hazard Mitigation Action Plan 6-17
6.11 Prioritization of Mitigation Initiatives 6-20
6.12 Status of Previous Plan Initiatives 6-21
6.13 Hazard Area Extent and Location 6-24
Chapter 7. Town of Latah 2026 Annex Update 7-1
7.1 Introduction 7-1
7.2 Hazard Mitigation Planning Team Point(s) of Contact 7-1
7.3 Community Profile 7-2
7.4 Hazard Event History 7-2
7.5 Capability Assessment 7-3
7.5.1 National Flood Insurance Information 7-4
7.5.2 Regulatory Capability 7-5
7.5.3 Administrative and Technical Capabilities 7-6
7.5.4 Fiscal Capability 7-8
7.5.5 Community Classifications 7-9
7.6 Hazard Risk and Vulerability Ranking 7-10
7.6.1 Additional Items Of Consideration 7-12
7.7 Community Wildfire Analysis 7-12
7.8 Mitigation Goals and Objectives 7-12
7.9 Hazard Mitigation Action Plan 7-12
7.10 Prioritization of Mitigation Initiatives 7-16

7.11 Additional Information 7-16

Chapter 8. Spokane Conservation District 2026 Annex Update 8-1
8.1 Introduction 8-1
8.2 Hazard Mitigation Planning Team Point(s) of Contact 8-1
8.3 District Profile 8-2
8.4 Hazard Event History 8-4
8.5 Applicable Regulations and Plans 8-6
8.5.1 Regulatory Capability 8-6
8.5.2 Administrative and Technical Capabilities 8-6
8.5.3 Fiscal Capability 8-8
8.6 Community Classification 8-9
8.7 Hazard Risk and Vulnerability Ranking 8-10
8.8 CWPP Planning and Analysis 8-12
8.9 Mitigation Goals and Objectives 8-13
8.10 Hazard Mitigation Action Plan 8-13
8.11 Prioritization of Mitigation Initiatives 8-14
8.12 Status of Previous Plan Initiatives 8-15

Chapter 9. Spokane County Fire District #3 Annex 9-1

Chapter 10. Spokane County Fire District #4 2026 Annex Update 10-1
10.1 Introduction 10-1
10.2 Hazard Mitigation Planning Team Point(S) of Contact 10-1
10.3 District Profile 10-2
10.4 Hazard Event History 10-5
10.5 Applicable Regulations and Plans 10-5
10.5.1 Regulatory Capability 10-6
10.5.2 Administrative and Technical Capabilities 10-6
10.5.3 Fiscal Capability 10-9
10.5.4 Community Classification 10-9
10.6 Hazard Risk and Vulnerability Ranking 10-10
10.7 CWPP Analysis 10-15
10.8 Mitigation Goals and Objectives 10-15
10.9 Hazard Mitigation Action Plan 10-16
10.9.1 Additional Mitigation Efforts Completed 10-17
10.10 Prioritization of Mitigation Initiatives 10-18
10.11 Status of Previous Plan Initiatives 10-18
10.12 Issues of Concern 10-20

Chapter 11. Spokane County Fire District #5 Annex 11-1

Chapter 12. Spokane County Fire District #8 2026 Annex Update 12-1
12.1 Introduction 12-1

12.2 Hazard Mitigation Planning Team Point(S) of Contact 12-1
12.3 District Profile 12-2
12.4 Hazard Event History 12-5
12.5 Applicable Regulations and Plans 12-6
12.5.1 Administrative and Technical Capabilities 12-7
12.5.2 Fiscal Capability 12-9
12.6 Community Classification 12-10
12.7 Hazard Risk and Vulnerability Ranking 12-11
12.8 CWPP Analysis 12-15
12.9 Mitigation Goals and Objectives 12-16
12.10 Hazard Mitigation Action Plan 12-16
12.11 Prioritization of Mitigation Initiatives 12-18
12.12 Status of Previous Plan Initiatives 12-19
12.13 Issues of Concern 12-22

Chapter 13. Spokane County Fire District #9 2026 Annex Update 13-1
13.1 Introduction 13-1
13.2 Hazard Mitigation Planning Team Point(S) of Contact 13-1
13.3 District Profile 13-2
13.4 Hazard Event History 13-4
13.5 Applicable Regulations and Plans 13-5
13.5.1 Regulatory Capability 13-5
13.5.2 Cooperative Agreements 13-6
13.5.3 Administrative and Technical Capabilities 13-6
13.5.4 Fiscal Capability 13-8
13.6 Community Classification 13-8
13.7 Hazard Risk and Vulnerability Ranking 13-9
13.8 CWPP Analysis 13-12
13.8.1 Additional Values at Risk 13-12
13.9 Mitigation Goals and Objectives 13-13
13.10 Hazard Mitigation Action Plan 13-13
13.11 Prioritization of Mitigation Initiatives 13-15
13.12 Issues of Concern 13-15

Chapter 14. Spokane County Fire District #10 Annex 14-1

Chapter 15. Spokane Valley Fire Department 2026 Annex Update 15-1
15.1 Introduction 15-1
15.2 Hazard Mitigation Planning Team Point(s) of Contact 15-1
15.3 District Profile 15-2
15.4 Hazard Event History 15-4
15.5 Applicable Regulations and Plans 15-5
15.5.1 Regulatory Capability 15-5

15.5.2 Administrative and Technical Capabilities 15-6
15.5.3 Fiscal Capability 15-7
15.6 Community Classification 15-8
15.7 Hazard Risk and Vulnerability Ranking 15-9
15.8 CWPP Analysis 15-12
15.9 Mitigation Goals and Objectives 15-12
15.10 Hazard Mitigation Action Plan 15-12
15.11 Prioritization of Mitigation Initiatives 15-13
15.12 Status of Previous Plan Initiatives 15-14
15.13 Future Needs to Better Understand Risk/ Vulnerability 15-15
15.14 Additional Comments 15-15
15.15 Issues of Concern 15-16

Chapter 16. Spokane County Fire District 13 / Newman Lake Fire Department Community Wildfire Protection Annex 16-1
16.1 Introduction 16-1
16.2 Planning Team Point(s) of Contact 16-1
16.3 District Profile 16-2
16.4 Hazard Event History 16-3
16.5 Applicable Regulations and Plans 16-4
16.5.1 Regulatory Capability 16-4
16.5.2 Administrative and Technical Capabilities 16-4
16.5.3 Fiscal Capability 16-6
16.6 Community Classification 16-6
16.7 Hazard Risk and Vulnerability 16-7
16.7.1 CWPP Analysis 16-7
16.7.2 Infrastructure at Risk 16-8
16.8 Mitigation Goals and Objectives 16-8
16.9 Hazard Mitigation Action Plan 16-8
16.10 Prioritization of Mitigation Initiatives 16-9
16.11 Future Needs to Better Understand Risk/ Vulnerability 16-10
16.12 Issues of Concern 16-10

Appendices

A. Planning Partner Expectations
B. Procedures for Linking to the Hazard Mitigation Plan Update

CHAPTER 1.
PLANNING PARTNER PARTICIPATION

1.1 BACKGROUND

The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning for hazard mitigation. Such planning efforts require all participating jurisdictions to fully participate in the process and formally adopt the resulting planning document.

In the preparation of the Spokane County Hazard Mitigation Plan and Community Wildfire Protection Plan, a Planning Partnership was formed to leverage resources and to meet requirements of the federal Disaster Mitigation Act of 2000 (DMA) for as many eligible local governments in Spokane County as possible. The DMA defines a local government as follows:

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

There are two types of Planning Partners in this process, with distinct needs and capabilities:

- Incorporated municipalities
- Special purpose districts.

1.2 THE PLANNING PARTNERSHIP

Initial Solicitation and Letters of Intent

The planning team solicited the participation of the cities and towns in the County and all County-recognized special purpose districts at the outset of this project. The initial kick off meeting was held to introduce the planning process to jurisdictions in the County that could have a stake in the outcome of the planning effort. Various agencies and citizen stakeholders were also invited to this meeting. The goals of the meeting were as follows:

- Provide an overview of the Disaster Mitigation Act and Community Wildfire Protection Plan initiatives.
- Provide an update on the planning grant.
- Outline work plan for the Spokane County hazard mitigation and community wildfire protection plan update.

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

Interested local governments were provided with a list of planning partner expectations developed by the planning team and were informed of the obligations required for participation. Local governments wishing to join the planning effort were asked to provide the planning team with a "notice of intent to participate" that agreed to the planning partner expectations and designate a point of contact for their jurisdiction. Formal commitment was received from planning partners, and the Spokane County Planning Partnership was formed.

Planning Partner Expectations

The Planning Partnership developed the following list of Planning Partner Expectations, which were confirmed at the kickoff meeting:

- Each partner will provide a "Letter of Intent to Participate."
- Each partner will support and participate in the development of the update.
- Each partner will provide support for the public involvement strategy in the form of mailing lists, possible meeting space, and media outreach such as newsletters, newspapers or direct-mailed brochures.
- Each partner will participate in plan update development activities such as:
  - Planning Team meetings
  - Public meetings or open houses
  - Workshops and planning partner training sessions
  - Public review and comment periods prior to adoption.

  Attendance at such activities will be tracked to document participation for each planning partner. A minimum level of participation was established and identified in the Letters of Intent to Participate. Each planning partner also must identify an internal team to assist in their annex development to ensure equitable involvement.
- Each partner will be expected to perform a "consistency review" of all technical studies, plans, and ordinances specific to hazards identified within the planning area to determine the existence of plans, studies or ordinances not consistent with the equivalent documents reviewed in preparation of the County plan. For example: if a planning partner has a floodplain management plan that makes recommendations that are not consistent with any of the County's basin plans, that plan will need to be reviewed for probable incorporation into the plan for the partner's area.

- Each partner will be expected to review the risk assessment and identify hazards and vulnerabilities specific to its jurisdiction. Contract resources will provide jurisdiction-specific mapping and technical consultation to aid in this task, but the determination of risk and vulnerability will be up to each partner.
- Each partner will be expected to review the mitigation recommendations chosen for the overall county and determine if they will meet the needs of its jurisdiction. Projects within each jurisdiction consistent with the overall plan recommendations will need to be identified, prioritized and reviewed to determine their benefits and costs.
- Each partner will be required to create its own action plan that identifies each project, who will oversee the task, how it will be financed and when it is estimated to occur.
- Each partner will be required to participate in at least one public meeting to present the draft plan, in addition to participation in the public outreach strategy of identifying risk to the community.
- Each partner will be required to formally adopt the plan.
- Each planning partner agrees to the plan implementation and maintenance protocol established in Volume 1.

Planning partners were advised that their failure to meet these criteria could result in a partner being dropped from the partnership and, thus, losing eligibility under the scope of this plan.

Linkage Procedures

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

1.3 ANNEX-PREPARATION PROCESS

Templates

Templates were created to help the Planning Partners prepare their jurisdiction-specific annexes. Since special purpose districts operate differently from incorporated municipalities, separate templates were created for the two types of jurisdictions. The templates were created so that all criteria of Section 201.6 of 44 CFR would be met, based on the partners' capabilities and mode of operation. Each partner was asked to participate in a technical assistance workshop during which key elements of the template were completed by a designated point(s) of contact for each partner and a member of the planning team. The templates were set up to lead each partner through a series of steps that would generate the DMA-required elements that are specific for each partner.

Planning Meetings and Workshops

Planning meetings and workshops were held for Planning Partners to learn about the templates and the overall planning process. Topics included the following:

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

The sessions provided technical assistance and an overview of the template completion process. Attendance at this workshop was mandatory under the planning partner expectations established in the Letters of Intent to Participate.

In the risk-ranking exercise, each planning partner was asked to rank each risk specifically for its jurisdiction. Municipal partners were asked to base this ranking on probability of occurrence and the potential impact on people, property, the environment, and the economy, as well as on its critical facilities identified during the process. Special purpose districts were asked to base this ranking on probability of occurrence and the potential impact on their constituency, their critical/vital facilities and the facilities' functionality after an event. The methodology followed the same as used for the countywide risk ranking presented in Volume 1. A principal objective of this exercise was to familiarize the partnership with how to use the risk assessment as a tool to support other planning and hazard mitigation processes. Tools utilized during these sessions included the following:

- The risk assessment results developed for this plan;
- Hazard maps for all hazards of concern;
- Special district boundary maps that illustrate the sphere of influence for each special purpose district partner;
- FEMA's 2013 Hazard Mitigation Catalog;
- Federal funding and technical assistance information; and
- Copies of partners' prior annexes and risk ranking spreadsheets, if applicable.

Prioritization

44 CFR requires actions identified in the action plan or mitigation strategies to be prioritized (Section 201.c.3.iii). The planning team developed a methodology for prioritizing the action plans that meets the needs of the partnership and the requirements of 44 CFR. The methodology

followed that used for the countywide prioritization of strategies/action items as presented in Volume 1 and include the following criteria:

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

These priority definitions are dynamic and can change from one category to another based on changes to a parameter such as availability of funding. For example, a project might be assigned a medium priority because of the uncertainty of a funding source, but be changed to high once a funding source has been identified. The prioritization schedule for this plan will be reviewed and updated as needed annually through the plan maintenance strategy.

Benefit/Cost Review

44 CFR requires the prioritization of the action plan to emphasize a benefit/cost analysis of the proposed actions. Because some actions may not be implemented for up to 10 years, benefit/cost analysis was qualitative and not of the detail required by FEMA for project grant eligibility under the Hazard Mitigation Grant Program (HMGP). A review of the apparent benefits versus the apparent cost of each project was performed. Parameters were established for assigning subjective ratings (high, medium, and low) to costs and benefits as follows:

Cost ratings:

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

Benefit ratings:

- **High—**The action will have an immediate impact on the reduction of risk exposure to life and property.

- **Medium**—The action will have a long-term impact on the reduction of risk exposure to life and property or will provide an immediate reduction in the risk exposure to property.
- **Low—**Long-term benefits of the action are difficult to quantify in the short term.

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

It should be noted that for many of the strategies identified in this action plan, funding might be sought under FEMA's grant programs. Those programs may require detailed benefit/cost analysis as part of the application process. These analyses will be performed on projects at the time of application preparation, using the FEMA benefit-cost model. For projects not seeking financial assistance from grant programs that require this sort of analysis, the Partners reserve the right to define "benefits" according to parameters that meet their needs and the goals and objectives of this plan.

Analysis of Mitigation Initiatives

Each planning partner reviewed its recommended initiatives to classify each initiative based on the hazard it addresses and the type of mitigation it involves. Mitigation types used for this categorization are as follows:

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

- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Recovery** —Actions that involve the construction or re-construction of structures in such a way as to reduce the impact of a hazard, or that assist in rebuilding or re-establishing a community after a disaster incident. It also includes advance planning to address recovery efforts which will take place after a disaster. Efforts are focused on re-establishing the planning region in such a way as enhance resiliency and reduce impacts to future incidents. Recovery differs from response, which occurs during, or immediately after an incident. Recovery views long-range, sustainable efforts.

Benefit: By whom the strategy benefits:

- A specific structure or facility;
- A local community;
- County-level efforts;
- Regional level benefits.

1.4 LEVEL OF PARTICIPATION

For the 2026 Update of the Hazard Mitigation Plan and the Community Wildfire Protection Plan, 19 planning partners initially participated (including the County), as identified in Volume 1, Table 2-1. This did include several additional new municipal planning partners, which had not previously been involved in the process. For the 2026 update, all original planning partners involved in the 2020 plan again were invited to take part in this update, with a press release issued inviting others wishing to participate. Some planning partners have developed their own stand-alone plans, while others elected to not participate in the update cycle. Anyone wishing to join at a later date will have the opportunity through the linkage procedures described in Appendix B of this volume.

The Newman Lake Fire District did not complete a Hazard Mitigation Plan but did complete the Community Wildfire Protection Plan. As such, the District's Annex only contains CWPP data.

CHAPTER 2.
CITY OF AIRWAY HEIGHTS 2026 ANNEX UPDATE

2.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to the City of Airway Heights, a participating jurisdiction to the Spokane County Hazard Mitigation Plan and Community Wildfire Protection Plan updates. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the City of Airway Heights. For planning purposes, this Annex provides additional information specific to the jurisdiction, with a focus on providing greater details on the risk assessment and mitigation strategy for this community only. This document serves as an update to the previously completed plans. All relevant data has been carried over and updated with new information as appropriate and as identified within the planning process discussed in Volume 1.

2.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

The City of Airway Heights followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, the City of Airway Heights also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Mitch Metzger, Fire Chief 1208 S Lundstrom St Airway Heights WA 99001 Telephone: 509 244-3322 e-mail: mmetzger@cawh.org	Primary Point of Contact	Meeting attendance, planning team facilitator; authoring of plan; capturing of information; conducting public outreach with council and citizens during Council meetings; present final plan to Council for adoption.
Nate Whannell, Deputy Chief 1208 S Lundstrom St Airway Heights WA 99001 Telephone: 509 244-3322 e-mail: nwhannell@cawh.org	Alternate Point of Contact	Meeting attendance; author portions of plan; capture information; assist with risk ranking and capabilities assessment.

2.3 COMMUNITY PROFILE

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

- **Date of Incorporation**—April 19, 1955
- **Current Population**—12,120 as of April 2025 (estimate)
- **Population Growth**—Growth in the city was spurred by the opening of the Airway Heights Correction Center by the Washington State Department of Corrections in 1992 and the opening of the Northern Quest Resort & Casino by the Kalispel Indian Tribe in 2000. More recently, with the addition of a new Wal-Mart Supercenter, several new apartment buildings and housing developments, and the expansion of the Northern Quest Casino, Airway Heights is continuing to grow. Also, the Spokane County Raceway Park is located in Airway Heights, and features major automobile events, including drag racing, stock car racing, and occasional monster truck shows. The recent growth trend is approximately 4 percent per year.
- **Location and Description**—Airway Heights is located at 47°38'37"N 117°35'11"W. According to the United States Census Bureau, the city has a total area of 5.63 square miles, all of it land. The community lies in the northeastern corner of the Columbia Plateau. While the plateau tends to be flat, the terrain locally is rugged as it is part of the Channeled Scablands. The "heights" in the city's name references its location at a higher elevation than the city center of Spokane. Traveling into Airway Heights along Highway 2, the main road into the city, from Downtown Spokane, one will climb over 500 feet. Highway 2 is the main east-west thoroughfare in the city. It connects Airway Heights with Fairchild to the west and Spokane to the east. Interstate 90 runs just a few miles south of the city.
- **Brief History**—Airway Heights celebrated its 50-year history June 14, 2005. Carl M. and Flora K. Lundstrom were the first to plat the land and donate parcels for initial city building. They worked for incorporation in 1955. Working in real estate in Seattle and Electric City, in the early 1940s, they also owned Rocket Investment Company. Discussions with officials at Galena Air Depot (which later became Fairchild Air Force Base), they discovered the need for local housing.
  - In the spring of 1942, they started installation of the electric and water systems in Airway Heights and sold some parcels of land for housing. The Lundstroms built the first home at the corner of Lundstrom and 13th.
  - In 1942, Fritz Ziegler and his wife became the first residents. Their son, Les was the first baby born in Airway Heights. Development was slow because availability of building materials and financing was low, and occasional opposition was high. In August 1946, the Lundstroms filed their plats for the

Airway Heights first and second addition and streets were named for town residents. In 1957, they filed the plat for the third addition.

- The first post office opened, and Mollie Mitchell was postmistress from 1948 to 1969 when the new post office was dedicated. In 1946, the Lofflers built the Airway Heights Motel - the first in town. The Lundstroms donated parcels of land over time to help build the community—land for the first Sunset School in 1951, the Airway Community Church in 1954, town hall in 1957 and the fire department in 1963. The first Sunset School was east of town and is now an apartment building. Church, community gatherings and dances were all held at the old school. The volunteer fire department was organized in 1963, and the building housed the fire truck.
- On April 15, 1955, after paying a $5 incorporation fee, and receiving a positive 50-8 vote, one square mile was incorporated as the City of Airway Heights, with 412 residents. The intersection of Lundstrom and 14th was the original town center for house numbering which was laid out by the Spokane County Planning Commission who issued all building permits until incorporation.
- Carl Lundstrom ran unopposed as the first mayor and held office for 7 years. Flora Lundstrom served on city council for 7 years and helped at town hall. Council meetings were held at the Sunset School and later a house on Lundstrom Street. In 1956, local residents voted to purchase the water system from August Timm to operate the town utility. In 1973, the 135-foot water tower was built, and in 1991, the state department of corrections chose Airway Heights for a minimum and medium security prison.
- **Climate:**
  - Average Daily High Temperature: 58.5ºF
  - Average Daily Low Temperature: 39.6ºF
  - Record High Temperature: 108ºF on 8/4/1961 and 7/26/1928
  - Record Low Temperature: –30ºF on 1/15-16/1888
  - Average Annual Precipitation: 21.32 inches
  - Record High Annual Precipitation: 26.07 inches in 1948
  - Record Low Annual Precipitation: 7.55 inches in 1929
  - Average Annual Snowfall: 51.8 inches
  - Record High Annual Snowfall: 132.6 inches in 2008
  - Earliest Recorded Freezing Date: 9/11/1889
  - Latest Recorded Freezing Date: 5/25/1964
  - Average wind speed: 8.3 mph
  - Highest wind speed: 48 mph
  - Highest gust speed: 58 mph
- **Governing Body Format**— In 2000, Airway Heights citizens voted to change its form of government from a mayor-council form to a council-manager form. Under

this form of government, the mayor presides at meetings of the City Council. In addition to the powers conferred upon him as mayor, he continues to have the rights, privileges and immunities of a member of City Council. The mayor is recognized as the head of the city for ceremonial purposes and by the governor for purposes of military law and has no regular administrative duties.

- **Development Trends**—Trends in development have been spurred by the Spokane Tribe's new casino and the nearby Amazon Distribution Center, which required additional housing. Commercial growth has been slow with potential development for more retail space next year.
- **Economy –** The City of Airway Heights' economic base consists of retail sales and services, and light manufacturing. The largest employers include Exotic Metals, Zac Designs and the Spokane and Kalispel Tribes.

2.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events which have occurred within the County. In the context of the planning region, it was determined that there are no additional hazards that are unique to the jurisdiction or there are hazards which are unique to the jurisdiction as follows. Table 2-1 lists all past occurrences of natural hazards within the jurisdiction. If available, dollar loss data is also included.

Table 2-1
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Dollar Losses (if known)
Severe Weather	DR-1825	3/2/2009	$1000
COVID	DR-4881	3/22/2020	Unknown
Fire	FM-5355	7/17/2020	$0
Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	DR-4593	4/8/2021	$0
Fire	FM-5395	7/6/2021	$0
Fire	FM-5479	8/18/2023	$0
Fire	FM-5481	8/19/2023	$0
Washington Wildfires (August 18-25, 2023)	DR-4759	3/25/2024	$0

2.5 CAPABILITY ASSESSMENT

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: National Flood Insurance Information; regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation, and classifications under various community programs.

2.6 NATIONAL FLOOD INSURANCE INFORMATION

Information on the community's National Flood Insurance Program (NFIP) compliance is presented in Table 2-2. This identifies the current status of the jurisdiction's involvement with the NFIP.

Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: 0
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

Table 2-2
National Flood Insurance Compliance

What department is responsible for floodplain management in your community?	None
Who is your community's floodplain administrator? (department/position)	N/A
Do you have any certified floodplain managers on staff in your community?	No
What is the date of adoption of your flood damage prevention ordinance?	N/A
When was the most recent Community Assistance Visit or Community Assistance Contact?	N/A
To the best of your knowledge, does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No

Table 2-2 National Flood Insurance Compliance	
Do your flood hazard maps adequately address the flood risk within your community? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	N/A
Does your community participate in the Community Rating System (CRS)? If so, is your community seeking to improve its CRS Classification? If not, is your community interested in joining the CRS program?	Yes, No, No

2.6.1 Regulatory Capability

The assessment of the jurisdiction's legal and regulatory capabilities is presented in Table 2-3. This includes planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are currently in place.

Table 2-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements				
Building Code	X		X	AHMC, Title 15 adopts the WA State Building Code
Zoning Ordinance	X			AHMC, Title 17, adopted 2025
Subdivision Ordinance	X		X	AHMC, Title 16, adopted 2025
Floodplain Ordinance	X	X	X	AHMC, Title 16, Chapter 16.08, adopted 2007
Stormwater Management	X		X	AHMC, Title 16, Chapter 16.08
Real Estate Disclosure	X			WA State Disclosure Law (RCW 64.06)
Site Plan Review	X			AHMC, Title 16, Chapter 16.06-2025
Public Health and Safety	X			AHMC, Title 8, Adopted 12/17/2023
Natural Hazard Specific Ordinance	X			AHMC, Title 18, adopted 12/17/2024
Environmental Protection				AHMC, Title 15 adopts the WA State Building Code, 2013
Planning Documents				

Table 2-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
General or Comprehensive Plan				AHMC Title 17, Chapter 17.02 adopts City Comprehensive plan -2023
Stormwater Plan				County Plan
Capital Improvement Plan				Yes
Habitat Conservation Plan				As part of SEPA
Community Wildfire Protection Plan				Yes – Countywide Plan 2026 update
Transportation Plan				County Plan
Response/Recovery Planning				
Comprehensive Emergency Management Plan				Spokane County DEM
Terrorism Plan				Spokane County DEM
Continuity of Operations Plan	X			
Public Health Plans		X		
Boards and Commission				
Planning Commission	X			
Mitigation Planning Committee				Yes. The City was part of the 2026 Spokane County HMP and CWPP Planning Teams and will remain an active participant.
Maintenance programs to reduce risk	X			Tree trimming, clearing drainage systems, chipping, etc.
Mutual Aid Agreements / Memorandums of Understanding	X			Airway Heights has several mutual aid agreements in place supporting various emergency services, including wildfire.

2.6.2 Administrative and Technical Capabilities

The assessment of the jurisdiction's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 2-4. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

Table 2-4
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Planning/ Dept Head
Professionals trained in building or infrastructure construction practices (building officials, fire inspectors, etc.)	Yes	Building / Dept Head/Fire Dept
Engineers specializing in construction practices?	Yes	Public Works
Planners or engineers with an understanding of natural hazards		
Staff with training in benefit/cost analysis	Yes	Clerk/Treasurer
Surveyors	No	
Personnel skilled or trained in GIS applications	No	
Scientist familiar with natural hazards in local area	No	
Emergency Manager	Yes	Fire Dept
Grant writers	No	
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?)	Yes	County
Hazard data and information available to public	Yes	The Mitigation Plan will be available via the County's Website.
Maintain Elevation Certificates	Yes	Public Works
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness?	No	
Local citizen groups or non-profit organizations focused on environmental protection?	No	
Organization focused on individuals with access and functional needs populations	No	
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Fire Dept

Table 2-4 Administrative and Technical Capability		
Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Natural disaster or safety related school programs?	Yes	Fire Dept
Public-private partnership initiatives addressing disaster-related issues?	No	
Multi-seasonal public awareness program?	Yes	Spokane County DEM has a multi-season awareness program which is available to Airway Heights
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	No	
Noxious Weed Eradication Program or other vegetation management	Yes	Code Enforcement
Fire Safe Councils	No	
Chipper program	Yes	Spokane Conservation District
Defensible space inspections program	Yes	Spokane Conservation District
Creek, stream, culvert or storm drain maintenance or cleaning program	No	
Stream restoration program	No	
Erosion or sediment control program	No	
Address signage for property addresses	Yes	Spokane Conservation District

2.6.3 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 2-5. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 2-5 Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes

Table 2-5 Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	Yes

2.6.4 Community Classifications

The jurisdiction's classifications under various hazard mitigation programs are presented in Table 2-6. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community.

Table 2-6 Community Classifications		
	Participating (Yes/No or Classification)	Date Enrolled
Protection Class	4	2024
Building Code Effectiveness Grading Schedule (Commercial)	4	2024
Building Code Effectiveness Grading Schedule (Dwelling)	4	2024
Storm Ready	Yes	County
Firewise	No	

2.7 HAZARD RISK AND VULERABILITY RANKING

The internal Planning Team reviewed the hazard list identified within the Base Plan and identified the hazards that affect the City of Airway Heights. No additional hazards of concern were identified. In addition, the Planning Team also examined Volume 1, Chapter 4 of the Spokane County Multi-Jurisdictional Hazard Mitigation Plan to ensure an understanding of the application of the Calculated Priority Risk Index (CPRI) information which is utilized in determining the hazard impact and vulnerability. The risk assessment process also included a review of critical facilities impacted, potential dollar losses at risk, and any additional information applicable within the hazard profiles for use in identifying each hazard of concern.

Table 2-8 presents the results of the CPRI process. Table 2-8 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.
- Low (Negligible) – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.
- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.
- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.
- Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted for in excess of one month.

Table 2-7
Calculated Priority Risk Ranking

Hazard	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought		2				2				2						1				4	**1.95**
Earthquake		2				2				2			4				1				**2.25**
Flood/Dam (Not Rated)	0				0				0							0		0			**0.00**
Landslides (Not Rated)	0				0				0							0	0				**0.00**
Severe Weather			3				3				3					1			3		**2.70**
Wildfire		2				2				2			4					2			**2.30**
Other Hazards of Concern	0				0				0							0	0				**0.00**

Table 2-8
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Hazard Rank
1	Severe Weather	2.7	High
2	Wildfire	2.3	High
3	Earthquake	2.25	Medium
4	Drought	1.95	Medium
5	Flood	NR	NR

Table 2-8
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Hazard Rank
6	Landslide	NR	NR

2.8 COMMUNITY WILDFIRE PROTECTION PLANNING AND ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted Spokane County in completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk. The analysis focused specifically on eight highly valued resources and assets (HVRA), to include people and property, critical facilities, drinking water, ecological integrity, wildlife, timber, agriculture, and recreation. This analysis varies slightly from the analysis within the HMP document, which looks at all assets exposed, in addition to the critical facilities, as well as impact to the people, property, environment, and economy. The resulting maps of the analysis completed by DNR are incorporated at the end of this Annex.

2.9 MITIGATION GOALS AND OBJECTIVES

The City of Airway Heights adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1 Chapter 12, as well as the CWPP specific goals identified in Chapter 10, Section 10.1.5.

2.10 HAZARD MITIGATION ACTION PLAN

The Planning Team for the jurisdiction identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the jurisdiction's assets and hazards of concern. Table 2-9 lists the action items/strategies that make up the jurisdiction's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, who will benefit from the activity, and the type of initiative associated with each item are also identified.

Table 2-9
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE #1 Continue public outreach efforts to provide hazard information developed as a result of the HMP with community members**.**									
New	All	All	Fire	Low	General Fund	Long-Term	Yes	Public Information, Emergency Service	Local
INITIATIVE #2 Actively participate in the plan maintenance strategy identified in this plan. This includes working annually with the Wildfire Coalition to identify areas where wildfire mitigation strategies will be most effectively applied within Airway Heights.									
New & Existing	All	1, 4, 8	Fire	Low	General Fund	Short Term	Modified	Public Information, Emergency Services	Local and County
INITIATIVE #3 Integrate the hazard mitigation plan into other plans, ordinances or programs to dictate land uses within the jurisdiction.									
New & Existing	All	2, 3, 4, 5, 11	Airway Heights Planning Department	Low	Local	Short-Term	Yes	Preventive Activities	Local
INITIATIVE #4 Implement wildfire mitigation recommendations identified in the Spokane County CWPP.									
New & Existing	Wildfire	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12	Spokane Conservation District, all County Fire Districts	Medium	Local, Fire Grants, HMGP, PDM	Short-Term	Yes	Preventive Activities, Structural, Natural Resource Protection	Local, County
INITIATIVE #5 Continue to maintain and/or enhance the City's capability to enforce its codes and regulations that result in decreased risk exposure of new development.									
New	All	4, 5, 11	Airway Heights Building Department	Low	Local	Short-Term	Yes	Preventive Activities, Structural, Natural Resource Protection	Local

2.10.1 Prioritization of Mitigation Initiatives

Once the mitigation initiatives were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 2-10 identifies the prioritization for each initiative.

Table 2-10
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
1	All	H	L	Y	N	Y	H
2	3	H	L	Y	N	Y	H
3	5	H	L	Y	N	Y	H
4	11	H	M	Y	Y	Some	H
5	3	H	L	Y	N	Y	H

a. See Chapter 1 for explanation of priorities.

2.11 STATUS OF PREVIOUS PLAN INITIATIVES

Table 2-11 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 2-11
2026 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
Mitigation Strategy	Project Status	Completed	Continual /Ongoing Nature	Removed -/No Longer Relevant / No Action	Carried Over
1. Continue to support the countywide initiatives identified in this plan.	The City has continued to work with the County and local planning partners in supporting the initiatives of this plan. That includes being an active member in the Wildfire Coalition established as a result of the 2023 wildfires, and which led the effort to the current update of the County's previous CWPP.				X
2. Actively participate in the plan maintenance strategy identified in this plan.	The City was a planning team member for the 2026 update, completing its annex template and all planning requirements to maintain an active level of participation.	X			X

Table 2-11
2026 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
Mitigation Strategy	Project Status	Completed	Continual /Ongoing Nature	Removed -/No Longer Relevant / No Action	Carried Over
3. Integrate the hazard mitigation plan into other plans, ordinances or programs to dictate land uses within the jurisdiction.	Carried forward. As the City updates its codes, etc., it does take the HMP risk assessment into consideration.				X
4. Implement wildfire mitigation recommendations identified in the Spokane County CWPP.	Airway Heights was a member of the Wildfire Coalition that updated the CWPP document.				X
5. Continue to maintain and/or enhance the City's capability to enforce its codes and regulations that result in decreased risk exposure of new development.	Carried forward. As the City updates its codes, etc., it does take the HMP risk assessment into consideration.				X
6. Consider, where appropriate, the adoption of higher regulatory standards that will result in an increase in the community resilience of new development.	As the City reviewed existing codes and compliance regulations since completion of the 2020 HMP, it did consider the areas identified at risk within the HMP and DNR's wildfire analysis completed in 2024.		X		X

2.12 HAZARD MAPS – EXTENT AND LOCATION

For those hazards which have the potential to impact the City, hazard area extent and location maps are included below. For all hazards for which a geographic boundary is identified, the base plan maintains impact maps. These maps are based on the best available data at the time of the preparation of this plan and are considered to be adequate for planning purposes.

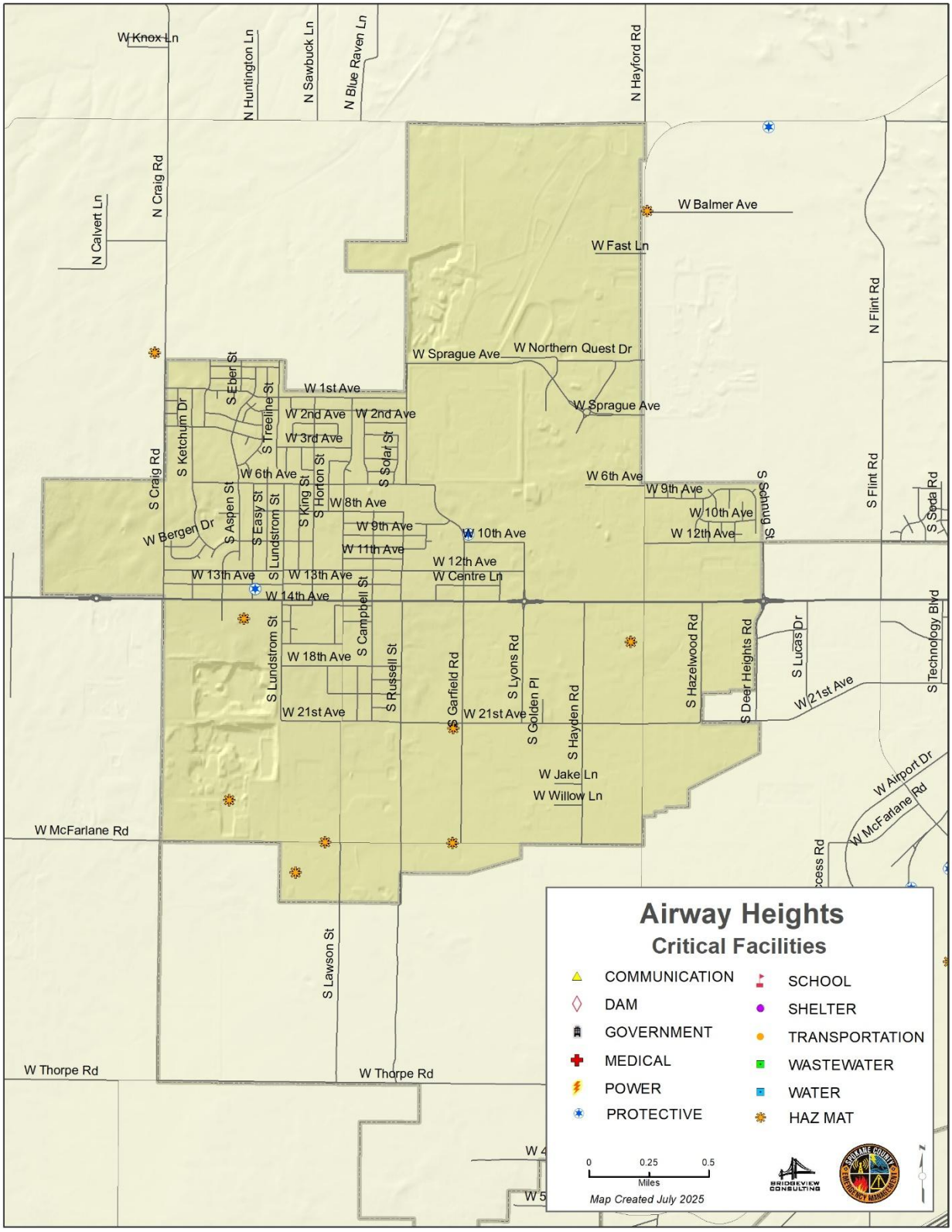


Figure 2-1 City of Airway Heights Critical Facilities

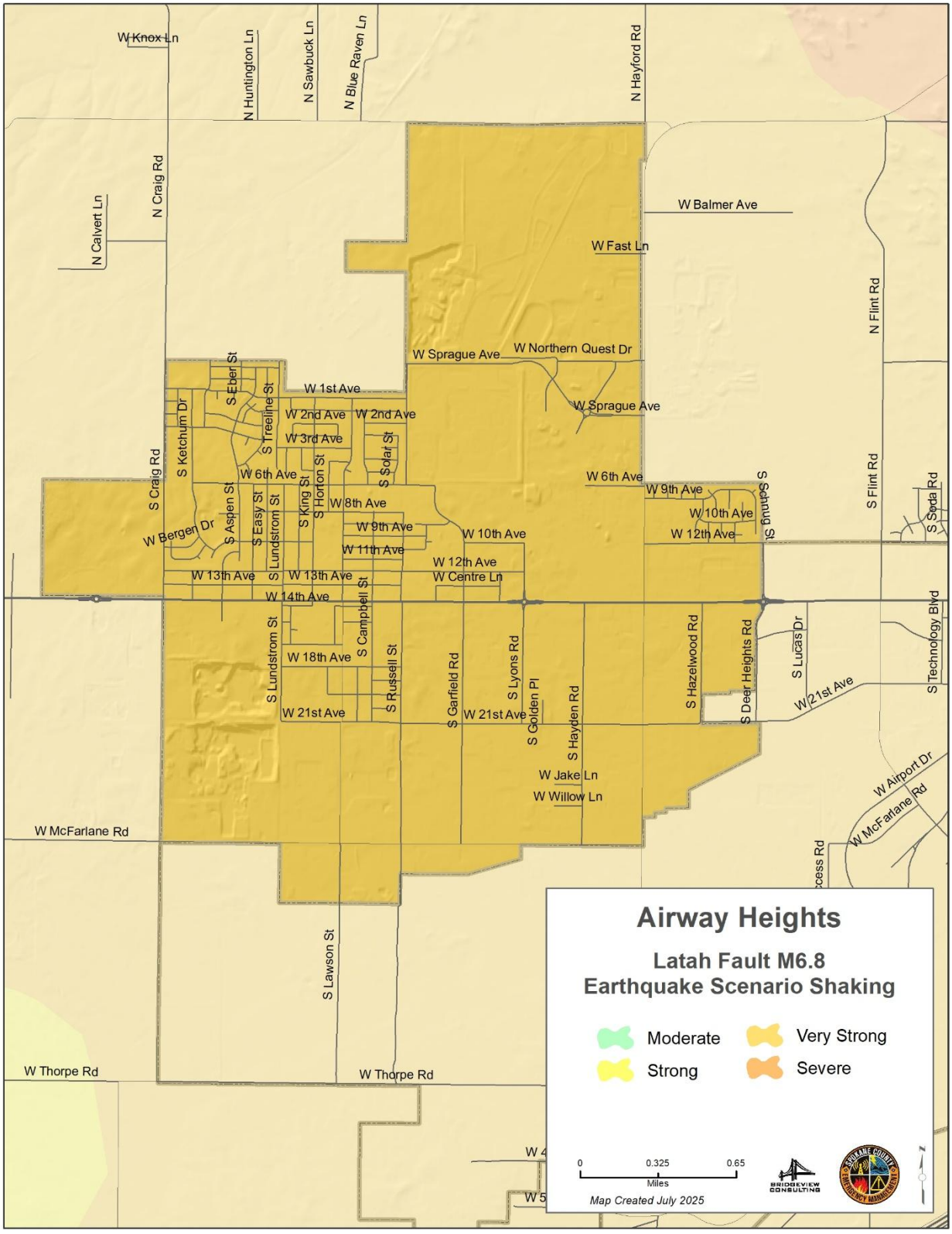


Figure 2-2 Latah Fault Earthquake Scenario Ground Shaking

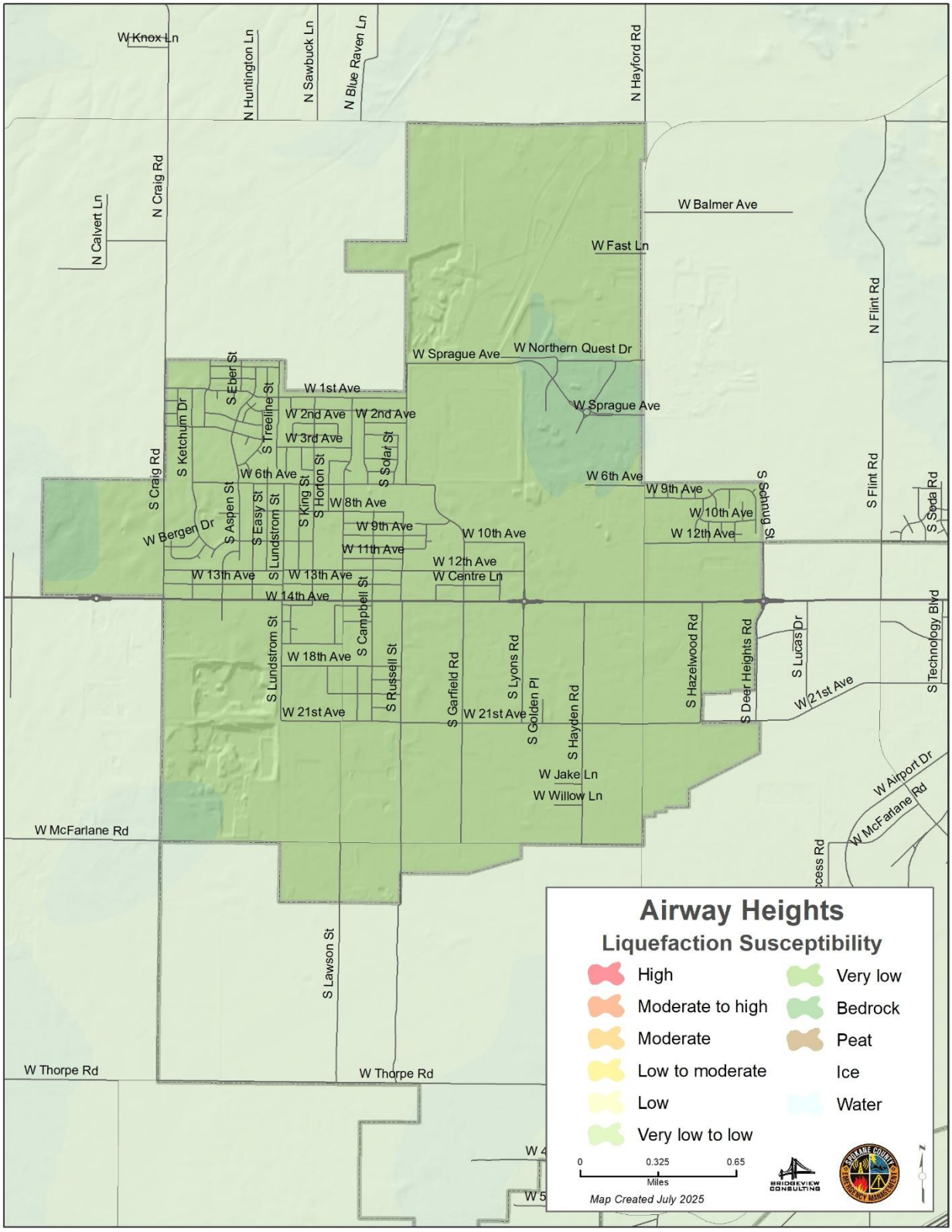


Figure 2-3 Liquefaction Susceptibility

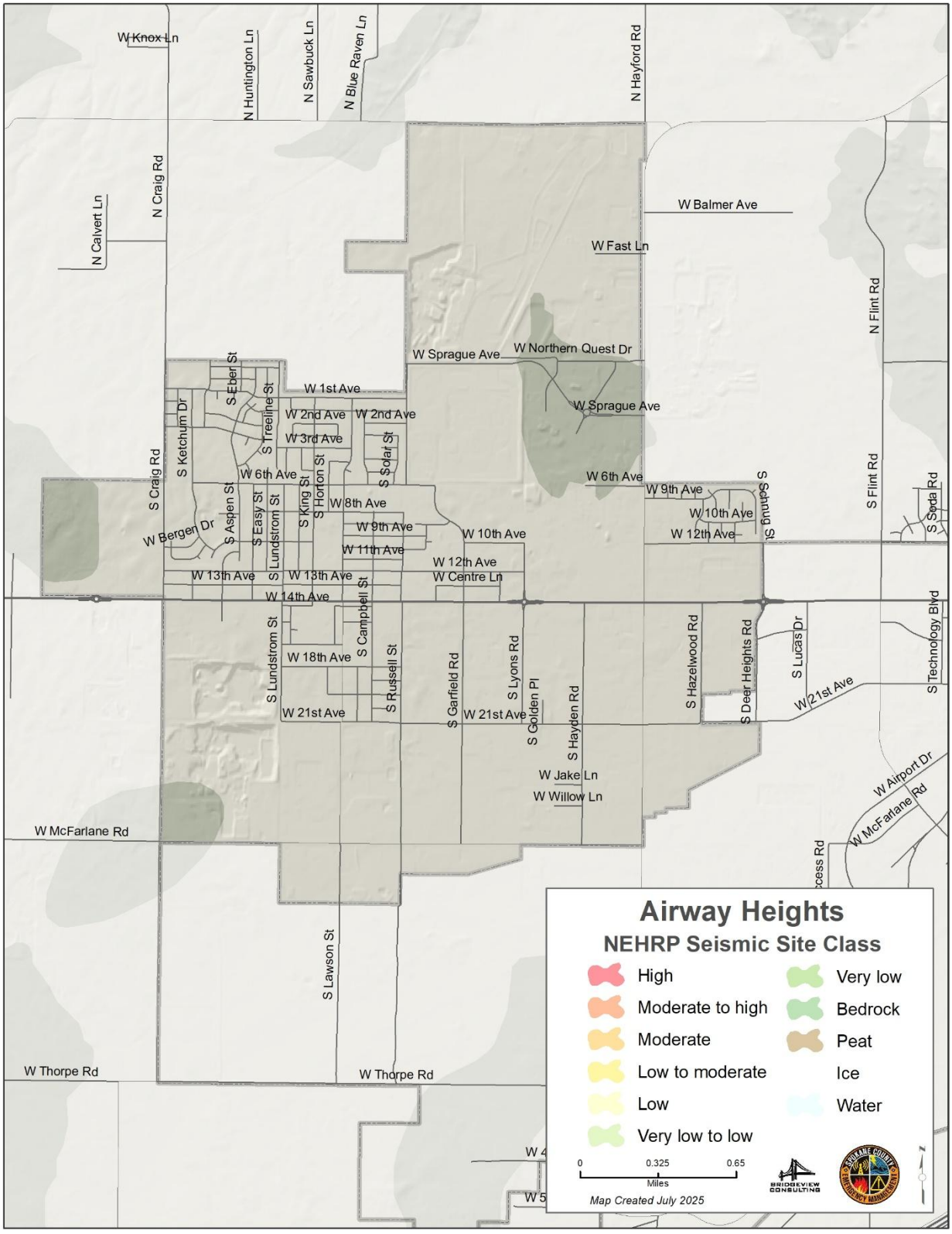


Figure 2-4 Seismic Site Class Based On NEHRP Soil Type

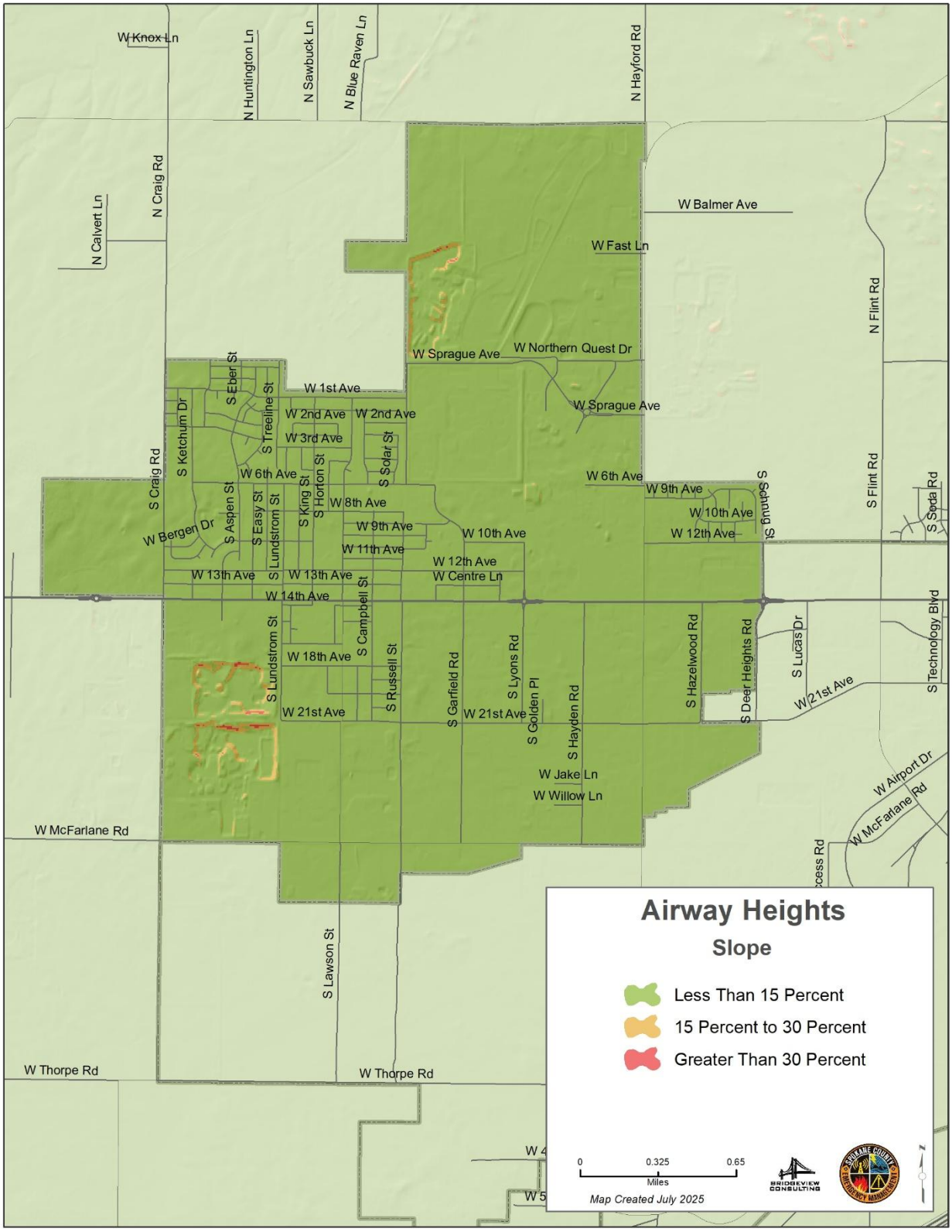


Figure 2-5 Percent Slope

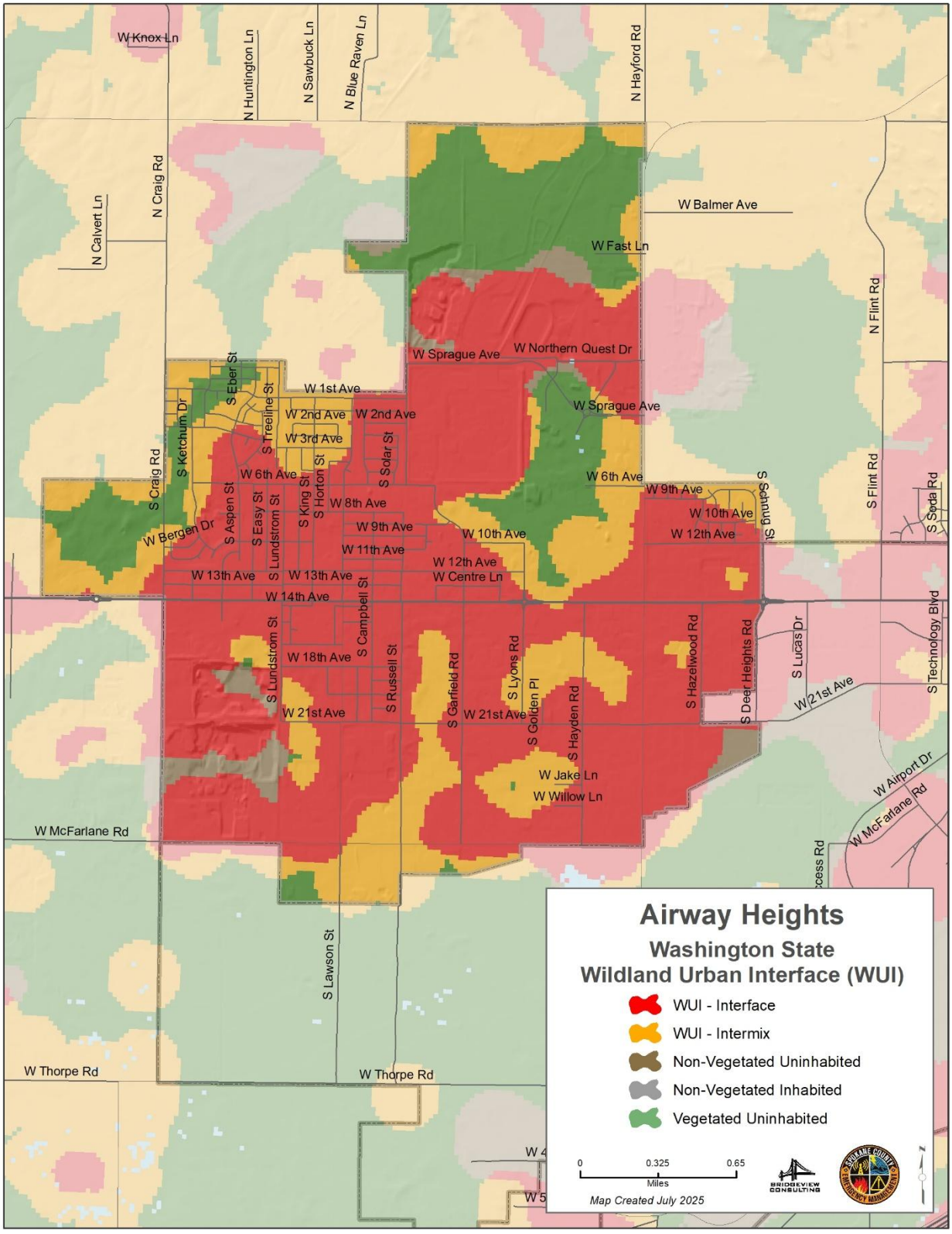


Figure 2-6 Wildland Urban Interface Boundary

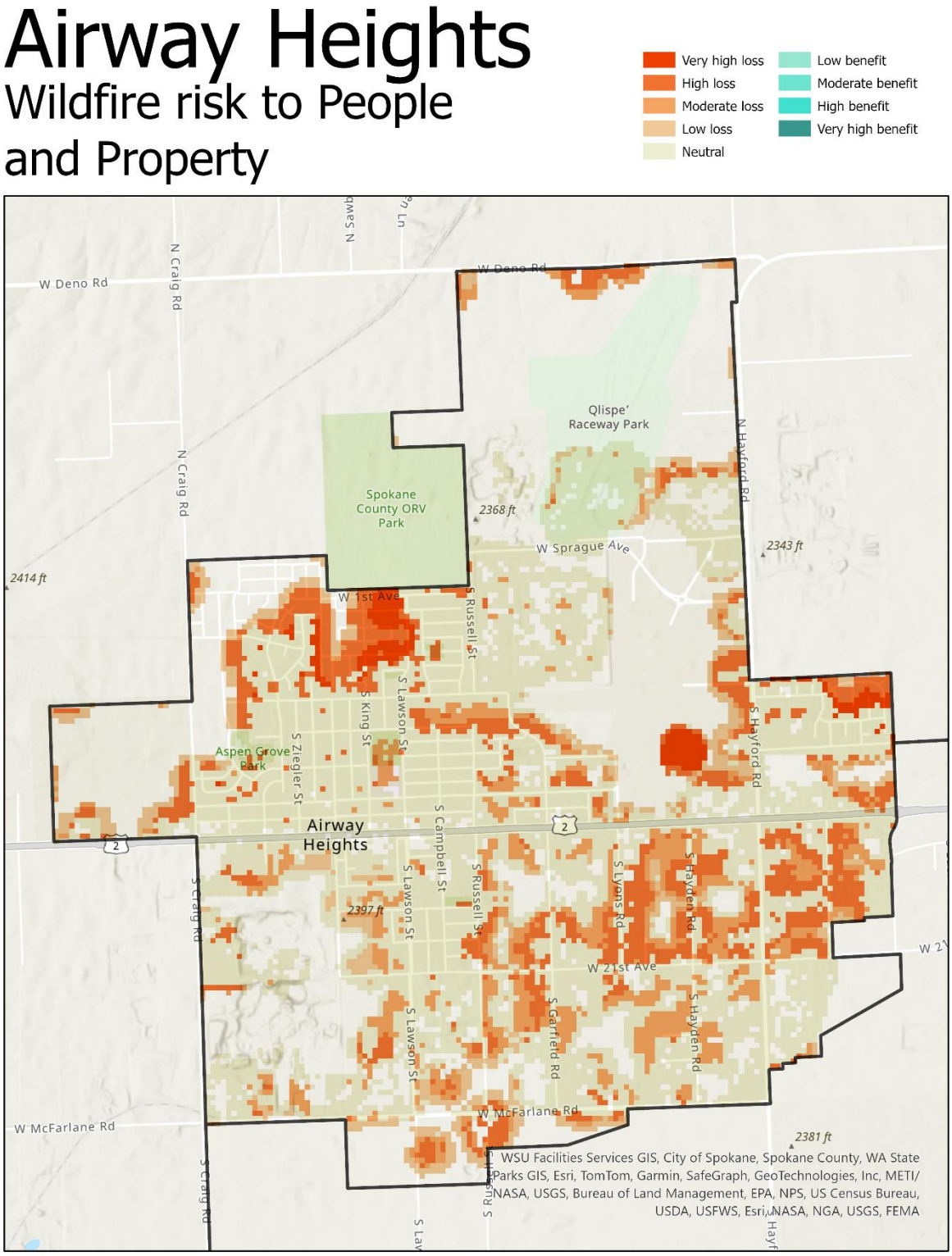


Figure 2-7 Wildfire Risk to People and Property (WA DNR, 2025)

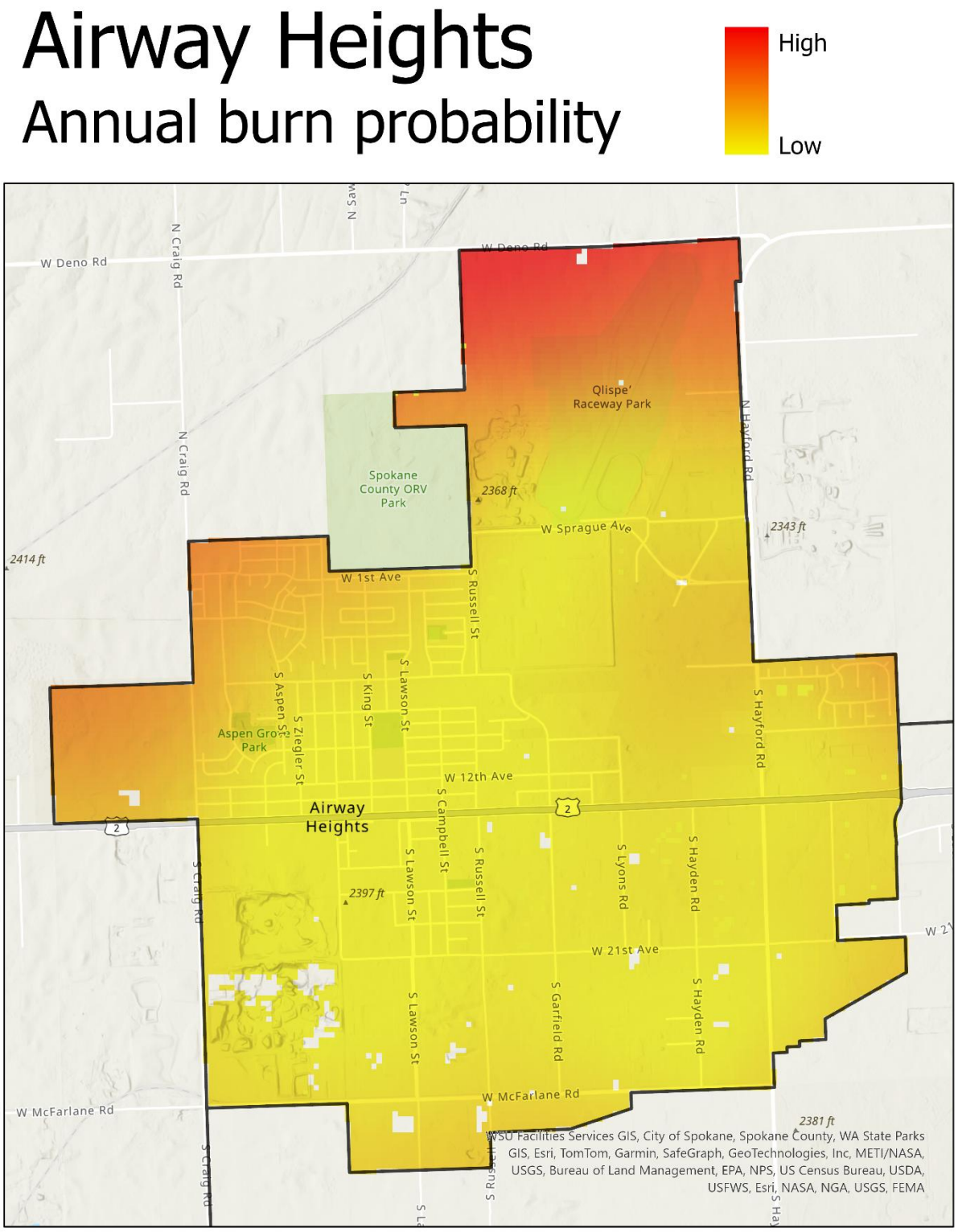


Figure 2-8 Annual Burn Probability (WA DNR, 2025)

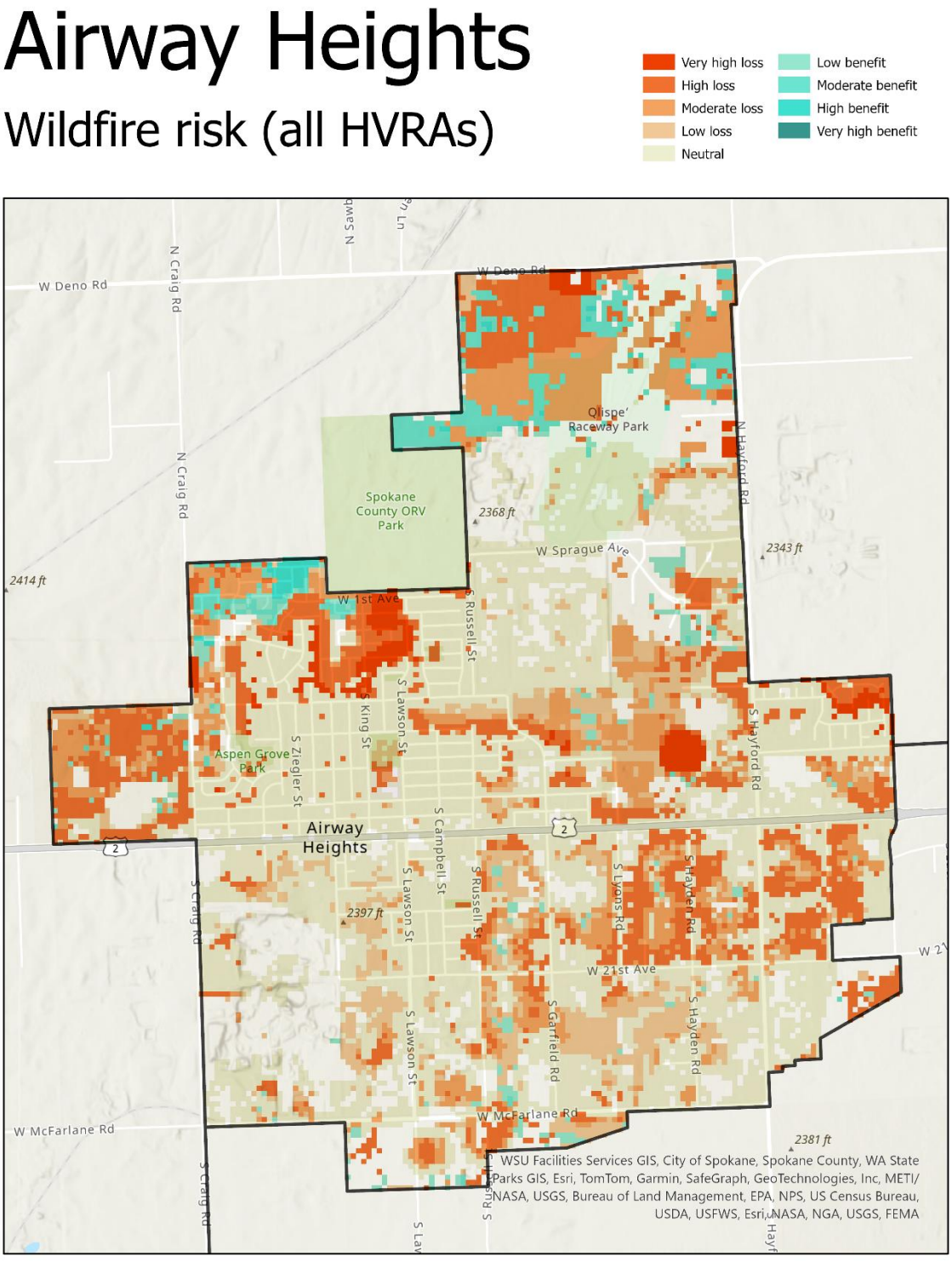


Figure 2-9 Wildfire Risk (WA DNR, 2025)

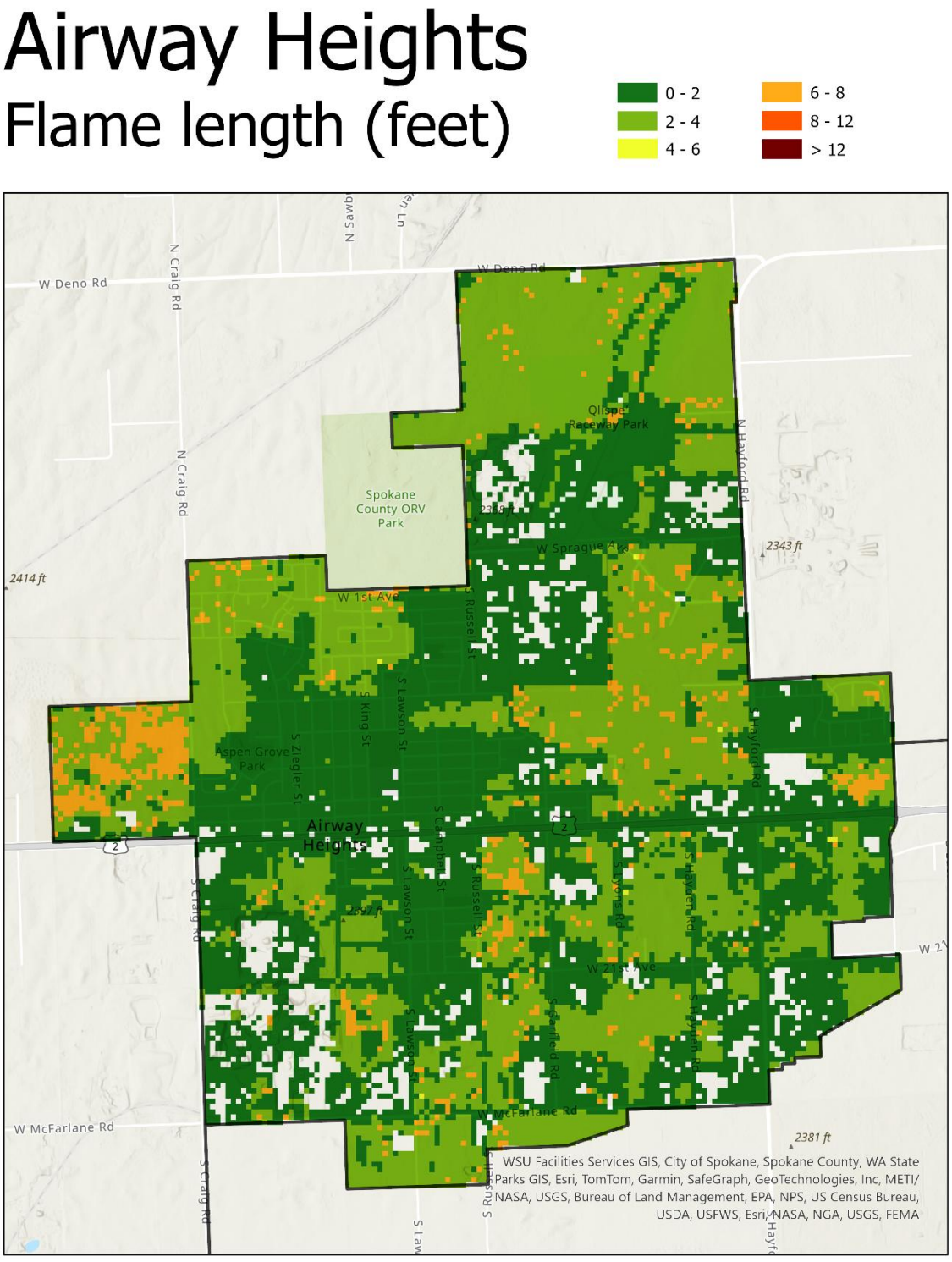


Figure 2-10 Flame Length (WA DNR, 2025)

CHAPTER 3.
CITY OF CHENEY 2026 ANNEX UPDATE

3.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to the City of Cheney, a participating jurisdiction to the Spokane County Hazard Mitigation Plan and the Community Wildfire Protection Plan updates. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the City of Cheney. For planning purposes, this Annex provides additional information specific to the jurisdiction, with a focus on providing greater details on the risk assessment and mitigation strategy for this community only. This document serves as an update to the previously completed plan. All relevant data has been carried over and updated with new information as appropriate and as identified within the planning process discussed in Volume 1. For wildfire planning purposes, the City of Cheney falls within Strategic Planning Area 6.

3.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

The City of Cheney followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, the City of Cheney also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Thomas Jenkins, Fire Chief 611 4th Street Cheney, WA 99004 Telephone: (509) 498-9291 e-mail: tjenkins@cityocheney.org	Primary Point of Contact	Meeting attendance, planning team facilitator for City's internal planning team; authoring of plan; capturing of information; conduct public outreach with council and citizens during meetings; capturing of status of previous plan initiatives; present final plan to Council for adoption; committee member for Spokane County HMP Team.
Susan Beeman, Admin. Secretary 112 Anderson Rd. Cheney, WA 99004 Telephone: (509) 498-9240 e-mail: sbeeman@cityofcheney.org	Alternate Point of Contact	Meeting attendance; assistance with authoring portions of plan; capture information; assist with risk ranking and capturing of information for capabilities assessment and strategy update. Update of profile.

3.3 COMMUNITY PROFILE

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

- **Date of Incorporation—**November 28, 1883
- **Current Population—**13,601 as of 2025 (est.)
- **Population Growth—**The City of Cheney is predominantly urban, with a six-percent population increase between 2020-2025.
- **Location and Description—**The City of Cheney is at the highest point on the railroads between Spokane and Portland and sits atop the route of gentlest gradient from the Spokane Valley to the Columbia Plateau, which was the reason for much of its early growth and railroad activity. The town is built on rolling Palouse hills overlooking channeled scablands carved out by the pre-historic Missoula Floods to the south and east. These scablands now host pothole lakes and wetlands and are home to Turnbull National Wildlife Refuge. Numerous lakes, along with the Spokane River and Little Spokane River, are located within 20 miles of Cheney
- **Brief History—**The name of the community, originally Section Thirteen, became Willow Springs, then became Depot Springs, because of its ties to the railroad, then Billings, in honor of a president of the Northern Pacific Company, and finally Cheney, in honor of Benjamin P. Cheney, a Director of the Northern Pacific Railroad. In 1880, the railroad was graded through the town, and in 1883, the town was incorporated with the streets laid out in the shape of a triangle with the base parallel to the tracks. The railroad tracks were not in a true east-west line, however, so the original town is askew with the map; the newer part of Cheney was built more to the compass. Cheney was the county seat of Spokane County until 1886. The continued history of Cheney revolves around the growth of the State Normal School, later Eastern Washington College of Education, later Eastern Washington State College and finally Eastern Washington University.
- **Climate—**Cheney has a true four-season climate. Winter is cold, wet and snowy; spring brings moderate temperatures and occasional rain. Summers are warm, with little precipitation, and fall can be a very short transitional period between summer and winter with moderate temperatures.
- **Governing Body Format—**Cheney has a mayor-council/strong mayor governing body. The council will assume responsibility for adoption and implementation of this plan.

- **Development Trends—** The City of Cheney has no Business and Occupancy (B&O) taxes; and has relatively affordable and competitive utility rates. There are currently over 200 employers /businesses operating in Cheney. This ranges from the very small entrepreneur to the largest employer of over 2,000 employees (Eastern Washington University). The city currently has lands available in both the commercial and industrial zones that are ready for development. Public infrastructure is generally available to all developable property, with some lots ready for on-site construction.

- **Economy –** Although Cheney contains its own distinguishing characteristics, its fortunes are closely tied to Spokane through economic, social and political linkages. Once a booming railroad town and County seat, Cheney has become one of many small towns surrounding the regionally dominant City of Spokane. Additionally, Cheney's growth and development have recently become tied to expanding industrial development taking place in the West Plains -yet another example of the regional nature of economic development in the Inland Northwest. Outside of government, education and institutional employment, retail is the next largest sector, as Cheney serves as the regional trade center for southwest Spokane County.

3.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events which have occurred within the County. In the context of the planning region, it was determined that there are two additional hazards that are unique to the jurisdiction which were included in this update, namely Train Derailment and Active Shooter. Table 3-1 lists all past occurrences of natural hazard disasters within the jurisdiction. If available, dollar loss data is also included.

Table 3-1
Natural Hazard Events Impacting Cheney

Type of Event	FEMA Disaster # (if applicable)	Date	Dollar Losses (if known)
COVID	DR-4481	03/22/2020	
Winter Storm	1825-DR-WA	12/08-1/09	$53,978.08

3.5 CAPABILITY ASSESSMENT

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the

jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: National Flood Insurance Information; regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation, and classifications under various community programs.

3.5.1 National Flood Insurance Information

Information on the community's National Flood Insurance Program (NFIP) compliance is presented in Table 3-2. This identifies the current status of the jurisdiction's involvement with the NFIP.

Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: None
- Number of FEMA-Identified Severe Repetitive Loss Properties: None
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: None

Table 3-2
National Flood Insurance Compliance

What department is responsible for floodplain management in your community?	Planning Dept
Who is your community's floodplain administrator? (department/position)	Public Works Director
Do you have any certified floodplain managers on staff in your community?	No
What is the date of adoption of your flood damage prevention ordinance?	Unknown
When was the most recent Community Assistance Visit or Community Assistance Contact?	N/A
To the best of your knowledge, does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	None
Do your flood hazard maps adequately address the flood risk within your community? (If no, please state why)	Yes

Table 3-2 National Flood Insurance Compliance	
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	
Does your community participate in the Community Rating System (CRS)? If so, is your community seeking to improve its CRS Classification? If not, is your community interested in joining the CRS program?	No

3.5.2 Regulatory Capability

The assessment of the jurisdiction's legal and regulatory capabilities is presented in Table 3-3. This includes planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are currently in place.

Table 3-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements				
Building Code Version Year	Yes	No	Yes	City Code of Ordinances, IBC and IFC 2021
Zoning Ordinance	Yes	No	No	CMC 21
Subdivision Ordinance	Yes	No	No	CMC 22
Floodplain Ordinance	Yes	No	No	CMC 19
Stormwater Management	Yes	No	No	Public Works Dept.
Post Disaster Recovery	No	Yes	No	County DEM CEMP
Real Estate Disclosure	No	Yes	Yes	RCW 64, 1996
Growth Management	Yes	No	Yes	Comp Plan, 2017-2037
Site Plan Review	Yes	No	No	CMC 23
Public Health and Safety	Yes	Yes	No	
Coastal Zone Management	No	No	No	N/A
Climate Change Adaptation	No	No	No	None

Table 3-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire, etc.)	Yes	No	Yes	CMC 21 (added steep slope)
Environmental Protection	Yes	No	Yes	City Code, Title 10
Planning Documents				
General or Comprehensive Plan				
Is the plan equipped to provide linkage to this mitigation plan?				Yes
Floodplain or Basin Plan	Yes	No	No	City Ord. 1989
Stormwater Plan	Yes	No	No	Public Works Dept.
Capital Improvement Plan	Yes	No	No	Annual Up-date
Habitat Conservation Plan	No	No	Yes	Fish and Wildlife
Economic Development Plan	No	No	Yes	Comp Plan, 2017-2037
Shoreline Management Plan	No	No	No	N/A
Community Wildfire Protection Plan	No	Yes	Yes	County CWPP, 2014 (2025 Plan is under review) and State DNR CWPP 10-year Strat Plan (2019)
Transportation Plan				
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	No	Yes	City/County/State CEMP (2020)
Threat and Hazard Identification and Risk Assessment	Yes			County Multi-Jurisdictional HMP 2025-2030
Terrorism Plan	Yes			City/County/State CEMP
Post-Disaster Recovery Plan	No	Yes		City/County/State CEMP
Continuity of Operations Plan	Yes	Yes	Yes	City COOP plan, County COOP
Public Health Plans	Yes			City Code, 1986
Boards and Commission				
Planning Commission	Yes			Planning Dept
Mitigation Planning Committee	No			

Table 3-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems, chipping, etc.)	Yes			Public Works/Light Dept's
Mutual Aid Agreements / Memorandums of Understanding	Yes	Yes		Spokane County, State DNR, WA State Patrol, Fairchild Air Force Base, and Local MOU's

3.5.3 Administrative and Technical Capabilities

The assessment of the jurisdiction's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 3-4. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

Table 3-4
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Public Works/City Planner, Engineer
Professionals trained in building or infrastructure construction practices (building officials, fire inspectors, etc.)	Yes	Public Works/City Planner, Engineer, City Building Inspector, Fire Marshall
Engineers specializing in construction practices?	Yes	Public Works/City Planner, Engineer
Planners or engineers with an understanding of natural hazards	Yes	Public Works/City Planner, Engineer
Staff with training in benefit/cost analysis	Yes	Public Works/City Planner, Engineer
Surveyors	Yes	Public Works/City Planner, Engineer
Personnel skilled or trained in GIS applications	Yes	Public Works/City Planner, Engineer
Personnel skilled or trained in Hazus use	Yes	

Table 3-4
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Scientist familiar with natural hazards in local area	Yes	Eastern Washington University
Emergency Manager	Yes	City Fire Chief
Grant writers	Yes	City Staff/Contract
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?)	Yes	City and County Alerting System
Hazard data and information available to public	Yes	City Fire Chief and Spokane County DEM
Maintain Elevation Certificates	Yes	Public Works/City Planner, Engineer
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness?	Yes	American Red Cross, County Medical Reserve Corp, Nextdoor Neighbor social media
Local citizen groups or non-profit organizations focused on environmental protection?	Yes	Nextdoor Neighbor social media
Organization focused on individuals with access and functional needs populations	Yes	Spokane CARES Team, Spokane County DEM
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Public Works, Fire and Police Departments, Eastern Washington University
Natural disaster or safety related school programs?	Yes	Cheney Fire Department, Cheney School District
Public-private partnership initiatives addressing disaster-related issues?	Yes	DEM, Fire Department Social Media Sites
Multi-seasonal public awareness program?	No	
Other		
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	Yes	Spokane County Noxious Weed Control Board
Noxious Weed Eradication Program or other vegetation management	Yes	Spokane County Noxious Weed Control Board

Table 3-4 Administrative and Technical Capability		
Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Fire Safe Councils	No	
Chipper program	Yes	DNR resources for unincorporated areas of the county
Defensible space inspections program	No	Urban Development within City Limits
Creek, stream, culvert or storm drain maintenance or cleaning program	Yes	Public Works Dept.
Stream restoration program	No	
Erosion or sediment control program	Yes	Public Works Dept.
Address signage for property addresses	Yes	City Ordinance, IRC
Other		

3.5.4 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 3-5. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 3-5 Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes

Table 3-5 Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

3.5.5 Community Classifications

The jurisdiction's classifications under various hazard mitigation programs are presented in Table 3-6. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community.

Table 3-6. Community Classifications		
	Participating (Yes/No)	Date Enrolled
Community Rating System	No	N/A
Building Code Effectiveness Grading Schedule – Commercial	4	Unknown
Building Code Effectiveness Grading Schedule – Dwelling	4	Unknown
Protection Class	4	Unknown
Storm Ready	Yes	Unknown
Firewise	No	N/A

3.6 HAZARD RISK AND VULNERABILITY RANKING

The internal Planning Team reviewed the hazard list identified within the Base Plan and have identified the potential for train derailment and active shooter as additional hazards that could impact the City of Cheney.

In addition, the Planning Team also examined Volume 1, Chapter 4 of the Spokane County Multi-Jurisdictional Hazard Mitigation Plan to ensure an understanding of the application of the Calculated Priority Risk Index (CPRI) information which is utilized in determining the hazard

impact and vulnerability. The risk assessment process also included a review of critical facilities impacted, potential dollar losses at risk, and any additional information applicable within the hazard profiles for use in identifying each hazard of concern.

Table 3-8 presents the results of the CPRI process. Table 3-8 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.
- Low (Negligible) – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.
- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.
- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.
- Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted for in excess of one month.

Table 3-7.
Calculated Priority Risk Ranking

Hazard	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought			3			2						4				1				4	2.75
Earthquake			3				3			2			4				1				2.85
Flood/Dam			3			2				2					2				3		2.45
Landslides	1				1				1				4				1				1.45
Severe Weather				4			3					4		3					3		3.60
Wildfire				4			3				3		4						3		3.55
Train Derailment		2						4				4	4							4	3.20
Active Shooter		2						4	1				4					2			2.50

Table 3-8.
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank
1	Severe Weather	3.6	High
2	Wildfire	3.55	High
3	Train Derailment	3.2	High
4	Earthquake	2.85	Medium
5	Drought	2.75	Medium

Table 3-8.
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank
6	Active Shooter	2.5	Low
7	Flood/Dam	2.45	Low
8	Landslide	1.45	Very Low

3.7 COMMUNITY WILDFIRE PROTECTION PLANNING AND ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted Spokane County in completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk. The analysis focused specifically on eight highly valued resources and assets (HVRA), to include people and property, critical facilities, drinking water, ecological integrity, wildlife, timber, agriculture, and recreation. This analysis varies slightly from the analysis within the HMP document, which looks at all assets exposed, in addition to the critical facilities, as well as impact to the people, property, environment, and economy. The resulting maps of the analysis completed by DNR are incorporated at the end of this Annex within the Hazard Maps – Extent and Location section.

3.8 MITIGATION GOALS AND OBJECTIVES

The City of Cheney adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1.

3.9 HAZARD MITIGATION ACTION PLAN

The Planning Team for the jurisdiction identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the jurisdiction's assets and hazards of concern. Table 3-9 lists the action items/strategies that make up the jurisdiction's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, who will benefit from the activity, and the type of initiative associated with each item are also identified.

Table 3-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE #1 Support adequate public fire protection.									
New and Existing	All	1, 7, 9	Fire	Medium	Local Budgets, Grants	Long	Yes	Preventive Activities, Property Protection, Emergency Services, Recovery, Natural Resource Protection, Infrastructure Systems Protection	Local, County, Region
INITIATIVE #2 Encourage tree trimming, fuels reduction measures, and defensible space on public and private property.									
New and Existing	SW, W	2, 5, 7, 10, 11	Light Dept	Low	Enterprise Funds, Grants	Long	Yes, modified	Preventive Activities, Property Protection, Emergency Services, Recovery, Natural Resource Protection, Infrastructure Systems Protection	Local
INITIATIVE #3 Develop hazardous materials evacuation drills.									
New and Existing	SW, TD, E	1, 4, 8	Fire	Low	Local Budgets, Grants	Long	Yes	Preventive Activities, Property Protection, Emergency Services, Recovery,	Local, County, Region
INITIATIVE #4 Continue training and exercising for possible terrorism/active shooter events.									

Table 3-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
New and Existing	TD, AS	1, 4, 8	Cheney and Eastern PD	Low	Local Budgets, Grants	Long	Yes	Preventive Activities, Emergency Services, Recovery,	Local, County
INITIATIVE #5 Assess the vulnerability of identified critical facilities to terrorist or other non-natural hazards.									
New and Existing	All	1, 4, 5, 8	Cheney PD	Low	Local Budgets, Grants	Long	Yes	Preventive Activities, Property Protection, Recovery, Infrastructure Systems Protection	Local, County
INITIATIVE #6 Continue to support the countywide initiatives identified in this plan.									
New and Existing	All	1, 3, 4, 5, 6, 7, 8, 9, 10, 13	DEM	Low	Local Budgets, Grants	Long	Yes	Preventive Activities, Property Protection, Emergency Services, Recovery, Natural Resource Protection, Infrastructure Systems Protection	Local, County, Regional
INITIATIVE #7 Actively participate in the plan maintenance strategy identified in this plan.									

Table 3-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
New and Existing	All	1, 4, 8	DEM	Low	Local Budgets, Grants	Short	Yes	Preventive Activities, Property Protection, Emergency Services, Recovery, Natural Resource Protection, Infrastructure Systems Protection	Local, County
INITIATIVE #8 Where appropriate, support retrofitting, purchase, or removal in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority.									
New and Existing	All	2, 10, 11	Planning Dept	High	FEMA Grants, Local Contributions	Long	Yes	Preventive Activities, Property Protection, Emergency Services, Recovery,	Local
INITIATIVE #9 Integrate the hazard mitigation plan into other plans, ordinances or programs to dictate land uses within the jurisdiction.									
New and Existing	All	2, 3, 4, 5, 11	Planning Dept	Low	City Funding	Short	Yes	Preventive Activities, Property Protection, Emergency Services, Recovery, Natural Resource Protection, Infrastructure Systems Protection	Local, County
INITIATIVE #10 Implement wildfire mitigation recommendations identified in the Spokane County CWPP or identified annually through partnership with Spokane County Conservation District, local, state and federal fire service agencies.									

Table 3-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
New and Existing	WF, F, LS	1-12	Spokane Conservation District, All County Fire Districts	Medium	Local, Fire Grants, HMGP, PDM	Short	Yes, modified	Preventive Activities, Property Protection, Natural Resource Protection, Infrastructure Systems Protection	Local
INITIATIVE #11 Continue to maintain and/or enhance the city's capability to enforce its codes and regulations that result in decreased risk exposure of new development.									
New and Existing	All	4, 5, 11	Building Dept	Low	Local Funds	Long	Yes	Preventive Activities, Property Protection, Infrastructure Systems Protection	Local
INITIATIVE #12 Consider, where appropriate, the adoption of higher regulatory standards that will result in an increase in the community resilience of new development.									
New	All	4, 5, 11	City Staff and Council	Low	Local Funds, Grants,	Long	Yes	Preventive Activities, Property Protection, Emergency Services, Recovery, Natural Resource Protection, Infrastructure Systems Protection	Local

Table 3-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE #13 Continue to maintain compliance and good standing under the National Flood Insurance Program. This will be accomplished through the implementation of floodplain management programs that, at a minimum, will meet the minimum requirements of the NFIP, which include the following: • Enforcement of the adopted flood damage prevention ordinance • Participating in floodplain identification and mapping updates • Providing public assistance/information on floodplain requirements and impacts									
New and Existing	F, SW, LS	4, 5, 11	Planning Dept	Low	Local Funds, Grants	Long	Yes	Preventive Activities, Property Protection, Recovery, Infrastructure Systems Protection	Local
INITIATIVE #14 Continue to build partnerships with railroad companies to mitigate railroad hazards and access issues due to crossings being blocked during emergencies.									
New and Existing	SW, F, Hazmat, Wildfire	All	Fire Dept	Low	Local Funds, Grants	Long	No	Preventive Activities, Property Protection, Emergency Services,	Local, County, regional

3.10 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 3-10 identifies the prioritization for each initiative.

Table 3-10.
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
1	3	H	M	Y	Y	Some	H
2	5	H	L	Y	Y	Y	H
3	3	H	L	Y	Y	Y	H
4	2	H	L	Y	Y	Y	H
5	3	M	L	Y	Y	Y	H
6	10	H	L	Y	Y	Y	H
7	3	H	L	Y	Y	Y	H
8	3	M	H	Y	Y	Some	H
9	5	M	L	Y	N	Y	H
10	12	H	M	Y	Y	Y	M
11	3	H	L	Y	N	Y	H
12	3	H	L	Y	Y	Y	H
13	3	H	L	Y	Y	Y	H
14	12	H	L	Y	Y	Y	H

a. See Chapter 1 for explanation of priorities.

3.11 STATUS OF PREVIOUS PLAN INITIATIVES

Table 3-11 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 3-11.
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
Mitigation Strategy	Project Status	Completed	Continual /Ongoing Nature	Removed -/No Longer Relevant /	Carried Over
1. Continue to support adequate public fire protection.	The City has recently purchased new equipment. With the rapid growth in the West-Plains of Spokane County and the insurgence of emergencies in the City, discussion on how public-safety can grow to meet the demands and how to fund additional positions in an on-going initiative. City Hired a full time Fire Marshal in 2024 and intends to replace the Ladder Truck in 2026.	✓	✓		✓
2. Continue to reduce vertical and nuisance vegetation on public and private property.	The City takes measures to trim vegetation in those areas that are the responsibility of the City's jurisdiction; however, on-going encouragement for private landowners to trim trees and reduce nuisance vegetation continually takes place. City conducted extensive tree trimming in the City and EWU cleared all fire lanes of vertical vegetation 2025. Through the City's website, citizens can address nuisance vegetation concerns.	✓	✓		✓
3. Continue to develop hazardous materials evacuation drills.	The City incorporates hazardous materials exercises and inclusion of public and merchants where and when able. City public safety engages in local and county exercises.	✓	✓		✓

Table 3-11.
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
Mitigation Strategy	Project Status	Completed	Continual /Ongoing Nature	Removed -/No Longer Relevant /	Carried Over
4. Continue training and exercising for possible terrorism/active shooter events.	City public safety agencies that include the fire department and both police agencies engage in local and county active shooter and rescue task force exercises. County built and implemented a Rescue Task Force training and response program. Trained 300+ LE and fire responders.	✓	✓		✓
5. Continue to assess the vulnerability of identified critical facilities.	The City established a Critical Facilities List and intends to rank those facilities and evaluate the list on an as needed basis through the City's Capital Facilities Plan (2024-2029)	✓	✓		✓
6. Continue to support the countywide initiatives identified in this plan.	The City has continued to work with the County and local planning partners in supporting the initiatives of this plan.	✓	✓		✓
7. Continue to actively participate in the plan maintenance strategy identified in this plan.	The City was a planning team member for the 2020 update and now the 2025 update and completed its annex template and all planning requirements to maintain an active level of participation.	✓	✓		✓
8. Continue to support, where appropriate, retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority.	While the City feels this is a good initiative, the reality of relocating structures that are in a hazard-prone area is too costly and the lack of sufficient funding to support makes this part of the initiative highly unlikely; therefore, the city is committed to retrofitting, where fiscally viable.	✓	✓		✓

Table 3-11.
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
Mitigation Strategy	Project Status	Completed	Continual /Ongoing Nature	Removed -/No Longer Relevant /	Carried Over
9. Integrate the hazard mitigation plan into other plans, ordinances or programs to dictate land uses within the jurisdiction.	The City updates its Codes and Ordnances on an as-needed basis or when Federal or State mandates and initiatives require change. This planning committee reviewed the hazard mitigation plan and continues to explore avenues to apply the plan where feasible.	✓	✓		✓
10. Continue to implement wildfire mitigation recommendations identified in the Spokane County CWPP.	The City updates its Codes and Ordnances on an as-needed basis or when Federal or State mandates and initiatives require change. This planning committee reviewed the wildfire mitigation recommendations and applied those recommendations where necessary. Tree trimming and zero-scape initiatives are on-going.	✓	✓		✓
11. Continue to maintain and/or enhance the city's capability to enforce its codes and regulations that result in decreased risk exposure of new development.	The City updates its Codes and Ordnances on an as-needed basis or when Federal or State mandates and initiatives require change. The City hired a full time Fire Marshal in 2024.	✓	✓		✓
12. Continue to consider, where appropriate, the adoption of higher regulatory standards that will result in an increase in the community resilience of new development.	The City updates its Codes and Ordnances on an as-needed basis or when Federal or State mandates and initiatives require change. This planning committee reviewed the wildfire mitigation recommendations and applied those recommendations where necessary. Tree trimming and zero-scape initiatives are on-going.	✓	✓		✓

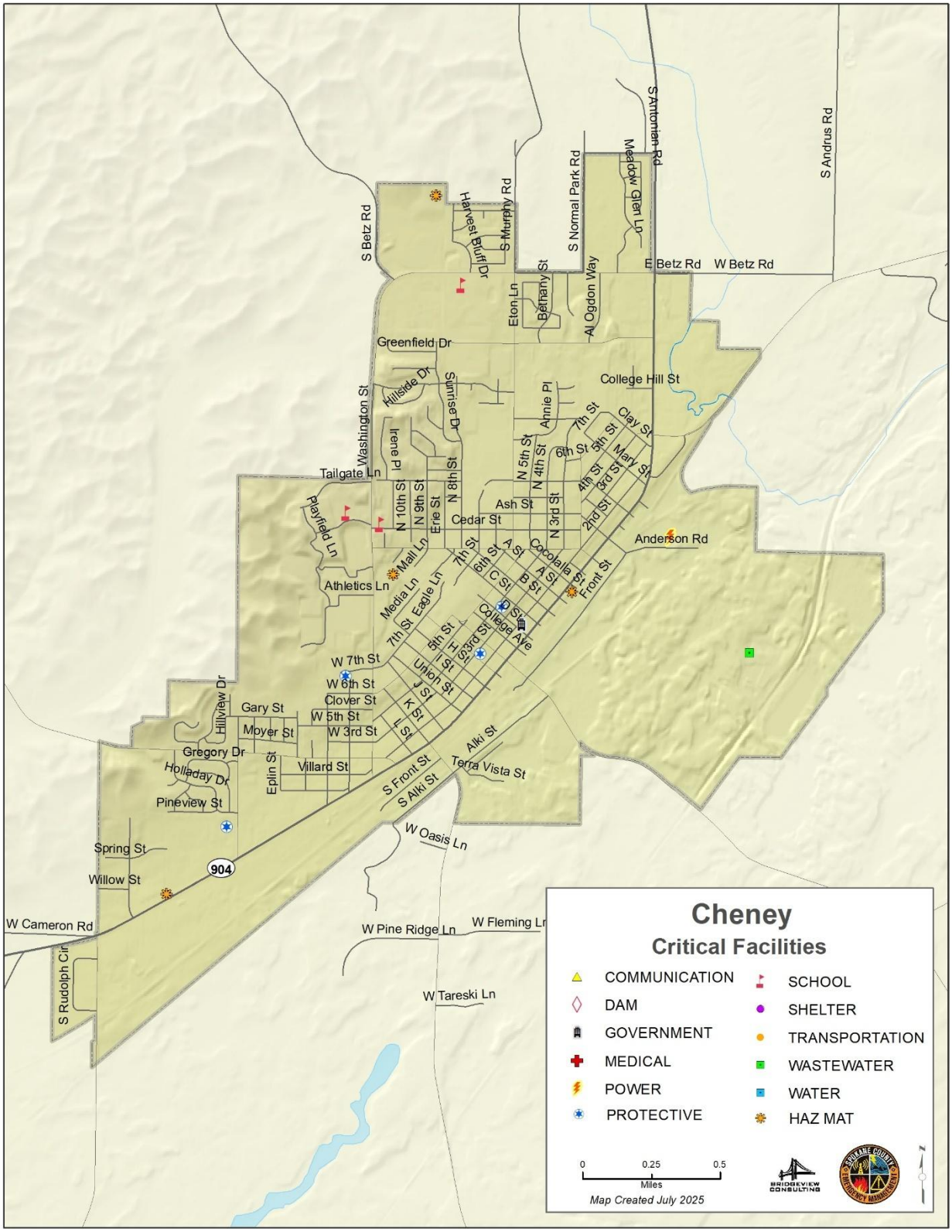
Table 3-11.
2025 Status of 2020 Hazard Mitigation Action Plan

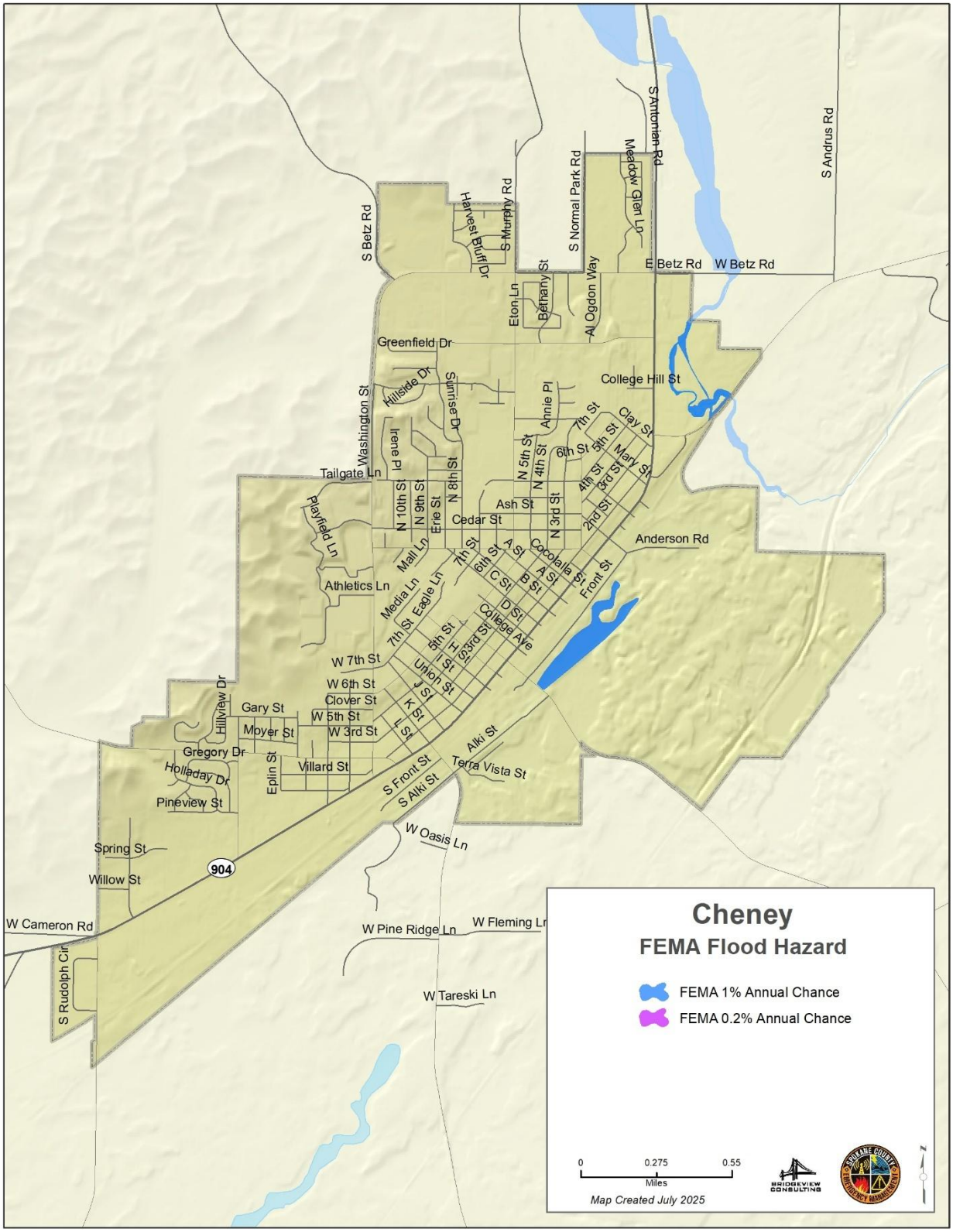
		Current Status			
Mitigation Strategy	Project Status	Completed	Continual /Ongoing Nature	Removed -/No Longer Relevant /	Carried Over
13. Continue to maintain compliance and good standing under the National Flood Insurance Program.	The City has continued to work with the County and local planning partners in supporting the initiatives of the NFIP.	✓	✓		✓

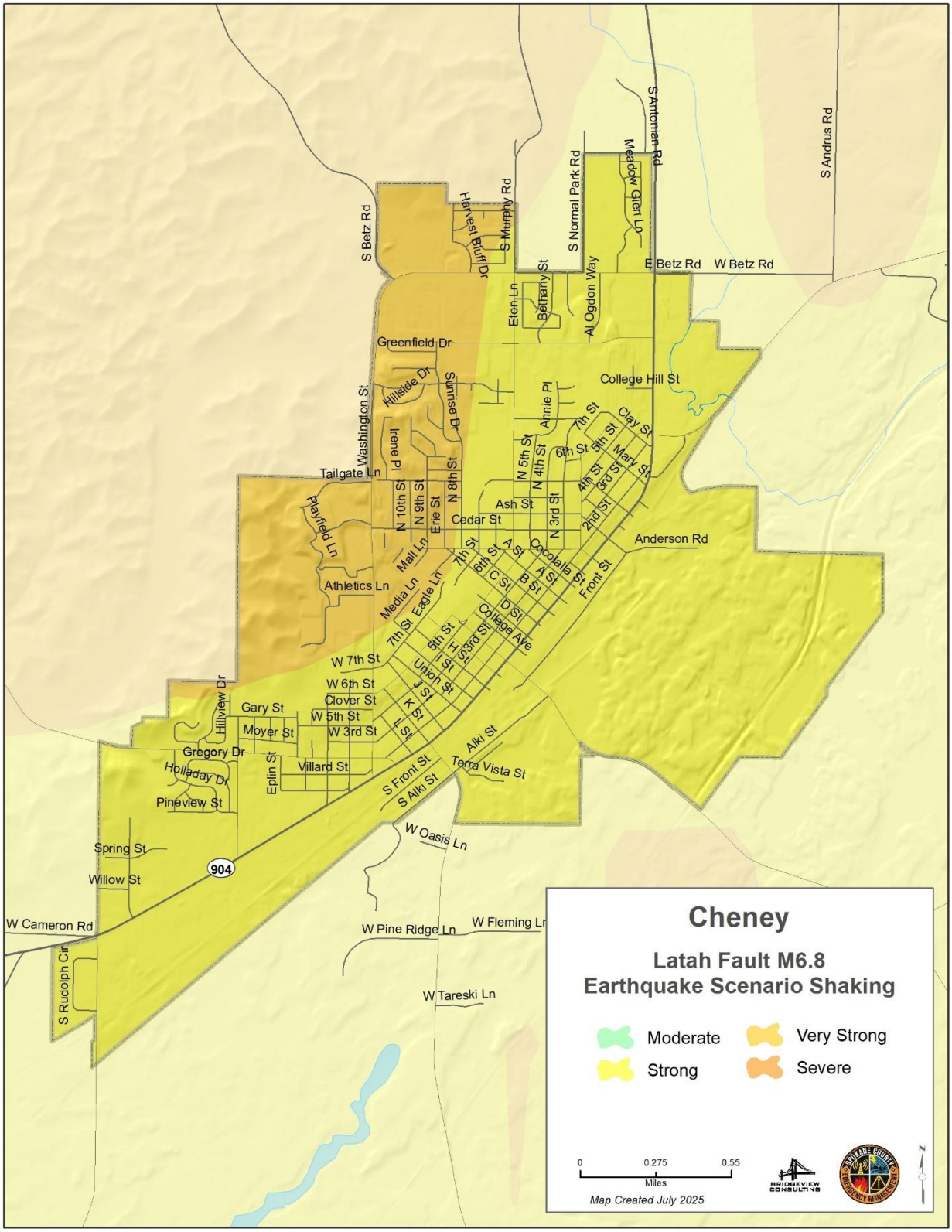
3.12 HAZARD MAPS – EXTENT AND LOCATION

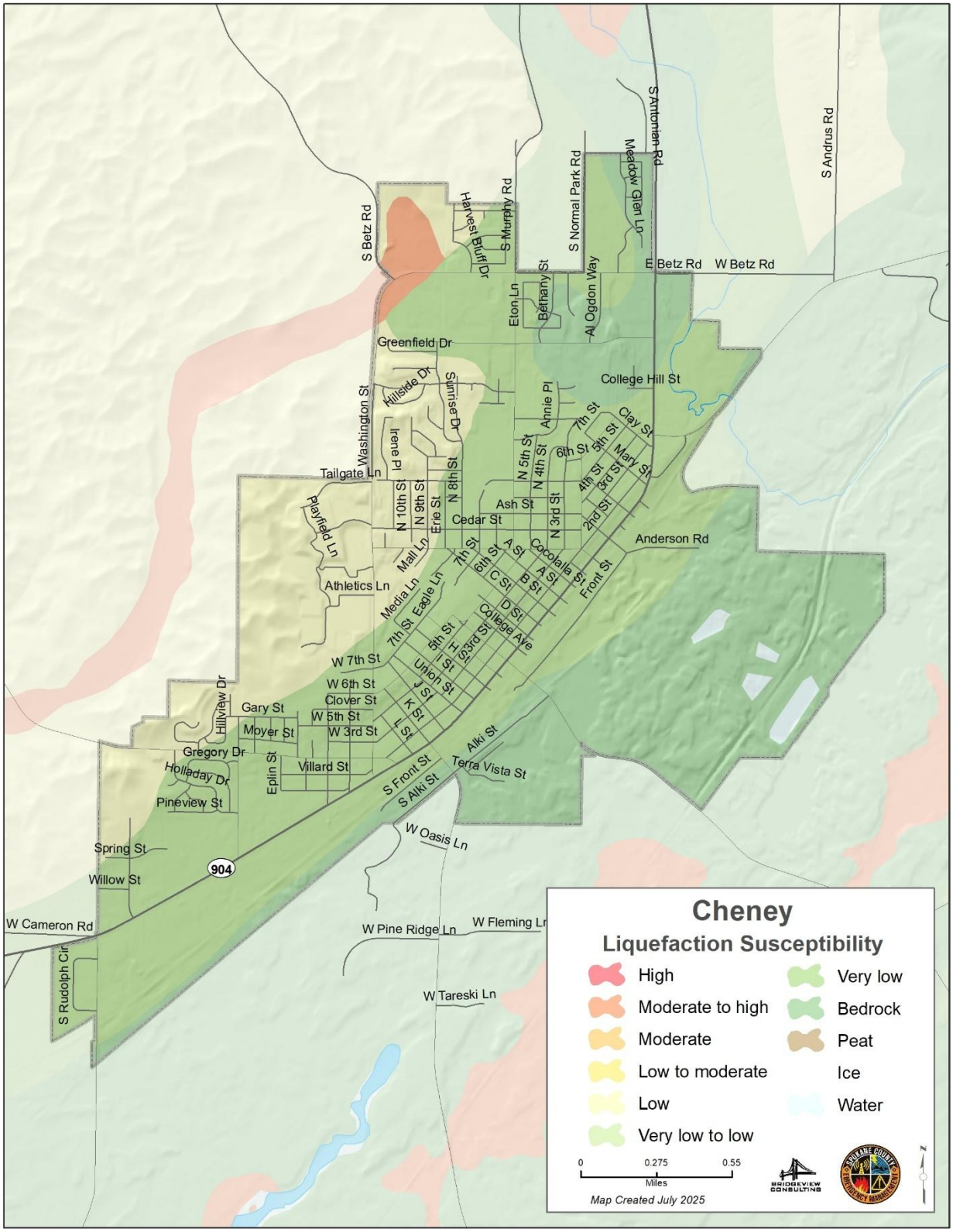
For those hazards which have the potential to impact the City, hazard area extent and location maps are included below. For all hazards for which a geographic boundary is identified, the base plan maintains impact maps. These maps are based on the best available data at the time of the preparation of this plan and are considered to be adequate for planning purposes.

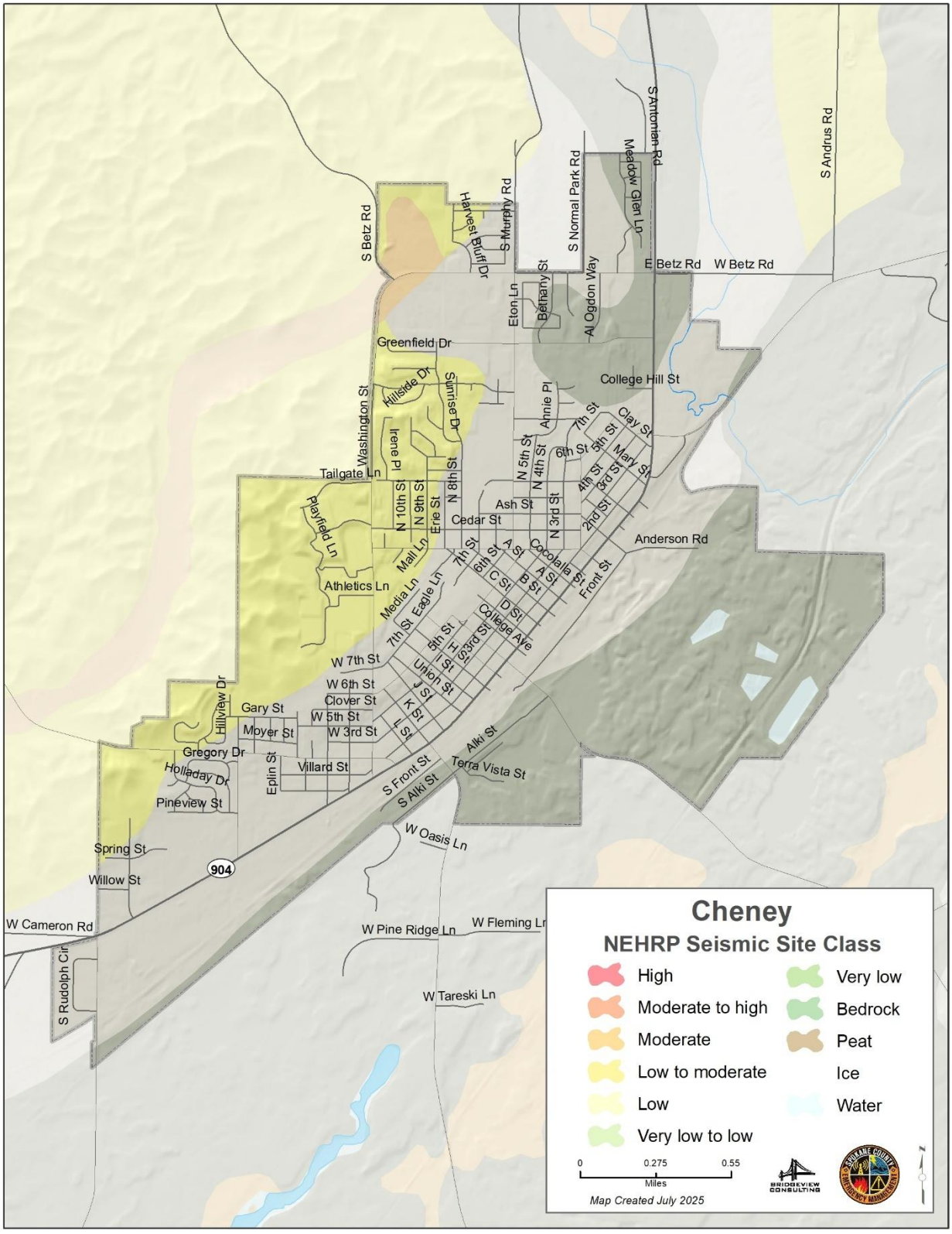
In addition to the maps associated with the risk assessment for the HMP, State DNR completed a risk analysis for Fire District 3, which incorporates the City of Cheney within its service area. Maps generated from that study are also included.

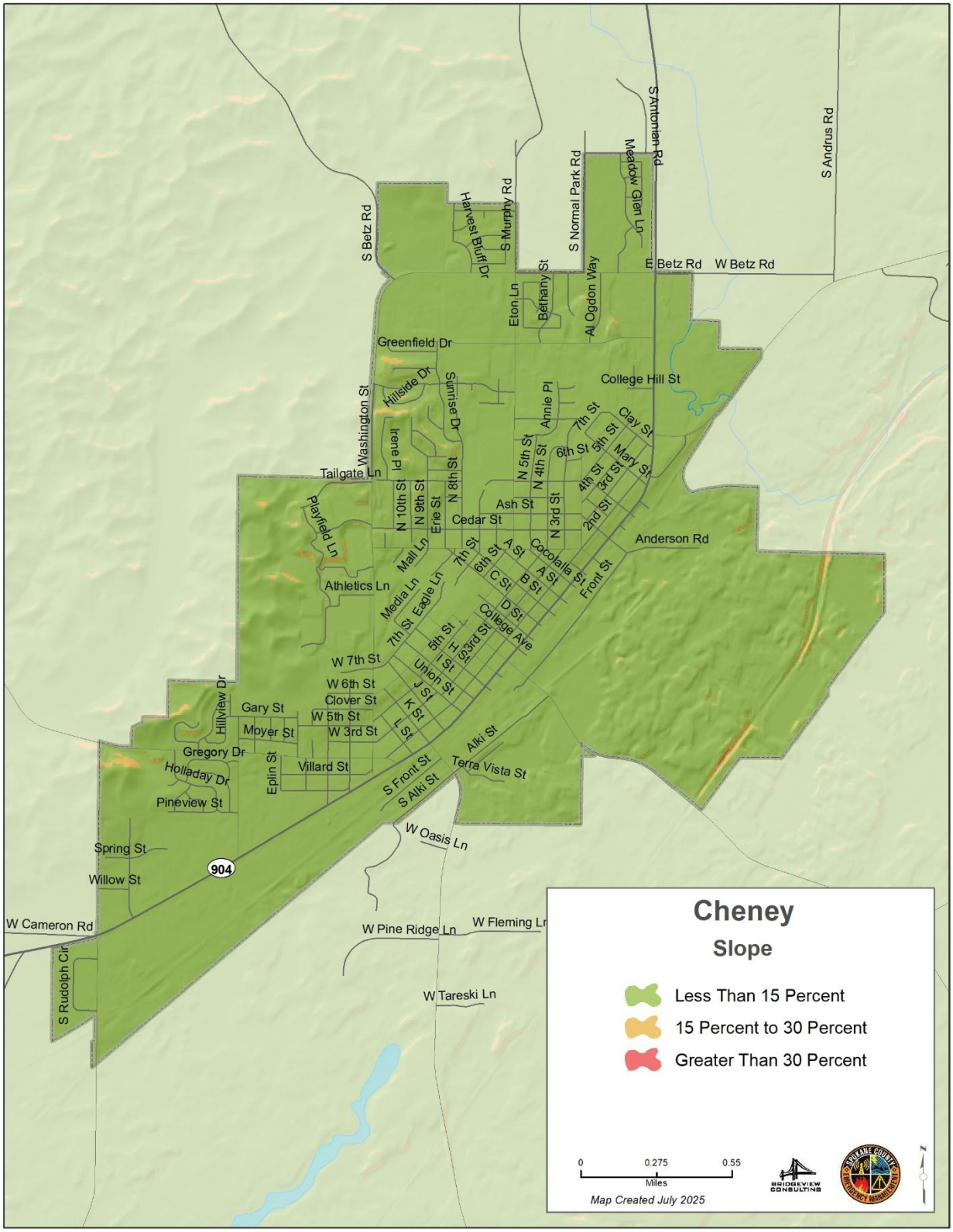

Cheney
Critical Facilities
COMMUNICATION
DAM
GOVERNMENT
MEDICAL
POWER
PROTECTIVE
SCHOOL
SHELTER
TRANSPORTATION
WASTEWATER
WATER
HAZ MAT
0
0.25
0.5
Miles
Map Created July 2025
S Betz Rd
Harvest Bluff Dr
S Murphy Rd
S Normal Park Rd
Meadow Glen Ln
S Antonian Rd
S Andrus Rd
E Betz Rd
W Betz Rd
Eton Ln
Bethany St
Al Ogdon Way
Greenfield Dr
College Hill St
Hillside Dr
Sunrise Dr
Annie Pl
Washington St
Irene Pl
Tailgate Ln
N 10th St
N 9th St
N 8th St
N 5th St
N 4th St
N 3rd St
7th St
6th St
5th St
4th St
3rd St
2nd St
Clay St
Mary St
Ash St
Cedar St
Erie St
Playfield Ln
Mall Ln
Athletics Ln
Media Ln
Eagle Ln
7th St
6th St
A St
B St
C St
D St
Cocolalla St
Front St
Anderson Rd
College Ave
5th St
3rd St
H St
I St
J St
K St
L St
Union St
W 7th St
W 6th St
Clover St
W 5th St
W 3rd St
Hillview Dr
Gary St
Moyer St
Gregory Dr
Holladay Dr
Pineview St
Villard St
Eplin St
Alki St
Terra Vista St
S Front St
S Alki St
Spring St
Willow St
904
W Oasis Ln
W Cameron Rd
W Pine Ridge Ln
W Fleming Ln
W Tareski Ln
S Rudolph Cir

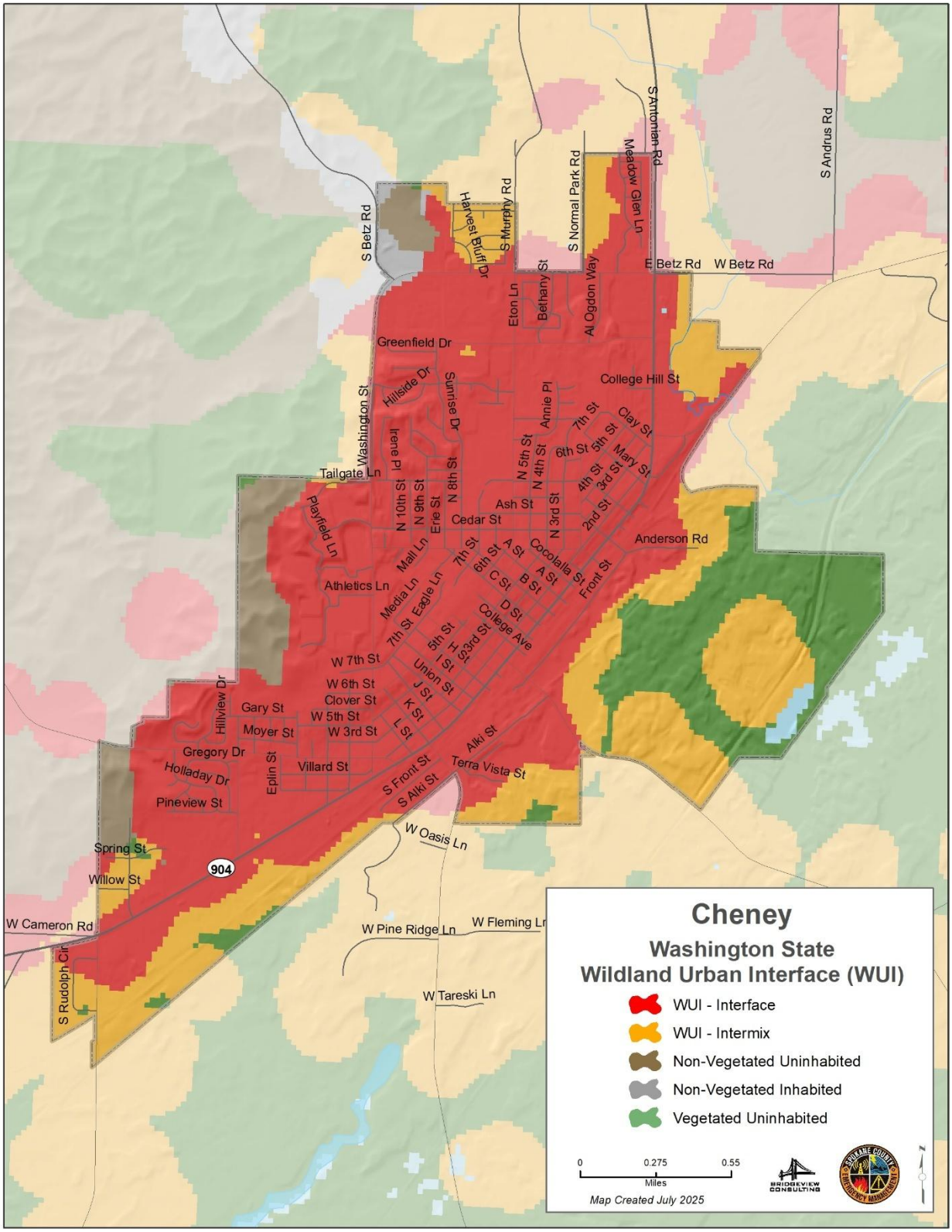

Cheney
FEMA Flood Hazard
FEMA 1% Annual Chance
FEMA 0.2% Annual Chance
0
0.275
0.55
Miles
Map Created July 2025
BRIDGEVIEW CONSULTING
S Betz Rd
S Murphy Rd
S Normal Park Rd
S Antonian Rd
S Andrus Rd
Meadow Glen Ln
Harvest Bluff Dr
E Betz Rd
W Betz Rd
Eton Ln
Bethany St
Al Ogdon Way
Greenfield Dr
College Hill St
Hillside Dr
Sunrise Dr
Annie Pl
Washington St
Irene Pl
7th St
Clay St
6th St
5th St
Mary St
4th St
3rd St
N 5th St
N 4th St
N 8th St
Tailgate Ln
N 10th St
N 9th St
Erie St
Ash St
N 3rd St
2nd St
Cedar St
Playfield Ln
Anderson Rd
Mall Ln
Athletics Ln
Media Ln
Eagle Ln
7th St
6th St
A St
B St
C St
D St
Cascadia St
Front St
College Ave
5th St
3rd St
W 7th St
W 6th St
Clover St
W 5th St
W 3rd St
Union St
I St
H St
J St
K St
F St
Hillview Dr
Gary St
Moyer St
Gregory Dr
Holladay Dr
Pineview St
Eplin St
Villard St
Alki St
Terra Vista St
S Front St
S Alki St
W Oasis Ln
Spring St
Willow St
904
W Cameron Rd
W Pine Ridge Ln
W Fleming Ln
S Rudolph Cir
W Tareski Ln


Cheney
Latah Fault M6.8
Earthquake Scenario Shaking
Moderate
Strong
Very Strong
Severe
0
0.275
0.55
Miles
Map Created July 2025
S Betz Rd
Harvest Bluff Dr
S Murphy Rd
S Normal Park Rd
Meadow Glen Ln
S Antonian Rd
S Andrus Rd
E Betz Rd
W Betz Rd
Eton Ln
Bethany St
Al Ogdon Way
Greenfield Dr
College Hill St
Hillside Dr
Sunrise Dr
Washington St
Irene Pl
Annie Pl
7th St
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N 5th St
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Tailgate Ln
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Cedar St
Playfield Ln
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Cochran St
B St
Front St
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Athletics Ln
Media Ln
Eagle Ln
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College Ave
7th St
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3rd St
H St
W 7th St
Union St
W 6th St
Clover St
I St
J St
K St
L St
Hillview Dr
Gary St
W 5th St
Moyer St
W 3rd St
Alki St
Gregory Dr
Villard St
Terra Vista St
Holladay Dr
Eplin St
S Front St
S Alki St
Pineview St
W Oasis Ln
Spring St
904
Willow St
W Cameron Rd
W Pine Ridge Ln
W Fleming Ln
S Rudolph Cir
W Tareski Ln


Cheney
Liquefaction Susceptibility
High
Moderate to high
Moderate
Low to moderate
Low
Very low to low
Very low
Bedrock
Peat
Ice
Water
0
0.275
0.55
Miles
Map Created July 2025
S Betz Rd
Harvest Bluff Dr
S Murphy Rd
S Normal Park Rd
Meadow Glen Ln
S Antonien Rd
S Andrus Rd
E Betz Rd
W Betz Rd
Eton Ln
Bethany St
Al Ogdon Way
Greenfield Dr
College Hill St
Hillside Dr
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Tailgate Ln
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2nd St
Cedar St
Playfield Ln
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Hillview Dr
Moyer St
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Alki St
Gregory Dr
Villard St
Terra Vista St
Holladay Dr
Eplin St
S Front St
S Alki St
Pineview St
W Oasis Ln
Spring St
904
Willow St
W Cameron Rd
W Pine Ridge Ln
W Fleming Ln
S Rudolph Cir
W Tareski Ln


Cheney
NEHRP Seismic Site Class
High
Moderate to high
Moderate
Low to moderate
Low
Very low to low
Very low
Bedrock
Peat
Ice
Water
0
0.275
0.55
Miles
Map Created July 2025
S Betz Rd
Harvest Bluff Dr
S Murphy Rd
S Normal Park Rd
Meadow Glen Ln
S Antonian Rd
S Andrus Rd
E Betz Rd
W Betz Rd
Eton Ln
Bethany St
Al Ogdon Way
Greenfield Dr
College Hill St
Hillside Dr
Sunrise Dr
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2nd St
Clay St
Mary St
Ash St
Cedar St
Erie St
Playfield Ln
Mall Ln
Athletics Ln
Media Ln
Eagle Ln
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College Ave
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3rd St
W 7th St
W 6th St
W 5th St
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Hillview Dr
Gary St
Moyer St
Gregory Dr
Holladay Dr
Pineview St
Villard St
Eplin St
Alki St
Terra Vista St
S Front St
S Alki St
Spring St
Willow St
904
W Oasis Ln
W Cameron Rd
W Pine Ridge Ln
W Fleming Ln
W Tareski Ln
S Rudolph Cir


Cheney
Slope
Less Than 15 Percent
15 Percent to 30 Percent
Greater Than 30 Percent
0
0.275
0.55
Miles
Map Created July 2025
S Betz Rd
Harvest Bluff Dr
S Murphy Rd
S Normal Park Rd
Meadow Glen Ln
S Antonian Rd
S Andrus Rd
E Betz Rd
W Betz Rd
Eton Ln
Bethany St
Al Ogdon Way
Greenfield Dr
College Hill St
Hillside Dr
Sunrise Dr
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Gary St
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L St
Hillview Dr
Moyer St
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Gregory Dr
Villard St
Terra Vista St
Holladay Dr
Eplin St
S Front St
S Alki St
Pineview St
W Oasis Ln
Spring St
904
Willow St
W Cameron Rd
W Pine Ridge Ln
W Fleming Ln
S Rudolph Cir
W Tareski Ln


Cheney
Washington State
Wildland Urban Interface (WUI)
WUI - Interface
WUI - Intermix
Non-Vegetated Uninhabited
Non-Vegetated Inhabited
Vegetated Uninhabited
0
0.275
0.55
Miles
Map Created July 2025
S Betz Rd
Harvest Bluff Dr
S Murphy Rd
S Normal Park Rd
Meadow Glen Ln
S Antonian Rd
S Andrus Rd
E Betz Rd
W Betz Rd
Eton Ln
Bethany St
Al Ogdon Way
Greenfield Dr
College Hill St
Hillside Dr
Sunrise Dr
Annie Pl
Washington St
Irene Pl
Tailgate Ln
N 10th St
N 9th St
N 8th St
N 5th St
N 4th St
N 3rd St
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6th St
5th St
4th St
3rd St
2nd St
Clay St
Mary St
Ash St
Cedar St
Erie St
Playfield Ln
Mail Ln
Anderson Rd
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Media Ln
Eagle Ln
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Cocolalla St
Front St
College Ave
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Union St
W 7th St
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Hillview Dr
Gary St
Moyer St
Gregory Dr
Holladay Dr
Pineview St
Eplin St
Villard St
Alki St
Terra Vista St
S Front St
S Alki St
Spring St
Willow St
904
W Oasis Ln
W Cameron Rd
W Pine Ridge Ln
W Fleming Ln
S Rudolph Cir
W Tareski Ln

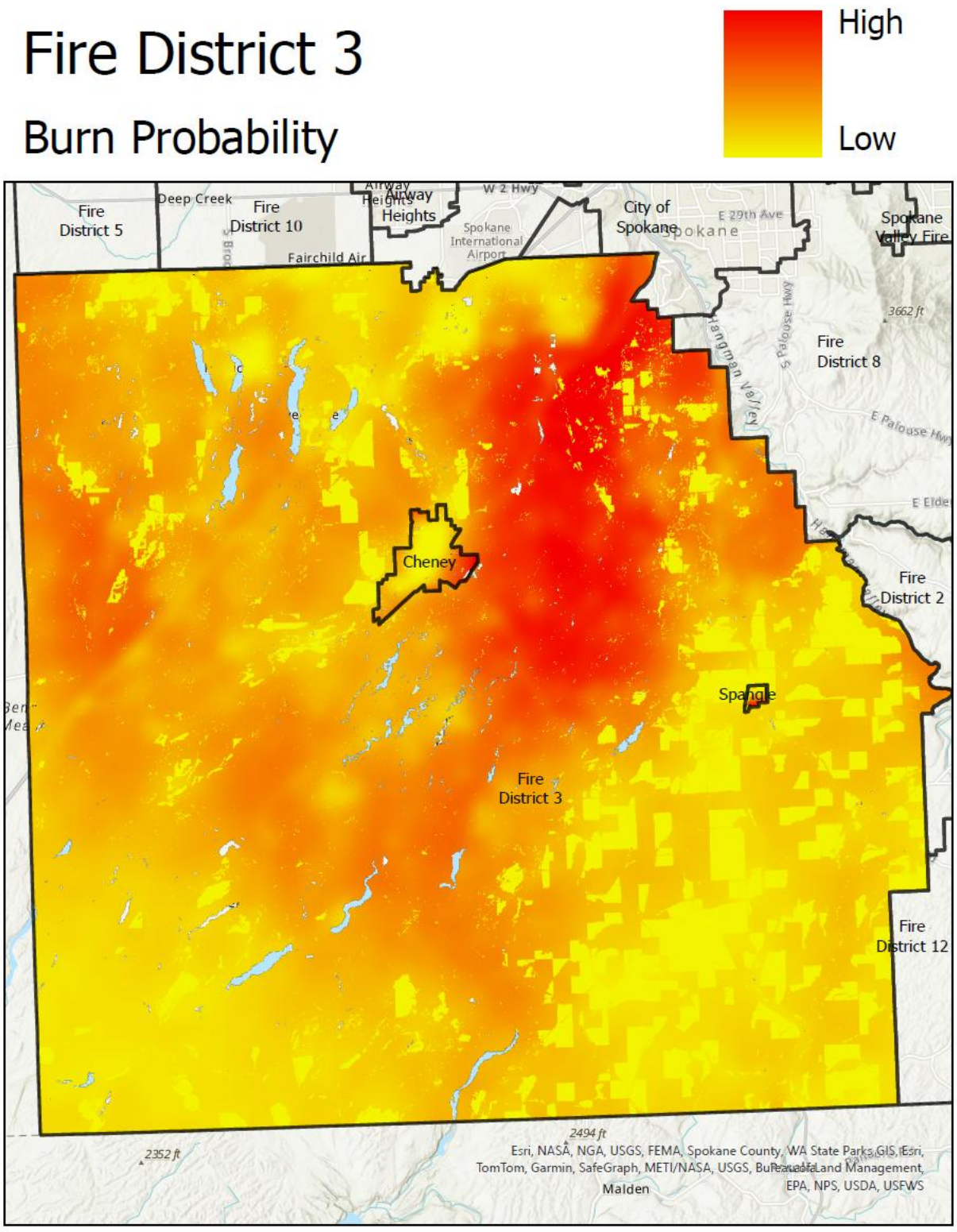


Figure 3-1 Burn Probability (WA DNR, 2024)

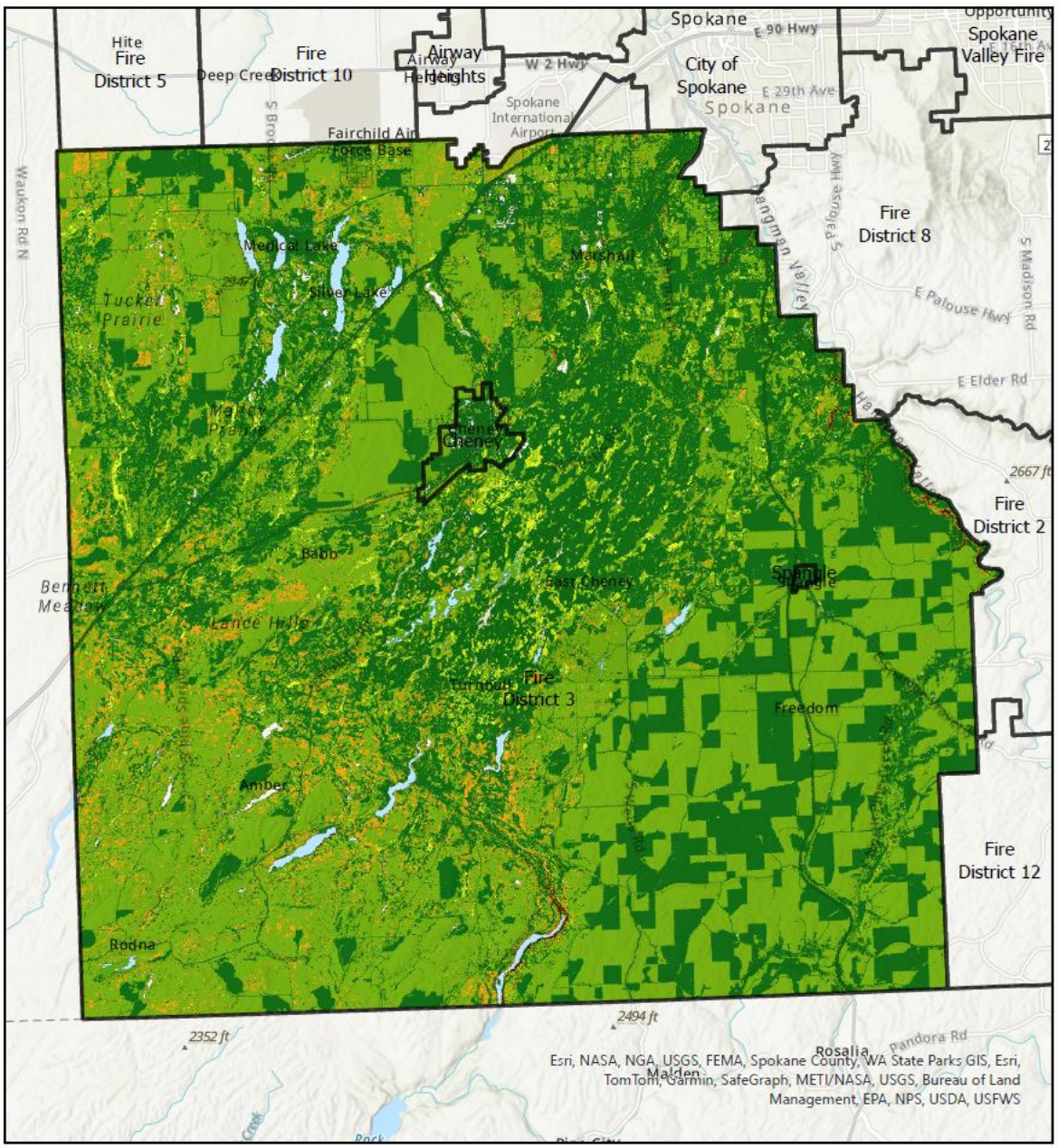


Figure 3-2 Flame Length (WA DNR, 2024)

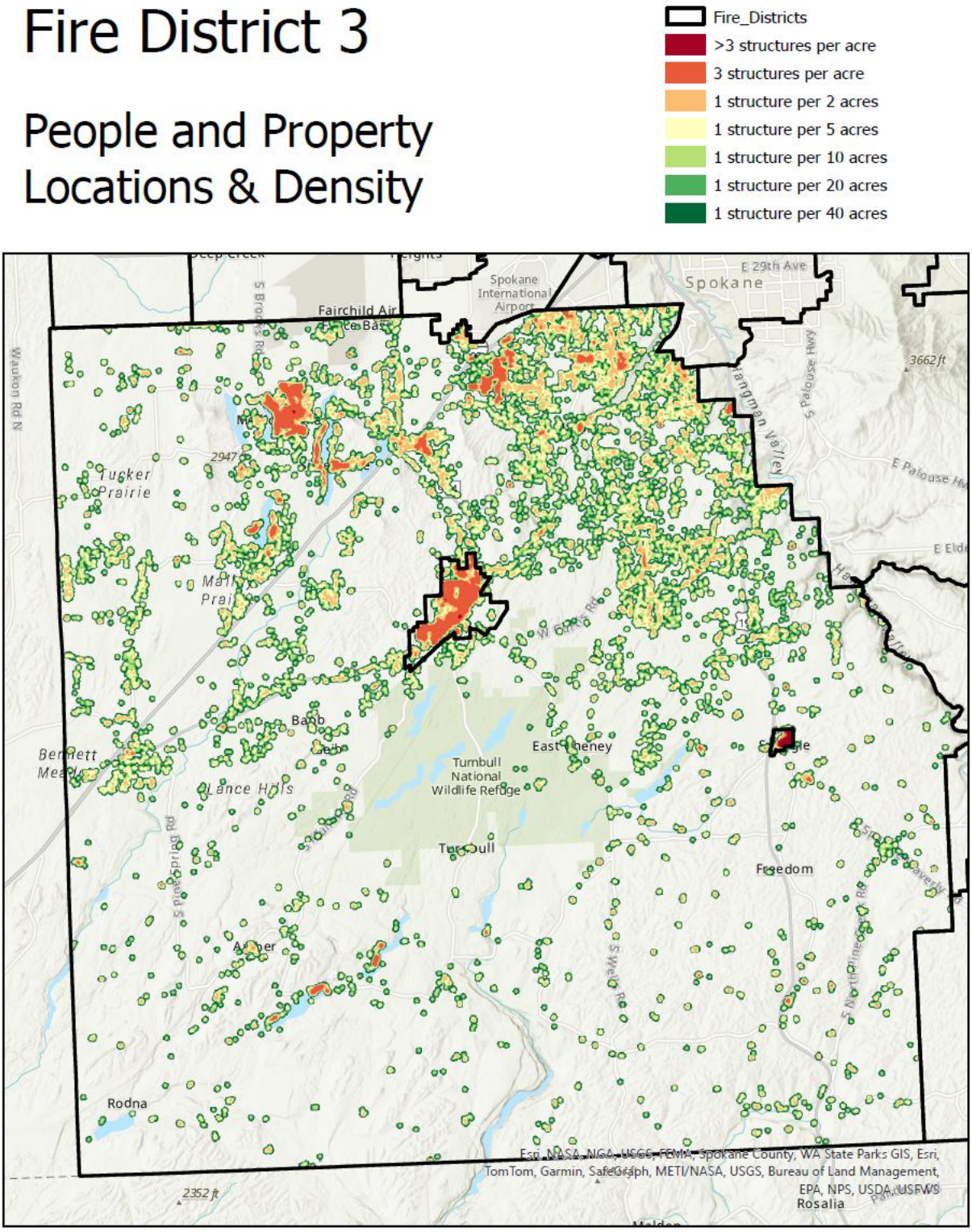


Figure 3-3 Locations and Density (WA DNR, 2024)

Response Function
People and Property

The response function describes how the HVRA value will change in response to fire at different intensities, described by the different flame length classes. For each flame length class there is a map of the probability of a given location experienced that flame length (not included in this packet). The integration of all six maps into one results in the flame length map in this packet.

		Fire Intensity Level (flame length)					
		FIL1	FIL2	FIL3	FIL4	FIL 5	FIL6
Sub-HVRA (based on structure density)	Share of HVRA relative importance	0-2'	2-4'	4-6'	6-8'	8-12'	>12'
Very low density	<1%	-10	-20	-40	-80	-100	-100
Low density	1%	-10	-20	-40	-80	-100	-100
Moderately low density	3%	-10	-20	-40	-80	-100	-100
Moderate density	7%	-10	-20	-40	-80	-100	-100
Moderate high density	14%	-10	-30	-50	-80	-100	-100
High density	47%	-20	-40	-60	-80	-100	-100
Very high density	28%	-30	-50	-70	-100	-100	-100

		Fire Intensity Level (flame length)					
		FIL 1	FIL 2	FIL 3	FIL 4	FIL 5	FIL 6
Sub-HVRA	Share of HVRA RI	*0 - 2'*	*2 - 4'*	*4 - 6'*	*6 - 8`*	*8 - 12'*	*>12'*
Very low density; > 0 structures - 1 structure per 40 acres	< 1%	-10	-20	-40	-80	-100	-100
Low density; 1 structure per 40 - 1 structure per 20 acres	1%	-10	-20	-40	-80	-100	-100
Moderately low density; 1 structure per 20 - 1 structure per 10 acres	3%	-10	-20	-40	-80	-100	-100
Moderate density; 1 structure per 10 - 1 structure per 5 acres	7%	-10	-20	-40	-80	-100	-100
Moderately high density; 1 structure per 5 - 1 structure per 2 acres	14%	-10	-30	-50	-80	-100	-100
High density; 1 structure per 2 - 3 structures per acre	47%	-20	-40	-60	-80	-100	-100
Very high density; > 3 structures per acre	28%	-30	-50	-70	-100	-100	-100

Figure 3-4 Response Function – People and Property (WA DNR, 2024)

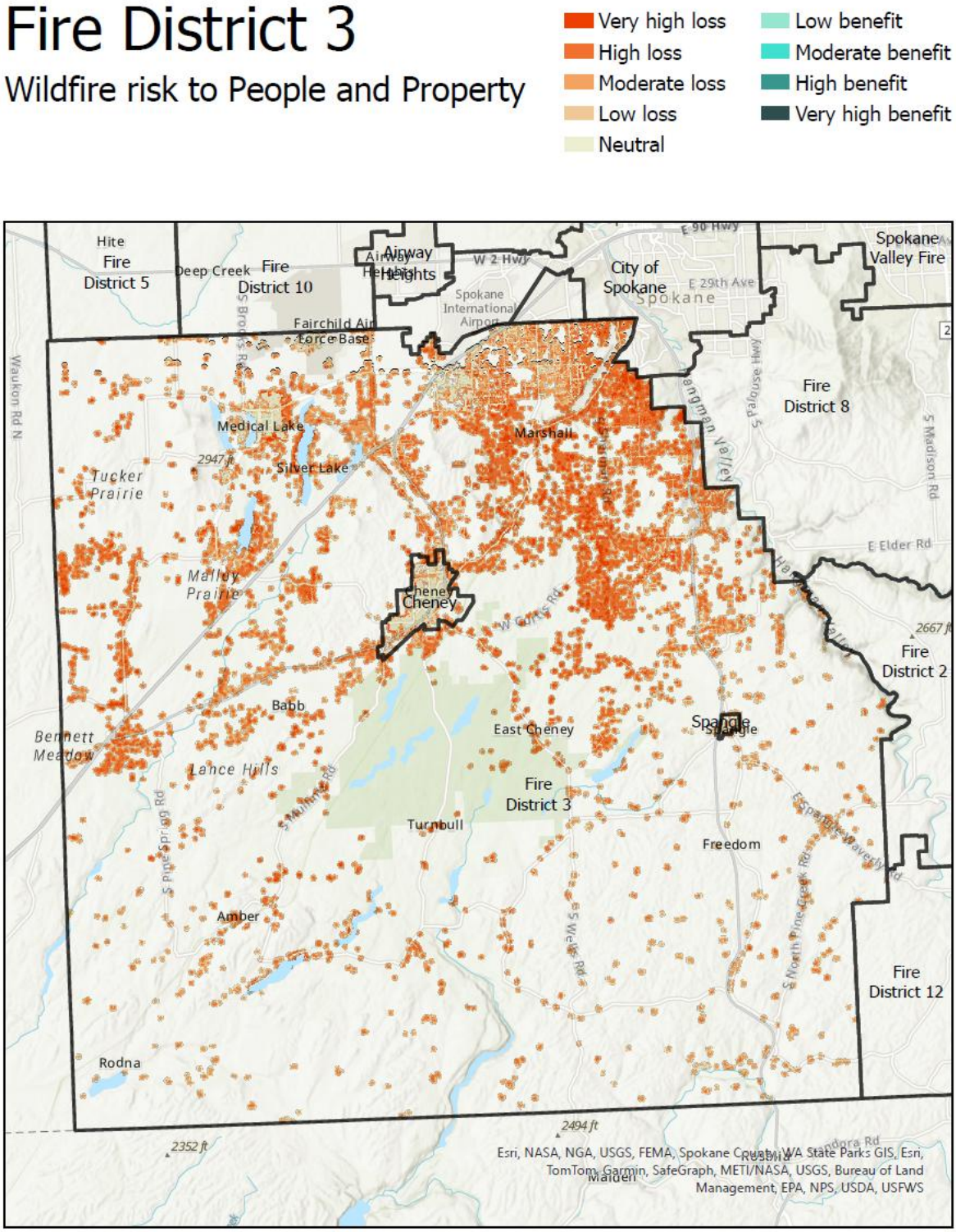


Figure 3-5 Wildfire Risk to People and Property (WA DNR, 2024)

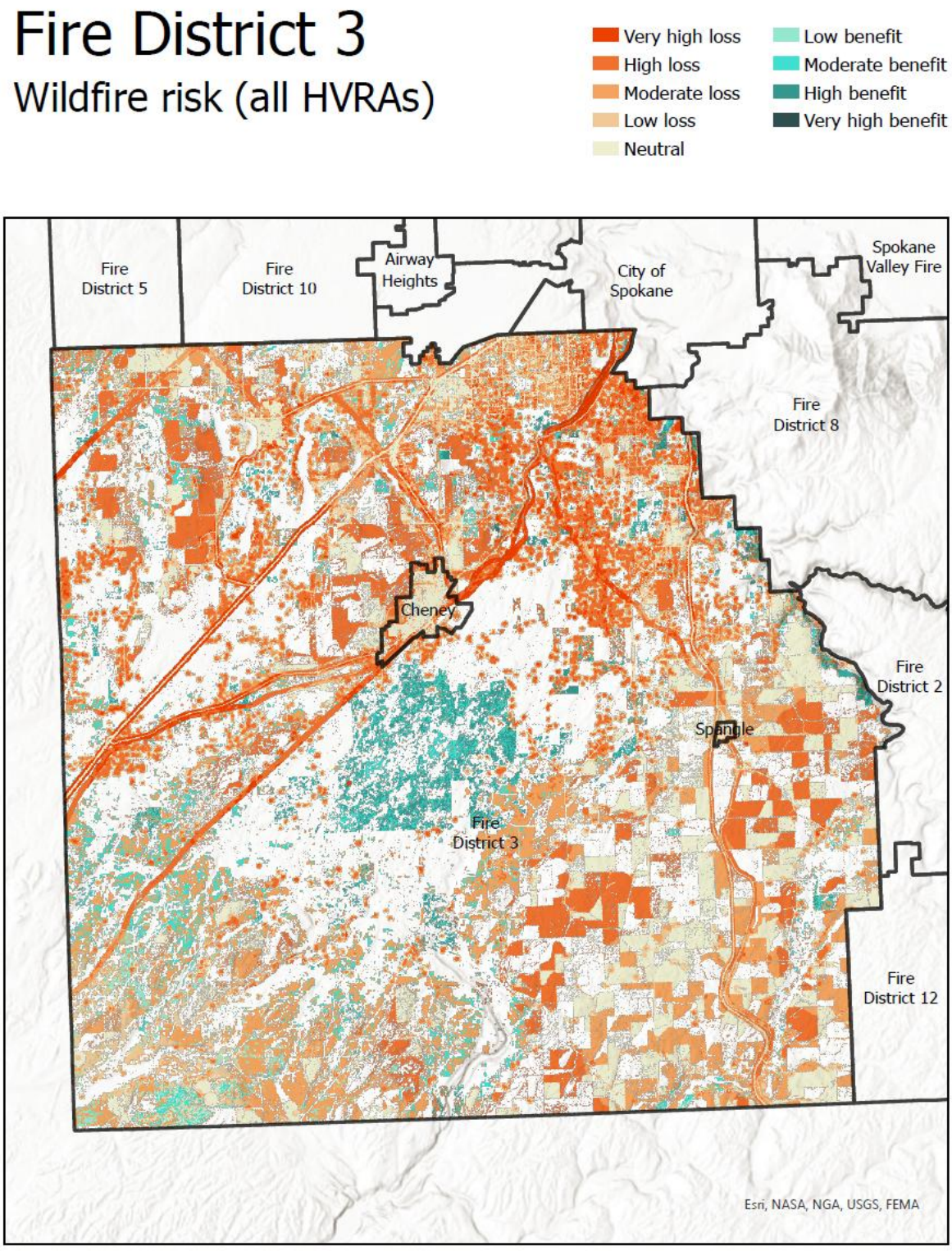


Figure 3-6 Wildfire Risk (WA DNR, 2024)

CHAPTER 4.
CITY OF DEER PARK 2026 ANNEX UPDATE

4.1 INTRODUCTION

This Annex details the hazard mitigation and community wildfire protection planning elements specific to the City of Deer Park, a participating jurisdiction to the Spokane County Hazard Mitigation and Community Wildfire Protection Plans. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the City of Deer Park. For planning purposes, this Annex provides additional information specific to the jurisdiction, with a focus on providing greater details on the risk assessment and mitigation strategy for this community only. This document serves as an update to the previously completed Hazard Mitigation and Community Wildfire Protection Plans. All relevant data has been carried over and updated with new information as appropriate and as identified within the planning process discussed in Volume 1.

4.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

The City of Deer Park followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, the City of Deer Park also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

LOCAL PLANNING TEAM MEMBERS		
NAME	**POSITION/TITLE**	**PLANNING TASKS**
Dan Pratt, Community Services Director 316 E Crawford Avenue Deer Park, WA 99006 Telephone: 509-276-8802 e-mail: dpratt@ci.deerpark.wa.us	Primary Point of Contact	Update Annex Template data; coordinate meetings with City Council members; attended planning team meetings and workshops; attended annex development workshop; conducted risk assessment review and hazard ranking process for presentation during public outreach session; worked with city departments to identify strategies and obtain status of previous strategies; completed plan review and presented and

LOCAL PLANNING TEAM MEMBERS		
NAME	**POSITION/TITLE**	**PLANNING TASKS**
		coordinated council and citizen briefings.
Deby Cragun, City Clerk 316 E Crawford Avenue Deer Park, WA 99006 Telephone: 509-276-8802 e-mail: DCragun@ci.deerpark.wa.us	Alternate Point of Contact	Coordinate meetings with City Council members; assisted with the update of information and gather information from other departments as appropriate.
City of Deer Park City Council and Mayor		Receive updates on HMP process and risk assessment. Completed plan review, approval and adoption.

4.3 COMMUNITY PROFILE

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

- **Date of Incorporation—** 1908
- **Current Population—** 5,135 as of April 1, 2025
- **Population Growth—** The City has used a population growth rate of 2.7 percent for key infrastructure planning, as the 2015 State of Washington Office of Financial Management population figure is 3,950 and this equates to this 2.7% growth rate over the last 10 years of 2005-2015.
- **Location and Description—** Deer Park is the only city in the northern portion of Spokane County and sits between SR 2 and SR 395, the main transportation corridors to Canadian trading partners. The total land area of the city is approximately 7.0 square miles, with an elevation of 2,123 above sea level. The area is generally flat, without natural hazards of severe slope instability or floodways, and located at GPS coordinates 47.956922, -117.470230.
- **Brief History—** Deer Park was settled in 1889 when a railroad siding was built for the Spokane Falls & Northern Railway. Deer Park got its name when railroad surveyors saw deer grazing in large numbers in the area. Soon the Standard Lumber Company sawmill was established to provide the lumber needed to rebuild the nearby city of Spokane Falls (later named Spokane) following the great fire of 1889. By 1900 the population of Deer Park was approximately 300 residents. Arcadia Apple Orchards Company was established in 1906, and orchards of apple trees were planted on land surrounding Deer Park that had been cleared by the logging activity. Water was diverted from Loon Lake by a series of canals and flumes to provide water to the orchard activity but was forced to be

abandoned when a draw-down in Deer Park was observed due to the water diversion. By this time there were as many as eight sawmills within 10 miles of Deer Park, all of which got their supplies in, and employed members of the town.

- **Climate---** Deer Park experiences a semi-arid climate with significant precipitation. The area is typified by hot, arid climate during the summer and a cold, snowy and moist climate in the winter. Because of Deer Park's location between the Cascade Range to the West and Rocky Mountains to the East and North, the city is protected from the weather patterns experienced in other parts of the Pacific Northwest. As a result of the rain shadow effect of the Cascade Mountains, the Deer Park area also has half the rainfall of Seattle, Washington, from the West side of the state. The average precipitation in the Deer Park area is 17 inches, whereas the Seattle area received 37 inches annually. The most precipitation occurs in December, and the summer is the driest time of the year. The Rocky Mountains shield Deer Park from the winter season's cold air masses traveling southward across Canada, sparing the City from the wort effects of Arctic air in the winter. Still, Deer Park's normal year snow accumulation is in excess of 46 inches.
- **Governing Body Format—** Deer Park's government structure is established as a code city, with a strong mayor and city council (7 members).
- **Development Trends—** Deer Park continues to grow with a mix of residential and support industry type facilities for the residential expansion going on. The proximity to the metropolitan area of Spokane provides a strong supply of employment, and continued improvements to the State Highway System reduce commute times greatly, making the area an ideal place for citizens who want to reside in a small-town setting.
- **Economy –** The City of Deer Park's economic base consists of retail sales and services; recreational and healthcare services; agricultural; and light manufacturing. The largest employers include the Deer Park School District, Northwest Steel Fabrication and Knight Construction. Additionally, continued efforts are in place to create additional acreage for industrial and business park developments, which are intended to promote living wage jobs and thus create additional demands on support industries, commercial growth and residential dwellings.

4.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events which have occurred within the County. In the context of the planning region, it was determined that there is one additional hazard that is unique to the City of Deer Park, which is the potential failure of a storage lagoon. Table 4-1 lists all past occurrences of natural hazards within the jurisdiction. If available, dollar loss data is also included.

Table 4-1
Natural Hazard Events

Type of Event	EMA Disaster # (if applicable)	Date	Dollar Losses (if known)
Fire	FM-5481	8/19/2023	None for City
Fire	FM-5479	8/18/2023	None for City
Fire	FM-5395	7/6/2021	None for City
Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	DR-4593	4/8/2021	Unknown
Fire	FM-5355	7/17/2020	None for City
COVID	DR-4481	3/22/2020	Unknown
Roadway Failure – flooding / rain	DR 4309	4/21/2017	$89,600
Winter Weather Snow	FEMA 8959993		Unknown
Winter Weather Ice Storm	FEMA 118746		$10,000
Winter Weather Snow	FEMA 66842		$250,000

4.5 CAPABILITY ASSESSMENT

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: National Flood Insurance Information; regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation, and classifications under various community programs.

4.5.1 National Flood Insurance Information

Information on the community's National Flood Insurance Program (NFIP) compliance is presented in Table 4-2. This identifies the current status of the jurisdiction's involvement with the NFIP.

Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: None.
- Number of FEMA-Identified Severe Repetitive Loss Properties: None.
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: None.

Table 4-2
National Flood Insurance Compliance

What department is responsible for floodplain management in your community?	Building Department
Who is your community's floodplain administrator? (department/position)	Dan Pratt, Community Services Director
Do you have any certified floodplain managers on staff in your community?	No
What is the date of adoption of your flood damage prevention ordinance?	June 16, 2010
When was the most recent Community Assistance Visit or Community Assistance Contact?	May, 2010
To the best of your knowledge, does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your community? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your community participate in the Community Rating System (CRS)? If so, is your community seeking to improve its CRS Classification? If not, is your community interested in joining the CRS program?	No

4.5.2 Regulatory Capability

The assessment of the jurisdiction's legal and regulatory capabilities is presented in Table 4-3. This includes planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are currently in place.

Table 4-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements				
Building Code Version IBC / IRC Year 2015	Yes	No	Yes	Title 15, Deer Park Mun. Code
Zoning Ordinance	Yes	No	Yes	Title 18
Subdivision Ordinance	Yes	No	Yes	Title 17
Floodplain Ordinance	Yes	No	Yes	Title 18
Stormwater Management	Yes	No	No	Title 12
Post Disaster Recovery	No	No	No	---
Real Estate Disclosure	No	No	Yes	RCW64.06.020
Growth Management	Yes	No	Yes	Title 17, 18, 19
Site Plan Review	Yes	No	Yes	Title 18
Public Health and Safety	Yes	No	No	Title 8
Coastal Zone Management	N/A	N/A	N/A	
Climate Change Adaptation	N/A	N/A	N/A	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire, etc.)	Yes	No	No	Title 18
Environmental Protection	Yes	No	Yes	Title 16
Planning Documents				
General or Comprehensive Plan *Is the plan equipped to provide linkage to this mitigation plan?* Yes				
Floodplain or Basin Plan	No	No	No	
Stormwater Plan	No	No	No	
Capital Improvement Plan	Yes	No	Yes	
Habitat Conservation Plan	Yes	No	Yes	
Economic Development Plan	Yes	No	Yes	
Shoreline Management Plan	N/A	N/A	N/A	
Community Wildfire Protection Plan	No	No	No	

Table 4-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Transportation Plan	Yes	No	Yes	
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	No	No	Spokane County DEM
Threat and Hazard Identification and Risk Assessment	No	No	No	Spokane County DEM
Terrorism Plan	No	No	No	Spokane County DEM
Post-Disaster Recovery Plan	No	No	No	
Continuity of Operations Plan	No	No	No	
Public Health Plans	No	No	No	
Boards and Commission				
Planning Commission	Yes	No	Yes	
Mitigation Planning Committee	No	No	Yes	The City was part of the County's Previous HMP and served on the Committee at that time. The City continues to be part of the effort with the 2020 update and will remain an active participant over the lifecycle of the 2020 edition.
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems, chipping, etc.)	Yes	No	No	
Mutual Aid Agreements / Memorandums of Understanding	Yes	No	No	The City has an Interlocal Agreement with County DEM to provide emergency management services, including

4.5.3 Administrative and Technical Capabilities

The assessment of the jurisdiction's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 4-4. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

Table 4-4
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	City Planning Staff
Professionals trained in building or infrastructure construction practices (building officials, fire inspectors, etc.)	Yes	City Building Staff
Engineers specializing in construction practices?	Yes	Contract for service with Engineering Firm
Planners or engineers with an understanding of natural hazards	Yes	Contract for service with Engineering Firm
Staff with training in benefit/cost analysis	Yes	Contract for service with Engineering Firm
Surveyors	Yes	Contract for service with Engineering Firm
Personnel skilled or trained in GIS applications	Yes	Contract for service with Engineering Firm
Emergency Manager	Yes	Contract with Spokane County DEM
Grant writers	Yes	City Staff
Warning Systems/Services	Yes	Reverse 9-1-1, Alert Spokane
Hazard data and information available to public	Yes	In addition to the HMP, the City also maintains a Wastewater Dam Plan
Maintain Elevation Certificates	No	
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness?	Yes	The City has an Interlocal Agreement with the County to provide various Emergency Management services and functions. In that regard, the County does have trained CERT members countywide, which would be utilized throughout the county.
Ongoing public education or information program	Yes	Fire District #4
Natural disaster or safety related school programs?	Yes	School Districts are compliant with necessary safety plans in place. Information from the HMP will further support their efforts in this respect.

Table 4-4 Administrative and Technical Capability		
Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Multi-seasonal public awareness program?	Yes	The City receives these benefits through an interlocal agreement with County DEM, who provides awareness and outreach efforts for the various hazards of concern, both on an educational basis, but also as emergencies are evolving.
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	Yes	This service is something that is coordinated by the Conservation District and WA DNR at various times.
Noxious Weed Eradication Program or other vegetation management	Yes	Spokane County Noxious Weed Control
Fire Safe Councils	Yes	Fire District #4
Chipper program	Yes	This service is something that is provided by the Conservation District at various times, when coordinated as a CWPP strategy.
Defensible space inspections program	Yes	This service is something that is available through WA DNR in a cost-share capacity.
Address signage for property addresses	Yes	This service is something that is provided by the Conservation District at various times, and possibly through the Fire District #4

4.5.4 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 4-5. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 4-5 Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes

Table 4-5 Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	

4.5.5 Community Classifications

The jurisdiction's classifications under various hazard mitigation programs are presented Table 4-6. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community.

The Protection Class (PC) and Building Code Effectiveness Grading Schedule (BEGS) classifications are data which describes a community's fire-defense capabilities, identified by its PC, while the BCEGS data describes its building code effectiveness and enforcement practices. Scores are rated 1-10, with the lower number indicating greater fire protection capabilities.

Table 4-6 Community Classifications		
	Participating (Yes/No)	Date Enrolled
Community Rating System	No	
Building Code Effectiveness Grading Scales (as of May 2025)	Yes Residential – Grade 4 Commercial – Grade 4	11/2/2011
Protection Class	4	11/2/2011
Storm Ready	Yes	
Firewise	No	

4.6 HAZARD RISK AND VULERABILITY RANKING

The internal Planning Team reviewed the hazard list identified within the Base Plan and have identified the potential for storage lagoon failure as an additional hazard that may impact the City of Deer Park.

In addition, the Planning Team also examined Volume 1, Chapter 4 of the Spokane County Multi-Jurisdictional Hazard Mitigation Plan to ensure an understanding of the application of the Calculated Priority Risk Index (CPRI) information which is utilized in determining the hazard impact and vulnerability. The risk assessment process also included a review of critical facilities impacted, potential dollar losses at risk, and any additional information applicable within the hazard profiles for use in identifying each hazard of concern.

Table 4-8 presents the results of the CPRI process. Table 4-8 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.
- Low (Negligible) – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.
- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.
- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.
- Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted for in excess of one month.

Table 4-7.
Calculated Priority Risk Ranking

Hazard	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought		2				2				2						1				4	1.95
Earthquake		2					3			2			4				1				2.45
Flood/Dam			3			2				2			4					2			2.70
Landslides	1				1				1							1		2			1.05
Severe Weather				4		2						4			2				3		3.25
Wildfire			3			2					3		4						3		2.95
Storage Lagoon Failure	1					2				2					2				3		1.65

Table 4-8
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank
1	Severe Weather	3.25	High
2	Wildfire	2.95	High
3	Flood	2.7	Medium
4	Earthquake	2.45	Medium
5	Drought	1.95	Low
6	Storage Lagoon Fail	1.65	Low
7	Landslides	1.05	Extremely Low

4.7 COMMUNITY WILDFIRE PROTECTION PLANNING AND ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted Spokane County in completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk. Fire District 4 serves as the City of Deer Park's fire service agency within the Countywide Strategic Planning Areas. As such, the resulting maps of the analysis completed by DNR which include the City of Deer Park are incorporated within Fire District 4's Annex (Volume 2, Chapter 10).

4.8 MITIGATION GOALS AND OBJECTIVES

The City of Deer Park adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1, Chapter 12, as well as the CWPP specific goals identified in Chapter 10, Section 10.1.5.

4.9 HAZARD MITIGATION ACTION PLAN

The Planning Team for the jurisdiction identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the jurisdiction's assets and hazards of concern. Table 4-9 lists the action items/strategies that make up the jurisdiction's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, who will benefit from the activity, and the type of initiative associated with each item are also identified.

Table 4-9
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE # DP-1 – Continue to support the countywide initiatives identified in this plan.									

Table 4-9
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
New & Existing	All Hazards	1,3,4,8	DEM, Deer Park Council and Planning Dept.	Low	Local	Ongoing	Yes	Public Information, Prevention, Emergency Services	Local, County
INITIATIVE # DP-2 – Actively participate in the plan maintenance strategy identified in this plan.									
New & Existing	All Hazards	1,4,8	DEM, Council, Dept. Heads	Low	Local	Ongoing	Yes	Public Information Preventive Activities	Local, County
INITIATIVE # DP-3 –Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority.									
Existing	All Hazards	2,10,11	Deer Park Council	High	FEMA Grant, Local Funds	Long Term	Yes	Preventive Activities, Structural Projects, Property Protection	Local
INITIATIVE # DP-4 – Integrate the Hazard Mitigation and Community Wildfire Protection Plans into other plans, ordinances or programs to dictate land uses within the jurisdiction.									
New & Existing	All Hazards	2,3,4,5, 11	Deer Park Planning	Low	Local	Short Term	Modified	Preventive Activities, Resource Protection	Local
INITIATIVE # DP-5 – Implement wildfire mitigation recommendations identified in the 2026 Spokane County CWPP.									
New & Existing	Wildfire	1,2,3,4, 5,7,8,9, 10,11,12	Conservation District, Fire District 4, Council	Medium	Local, Fire Grants, FEMA	Short Term and ongoing	Modified	Public Information, Preventive Activities, Property Protection, Natural Resource Protection	Local

Table 4-9
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE # DP-6 – Continue to maintain and/or enhance the City's capability to enforce its codes and regulations that result in decreased risk exposure of existing and new development.									
New & Existing	All Hazards	4,5,11	Deer Park	Low	Local	Ongoing	Yes	Public Information, Preventive Activities, Property Protection	Local
INITIATIVE # DP-7 –Consider, where appropriate, the adoption of higher regulatory standards that will result in an increase in the community resilience of new development.									
New	All Hazards	4,5,11	Deer Park Council and Planning	Low	Local	Long Term	Yes	Preventive Activities, Property Protection, Natural Resource Protection	Local
INITIATIVE # DP-8 – Continue to maintain compliance and good standing under the National Flood Insurance Program. This will be accomplished through the implementation of floodplain management programs that, at a minimum, will meet the minimum requirements of the NFIPO, which include the following: Enforcement of the adopted flood damage prevention ordinance, Participation in floodplain identification and mapping updates, Providing public assistance/information on floodplain requirements and impacts.									
New & Existing	Flood	2,4,5,6, 8,12	Deer Park	Low	Local	On-Going	Yes	Preventive Activities, Property Protection, Natural Resource Protection	Local
INITIATIVE # DP-9 –Consider participation on the NFIP Community Rating System program.									

Table 4-9
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
New & Existing	Flood	2, 4, 5, 6, 8, 12	Deer Park Council	Low	Local	On-Going	Yes	Preventive Activities, Property Protection, Natural Resource Protection	Local

4.10 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 4-10 identifies the prioritization for each initiative.

Table 4-10
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
DP-1	4	Medium	Low	Yes	Yes	Yes	High
DP-2	3	Medium	Low	Yes	Yes	Yes	High
DP-3	3	High	High	Yes	Yes	Yes	Medium
DP-4	5	Medium	Low	Yes	No	Yes	High
DP-5	10	High	Low	Yes	No	Yes	High
DP-6	3	Medium	Low	Yes	No	Yes	High
DP-7	3	Medium	Low	Yes	No	Yes	Medium
DP-8	6	Medium	Low	Yes	No	Yes	High

Table 4-10
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
DP-9	6	Medium	Low	Yes	No	Yes	Medium

a. See Chapter 1 for explanation of priorities.

4.11 STATUS OF PREVIOUS PLAN INITIATIVES

Table 4-11 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 4-11
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	2025 Project Status	Completed	Continual /Ongoing Nature	Removed -/No Longer Relevant /	Carried Over
Support County wide plan initiatives.	Ongoing participation with DEM. We continue to work with the County in all areas of emergency management, including the maintenance and update of the existing HMP and CWPP.	✓	✓		✓
Actively participate in the plan maintenance strategy identified in this plan.	The City has participated in all annual HMP reviews, as well as development of the 2026 HMP and CWPP.	✓	✓		✓
Support retrofit/purchase of structures in hazard prone areas.	The City has continued to monitor areas for this action item. To date, we have not pursued this initiative, but it remains a viable option.		✓		✓

Table 4-11
2025 Status of 2020 Hazard Mitigation Action Plan

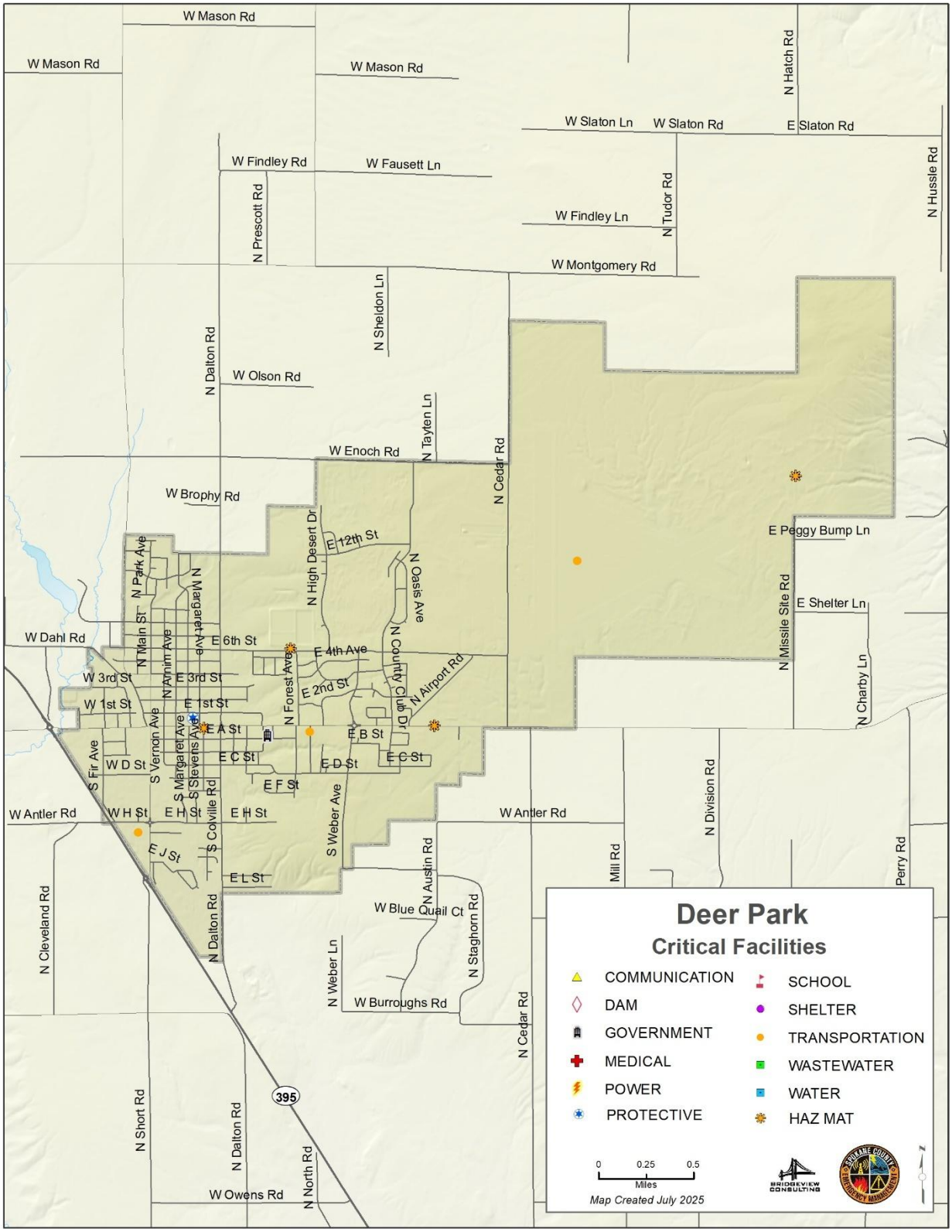
		Current Status			
2020 Mitigation Strategy	2025 Project Status	Completed	Continual /Ongoing Nature	Removed -/No Longer Relevant /	Carried Over
Integrate Hazard Mitigation Plan into other plans, ordinances, or programs to dictate land use within the jurisdiction.	The City continues to utilize information contained and identified within the HMP to enhance its code updates in Building and Planning as warranted.	✓	✓		✓
Implement wildfire strategies.	The City continues to work with the County Conservation District and the County DEM in identifying potential mitigation efforts to help reduce the risk of wildfire throughout the City and county as a whole. This includes review and application of wildfire risk information as codes are reviewed and updated.	✓	✓		✓
Code enforcement enhancements.	The City continues to ensure qualified personnel are on staff by continually support efforts for personnel certification updates and training as applicable to allow for appropriate code enforcement. As deemed appropriate, the City also updates its regulatory authority to meet guidelines and address areas of concern.	✓	✓		✓
Development code updates and standards.	The city has a process in place to ensure code updates in Building and Planning occurs as warranted. Information from the Hazard Mitigation Plan, as well as other sources, are utilized to ensure compliance.	✓			✓

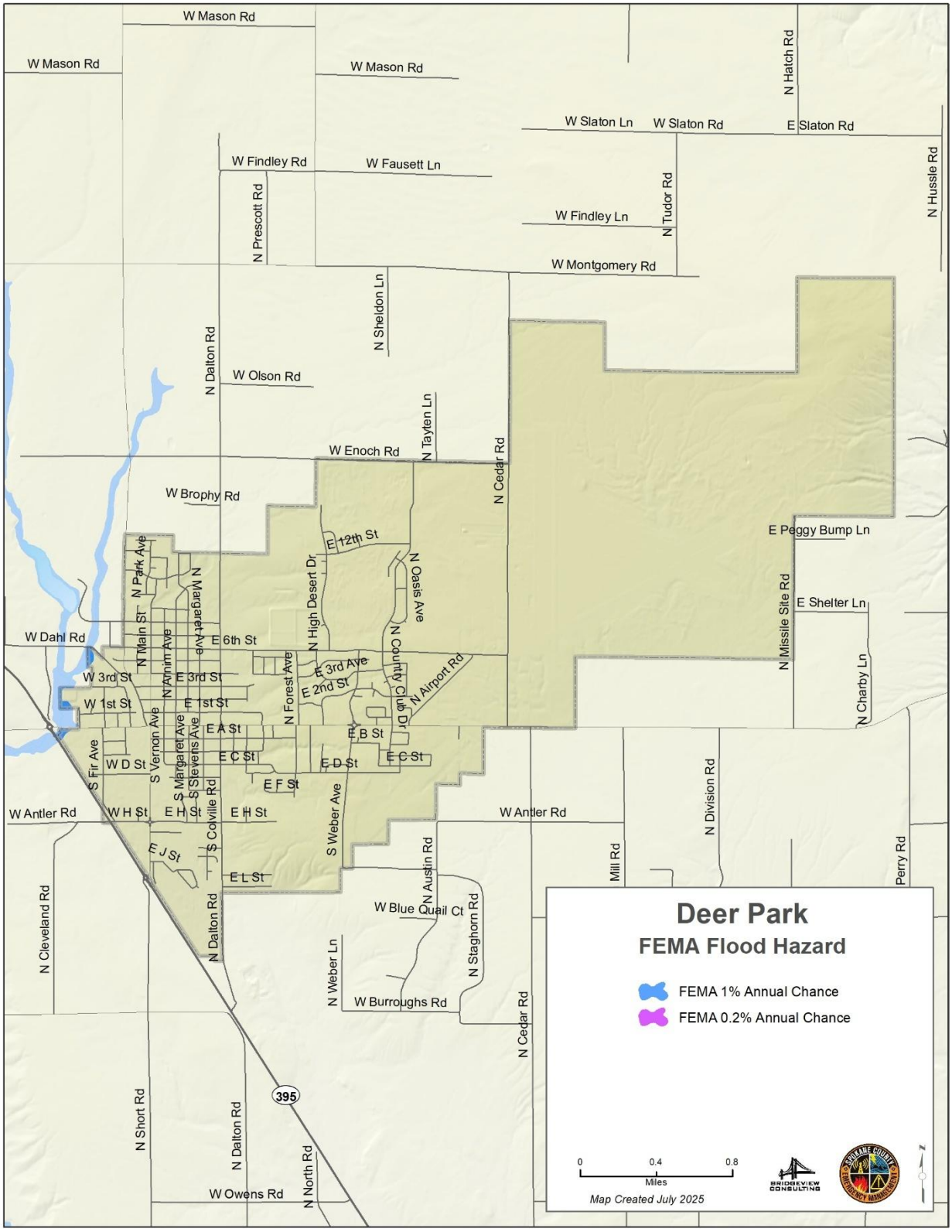
Table 4-11
2025 Status of 2020 Hazard Mitigation Action Plan

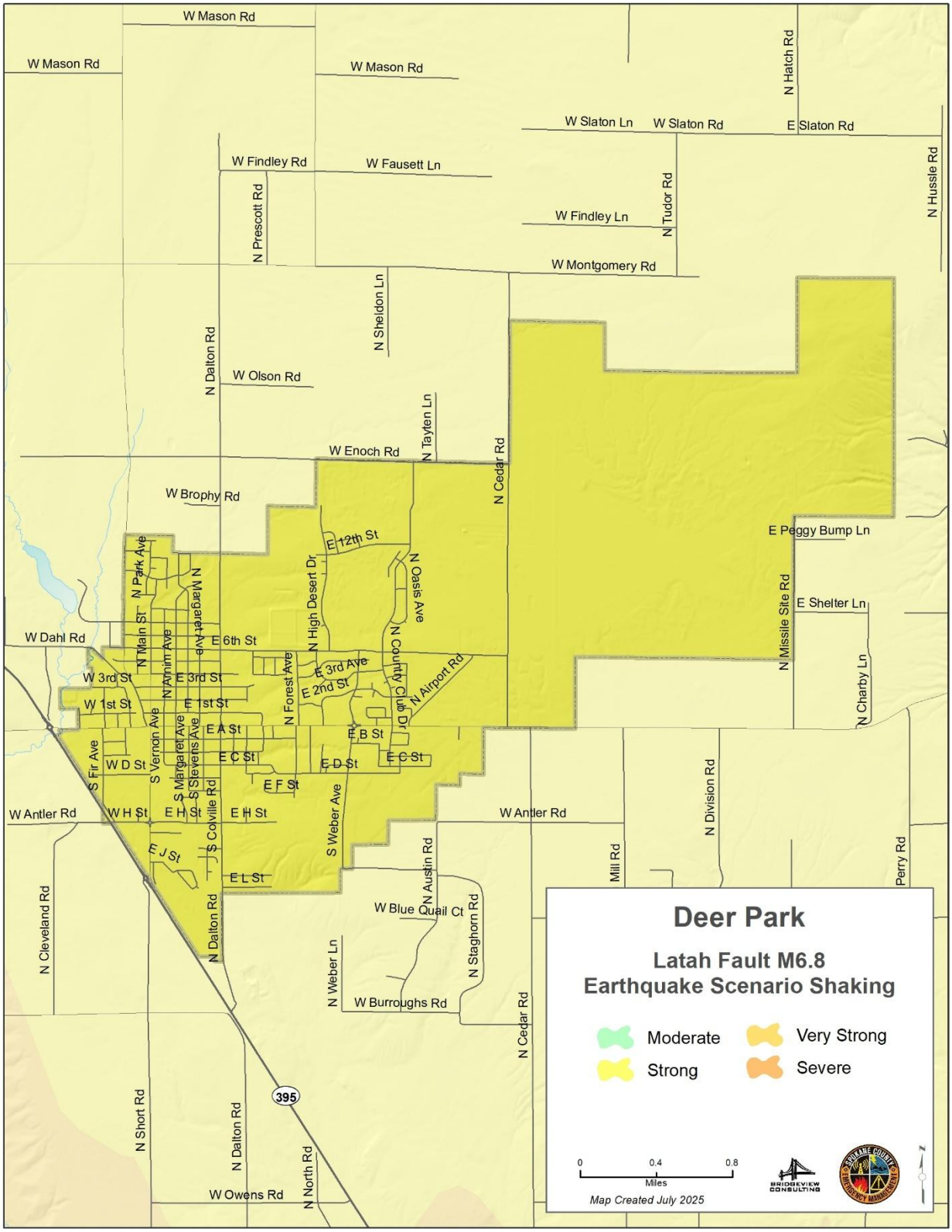
		Current Status			
2020 Mitigation Strategy	2025 Project Status	Completed	Continual /Ongoing Nature	Removed -/No Longer Relevant /	Carried Over
Maintain compliance and participation with National Flood Insurance Program.	Code updates in Building and Planning as warranted to maintain compliance within the NFIP. NFIP data was provided as an outreach effort during the 2026 HMP development.	✓	✓		✓
Participation in NFIP Community Rating System.	Monitoring areas for action. Enrollment within the CRS program remains an option for the City, but at present, the City lacks the capacity to administer a program of this magnitude.				✓

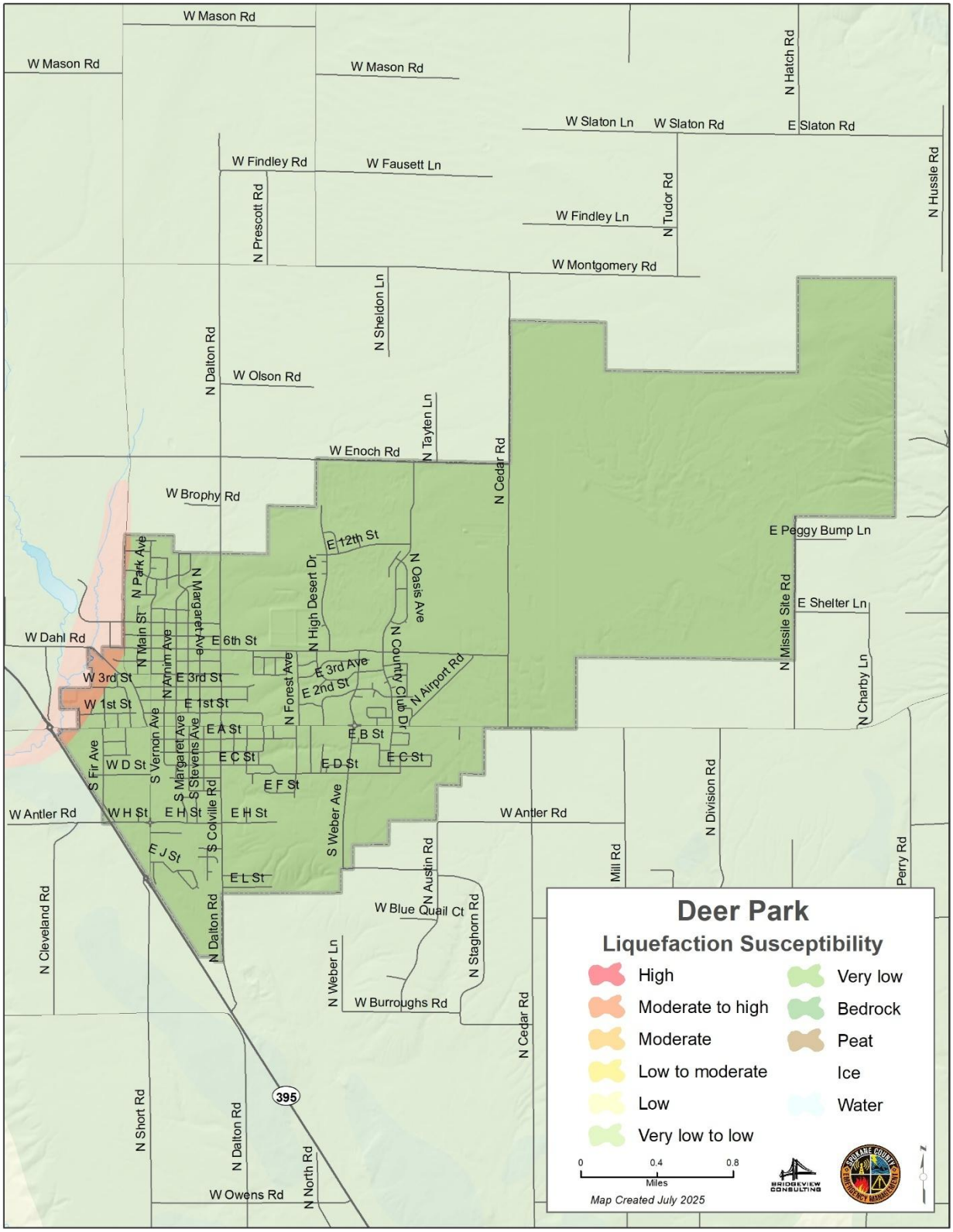
4.12 HAZARD AREA EXTENT AND LOCATION

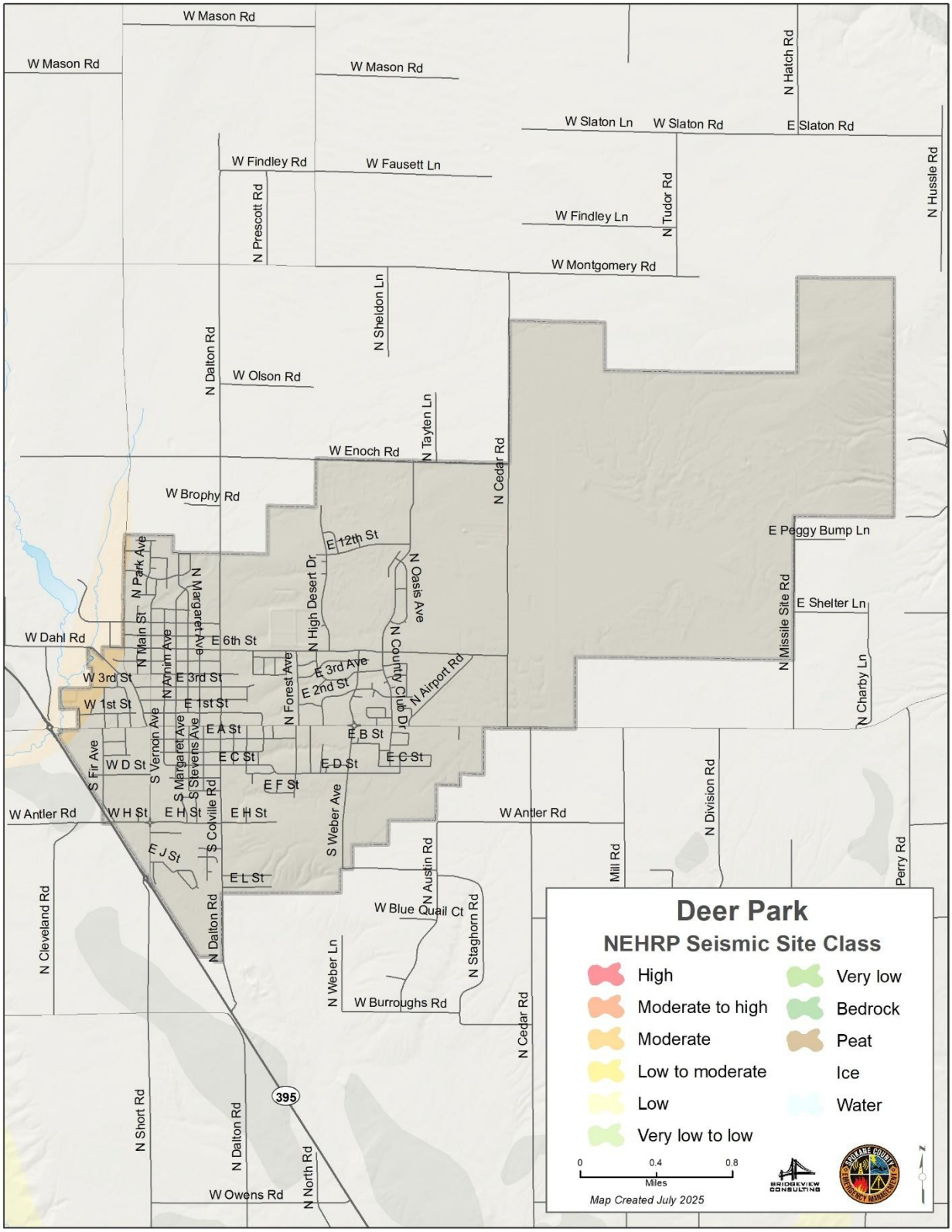
For those hazards which have the potential to impact the City, hazard area extent and location maps are included below. For all hazards for which a geographic boundary is identified, the base plan maintains impact maps. These maps are based on the best available data at the time of the preparation of this plan and are considered to be adequate for planning purposes.

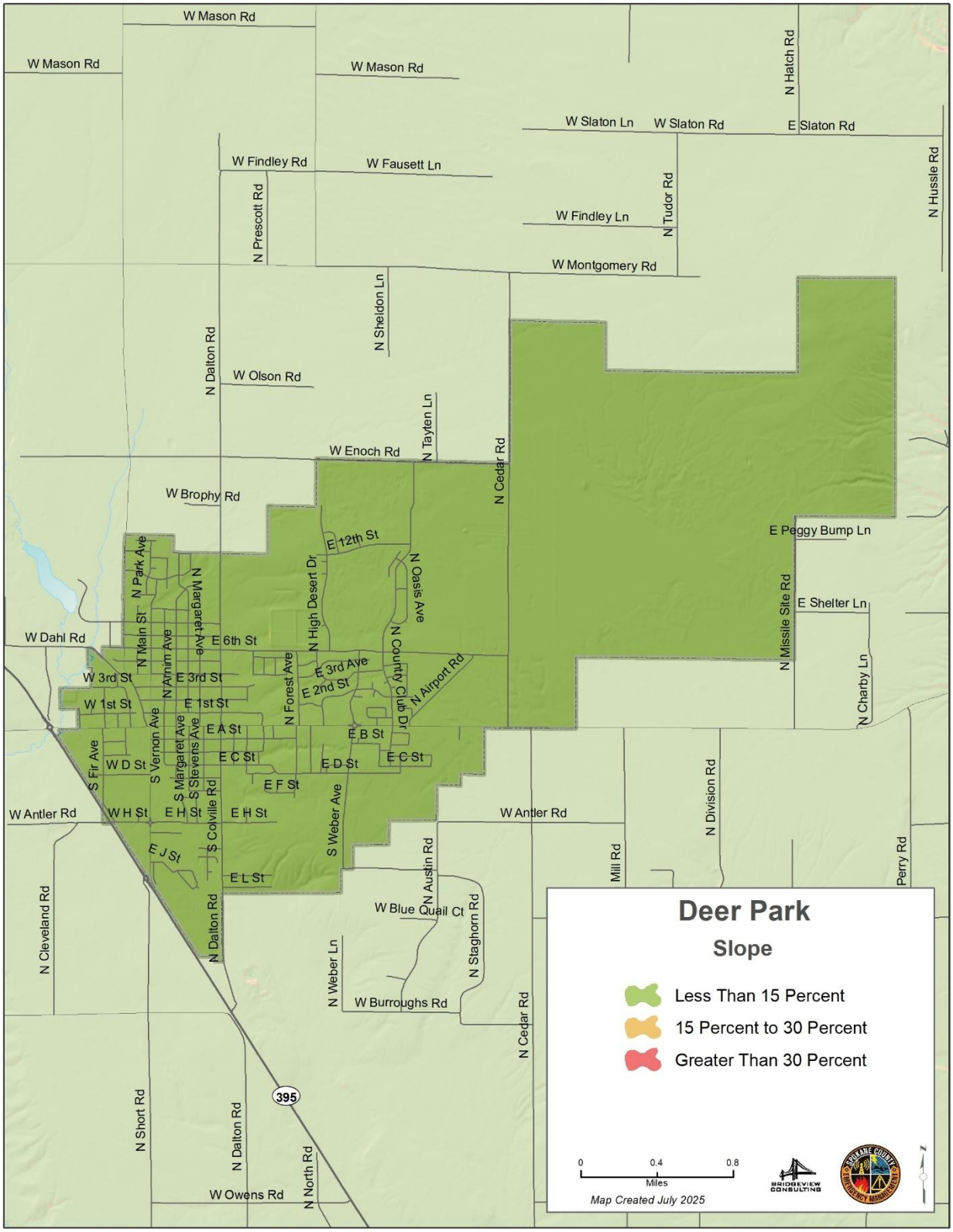

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Deer Park
Critical Facilities
COMMUNICATION
DAM
GOVERNMENT
MEDICAL
POWER
PROTECTIVE
SCHOOL
SHELTER
TRANSPORTATION
WASTEWATER
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Map Created July 2025
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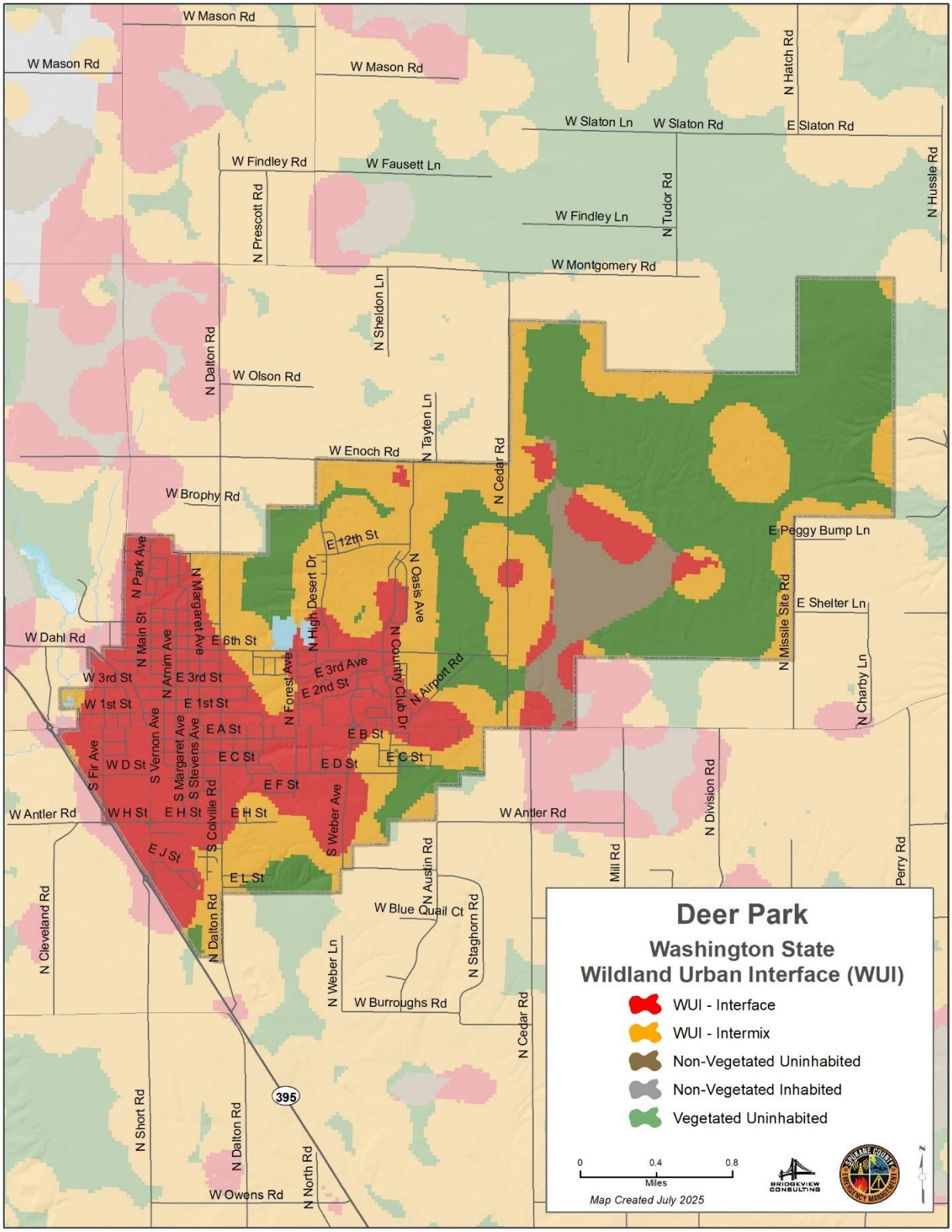

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N Short Rd
N Dalton Rd
N North Rd
W Owens Rd
Deer Park
FEMA Flood Hazard
FEMA 1% Annual Chance
FEMA 0.2% Annual Chance
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Map Created July 2025
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W Mason Rd
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N Dalton Rd
N Weber Ln
W Burroughs Rd
N Cedar Rd
395
N Short Rd
N Dalton Rd
N North Rd
W Owens Rd
Deer Park
Latah Fault M6.8
Earthquake Scenario Shaking
Moderate
Very Strong
Strong
Severe
0
0.4
0.8
Miles
Map Created July 2025
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N


Deer Park
Liquefaction Susceptibility
High
Moderate to high
Moderate
Low to moderate
Low
Very low to low
Very low
Bedrock
Peat
Ice
Water
0
0.4
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Miles
Map Created July 2025
BRIDGEVIEW CONSULTING
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E H St
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Deer Park
NEHRP Seismic Site Class
High
Moderate to high
Moderate
Low to moderate
Low
Very low to low
Very low
Bedrock
Peat
Ice
Water
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Map Created July 2025
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N Dalton Rd
N North Rd
W Owens Rd
Deer Park
Slope
Less Than 15 Percent
15 Percent to 30 Percent
Greater Than 30 Percent
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Miles
Map Created July 2025
BRIDGEVIEW CONSULTING


W Mason Rd
W Slaton Ln
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N Dalton Rd
N North Rd
W Owens Rd
Deer Park
Washington State
Wildland Urban Interface (WUI)
WUI - Interface
WUI - Intermix
Non-Vegetated Uninhabited
Non-Vegetated Inhabited
Vegetated Uninhabited
0
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Miles
Map Created July 2025
BRIDGEVIEW CONSULTING
SPOKANE COUNTY EMERGENCY MANAGEMENT
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CHAPTER 5.
CITY OF LIBERTY LAKE 2026 ANNEX UPDATE

5.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to the City of Liberty Lake, a participating jurisdiction to the Spokane County Hazard Mitigation Plan and Community Wildfire Protection Plan updates. This Annex is not intended to be a standalone document, but rather, appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the City of Liberty Lake. For planning purposes, this Annex provides additional information specific to the jurisdiction, with a focus on providing greater details on the risk assessment and mitigation strategy for this community only. This document serves as an update to the previously completed plan. All relevant data has been carried over and updated with new information as appropriate and as identified within the planning process discussed in Volume 1.

5.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

The City of Liberty Lake followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, the City of Liberty Lake also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Mark McAvoy 22710 East Country Vista Drive Liberty Lake, WA 99019 Telephone: 509-755-6728 Cell: 281-677-1883 mmcavoy@libertylakewa.gov	City Administrator Alternate Point of Contact	Plan Sponsor
Damon Simmons 23127 East Mission Avenue Liberty Lake, WA 99019 Telephone: 509-755-1141 Cell: 509-481-3453 dsimmons@libertylakewapd.gov	Chief of Police Primary Point of Contact	Meeting attendance, capturing of information; review risk ranking; review final annex and County base plan. Present plan to City Council for adoption.

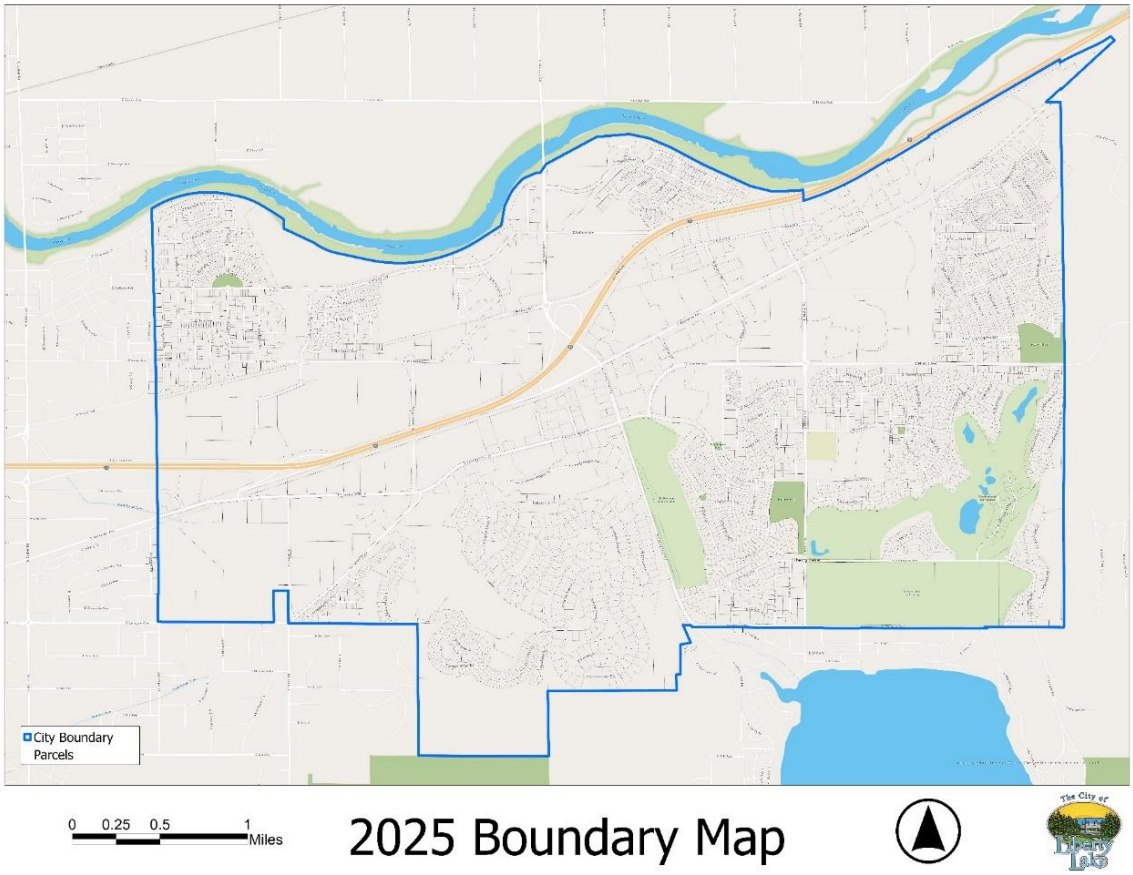
Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Darin Morgan 23127 East Mission Avenue Liberty Lake, WA 99019 Telephone: 509-755-1142 Cell: 509-919-0451 dmorgan@libertylakewapd.gov	Deputy Chief of Police Alternate Point of Contact	Meeting attendance, planning team facilitator; authoring of plan; capturing of information; conduct risk assessment; review final annex and County base plan.
Lisa Key, 22710 East Country Vista Drive Liberty Lake, WA 99019 Telephone: 509-755-6708 Cell: 509-344-9460 lkey@libertylakewa.gov	Community Development Director Plan Coordinator	Provide information as necessary; coordinate plan development; prepare draft plan.
Kyle Dixon 22710 East Country Vista Drive Liberty Lake, WA 99019 Telephone: (509) 755-6702 Cell: (509) 879-4936 kdixon@libertylakewa.gov	Finance Director Alternate Point of Contact	Meeting attendance, collaboration and review of plan
Ben Turner 22710 East Country Vista Drive Liberty Lake, WA 99019 Cell: (509) 613-9901 bturner@libertylakewa.gov	Public Works Planning Team Member	Identify and assess risks to infrastructure; provide asset data; evaluate past damage to facilities/services; recommend projects to reduce hazard vulnerability; prioritize mitigation actions
Jennifer Camp 22710 East Country Vista Drive Liberty Lake, WA 99019 Telephone: (509) 755-6714 Cell:(509)370-5404 jcamp@libertylakewa.gov	Parks & Recreation Director Planning Team Member	Reviewer and collaborator
Jandy Humble 23123 East Mission Ave. Liberty Lake, WA 99019 Telephone: (509) 435-0777 Cell:(801)376-9813 jhumble@libertylakewa.gov	Library Director Planning Team Member	Reviewer and collaborator

5.3 COMMUNITY PROFILE

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

- **Date of Incorporation—**August 31, 2001
- **Current Population—**14,110 as of April1, 2025
- **Population Growth—**3.3% average growth rate per year from 2020-2025
- **Location and Description—**Located in Spokane County along the I-90 corridor 17 miles east of Spokane and two miles west of the Idaho/Washington state line. Liberty Lake is approximately 6.25 square miles. The city borders the City of Spokane Valley on the west, the Spokane River on the north and Liberty Lake on the south.
- **Brief History—**Highlights of Liberty Lake Community History:
  - The City of Liberty Lake was incorporated on August 31st, 2001, with a population of just over 4,000 residents.
  - The City has annexed additional properties in 2002, 2006, 2019, and 2021.
  - The City has very few remaining historical sites and structures. The Domrese barn, located at Rocky Hill Park, is on the Washington State Heritage Barn Registry.
- **Climate—**Liberty Lake, Washington has a moderate climate, characterized by short, warm, dry summers, and cold, snowy, mostly cloudy winters. Over the course of the year, the temperature typically varies from 25ºF to 88ºF. Average low temperature of Liberty Lake in December is 26º, average high temperature in August is 85º. Liberty Lake receives 28 inches of precipitation annually. Average precipitation in December is 4.1", average precipitation in August is .07".
- **Governing Body Format—** Non-Charter Code City with a Strong Mayor and seven City Council Members. The city has an appointed city administrator who is responsible for the day-to-day operations.
- **Development Trends—**The City of Liberty Lake has experienced moderate to high growth rates in both commercial and residential development. Multifamily housing has increased significantly and continues to be an area where developers express interest. As the city matures, planned residential and commercial areas continue to be built out. The city has added a second elementary school, its first middle school, and a comprehensive high school that open in 2021.
- **Economy –** The City of Liberty Lake's economic base consists of retail sales and services; recreational and healthcare services; motor vehicle and recreations vehicle sales and light manufacturing. The largest employment sectors in Liberty Lake are finance, insurance, real estate, rental and leasing (22.5%); manufacturing (22.0%); services – professional, administrative, scientific, managerial, and waste management (13.1%); retail trade (11.5%); and educational services, health care, and social services (9.9%). The largest employers include: Itron, Spokane Teacher's Credit Union, Huntwood Cabinets, F5 Networks, and Central Valley School District.

The jurisdiction boundaries are identified in the map below.



5.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events which have occurred within the County. In the context of the planning region, it was determined that there are additional hazards that are unique to the jurisdiction, including Excessive Temperatures (included within the Severe Weather Profile for all other planning partners), Wildfire Smoke (included within Wildfire), Man-Made disasters, and Public Health emergencies. Table 5-1 lists all past occurrences of natural hazards within the jurisdiction. If available, dollar loss data is also included.

Table 5-1
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Dollar Losses (if known)
Earthquake		04/29/1965	Information Not Available
Earthquake		06/25/2001	Information Not Available
Earthquake		11/11/2001	Information Not Available

Table 5-1
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Dollar Losses (if known)
Winter Storm	FEMA 1825 DR	12/08-01/09	$12,932.61
Winter Storm		01/15/2016	Information Not Available
Winter Storm		04/21/2017	Information Not Available
Biological	FEMA 3427 EM	03/13/2020	Information Not Available
Excessive Heat		09/01/2021	Information Not Available
Winter Storm		01/07/2022	Information Not Available

5.5 CAPABILITY ASSESSMENT

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: National Flood Insurance Information; regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation, and classifications under various community programs.

5.5.1 National Flood Insurance Information

Information on the community's National Flood Insurance Program (NFIP) compliance is presented in Table 5-2. This identifies the current status of the jurisdiction's involvement with the NFIP.

Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: 0
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

Table 5-2 National Flood Insurance Compliance	
What department is responsible for floodplain management in your community?	Community Development
Who is your community's floodplain administrator? (department/position)	Community Development/ Director
Do you have any certified floodplain managers on staff in your community?	No
What is the date of adoption of your flood damage prevention ordinance?	November 19, 2019
When was the most recent Community Assistance Visit or Community Assistance Contact?	Unknown
To the best of your knowledge, does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your community? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your community participate in the Community Rating System (CRS)? If so, is your community seeking to improve its CRS Classification? If not, is your community interested in joining the CRS program?	Yes

5.5.2 Regulatory Capability

The assessment of the jurisdiction's legal and regulatory capabilities is presented in Table 5-3. This includes planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are currently in place.

Table 5-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements				
Building Code Version Year	Yes	No	Yes	IBC (2021)
Zoning Ordinance	Yes	No	No	

Table 5-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Subdivision Ordinance	Yes	No	Yes	
Floodplain Ordinance	Yes	No	No	
Stormwater Management	Yes	No	No	
Post Disaster Recovery	No	No	No	
Real Estate Disclosure	No	Yes	Yes	RCW 64.06
Growth Management	No	Yes	Yes	
Site Plan Review	Yes	No	Yes	Requirement of IBC
Public Health and Safety	Yes	No	No	
Coastal Zone Management	N/A			
Climate Change Adaptation	Yes	No	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire, etc.)	Yes	Yes	Yes	
Environmental Protection				
Planning Documents				
General or Comprehensive Plan	*Is the plan equipped to provide linkage to this mitigation plan?* Yes			
Floodplain or Basin Plan	No	No	No	
Stormwater Plan	Yes	No	Yes	
Capital Improvement Plan	Yes	No	Yes	
Habitat Conservation Plan	No	No	No	
Economic Development Plan	No	No	No	
Shoreline Management Plan	Yes	Yes	Yes	
Community Wildfire Protection Plan	No	No	No	
Transportation Plan	Yes	Yes	Yes	
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	Yes	Yes	
Threat and Hazard Identification and Risk Assessment	No	Yes	No	
Terrorism Plan	No	No	No	

Table 5-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Post-Disaster Recovery Plan	No	No	No	
Continuity of Operations Plan	No	No	No	
Public Health Plans	No	No	Yes	
Boards and Commission				
Planning Commission	Yes	No	Yes	
Mitigation Planning Committee	Yes	Yes	No	Served as a member of the HMP committee for the 2020 update, as well as the current 2025 update cycle; will remain active during the lifecycle of this plan as identified in the maintenance strategy of the plan.
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems, chipping, etc.)	Yes	No	No	
Mutual Aid Agreements / Memorandums of Understanding	Yes	No	No	
Other				

5.5.3 Administrative and Technical Capabilities

The assessment of the jurisdiction's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 5-4. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

Table 5-4
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Community Development/Director

Table 5-4
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Professionals trained in building or infrastructure construction practices (building officials, fire inspectors, etc.)	Yes	Community Development/Building Inspectors/Plans Examiners
Engineers specializing in construction practices?	Yes	Community Development/City Engineer
Planners or engineers with an understanding of natural hazards	No	Community Development/ City Engineer /Director
Staff with training in benefit/cost analysis	Yes	Executive/City Administrator Finance/Director Community Development/Director
Surveyors	No	
Personnel skilled or trained in GIS applications	Yes	Community Development/Permit Technician
Personnel skilled or trained in Hazus use	No	
Scientist familiar with natural hazards in local area	No	
Emergency Manager	Yes	Police Department/Chief of Police
Grant writers	Yes	Community Development/Director/City Engineer
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?)	Yes	SREC/Partner Agency
Hazard data and information available to public	Yes	
Maintain Elevation Certificates	Yes	PEBS/PEBS Director
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness?	Yes	
Local citizen groups or non-profit organizations focused on environmental protection?	No	
Organization focused on individuals with access and functional needs populations	No	

Table 5-4 Administrative and Technical Capability		
Staff/Personnel Resources	**Available (Yes/No)**	**Department/Agency/Position**
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	
Natural disaster or safety related school programs?	No	
Public-private partnership initiatives addressing disaster-related issues?	No	
Multi-seasonal public awareness program?	Yes	
Other		
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	Yes	Community Development/Code Enforcement; Public works/Urban Forester
Noxious Weed Eradication Program or other vegetation management	Yes	Parks and Maintenance/Parks Superintendent; Community Development/Code Enforcement Specialist; Public Works/Urban Forester
Fire Safe Councils	No	No
Chipper program	Yes	
Defensible space inspections program	Yes	
Creek, stream, culvert or storm drain maintenance or cleaning program	Yes	Stormwater/Streets Crew
Stream restoration program	No	
Erosion or sediment control program	Yes	Community Development/City Engineer & Code Enforcement
Address signage for property addresses	Yes	Community Development/ Director
Other		

5.5.4 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 5-5. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 5-5 Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	FEMA Grant Funding

5.5.5 Community Classifications

The jurisdiction's classifications under various hazard mitigation programs are presented in Table 5-6. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community.

Table 5-6. Community Classifications		
	Participating (Yes/No)	Date Enrolled
Community Rating System	Yes	
Building Code Effectiveness Grading Schedule (Commercial and Dwelling	4	
Protection Class	2	
Storm Ready	Yes	2003
Firewise	No	

5.6 HAZARD RISK AND VULERABILITY RANKING

The City's Planning Team reviewed the hazard list identified within the Base Plan and have identified the hazards that affect the City of Liberty Lake. The City of Liberty Lake did identify

additional hazards, including Excessive Temperatures (included within the Severe Weather Profile for all other planning partners), Wildfire Smoke (included within Wildfire), Man-Made disasters, and Public Health.

In addition, the Planning Team also examined Volume 1, Chapter 4 of the Spokane County Multi-Jurisdictional Hazard Mitigation Plan to ensure an understanding of the application of the Calculated Priority Risk Index (CPRI) information which is utilized in determining the hazard impact and vulnerability. The risk assessment process also included a review of critical facilities impacted, potential dollar losses at risk, and any additional information applicable within the hazard profiles for use in identifying each hazard of concern.

Error! Reference source not found. presents the results of the CPRI process. Table 5-8 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.
- Low (Negligible) – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.
- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.
- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.
- Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted for more than one month.

Table 5-7.
Calculated Priority Risk Ranking

Hazard	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought			3			2				2						1				4	2.35
Earthquake			3			2				2			4				1				2.65
Flood/Dam	1				1				1						2			2			1.20
Landslides	1					2				2			4					2			1.90
Severe Weather				4			3					4			2			2			3.40
Wildfire				4			3				3		4						3		3.55
Wildfire Smoke				4		2						4			2				3		3.25
Excessive Temperature				4		2						4			2				3		3.25
Public Health Event		2				2				2					2			2			2.00
Man-made Disaster		2					3			2			4					2			2.50

Table 5-8.
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank
1	Wildfire	3.55	High
2	Severe Weather	3.4	High

Table 5-8.
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank
3	Wildfire Smoke[1]	3.25	High
4	Excessive Temperatures[1]	3.25	High
5	Earthquake	2.65	Medium
6	Man-Made Disaster[2]	2.5	Medium
7	Drought[1]	2.35	Medium
8	Public Health Event[3]	2.0	Medium
9	Landslide	1.9	Medium
10	Flood	1.2	Low

5.7 COMMUNITY WILDFIRE PROTECTION PLANNING AND ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted Spokane County in completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk. Spokane Valley Fire Department and Fire District 8 serve as the City of Liberty Lake's fire service agency within the Countywide Strategic Planning Areas. As such, the resulting maps of the analysis completed by DNR which include the City of Liberty Lake are incorporated within Spokane Valley Fire Department's and Fire District 8's Annex documents (Volume 2, Chapters 12 and 15).

5.8 MITIGATION GOALS AND OBJECTIVES

The City of Liberty Lake adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1, Chapter 12, as well as the CWPP specific goals identified in Chapter 10, Section 10.1.5.

[1] These hazard types were specifically added based upon Liberty Lake's Climate Vulnerability & Risk Assessment Report and are detailed within that document, available for download on the City's website. While technically subsets of wildfire and sever weather, these hazards are distinct risks, requiring specific mitigation strategies and response plans.

[2] Man-made disasters encompass any harmful event caused by human action or inaction, which can be accidental (like industrial accidents or chemical spills) or deliberate (like terrorism or cyberattacks).

[3] Public heath event would include any event that represents an immediate threat to human health and requires prompt action, i.e. the implementation of control and/or mitigation measures to protect the health of the public.

5.9 HAZARD MITIGATION ACTION PLAN

The Planning Team for the jurisdiction identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the jurisdiction's assets and hazards of concern. Table 5-9 lists the action items/strategies that make up the jurisdiction's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, who will benefit from the activity, and the type of initiative associated with each item are also identified.

Table 5-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE #1 - Develop a Continuity of Operations Plan for the City of Liberty Lake.									
Existing	All	1,3,8,9	Executive Team	Low	Local	Short-Term	No	Protection, Planning / Mitigation, Preventive	Local
INITIATIVE #2 - Develop a Comprehensive Emergency Management Plan for the City of Liberty Lake									
Existing	All	1,2,3,4,8, 9	Executive Team	Medium	Local	Long-Term	No	Protection, Planning / Mitigation	Local
INITIATIVE # 3 - Develop a Transportation Resiliency Plan									
Existing	All	2,4,5,8,9	Community Development	Low	Climate Planning Grant	Short-Term	No	Protection, Planning / Mitigation	Local
INITIATIVE #4 - Update the City of Liberty Lake ratings under the Building Code Effectiveness Grading Schedule administered by the Washington Survey and Rating Bureau.									
Existing	SW,E,W, L,D	2,4,12	Community Development	Low	Local	Short-Term	Yes	Preventive Activities	Local
INITIATIVE #5 – Complete Liberty Lake Police Department Accreditation									
Existing	All	1,2,8,9,	LLPD	Medium	Local	Short-Term	Yes	Protection, Planning / Mitigation, Preventive	Local
INITIATIVE #6- Place vulnerable utilities underground that are vulnerable to severe weather.									

Table 5-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
Existing	SW	1,2,3,10	Community Development	High	General Fund, Utility	Long-Term	Yes	Preventive Activities	Local, County
INITIATIVE #7- Create fire resilient landscapes, manage tree canopy and forests to decrease risk from wildfires, and trim/remove hazardous trees that can cause damage to life or property during storms.									
Existing	SW, W	2,4,5,7	Public Works	Medium	General Fund, Utility	Short-Term	Yes	Preventive Activities	Local, County
INITIATIVE #8 - Support countywide initiatives that promote education of the public regarding natural hazards within the region.									
Existing	SW,E,W, L,D	1,3,4,8, 12	City Admin	Low	Local	Short-Term	Yes	Public Information	Local, County, Region
INITIATIVE #9 - Continue to coordinate with Spokane County DEM in disaster response and preparedness to include updates to CEMP, hazard mitigation plan, training, exercises and other support.									
Existing	WE,E,W, L,D	1,3,4,8,9	City Admin	Low	Local	Short/Long Term	Yes	Preventative Activities	Local, County, Region
INITIATIVE #10- Actively participates in the plan maintenance strategy identified in this plan.									
Existing	WE,E,W, L,D	1,4,8	DEM, City of Liberty Lake	Low	Local	Short Term	Yes	Preventative Activities	Local, County, Region
INITIATIVE #11 - Integrate the hazard mitigation plan into other plans, ordinances or programs to dictate land uses within the jurisdiction.									
Existing	WE,E,W, L,D	2,3,4,5,9, 11,12	Community Development , City Admin	Low	Local	Short Term	Yes	Preventative Activities	Local, County
INITIATIVE #12- Implement wildfire mitigation recommendations identified in the Spokane County CWPP and Liberty Lake Comprehensive Plan Climate Element and participate in the Spokane County Wildfire Mitigation Coalition.									
Existing	W	1,2,3,4,5, 7,8,9,10, 11,12	Spokane County Fire/Conservation Districts/ SVFD	Medium	Local, FEMA/Fire Grants	Short Term	Yes	Preventative Activities	Local, County, Region
INITIATIVE #13 - Continue to maintain/enhance the City's capability to enforce its codes and regulations that result in decreased risk exposure of new development.									
Existing	WE,E,W, L,D	2,4,5,11	Community Development	Low	Local	Short Term	Yes	Preventative Activities	Local, County

Table 5-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE #14 - Consider the adoption of higher regulatory standards that will result in an increase in the community resilience of new development.									
Existing	WE,E,W, L,D	4,5,11, 12	Community Development	Low	Local	Long Term	Yes	Preventative Activities	Local, County
INITIATIVE #15 - Continue to support the countywide initiatives identified in this plan.									
Existing	WE,E,W, L,F,D	1,3,4,8	DEM	Low	Local	Short/Long Term	Yes	Preventative Activities	Local, County

5.10 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 5-10 identifies the prioritization for each initiative.

Table 5-10.
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
LL-1	4	High	Low	Yes	Unknown	Yes	High
LL-2	6	High	Medium	Yes	Unknown	Yes	High
LL-3	5	High	Medium	Yes	Yes	Yes	High
LL-4	3	Medium	Low	Yes	No	No	Medium
LL-5	4	High	Medium	Yes	Yes	Yes	High
LL-6	4	High	High	Yes	Unknown	No	Medium
LL-7	4	High	Low	Yes	No	Yes	High
LL-8	5	Low	Low	Yes	Unknown	Yes	Medium
LL-9	3	High	Low	Yes	No	Yes	High
LL-10	7	Medium	Low	Yes	No	Yes	Medium

Table 5-10.
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
LL-11	11	Medium	Low	Yes	No	Yes	High
LL-12	12	Medium	Low	Yes	No	Yes	High
LL-13	4	Medium	Low	Yes	No	No	Medium
LL-14	4	Medium	Low	Yes	No	Yes	Medium
LL-15	4	Medium	Low	Yes	No	Yes	Medium

a. See Chapter 1 for explanation of priorities.

5.11 STATUS OF PREVIOUS PLAN INITIATIVES

Table 5-11 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 5-11.
2026 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	**2026 Project Status**	**Completed**	**Continual /Ongoing Nature**	**Removed -/No Longer Relevant / No Action**	**Carried Over**
Jurisdiction application and acceptance into NFIP.	Completed.	✓			
Re-establish recognitions for the City of Liberty Lake under the Building Code Effectiveness Grading Schedule administered by the Washington Survey and Rating Bureau.	Completed in 2014; proposed to be updated in next planning period.				✓
Re-establish recognitions for the City of Liberty Lake under the Building Code Effectiveness Grading Schedule administered by the Washington Survey and Rating Bureau.	Bridge owned by WSDOT. Not within the City's jurisdiction.			✓	

Table 5-11.
2026 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	**2026 Project Status**	**Completed**	**Continual /Ongoing Nature**	**Removed -/No Longer Relevant / No Action**	**Carried Over**
Place vulnerable utilities underground that are vulnerable to severe weather	In the last planning period, Liberty Lake undergrounded overhead utilities at Trailhead golf course.		✓		
Trimming/removal of hazardous trees that can cause damage to life or property during storms.	City has hired a full-time urban forester to enhance these activities.		✓		
Support countywide initiatives that promote education of the public of natural hazards within the region.	The City of Liberty Lake and its planning partners continue to have an extensive outreach program. Several annual safety fairs have occurred; council presentations of various types are used by all planning partners to provide information on hazards and associated efforts to enhance resiliency of Spokane County.		✓		
Continue to coordinate with Spokane County DEM in disaster response and preparedness to include updates to CEMP, hazard mitigation plan, training, exercises and other support.	Ongoing.		✓		
Actively participates in the plan maintenance strategy identified in this plan.	Ongoing		✓		
Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority.	No known, applicable structures.			✓	
Integrate the hazard mitigation plan into other plans, ordinances or programs to dictate land uses within the jurisdiction.	Ongoing effort, to include incorporation in 2026 Comprehensive Plan.		✓		
Implement wildfire mitigation recommendations identified in the Spokane County CWPP.	Ongoing.		✓		

Table 5-11.
2026 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	**2026 Project Status**	**Completed**	**Continual /Ongoing Nature**	**Removed -/No Longer Relevant / No Action**	**Carried Over**
Continue to maintain/enhance the City's capability to enforce its codes and regulations that result in decreased risk exposure of new development.	Ongoing.		✓		
Consider the adoption of higher regulatory standards that will result in an increase in the community resilience of new development.	Ongoing.		✓		
Continue to support the countywide initiatives identified in this plan.	Ongoing.		✓		

5.12 ADDITIONAL COMMENTS

Since completion of the 2020 plan, the City of Liberty Lake commenced participation in the National Flood Insurance Program, effective February 18, 2020. The Community Development Department has a designated NFIP administrator. The City of Liberty Lake is committed to providing resources to remain in compliance with the NFIP. The City of Liberty Lake is currently participating in FEMA's RiskMAP Flood Study, to update floodplain maps in the region. Completion of those maps is expected to occur after completion of this Hazard Mitigation Plan update.

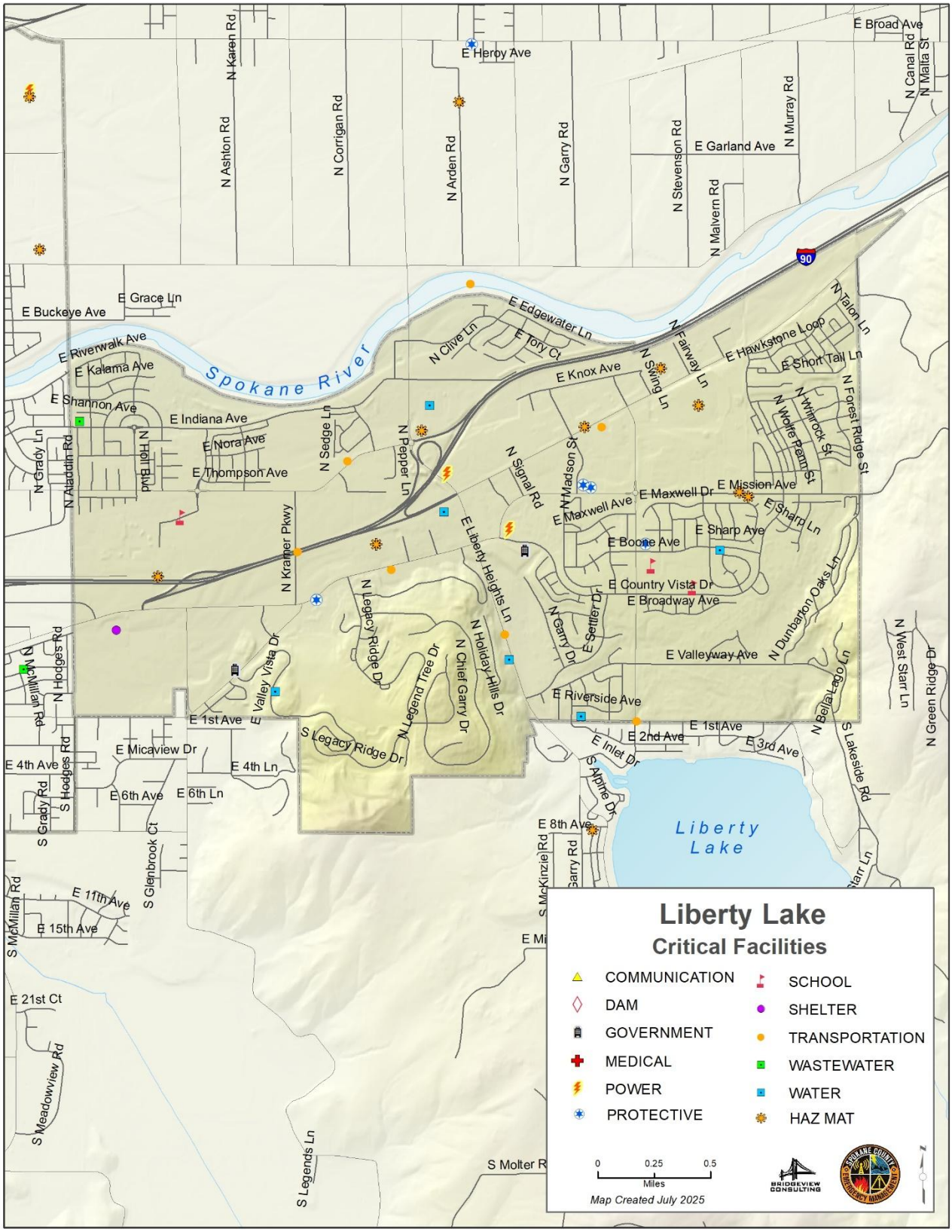
Further, in 2024, the City of Liberty Lake completed a Stormwater Master Plan, to further enhance the City's resiliency related to flooding, as well drought.

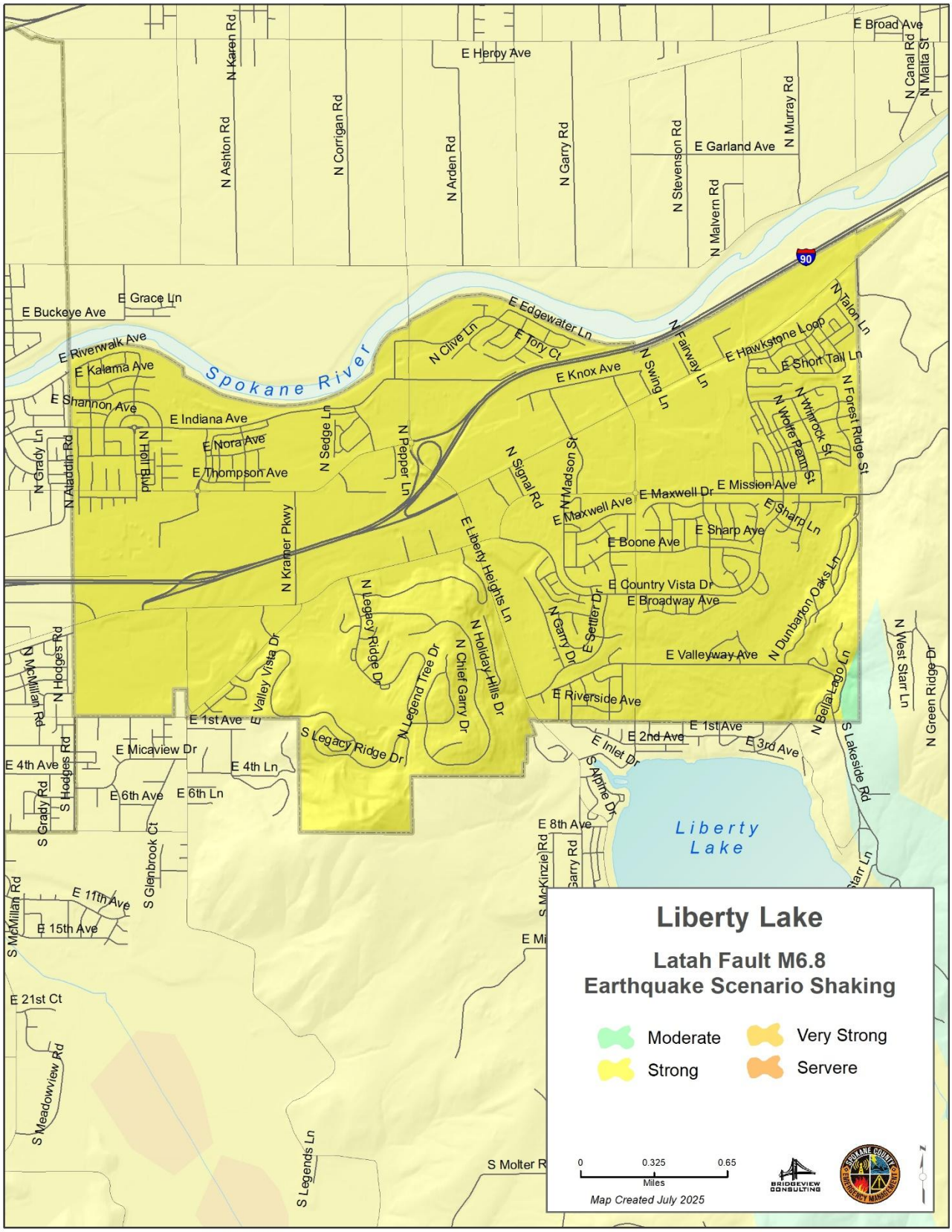
The City of Liberty Lake is also in the process of completing the Climate Element of its 2026 Comprehensive Plan Periodic Update. A copy of the Liberty Lake's Climate Vulnerability and Risk Assessment Report is attached to this annex as available on the City's website at: https://libertylakewa.gov/DocumentCenter/View/9396/Climate-Vulnerability-and-Risk-Assessment-Report?bidId=

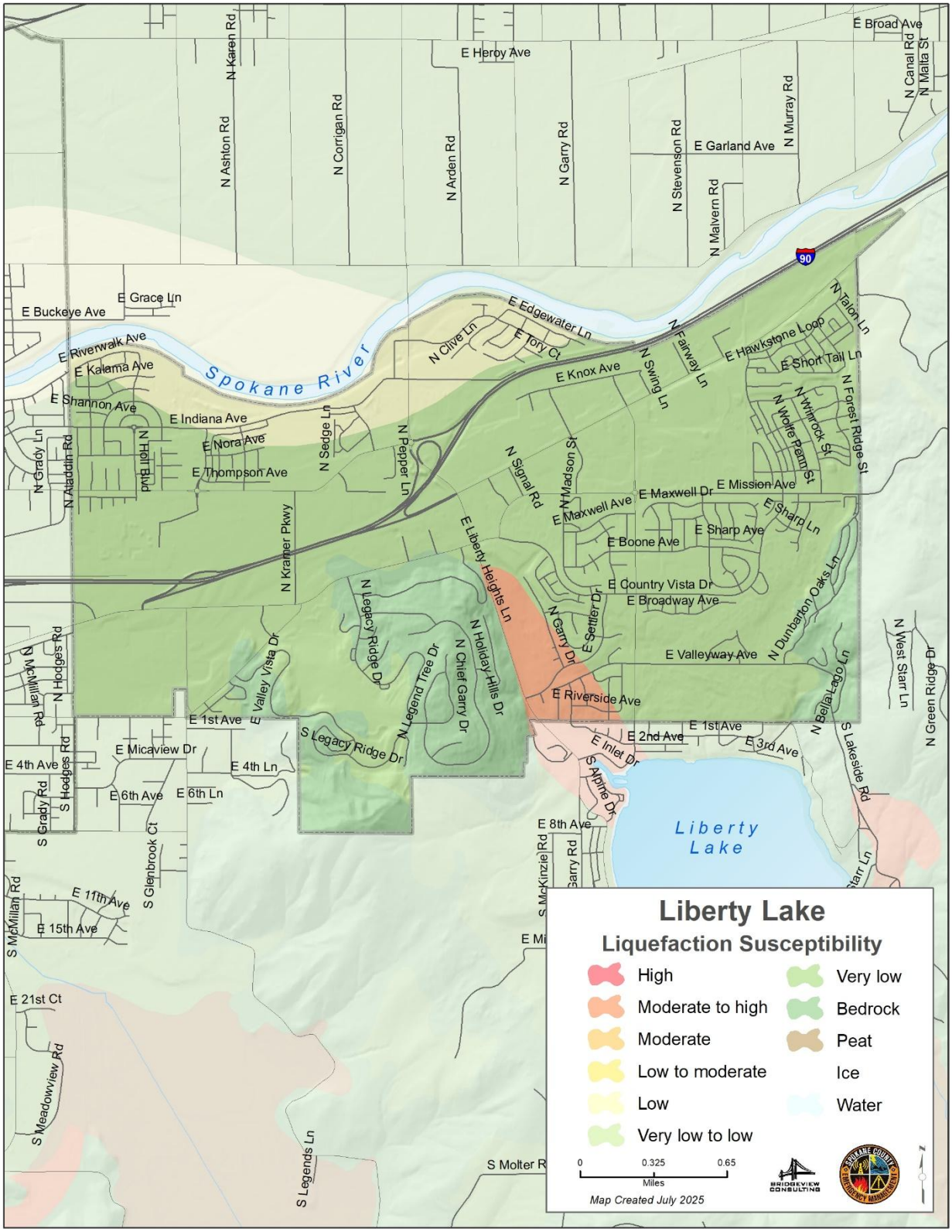
Finally, Liberty Lake Police Department is actively exploring the feasibility of launching a Community Emergency Response Team (CERT) in Liberty Lake.

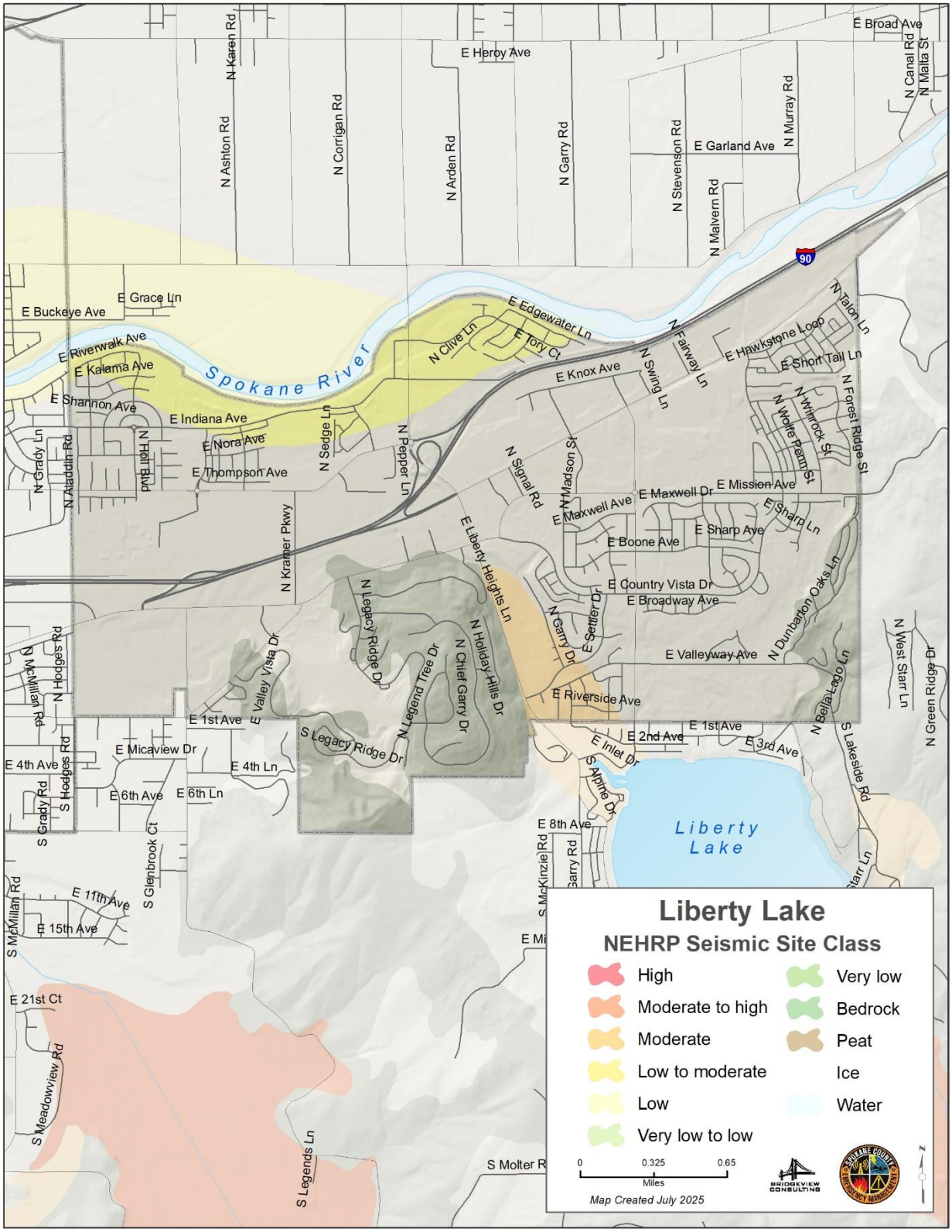
5.13 HAZARD AREA EXTENT AND LOCATION

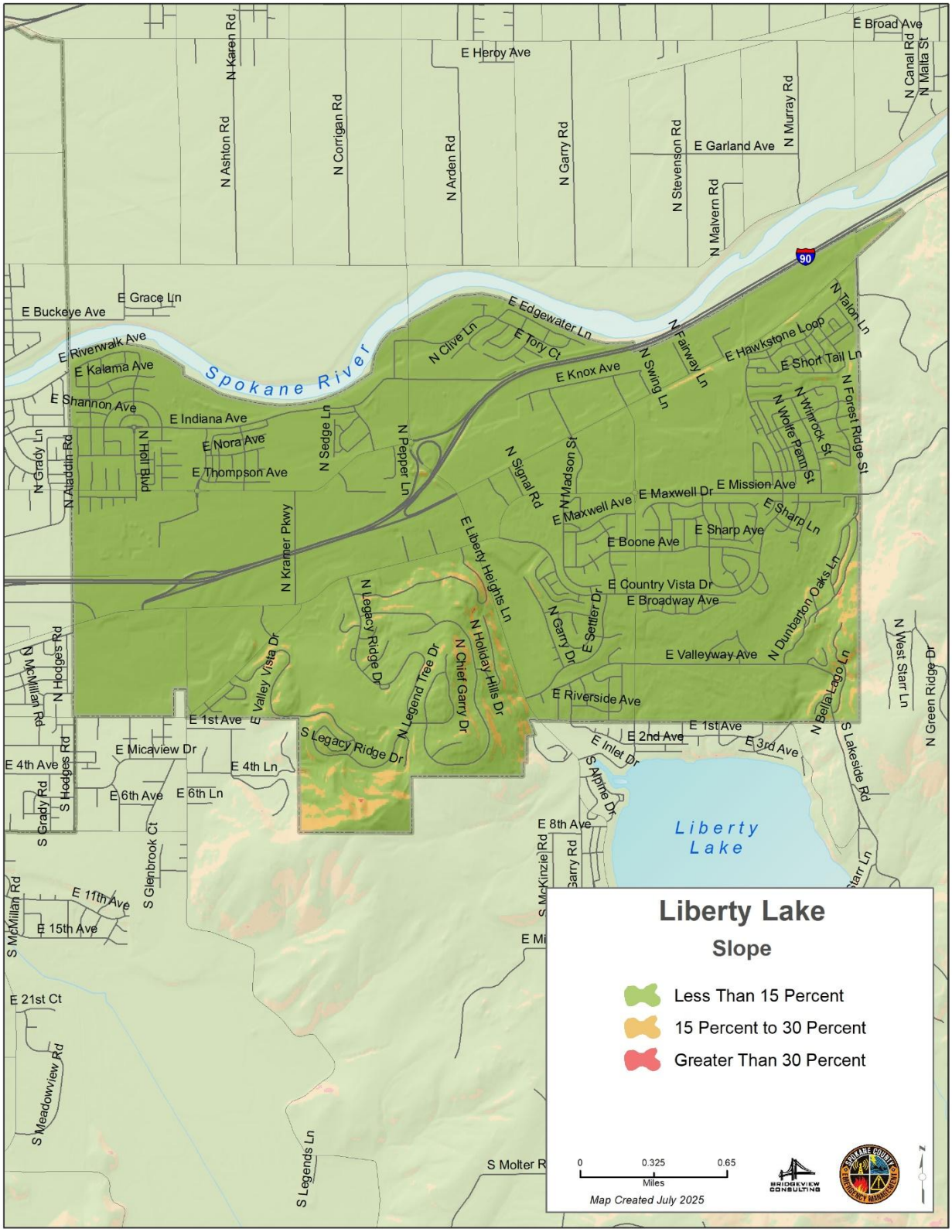
For those hazards which have the potential to impact the City, hazard area extent and location maps are included below. For all hazards for which a geographic boundary is identified, the base plan maintains impact maps. These maps are based on the best available data at the time of the preparation of this plan and are considered to be adequate for planning purposes.


Liberty Lake
Critical Facilities
COMMUNICATION
DAM
GOVERNMENT
MEDICAL
POWER
PROTECTIVE
SCHOOL
SHELTER
TRANSPORTATION
WASTEWATER
WATER
HAZ MAT
0 0.25 0.5
Miles
Map Created July 2025
Spokane River
Liberty Lake
E Broad Ave
E Heroy Ave
N Karen Rd
N Ashton Rd
N Corrigan Rd
N Arden Rd
N Garry Rd
N Stevenson Rd
N Malvern Rd
N Murray Rd
E Garland Ave
N Canal Rd
N Malta St
90
E Buckeye Ave
E Grace Ln
E Riverwalk Ave
E Kalama Ave
E Shannon Ave
E Indiana Ave
E Nora Ave
E Thompson Ave
N Grady Ln
N Aladdin Rd
N Holt Blvd
N Sedge Ln
N Pepper Ln
N Clive Ln
E Edgewater Ln
E Tory Ct
E Knox Ave
N Swing Ln
N Fairway Ln
E Hawkstone Loop
N Talon Ln
E Short Tail Ln
N Wimrock St
N Wolfe Penn St
N Forest Ridge St
N Signal Rd
N Madson St
E Maxwell Ave
E Maxwell Dr
E Mission Ave
E Sharp Ln
E Sharp Ave
E Boone Ave
E Country Vista Dr
E Broadway Ave
N Dunbarton Oaks Ln
N Kramer Pkwy
E Liberty Heights Ln
N Gary Dr
E Setter Dr
E Valley Vista Dr
N Legacy Ridge Dr
N Legend Tree Dr
N Holiday Hills Dr
N Chief Garry Dr
E Valleyway Ave
N Bella Lago Ln
N West Starr Ln
N Green Ridge Dr
E Riverside Ave
E 1st Ave
E 2nd Ave
E 3rd Ave
E Inlet Dr
S Alpine Dr
S Lakeside Rd
S Legacy Ridge Dr
N McMillan Rd
N Hodges Rd
E Micaview Dr
E 4th Ave
E 4th Ln
E 6th Ave
E 6th Ln
S Hodges Rd
S Grady Rd
S Glenbrook Ct
E 8th Ave
S McKinzie Rd
S Barry Rd
S McMillan Rd
E 11th Ave
E 15th Ave
E 21st Ct
S Meadowview Rd
S Legends Ln
S Molter Rd

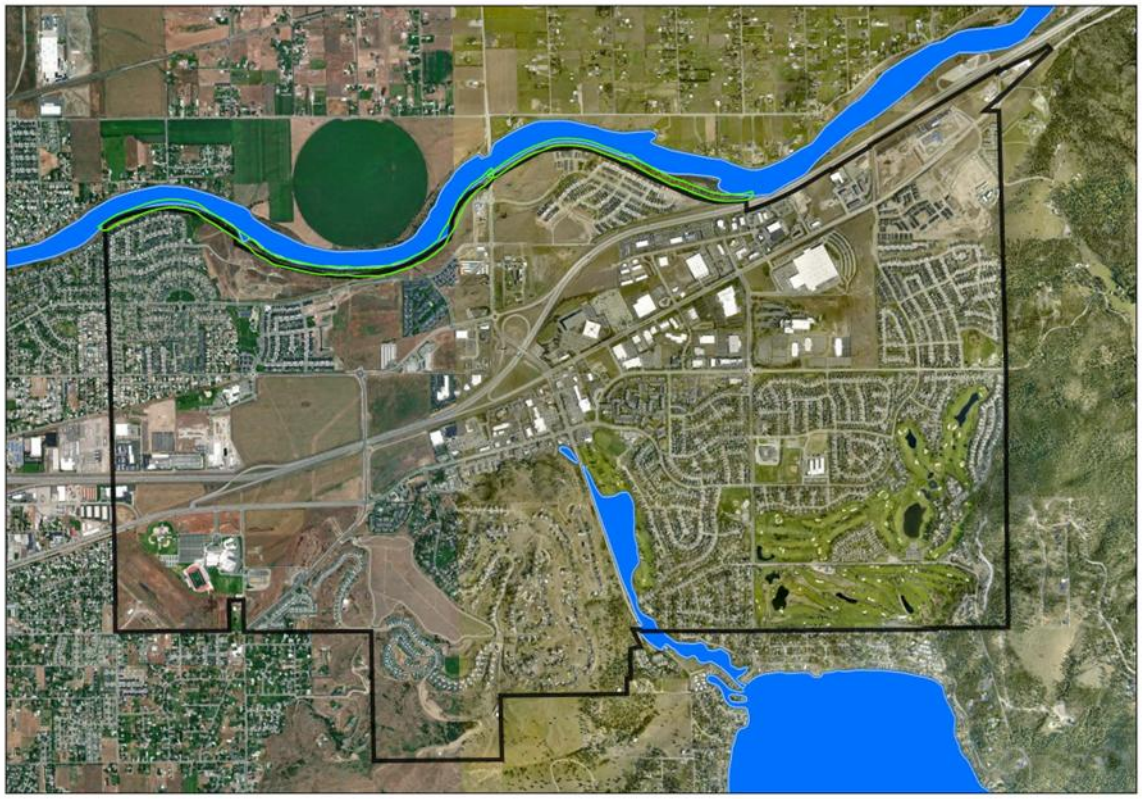

Liberty Lake
Latah Fault M6.8
Earthquake Scenario Shaking
Moderate
Strong
Very Strong
Servere
0
0.325
0.65
Miles
Map Created July 2025
Spokane River
Liberty Lake
E Broad Ave
E Heroy Ave
E Garland Ave
E Buckeye Ave
E Grace Ln
E Riverwalk Ave
E Kalama Ave
E Shannon Ave
E Indiana Ave
E Nora Ave
E Thompson Ave
E Edgewater Ln
E Knox Ave
E Hawkstone Loop
E Short Tail Ln
E Maxwell Ave
E Maxwell Dr
E Mission Ave
E Sharp Ave
E Boone Ave
E Country Vista Dr
E Broadway Ave
E Valleyway Ave
E Riverside Ave
E 1st Ave
E 2nd Ave
E 3rd Ave
E Micaview Dr
E 4th Ave
E 4th Ln
E 6th Ave
E 6th Ln
E 8th Ave
E 11th Ave
E 15th Ave
E 21st Ct
N Ashton Rd
N Karen Rd
N Corrigan Rd
N Arden Rd
N Garry Rd
N Stevenson Rd
N Malvern Rd
N Murray Rd
N Canal Rd
N Malta St
N Talon Ln
N Fairway Ln
N Swing Ln
N Clive Ln
E Tory Ct
N Forest Ridge St
N Wolfe Paw St
N Whitrock St
N Madson St
N Signal Rd
N Pepper Ln
N Sedge Ln
N Kramer Pkwy
N Legacy Ridge Dr
N Legend Tree Dr
N Chief Garry Dr
N Holiday Hills Dr
E Liberty Heights Ln
E Settler Dr
N Garry Dr
N Dunbarton Oaks Ln
N Bella Lago Ln
S Legacy Ridge Dr
Valley Vista Dr
E Inlet Dr
S Alpine Dr
S Lakeside Rd
N West Starr Ln
N Green Ridge Dr
N Hodges Rd
S Hodges Rd
N McMillan Rd
S McMillan Rd
S Grady Rd
N Grady Ln
N Aladdin Rd
N Bluff Rd
S Glenbrook Ct
S Meadowview Rd
S Legends Ln
S Molter Rd
S McKinzie Rd
Garry Rd
Starr Ln
E Mi
90


Liberty Lake
Liquefaction Susceptibility
High
Moderate to high
Moderate
Low to moderate
Low
Very low to low
Very low
Bedrock
Peat
Ice
Water
0
0.325
0.65
Miles
Map Created July 2025
Spokane River
Liberty Lake
E Broad Ave
E Heroy Ave
E Garland Ave
E Buckeye Ave
E Grace Ln
E Riverwalk Ave
E Kalama Ave
E Shannon Ave
E Indiana Ave
E Nora Ave
E Thompson Ave
E Edgewater Ln
E Knox Ave
E Hawkstone Loop
E Short Tail Ln
E Maxwell Ave
E Maxwell Dr
E Mission Ave
E Sharp Ave
E Sharp Ln
E Boone Ave
E Country Vista Dr
E Broadway Ave
E Valleyway Ave
E Riverside Ave
E 1st Ave
E 2nd Ave
E 3rd Ave
E Micaview Dr
E 4th Ave
E 4th Ln
E 6th Ave
E 6th Ln
E 8th Ave
E 11th Ave
E 15th Ave
E 21st Ct
E Inlet Dr
S Alpine Dr
S Legacy Ridge Dr
N Legacy Ridge Dr
N Legend Tree Dr
N Holiday Hills Dr
N Chief Garry Dr
E Liberty Heights Ln
E Valley Vista Dr
N Kramer Pkwy
N Sedge Ln
N Pepper Ln
N Signal Rd
N Madison St
N Garry Dr
E Settler Dr
N Dunbarton Oaks Ln
N Bella Lago Ln
N Ashton Rd
N Corrigan Rd
N Arden Rd
N Garry Rd
N Stevenson Rd
N Malvern Rd
N Murray Rd
N Canal Rd
N Malta St
N Karen Rd
N Taylon Ln
N Fairway Ln
N Swing Ln
N Wolfe Penn St
N Wimrock St
N Forest Ridge St
N West Starr Ln
N Green Ridge Dr
S Lakeside Rd
N Grady Ln
N Aladdin Rd
N Holl Blvd
N Hodges Rd
S Hodges Rd
N McMillan Rd
S Grady Rd
S Glenbrook Ct
S McMillan Rd
S Meadowview Rd
S Legends Ln
S Molter Rd
S McKinzie Rd
Barry Rd
90


Liberty Lake
NEHRP Seismic Site Class
High
Moderate to high
Moderate
Low to moderate
Low
Very low to low
Very low
Bedrock
Peat
Ice
Water
0
0.325
0.65
Miles
Map Created July 2025
Spokane River
Liberty Lake
E Broad Ave
E Heroy Ave
E Garland Ave
E Buckeye Ave
E Grace Ln
E Riverwalk Ave
E Kalama Ave
E Shannon Ave
E Indiana Ave
E Nora Ave
E Thompson Ave
E Edgewater Ln
E Knox Ave
E Hawkstone Loop
E Short Tail Ln
E Maxwell Ave
E Maxwell Dr
E Mission Ave
E Sharp Ave
E Boone Ave
E Country Vista Dr
E Broadway Ave
E Valleyway Ave
E Riverside Ave
E 1st Ave
E 2nd Ave
E 3rd Ave
E Micaview Dr
E 4th Ave
E 4th Ln
E 6th Ave
E 6th Ln
E 8th Ave
E 11th Ave
E 15th Ave
E 21st Ct
N Ashton Rd
N Corrigan Rd
N Arden Rd
N Garry Rd
N Stevenson Rd
N Murray Rd
N Malvern Rd
N Canal Rd
N Malta St
N Karen Rd
N Grady Ln
N Aladdin Rd
N High Rd
N Sedge Ln
N Pepper Ln
N Kramer Pkwy
N Signal Rd
N Madson St
N Fairway Ln
N Swing Ln
N Talon Ln
N Wolfe Pasm St
N Wimrock St
N Forest Ridge St
N Legacy Ridge Dr
N Legend Tree Dr
N Holiday Hills Dr
N Chief Garry Dr
E Liberty Heights Ln
N Garry Dr
E Settler Dr
N Dunbarton Oaks Ln
N Bella Lago Ln
N West Starr Ln
N Green Ridge Dr
S Lakeside Rd
E Inlet Dr
S Alpine Dr
S Legacy Ridge Dr
E Valley Vista Dr
N McMillan Rd
N Hodges Rd
S Hodges Rd
S Grady Rd
S Glenbrook Ct
S McMillan Rd
S Meadowview Rd
S Legends Ln
S McKinzie Rd
S Barry Rd
S Molter Rd


Liberty Lake
Slope
Less Than 15 Percent
15 Percent to 30 Percent
Greater Than 30 Percent
0
0.325
0.65
Miles
Map Created July 2025
Spokane River
Liberty Lake
E Broad Ave
E Heroy Ave
N Karen Rd
N Ashton Rd
N Corrigan Rd
N Arden Rd
N Garry Rd
N Stevenson Rd
E Garland Ave
N Murray Rd
N Malvern Rd
N Canal Rd
N Malta St
E Buckeye Ave
E Grace Ln
E Riverwalk Ave
E Kalama Ave
E Shannon Ave
E Indiana Ave
E Nora Ave
E Thompson Ave
N Grady Ln
N Aladdin Rd
N High Blvd
N Sedge Ln
N Pepper Ln
N Kramer Pkwy
N Clive Ln
E Tony Ct
E Edgewater Ln
E Knox Ave
N Swing Ln
N Fairway Ln
E Hawkstone Loop
N Talon Ln
E Short Tail Ln
N Forest Ridge St
N Wolfe Penn St
N Winrock St
N Signal Rd
N Madson St
E Maxwell Ave
E Maxwell Dr
E Mission Ave
E Sharp Ln
E Sharp Ave
E Boone Ave
E Country Vista Dr
E Broadway Ave
E Liberty Heights Ln
N Legacy Ridge Dr
N Legend Tree Dr
N Holiday Hills Dr
N Chief Garry Dr
N Garry Dr
E Settler Dr
N Dunbarton Oaks Ln
E Valleyway Ave
E Riverside Ave
N Bella Lago Ln
N West Starr Ln
N Green Ridge Dr
S Lakeside Rd
E 1st Ave
E 1st Ave
E 2nd Ave
E 3rd Ave
E Inlet Dr
S Alpine Dr
S Legacy Ridge Dr
Valley Vista Dr
N McMillan Rd
N Hodges Rd
S Hodges Rd
S Grady Rd
E Micaview Dr
E 4th Ave
E 4th Ln
E 6th Ave
E 6th Ln
S Glenbrook Ct
E 8th Ave
S McKinzie Rd
Barry Rd
E 11th Ave
E 15th Ave
S McMillan Rd
E 21st Ct
S Meadowview Rd
S Legends Ln
S Molter R
E Mi
90

City of Liberty Lake - Flood Zones



Legend

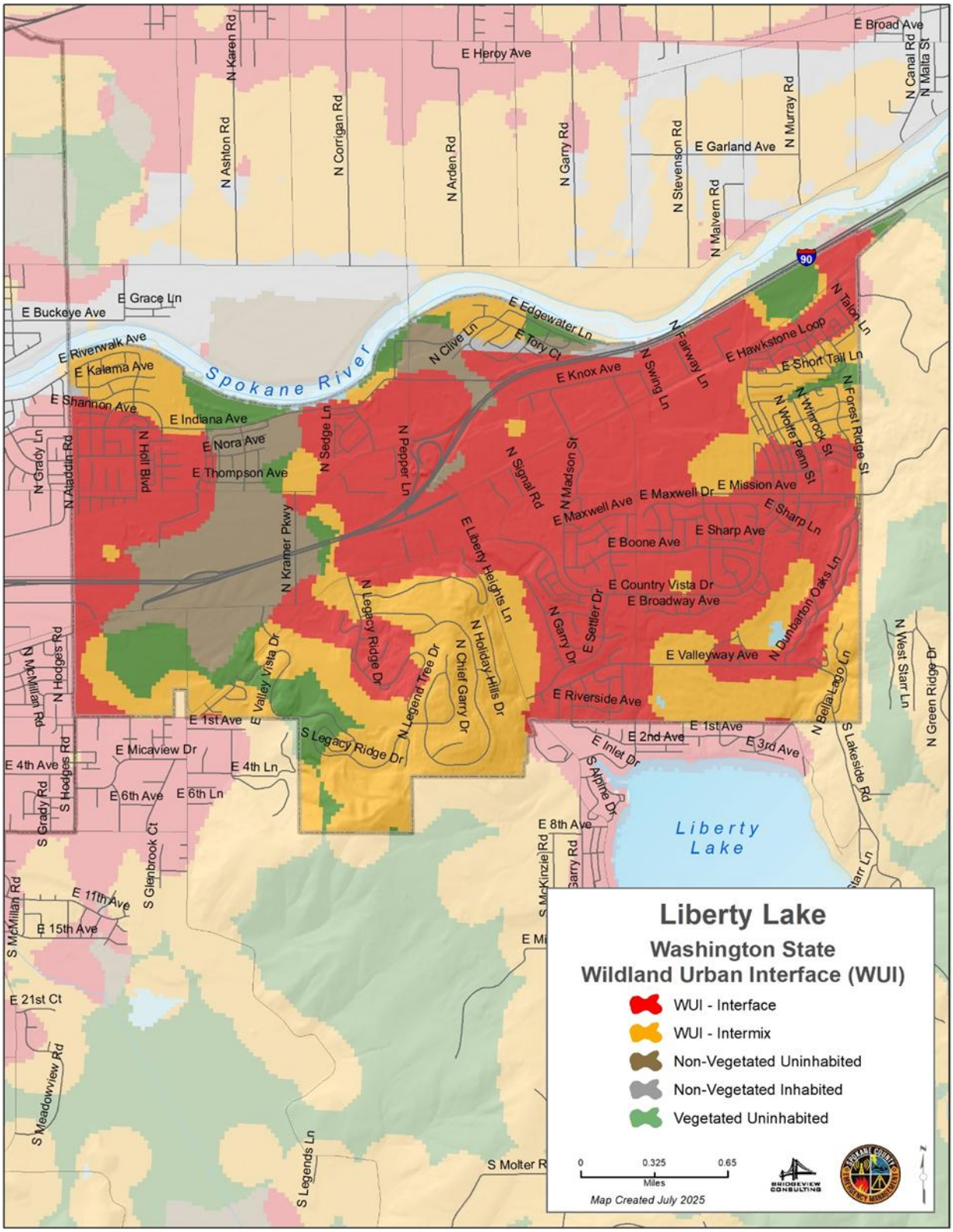
- Spokane River Riparian Boundary
- City of Liberty Lake
- FEMA Flood Zone

Map Location



Flood Zones & Riparian Areas

Updated: June 27th, 2025


Liberty Lake
Washington State
Wildland Urban Interface (WUI)
WUI - Interface
WUI - Intermix
Non-Vegetated Uninhabited
Non-Vegetated Inhabited
Vegetated Uninhabited
0
0.325
0.65
Miles
Map Created July 2025
Spokane River
Liberty Lake
E Broad Ave
E Heroy Ave
E Garland Ave
E Buckeye Ave
E Grace Ln
E Riverwalk Ave
E Kalama Ave
E Shannon Ave
E Indiana Ave
E Nora Ave
E Thompson Ave
E Edgewater Ln
E Knox Ave
E Hawkstone Loop
E Short Tail Ln
E Maxwell Ave
E Maxwell Dr
E Mission Ave
E Sharp Ave
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E Boone Ave
E Country Vista Dr
E Broadway Ave
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E Riverside Ave
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E 3rd Ave
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N Malta St
N Clive Ln
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N Fairway Ln
N Swing Ln
N Talon Ln
N Forest Ridge St
N Wolfe Penn St
N Winrock St
N Sedge Ln
N Pepper Ln
N Signal Rd
N Madson St
N Kramer Pkwy
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N Holiday Hills Dr
E Liberty Heights Ln
N Garry Dr
E Settler Dr
N Dunbarton Oaks Ln
N Bella Lago Ln
S Lakeside Rd
N West Stair Ln
N Green Ridge Dr
N Aladdin Rd
N Grady Ln
N Holl Blvd
N Hodges Rd
N McMillan Rd
S Hodges Rd
S Grady Rd
S McMillan Rd
S Glenbrook Ct
S Meadowview Rd
S Legends Ln
S Alpine Dr
S McKinzie Rd
Valley Vista Dr
90

CHAPTER 6.
CITY OF SPOKANE VALLEY 2026 ANNEX UPDATE

6.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to the City of Spokane Valley, a participating jurisdiction to the Spokane County Hazard Mitigation Plan and Community Wildfire Protection Plan updates. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the City of Spokane Valley. For planning purposes, this Annex provides additional information specific to the jurisdiction, with a focus on providing greater details on the risk assessment and mitigation strategy for this community only. This document serves as an update to the previously completed plan. All relevant data has been carried over and updated with new information as appropriate and as identified within the planning process discussed in Volume 1.

6.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

The City of Spokane Valley followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, the City of Spokane Valley also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
John Hohman 10210 E Sprague Ave Spokane Valley, WA 99206 509.720.5100 jhohman@spokanevalleywa.gov	City Manager Primary Point of Contact (Original)	Directed the development of the City's Annex.
Virginia Clough 10210 E Sprague Ave. Spokane Valley, WA 99206 509.720.5103 vclough@spokanevalleywa.gov	Project Manager Primary Point of Contact	Assisted with identification of planning team members; coordinated with consultants and staff to update information; attended kick-off and planning

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
		meetings; reviewed plan and maintained contact with County HMP team.
Steve Roberge 10210 E Sprague Ave. Spokane Valley, WA 99206 509.720-5337 sroberge@spokanevalleywa.gov	Planning Manager Alternate Point of Contact	Assisted with identification of planning team members; provided information; attended kick-off and planning meeting; reviewed plan and maintained contact with County HMP team.
Jenny Nickerson 10210 E Sprague Ave Spokane Valley, WA 99206 509.720.5305 jnickerson@spokanevalleywa.gov	Building Official Alternate Point of Contact	Attended planning team meetings as required; captured relevant data required to complete plan; attended internal working group meetings; assisted in plan authoring and review.
Robert Blegen 10210 E Sprague Ave Spokane Valley, WA 99206 509.720.5320 rblegen@spokanevalleywa.gov	Public Works Director Alternate Point of Contact	Attended planning team meetings as required; captured relevant data necessary to complete plan; attended internal working group meetings; assisted in plan authoring and review.

6.3 COMMUNITY PROFILE

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

- **Date of Incorporation –** March 31, 2003
- **Current Population –** 110,200 as of April 2025
- **Population Growth –** Based on data from the Washington State Office of Financial Management and U.S. Census Bureau, Spokane Valley has experienced a 7-percent increase in population since 2020 and approximately a 32.8-percent increase in population from its estimated population of 82,985 at the time of incorporation.
- **Location and Description –** The City of Spokane Valley is located near the eastern border of Washington. The incorporated area of Spokane Valley encompasses 38.5 square miles of land area, with room for residential, commercial and industrial expansion. Within the incorporated city limits, there are 464 miles of roadway. The City has an extensive retail tax base and is home to several major auto dealerships, a Spokane Business Park with more than 70 buildings ranging from 1,200 to 270,000 square feet, and the Spokane Valley Mall, which includes over 700,000 square feet of

gross leasable floor area. There are more than 10,579 businesses registered to do business in Spokane Valley as of August 2025.

- **Brief History –** Spokane Valley occupies the broad, gravelly valley of the Spokane River and was originally populated by the Spokane and Coeur d'Alene tribes. Antoine Plante (1812-1890), a former fur trader, operated a ferry over the river beginning in about 1854. Over the next few decades, settlers began to establish farms, orchards and trading posts such as the Dishman Store. Beginning in 1895, irrigation vastly increased the productivity of the land. Apples were the chief crop until about 1925, when truck farming took over. World War II brought a huge aluminum plant to Trentwood and hundreds of jobs. The 1950s brought a rapid growth trend toward suburban living, which caused a population boom in the last half of the century. Several incorporation drives were attempted and failed. Finally, in 2002, voters authorized the creation of a 38.5-square-mile city. Today Spokane Valley is the 8th largest city in Washington.

- **Climate –** At an elevation of 2,384 feet, Spokane Valley experiences all four seasons of the year. All of Spokane County is within Water Resource Inventory Area (WRIA) 54. Based upon state data for WRIA 54, the average annual precipitation is 15.8 inches; approximately half of that amount falls as snow, which peaks between October and the end of March. November is the wettest month in the watershed, with an average precipitation of 2.13 inches. July is the driest month in the watershed, averaging 0.57 inches of precipitation. Snow, the dominant form of precipitation due to winter coinciding with the rainy season, accumulates to a depth of 10-15 inches and remains on the ground from December through February.

- Temperatures range from average January lows of 23ºF to mid-summer average highs at 85.4ºF.

- **Governing Body Format –** The City of Spokane Valley is a non-charter code city and operates under a council-manager plan of government. It is governed under the optional municipal code of RCW Chapter 35A. Under this form of government, legislative authority is concentrated in the elected City Council, which hires a professional administrator to implement its policies. The executive branch is led by the city manager. There are seven positions on the City Council, and all council positions are at-large positions. Councilmembers are generally elected to four-year terms, with elections held every two years. For continuity, position terms are staggered by two years so that not all positions are open for election at the same time. The chair of the council has the title of Mayor and presides at Council meetings

- **Development Trends –** The City of Spokane Valley and its immediate area are primarily urban and suburban residential with retail, commercial, and industrial enterprises. Heavy industrial uses are located along the BNSF/UP railways, primarily within the Spokane Business and Industrial Park surrounding industrial properties near the northeastern border of the city, which also houses light industrial, distribution warehouse and manufacturing uses. Washington State has a Growth

Management Act (GMA) found in the Revised Code of Washington (RCW) Chapter 36.70A, that requires counties that meet specified population criteria, as well as cities within those counties, to prepare and adopt a comprehensive 20-year plan articulating the community vision through a series of goals, objectives, policies and actions to serve as a guide for community development. The plan consists of required and optional elements that are integrated and internally consistent. City actions, such as those relating to land use planning, annexations, zoning, subdivision and design review, redevelopment, and capital improvements, must be consistent with the plan. The City of Spokane Valley is in compliance with the provisions of RCW 36.70A and adopted its most recent comprehensive plan in 2016.

- **Economy –** The City of Spokane Valley's key economic industries are healthcare and social assistance, retail, manufacturing, and construction. In 2025, these four industries together accounted for 37,295 jobs in the Valley, or about 45 percent of all employment.

- The greater Spokane region is the health care hub of the Inland Northwest and northern Idaho. Specifically, Spokane Valley hosts numerous healthcare facilities that serve a regional customer base, including MultiCare Valley Hospital, Cancer Care Northwest, Spokane Valley VA Clinic, and Spokane CyberKnife and Radiation Oncology Center. The City is also home to several residential care centers and health diagnostic services.

- Manufacturing companies in Spokane Valley range from very small to very large; leading industry segments include aluminum casting, aerospace products, structural and other metal products, and medical equipment and supplies. These businesses enjoy significant distribution options thanks to Interstate 90 and two class 1 railroads that pass through the City. The largest manufacturing employers are Kaiser Aluminum, Wagstaff, Berg Manufacturing, Hotstart, Servatron, SkyOne Aerospace, Mackay Manufacturing, Northwest Container, and Cap and Inland Empire Paper Co.

- In regard to retail, Spokane Valley is centrally located and hosts the largest indoor shopping mall and surrounding retail sector in the Spokane - Spokane Valley - Coeur d'Alene combined statistical area. The Spokane Valley Mall offers 105 retail outlets, including JC Penney and the only remaining Macy's in the region, a Regal Theater and several eating establishments. Miscellaneous retailers range from smaller-footprint national and local retailers that provide all types of products, to auto dealerships and related auto services. The largest retail employers in the City are Walmart, Home Depot, Yokes Market, Lowes, Costco, Winco Foods, Kohls, Spalding Auto Parts and Walkers Furniture. In the past two years, the City has welcomed Burlington, LandRover, Tractor Supply, BuyWander, Sierra Trading Post, Five Below, Dave & Buster's and other new retailers.

6.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events which have occurred within the County. In the context of the planning region, it was determined that there are no additional hazards that are unique to the jurisdiction. Table 6-1 lists all past occurrences of natural hazards within the jurisdiction. Other than lost revenue resulting from the COVID-19 pandemic, the City could not identify specific dollar losses associated with the hazard impact but will work to maintain that information for future plan updates.

Table 6-1
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date (Declared)	Dollar Losses (if known)
Washington Wildfires	DR 4579	3.25.2024	None
Fire	FM 5481	8.19.2023	None
Fire	FM 5479	8.18.2023	None
Fire	FM 5395	7.6.2021	None
Severe Winter Storms, Straight Line Winds, Flooding, Landslides and Mudslides	DR 4593	4.8.2021	Unknown
Fire	FM 355	7.17.2020	None
COVID	DR 4481	3.22.2020	$17,128,985 in lost revenue
Flood	DR 4309	04.21.2017	Unknown
Severe Storms	DR 4249	01.15.2016	Unknown
Wildfire	EM 3372	08.21.2015	Unknown
Severe Storms	DR 1825	03.02.2009	Unknown
Wildfire	FM 2783	07.11.2008	Unknown
Hurricane Katrina	EM 3227	09.07.2005	Unknown
Flood/Landslides	DR 1172	04.02.1997	Unknown

Table 6-1
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date (Declared)	Dollar Losses (if known)
Severe Storms	DR 1159	01.17.1997	Unknown
Severe Storms	DR 1152	11.19.1997	Unknown
Flood	DR 1100	02.09.1996	Unknown
Wildfire	DR 922	11.13.1991	Unknown
Flood	DR 769	07.26.1986	Unknown
Flood	EM 3086	08.19.1982	Unknown
Volcano	DR 623	05.21.1980	Unknown
Drought	EM 3037	03.31.1977	Unknown
Flood	DR 185	12.29.1964	Unknown

6.5 CAPABILITY ASSESSMENT

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: National Flood Insurance Information; regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other ongoing mitigation efforts; fiscal capabilities which support mitigation and classifications under various community programs.

6.5.1 National Flood Insurance Information

Information on the community's National Flood Insurance Program (NFIP) compliance is presented in Table 6-2. This identifies the current status of the jurisdiction's involvement with the NFIP.

Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: None
- Number of FEMA-Identified Severe Repetitive Loss Properties: None
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: None

Table 6-2
National Flood Insurance Compliance

What department is responsible for floodplain management in your community?	Community and Economic Development and Public Works Departments
Who is your community's floodplain administrator? (department/position)	Engineering Manager in Public Works
Do you have any certified floodplain managers on staff in your community?	Yes
What is the date of adoption of your flood damage prevention ordinance?	Adopted 3/11/03 and effective at incorporation on 3/31/03. Last amended 4/5/17.
When was the most recent Community Assistance Visit or Community Assistance Contact?	9/18/08
To the best of your knowledge, does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your community? (If no, please state why)	No. Two basins are Zone A with inaccurate boundaries but are currently undergoing a detailed study with remapping.
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your community participate in the Community Rating System (CRS)? If so, is your community seeking to improve its CRS	No. We are not currently interested in joining the CRS program.

Table 6-2 National Flood Insurance Compliance	
Classification? If not, is your community interested in joining the CRS program?	

6.5.2 Regulatory Capability

The assessment of the jurisdiction's legal and regulatory capabilities is presented in Table 4-3. This includes planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are currently in place.

Table 6-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements				
Building Code Version: Int'l Code Council Year: 2021	Yes	No	No	Currently adopted Washington State Building Codes under the State Building Code Act, RCW 19.27
Zoning Ordinance	Yes	No	No	City of Spokane Valley Municipal Code Title 19, Zoning Regulations
Subdivision Ordinance	Yes	No	No	City of Spokane Valley Municipal Code Title 20, Subdivision Regulations
Floodplain Ordinance	Yes	Yes	Yes	
Stormwater Management	Yes	No	Yes	City of Spokane Valley Municipal Code Title 22, Design and Development Regulations
Post Disaster Recovery	No	No	No	
Real Estate Disclosure	No	No	Yes	Comprehensive Plan and Development Regulations must be consistent with Chapter 64.06 RCW
Growth Management	Yes	No	Yes	Regulations must be consistent with Chapter 36.70A RCW
Site Plan Review	Yes	No	No	City of Spokane Valley Municipal Code Title 19, Zoning Regulations
Public Health and Safety	No	Yes	Yes	Spokane Regional Health Department and Washington State Department of Health
Coastal Zone Management	No	No	No	Not Applicable to Region

Table 6-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Climate Change Adaptation	No	No	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire, etc.)	Yes	Yes	Yes	
Environmental Protection	Yes	Yes	Yes	
Planning Documents				
General or Comprehensive Plan	Yes	No	Yes	
Is the plan equipped to provide linkage to this mitigation plan?				Yes – completion in 2026.
Floodplain or Basin Plan	No	Yes	Yes	
Stormwater Plan	Yes	Yes	Yes	
Capital Improvement Plan	Yes	Yes	Yes	
Habitat Conservation Plan	No	No	No	
2023 Tourism Strategic Plan	Yes	No	No	
Shoreline Management Plan	Yes	Yes	Yes	Comprehensive Plan and Development regulations must be consisted with Chapter 90.58 RCW
Community Wildfire Protection Plan	Yes	No	No	Spokane County Community Wildfire Protection Plan
Transportation Plan	Yes	Yes	Yes	6-Year Transportation Improvement Program
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	Yes	No	Spokane County Emergency Management, however local work to begin in 2026.
Threat and Hazard Identification and Risk Assessment	No	Yes	No	Spokane County Emergency Management, Hazard Mitigation Plan
Terrorism Plan	No	No	No	
Post-Disaster Recovery Plan	No	No	No	
Continuity of Operations Plan	Yes	No	No	Adopted Continuity of Operations Plan in 2024. Implementation is currently in progress.

Table 6-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Public Health Plans	Yes	No	No	County Public Health maintains various health plans on which the City relies when needed for these services.
Boards and Commission				
Planning Commission	Yes	Yes	Yes	
Mitigation Planning Committee	Yes	No	No	The City was part of the County's HMP update for this 2025 version of the plan and will continue to serve on the Committee as required within the Plan Maintenance Strategy portion of the plan.
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems, chipping, etc.)	Yes	Yes	No	
Mutual Aid Agreements / Memorandums of Understanding	No	No	No	
Other				

6.5.3 Administrative and Technical Capabilities

The assessment of the jurisdiction's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 6-4. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

Table 6-4
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Community and Economic Development and Public Works Departments

Table 6-4
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Professionals trained in building or infrastructure construction practices (building officials, fire inspectors, etc.)	Yes	Community and Economic Development and Public Works Departments
Engineers specializing in construction practices?	Yes	Community and Economic Development and Public Works Departments
Planners or engineers with an understanding of natural hazards	Yes	Community and Economic Development and Public Works Departments
Staff with training in benefit/cost analysis	Yes	City Finance Staff
Surveyors	No	
Personnel skilled or trained in GIS applications	Yes	Community and Economic Development and Public Works Departments
Personnel skilled or trained in Hazus use	No	
Scientist familiar with natural hazards in local area	No	
Emergency Manager (Coordinator)	Yes	City Manager's Office
Grant writers	Yes	Community and Economic Development and Public Works Departments
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?)	Yes	Provided by: Spokane EM: EAS-WEA-Reverse 911 SREC911: Reverse 911 WSDOT: Outdoor signs & Signals WSP: Amber/Silver Alerts SRMTC: some road signage available
Hazard data and information available to public	Yes	Available on Spokane County Emergency Management website: Hazards We Face | Spokane County, WA with link added to City website.
Maintain Elevation Certificates	Yes	Community and Economic Development and Public Works Departments (stored in address files in records room)
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness?	Yes	Spokane County Emergency Management (SCEM) tracks Disaster Assistance Response Teams (DART) and American Red Cross (ARC) but none specifically in the valley

Table 6-4
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Local citizen groups or non-profit organizations focused on environmental protection?	Yes	Sierra Club, INW Lands Council, Friends of the Centennial Trail, Dishman Hills Conservancy
Organization focused on individuals with access and functional needs populations	Yes	Aging & Long-Term Care of Eastern WA, ARC Spokane, Disability Action Center NW, Spokane Regional Health District, SNAP, International Rescue Committee, Better Health Together, Special Mobility Services, Avista
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Spokane Valley Fire Department, Spokane Valley Fire District 8, Spokane Conservation District, Washington State Dept. of Ecology and Dept. of Natural Resources, Spokane Clean Air Agency, Spokane Aquifer Joint Board, Spokane County Emergency Management
Natural disaster or safety related school programs?	Yes	Provided by the local school districts
Public-private partnership initiatives addressing disaster-related issues?	No	
Multi-seasonal public awareness program?	Yes	The City is part of an interlocal agreement with Spokane County to provide these services
Other	No	
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	Yes	Firewise program, offered through Spokane Conservation District, offers free home assessments
Noxious Weed Eradication Program or other vegetation management	Yes	Spokane County Noxious Weed Control Board
Fire Safe Councils	No	
Chipper program	No	
Defensible space inspections program	Yes	Provided by the local fire districts in conjunction with the Spokane County Conservation District
Creek, stream, culvert or storm drain maintenance or cleaning program	Yes	Community and Economic Development and Public Works Departments
Stream restoration program	No	
Erosion or sediment control program	Yes	Yes, for disturbance-related projects only

Table 6-4 Administrative and Technical Capability		
Staff/Personnel Resources	**Available (Yes/No)**	**Department/Agency/Position**
Address signage for property addresses (City does not provide signage, however code requires posting of addresses.)	Yes	Community and Economic Development and Public Works Departments
Other		

6.5.4 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 6-5. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 6-5 Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	Yes, State and Federal Grant Funds

6.5.5 Community Classifications

The jurisdiction's classifications under various hazard mitigation programs are presented in Table 4-6. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community.

Table 6-6.
Community Classifications

	Participating (Yes/No) or Rating	Date Enrolled
Community Rating System	No	
Building Code Effectiveness Grading Schedule	4	Unknown
Building Code Effectiveness Grading Schedule	4	Unknown
Protection Class	2	Unknown
Storm Ready	Yes	Unknown
Firewise	No	

6.6 HAZARD RISK AND VULNERABILITY RANKING

The internal Planning Team reviewed and identified the hazard list within the Base Plan. The Planning Team added hazardous material as a human-caused hazard in the 2025 update due to the high volume of truck and rail freight traveling through Spokane Valley each day.

In addition, the Planning Team examined Volume 1, Chapter 4 of the Spokane County Multi-Jurisdictional Hazard Mitigation Plan to ensure an understanding of the application of the Calculated Priority Risk Index (CPRI) information which is utilized in determining the hazard impact and vulnerability. The risk assessment process also included a review of critical facilities impacted, potential dollar losses at risk and any additional information applicable within the hazard profiles for use in identifying each hazard of concern.

Table 6-8 presents the results of the CPRI process. Table 6-8 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.

- Low (Negligible) – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.

- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.

- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.

- Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted for in excess of one month.

Table 6-7.
Calculated Priority Risk Ranking

	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
Hazard	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought				4		2				2						1				4	2.75
Earthquake			3			2				2			4				1				2.65
Flood		2				2			1						2			2			1.80
Landslides		2				2				2			4				1				2.25
Severe Weather				4			3						4		2				3		3.25
Wildfire				4			3				3		4						3		3.55
Hazmat		2					3			2			4					2			2.50

Table 6-8.
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank
1	Wildfire[4]	3.55	High
2	Severe Weather	3.25	High
3	Drought	2.75	Medium
4	Earthquake	2.65	Medium
5	Hazardous Materials[5]	2.50	Medium
6	Landslide	2.25	Medium
7	Flood[6]	1.80	Low

6.7 COMMUNITY WILDFIRE PROTECTION PLANNING AND ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted Spokane County in completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk. Spokane Valley Fire Department is the City of Spokane Valley's Fire service agency within the Countywide Strategic Planning Areas. As such, the resulting maps of the analysis completed by DNR which include the City of Spokane Valley are incorporated within Spokane Valley Fire Department's Annex (Chapter 15).

6.8 PUBLIC OUTREACH EVENTS

The Planning Team, Spokane Valley Fire Department, and Spokane County Emergency Management presented the Hazard Risk and Vulnerability Ranking at a Community Conversations event prior to the September 16, 2025, City Council meeting. The presentation included an overview of the Hazard Mitigation Plan, Table 6-8, showing the hazard rankings and key changes since the previous plan. Additionally, the Team and its partners shared maps of hazards in Spokane Valley including wildfire, earthquake, landslide/slope and flood. The same materials were shared the following day at Spokane County Emergency Management's outreach event at Fire Station 41 in Deer Park.

[4] The Planning Team considers "smoke" as an impact of wildfire, so it was not listed separately.

[5] The Planning Team added hazardous materials to the risk and vulnerability ranking due to the high volume of truck and rail freight traveling through Spokane Valley on a daily basis. With little historical data to consider, it ranked as a moderate potential impact that will continue to be evaluated in future updates.

[6] The flood hazard score decreased from 3.2 in the 2020 Plan as flood impact areas are relatively small and isolated and previous mitigation efforts seems to be working well. Additionally, flood insurance policy holders have decreased about 37% since the last plan update.

Community Conversations were attended by the City Council, partner agencies and members of the community and attendees were encouraged to take the countywide online survey. The following entities and organizations were invited to attend the city's event and invited to take the survey: City Council, Planning Commission, American Red Cross, Dishman Hills Conservancy, Inland Northwest Land Conservancy, Friends of the Centennial Trail, Spokane Conservation District, WA State Dept. of Natural Resources (NE Region), Inland Empire VHR Radio Amateurs, Spokane Clean Air Agency, Spokane Valley Senior Center and Spokane Valley Tech High School (Environmental Science students).

Other outreach efforts included city *eNews* distribution list, city Facebook event, City Council meeting announcement, and Facebook and X (Twitter) posts.

6.9 MITIGATION GOALS AND OBJECTIVES

The City of Spokane Valley adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1, Chapter 12, as well as the CWPP specific goals identified in Chapter 10, Section 10.1.5.

6.10 HAZARD MITIGATION ACTION PLAN

The Planning Team for the jurisdiction identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the jurisdiction's assets and hazards of concern. Table 6-9 lists the action items/strategies that make up the jurisdiction's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, who will benefit from the activity and the type of initiative associated with each item are also identified.

Table 6-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE # COSV 1 – Enforce updated Building and Energy Codes.									
New & Existing	All Hazards	1,2,3,10	Community & Economic Development	Low	City of Spokane Valley, Washington Assoc. of Building Officials, Idaho Assoc. of Building Officials, WA State Univ. Energy Program, Int'l Code Council	Short-Term	Yes	Public Information, Preventative Activities	All
INITIATIVE # COSV 2 – Educate residents in flood-prone areas by providing informational pamphlets.									
New & Existing	Flood, Severe Weather	2,4,5,6,8, 10	Community & Economic Development	Low	City of Spokane Valley	Short-Term	Yes	Public Information	All
INITIATIVE # COSV 3 – Continue to maintain compliance and good standing under the National Flood Insurance Program. This will be accomplished through the implementation of floodplain management programs that, at a minimum, will meet the requirements of the NFIP, which include the following: • Enforcement of the adopted flood damage prevention ordinance • Participating in flood plain identification and mapping updates • Providing public assistance/information on floodplain requirements and impacts.									
New & Existing	Flood, Severe Weather	2,4,5,6,8, 10	Community & Economic Development	Low	Local	Ongoing	Yes	Public Information, Property Protection, Preventative Activities	All
INITIATIVE # COSV 4 – Implement wildfire mitigation recommendations identified in the Spokane County CWPP.									

Table 6-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
New & Existing	Wildfire	1,2,3,4,5, 7,8,9,10, 11,12	Spokane Conservation District, all County Fire Districts	High	Local, Fire Grants, FEMA Hazard Mitigation Grants	Short-Term	Yes	Public Information, Preventative Activities	All
INITIATIVE # COSV 5 – Continue to maintain and/or enhance the City's capability to enforce its codes and regulations that result in a decreased risk exposure of new development.									
New & Existing	All Hazards	4,5,11	Community & Economic Development	Low	Local, FEMA Hazard Mitigation Grants	Ongoing	Yes	Public Information	All
INITIATIVE # COSV 6 – Consider, where appropriate, the adoption of higher regulatory standards that will result in an increase in the community resilience of new development.									
New	All Hazards	4,5,11	Community & Economic Development	Low	Local	Long-Term	Yes	Public Information, Preventative Activities	All
INITIATIVE # COSV 7 – Continue to support the countywide initiatives identified in the plan.									
New & Existing	All Hazards	1,3,4,8	DEM	Low	Local	Ongoing	Yes	Preventative Activities	All
INITIATIVE # COSV 8 – Actively participate in the plan maintenance strategy identified in this plan.									
New & Existing	All Hazards	1,4,8	DEM	Low	Local	Ongoing	Yes	Preventative Activities	All
INITIATIVE # COSV 9 – Provide scour protection for vulnerable bridge abutments.									

Table 6-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
Existing	Flood, Severe Weather	1,11	Public Works	High	Hazard Mitigation Grant Program, Flood Control Assistance Account Program, Public Works Trust Fund	Long-Term, Ongoing	Yes	Preventative Activities, Structural Projects, Property Protection, Natural Resource Protection	All
INITIATIVE # COSV 10 – Implement follow up measures from Continuity of Operations Plan adopted in Nov. 2024.									
New	All Hazards	1,2, 3,8, 9	City Manager's Office	Low	Local	Ongoing	No	Public Information, Preventative Activities, Property Protection, Emergency Services	All
INITIATIVE # COSV 11 – Develop a Comprehensive Emergency Management Plan (CEMP)									
New	All Hazards	1,2, 3,8, 9	City Manager's Office	Low	Local	Short-Term	No	Public Information, Preventative Activities, Property Protection, Emergency Services	All

6.11 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 6-10 identifies the prioritization for each initiative.

Table 6-10.
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
COSV-1	4	Medium	Low	Yes	Yes	Yes	Medium
COSV-2	6	Low	Low	Yes	Yes	Yes	Medium
COSV-3	6	Medium	Low	Yes	No	Yes	High
COSV-4	10	Medium	High	Yes	No	Yes	High
COSV-5	3	Medium	Low	Yes	No	Yes	High
COSV-6	3	Medium	Low	Yes	Yes	Yes	Medium
COSV-7	4	Low	Low	Yes	Yes	Yes	High
COSV-8	3	Low	Low	Yes	Yes	Yes	High
COSV-9	2	High	High	Yes	Yes	No	Medium
COSV 10	5	High	Medium	Yes	No	Yes	High
COSV 11	5	High	Low	Yes	No	Yes	High

6.12 STATUS OF PREVIOUS PLAN INITIATIVES

Table 6-11 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 6-11.
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
Mitigation Strategy	**Project Status**	**Completed**	**Continual /Ongoing Nature**	**Removed -/No Longer Relevant / No Action**	**Carried Over**
COSV 1 – Enforce updated Building and Energy Codes.	Continuous and ongoing, since the last plan, the City has begun enforcing the 2021 WA Codes, including the 2021 Energy Code.		X		X
COSV 2 – Educate residents in flood-prone areas by providing informational pamphlets.	Floodplain meetings were held in February and May of 2024 to evaluate the watershed and remap the FEMA floodplain boundary. FEMA's update will be done after this HMP update is completed. Additional outreach efforts included a new webpage, a mailer to those located within the floodplain and social media posts.		X		X
COSV 3 – Protect the aquifer from critical materials through secondary containment requirements and documentation.	The City participates in an Aquifer Protection Area (APA) with Spokane County and neighboring cities. The APA fee expires on 12/31/25 and voters approved a 20-year renewal and expansion in the August 2025 election. The Stormwater Utility Fee funds a variety of stormwater management activities that help protect the aquifer from spills and spill control.			X	
COSV 4 – Continue to maintain compliance and good standing under the National Flood Insurance Program (NFIP). This will be accomplished through the implementation of floodplain management programs that, at a minimum, will meet the requirements of the NFIP, which include the following: • Enforcement of the adopted flood damage prevention ordinance • Participating in flood plain identification and mapping updates • Providing public assistance/information on floodplain requirements and impacts.	City continues to participate in the NFIP through adoption and enforcement of floodplain management ordinances to reduce future flood damage. The City regulates floodplain development in accordance with SVMC 21.30 (Floodplain Regulations).		X		X

Table 6-11.
2025 Status of 2020 Hazard Mitigation Action Plan

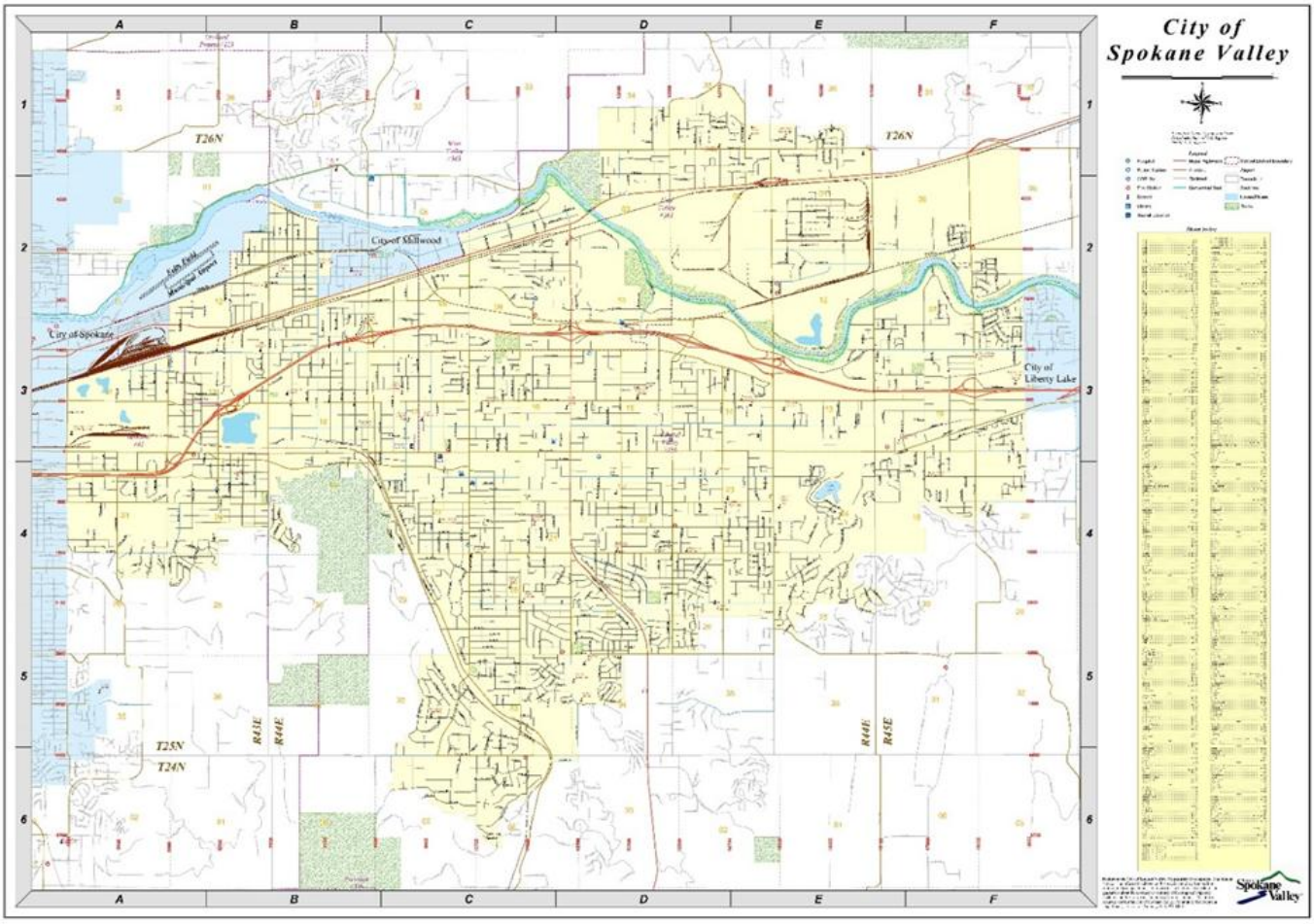
		Current Status			
Mitigation Strategy	**Project Status**	**Completed**	**Continual /Ongoing Nature**	**Removed -/No Longer Relevant / No Action**	**Carried Over**
COSV 5 – Consider participating in the NFIP Community Rating System.				X	
COSV 6 – Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority.	No action has been taken; no documented repetitive loss exposure conditions related to structures in hazard-prone areas.			X	
COSV 7 – Integrate the hazard mitigation plan into other plans, ordinances or programs to dictate land uses within the jurisdiction.	No action has been taken, and this has been addressed by other initiatives.			X	
COSV 8 – Implement wildfire mitigation recommendations identified in the Spokane County CWPP.	The City continues to partner with lead agencies including Spokane Valley Fire Department, Spokane County Fire District 8 and Spokane County Emergency Management (SCEM) to implement CWPP recommendations. Additionally, the City participated in the annual Fire Symposiums hosted by SCEM.		X		X
COSV 9 – Continue to maintain and/or enhance the City's capability to enforce its codes and regulations that result in a decreased risk exposure of new development.	The city's capability is supported by design review, construction inspections and a formal code enforcement process that applies to construction, land use and environmental protections.		X		X
COSV 10 – Consider, where appropriate, the adoption of higher regulatory standards that will result in an increase in the community resilience of new development.	In 2024, the City adopted the 2021 International Fire Code (IFC), as adopted by Washington state. This update includes new requirements specifically for Emergency Responder Radio Coverage Systems.		X		X
COSV 11 – Continue to support the countywide initiatives identified in the plan.	The City adopted a Continuity of Operations Plan in 2024 to support continuity of local government operations.		X		X

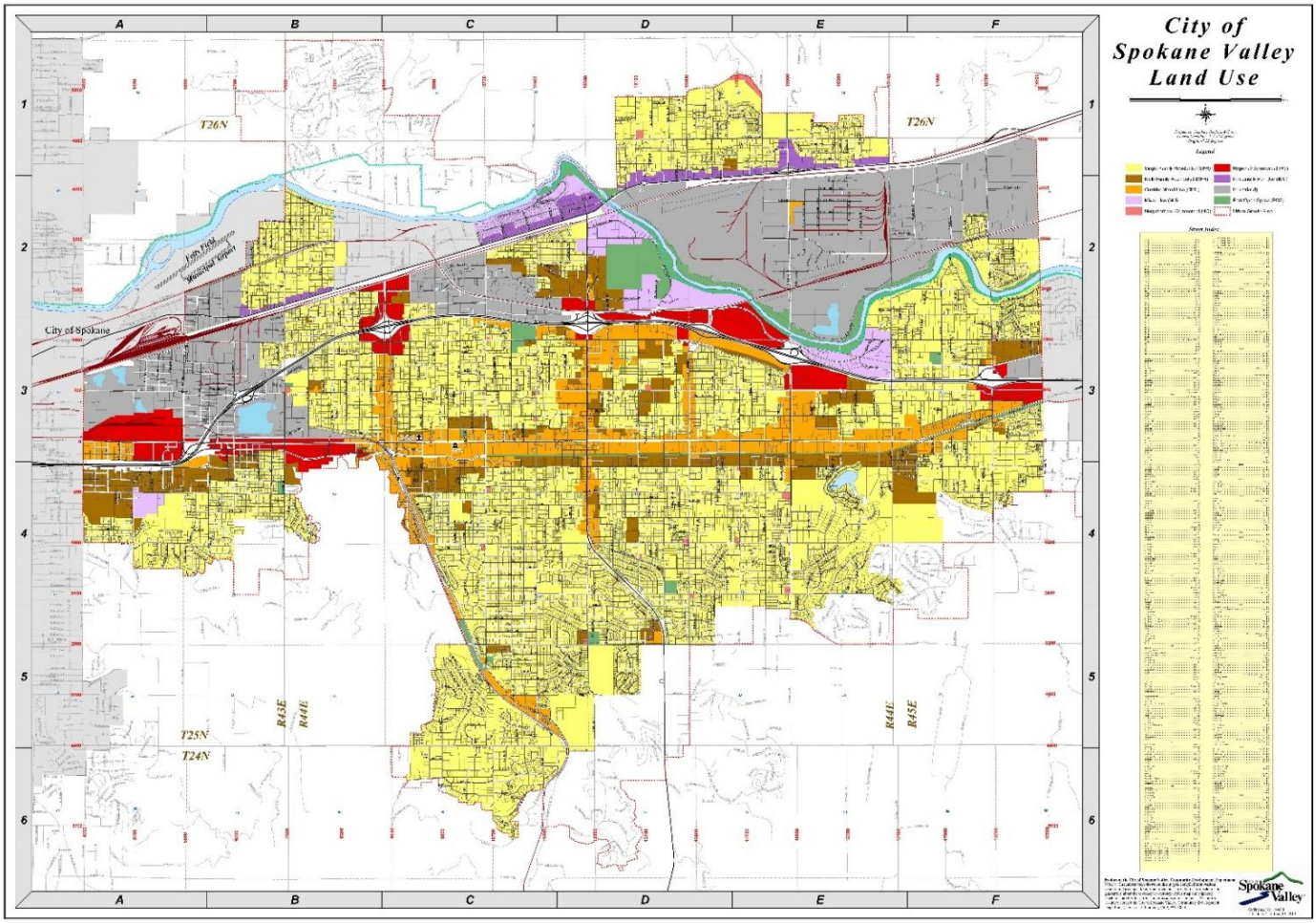
Table 6-11.
2025 Status of 2020 Hazard Mitigation Action Plan

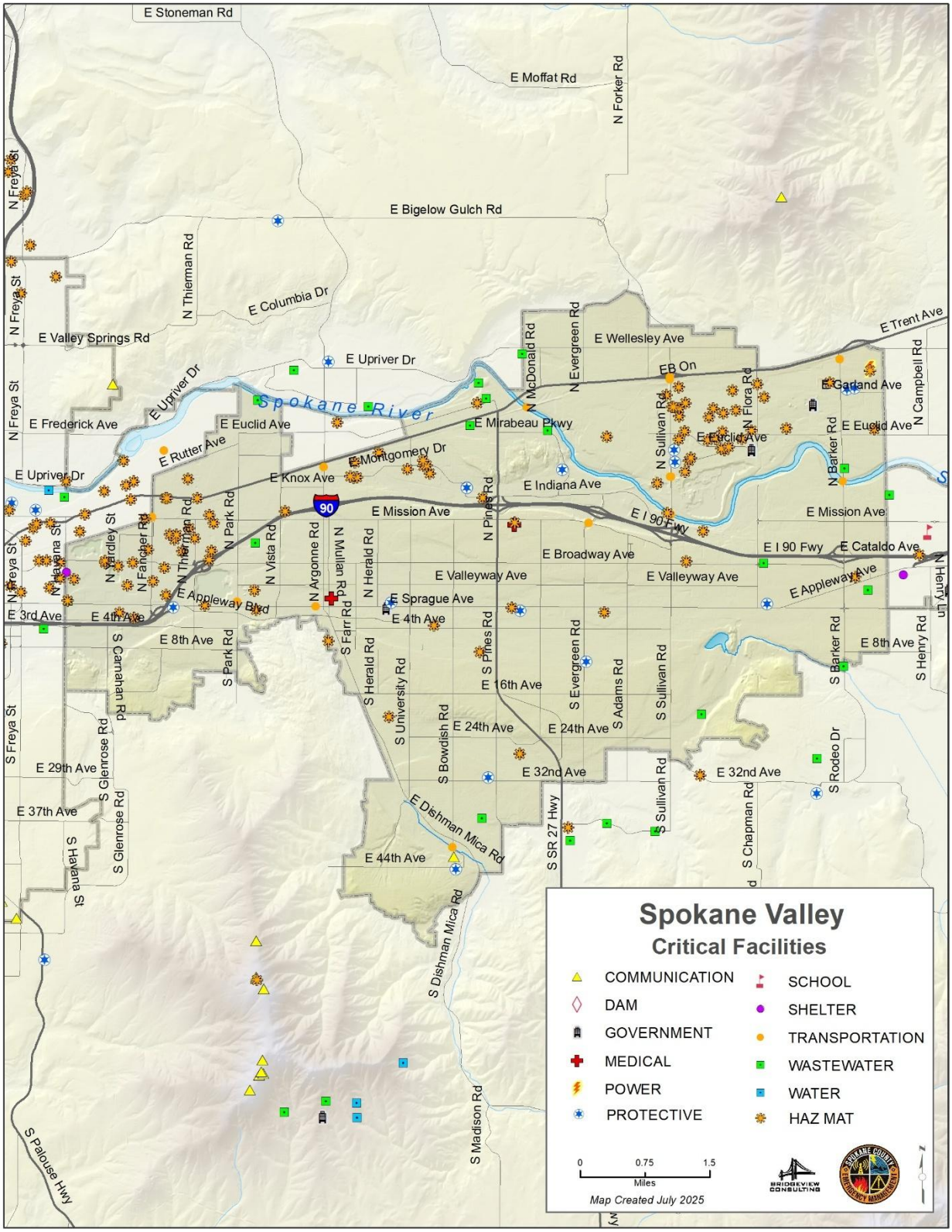
		Current Status			
Mitigation Strategy	**Project Status**	**Completed**	**Continual /Ongoing Nature**	**Removed -/No Longer Relevant / No Action**	**Carried Over**
COSV 12 – Actively participate in the plan maintenance strategy identified in this plan.			X		X
COSV 13 – Provide scour protection for vulnerable bridge abutments.	Ongoing Bridge Maintenance Program		X		X

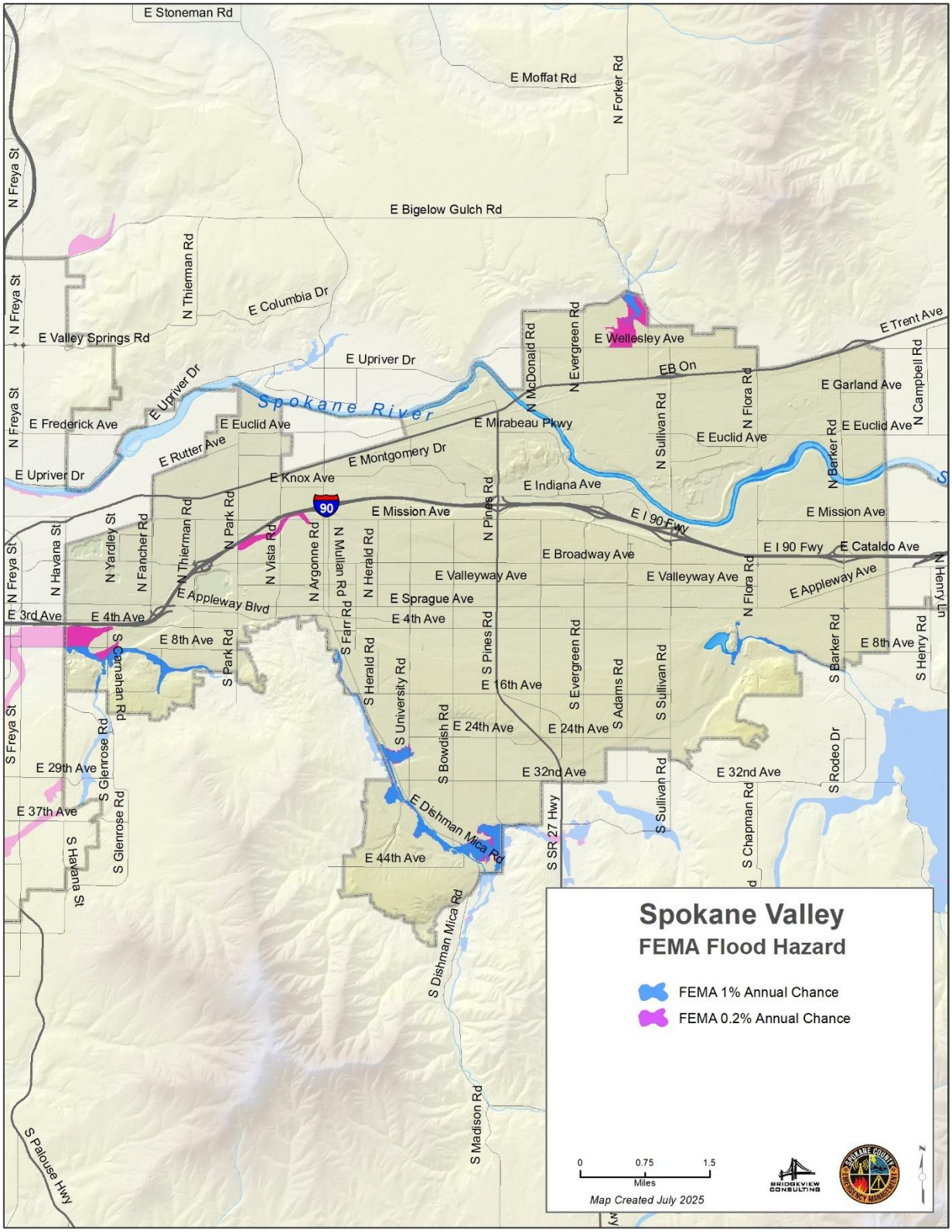
6.13 HAZARD AREA EXTENT AND LOCATION

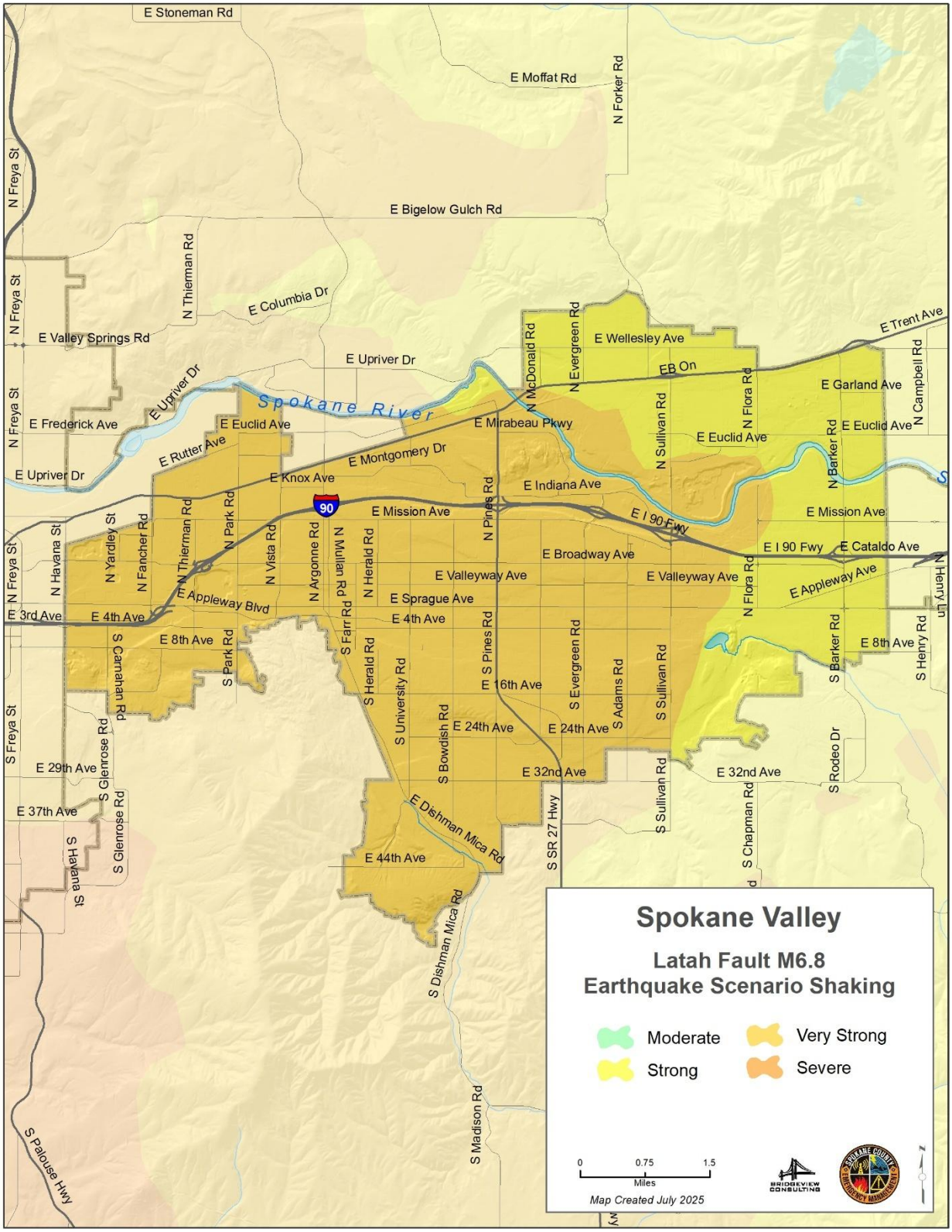
For those hazards which have the potential to impact the City, hazard area extent and location maps are included below. For all hazards for which a geographic boundary is identified, the base plan maintains impact maps. These maps are based on the best available data at the time of the preparation of this plan and are considered to be adequate for planning purposes.

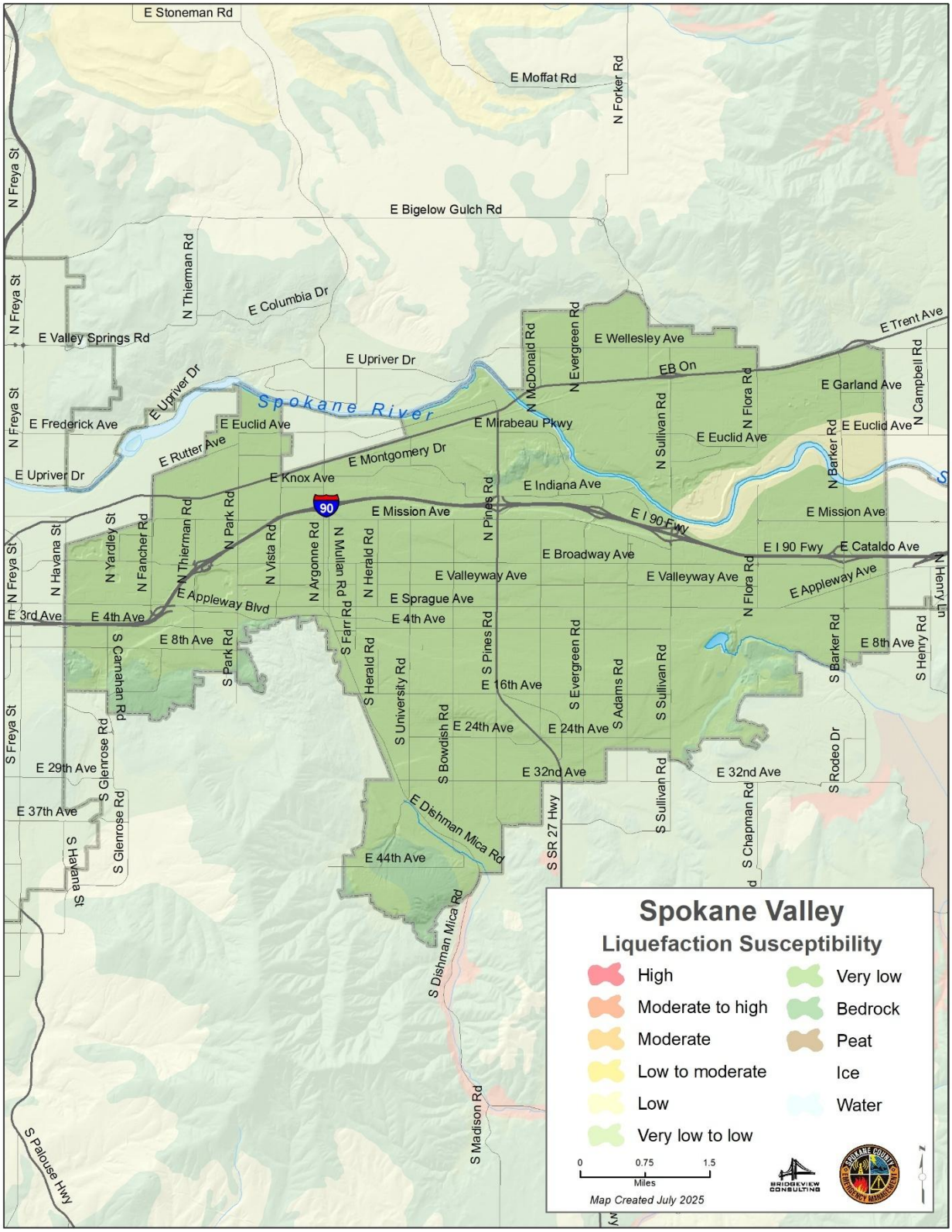

City of
Spokane Valley
T26N
T26N
City of Millwood
City of Spokane
City of
Liberty Lake
T25N
T24N
R41E
R44E
R44E
R45E
A
B
C
D
E
F
1
2
3
4
5
6

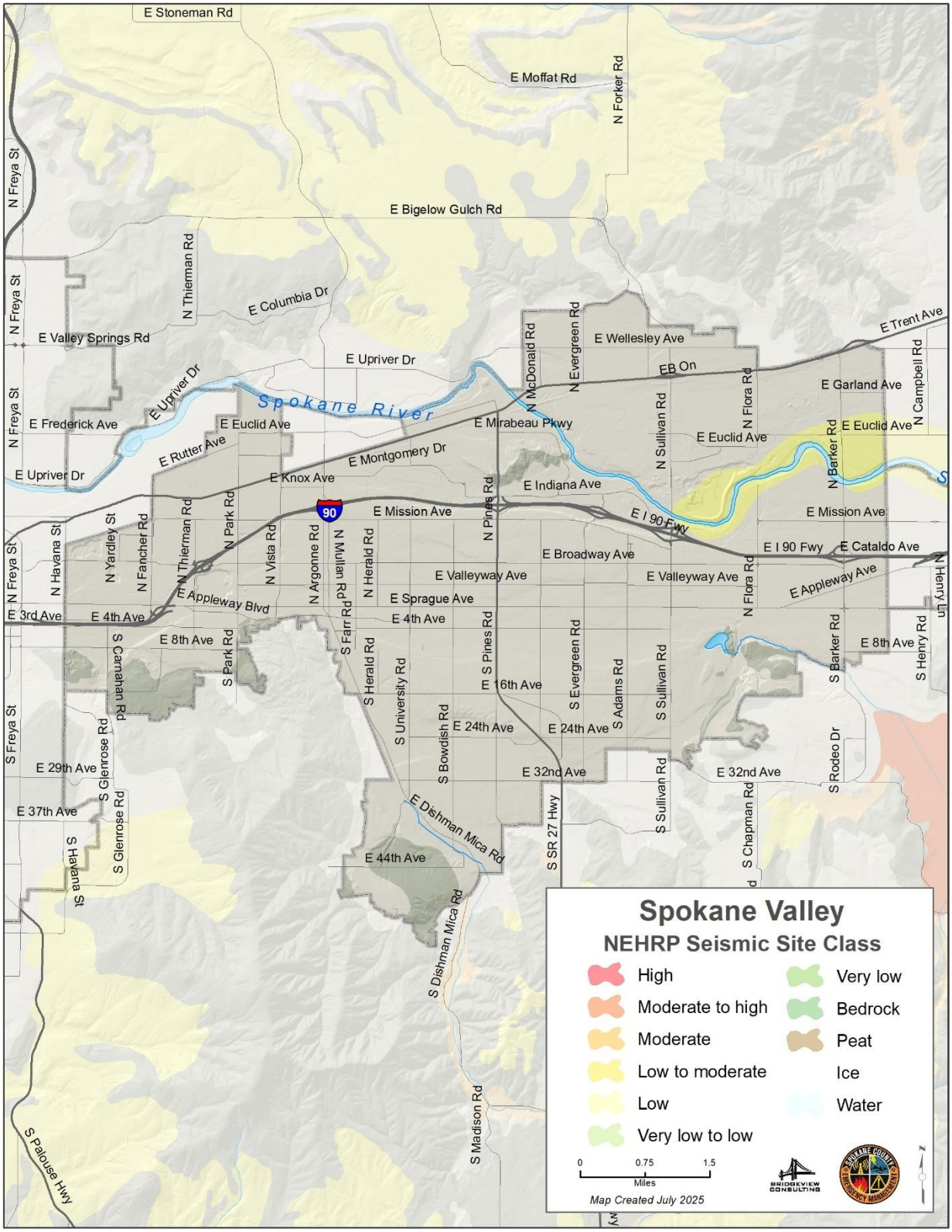

City of Spokane Valley Land Use
A
B
C
D
E
F
1
2
3
4
5
6
T26N
T25N
T24N
R43E
R44E
R45E
City of Spokane
Spokane River
Historical Channel
Spokane Valley

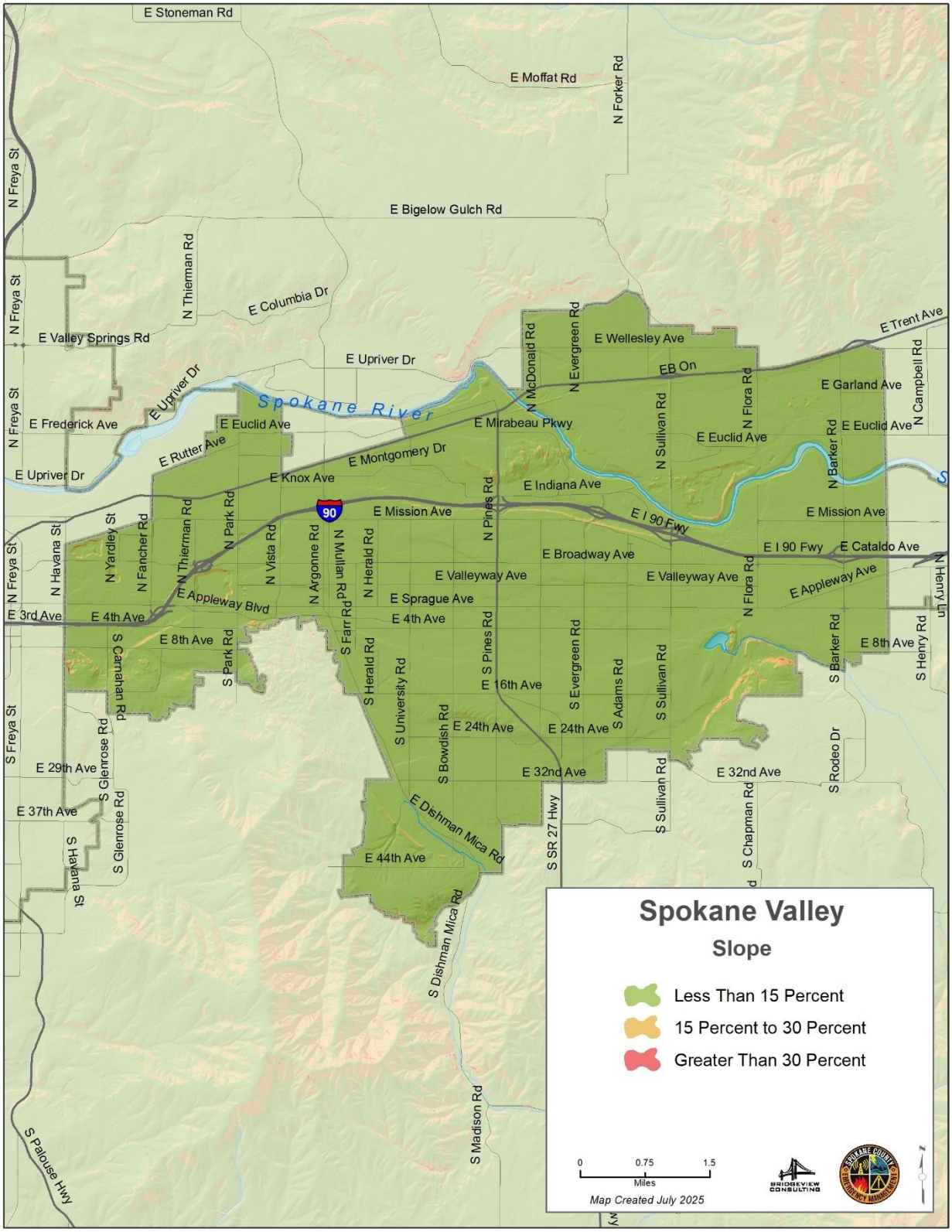

Spokane Valley
Critical Facilities
COMMUNICATION
DAM
GOVERNMENT
MEDICAL
POWER
PROTECTIVE
SCHOOL
SHELTER
TRANSPORTATION
WASTEWATER
WATER
HAZ MAT
0
0.75
1.5
Miles
Map Created July 2025
Spokane River
E Stoneman Rd
E Moffat Rd
N Forker Rd
E Bigelow Gulch Rd
N Thierman Rd
E Columbia Dr
E Valley Springs Rd
E Upriver Dr
N Freya St
E Frederick Ave
E Euclid Ave
E Rutter Ave
E Knox Ave
E Montgomery Dr
E Mirabeau Pkwy
E Mission Ave
E Indiana Ave
E Broadway Ave
E Valleyway Ave
E Sprague Ave
E Appleway Blvd
E 3rd Ave
E 4th Ave
E 8th Ave
E 16th Ave
E 24th Ave
E 29th Ave
E 32nd Ave
E 37th Ave
E 44th Ave
E Dishman Mica Rd
S Dishman Mica Rd
S Madison Rd
S Palouse Hwy
N Pines Rd
N Sullivan Rd
N Evergreen Rd
N McDonald Rd
N Flora Rd
N Barker Rd
N Campbell Rd
E Trent Ave
E Garland Ave
E I 90 Fwy
E Cataldo Ave
E Appleway Ave
N Henry Rd
N Park Rd
N Vista Rd
N Argonne Rd
N Mullan Rd
N Herald Rd
S Herald Rd
S University Rd
S Bowdish Rd
S Pines Rd
S Evergreen Rd
S Adams Rd
S Sullivan Rd
S Barker Rd
S Henry Rd
S Rodeo Dr
S Chapman Rd
S SR 27 Hwy
S Freya St
S Glenrose Rd
S Havana St
S Park Rd
S Cameron Rd
N Havana St
N Yardley St
N Rancher Rd
N Thierman Rd
N Freya St
90
EB On

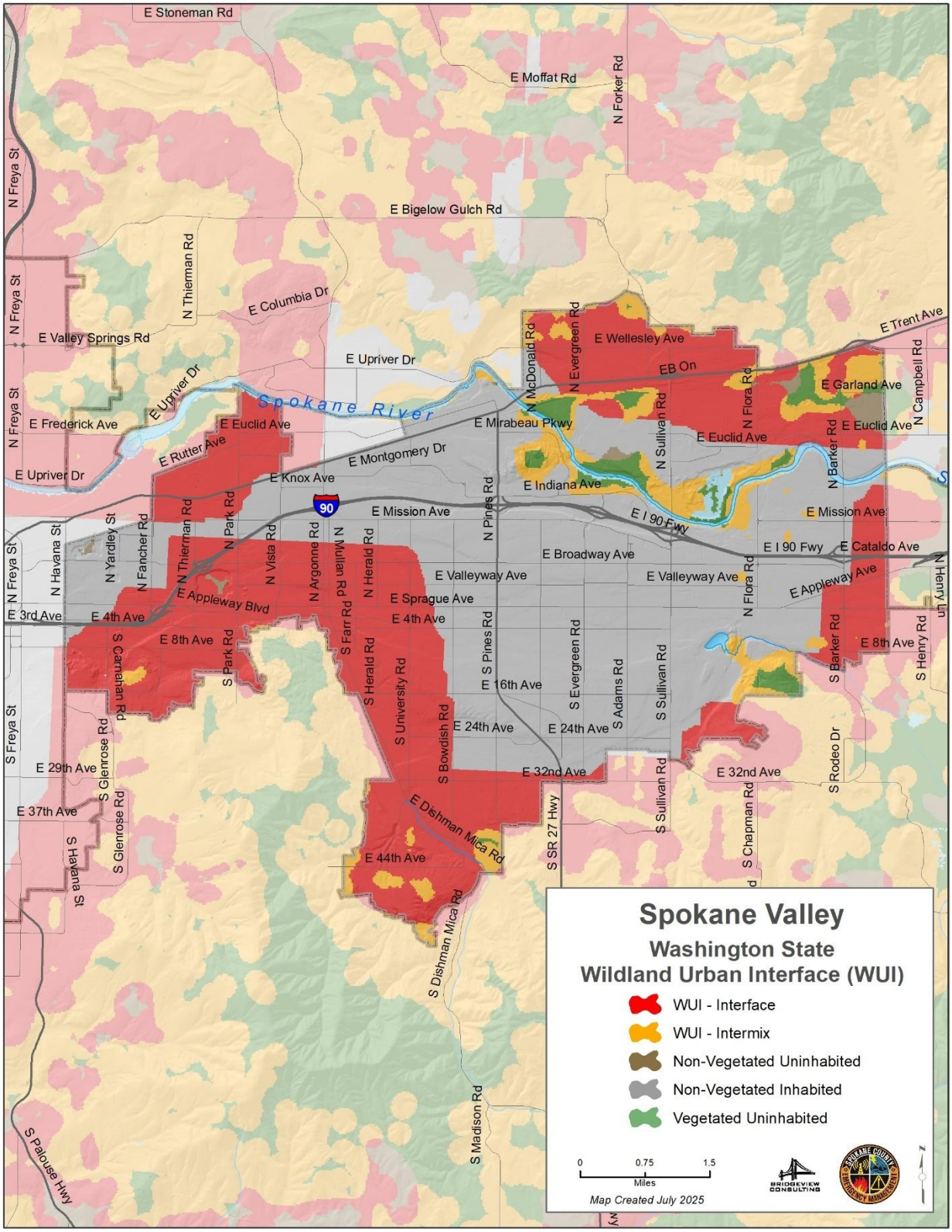

Spokane Valley
FEMA Flood Hazard
FEMA 1% Annual Chance
FEMA 0.2% Annual Chance
0
0.75
1.5
Miles
Map Created July 2025
Spokane River
E Stoneman Rd
E Moffat Rd
N Forker Rd
E Bigelow Gulch Rd
N Freya St
N Thierman Rd
E Columbia Dr
E Valley Springs Rd
E Upriver Dr
E Frederick Ave
E Rutter Ave
E Euclid Ave
E Knox Ave
E Montgomery Dr
E Mirabeau Pkwy
E Wellesley Ave
N McDonald Rd
N Evergreen Rd
E Trent Ave
EB On
E Garland Ave
N Campbell Rd
N Sullivan Rd
N Flora Rd
E Indiana Ave
E Mission Ave
E I 90 Fwy
N Barker Rd
N Pines Rd
N Havana St
N Yardley St
N Fancher Rd
N Park Rd
N Vista Rd
N Argonne Rd
N Mullan Rd
N Herald Rd
E Broadway Ave
E Valleyway Ave
E Cataldo Ave
E Appleway Ave
E Appleway Blvd
E Sprague Ave
E 3rd Ave
E 4th Ave
E 8th Ave
S Park Rd
S Farr Rd
S Herald Rd
S University Rd
E S Pines Rd
E 16th Ave
S Evergreen Rd
S Adams Rd
S Sullivan Rd
S Barker Rd
S Henry Rd
N Henry Ln
S Freya St
S Havana St
S Glenrose Rd
E 29th Ave
E 37th Ave
E 24th Ave
S Bowdish Rd
E 32nd Ave
S Rodeo Dr
S Chapman Rd
E Dishman Mica Rd
E 44th Ave
S SR 27 Hwy
S Dishman Mica Rd
S Madison Rd
S Palouse Hwy
90


Spokane Valley
Latah Fault M6.8
Earthquake Scenario Shaking
Moderate
Strong
Very Strong
Severe
0
0.75
1.5
Miles
Map Created July 2025
E Stoneman Rd
E Moffat Rd
N Forker Rd
N Freya St
E Bigelow Gulch Rd
N Thierman Rd
E Columbia Dr
E Valley Springs Rd
E Upriver Dr
Spokane River
E Frederick Ave
E Euclid Ave
E Rutter Ave
E Montgomery Dr
E Knox Ave
E Mirabeau Pkwy
E Indiana Ave
E Mission Ave
E I 90 Fwy
E Broadway Ave
E Valleyway Ave
E Sprague Ave
E Appleway Blvd
E 3rd Ave
E 4th Ave
E 8th Ave
E 16th Ave
E 24th Ave
E 29th Ave
E 32nd Ave
E 37th Ave
E 44th Ave
E Dishman Mica Rd
E Trent Ave
E Wellesley Ave
EB On
E Garland Ave
E Cataldo Ave
E Appleway Ave
N McDonald Rd
N Evergreen Rd
N Sullivan Rd
N Flora Rd
N Campbell Rd
N Barker Rd
N Pines Rd
N Vista Rd
N Argonne Rd
N Mullan Rd
N Herald Rd
N Park Rd
N Yardley St
N Fancher Rd
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S Evergreen Rd
S Adams Rd
S Sullivan Rd
S Barker Rd
S Henry Rd
S Rodeo Dr
S Chapman Rd
S Freya St
S Glenrose Rd
S Havana St
S Cameron Rd
S Farr Rd
S Pines Rd
S SR 27 Hwy
S Dishman Mica Rd
S Madison Rd
S Palouse Hwy
90


Spokane Valley
Liquefaction Susceptibility
High
Moderate to high
Moderate
Low to moderate
Low
Very low to low
Very low
Bedrock
Peat
Ice
Water
0
0.75
1.5
Miles
Map Created July 2025
Spokane River
E Stoneman Rd
E Moffat Rd
N Forker Rd
E Bigelow Gulch Rd
N Freya St
N Thierman Rd
E Columbia Dr
E Valley Springs Rd
E Upriver Dr
E Frederick Ave
E Euclid Ave
E Rutter Ave
E Montgomery Dr
E Knox Ave
E Mirabeau Pkwy
E Wellesley Ave
E Trent Ave
EB On
E Garland Ave
E Indiana Ave
E Mission Ave
E I 90 Fwy
E Cataldo Ave
E Broadway Ave
E Valleyway Ave
E Appleway Ave
E Appleway Blvd
E Sprague Ave
E 4th Ave
E 3rd Ave
E 8th Ave
E 16th Ave
E 24th Ave
E 29th Ave
E 32nd Ave
E 37th Ave
E 44th Ave
E Dishman Mica Rd
S Dishman Mica Rd
S Madison Rd
S Palouse Hwy
S SR 27 Hwy
N McDonald Rd
N Evergreen Rd
N Sullivan Rd
N Flora Rd
N Campbell Rd
N Barker Rd
N Pines Rd
N Havana St
N Yardley St
N Fancher Rd
N Park Rd
N Vista Rd
N Argonne Rd
N Mullan Rd
N Herald Rd
S Farr Rd
S Herald Rd
S University Rd
S Bowdish Rd
S Evergreen Rd
S Adams Rd
S Sullivan Rd
S Barker Rd
S Henry Rd
S Rodeo Dr
S Chapman Rd
S Freya St
S Glenrose Rd
S Havana St
S Park Rd
S Carnahan Rd
N Henry Ln


Spokane Valley
NEHRP Seismic Site Class
High
Moderate to high
Moderate
Low to moderate
Low
Very low to low
Very low
Bedrock
Peat
Ice
Water
0
0.75
1.5
Miles
Map Created July 2025
BRIDGEVIEW CONSULTING
Spokane River
E Stoneman Rd
E Moffat Rd
N Forker Rd
E Bigelow Gulch Rd
N Freya St
N Thierman Rd
E Columbia Dr
E Valley Springs Rd
E Upriver Dr
E Frederick Ave
E Euclid Ave
E Rutter Ave
E Montgomery Dr
E Knox Ave
E Mirabeau Pkwy
E Wellesley Ave
E Trent Ave
EB On
E Garland Ave
E Mission Ave
E I 90 Fwy
E Cataldo Ave
E Broadway Ave
E Valleyway Ave
E Appleway Ave
E Appleway Blvd
E Sprague Ave
E 4th Ave
E 3rd Ave
E 8th Ave
E 16th Ave
E 24th Ave
E 29th Ave
E 32nd Ave
E 37th Ave
E 44th Ave
E Dishman Mica Rd
S Dishman Mica Rd
S Madison Rd
S Palouse Hwy
S SR 27 Hwy
N McDonald Rd
N Evergreen Rd
N Sullivan Rd
N Flora Rd
N Campbell Rd
N Barker Rd
N Pines Rd
N Havana St
N Yardley St
N Fancher Rd
N Park Rd
N Vista Rd
N Argonne Rd
N Mullan Rd
N Herald Rd
S Freya St
S Havana St
S Glenrose Rd
S Cameron Rd
S Park Rd
S Herald Rd
S University Rd
S Bowdish Rd
S Pines Rd
S Evergreen Rd
S Adams Rd
S Sullivan Rd
S Barker Rd
S Henry Rd
S Rodeo Dr
S Chapman Rd
N Henry Ln
90


Spokane Valley
Slope
Less Than 15 Percent
15 Percent to 30 Percent
Greater Than 30 Percent
0
0.75
1.5
Miles
Map Created July 2025
Spokane River
E Stoneman Rd
E Moffat Rd
N Forker Rd
E Bigelow Gulch Rd
N Freya St
N Thierman Rd
E Columbia Dr
E Valley Springs Rd
E Upriver Dr
E Frederick Ave
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E Montgomery Dr
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E Wellesley Ave
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E Mission Ave
E I 90 Fwy
E Cataldo Ave
E Broadway Ave
E Valleyway Ave
E Appleway Ave
E Appleway Blvd
E Sprague Ave
E 4th Ave
E 3rd Ave
E 8th Ave
E 16th Ave
E 24th Ave
E 29th Ave
E 32nd Ave
E 37th Ave
E 44th Ave
E Dishman Mica Rd
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S Evergreen Rd
S Adams Rd
S Sullivan Rd
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S Henry Rd
S Rodeo Dr
S Chapman Rd
S Freya St
S Glenrose Rd
S Havana St
S SR 27 Hwy
S Bowdish Rd
S Dishman Mica Rd
S Madison Rd
S Palouse Hwy
90


E Stoneman Rd
E Moffat Rd
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N Freya St
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N Thierman Rd
E Columbia Dr
E Valley Springs Rd
E Upriver Dr
Spokane River
E Frederick Ave
E Euclid Ave
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E Montgomery Dr
E Knox Ave
E Mission Ave
E Trent Ave
E Wellesley Ave
EB On
E Garland Ave
N McDonald Rd
N Evergreen Rd
N Flora Rd
N Campbell Rd
N Sullivan Rd
E Mirabeau Pkwy
E Indiana Ave
N Barker Rd
E I 90 Fwy
E Cataldo Ave
N Pines Rd
N Havana St
N Yardley St
N Fancher Rd
N Park Rd
N Vista Rd
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N Mullan Rd
N Herald Rd
E Broadway Ave
E Valleyway Ave
E Appleway Ave
E Appleway Blvd
E Sprague Ave
E 3rd Ave
E 4th Ave
E 8th Ave
S Carnahan Rd
S Park Rd
S Farr Rd
S Herald Rd
S University Rd
S Bowdish Rd
E 16th Ave
E 24th Ave
S Evergreen Rd
S Adams Rd
S Sullivan Rd
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E 37th Ave
S Havana St
E Dishman Mica Rd
E 44th Ave
S SR 27 Hwy
S Chapman Rd
S Dishman Mica Rd
S Madison Rd
S Palouse Hwy
S Freya St
Spokane Valley
Washington State
Wildland Urban Interface (WUI)
WUI - Interface
WUI - Intermix
Non-Vegetated Uninhabited
Non-Vegetated Inhabited
Vegetated Uninhabited
0
0.75
1.5
Miles
Map Created July 2025
BRIDGEVIEW CONSULTING
SPOKANE COUNTY EMERGENCY MANAGEMENT
N

CHAPTER 7.
TOWN OF LATAH 2026 ANNEX UPDATE

7.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to the Town of Latah, a participating jurisdiction to the Spokane County Hazard Mitigation Plan Update. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the Town of Latah. For planning purposes, this Annex provides additional information specific to the jurisdiction, with a focus on providing greater details on the risk assessment and mitigation strategy for this community only. This document serves as the Town's first Hazard Mitigation Plan. All relevant data has been carried over and updated with new information as appropriate and as identified within the planning process discussed in Volume 1.

7.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

The Town of Latah followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, the Town also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Corinna Rittgarn, Mayor P.O. Box 130 Latah, WA 99018 Telephone: (509) 288-0851 e-mail: latahmayorc@gmail.com	Primary Point of Contact	Meeting attendance, planning team facilitator; authoring of plan; capturing of information
Tahnee Constancio, Clerk/Treasurer P.O. Box 130 Latah, WA 99018 Telephone: (509) 286-3471 e-mail: latahtown@gmail.com	Alternate Point of Contact	Meeting attendance; author portions of plan; capture information
Town of Latah Council		Regular briefings on HMP update; presentation/review of risk assessment; input on strategies

7.3 COMMUNITY PROFILE

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

- **Date of Incorporation**—April 9, 1892
- **Current Population**—185 as of 2020 census
- **Population Growth**—The Town reached its peak population of 339 residents in the early 1900's before experiencing a long-term decline that bottomed out in 2000 at 151 residents. Since that time, there has been a modest, steady increase, reaching 185 in 2020. This indicates a recent stabilization and limited growth. Based on historical trends, significant population growth is not anticipated.
- **Location and Description**—Latah is located along Highway 27 south of Spokane, between the Town of Fairfield and City of Tekoa. The Town has a total area of 0.31 square miles.
- **Brief History**—Established in the late 19th century as a small agricultural community. The area gained early historical significance with the discovery of mammoth remains nearby. Throughout the 20th century the Town gradually declined in population, experiencing a small rebound in the past 25 years. Latah remains a largely agricultural town to this day.
- **Climate -** Latah experiences a mild climate throughout the year with warm summers and cool winters. Average winter daily temperatures are in the mid 20's and average summer daily temperatures are in the mid 70's in the summer. Latah receives an annual precipitation of 22 inches.
- **Governing Body Format**—Latah operates with a Mayor-Council form of government.
- **Development Trends**—While the Town has seen some vacant homes being remodeled and families move in; residential and commercial growth has largely remained the same with no substantial changes.
- **Economy –** The Town of Latah is primarily agricultural with limited commercial activity.

The jurisdiction boundaries are identified in the maps at the end of the annex.

7.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events which have occurred within the County. In the context of the Town of Latah, it was determined that there are no additional hazards that are unique to the jurisdiction. Table 7-1 lists all past occurrences of natural hazards within the jurisdiction. If available, dollar loss data is also included. The Town will begin to track more carefully the impacts of previous occurrences to enhance this data in future updates.

Table 7-1 Natural Hazard Events			
Type of Event	**FEMA Disaster # (if applicable)**	**Date**	**Dollar Losses (if known)**
Severe Storm/ Severe Winter Storm And Record and Near-Record Snow	DR-1825	3/2/2009	~$1,000
Severe Storms, Straight-line winds, Flooding, Landslides and Mudslides	DR-4249	1/15/2016	Unknown
Severe Winter Storms, Flooding, Land- and Mud-slides	DR-4309	4/21/2017	Unknown
COVID	DR-4481	3/22/2020	Unknown
Fire	FM-5355	7/17/2020	Unknown
Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	DR-4593	4/8/2021	Unknown
Fire	FM-5395	7/6/2021	Unknown
Fire	FM-5479	8/18/2023	Unknown
Fire	FM-5481	8/19/2023	Unknown
Washington Wildfires (August 18-25, 2023)	DR-4759	3/25/2024	Unknown

7.5 CAPABILITY ASSESSMENT

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: National Flood Insurance Information; regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach,

partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation, and classifications under various community programs.

7.5.1 National Flood Insurance Information

Information on the community's National Flood Insurance Program (NFIP) compliance is presented in Table 4-2. This identifies the current status of the jurisdiction's involvement with the NFIP.

Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: 0
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

Table 7-2
National Flood Insurance Compliance

What department is responsible for floodplain management in your community?	Town Relies on Spokane County
Who is your community's floodplain administrator? (department/position)	Town Relies on Spokane County
Do you have any certified floodplain managers on staff in your community?	No
What is the date of adoption of your flood damage prevention ordinance?	2025
When was the most recent Community Assistance Visit or Community Assistance Contact?	N/A
To the best of your knowledge, does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your community? (If no, please state why)	FEMA currently updating NFIP Maps
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your community participate in the Community Rating System (CRS)? If so, is your community seeking to improve its CRS Classification? If not, is your community interested in joining the CRS program?	No

7.5.2 Regulatory Capability

The assessment of the jurisdiction's legal and regulatory capabilities is presented in Table 4-3. This includes planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are currently in place.

Table 7-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements				
Building Code	X		X	The town adopted the WA State Building Code last in 2025 but also relies on Spokane County regulations.
Zoning Ordinance	X			Ordinance 189, Adopted 1999
Floodplain Ordinance				Last updated/adopted 2025
Stormwater Management	X		X	Relies on County to Provide
Real Estate Disclosure	X			WA State Disclosure Law (RCW 64.06)
Site Plan Review	X			
Public Health and Safety	X			Relies on County & Public Health to Provide
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire, etc.)	X			Through HMP
Environmental Protection				Town Adopted the WA State Building Code, 2025
Planning Documents				
General or Comprehensive Plan				In Progress as of 2025 Update *Is the plan equipped to provide linkage to this mitigation plan?* No
Floodplain or Basin Plan				N/A
Stormwater Plan				County Plan
Capital Improvement Plan				Yes
Habitat Conservation Plan				As part of SEPA
Shoreline Management Plan				N/A
Community Wildfire Protection Plan				Yes – Countywide Plan - 2026
Transportation Plan				County Plan

Table 7-3
Legal and Regulatory Capability

	Local Authority	Other Jurisdictional Authority	State Mandated	Comments
Response/Recovery Planning				
Comprehensive Emergency Management Plan				Spokane County DEM
Threat and Hazard Identification and Risk Assessment				Yes, through the County and HLS Region.
Terrorism Plan				Spokane County DEM
Post-Disaster Recovery Plan				No
Continuity of Operations Plan				No
Public Health Plans		X		Relies on County
Boards and Commission				
Planning Commission	X			
Mitigation Planning Committee				The County was part of the HMP planning committee for the 2026 update, which was led by Bridgeview Consulting
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems, chipping, etc.)	X			Yes
Mutual Aid Agreements / Memorandums of Understanding	X			Yes, various MOU/MOAs are in place, as well as contracts for services.
Other				

7.5.3 Administrative and Technical Capabilities

The assessment of the jurisdiction's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 4-4. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

Table 7-4 Administrative and Technical Capability		
Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Planning/ Dept Head
Professionals trained in building or infrastructure construction practices (building officials, fire inspectors, etc.)	Yes	Building / Dept Head/Fire Dept
Engineers specializing in construction practices?	Yes	Public Works
Planners or engineers with an understanding of natural hazards		Spokane County
Staff with training in benefit/cost analysis	Yes	Clerk/Treasurer
Surveyors	No	
Personnel skilled or trained in GIS applications	No	
Scientist familiar with natural hazards in local area	No	
Emergency Manager	Yes	Mayor
Grant writers	No	
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?)	Yes	County
Hazard data and information available to public	Yes	The Mitigation Plan will be available via the County's Website.
Maintain Elevation Certificates	Yes	Spokane County
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness?	Yes	
Local citizen groups or non-profit organizations focused on environmental protection?	No	
Organization focused on individuals with access and functional needs populations	No	

Table 7-4
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Fire Dept and Spokane County provide these services. The Mayor also regularly physically posts public outreach information at various locations throughout the Town.
Natural disaster or safety related school programs?	No	
Public-private partnership initiatives addressing disaster-related issues?	No	
Multi-seasonal public awareness program?	Yes	Spokane County DEM has a multi-season awareness program which the Mayor posts to various places.
Other		
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	No	
Noxious Weed Eradication Program or other vegetation management	Yes	In process of identifying responsible Town Employee to fulfill this function
Fire Safe Councils	Yes	With the completion of the 2026 CWPP, the Town has engaged with the local Fire District to establish Fire Safe Councils within its boundaries.
Chipper program	Yes	Spokane Conservation District
Defensible space inspections program	Yes	Spokane Conservation District
Creek, stream, culvert or storm drain maintenance or cleaning program	No	
Stream restoration program	No	
Erosion or sediment control program	No	Seeking funding to assist in addressing road erosion
Address signage for property addresses	Yes	Spokane Conservation District
Other		

7.5.4 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 4-5. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 7-5 Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	Yes

7.5.5 Community Classifications

The jurisdiction's classifications under various hazard mitigation programs are presented in Table 4-6. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community.

Table 7-6. Community Classifications		
	Participating (Yes/No or Classification)	Date Enrolled
Protection Class	6	
Building Code Effectiveness Grading Schedule (Commercial)	4	
Building Code Effectiveness Grading Schedule (Dwelling)	4	
Storm Ready	Yes	County
Firewise	No	

7.6 HAZARD RISK AND VULERABILITY RANKING

The internal Planning Team reviewed the hazard list identified within the Base Plan and identified the hazards that affect the Town of Latah. No additional hazards of concern were identified. In addition, the Planning Team also examined Volume 1, Chapter 4 of the Spokane County Multi-Jurisdictional Hazard Mitigation Plan to ensure an understanding of the application of the Calculated Priority Risk Index (CPRI) information which is utilized in determining the hazard impact and vulnerability. The risk assessment process also included a review of critical facilities impacted, potential dollar losses at risk, and any additional information applicable within the hazard profiles for use in identifying each hazard of concern.

Table 8-6 presents the results of the CPRI process. Table 7-8 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.
- Low (Negligible) – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.
- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.
- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.
- Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted for in excess of one month.

Table 7-7.
Calculated Priority Risk Ranking

Hazard	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought			3			2				2						1				4	2.35
Earthquake		2				2				2			4				1				2.25
Flood		2				2				2					2			2			2.00
Landslides	1					2				2			4				1				1.85
Severe Weather				4			3					4			2				3		3.45
Wildfire				4			3					4	4					2			3.70
Other Hazards of Concern																					0.00

Table 7-8.
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Hazard Rank
1	Wildfire	3.7	High
2	Severe Weather	3.45	High
3	Drought	2.35	Medium
4	Earthquake	2.25	Medium
5	Flood	2	Medium
6	Landslide	1.85	Low

7.6.1 Additional Items Of Consideration

During community meetings in which the risk assessment and risk ranking were discussed, both citizens and council members expressed concerns over roadway erosion issues that have previously been experienced in the Town. Concern was raised that these erosion issues could potentially impact any evacuations that may be necessary during severe weather or flood events, or impact potential emergency response to areas where the roadways are impacted. Residential structures in the area have previously been impacted by the floodwaters accumulating in the area, draining onto private properties and flooding the area and structures. Additional concern was expressed over the aging infrastructure in the Town, which could potentially not support firefighting services. Comments also included concern over the age of the Town's one building it owns, which supports all of the Town's governmental operations, as well as the Town's lack of adequate shelter needs. Should the governmental operations structure fail, the continuity of the Town's government would be jeopardized, at least short term until emergency operations could begin. With the wildfires occurring throughout the region, smoke has been and will continue to be an issue. The age of the one existing structure owned by the Town is concerning due not only to its age, but also the fact that the building is constructed from wood, has no sprinkler system, is attached to the fire station, and it lacks an updated HVAC system to help purify air during times when wildfire smoke is significant and the structure is used for shelter purposes.

7.7 COMMUNITY WILDFIRE ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted Spokane County in completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk. The analysis focused specifically on eight highly valued resources and assets (HVRA), to include people and property, critical facilities, drinking water, ecological integrity, wildlife, timber, agriculture, and recreation. This analysis varies slightly from the analysis within the HMP document, which looks at all assets exposed, in addition to the critical facilities, as well as impact to the people, property, environment, and economy. The resulting maps of the analysis completed by DNR are incorporated at the end of Fire District 12's Annex, which is the Town's fire service agency. Latah is part of Strategic Planning Area 5, which includes Fire Districts 2, 11, and 12, and the towns of Latah, Waverly, Fairfield, and Rockford.

7.8 MITIGATION GOALS AND OBJECTIVES

The Town of Latah adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1.

7.9 HAZARD MITIGATION ACTION PLAN

The Planning Team for the jurisdiction identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the jurisdiction's assets and hazards of concern. Table

7-9 lists the action items/strategies that make up the jurisdiction's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, who will benefit from the activity, and the type of initiative associated with each item are also identified.

Table 7-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known*	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE #1 Continue public outreach efforts to provide hazard information developed as a result of the HMP with community members**.**									
New	All	All	Fire	Low	General Fund	Long-Term	No	Public Information, Emergency Service	Local
INITIATIVE #2 Actively participate in the plan maintenance strategy identified in this plan. This includes annually working with the Wildfire Coalition to identify areas where wildfire mitigation strategies will be most effectively applied within the Town of Latah.									
New & Existing	All	1, 4, 8	Fire	Low	General Fund	Short Term	No	Public Information, Emergency Services	Local and County
INITIATIVE #3 Integrate the hazard mitigation plan into other plans, ordinances or programs to dictate land uses within the jurisdiction. The Town recently updated its NFIP ordinance and continues to seek grants or funding to help in the development of additional land use regulations.									
New & Existing	All	2, 3, 4, 5, 11	Town of Latah's Planning Department	Medium	Local	Short-Term	No	Preventive Activities	Local
INITIATIVE #4 Implement wildfire mitigation recommendations identified in the Spokane County CWPP.									
New & Existing	Wildfire	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12	Spokane Conservation District, all County Fire Districts	High	Local, Fire Grants, HMGP	Short-Term	No	Preventive Activities, Structural, Natural Resource Protection	Local, County
INITIATIVE #5 Continue to explore options to allow the Town to hire staff, or through contracts, to enforce its codes and regulations that result in decreased risk exposure to new development.									

Table 7-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known*	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
New	All	4, 5, 11	Town of Latah's Building Personnel	Low	Local, HUD Grants, Economic Develop-ment Grants	Short-Term	No	Preventive Activities, Structural, Natural Resource Protection	Local
INITIATIVE #6 Working with County and State officials to seek grant funding to elevate roads which are regularly flooded during rain or severe weather events.									
New	All	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12	Town Council	High	Federal, County and State DOT Funds	Medium-Term	No	Preventive Activities, Property Protection, Emergency Services	Local, County
INITIATIVE #7 Seek grant funding to replace/remodel existing Shop and Fire Department, Community Center, & Town Hall Building.									
New	All	All	Town Council	High	HUD Grants, Economic Develop-ment Grants, Stafford Act Grants	Long-Term	No	Structural Projects, Preventive Activities, Property Protection, Emergency Services	Local
INITIATIVE #8 Seek grant funding to establish a community shelter at the park location.									
New	All	All	Town Council, Mayor	High	HUD Grants, Economic Develop-ment Grants, Stafford Act Grants	Long Term	No	Structural Projects, Preventive Activities, Emergency Services	Local
INITIATIVE #9 Seek grant funding to obtain water storage structures to assist with fighting wildfire.									

Table 7-9.
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known*	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
New	Wildfire	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12	Fire District	Medium	Fire Grants	Short-Term	No	Structural Projects, Property Protection, Emergency Services	Local, County
INITIATIVE #10 Working with local fire service agencies to identify areas in which community wildfire mitigation treatment would be effective, and continue to work with Fire Department agencies, Spokane County Conservation District, and Spokane County Wildfire Coalition.									
New	Wildfire	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12	Fire District, Spokane County Conservation District, Mayor, Emergency Management,	High	Fire Grants	Short-Term	No	Preventive Activities, Emergency Services, Recovery, Natural Resource Protection	Local, County
INITIATIVE #11 Work with County Officials to identify potential areas of annexation to support new structures for Town Government and future growth, including a shelter location and new fire station.									
New	All	All	Town Council, Mayor	High	Stafford Act, HLS	Long-Term	No	Preventive Activities, Structural Projects, Emergency Services, Recovery	Local, County
INITIATIVE #12 Seek grant funding to update aged water infrastructure.									
New	All	All	Town Council, Mayor, Facilities/ Maintenance	High	HUD, Ecology, Fire and Stafford Act Grants	Long-Term	No	Preventive Activities, Structural Projects, Emergency Services, Recovery,	Local
*For the Town of Latah, as an impoverished community, even small projects which other municipalities may be able to fund through general funds are not possible, and as such, almost all projects are identified as having a “high” cost.									

7.10 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 7-10 identifies the prioritization for each initiative.

Table 7-10.
Mitigation Strategy Priority Schedule

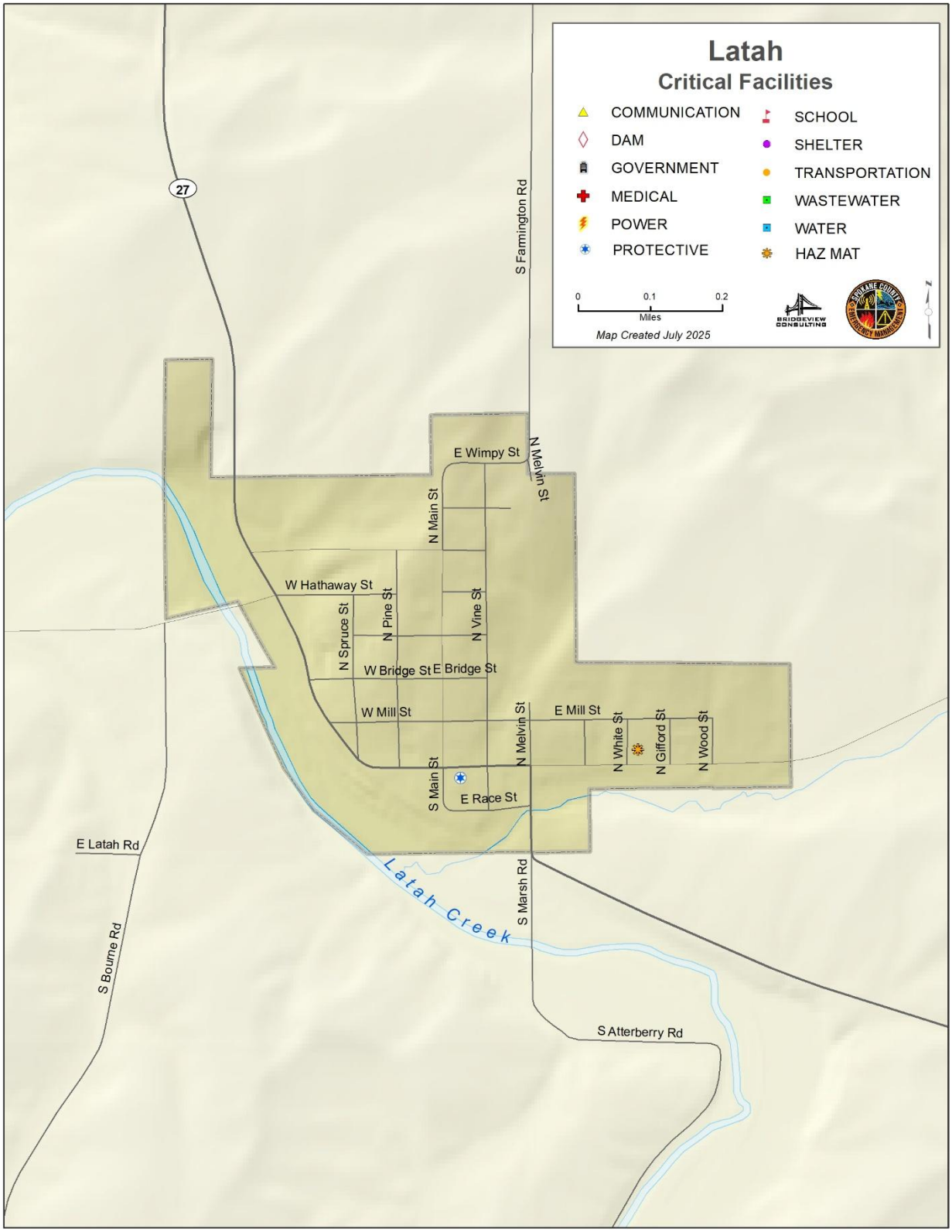
Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
1	All	H	L	Y	N	Y	H
2	3	H	L	Y	N	Y	H
3	5	H	L	Y	N	Y	H
4	11	H	H	Y	Y	Some	H
5	3	H	L	Y	Y	Y	H
6	11	H	H	Y	Y	N	H
7	12	H	H	Y	Y	N	H
8	12	H	H	Y	Y	N	H
9	11	H	H	Y	Y	N	H
10	11	H	H	Y	Y	N	H
11	12	H	H	Y	Y	N	H
12	12	H	H	Y	Y	N	H

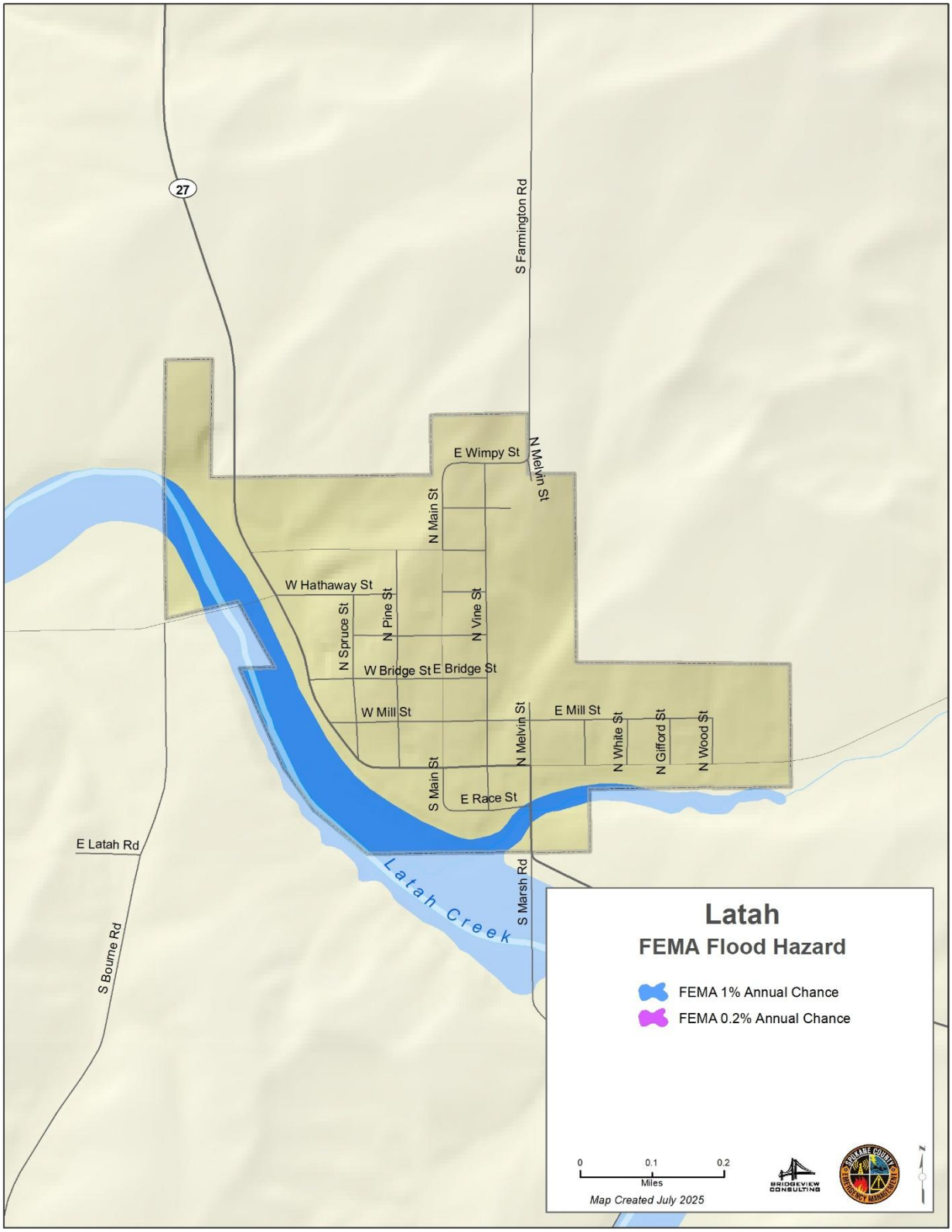
a. See Chapter 1 for explanation of priorities.

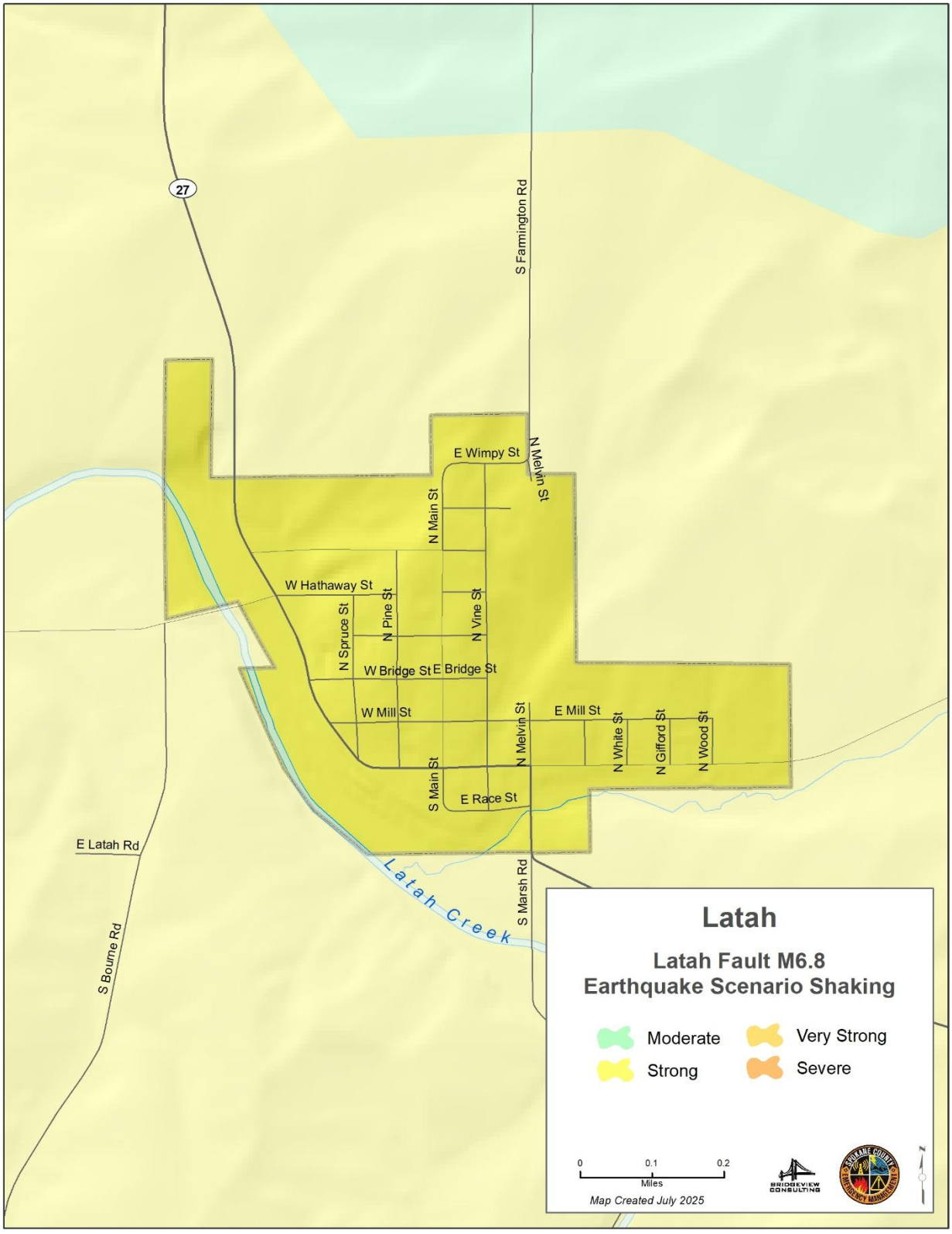
7.11 ADDITIONAL INFORMATION

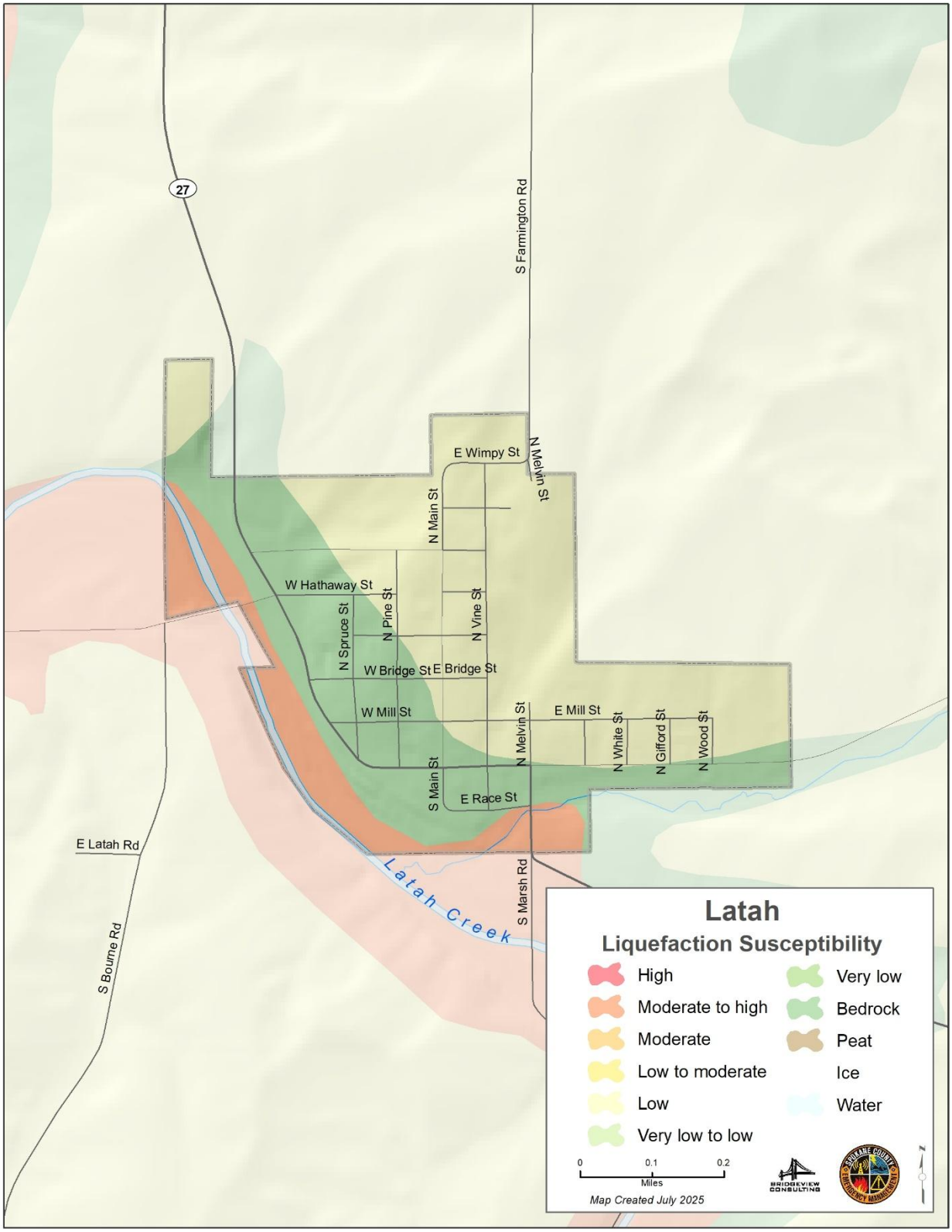
Latah is a rural Town with very limited staff, consisting of a part-time Town Maintenance position and a part-time Clerk/Treasurer. With these limitations, plans such as these are very difficult.

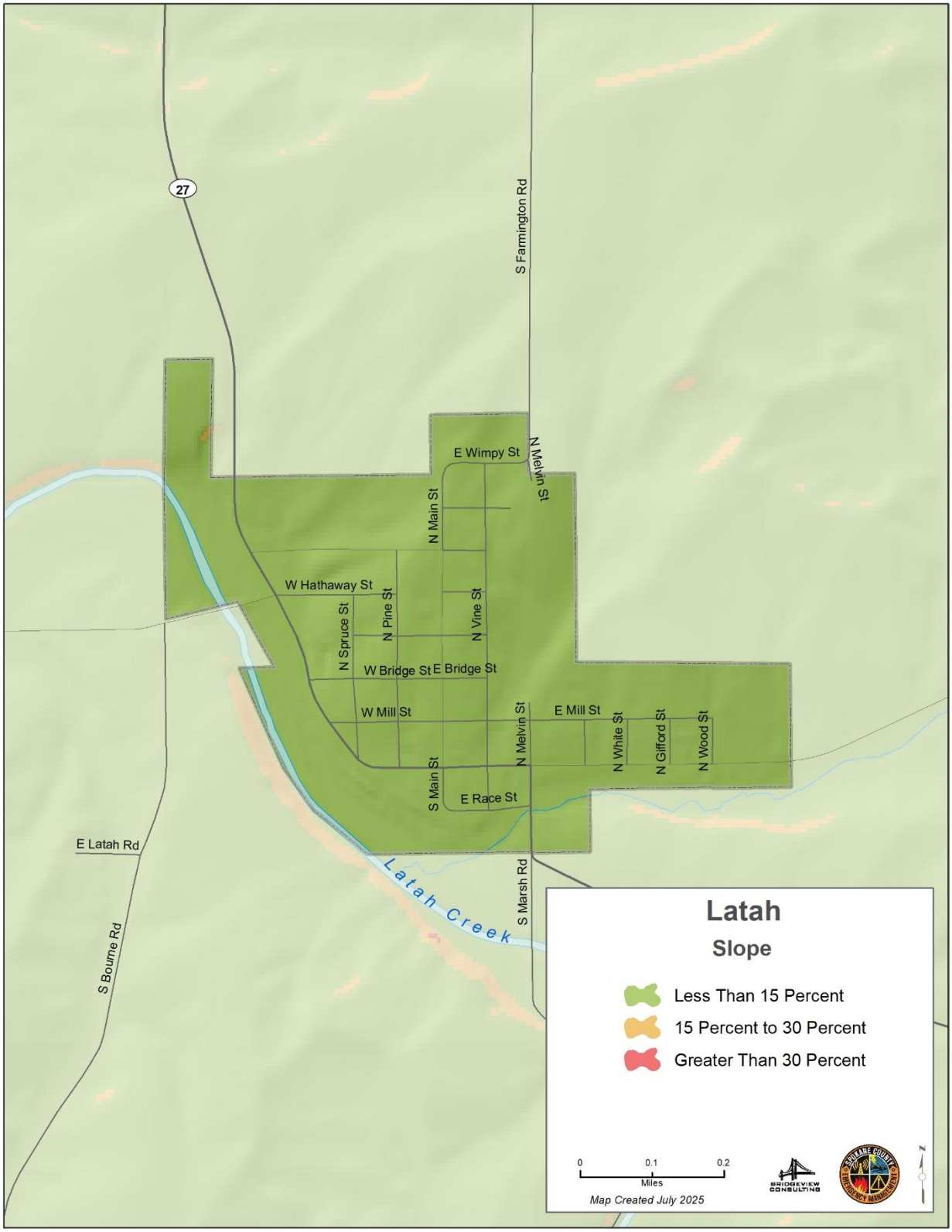
During Council Presentations attended by Community Members, both parties deemed the potential to get grant funding for replacing or remodeling the Town Hall/Community Center/Fire Department, of utmost importance. With that being said, the Town has no available lands as the County has deemed that the Town is now landlocked, and there are no available places to locate new structures. As such, the Town will need to work with the County to determine feasibility of annexing additional land, or a complete remodel of the existing structure will be required, which could be more cost-prohibitive than a new structure.

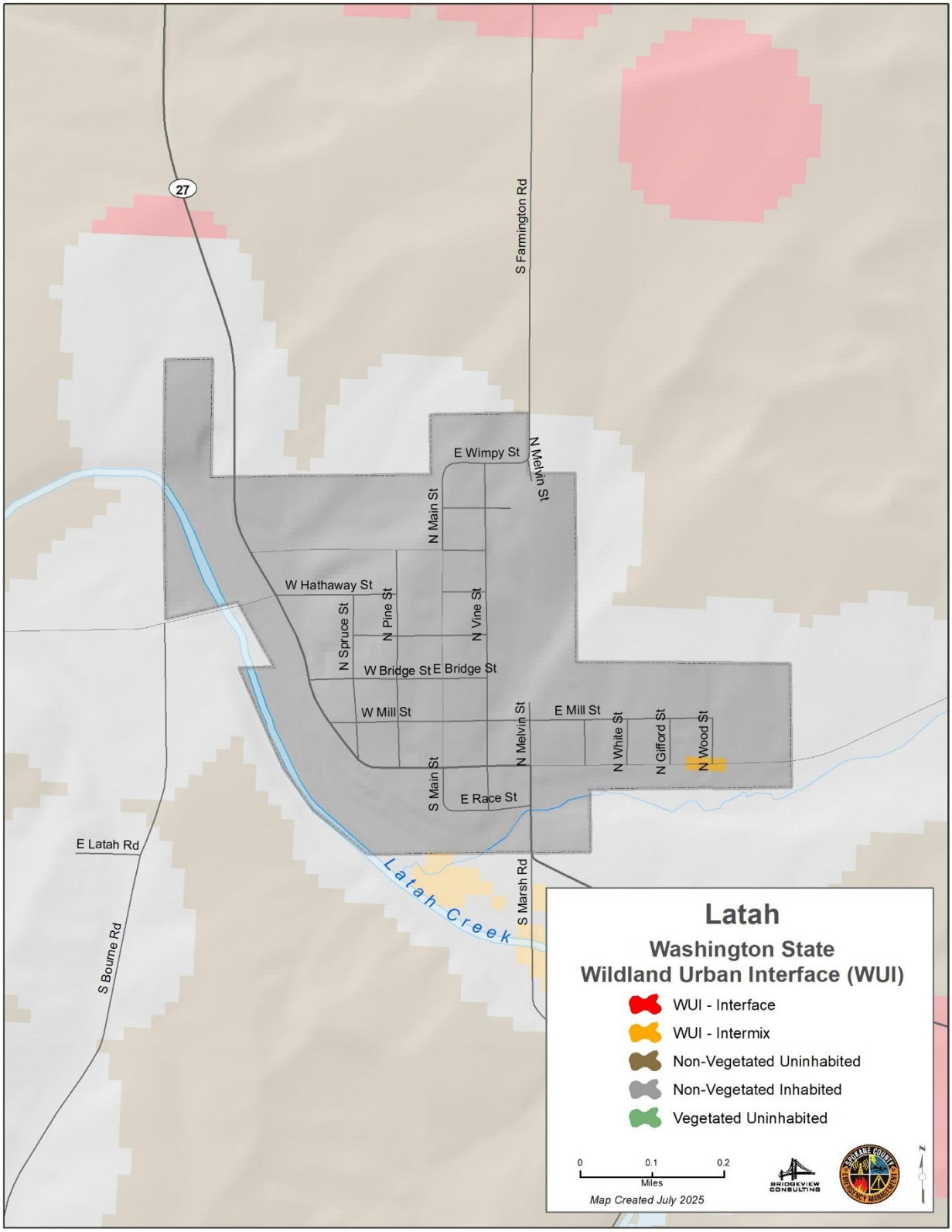

Latah
Critical Facilities
COMMUNICATION
DAM
GOVERNMENT
MEDICAL
POWER
PROTECTIVE
SCHOOL
SHELTER
TRANSPORTATION
WASTEWATER
WATER
HAZ MAT
0
0.1
0.2
Miles
Map Created July 2025
BRIDGEVIEW CONSULTING
27
S Farmington Rd
E Wimpy St
N Melvin St
N Main St
W Hathaway St
N Spruce St
N Pine St
N Vine St
W Bridge St
E Bridge St
W Mill St
E Mill St
N Melvin St
N White St
N Gifford St
N Wood St
S Main St
E Race St
E Latah Rd
Latah Creek
S Marsh Rd
S Boume Rd
S Atterberry Rd


27
S Farmington Rd
E Wimpy St
N Melvin St
N Main St
W Hathaway St
N Spruce St
N Pine St
N Vine St
W Bridge St
E Bridge St
W Mill St
E Mill St
N Melvin St
N White St
N Gifford St
N Wood St
S Main St
E Race St
E Latah Rd
Latah Creek
S Marsh Rd
S Bourne Rd
Latah
FEMA Flood Hazard
FEMA 1% Annual Chance
FEMA 0.2% Annual Chance
0
0.1
0.2
Miles
Map Created July 2025
BRIDGEVIEW CONSULTING
SPOKANE COUNTY EMERGENCY MANAGEMENT
N


27
S Farmington Rd
E Wimpy St
N Melvin St
N Main St
W Hathaway St
N Spruce St
N Pine St
N Vine St
W Bridge St
E Bridge St
W Mill St
E Mill St
N Melvin St
N White St
N Gifford St
N Wood St
S Main St
E Race St
E Latah Rd
Latah Creek
S Marsh Rd
S Boume Rd
Latah
Latah Fault M6.8
Earthquake Scenario Shaking
Moderate
Strong
Very Strong
Severe
0
0.1
0.2
Miles
Map Created July 2025
BRIDGEVIEW CONSULTING
SPOKANE COUNTY EMERGENCY MANAGEMENT
N


27
S Farmington Rd
E Wimpy St
N Melvin St
N Main St
W Hathaway St
N Spruce St
N Pine St
N Vine St
W Bridge St
E Bridge St
W Mill St
E Mill St
N Melvin St
N White St
N Gifford St
N Wood St
S Main St
E Race St
E Latah Rd
Latah Creek
S Marsh Rd
S Boume Rd
Latah
Liquefaction Susceptibility
High
Moderate to high
Moderate
Low to moderate
Low
Very low to low
Very low
Bedrock
Peat
Ice
Water
0
0.1
0.2
Miles
Map Created July 2025


27
S Farmington Rd
E Wimpy St
N Melvin St
N Main St
W Hathaway St
N Spruce St
N Pine St
N Vine St
W Bridge St
E Bridge St
W Mill St
E Mill St
N Melvin St
N White St
N Gifford St
N Wood St
S Main St
E Race St
E Latah Rd
Latah Creek
S Marsh Rd
S Boume Rd
Latah
Slope
Less Than 15 Percent
15 Percent to 30 Percent
Greater Than 30 Percent
0
0.1
0.2
Miles
Map Created July 2025
BRIDGEVIEW CONSULTING
SHOSHONE COUNTY EMERGENCY MANAGEMENT
N


27
S Farmington Rd
E Wimpy St
N Melvin St
N Main St
W Hathaway St
N Spruce St
N Pine St
N Vine St
W Bridge St
E Bridge St
W Mill St
E Mill St
N Melvin St
N White St
N Gifford St
N Wood St
S Main St
E Race St
E Latah Rd
Latah Creek
S Marsh Rd
S Bourne Rd
Latah
Washington State
Wildland Urban Interface (WUI)
WUI - Interface
WUI - Intermix
Non-Vegetated Uninhabited
Non-Vegetated Inhabited
Vegetated Uninhabited
0
0.1
0.2
Miles
Map Created July 2025
BRIDGEVIEW CONSULTING
SPOKANE COUNTY EMERGENCY MANAGEMENT
N

CHAPTER 8.
SPOKANE CONSERVATION DISTRICT 2026 ANNEX UPDATE

8.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to the Spokane Conservation District, a participating special purpose district to the Spokane County Hazard Mitigation Plan Update and the Community Wildfire Protection Plan. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the Spokane Conservation District. For planning purposes, this Annex provides additional information specific to the district, with a focus on providing greater details on the risk assessment and mitigation strategy for this entity only. This document serves as an update to the district's previously completed plan. All relevant data has been carried over and updated with new information as appropriate and as identified within the planning process discussed in Volume 1.

8.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

The Spokane Conservation District followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, the Spokane Conservation District also formulated its own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Garth Davis, Forestry Manager 4422 E. 8th Avenue Spokane, WA 99212 (509)535-7274 ext 212 Garth-Davis@sccd.org	Primary Point of Contact/ Forestry Program Manger	Planning team
Jeff Cunningham 4422 E. 8th Avenue Spokane, WA 99212 (509)535-7274 ext 233 Jeff-Cunningham@sccd.org	Alternate Point of Contact/ Operations Manager	Planning team
Jacob Taylor 4422 E. 8th Avenue Spokane, WA 99212 (509) 535 7274 ext 240 Jaco-Taylor@spokanecd.org	Planning Team Member/ Watershed Mngt Specialist	Planning team

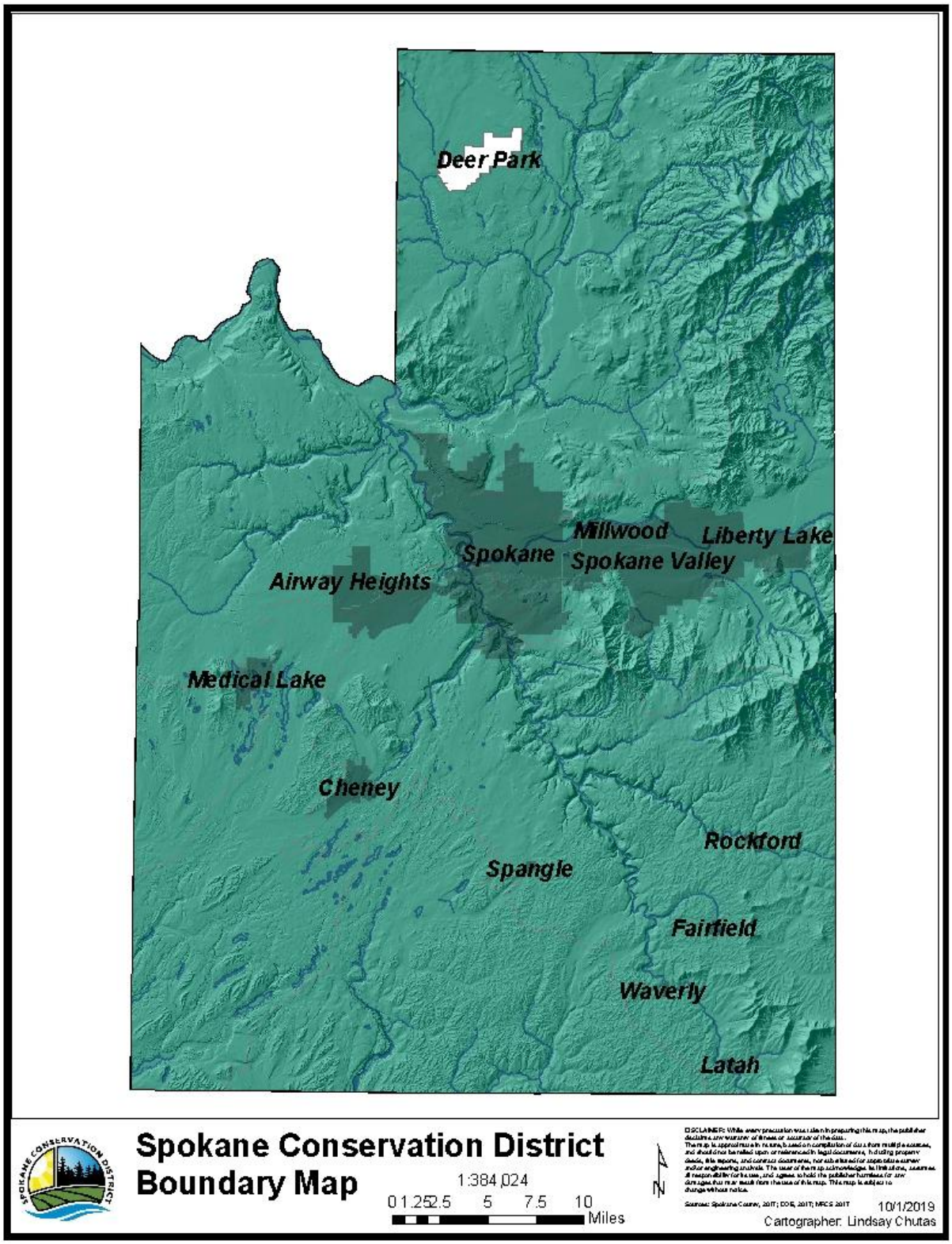
8.3 DISTRICT PROFILE

Spokane Conservation District is a special purpose district that was formed in 1973 to serve the citizens and resources of Spokane County, excluding Deer Park, and works across county lines through the use of memorandums of understanding. The District works with individuals, landowners, business and government entities to protect and conserve water resources, provide technical assistance for agricultural and livestock practices, promote sustainable forestry practices; promote energy conservation and enhance wildlife habitat. For fiscal year 2024 the District's annual operating budget was approximately $2 million. Funding comes primarily through a property assessment and state grants.

A five-member Board of Supervisors governs the District. Three Board members are elected and two are appointed by the Washington State Conservation Commission. The Board appoints a Director to oversee the District's daily operations as well as its 23 regular employees. The Board assumes responsibility for the adoption of this plan; the Director will oversee its implementation.

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

- **Governing Authority—** The district is governed by a five-member Board of Supervisors
- **Population Served—** 551,583 as of July 1, 2024
- **Land Area Served—**1,764 square miles
- **Land Area Owned—**50 acres
- **List of Critical Infrastructure/Equipment Owned by the Jurisdiction:**
  Vehicle Fleet - $163,000
  Tractors, Trailers - $180,000
  Drone - $40,000
  Computers, laptops - $20,000
  Tools and other field equipment - $250,000
- **Total Value of Critical Infrastructure/Equipment—**The total value of critical infrastructure and equipment owned by the jurisdiction is $396,000.
- **List of Critical Facilities Owned by the Jurisdiction:**
  8th Avenue Campus Buildings - $15,000,000
- **Total Value of Critical Facilities—**The total value of critical facilities owned by the jurisdiction is $15,000,000. We have added two new structures to this accounting that were not present in the original annex.
- **Current and Anticipated Service Trends—**The Spokane Conservation District provides services in the following categories: Production Agriculture, Environmental Education, Water Resources, Forestry and Soil Science. The District anticipates service requests to increase across all of our service categories as a result of our constituents realizing the need for better natural resource stewardship.


Deer Park
Millwood
Liberty Lake
Spokane
Spokane Valley
Airway Heights
Medical Lake
Cheney
Rockford
Spangle
Fairfield
Waverly
Latah
Spokane Conservation District
Boundary Map
1:384,024
0 1.25 2.5 5 7.5 10
Miles
N
10/1/2019
Cartographer: Lindsay Chutas

8.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events which have occurred within the County. In the context of the planning region, it was determined that there are no additional hazards that are unique to the special purpose district. Table 8-1 lists all past occurrences which have impacted the district.

February 1985 **-** There was an extreme cold front settled over the region with daytime temperatures holding around -10 to -15 degrees. The District had a Washington Conservation Corps crew that was doing hazard fuels reduction on private lands in Spokane County. The District's Forestry Manager was in charge of the crew and had set up firewood deliveries to low-income households for the second week of the month. The cold front moved in that week along with winds gusting to 20-30mph from the Northeast. The wind chills were down to -35 degrees. Due to the temperatures, the crews were sent home, but two District employees stayed to load and deliver the wood. Due to the cold, staff could only work for about 15 minutes at a time even with military issue arctic parkas, gloves and boots. The damage came on the second day of the winds with numerous trees going down, especially Spruce and shallow rooted ornamental trees. Power lines came down and many streets were blocked just as they were during Ice Storm in 1998. The Spokane Indians baseball park outfield fence also came down and was totally destroyed. After the storm passed, District crews started cleanup of the fence and stacked and sorted the materials for salvage by the County. Spokane County as a whole was significantly impacted for several weeks, and District employees were very busy helping landowners with tree salvage and advice.

The Hangman Hills Fire in 1987 **-** A very strong front moved into the area with winds gusting to 30+ mph from the west. A power line along Hwy 195 at Washington Rd. went down when a very large pine tree fell on it. The ensuing fire raced across the valley and struck the Hangman Hills housing development, destroying 36 homes and part of the golf course Clubhouse. There were covenants that required all homes in the development to have cedar shakes on the roofs. Like pouring gasoline on the fire, the homes were quickly consumed by the fire with only a couple down in the bottom of the drainage coming through unscathed. Both of those houses (which were not a part of the development) had stucco exteriors and metal roofs. As a result of that fire, Fire Safe Spokane was formed which eventually blended into the national Firewise program. Alan and I spent hundreds of hours providing technical assistance on that fire. I produced a video that informed landowners about how to determine if a tree was damaged too much to save and when and what type of trees should be planted in the future. We also were busy keeping the "Chainsaw Bandits" from taking advantage of landowners, telling them that all of their tree must come down immediately. A lot of trees were removed without cause because of people taking advantage of the landowners involved in the fire.

1996 Ice Storm **-** Created a lot of damage just because of the weight of the ice coating the trees and power lines. Once again the chainsaw bandits hit the streets, gouging people by convincing

them their trees were damaged beyond salvation. We spent hundreds of hours doing damage assessments. We were constantly reminding the public about having qualified people do damage assessments and that any work performed should also be done by people who are qualified.

Valley View Fire - The fire began on July 18, 2008, just two weeks after the last Firewise risk assessments were completed by District Staff.

2015 Windstorm **-** The November 2015 windstorm caused landscape trees to take down power lines resulting in a power outage lasting over a week. Months of technical assistance provided by the District was generated by this storm.

Gray and Oregon Road Fires April 18 and 19, 2023 **-** These fires burned 20,000 acres and 366 homes. Directly after these fires, the District organized forest restoration meetings in Riverside and Medical Lake. These meetings brought our partners like DNR, Avista, Mills, and NRCS together to educate landowners on resources available. Spokane CD performed post fire assessments on 55 properties and recorded the data for reforestation needs. Spokane CD received funding from the Washington State Legislature to assist many of these landowners with their reforestation efforts.

Table 8-1.
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Dollar Losses (if known)
COVID	DR-4481	March 22,2020	Unknown
Fire	FM-5355	July 17, 2020	Unknown
Severe windstorms, flooding landslides and mudslides	DR-4593	April 8, 2021	Unknown
Fire	FM-5395	July 6, 2021	Unknown
Fire	FM-5479	August 18,2023	Unknown
Fire	FM-5481	August 19, 2023	Unknown
Washington Wildfires	DR-4759	March 25, 2024	Unknown

8.5 APPLICABLE REGULATIONS AND PLANS

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation efforts, and classifications under various community programs.

8.5.1 Regulatory Capability

The District has adopted/enacted codes, resolutions, policies and plans that compliment and support hazard mitigation planning and activities. The following existing District codes, resolutions, policies, and plans are applicable to this hazard mitigation plan:

- Emergency Operations Plan
- Facility Evacuation Plan
- Inclement Weather Plans
- Active Shooter Plans
- Hazardous Materials Response Plans
- Employee Handbooks and Safety Manuals

8.5.2 Administrative and Technical Capabilities

The assessment of the district's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 8-2. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

Table 8-2. Administrative and Technical Capability		
Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Professionals trained in building or infrastructure construction practices.	No	
Planners or engineers with an understanding of natural hazards.	Yes	Water Resources, Forestry
Staff with training in benefit/cost analysis.	Yes	Operations
Personnel skilled or trained in GIS or Hazus use.	Yes	Water Resources
Emergency Manager.	Yes	Operations
Grant writers.	Yes	Forestry, Production Ag, Water Resources
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?).	Yes	Operations
Hazard data and information available to public.	No	
Specific equipment response plans.	No	
Specific operational plans.	No	
Water Shortage Contingency Plan.	No	
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness?	No	
Organization focused on individuals with access and functional needs populations	No	
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Public Education

Table 8-2. Administrative and Technical Capability		
Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Natural disaster or safety related school programs?	No	
Public-private partnership initiatives addressing disaster-related issues?	No	
Multi-seasonal public awareness program?	No	
Other		
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	No	
Noxious Weed Eradication Program or other vegetation management	Yes	Water Resources/Forestry
Fire Safe Councils	Yes	Forestry Program
Chipper program	No	
Defensible space inspections program	Yes	Forestry Program
Creek, stream, culvert or storm drain maintenance or cleaning program	Yes	Water Resources
Stream restoration program	Yes	Water Resources
Erosion or sediment control program	Yes	Water Resources
Address signage for property addresses	Yes	Forestry

8.5.3 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 8-3. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 8-3. Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes

Table 8-3. Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Authority to Levy Taxes for Specific Purposes	No
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Other	

8.6 COMMUNITY CLASSIFICATION

The district's classifications under various hazard mitigation programs are presented in Table 8-4. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community. Those which specifically require district participation or enhance mitigation efforts are indicated accordingly.

Table 8-4. Community Classifications		
	Participating (Yes/No)	Date Enrolled
Firewise	Yes	While the CD is not a Firewise Community, the CD supports all of the local Firewise communities by providing program information and working with the various municipalities throughout the County in enhancing the Firewise Program countywide, including identifying and funding, as possible fuels reduction projects, etc.
Storm Ready	No	

8.7 HAZARD RISK AND VULNERABILITY RANKING

The district's Planning Team reviewed the hazard list identified within the Base Plan and have identified the hazards that affect the Spokane Conservation District. No additional hazards were identified.

In addition, the Planning Team also examined Volume 1, Chapter 4 of the Spokane County Multi-Jurisdictional Hazard Mitigation Plan to ensure an understanding of the application of the Calculated Priority Risk Index (CPRI) information which is utilized in determining the hazard impact and vulnerability.

During discussions by the internal planning team members identifying the potential impact of the hazards, additional factors were also discussed and considered, such as critical facilities impacted, potential dollar losses at risk, and additional information applicable within the hazard profiles. Additional factors included previous or on-going mitigation efforts completed by the District which were impacted by the hazards of concern, such as tree risk assessments, floods and associated streambank work, salvage logging (wildfire/windstorm), BAER team work (post fires), and property cleanup. Another significant factor considered was the length of time required for repairs, which could impact the District's ability to provide services.

Table 8-6 presents the results of the CPRI process. Table 8-6 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.
- Low (Negligible) – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.
- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.
- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.
- Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted for in excess of one month.

Table 8-5.
Calculated Priority Risk Ranking

Hazard	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought			3			2						4				1				4	2.75
Earthquake		2					3					4	4				1				2.85
Flood		2					3			2						1			3		2.10
Landslides	1				1					2			4				1				1.65
Severe Weather			3				3					4		3				2			3.15
Wildfire				4			3					4	4				1				3.65

Table 8-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
1	Wildfire	3.65	High	In the last five years, we've experienced three of the most active wildfire seasons. The structures owned by the district have not been impacted by wildfire. The recent increase in wildfires undoubtedly is related to climate change and drought. As conditions worsen, wildfires will occur more regularly.

Table 8-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
2	Severe Weather	3.15	High	Severe storms, including winds, can impact all of the District's structures including damage to structures and ability for normal business operation to continue. In 2015, a severe windstorm knocked down surrounding power lines, and the District was unable to continue normal business operation for 11 days due to power outage. While 2015 was the longest disruption to occur as of this 2025 update, the regularity with which the windstorms occur and have impact on the region as a whole has caused the district to identify it as a primary hazard of concern.
3	Earthquake	2.85	Medium	Spokane County has a relatively low seismic risk. However, seismic levels up to 5.5 have been reached in the past. The District's buildings are made of concrete or steel, limiting the impact.
4	Drought	2.75	Medium	Droughts will increase the risk to wildfire and has the ability to limit water supplies needed to fight fires. The increase to wildfire danger could also impact the risk to the District's structures.
5	Flood	2.1	Medium	The District's 8th property falls within a flood zone.
6	Landslide	1.65	Low	Landslides are possible within the District campus.

8.8 CWPP PLANNING AND ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, the County, Conservation District, impacted communities, and planning partners formed a Wildfire Coalition in an effort to reduce future occurrences of wildfires and their impacts.

Working with Washington State Department of Natural Resources (DNR) and others, a Scaled Quantitative Wildfire Risk Assessment Summary (2024) was conducted countywide. That data

geographically defines the wildfire risk within each Strategic Planning Areas (defined in Volume 1, Section 10.5.2).

During Coalition meetings, several issues and gaps impacting wildfire response and mitigation capabilities were identified. Many of the gaps were further addressed by identifying potential strategies or mitigation action items which, when implemented, would help reduce the impact of wildfires. Those generalized strategies are included within Chapter 12 of the HMP, and within each Jurisdictional Annex, and include:

- Fuels Reduction Projects
- Prescribed Fires
- Community Involvement, Education, and Outreach, including home hardening
- Capacity Building

Annually, the Conservation District works directly with the County, state and federal stakeholders, the planning partners, and local communities to help identify areas where the various strategies would most effectively be implemented. During this 2026-2030 life cycle of this HMP/CWPP, the District intends to continue such efforts, working with all interested parties in an effort to assist Coalition members to facilitate implementation of the strategies through various methods, including public outreach, home assessments, assisting with grant applications (as appropriate), and identifying areas where fuels reduction should be implemented (an annual process with DNR and other stakeholders), as well as assisting with capacity building to the extent possible.

8.9 MITIGATION GOALS AND OBJECTIVES

The District adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1, Chapter 12, as well as the CWPP specific goals identified in Chapter 10, Section 10.1.5.

8.10 HAZARD MITIGATION ACTION PLAN

The Planning Team for the district identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the district's assets and hazards of concern. Table 8-7 lists the action items/strategies that make up the district's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, and the type of initiative associated with each item are also identified.

Table 8-7
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE # 1 Continue to keep the Public advised on hazards of concern and potential impacts to natural resources.									
Existing	WF, Fl, Dr, Eq, SW	2,4,12	SCD	Low	SCD	Long-term	No	Public Information	County
INITIATIVE # 2 Provide Home Ignition Zone cost share program to homeowners in Spokane County, with a goal of 33 home hardening projects per year.									
Existing	Wildfire	2,4,10,12	SCD	Medium	SCD	Long-term	No	Property protection	County
INITIATIVE #3 Continue to assist with CWPP maintenance, including prioritization of projects.									
Existing	Wildfire	2,4,5,8,10,11,12	SCD	Low	All participants in CWPP	Long-term	No	Prevention	County
INITIATIVE # 4 Continue Firewise Program including 150 home site assessments annually.									
Existing	Wildfire	2,4,12	SCD, DNR	Medium	SCD, DNR	Long-term	No	Prevention	County
INITIATIVE # 5 Seek out grant opportunities to site harden new facility for hazards of concern.									
new	WF, Fl, LS	2,4,12	SCD	Medium	SCD	Short-term	No	Prevention	County
INITIATIVE # 6 Establish emergency operations center facility.									
new	WF, FL	1,2	SCD	Low	SCD	Long-term	No	Emergency Services	County
INITIATIVE # 7 Utilize future training facility with kitchen as potential community hazard shelter.									
New	WF, FL, SW	1,2,8	SCD	Low	SCD	Long-term	No	Emergency Services	County

8.11 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 8-8 identifies the prioritization for each initiative.

Table 8-8.
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
1	3	High	Low	Yes	Yes	Yes	High
2	4	Medium	Medium	Yes	Yes	Yes	High
3	8	High	Low	Yes	Yes	Yes	High
4	3	High	Low	Yes	Yes	Yes	High
5	3	Medium	Medium	Yes	Yes	No	Medium
6	2	Medium	Medium	Yes	Yes	No	Medium
7	3	Medium	Low	Yes	Yes	Yes	Medium

a. See Chapter 1 for explanation of priorities.

8.12 STATUS OF PREVIOUS PLAN INITIATIVES

Table 8-9 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 8-9.
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	2025 Project Status	Completed	Continual /Ongoing Nature	Removed /No Longer Relevant /No Action	Carried Over
1. Continue to keep the Public advised on hazards of concern and potential impacts to natural resources.	We continue to use social media, billboards, radio	X	X		**X**
2. Provide Home Ignition Zone cost share program to homeowners in Spokane County.	$350,000 put out in last biennium. With the development of an updated CWPP, the District anticipates this number to increase.	X	X		**X**

Table 8-9.
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	2025 Project Status	Completed	Continual /Ongoing Nature	Removed /No Longer Relevant /No Action	Carried Over
3. Continue to assist with CWPP maintenance.	CWPP is currently being updated through Spokane County Emergency Management.		X		**X**
4. Continue Firewise Program including home site assessments	At present, the District is averaging 150 homesite assessments per year. With the completion of the CWPP update, it is anticipated that this number will increase.		**X**		
5. Seek out grant opportunities to site harden new facility for hazards of concern.	As of this update, the Conservation District received notification of an award for $9.2 million as a result of an application submitted to the US Department of Agriculture. The District continues to look for funding opportunities to further support wildfire mitigation efforts countywide.	**X**	**X**		**X**
6. Establish emergency operations center facility.	No activity has been completed on this strategy; however, the District does still feel it is a valid project and will carry it forward.		**X**		**X**
7. Utilize future training facility with kitchen as potential community hazard shelter.	No activity has been completed on this strategy.		**X**		**X**

CHAPTER 9.
SPOKANE COUNTY FIRE DISTRICT #3 ANNEX

(Pending)

CHAPTER 10.
SPOKANE COUNTY FIRE DISTRICT #4 2026 ANNEX UPDATE

10.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to the Fire District, a participating special purpose district to the Spokane County Hazard Mitigation Plan and Community Wildfire Protection Plan update. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the Fire District. For planning purposes, this Annex provides additional information specific to Fire District #4 (Strategic Planning Area 1), with a focus on providing greater details on the risk assessment and mitigation strategy for this entity only. This document serves as an update to the district's previously completed plan. All relevant data has been carried over and updated with new information as appropriate and as identified within the planning process discussed in Volume 1.

10.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

The Spokane County Fire District #4 plan followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, the Fire District also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Asst Chief Howard Johnson 315 E. Crawford St Deer Park, WA 99006 Telephone: 509-467-4500 e-mail: howardj@scfd4.org	Primary Point of Contact	Oversite / Administration of project
Deputy Chief Jared Harms 315 E. Crawford St Deer Park, WA 99006 Telephone: 509-467-4500 e-mail: jaredh@scfd4.org	Alternate Point of Contact	Lead on Project; authored plan; attended meetings; coordinated/gathered necessary information. Attended workshops with County.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Eric Bishop 315 E. Crawford St Deer Park, WA 99006 Telephone: 509-467-4500 e-mail: russel.bishop@scfd4.org	Alternate Point of Contact	Assistant on Project capturing and gathering information as necessary. Attended meetings.

10.3 DISTRICT PROFILE

Spokane County Fire District #4, established in 1945, is located within Strategic Planning Area 1. The district provides Fire, Rescue, Medical, and Hazardous incident response to North Spokane County. The district includes the areas of Wildrose, Wayside, Riverside, Elk, Chattaroy, Elk-Chattaroy, Colbert, Mead, Green Bluff, Mt. Spokane (including portions of the State Park), and the city of Deer Park. A three-member elected Board of Commissioners governs the fire district. The Board of Commissioners assumes responsibility for the adoption of this plan. The Fire Chief oversees its implementation.

This area has a diverse mix of land uses which include farming, ranching, forestry, large and small tract residential, and recreation. The eastern side of the planning unit is large expanses of forest land that include Mount Spokane State Park as well as commercial forestland owned by forest industry, private individuals, and the Washington Department of Natural Resources. The central and western portion of the planning area is prairie land gently carved by the Little Spokane River and several of its tributaries creating a mosaic of wooded riparian areas, farmland, rangeland, woodlots, and open space.

This area's proximity to the Spokane Metropolitan area in addition to good road access and favorable terrain, makes it a popular area for rural home site development. However, water supply for fire suppression is not available in all areas. Housing development is the heaviest on the south end of the SPA near Mead as well as surrounding the communities of Deer Park and Chattaroy and along the Highway 2 and 395 corridors. Outside of these areas, development is widely scattered and very rural, consisting mostly of individual home sites and small subdivisions surrounded by wildland fuels in secluded areas; many with one way in, one way out access.

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

- **Governing Authority—** The district is governed by an elected board of 3 Fire Commissioners.
- **Population Served—** 45,000 (estimated)
- **Land Area Served—**approximately 330 square miles in North Spokane County

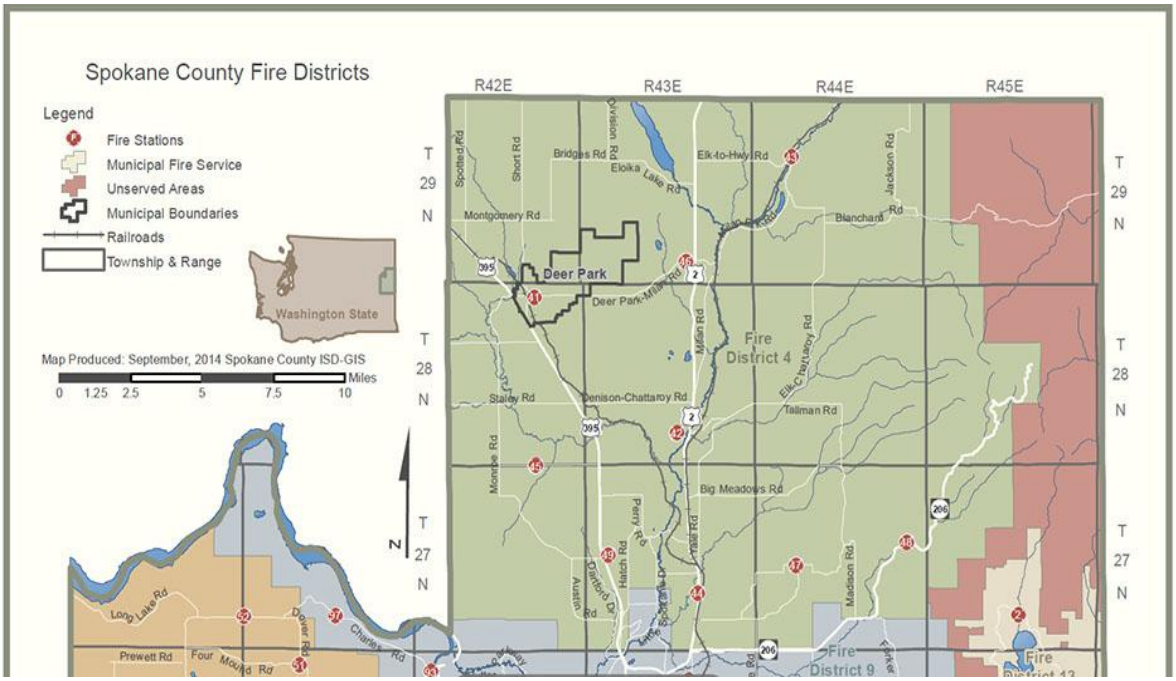
- **Value of Area Served—**The estimated value of the area served by the jurisdiction is $7,505,797,238 (based upon 2024 tax assessment)
- **Land Area Owned—**Approximately 30 acres (station properties)
- **Department Vehicles and Equipment Owned by the Jurisdiction:**
  - Located at the 10 Fire Stations throughout the Fire District
    - 12 Fire Engines
    - 10 Squad/Brush Units
    - 10 Water Tenders (3000 gallon)
    - 13 Command Vehicles
    - 1 Jeep Plows
    - 1 Support Unit
    - 1 Heavy Rescue
    - 2 Tower/Ladder Truck
- **Total Value of Equipment—**The total value of critical infrastructure and equipment owned by the jurisdiction is $9,658,798
- **Total Value of Critical Facilities—**The total value of critical facilities owned by the jurisdiction is $32,292,518
- **Current and Anticipated Service Trends—** The Fire District has grown steadily over the years and continues to grow. The district calls for service has grown commensurate with the population growth. District 4 responses totaled 4227 for 2024. This is an increase of 887 calls per year since 2018. With the amount of building of both residential and commercial properties within the district this trend is anticipated to continue or increase in the upcoming years.
- **Ingress – Egress -** Highway 2 and 395 are the primary ingress and egress routes traveling north and south through the District and SPA 1. Deer Park-Milan Rd, Eloika Lake Road and Elk to Highway Road provide east-west access between Highways 2 and 395, Deer Park, and Elk. Highway 206 (Mt Spokane Park Drive) is the primary access into Mount Spokane State Park and the surrounding timberlands and is also a one way in-one way out roadway. Ingress and egress into subdivisions near Deer Park and Chattaroy are typically well-developed. This minimizes hazards associated

with emergency access in the residential areas and provides multiple emergency escape routes. However, many rural areas are accessed via unimproved, narrow roads accessible only by small emergency vehicles. In these areas, access is limited or, in some instances, prohibited entirely during wildfires as the roads lack adequate turnout and turn-around areas. This can reduce or may even eliminate suppression capability. The remote forested areas within the planning area, in general, have logging road access enabling ingress for fire suppression equipment as well.

- **Infrastructure** - Residents within the community of Deer Park have a municipal water system. Public fire hydrants are available to a limited extent throughout the community and within newer subdivisions. Outside this area, development typically relies on well systems, as well as creeks, ponds, and stock tanks to provide additional water sources for emergency fire suppression in the rural areas.

  Above ground, high voltage transmission lines cross SPA 1 from north to south in cleared corridors would not likely be affected by a wildfire. Local public electrical utility lines travel along roads and highways and are exposed to damage from falling trees in the forested areas. Power and phone service throughout the planning area are both above and below ground. Power and communications may be cut into some of these areas during a wildfire situation.

The district's boundaries are shown on the map provided below.



10.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events which have occurred within the County. In the context of the planning region, it was determined that there are no additional hazards that are unique to the special purpose district. **Error! Reference source not found.** lists all past occurrences which have impacted the district. If available, dollar loss data is also included.

Table 10-1
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Dollar Losses (if known)
Fire	922	10/16/1991	Unknown
Severe Ice Storm	1152	11/19/1996	Unknown
Severe Storm(s)	1825	12/12/2008	Unknown
Volcano	623	5/21/1980	Unknown
Fire (Oregon Road)	5481	8/19/2023	Unknown
Local Area Disaster – Not Declared			
Severe Windstorm	N/A	07/23/2014	Unknown

10.5 APPLICABLE REGULATIONS AND PLANS

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation efforts, and classifications under various community programs.

10.5.1 Regulatory Capability

The District has adopted/enacted codes, resolutions, policies and plans that compliment and support hazard mitigation planning and activities. The following existing District codes, resolutions, policies, and plans are applicable to this hazard mitigation plan:

Fire District Capabilities:

- Capital Improvement Program
- Sprinkler Codes
- Strategic Plan
- Emergency Operations Plan
- Emergency Procedures and Policies
- City/County Comprehensive Emergency Management Plan
- State of Washington Comprehensive Emergency Management Plan
- National Response Framework
- National Incident Management System
- Revised Code of Washington 52.26 (Regional Fire Protection Service)
- WAC 296.305
- Response Plan

General Capabilities:

- Specific incident response plans
- Operations plans or policies
- Employee Handbooks and Safety Manuals
- Mutual Aid Agreements

10.5.2 Administrative and Technical Capabilities

The assessment of the district's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 10-2. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

Table 10-2
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Professionals trained in building or infrastructure construction practices.	No	
Planners with an understanding of natural hazards.	Yes	SCFD4 / Assistant Chief
Staff with training in benefit/cost analysis.	No	
Personnel skilled or trained in GIS or Hazus use.	Yes	SCFD4 / IT Support
Emergency Manager.	Yes	SCFD4 / Duty Officers
Grant writers.	No	
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?).	Yes	SREC / Dispatch Agency
Hazard data and information available to public.	Yes	SCFD4 / Admin
Specific equipment response plans.	Yes	SCFD4 / SREC / Dept Run Cards
Specific operational plans.	Yes	SCFD4 / Admin
Water Shortage Contingency Plan.	No	
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness?	Yes	SCFD4 / Citizens Advisory Committee
Organization focused on individuals with access and functional needs populations	No	

Table 10-2
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	SCFD4 / PIO
Natural disaster or safety related school programs?	Yes	SCFD4 / PIO
Public-private partnership initiatives addressing disaster-related issues?	No	
Multi-seasonal public awareness program?	Yes	SCFD4 / PIO
Other		
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	Yes	SCFD4 / Asst. Chief CWPP
Noxious Weed Eradication Program or other vegetation management	No	
Fire Safe Councils	Yes	SCFD4 / Asst. Chief / PIO
Chipper program	No	
Defensible space inspections program	Yes	SCFD4 / Asst. Chief / Wildland
Creek, stream, culvert or storm drain maintenance or cleaning program	No	
Stream restoration program	No	
Erosion or sediment control program	No	
Address signage for property addresses	Yes	SCFD4 / Duty Officers
Other		

10.5.3 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 10-3. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 10-3
Fiscal Capability

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

10.5.4 Community Classification

The district's classifications under various hazard mitigation programs are presented in Table 10-4. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community. Those which specifically require district participation or enhance mitigation efforts are indicated accordingly.

Table 10-4 Community Classifications		
	Participating (Yes/No) or Grading	Date Enrolled
Protection Class	4	
Building Code Effectiveness Grading Schedule - Commercial	4	
Building Code Effectiveness Grading Schedule - Residential	4	
Storm Ready	No	
Firewise	Yes	1992

10.6 HAZARD RISK AND VULNERABILITY RANKING

The district's Planning Team reviewed the hazard list identified within the Base Plan and identified the hazards that affect the Fire District #4. No additional hazards were identified.

In addition, the Planning Team also examined Volume 1, Chapter 4 of the Spokane County Multi-Jurisdictional Hazard Mitigation Plan to ensure an understanding of the application of the Calculated Priority Risk Index (CPRI) information which is utilized in determining the hazard impact and vulnerability.

The risk assessment process also included a review of critical facilities impacted, potential dollar losses at risk, and any additional information applicable within the hazard profiles for use in identifying each hazard of concern. Factors also include the length of time required for repairs, which could impact the District's ability for fire response to its service area.

Table 10-6 presents the results of the CPRI process. Table 10-6 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.

- Low (Negligible) – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.

- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.

- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.

- Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted for in excess of one month.

Table 10-5.
Calculated Priority Risk Ranking

	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
Hazard	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought			3			2					3					1				4	2.55
Earthquake			3			2					3		4				1				2.85
Flood			3			2				2			4					2			2.70
Landslides		2			1					2						1		2			1.65
Severe Weather				4			3				3		4					2			3.50
Wildfire			3			2					3		4					2			2.90
Other Hazards of Concern																					0.00

Table 10-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
1	Severe Weather	3.5	High	Severe storms can impact all of the district's structures. Strong winds in the area could damage the facilities. Severe weather would have an impact on response from all the district Fire Stations, especially to the Station 43 response area (elk) and the Station 48 Response area (Mt Spokane). Falling trees impacts ingress and egress to primary and secondary roads, as well as a vast majority of the driveways in the area. Snow not only has the ability to increase call volume, but it dramatically increases response time to those incidents. Snow load has impacted many buildings in the district and will continue to in the future.

Table 10-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
2	Wildfire	2.9	High	None of the Fire District's structures have been impacted by wildfire, however, the district's number of responses to wildfire continues to increase (on average) year to year. It has been a few years since the Fire District experienced a 'large' loss of structures due to wildfire. However, in 1991, a firestorm hit the area, and the district lost over 50 structures in a 24-hour period. This happened again in 2023 with the Oregon Rd Fire. There were over 100 homes lost in that incident. Based on review of data provided by WA DNR, fire potential in SPA 1 is moderate to high in the wooded areas and moderate to low in the farmland and semi urban areas. Wildland fuels in forested areas consist of several conifer species mixed with a variety of understory shrubs and grasses. Development rapidly continues to rise in both the forested and non-forested areas changing the continuity and condition of the vegetation. Vegetation management, land use, and landscaping differ on a parcel-by-parcel basis, creating conditions that can both hinder and enhance a fire's rate of spread and ultimately the fire hazard potential in an area. As development continues to increase in areas with high concentrations of wildland fuels, the probability of loss by a wildfire significantly increases. Mount Spokane State Park is located on the east side of this planning area. The park provides winter recreation as well as seasonal camping, hiking, and biking. Camping, picnicking, hiking, and day use facilities are developed throughout the park area adjoining wildland fuels. Due to the proximity of the park to the Spokane metropolitan area and its heavy use, there is increasing potential for wildfires in this area.

Table 10-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
				Residents within SPA 1 have an increased risk of experiencing a catastrophic wildland fire depending on location and proximity to vegetation cover. Residence within the forest and woodland areas are at the highest risk and residences in the semi-urban and rural farmland are at a lower risk. As more forested land is developed for home sites, increasing pressure will be placed on fire services for protection. Agriculture and ranching activities are a common ignition source increasing the risk of a man-caused wildfire spreading to the forested areas. Large expanses of CRP or annual crops provide areas of continuous fuels that have potential to threaten homes and farmsteads. Under extreme weather conditions, escaped agricultural or open range fires can threaten individual homes or a town site; however, this type of fire is usually quickly controlled. High winds increase the rate of fire spread and intensity of rangeland fires. It is imperative that homeowners implement fire mitigation measures to protect their structures and families prior to a wildfire event. Many access routes in this SPA are restricted and/or are located in areas of moderate to high fire risk due to the close proximity of continuous fuels along the roadway. In the event of a wildland fire, it is likely that one or more of the escape routes would become impassable. Signing of unrestricted alternate escape routes would reduce confusion and save time in a wildfire situation. Many roads and driveways accessing rural residential areas do not have adequate road widths or turnouts for firefighting equipment, particularly in older developments. Current fire codes now require compliance with minimum road standards for new construction, but many existing structures are inadequate for firefighting equipment, increasing wildfire risk.

Table 10-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
3	Earthquake	2.85	High	All of the district facilities are susceptible to damage from earthquake. The area is not necessarily 'earthquake prone' so none of them are built with earthquake preparedness in mind. Due to that fact, if a large earthquake were to impact our Fire District, the damage to our facilities could be high.
4	Flood	2.7	Medium	One of the fire district facilities fall within the flood plain, Station 43 in Elk. This station will have to be relocated at some point in the future as re-model or construction on the same spot is not viable.
5	Drought	2.55	Medium	Droughts contribute to the destructiveness of wildfires. The drought trend has continued over the last few years for eastern Washington (minus 2019)
6	Landslide	1.65	Medium	None of the district facilities are within known landslide areas.

10.7 CWPP ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted the various fire districts throughout the Spokane County in completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk as it relates specifically within Fire District 4's service area. The analysis focuses specifically on eight highly valued resources and assets (HVRA), to include people and property, critical facilities, drinking water, ecological integrity, wildlife, timber, agriculture, and recreation. This analysis varies slightly from the analysis within the HMP document, which looks at all assets exposed, in addition to the critical facilities, as well as impact to the people, property, environment, and economy. The resulting maps of the analysis completed by DNR are incorporated at the end of this Annex.

10.8 MITIGATION GOALS AND OBJECTIVES

The District adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1.

10.9 HAZARD MITIGATION ACTION PLAN

The Planning Team for the district identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the district's assets and hazards of concern. Table 10-7 lists the action items/strategies that make up the district's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, and the type of initiative associated with each item are also identified.

Table 10-7
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE #1 Implement a hazard fuels reduction program focusing on reducing vegetation and ladder fuels in high-risk areas. The program shall include both District-led mitigation projects and community support efforts, such as a residential chipping program that helps property owners dispose of trimmed or removed vegetation safely and cost-effectively. These efforts collectively support the District's goal of reducing wildfire risk and improving community resilience.									
Existing	WF	1, 2, 4, 7, 11, 12	SCFD4	Moderate /High	General Fund / Hazard Mitigation Grant	Long-Term	No	Public Information, Property Protection, Resource Protection	Local, County, Region
INITIATIVE #2 Working with local utility providers and public officials, identify power lines that can be protected from the impacts of winter storms (as well as other hazards). This shall include establishing standards for all utilities regarding tree pruning around lines, as well as burying overhead power lines. The District will work with the local utility providers and local policy makers to further this initiative**.**									
New	All Hazards	2, 12	SCFD4	Mod/High	Hazard Mitigation Grant	Long Term	Yes	Prevention Activities, Emergency Services	Local, County

Table 10-7
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE #3 Conduct Weather Risk Awareness Activities. Public awareness of severe winter storms can be improved through following efforts that District 4 can assist in providing: Inform public about severe winter weather impacts (through district webpage and community events); encouraging homeowners to install carbon monoxide monitors and alarms in their homes.									
New	All Hazards	2, 4	SCFD4	Low/Mod	General Fund	Short Term	Yes	Public Information	Local, County
INITIATIVE #4 – Based upon priority planning areas identified, conduct fuels reduction on the following areas: • Bailey Lake hazard fuels mitigation (100 Acres) • Denison Chattaroy Corridor hazard fuels mitigation (100+ Acres) • Hazard Road Corridor hazard fuels mitigation (100+ Acres) • Austin Road Corridor hazard fuels mitigation (100+ Acres) • Hwy 206 egress access improvements (500+ Acres) • Blanchard Corridor egress access improvements (500+ Acres) • Eloika Lake hazard fuels mitigation (100+ Acres) • Elk Chattaroy Corridor egress access improvements (500+ Acres)									
New and Existing	WF	1, 2, 4, 7, 11, 12	SCFD4	High	Fire Grants	Short Term	No	Preventive Activities, Property Protection	Local

10.9.1 Additional Mitigation Efforts Completed

Since completion of the last plan, the following mitigation efforts not identified in the 2020 HMP include:

- Riverside School District hazard fuels mitigation (100 Acres Treated) – Completed 2024
- Spokane County Transfer Station fuels mitigation (130 Acres Treated) – Completed 2024
- Spokane County Parks Bear Lake (80 Acres Treated) – Completed 2024
- Deer Creek hazard fuels mitigation (100 Acres Treated) – Completed 2024

10.10 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 10-8 identifies the prioritization for each initiative.

Table 10-8.
Mitigation Strategy Priority Schedule

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

a. See Chapter 1 for explanation of priorities.

10.11 STATUS OF PREVIOUS PLAN INITIATIVES

Table 10-9 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 10-9.
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	2025 Project Status	Completed	Continual/Ongoing Nature	Removed/No Longer Relevant /No Action	Carried Over
INITIATIVE # -1 – District has initiated a plan to map and assess vulnerability to wildfire. We have hired a consultant and continue to work with him to assess the overall community vulnerability. We are utilizing GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions. We are developing and maintaining a database to track community vulnerability to wildfire. We are utilizing this information to assist in working with state and local partners to develop wildfire mitigation priorities for the Fire District.	The Fire District continues this project with an 'on staff' GISS trained individual working on mapping of the areas. Project feeds directly into our new Initiative 1 with our fuel's mitigation program.		X		
INITIATIVE # -2 Power lines can be protected from the impacts of winter storms (as well as other hazards) with the following techniques: Establish standards for all utilities regarding tree pruning around lines (work with Utility Companies). Burying overhead power lines (Utility companies).	Project is ongoing		**X**		
INITIATIVE #-3 Conduct Weather Risk Awareness Activities. Public awareness of severe winter storms can be improved through following efforts that District 4 can assist in providing: Inform public about severe winter weather impacts (through district webpage and community events); encouraging homeowners to install carbon monoxide monitors and alarms in their homes.	Project is ongoing; the County and FD regularly conduct weather campaigns		**X**		

10.12 ISSUES OF CONCERN

1. Designing a plan to help firefighters control fires in Conservation Reserve Program (CRP) fields and on agricultural land that lies adjacent to forest and riparian areas would significantly lessen a fire's potential of escaping. Mitigation associated with this type of fire might include plowing a fire-resistant buffer zone around fields and along pre-designed areas to tie into existing natural or manmade barriers or implementing a prescribed burning regime during less risky seasons of the year. Measures taken to reduce fuel continuity and rate of spread can help minimize loss and will give emergency services an opportunity to suppress a potentially devastating wildfire.
2. Roads can be made more fire resistant by frequently mowing along the edges to reduce the fuels or planting more fire-resistant grasses in these highly prone areas. Aggressive initial attack on fires occurring along travel routes will help ensure that these ignitions do not spread to nearby home sites.
3. Maintaining developed drafting sites and mapping alternative water resources such as ponds and stock tanks near developed areas will increase the effectiveness and efficiency of emergency response in a wildfire situation.
4. During the past years, District 4 has experienced a high percentage of new home growth in the county, which is continuing to grow. Residential growth has occurred in all areas of Fire District 4, but primarily in large housing developments in the southern portion of the District and within the City of Deer Park. Large farms have been sub-divided into small acreage building sites and poor access and lack of adequate water systems (approximately only 1/3 of the fire district has access to adequate water systems for fire suppression) have created response issues for the department.
5. District 4 faces communication challenges when dealing with WUI (Wildland Urban Interface) Fires. Spokane County has converted to an 800mhz radio system, while our primary response partner for wildland fires, the Department of Natural Resources (DNR) still utilizes VHF radios for their communication. The system has 'patches' in place to allow communication between the systems, but it would streamline communication if the DNR could talk on our 800mhz radio system directly.
6. Increased "No-Burn" areas substantially limit homeowners from reducing the fuels on their property by burning the material. Hauling the material to a disposal site or chipping is cost prohibitive due to the quantity. Financial assistance to the property owners would greatly enhance the fuel reduction. Additionally, a review of the current "No Burn" area as mandated by Spokane Regional Clean Air Agency is warranted to allow options for hazard fuel reduction.
7. Due to the large geographic area of District 4, there are still some very remote areas where homeowners have chosen to build. Access to these areas to provide service is very

difficult due to inadequate road systems. Education to homeowners prior to issuing building permits and follow-up inspections would be very beneficial.

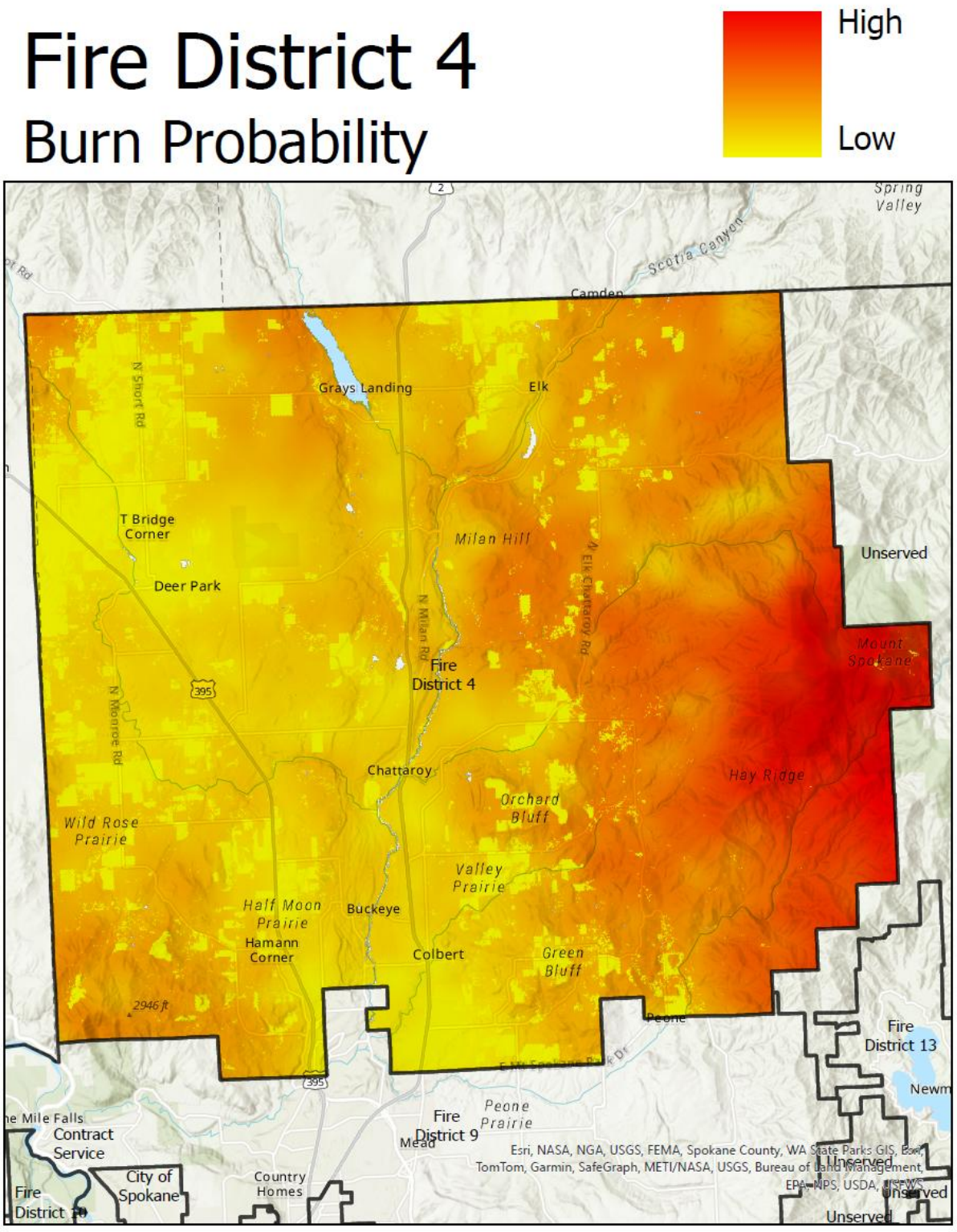


Figure 10-1 Wildfire Burn Probability (WA DNR, 2024)

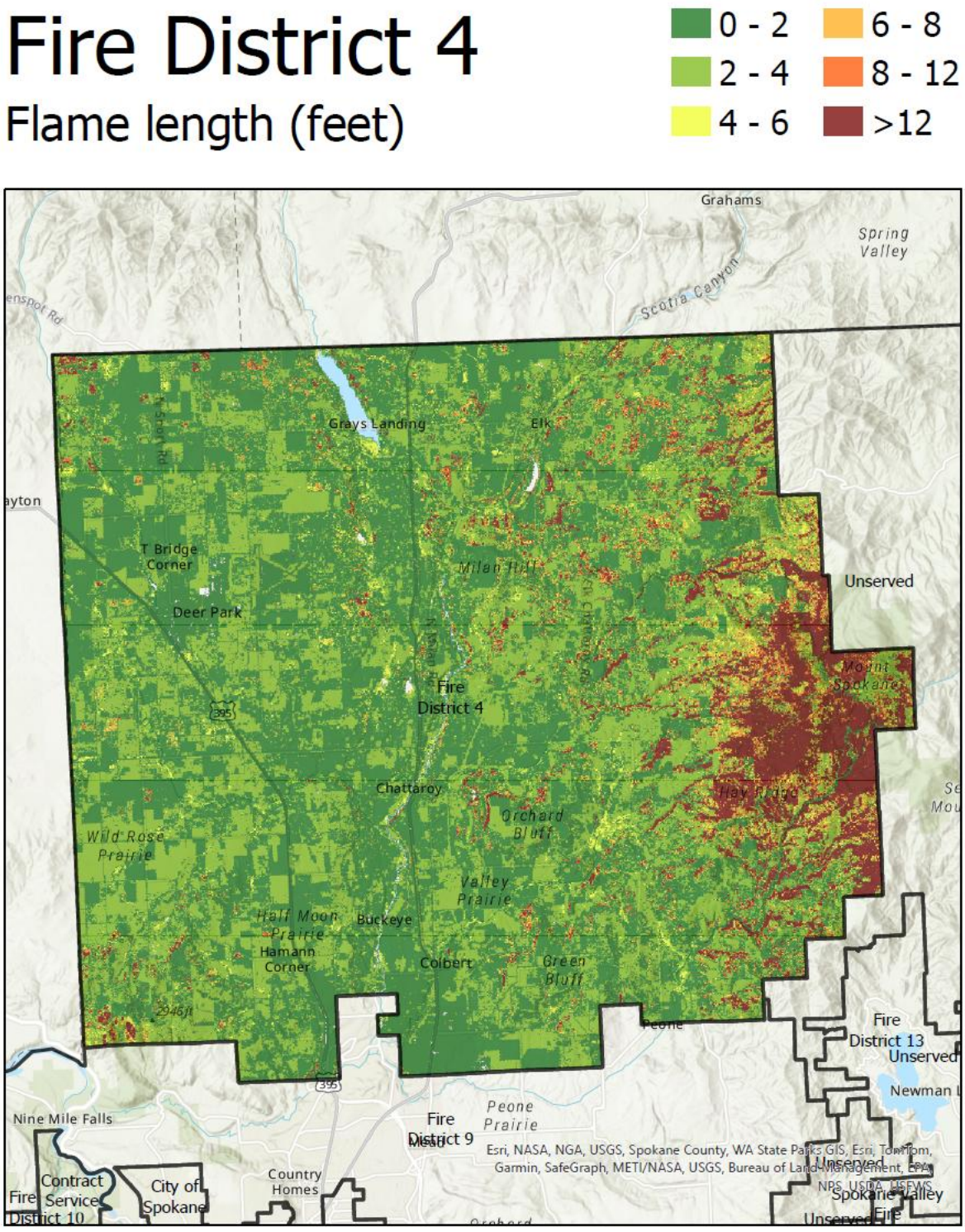


Figure 10-2 Flame Length (WA DNR, 2024)

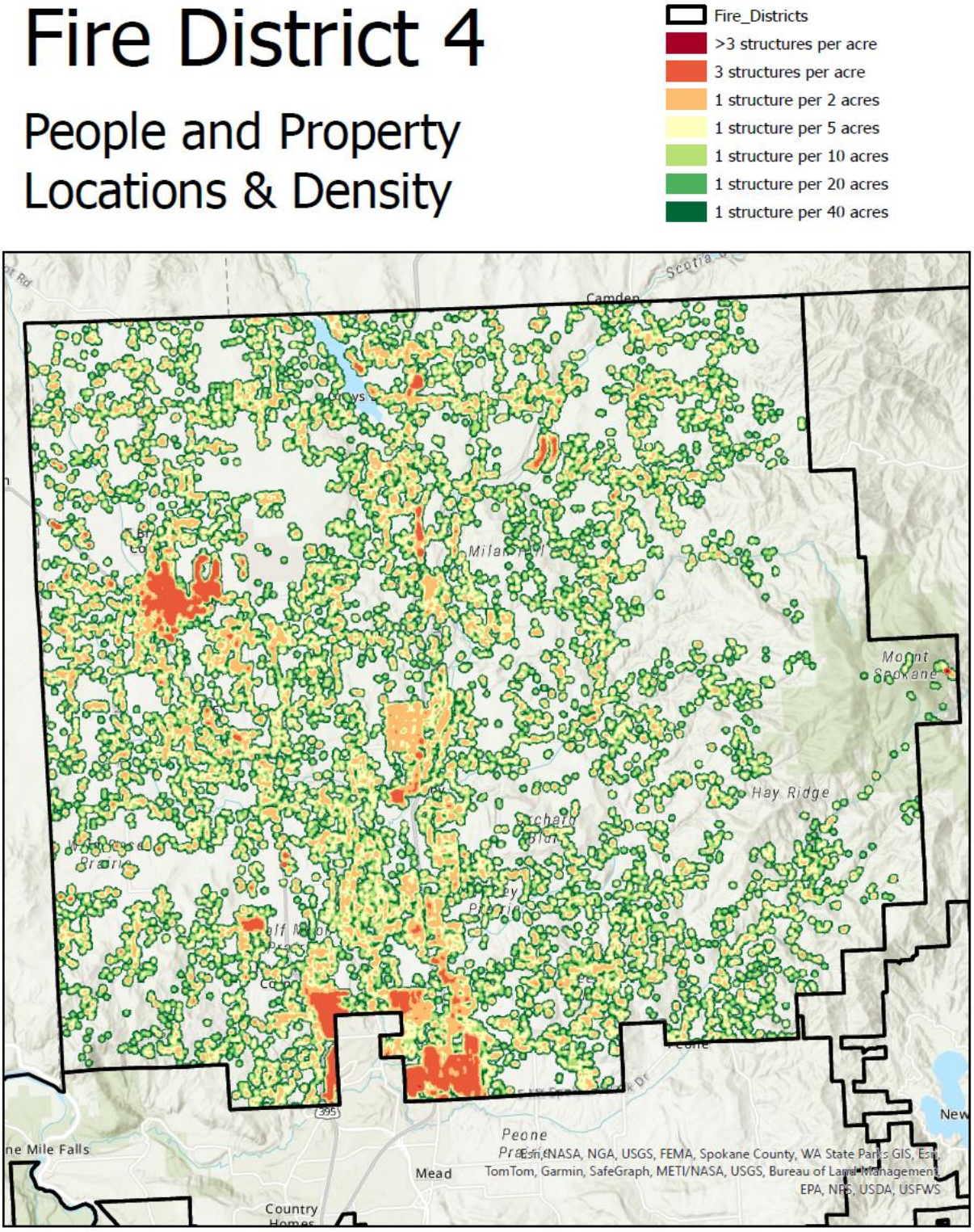


Figure 10-3 Location and Density (WA DNR, 2024)

Response Function
People and Property

The response function describes how the HVRA value will change in response to fire at different intensities, described by the different flame length classes. For each flame length class there is a map of the probability of a given location experienced that flame length (not included in this packet). The integration of all six maps into one results in the flame length map in this packet.

		Fire Intensity Level (flame length)					
		FIL1	FIL2	FIL3	FIL4	FIL 5	FIL6
Sub-HVRA (based on structure density)	Share of HVRA relative importance	0-2'	2-4'	4-6'	6-8'	8-12'	>12'
Very low density	<1%	-10	-20	-40	-80	-100	-100
Low density	1%	-10	-20	-40	-80	-100	-100
Moderately low density	3%	-10	-20	-40	-80	-100	-100
Moderate density	7%	-10	-20	-40	-80	-100	-100
Moderate high density	14%	-10	-30	-50	-80	-100	-100
High density	47%	-20	-40	-60	-80	-100	-100
Very high density	28%	-30	-50	-70	-100	-100	-100

		Fire Intensity Level (flame length)					
		FIL 1	FIL 2	FIL 3	FIL 4	FIL 5	FIL 6
Sub-HVRA	Share of HVRA RI	*0 - 2'*	*2 - 4'*	*4 - 6'*	*6 - 8`*	*8 - 12'*	*>12'*
Very low density; > 0 structures - 1 structure per 40 acres	< 1%	-10	-20	-40	-80	-100	-100
Low density; 1 structure per 40 - 1 structure per 20 acres	1%	-10	-20	-40	-80	-100	-100
Moderately low density; 1 structure per 20 - 1 structure per 10 acres	3%	-10	-20	-40	-80	-100	-100
Moderate density; 1 structure per 10 - 1 structure per 5 acres	7%	-10	-20	-40	-80	-100	-100
Moderately high density; 1 structure per 5 - 1 structure per 2 acres	14%	-10	-30	-50	-80	-100	-100
High density; 1 structure per 2 - 3 structures per acre	47%	-20	-40	-60	-80	-100	-100
Very high density; > 3 structures per acre	28%	-30	-50	-70	-100	-100	-100

Figure 10-4 Response Function (WA DNR, 2024)

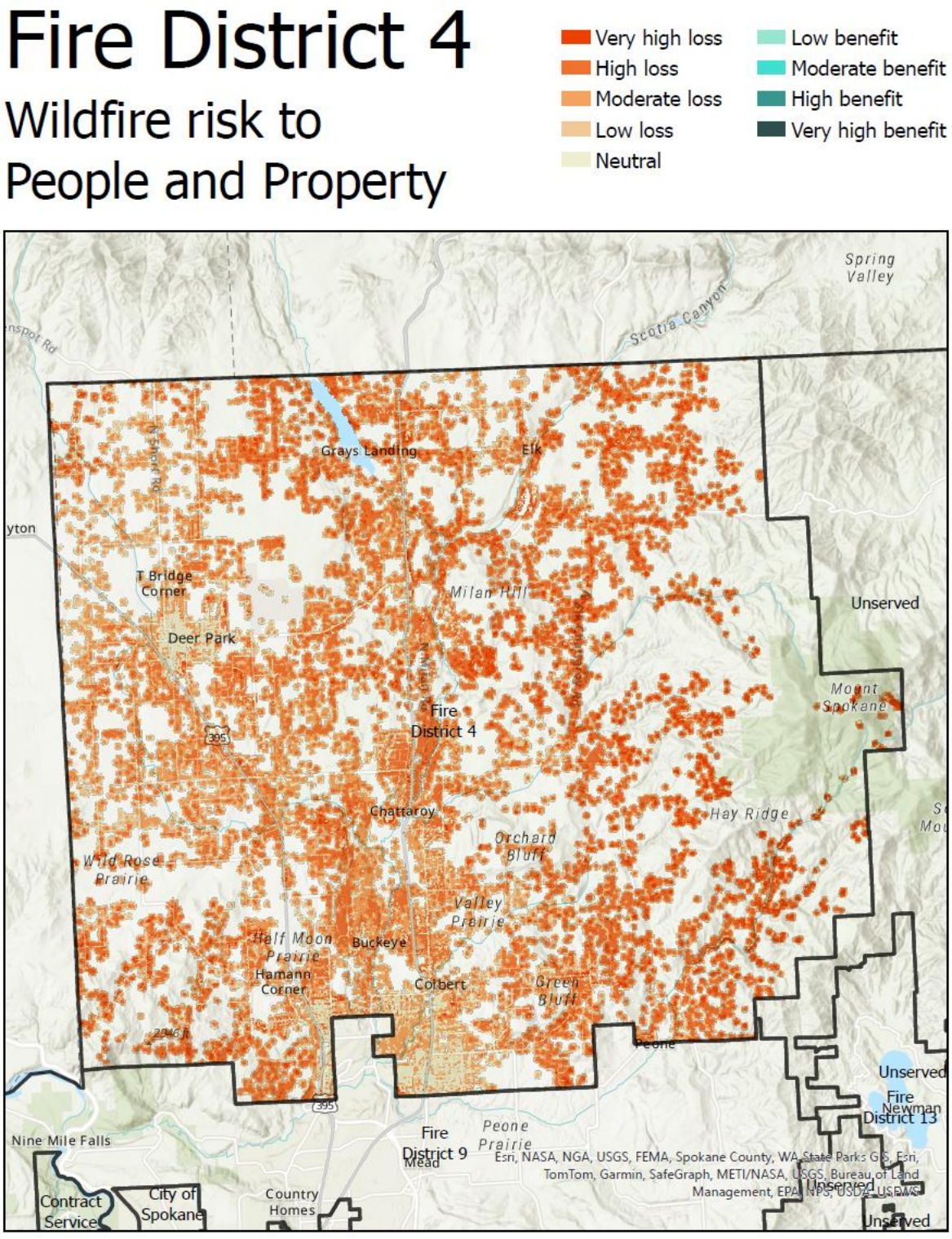


Figure 10-5 Wildfire Risk to People and Property (WA DNR, 2024)



Figure 10-6 Wildfire Risk to High Value Risk Assets (HVRAs) (WA DNR, 2024)

CHAPTER 11.
SPOKANE COUNTY FIRE DISTRICT #5 ANNEX

(Pending)

CHAPTER 12.
SPOKANE COUNTY FIRE DISTRICT #8 2026 ANNEX UPDATE

12.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to the Spokane County Fire District 8, a participating special purpose district to the Spokane County Hazard Mitigation Plan and Community Wildfire Protection Plan updates. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the Spokane County Fire District 8. For planning purposes, this Annex provides additional information specific to the district, with a focus on providing greater details on the risk assessment and mitigation strategy for this entity only. This document serves as an update to the district's previously completed plan. All relevant data has been carried over and updated with new information as appropriate and as identified within the planning process discussed in Volume 1. For the CWPP portion of the plan, Fire District 8 falls wholly within Strategic Planning Area (SPA) 8.

12.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

Spokane County Fire District 8 followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, Spokane County Fire District 8 also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Chris Wyrobek 12100 E Palouse Hwy Valleyford, WA 99036 Telephone: 509-926-6699 cwyrobek@scfd8.org	Interim Fire Chief Primary Point of Contact	Planning Coordinator; Meeting attendance, planning team facilitator; authoring of plan; capturing of information; review final annex and County base plan. Present plan to Commissioners for adoption.
Marty Long 12100 E Palouse Hwy Valleyford, WA 99036 Telephone: 509-926-6699 mlong@scfd8.org	Division Chief Alternate Point of Contact	Meeting attendance; risk ranking; author portions of plan; capture information; capabilities assessment; review final annex and County base plan.
Kris Cress 12100 E Palouse Hwy	Division Chief Planning Team Member	Prevention Education Tasks; public outreach; author portions of plan; capture

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Valleyford, WA 99036 Telephone: 509-926-6699 kcress@scfd8.org		information; capabilities assessment; risk ranking.
Jason Wilkins, Division Chief 12100 E Palouse Hwy Valleyford, WA 99036 Telephone: 509-926-6699 jwilkins@scfd8.org	Planning Team Member	Meeting attendance; author portions of plan; risk ranking; capture information; capabilities assessment

12.3 DISTRICT PROFILE

Every aspect of the District's work and service is managed by one of the six division managers. Our business is in the service industry, that is, we are in the business of providing service to a group of very important customers- our citizens. Our customers have very high expectations, and it is our desire to meet and exceed their expectations.

Spokane County Fire District 8 was formed on August 29, 1947, and operates under the statutory authority provided by RCW Title 52. We are subject to the rules of municipal corporations within the laws and constitution of the state of Washington.

The District is governed by a three-member Board of Fire Commissioners who is elected, at large, by the citizens of the District, for staggered 6-year terms on a 2-year rotating basis to ensure continuity of the governance of the District. The Board of Fire Commissioners act together as a unit to govern the affairs of the District. This governance includes the setting of policy and approval of the annual revenue and expense budget for the District as well as the selection, appointment and hiring of the Fire Chief/Chief Executive Officer to manage the affairs of the District. The Board of Fire Commissioners meet regularly on the second Tuesday of each month beginning at 6:00 p.m. at our Headquarters - Station 82. Their meetings are open to the public and are subject to the Open Public Meetings Act. The current Board (2025) consists of Board Chair Andy Rorie, Commissioner Lee Boling, and Commissioner Jeff Larsen.

The District lies south of the City of Spokane and south of the City of Spokane Valley encompassing approximately 110 square miles of urban, suburban, and rural properties, which includes the communities of: Saltese, Ponderosa, Painted Hills, Mica, Freeman, Valleyford, Moran Prairie, Glenrose, and a very diverse population of approximately 23,917 citizen customers. The assessed value of the District is approximately 5.8 billion dollars, which provides for an annual budget of approximately 12.5 million dollars through property tax levies for fire and emergency medical services as provided for by statute.

Spokane County Fire District 8 provides a full range of services that include fire suppression, emergency medical services, fire prevention, education and investigation, and associated support and maintenance services to our 23,917 citizens. Each station is staffed twenty-four hours a day with a combination of career firefighters and callback volunteer personnel.

An overall increase in staffing has brought our suppression force to 52 uniformed career firefighters. Additionally, by maintaining our Volunteer Firefighter Program, the District was able to bolster water tender (water supply) response and enhance suppression support on days when volunteers are available to cover additional shifts.

In 2024, the General Operating Budget for Fire District 8 was $12 million dollars. This revenue is derived primarily from property taxes, which were levied at $1.29 per $1,000 of assessed property valuation, and an EMS levy that was set at $0.27 per $1,000 of assessed property valuation. A Maintenance and Operations levy, also set at $0.47 per $1,000 of assessed property valuation, contributes to the revenue of the District as well.

Per the Washington Survey and Rating Bureau (WSRB), Spokane County Fire District 8 has worked to achieve an overall community protection class rating of 4. The Fire Protection Classification rating, which helps determine insurance rates for residential and commercial properties, is derived from several factors including, but not limited to, fire station location, staffing, and water supply. Fire District 8 achieved this rating in 2018 and has been successful in maintaining a community protection class rating of 4 due to improvements made in the areas of staffing, equipment, water supply, and training.

Additional District information includes:

- **Value of Area Served—**The estimated value of the area served by the jurisdiction is $5.9 billion dollars
- **Land Area Owned—**The Fire District owns approximately 18 acres of land
- **List of Equipment Owned by the Jurisdiction:**

  6 Engines, 6 Brush, 3 Water Tenders, 1 Support/Air Unit
- **Total Value of Equipment—**The total value of critical infrastructure and equipment owned by the jurisdiction is 6.7 million dollars
- **Total Value of Critical Facilities—**The total value of critical facilities owned by the jurisdiction is 18 million dollars
- **Current and Anticipated Service Trends—**the Fire District has experienced an approximately 16 percent overall increase in calls from 2020 to 2024. This increase is due to increased growth in the fire district as well as automatic aid agreements with neighboring fire districts. While the actual land use has gone relatively unchanged, density with respect to infill and new residential subdivisions has grown.

- **Calls for Service** - Fire District 8 members responded to 4,209 incidents in 2024 from four fire stations located in the Moran, Valleyford, Ponderosa, and Saltese areas.
- **Strategic Planning Area 8** – **Hangman Valley – Liberty Lake**: SPA 8 is located in the center of Spokane County just south of the city of Spokane and the Spokane Valley. It includes the southern portion of Liberty Lake and Liberty Lake Regional Park to the east, the Dishman-Mica Rd/State Route 27 corridor through the mid-section, high density residential areas outside the Spokane Municipal Boundary on the north end, and portions of Hangman Valley and the Moran Prairie/Glenrose. Portions of Interstate 195 to the west. SPA 8 includes all of Fire District 8 and a section of unincorporated fire protection to the east. This planning area is heavily populated with rural and semi-rural residential areas located in the midst of heavy wildland fuels. Several hundred acres of public access hiking/rock climbing. The trail heads to these areas are located in several different locations within SPA 8.

  Most of SPA 8 is a mosaic of rural farmland, wooded stream channels, shrub land, and mixed conifer forest except on the east side which is dominated by continuous commercial forestland and county park. Major drainages through the planning area include Hangman Creek, California Creek, Chester Creek, Cottonwood Creek, and Liberty Creek, which are all tributaries of the Spokane River. Landownership is predominantly private with several large tracts owned by forest Industry, Spokane County, and the Washington Department of Natural Resources. Land subdivision for home sites is common throughout the area. Some of these subdivisions are for large organized multi-home development, but most are for secluded semi-remote sites in timbered areas or converted farmland with one-way in, one-way out roads. Most structures lie adjacent or in close proximity to wildland fuels on widely varying terrain.

  Primary ingress and egress routes traveling through SPA 8 include State Highway 27, Dishman-Mica Road, Hangman Valley Road, Palouse HWY and Interstate 195. These routes are well developed, paved arterials providing access to and from the City of Spokane and Spokane Valley. Access to rural subdivisions and small ranches is well-developed allowing escape by people living in the area as well as access by emergency services during a fire event. Roads in newer subdivisions have been designed to accommodate emergency vehicles with either loop roads or cul-de-sacs with wide turning radii and easily negotiable grades for large emergency equipment. Many residences in the forested areas are accessed via unimproved roads accessible only by small emergency vehicles. In these areas, access roads and driveways are often lined with shrubs and mature trees that can limit or prohibit access during wildfires. Generally, these roads lack adequate turnouts and turn-around areas for emergency vehicles. The inability of emergency resources to safely access structures reduces or may even eliminate suppression response.

12.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events which have occurred within the County. In the context of the planning region, it was determined that there are no additional hazards that are unique to the special purpose district. Table 12-1 lists all past occurrences which have impacted the district. If available, dollar loss data is also included.

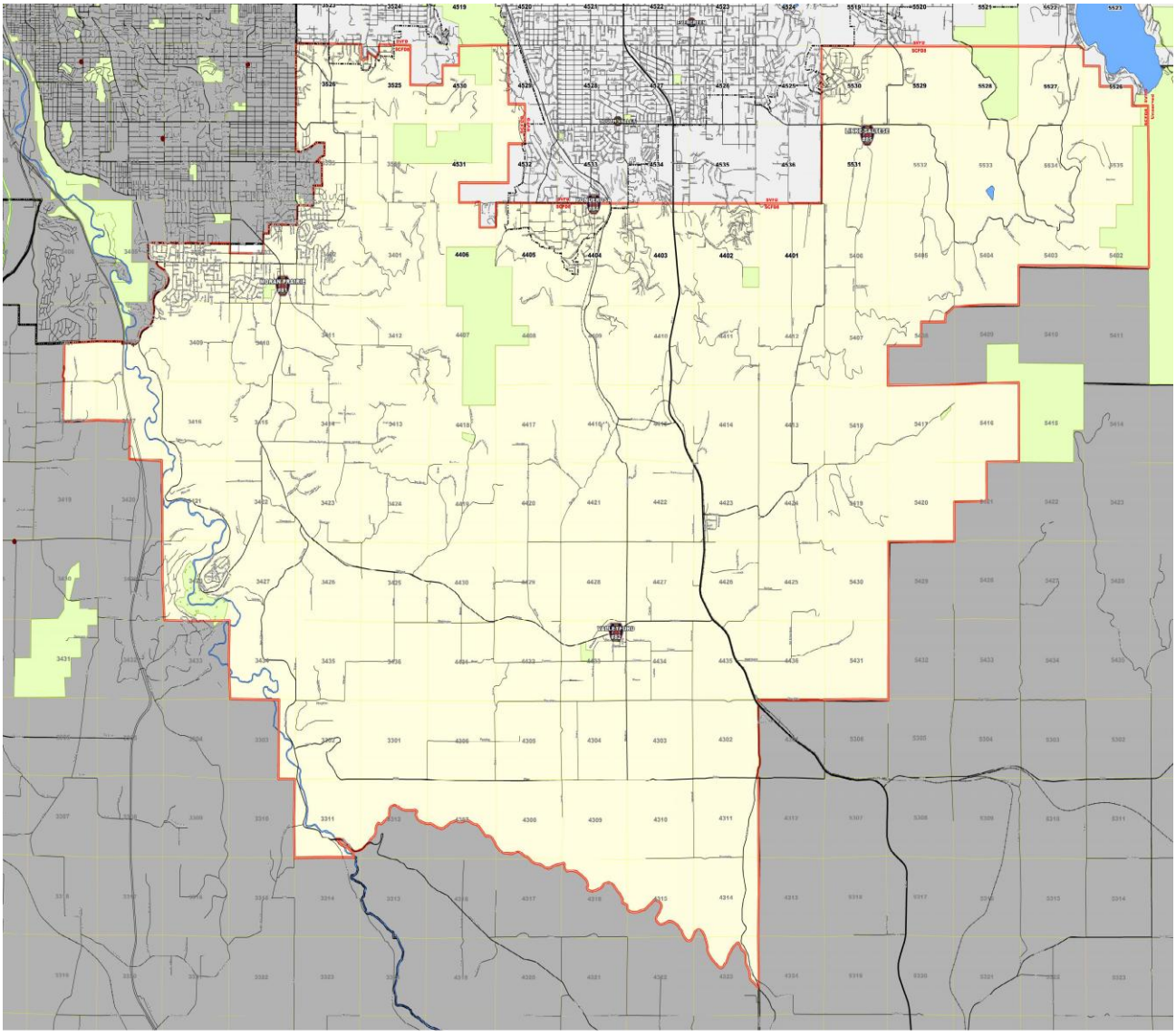


Figure 12-1 District Boundaries

Table 12-1
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Dollar Losses (if known)
Snowstorm	1825	12/23/2008	380,000.00
Spokane Valley Fire	2783	7/10/2008	Unknown
Wildfire (Yale Road)	5149	8/13/2015	Unknown

12.5 APPLICABLE REGULATIONS AND PLANS

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation efforts, and classifications under various community programs.

Regulatory Capability

The District has adopted/enacted codes, resolutions, policies and plans that compliment and support hazard mitigation planning and activities. The following existing District codes, resolutions, policies, and plans are applicable to this hazard mitigation plan:

Fire District Capabilities:

- Capital Improvement Program
- Sprinkler Codes (Adopted by Spokane County Building and Planning)
- Strategic Plan
- Emergency Procedures and Policies
- City/County Comprehensive Emergency Management Plan
- State of Washington Comprehensive Emergency Management Plan
- National Response Framework
- National Incident Management System
- Revised Code of Washington 52.26 (Regional Fire Protection Service)

- WAC 296.305
- Response Plans, to include Automatic and Mutual Assistance
- District's Annual Capital Improvement Plan (CIP) supports projects that are identified in this plan update. The CIP is updated annually by the District and adopted by the Board of Commissioners in the fall of each year.
- Specific incident response plans or complement of types of resources for response
- Operations plans or policies
- Standard Operating Guidelines and Safety Manuals
- Mutual Aid Agreements (various in place, including local, state and federal partners)
- Automatic Aid Agreements

12.5.1 Administrative and Technical Capabilities

The assessment of the district's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 12-2. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

TABLE 12-2
ADMINISTRATIVE AND TECHNICAL CAPABILITY

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Professionals trained in building or infrastructure construction practices.	No	
Planners or engineers with an understanding of natural hazards.	No	
Staff with training in benefit/cost analysis.	Yes	
Personnel skilled or trained in GIS or Hazus use.	Yes	
Emergency Manager.	No	
Grant writers.	Yes	Contract vendor
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?).	Yes	Spokane Regional Emergency Communications

TABLE 12-2
ADMINISTRATIVE AND TECHNICAL CAPABILITY

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Hazard data and information available to public.	Yes	The hazard mitigation plan risk assessment is available on the County's website for citizens to review. The County will maintain the data on its website during the lifecycle of the mitigation plan.
Specific equipment response plans.	Yes	
Specific operational plans.	Yes	
Water Shortage Contingency Plan.	No	
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness?	No	
Organization focused on individuals with access and functional needs populations	Yes	Prevention Education Division, Fire District 8, Division Chief of Prevention
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Prevention Education Division, Fire District 8, Division Chief of Prevention/ Support Services Volunteer Community Risk Reduction
Natural disaster or safety related school programs?	Yes	Prevention Education Division, Fire District 8, Division Chief of Prevention
Public-private partnership initiatives addressing disaster-related issues?	No	
Multi-seasonal public awareness program?	Yes	The County maintains these programs through its Emergency Management Department.
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	Yes	Prevention Education Division, Fire District 8, Division Chief Prevention/Education, Spokane County Wildfire Mitigation Coalition.

TABLE 12-2 ADMINISTRATIVE AND TECHNICAL CAPABILITY		
Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Noxious Weed Eradication Program or other vegetation management	No	
Fire Safe Councils	Yes	Prevention Education Division, Fire District 8, Division Chief Prevention/Education, Fire Wise Communities Designated
Chipper program	Yes	Prevention Education Division, Fire District 8, Division Chief of Prevention(Shredding Day with DNR)
Defensible space inspections program	Yes	Prevention Education Division, Fire District 8, Division Chief of Prevention/ Support Services Volunteer Community Risk Reduction
Creek, stream, culvert or storm drain maintenance or cleaning program	No	
Address signage for property addresses	Yes	Prevention Education Division, Fire District 8, Division Chief of Prevention/ Support Services Volunteer Community Risk Reduction
Other		

12.5.2 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 12-3. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 12-3 Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	No

Table 12-3
Fiscal Capability

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

12.6 COMMUNITY CLASSIFICATION

The district's classifications under various hazard mitigation programs are presented in Table 12-4. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community. Those which specifically require district participation or enhance mitigation efforts are indicated accordingly.

Table 12-4
Community Classifications

	Participating (Yes/No)	Date Enrolled
Community Rating System	No	
Building Code Effectiveness Grading Schedule – Commercial	4	Unknown
Residential	4	
Protection Class	4	
Storm Ready	No	
Firewise	Yes	5/2016

12.7 HAZARD RISK AND VULNERABILITY RANKING

The district's Planning Team reviewed the hazard list identified within the Base Plan and identified the hazards that affect Spokane County Fire District 8. Fire District 8 identified Train Derailment as an additional hazard of concern.

In addition, the Planning Team also examined Volume 1, Chapter 4 of the Spokane County Multi-Jurisdictional Hazard Mitigation Plan to ensure an understanding of the application of the Calculated Priority Risk Index (CPRI) information which is utilized in determining the hazard impact and vulnerability.

The risk assessment process also included a review of critical facilities impacted, potential dollar losses at risk, and any additional information applicable within the hazard profiles for use in identifying each hazard of concern. Factors also include the length of time required for repairs, which could impact the District's ability for fire response to its service area.

Table 12-6 presents the results of the CPRI process. Table 12-6 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.
- Low (Negligible) – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.
- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.
- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.
- Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted for in excess of one month.

Table 12-5.
Calculated Priority Risk Ranking

Hazard	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought			3				3			2						1				4	2.55
Earthquake		2					3				3		4				1				2.65
Flood			3			2				2					2			2			2.40
Landslides		2					3				2		4					2			2.50
Severe Weather				4			3					4			2			2			3.40
Wildfire				4			3			2			4						3		3.35
Other Hazards of Concern																					0.00

Table 12-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
1	Severe Weather	3.4	High	Severe storms can impact all of the District's structures. 10 of the structures included in this assessment were built in the 1977-1978 timeframe. One was built in 1920. Strong winds in the area could damage the facilities. Severe storms also impact response capabilities. Falling trees and flooded roadways impact ingress and egress. Snow, while customarily not of a long duration or significant amounts, also has the potential to impact response times, as well as increasing calls for service. Snow-load capacities can also be of concern, such as the roof collapsing a gym in Thurston County during a particularly significant snow event. A combined snow/rain event could overcome drainage capacity, further impacting response.

Table 12-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
2	Wildfire	3.35	High	The majority of structures owned by the district fall into Fire Regimes 3 and 5. While structures owned have not been impacted by wildfire, the district's response to wildfire events has increased over the last several years, potentially because of climate change and the drought which the entire state experienced in 2015, as well as the dries summer on record in 2017. Fire potential in SPA 8 is moderate to high. Wildland fuels consist of mixed conifer forest, seasonal agricultural crops, wooded riparian areas, shrub land and pasture. These fuels lie adjacent to home sites and organized housing developments in many locations. Topography is rolling-to-steep near the mountains to the east, wooded foothills south of Spokane, and flat to gently rolling terrain in the creek valleys and prairie. Liberty Lake Regional Park on the east side of SPA 8 provides overnight camping and a system of trails in close proximity to the community of Liberty Lake and the Spokane metropolitan area. Camping, picnicking, hiking, and day use facilities are developed throughout the park area adjoining wildland fuels. Adjacent to the park are vast areas of commercial timberland with varying age classes and stocking densities capable of carrying a high intensity crown fire. Due to the proximity of the park to the Spokane metropolitan area and its heavy use, there is increasing potential for wildfires in this area.

Table 12-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
3	Earthquake	2.65	Medium	The entire planning area is susceptible to earthquakes. While all structures owned by the district fall within the "very low" liquefaction zone, all of the structures are dated, making them more susceptible to the EQ hazard. All but three of the structures owned by the district included in this assessment are wood, with three being steel construction. Five others are concrete.
4	Drought	2.55	Medium	Droughts will increase the risk to wildfire and can limit water supplies needed to fight fires. The increase to wildfire danger could also impact the risk to the district's structures.
5	Landslide	2.5	Medium	While no impact has occurred to district property, the area which the district serves is susceptible to landslides, which may impact response capabilities and evacuation, if necessary.
6	Flood	2.4	Medium	None of the district's structures fall within either the 100- or 500-year floodplain; however, response to areas flooded do frequently occur. In some instances, response is hampered by floodwater over roadways.
7	Train Derailment	2.15	Medium	Trains traveling through the area have the potential to not only cause a hazardous material release, but the tracks themselves have the potential to cause ingress and egress issues to areas, impacting emergency response.

12.8 CWPP ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted the various fire districts throughout the Spokane County in

completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk as it relates specifically within Fire District 8's service area. The analysis focuses specifically on eight highly valued resources and assets (HVRA), to include people and property, critical facilities, drinking water, ecological integrity, wildlife, timber, agriculture, and recreation. This analysis varies slightly from the analysis within the HMP document, which looks at all assets exposed, in addition to the critical facilities, as well as impact to the people, property, environment, and economy. The resulting maps of the analysis completed by DNR are incorporated at the end of this Annex.

12.9 MITIGATION GOALS AND OBJECTIVES

The District adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1, Chapter 12, as well as the CWPP specific goals identified in Chapter 10, Section 10.1.5.

12.10 HAZARD MITIGATION ACTION PLAN

The Planning Team for the district identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the District's assets and hazards of concern. Table 12-7 lists the action items/strategies that make up the district's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, and the type of initiative associated with each item are also identified.

Table 12-7
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE # 1 Continue to support the Glenrose Community Fire Wise Program, as well as any new FireWise Communities that may exist in the District. This initiative addresses the ongoing education, prevention, and recovery activities to support the local communities. With the update to the CWPP, the District is hopeful that through continued outreach efforts, additional communities will seek enrollment in FireWise.									

Table 12-7
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
Existing	WF	2,5,8,11,12	Spokane County Fire District 8-Community Risk Reduction Division	$1,500.00 annual	General Fund	Long-Term	Modified	Public Information, Prevention Activities, Emergency Services, Recovery, Natural Resource Protection.	Local and County
INITIATIVE # 2 The District has a sustainable and robust pre-plan program that includes rural farming areas. The District will seek out grant funding to assist in maintaining this program through continued public education.									
Existing	SW/WF	1,4	Spokane County Fire District 8-Community Risk Reduction Division	Low	General Fund	Long-Term	Yes	Prevention Education, Emergency Services.	Public, District, Local.
INITIATIVE #3 Seek grant funding to conduct additional Wildland Urban Interface Assessment with Mapping. The District has significant Wildland Urban Interface areas and is looking for the ability to continue to identify, map and educate those in the hazard areas of strategies to reduce impacts of wildland fires. With completion of the 2026 update of the HMP and CWPP, more current data is now available; however, as growth continues to expand in the area, the maps and data will require continued updates.									
New and Existing	WF	1,2,4,12	Spokane County Fire District 8-Community Risk Reduction Division	Medium	General Fund /Grants	Long-Term	Yes	Public Information, Prevention Activities, Emergency Services	Public, District, Local, Region
INITIATIVE # 4 The District has recognized the need to support the community and be able to effectively respond during hazardous events, as well as be a short-term shelter during disasters. The District does not currently have those capabilities and is in need of sustainable generators at two of the four fire stations in order to be able to serve as shelters in the area.									

Table 12-7
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
Existing	WF/EQ/SV	1,3	Spokane County Fire District 8	High $280,000	General Fund / Block Grants	Short-Term	Yes	Property Protection, Emergency Services.	Public, District, County
INITIATIVE # 5 Enhance the GIS function of the District through mapping, data collection, and education to responders. The District will need to hire a GIS manager to complete the work and maintain updated information, and interface with Spokane County GIS. The District will seek out grant funding to staff such a position to allow for the capture and maintenance of the GIS data which will assist with future risk assessments in the area.									
New	SW/ WF/EQ	1,2,3,4,	Spokane County Fire District 8-Community Risk Reduction Division	Medium	General Fund / Grants	Long-Term	Modified	Property Protection, Emergency Services, Public Information	Public, District, County
INITIATIVE # 6 In an effort to further support community resilience, the District recognizes the need to be able to provide shelter facilities which inhibit smoke infiltration. None of the District's facilities currently have air purification systems which help reduce the level of smoke indoors to healthy (or more acceptable) levels. As such, the District intends to seek out grant funding to enhance District 8's facilities to include air purification systems to allow for use of the facilities as potential shelters during times when wildfire smoke impacts the District.									
New and Existing	WF	1, 3	Spokane County Fire District 8-Community Risk Reduction Division	High	Grant	Short-Term	No	Structural Project, Emergency Services, Preventive Activities, Recovery	Local Community, County

12.11 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different

initiative types for each identified action item was conducted. Table 12-8 identifies the prioritization for each initiative.

Table 12-8.
Mitigation Strategy Priority Schedule

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

a. See Chapter 1 for explanation of priorities.

12.12 STATUS OF PREVIOUS PLAN INITIATIVES

Table 12-9 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 12-9
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	2025 Project Status	Completed	Continual /Ongoing Nature	Removed /No Longer Relevant /No Action	Carried Over
INITIATIVE # 1 Continue to support the Glenrose Community Fire Wise Program. This initiative addresses the ongoing education, prevention, and recovery activities to support the community of Glenrose.	The Glenrose Community Fire Wise program is still active. The Fire District has continued to work with them since completion of the last plan and will continue to do so during the life cycle of this 2026 update. Since completion of the last plan, Glenrose added an annual clean-up day in May to help reduce fuels in the area.		X		X
INITIATIVE # 2 The Fire District has initiated an apartment and short-term rental program to educate apartment managers on important safety and recover information and strategies. The District would like to expand the program to add a part-time, as needed person to coordinate, facilitate, and expand the program. The intent would be to seek out grant funding to help continue the practice.	Program was set to start early 2020, however the COVID pandemic delayed the start. Never had the capacity to restart the program.			X	
INITIATIVE # 3 The District has a sustainable and robust pre-plan program that includes rural farming areas. The District will seek out grant funding to assist in maintaining this program through continued public education.	The District has now allocated funds annually to maintain pre-plan program and will continue to support the program moving forward.	X			X

Table 12-9
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	2025 Project Status	Completed	Continual /Ongoing Nature	Removed /No Longer Relevant /No Action	Carried Over
INITIATIVE 4 Seek grant funding to conduct a Wildland Urban Interface Assessment with Mapping. The District has significant Wildland Urban Interface areas and is looking for the ability to identify, map and educate those in the hazard areas of strategies to reduce impacts of wildland fires.	Department of Natural Recourses has been task by WA St Legislators to create a Wildland Urban Interface map of the entire state. This map will be used for educational and development purposes.	X			X
INITIATIVE # 5 The District has recognized the need to support the community and be able to effectively respond during hazardous events as well as be a short-term shelter during disasters. The District does not currently have those capabilities and is in need of sustainable generators at two of the four fire stations in order to be able to serve as shelters in the area.	District has two sustainable generators at two stations and a third generator coming online in 2025.	X			X

Table 12-9
2025 Status of 2020 Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	2025 Project Status	Completed	Continual /Ongoing Nature	Removed /No Longer Relevant /No Action	Carried Over
INITIATIVE # 6 Enhance the GIS function of the District through mapping, data collection, and education to responders. The District will need to hire a GIS manager to complete the work and maintain updated information, and interface with Spokane County GIS. The District will seek out grant funding to staff such a position to allow for the capture and maintenance of the GIS data which will assist with future risk assessments in the area.	District worked with Spokane County GIS Department to enhance street mapping and hydrant location mapping. Spokane County maintains the GIS layers and will make changes as needed for the Fire District at an hourly rate. Fire District allocates funds for this service. The District will continue to update the data as needed.	**X**			**X**

12.13 ISSUES OF CONCERN

1. The District wants to make sure we have requirements in place to ensure adequate access and egress to areas experiencing growth, and feel it is important that this fact is taken into consideration when looking at the totality of the user population.

2. Many primary access routes in SPA 8 are located in areas of moderate to high fire risk due to the close proximity of continuous fuels along the roadway. These access routes include State Route 27, Dishman-Mica Road to the east, Hangman Valley Road, Palouse Hwy and Interstate 195 to the west. In the event of a wildland fire, it is likely that one or more of the escape routes would become impassable. As such, the District wants to ensure that the community is aware of evacuation and provide education on shelter in place needs.

3. The District would like to explore the possibility of having a central number and clearing house for people to call in burn permits then notification to dispatch.

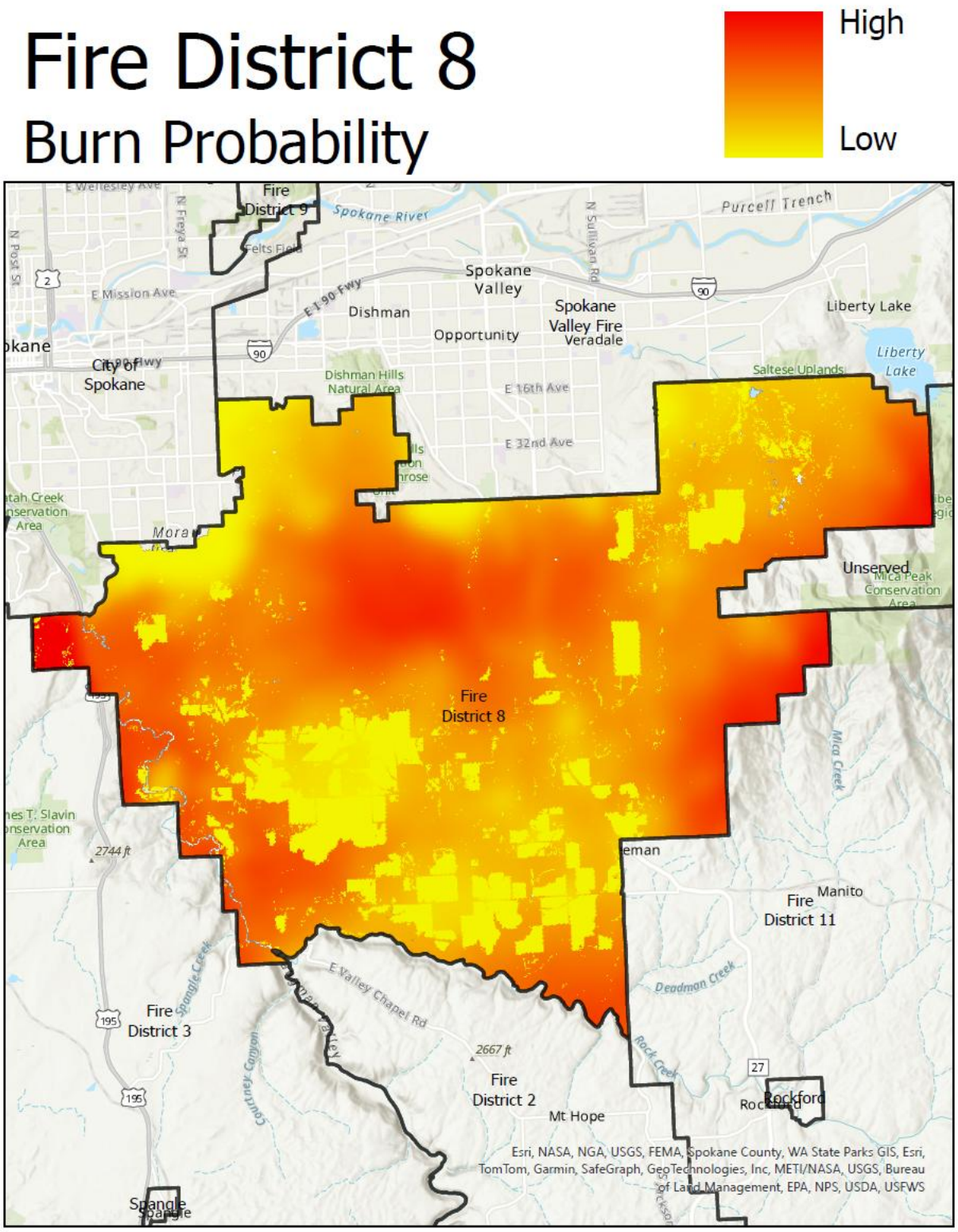


Figure 12-2 Fire District 8 Burn Probability (WA DNR, 2024)

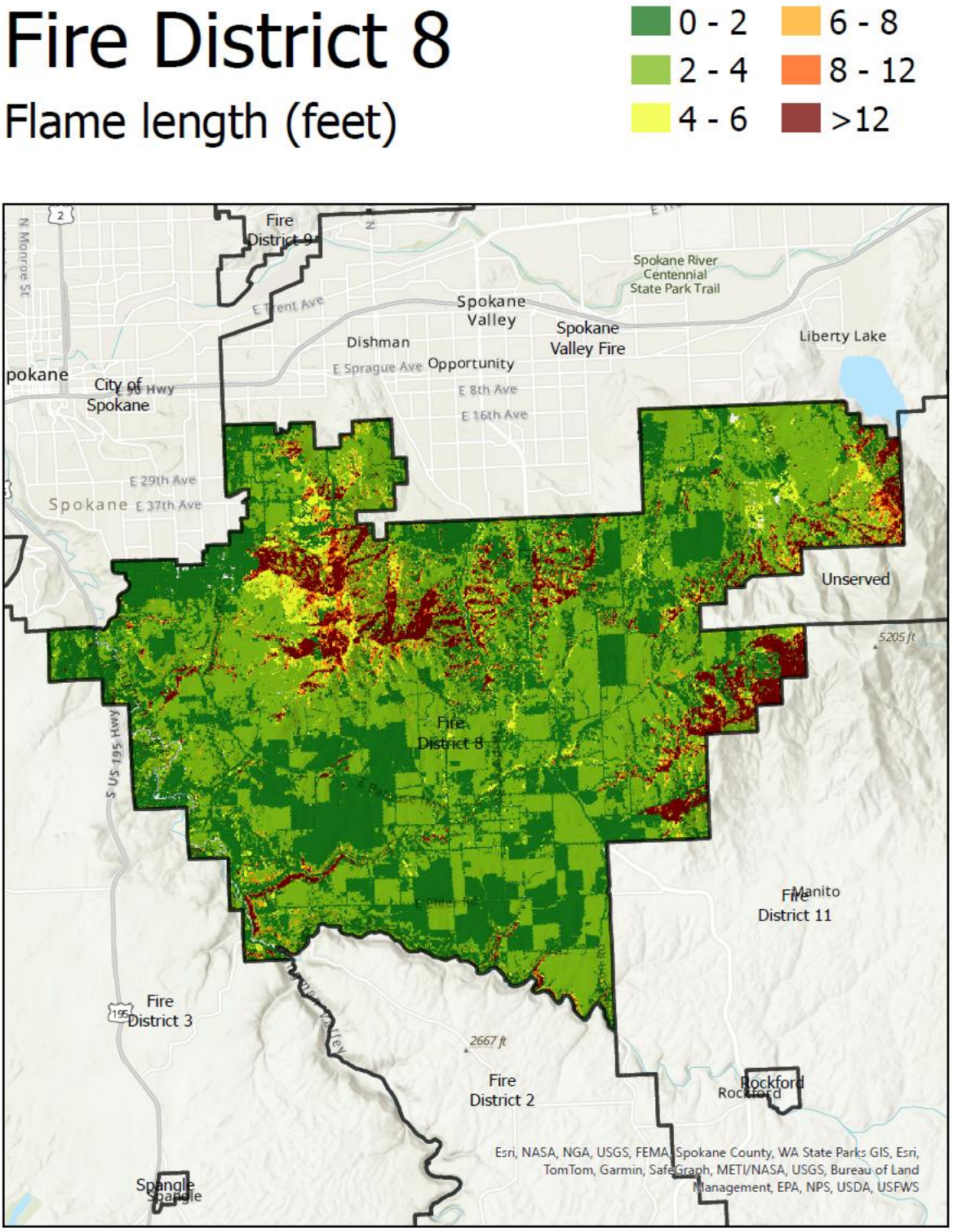


Figure 12-3 Fire District 8 Flame Length (WA DNR, 2024)

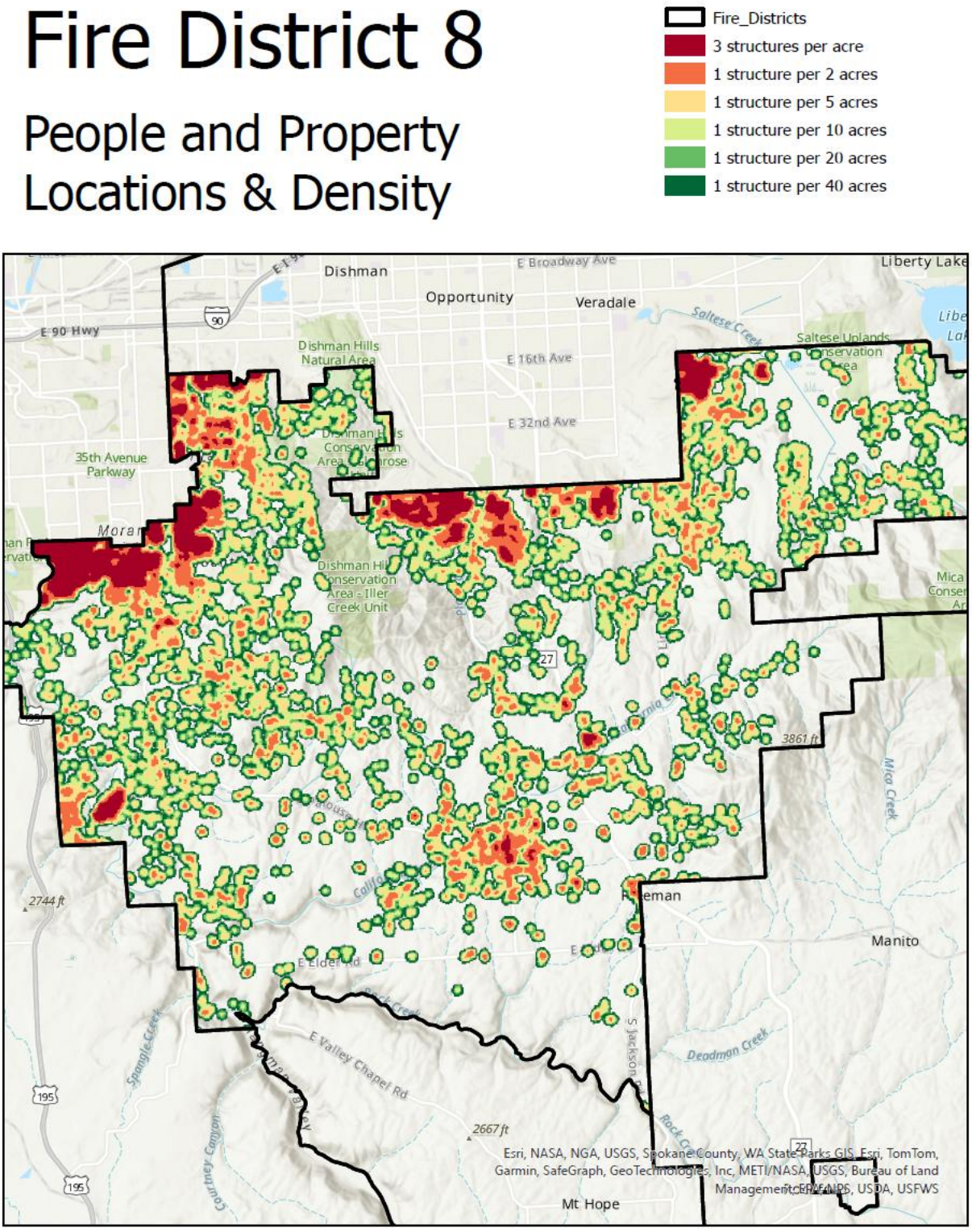


Figure 12-4 Fire District 8 Density (WA DNR, 2024)

Response Function
People and Property

The response function describes how the HVRA value will change in response to fire at different intensities, described by the different flame length classes. For each flame length class there is a map of the probability of a given location experienced that flame length (not included in this packet). The integration of all six maps into one results in the flame length map in this packet.

		Fire Intensity Level (flame length)					
		FIL1	FIL2	FIL3	FIL4	FIL 5	FIL6
Sub-HVRA (based on structure density)	Share of HVRA relative importance	0-2'	2-4'	4-6'	6-8'	8-12'	>12'
Very low density	<1%	-10	-20	-40	-80	-100	-100
Low density	1%	-10	-20	-40	-80	-100	-100
Moderately low density	3%	-10	-20	-40	-80	-100	-100
Moderate density	7%	-10	-20	-40	-80	-100	-100
Moderate high density	14%	-10	-30	-50	-80	-100	-100
High density	47%	-20	-40	-60	-80	-100	-100
Very high density	28%	-30	-50	-70	-100	-100	-100

		Fire Intensity Level (flame length)					
		FIL 1	FIL 2	FIL 3	FIL 4	FIL 5	FIL 6
Sub-HVRA	Share of HVRA RI	*0 - 2'*	*2 - 4'*	*4 - 6'*	*6 - 8`*	*8 - 12'*	*>12'*
Very low density; > 0 structures - 1 structure per 40 acres	< 1%	-10	-20	-40	-80	-100	-100
Low density; 1 structure per 40 - 1 structure per 20 acres	1%	-10	-20	-40	-80	-100	-100
Moderately low density; 1 structure per 20 - 1 structure per 10 acres	3%	-10	-20	-40	-80	-100	-100
Moderate density; 1 structure per 10 - 1 structure per 5 acres	7%	-10	-20	-40	-80	-100	-100
Moderately high density; 1 structure per 5 - 1 structure per 2 acres	14%	-10	-30	-50	-80	-100	-100
High density; 1 structure per 2 - 3 structures per acre	47%	-20	-40	-60	-80	-100	-100
Very high density; > 3 structures per acre	28%	-30	-50	-70	-100	-100	-100

Figure 12-5 Response Function (WA DNR, 2024)

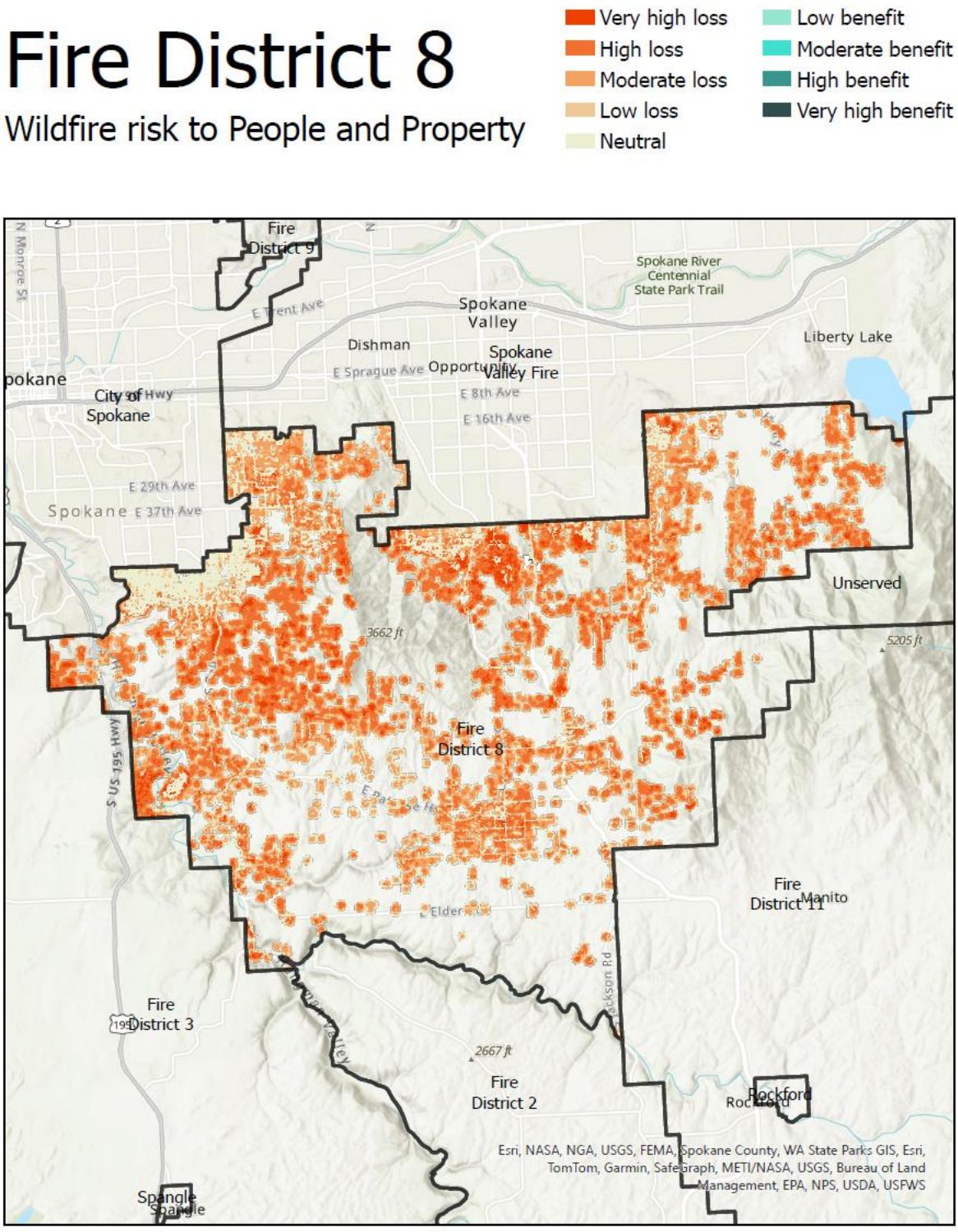


Figure 12-6 Fire District 8 Wildfire Risk (WA DNR, 2024)

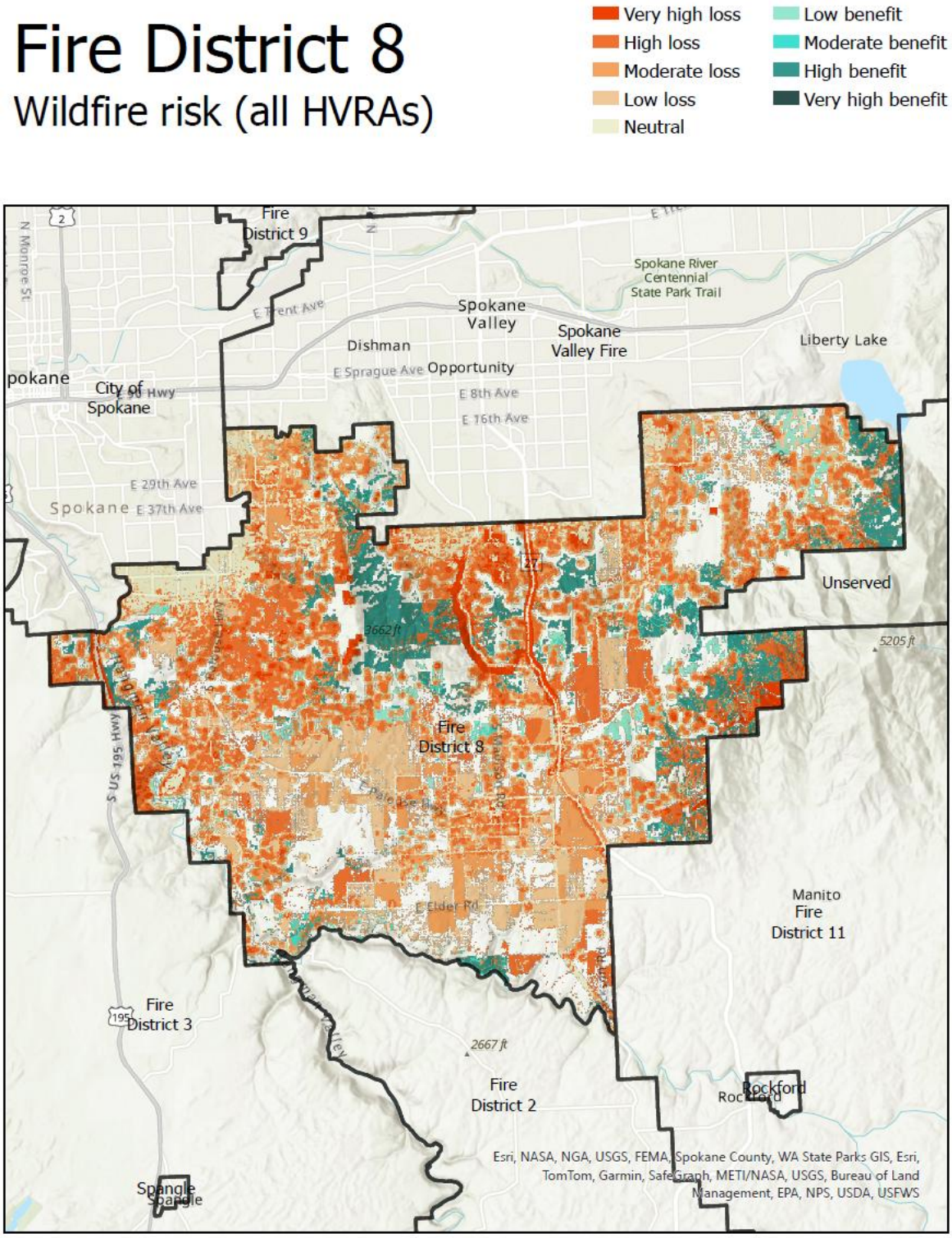


Figure 12-7 Wildfire Risk to High Value Risk Assets (HVRAs) (WA DNR, 2024)

CHAPTER 13.
SPOKANE COUNTY FIRE DISTRICT #9 2026 ANNEX UPDATE

13.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to Spokane County Fire District 9, a participating special purpose district to the Spokane County 2026 Hazard Mitigation and Community Wildfire Protection Plans. This is District 9's first Hazard Mitigation Plan and an update to the 2015 Community Wildfire Protection Plan. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by Spokane County Fire District 9. For planning purposes, this Annex provides additional information specific to the District and Strategic Planning Area 7, with a focus on providing greater details on the risk assessment and mitigation strategy for this entity only. This document serves as the District's first Hazard Mitigation Plan.

13.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

Spokane County Fire District 9 followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, Spokane County Fire District 9 also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Matthew Vinci	Chief	Attended CWPP and HMP meetings; provided information for inclusion in the base plan, HMP and CWPP.
Nathan Jeffries	Assistant Chief	Lead Facilitator for public outreach efforts for both HMP and CWPP. Conducted all elements of the plan development; primary author of plan. Assisted with development of strategies for inclusion in the 2026 plan. Attended presentation of risk public outreach efforts. Conducted review of hazard profiles and base plan. Presented HMP and CWPP to Commissioners for review and adoption.
Whitman Spencer	Acting Captain Training/Operations/EMS	Assisted with public outreach efforts for both HMP and CWPP effort; attended meetings for plan

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
		development; assisted with information gathering and ranking of hazards of concern; assisted with development of plan strategies; conducted review of hazard profiles and base plan.

13.3 DISTRICT PROFILE

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

- **District Summary -** The District covers 122 square miles to the north of the City of Spokane and the City of Spokane Valley covering a population of over 52,000 people. The population of the District continues to increase across all areas.
- **Governing Authority—** The district is governed by a board of three (3) Fire Commissioners.
- **Population Served—** 52,000
- **Land Area Served—**122 sq. miles
- **Value of Area Served—**The estimated value of the area served by the jurisdiction is $9,386,801,972 (2025).
- **Land Area Owned—**30.68 acres
- **List of Equipment Owned by the Jurisdiction:**
  - Fire Engines $8,030,000
  - Pumper Ladder $2,500,000
  - Brush Trucks $1,600,000
  - Command units $582,000
  - Support units $400,000
- **Total Value of Equipment—**The total value of critical infrastructure and equipment owned by the jurisdiction is $13,112,000.
- **Total Value of Critical Facilities—**The total value of critical facilities owned by the District is $26,415,346.
- **Current and Anticipated Service Trends—** The District continues to see significant population growth and new construction which is driving increased call volumes.

Growth is occurring in all areas of the Fire District. Current breakdown of new construction:

- 2,186 multi-family units proposed, approved or under construction
- 79 multi-family buildings proposed, approved or under construction
- 1,923 residential units proposed, approved or under construction
- 12 different subdivisions proposed, approved or under construction
- 10 commercial buildings, to include 3 strip malls and a medical facility

- **Calls for Service -** In 2020, District 9 responded to 5,876 incidents which increased to 7,931 in 2024, which included 200 fire calls. Of those calls, rescue and emergency medical services generate about 58% of the District's call volume and fires generate about 3%. Of all fire calls, wildland fires constitute roughly 28% and structure fires constitute about 27%.

- **Climate -** Weather is a significant contributor to emergency responses. The climate gives all four seasons. Hot, dry, and windy summers contribute to a major wildfire and urban interface risk. Winters can be extremely cold and have heavy snow which has caused buildings to collapse due to the heavy snow loads.

- **Land Use -** Land uses vary widely across the Fire District with an urban core that includes residential, commercial, and industrial properties. In addition, the east and west end of the Fire District have rural/remote land areas that are heavily forested. The varied land uses contribute to a diverse set of hazards and need for emergency services.

- **Response Capabilities -** The District is an all-hazards department. All firefighters are trained to respond to structure and wildland fires. Advanced life support is provided from all five of the career fire stations. Personnel are trained to the operational level in hazardous materials. The District participates in a regional USAR and technical rescue team which provides rope, confined space, trench, building collapse, and heavy extrication services to the technician level. Shored based water rescue is also provided. The District is in the process of obtaining an ALS ambulances transport license and will begin transport services in July of 2026.

- **Staffing -** The District has five staffed stations and four volunteer stations. The District employs 82 full-time personnel and 36 volunteer personnel.

- **Mutual Aid Agreements -** The District has varying levels of automatic aid agreements with the City of Spokane, Spokane Valley, Spokane County Fire District 4, Spokane

County Fire District 5, Spokane County Fire District 10, and Stevens County Fire District 1. In addition, the District is part of the Spokane County and Kootenai County mutual aid agreements.

- **Ingress and Egress** - Primary ingress and egress routes traveling north-south through Fire District 9 and SPA 7 include Highway 2 and 395, Forker Road, and Market Street. Primary and secondary routes traveling east-west include Hastings, Hawthorn, Mount Spokane Park Drive, Bigelow Gulch, Rudder Parkway/Waikiki, Nine Mile Rd/Highway 291, and Charles/South Bank Roads. Charles Road and South Bank Road on the west side of the planning area are narrow, windy routes with mostly one way in, one way out access passing through a heavily forested area. During a fire event, escape by people living in this area as well as access by emergency services would be difficult.

13.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events that have occurred within the County. In the context of the planning region, it was determined that there are no additional hazards that are unique to the special purpose district. Table 13-1 lists all past occurrences which have impacted the district. If available, dollar loss data is also included.

Table 13-1
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Dollar Losses (if known)
Pandemic	DR-4481/EM-3427 COVID	2020	Unknown
Wildfire	FM-5254 Upriver Beacon Fire	2018	Unknown
Wildfire	FM-5148 Wellesley Fire	2016	Unknown
Wildfire	Rutter Canyon Fire	2015	Unknown
Severe Weather	DR-4249 Severe Storms	2016	Unknown
Severe Weather	DR-1825 Record Snow Fall	2009	Unknown
Severe Weather	DR-1152 Ice Storm	1996	Unknown
Severe Weather	DR-1100 Flood / High Winds	1996	Unknown
Wildfire	DR-922 Fire Storm	1991	Unknown

13.5 APPLICABLE REGULATIONS AND PLANS

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies, and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: regulatory capabilities that influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation efforts, and classifications under various community programs.

13.5.1 Regulatory Capability

Fire District 9 is home to several progressive programs including a technical rescue team, a fire investigation task force, public education, and regional training opportunities. Additionally, the District has also adopted/enacted codes, resolutions, policies and plans that complement and support hazard mitigation planning and activities. The following list identifies District codes, resolutions, policies, and plans are applicable to this hazard mitigation plan.

Fire District Capabilities:

- Capital Improvement Plan
- International Fire Codes / Spokane County Building Code
- Strategic Plan
- Community First Aid/ CPR training, Stop The Bleed training
- Emergency Procedures and Policies
- City/County Comprehensive Emergency Management Plan
- State of Washington Comprehensive Emergency Management Plan
- National Response Framework
- National Incident Management System
- Employee Handbooks and Safety Manuals
- Revised Code of Washington 52.26 (Regional Fire Protection Service)
- WAC 296.305
- Spokane County Fire Resource Plan / Spokane County Field Operations Guide
- Spokane County and Kootenai County Mutual Aid Agreements
- Forest Land Response Agreement with Washington State Department of Natural Resources

- Automatic Aid agreements with the City of Spokane Fire Department, Spokane Valley Fire Department, Spokane County Fire District 4, Spokane County Fire District 5, Spokane County Fire District 10, and Stevens County Fire District 1
- Participate in the Spokane Regional Urban Search and Rescue and Technical Rescue Team

13.5.2 Cooperative Agreements

The Fire District utilizes a very extensive mutual assistance program of sharing resources (giving and receiving) across jurisdictional boundaries to maximize available resources and enhance the services available to our citizens. The Fire District has mutual aid agreements with every fire agency within Spokane County and participates in the Washington State Fire Resource Mobilization Plan. In addition, the Fire District has intergovernmental assistance agreements with the Washington DNR, Washington State Parks, and the federal fire agencies providing protection for parks and natural areas.

13.5.3 Administrative and Technical Capabilities

The assessment of the District's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 13-2. These are elements that support not only mitigation but all phases of emergency management already in place used to implement mitigation activities and communicate hazard-related information.

Table 13-2
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Professionals trained in building or infrastructure construction practices.	Yes	
Planners or engineers with an understanding of natural hazards.	Yes	Spokane County Building Department
Staff with training in benefit/cost analysis.	Yes	Finance Manager, Assistant Chief of Admin/Finance, and the Fire Chief
Personnel skilled or trained in GIS or Hazus.	Yes	Assistant Chief of Technical Services, SREC and contracted sources
Emergency Manager.	Yes	Spokane DEM
Grant writers.	Yes	

Table 13-2
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Warning Systems/Services	Yes	Social Media accounts, SREC and Spokane DEM
Hazard data and information available to public.	Yes	Results of County's Risk Assessment are available on County's website. Public outreach events regularly occur throughout the County, with hazard specific data provided. Seasonal outreach also occurs.
Specific equipment response plans.	Yes	
Specific operational plans.	Yes	
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness?	Yes	SCOPE, Red Cross
The organization focused on individuals with access and functional needs populations	Yes	CARES
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Prevention Division, Farmer's Market PR Events, Informal Presentations to Community Groups, County DEM provides HMP and CWPP risk findings and seasonal weather outreach.
A natural disaster or safety-related school programs?	Yes	
Public-private partnership initiatives addressing disaster-related issues?	No	
Multi-seasonal public awareness program?	Yes	County conducts regular seasonal awareness campaigns.
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	Yes	Washington State Department of Natural Resources
Noxious Weed Eradication Program or other vegetation management	Yes	Spokane County

Table 13-2 Administrative and Technical Capability		
Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Fire Safe Councils	Yes	Prevention Program
Chipper program	No	
Defensible space inspections program	Yes	Currently provided through Spokane Conservation District
Address signage for property addresses	Yes	
Other		

13.5.4 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 13-3. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 13-3 Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Grants	Yes

13.6 COMMUNITY CLASSIFICATION

The district's classifications under various hazard mitigation programs are presented in Table 13-4. Each of the classifications identified establishes requirements that, when met, are known

to increase the resilience of a community. Those which specifically require district participation or enhance mitigation efforts are indicated accordingly.

Table 13-4
Community Classifications

	Participating (Yes/No) or Rank	Date Enrolled
Building Code Effectiveness Grading Schedule – Commercial	4	2018
Building Code Effectiveness Grading Schedule – Dwelling	4	2018
Fire Protection Class	4	2018
StormReady	Yes	

13.7 HAZARD RISK AND VULNERABILITY RANKING

The District's Planning Team reviewed the hazard list identified within the Base Plan and have identified the hazards that affect the Spokane County Fire District 9. No additional hazards were identified.

The risk assessment process also included a review of critical facilities impacted, potential dollar losses at risk, and any additional information applicable within the hazard profiles for use in identifying each hazard of concern. Factors also include the length of time required for repairs, which could impact the District's ability for fire and medical response to its service area.

Table 13-6 presents the results of the CPRI process. Table 13-6 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and the potential cost of damage to life and property are very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.
- Low (Negligible) – Minimal potential impact. The occurrence and the potential cost of damage to life and property are minimal. Government functions are at 90% with limited disruption to essential services.
- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated and less costly than a more widespread disaster. Government functions are at 80% with limited impact on essential services.
- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread.

Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.

□ Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted in excess of one month.

Table 13-5.
Calculated Priority Risk Ranking

Hazard	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought		2					3				3					1				4	2.35
Earthquake	1						3				3		4				1				2.25
Flood			3			2				2						1			3		2.30
Landslides	1					2			1					3			1				1.50
Severe Weather				4			3					4				1			3		3.30
Wildfire				4				4			3		4							4	3.80
Other Hazards of Concern																					0.00

Table 13-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
1	Wildfire	3.8	High	Wildfires increase calls for service and potential risk to firefighters; Wildfire potential in SPA 7 is moderate to high in the rural areas and moderate to low in the developed, urban corridors. Wildland fuels in rural areas consist of mixed conifer forests, seasonal agricultural crops, wooded riparian areas, shrub land, and pasture. The more urban areas contain parks and open space as well as vacant land with a variety of cover vegetation. Riverside State Park is located along the Spokane and Little Spokane Rivers in the west central portion of this planning area. The park provides overnight camping for individuals and groups as well as a system of hiking and biking trails in close proximity to the Spokane metropolitan area. Camping, picnicking, hiking and day use facilities are developed throughout the park area and adjoining wildland fuels. Due to the close proximity of the park to the Spokane metropolitan area and its heavy use, there is increasing potential for wildfires in this area.
2	SW	3.3	High	Vehicle and structural damage; increased calls for service;
3	Drought	2.35	Medium	Increase the risk of wildland fires
4	Flood	2.3	Medium	Damaged bridges delayed response times, water rescue incidents

Table 13-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact
5	Earthquake	2.25	Low	Damaged property; injury to citizens; potential delayed response time due to roadway conditions, landslides, or increased calls for service.
6	Landslide	1.5	Low	The District has a low impact of landslide risk to its facilities; however, landslides in areas to which response is provided could impact ingress and egress, and delay response for medical aid.

13.8 CWPP ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted the various fire districts throughout the Spokane County in completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk as it relates specifically within Fire District 9's service area. The analysis focuses specifically on eight highly valued resources and assets (HVRA), to include people and property, critical facilities, drinking water, ecological integrity, wildlife, timber, agriculture, and recreation. This analysis varies slightly from the analysis within the HMP document, which looks at all assets exposed, in addition to the critical facilities, as well as impact to the people, property, environment, and economy. The resulting maps of the analysis completed by DNR are incorporated at the end of this Annex.

13.8.1 Additional Values at Risk

In addition to the critical facilities identified as part of the HMP/CWPP update, the District also identifies the following as critical infrastructure falling within its service area.

- The Bonneville Power Administration (BPA), a federal agency under the Department of Energy transmits and sells wholesale electricity in Washington, Oregon, Idaho, Montana, Wyoming, Utah, Nevada and California. They control 75% of the high-voltage transmission capacity in this region. The Munro Control Center manages the vast power grid that serves almost 14 million people. BPA also operates the Bell substation which serves as a connection point with the Canadian power grid and areas of Washington State, Idaho, and Montana. Both of these facilities are located in the core of the Fire District.

- Chevron and Yellowstone Pipeline move large quantities of refined petroleum products (jet fuel, diesel, and gasoline). Williams Pipeline and Avista Utilities both operate high pressure, large diameter natural gas pipelines within our jurisdiction.
- The Nine Mile Falls Dam is owned by Avista Utilities, the primary electricity provider for portions of Eastern Washington and Northern Idaho. The utility provides service to 1.6 million people. This dam provides almost 38 megawatts to the Avista grid.
- Holly Refining and Conoco Phillips operate two above ground tank farms that store large quantities of gasoline, diesel, and jet fuel. Both tank farms have transfer platforms that move the fuel to semi-trucks in order to re-supply gas stations and airports across the Inland Northwest.
- Burlington-Northern Santa Fe Railroad operates a major line. The line connects to the BNSF Northern Rockies crossing which then accesses the mid-western United States.
- US Highway 395 is a major freight highway that connects British Columbia on the north to Nevada and California on the south end. This highway is a frequent alternative to Interstate 5. DOT is in the process of a 20-year project of enhancing this highway into the sole North-South freeway for the Spokane metro area. US Highway 2 is a major freight corridor that connects Western Washington to the Upper Midwest. This is an alternative to Interstate 90 and carries freight from the Ports of Seattle, Tacoma, and Everett.

13.9 MITIGATION GOALS AND OBJECTIVES

The District adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1, Chapter 12, as well as the CWPP specific goals identified in Chapter 10, Section 10.1.5.

13.10 HAZARD MITIGATION ACTION PLAN

The Planning Team for the District identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the district assets and hazards of concern. Table 13-7 lists the action items/strategies that make up the district's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, and the type of initiative associated with each item are also identified.

TABLE 13-7
HAZARD MITIGATION ACTION PLAN MATRIX

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE # 1 Ensure efficient but effective emergency response and recovery capabilities to reduce the loss of life and property during and after a disaster through mitigation efforts.									
Existing	All Hazards	All	SCFD9	High	General Fund	Long-Term	No	emergency services/protection / planning/ mitigation	Local
INITIATIVE # 2 Continue Community Outreach.									
Existing	All Hazards	All	SCFD9	Low	General Fund	Long Term	No	Public Information, prevention activities	Local
INITIATIVE # 3 Complete a strategic plan that includes apparatus, equipment, and facility replacement plans to support District operations and community needs.									
New	All Hazards	In process	SCFD9	Plan is low cost. Implementation of plan costs will be high	General Fund	Short Term	No	Structural projects, Emergency Services	County
INITIATIVE # 4 Receive an ALS ambulance transport license from the Washington State Department of Health to enhance service and provide added system capacity.									
New	All Hazards	In process	SCFD9	Low	General Fund and Reserves	Long Term	No	Emergency Services	Region
INITIATIVE # 5 Continue to work with Spokane County EM, Spokane County Conservation District, Spokane County Wildfire Coalition, and Washington State Dept. of Natural Resources to identify community wildfire hazards as well as mitigation strategies which will help reduce the impact of the wildfire hazard. Examples of applicable strategies include fuels reduction, enhanced building codes, residential fire assessments, continued involvement with FireWise, etc.									
Existing	Wildfire	In process	SCWC	Low	General Fund	Short Term	No	Prevention/ Property Protection	County

13.11 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 13-8 identifies the prioritization for each initiative.

Table 13-8.
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
1	9	High	High	Yes	Yes	Yes	High
2	9	High	Low	Yes	Yes	Yes	High
3	0	High	Low	Yes	Yes	No	High
4	2	High	Medium	Yes	Yes	Yes	High
5	2	High	Low	Yes	Yes	Unk	Medium

13.12 ISSUES OF CONCERN

1. Residential growth is usually constrained by water system availability. Current Spokane County codes require that water supply for firefighting be in place before approval of residential development unless parcels are five acres or greater in size, one to four acres in size where more than four parcels are created, or one to four acres in size and any parcel is within 350’ of a water system. Larger lots of five acres or more are developed without any water supply. Smaller groupings of lots one to four acres in size can also be developed without water supplies. Residents within the urban corridor and the Mead community as well as developed subdivisions have access to municipal water systems. In these areas, public fire hydrants are available. Outside of these areas, development typically relies on personal or multiple home well systems. The Spokane and Little Spokane Rivers provide additional water sources for emergency fire suppression in the rural areas to the west.
2. Another concern with residential growth is periodic assaults on road standards. Spokane County has a rather comprehensive set of road standards based on nationally recognized standards and local experience that provide adequate fire service access to homes. Proponents often challenge established road standards as too burdensome and attempt to reduce access for fire departments are not uncommon.

3. Spokane County Fire District 9's problems with burning do not stem from permit regulations. Burn regulations appear to be adequate for District needs. Illegal burning throughout the District tends to come from individuals who refuse to comply with any burn regulations. The District does receive periodic complaints from taxpayers about logging operations, where logging slash is not removed expeditiously. County code does not require this and in some cases logging slash is left in place for long periods of time.
4. With such a large urban wildland intermix, the District's greatest demand for fire suppression service is in the wildland arena. Involvement in the national Firewise workshop efforts show that our codes and laws regarding wildland fire-safe construction and development are better than in many Washington counties. Our greatest contribution to fire protection can be realized through fuel treatments in wildland areas. In some areas of our district, fuel accumulations are so thick firefighters have trouble walking through the brush. In many cases, fuel accumulations are too thick to allow wildland fire apparatus to access the fire. Fighting fire in such areas is dangerous and, in some cases, impossible; forcing firefighters to try and attack the fire when it gets to areas where safe access and anchor points exist.
5. Vegetation treatments that reduce surface fuel loads, decrease biomass accumulations, open timber stands, and eliminate ladder fuels help slow fire spread, create areas where firefighters can stop advancing fires, and reduce risks of higher-intensity crown fires. Such actions would also promote greater forest health, enhance ecosystems, and improve forest resistance to disease and insect infestations. Many property owners have been reluctant to implement nationally recommended fuel treatments on their land. In some cases, the problem has been absentee landlords. The costs and labor involved are too great for some landowners. In still other cases, landowners do not want anything done to their land regardless of the fire hazards. With grant funding support, the District believes it could assist those landowners who are interested in mitigating fuel hazards but lack resources to deal with the problem.

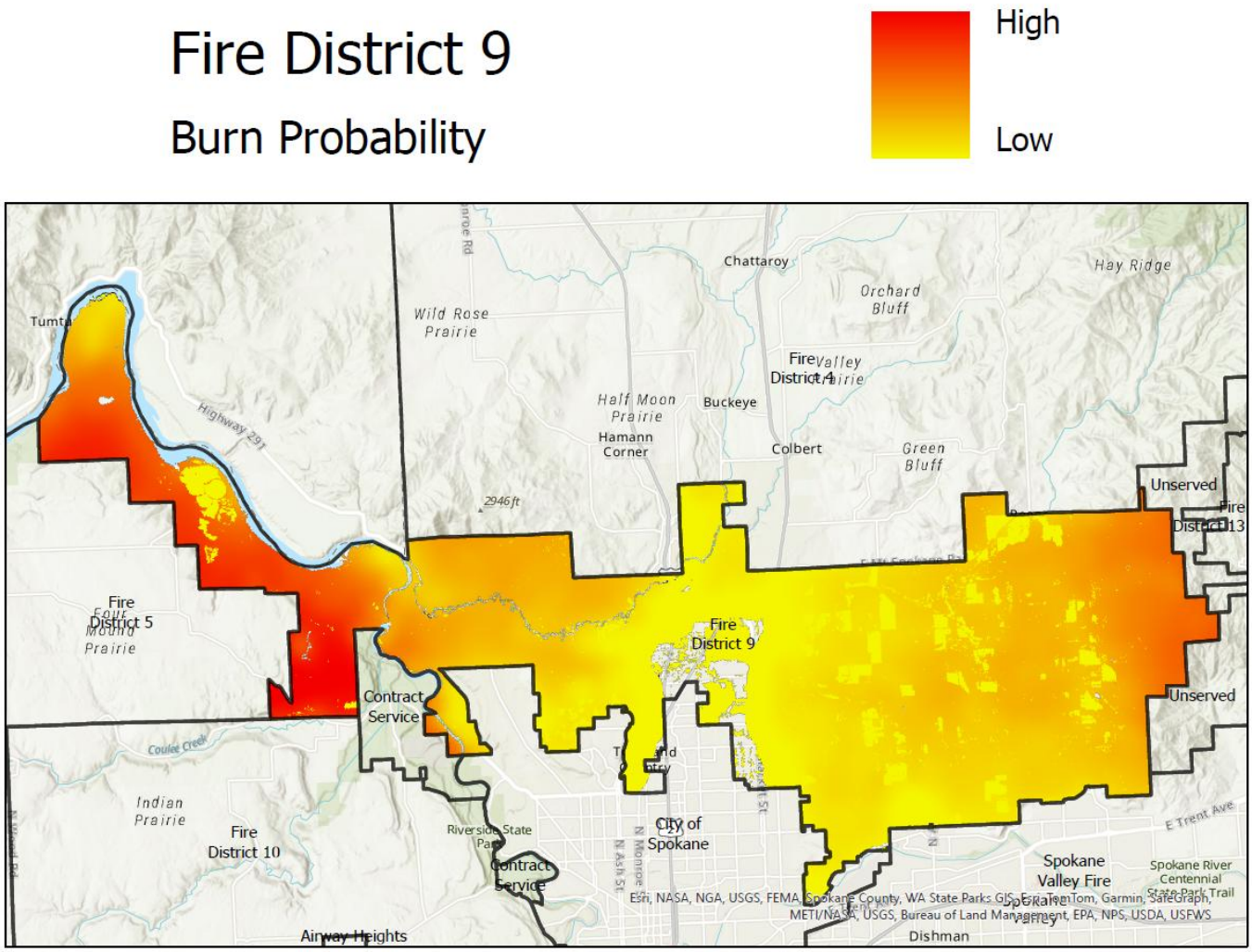


Figure 13-1 Fire District 9 Burn Probability (WA DNR, 2024)

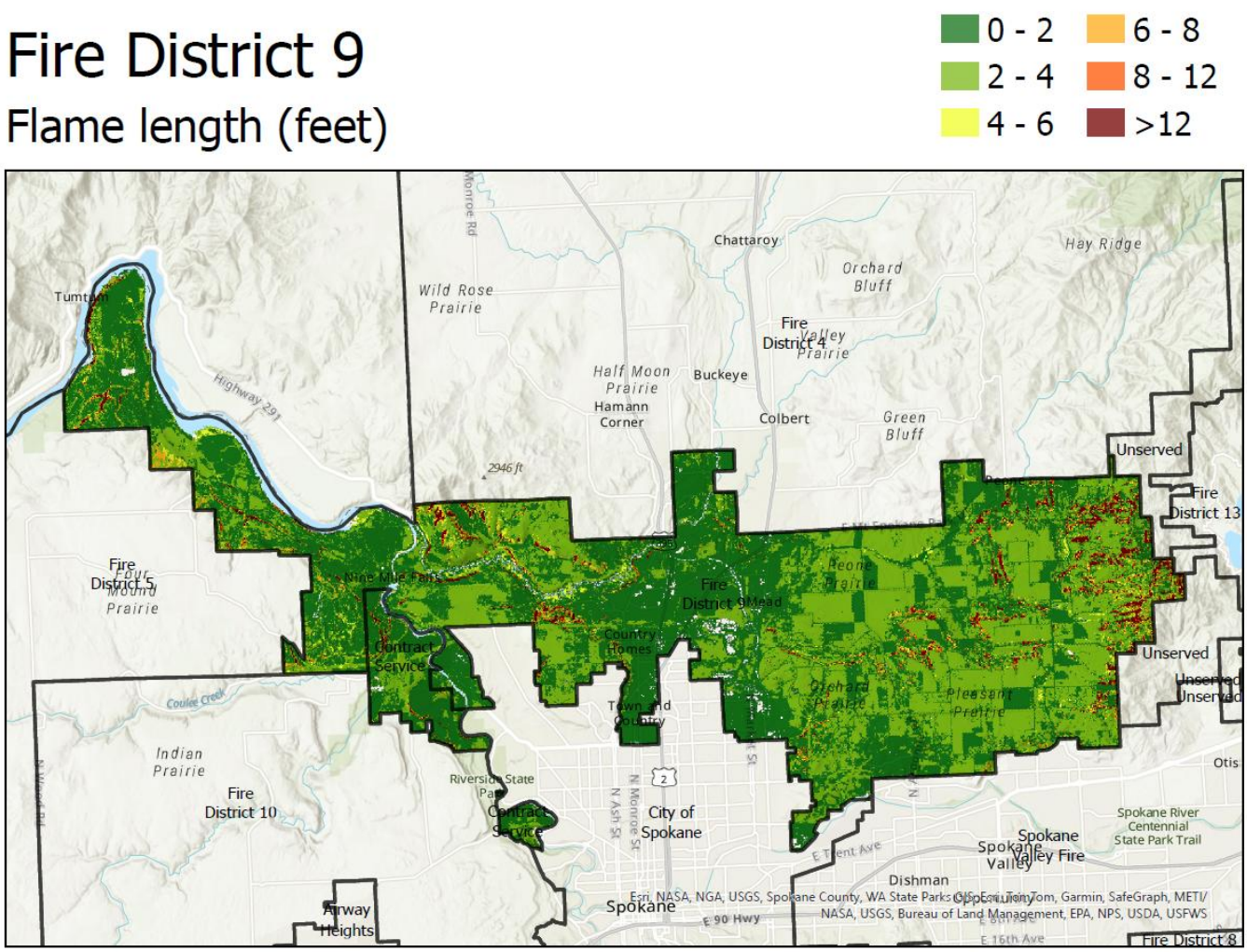


Figure 13-2 Fire District 9 Flame Length (WA DNR, 2024)

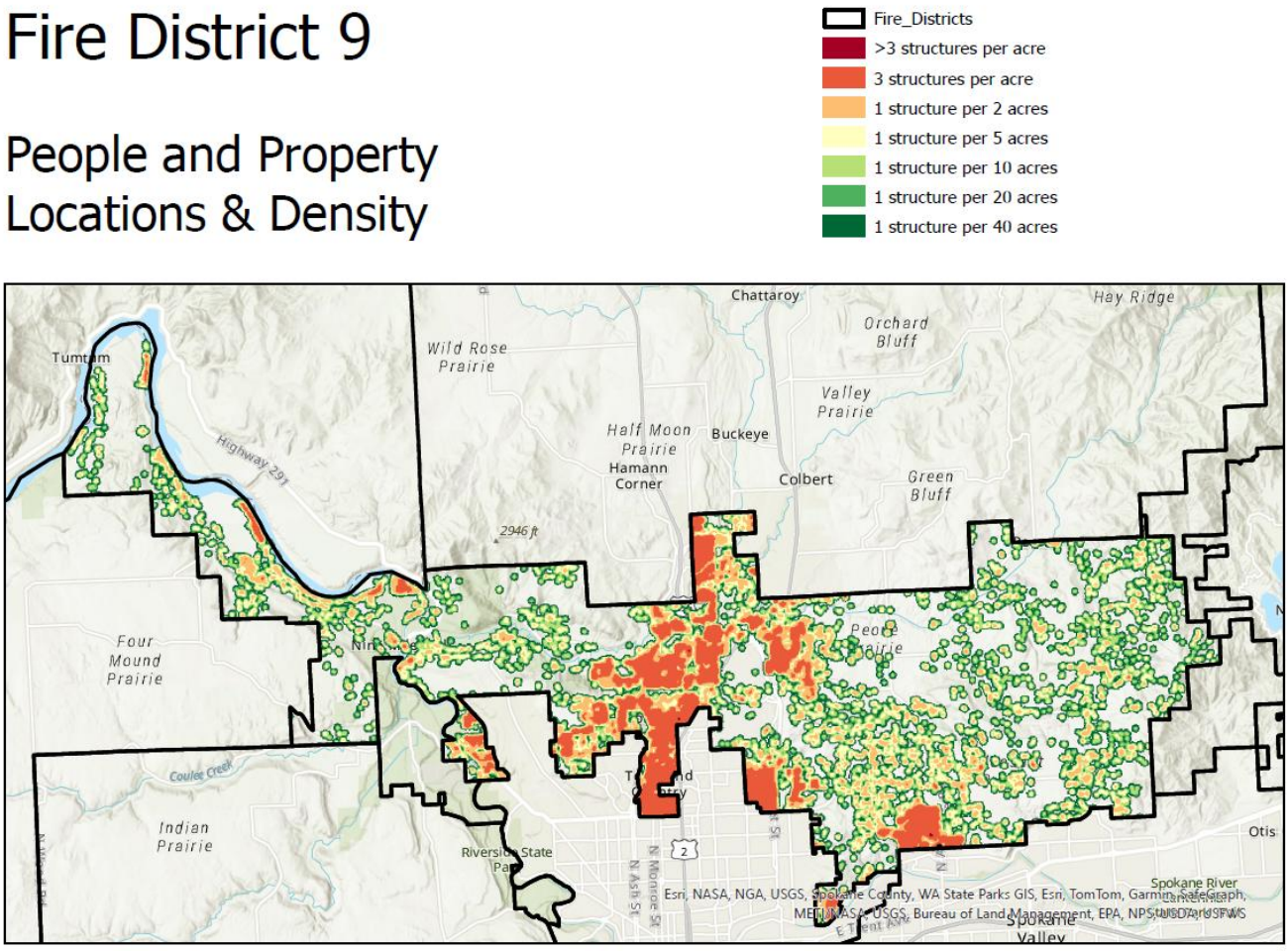


Figure 13-3 Fire District 9 Density (WA DNR, 2024)

Response Function
People and Property

The response function describes how the HVRA value will change in response to fire at different intensities, described by the different flame length classes. For each flame length class there is a map of the probability of a given location experienced that flame length (not included in this packet). The integration of all six maps into one results in the flame length map in this packet.

		Fire Intensity Level (flame length)					
		FIL1	FIL2	FIL3	FIL4	FIL 5	FIL6
Sub-HVRA (based on structure density)	Share of HVRA relative importance	0-2'	2-4'	4-6'	6-8'	8-12'	>12'
Very low density	<1%	-10	-20	-40	-80	-100	-100
Low density	1%	-10	-20	-40	-80	-100	-100
Moderately low density	3%	-10	-20	-40	-80	-100	-100
Moderate density	7%	-10	-20	-40	-80	-100	-100
Moderate high density	14%	-10	-30	-50	-80	-100	-100
High density	47%	-20	-40	-60	-80	-100	-100
Very high density	28%	-30	-50	-70	-100	-100	-100

		Fire Intensity Level (flame length)					
		FIL 1	FIL 2	FIL 3	FIL 4	FIL 5	FIL 6
Sub-HVRA	Share of HVRA RI	*0 - 2'*	*2 - 4'*	*4 - 6'*	*6 - 8`*	*8 - 12'*	*>12'*
Very low density; > 0 structures - 1 structure per 40 acres	< 1%	-10	-20	-40	-80	-100	-100
Low density; 1 structure per 40 - 1 structure per 20 acres	1%	-10	-20	-40	-80	-100	-100
Moderately low density; 1 structure per 20 - 1 structure per 10 acres	3%	-10	-20	-40	-80	-100	-100
Moderate density; 1 structure per 10 - 1 structure per 5 acres	7%	-10	-20	-40	-80	-100	-100
Moderately high density; 1 structure per 5 - 1 structure per 2 acres	14%	-10	-30	-50	-80	-100	-100
High density; 1 structure per 2 - 3 structures per acre	47%	-20	-40	-60	-80	-100	-100
Very high density; > 3 structures per acre	28%	-30	-50	-70	-100	-100	-100

Figure 13-4 WA DNR Response Function Defined

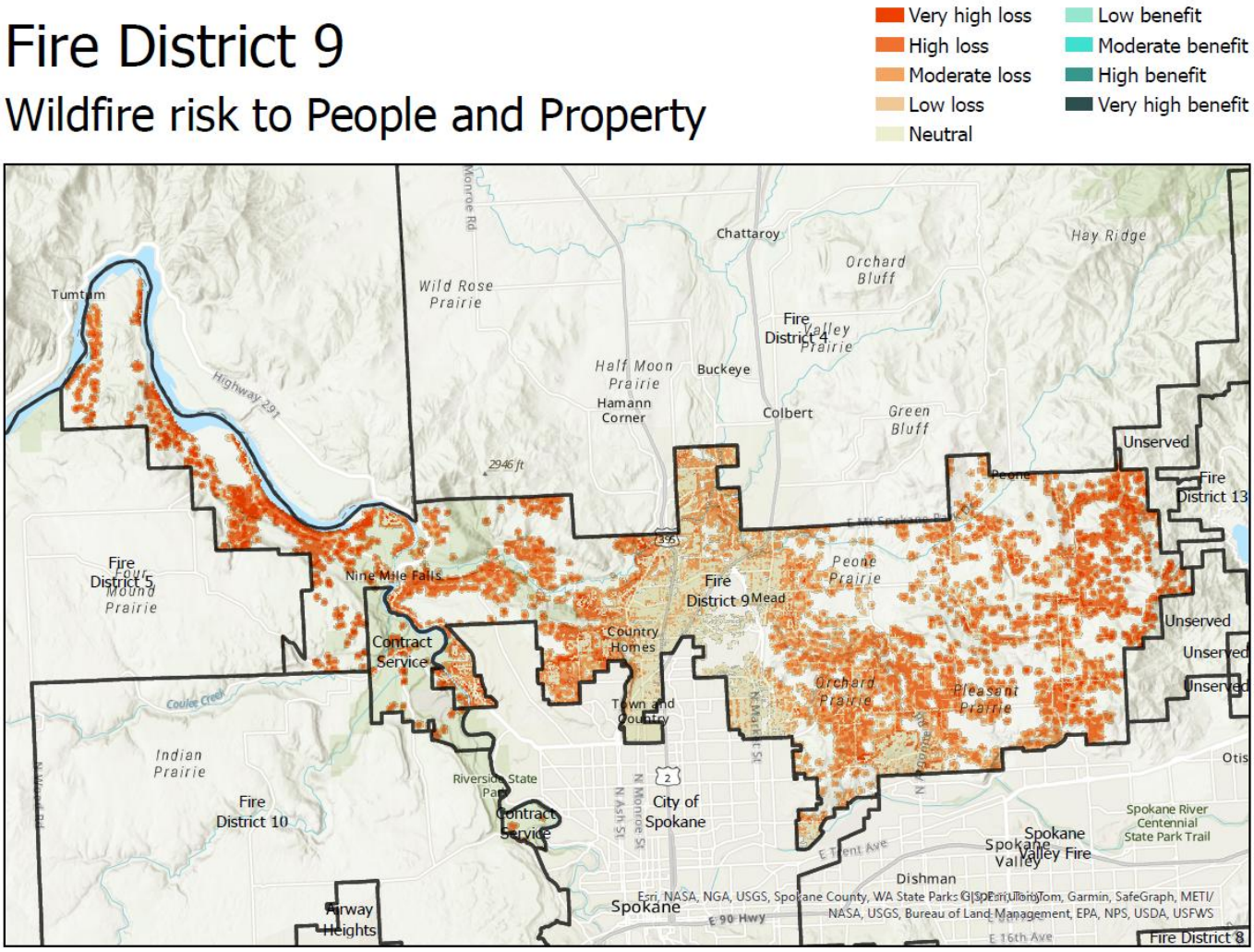


Figure 13-5 Fire District 9 Wildfire Risk to People and Property (WA DNR, 2024)

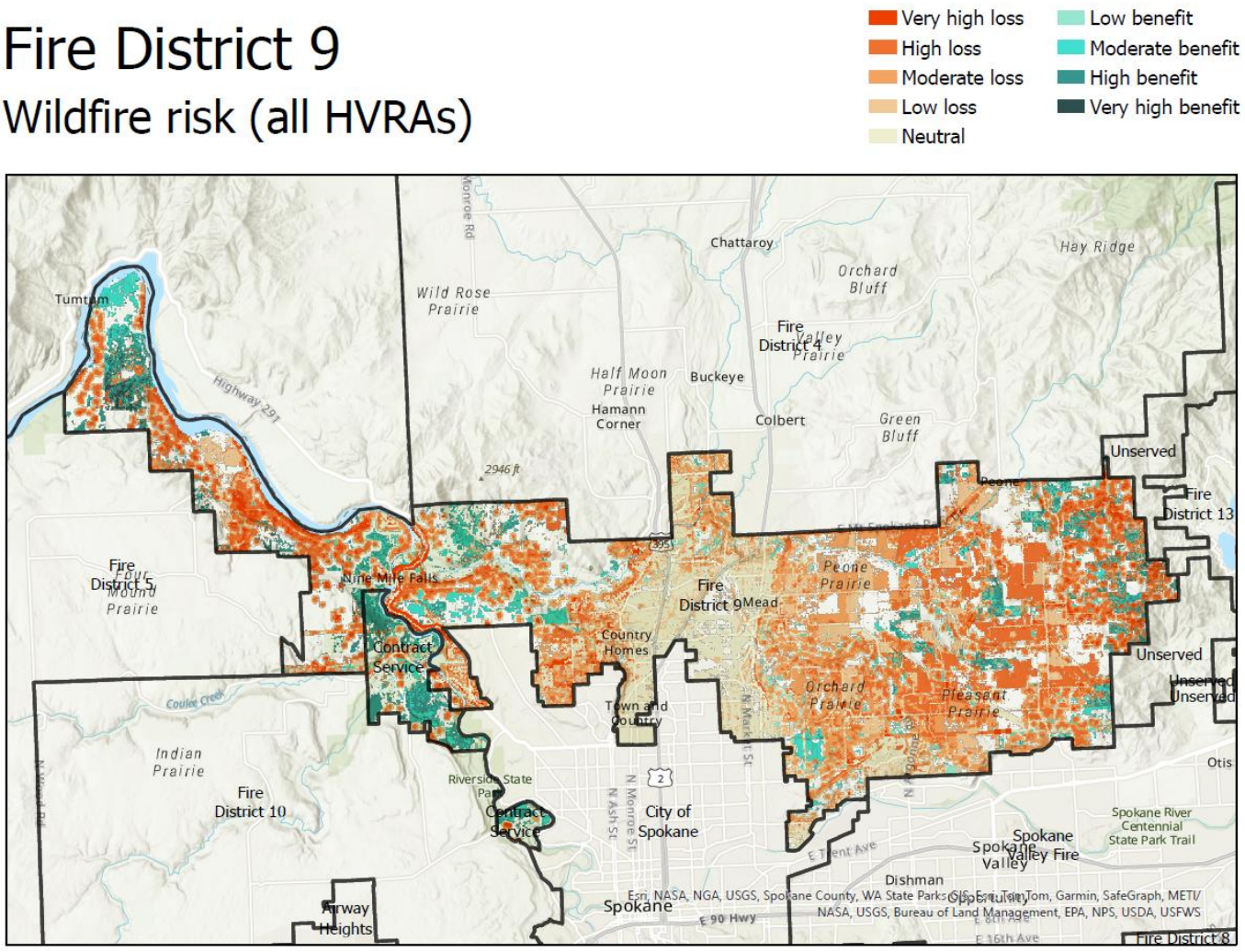


Figure 13-6 Fire District 9 Wildfire Risk (HVRAs) (WA DNR, 2024)

CHAPTER 14.
SPOKANE COUNTY FIRE DISTRICT #10 ANNEX

(Pending)

CHAPTER 15.
SPOKANE VALLEY FIRE DEPARTMENT 2026 ANNEX UPDATE

15.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to the Spokane Valley Fire Department (SVFD), a participating special purpose district to the Spokane County Hazard Mitigation Plan Update, and Community Wildfire Protection Plan. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the Spokane Valley Fire Department. For planning purposes, this Annex provides additional information specific to the district, with a focus on providing greater details on the risk assessment and mitigation strategy for this entity only. Spokane Valley Fire Department falls within Strategic Planning Area 4.

15.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

The Spokane Valley Fire Department followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, the Spokane Valley Fire Department also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Brian Treffry 2120 N. Wilbur Road Spokane Valley, WA 99206 Telephone: 509-928-1700 e-mail: treffryb@spokanevalleyfire.com	Deputy Chief Primary Point of Contact	Attended planning team meetings, served as primary author of the plan, conducted internal planning team meetings, captured information from other personnel.
Frank Soto Jr. 2120 N. Wilbur Road Spokane Valley, WA 99206 Telephone: 509-928-1700 e-mail: sotof@spokanevalleyfire.com	Fire Chief Alternate Point of Contact	Attended planning team meetings, assisted with development of the annex, attended internal planning meetings, worked to capture data and information from other SVFD personnel.

15.3 DISTRICT PROFILE

The following is a summary of key information about the district:

- **District Summary** - The Spokane Valley Fire Department (SVFD) serves an area of approximately 75 square miles, encompassing the cities of Spokane Valley, Liberty Lake, Millwood, and unincorporated areas of Spokane County. This jurisdiction includes 145,421 residents, 36,268 single-family homes, 5,373 businesses, 55 public and private schools, 42 nursing homes, and a major hospital. The area is predominantly suburban, with commercial centers and pockets of light agricultural land.
- **Governing Authority—** The Spokane Valley Fire Department (SVFD) was organized in 1940 and legally established under Title 52 - Fire Protection Districts, Chapter 52.02 of the Revised Code of Washington (RCW). The Department was originally identified as the Spokane County Fire Protection District #1 (SCFPD#1) and legally changed their name to the Spokane Valley Fire Department and Spokane County Fire District 1 on April 8, 1997. For the express purpose of providing fire protection services, SVFD has evolved into an organization providing a wide range of emergency services such as fire suppression, emergency medical basic and advanced life support, fire prevention, public education, community risk reduction, rescue task force, hazardous materials mitigation, domestic preparedness planning and response, technical rescue, and wildland-urban interface fire prevention and suppression. Chapters 52.12 through 52.16 of the RCW define Powers, Commissioners, and Finances of Fire Protection Districts. The Department is governed by a five-member elected Board of Commissioners that has the authority for conducting the public's business through established policies. However, the Board of Commissioners subrogates the responsibility and oversight for daily operations and established programs to the Fire Chief.
- **Population Served -** 145,421 residents, which exceeds a 20,000+ increase since completion of the 2020 plan.
- **Land Area Served -** 75 square miles
- **Value of Area Served -** The estimated value of the area served by the district is $25.8 billion.
- **Land Area Owned -** 14 acres
- **List of Equipment Owned by the District:**
  - 9 Engines……. $ 8,000,000
  - 2 Ladders……. $ 3,600,000
  - 4 Reserve Engines……. $ 1,200,000

- 3 Wildland Apparatus…… $ 180,000
- Specialized Apparatus (Communications Trailer, Rescues, etc.) $ 750,000
- Prevention, Staff, and Other Vehicles…… $ 6,730,000

- **Total Value of Equipment**…..…… $19,860,000
- **Total Value of Critical Facilities**…….. $60,500,000
- **Current and Anticipated Service Trends:**

  SVFD experienced a higher growth of assessed property valuation over the last several years. Building permit values over the last five years have continued to increase by approximately 5%. Through the past year, property values have been increasing at a more substantial rate, and construction activity and value have increased significantly. Land use designations allow for an increase in medium and light commercial and residential land uses within the service area, especially in the eastern geographical area. This increase in density of land uses will represent an increase in population and thus a projected increase in call volume, necessitating the addition of an 11th station, likely in the next five years. SVFD continues to see an increase in call volume over the last five years. In 2024, SVFD received over 24,000 calls for service as compared to nearly 18,000 in 2018. Call volume has steadily increased since 2018 in light of the increased population. SVFD does feel it is well situated to continue to adequately provide services to the increased population and structure count with no negative impacts, particularly in light of the addition of an 11th station within the lifecycle of this plan.

  Various Auto Aid agreements have also been implemented with neighboring agencies within the last several years, which not only assist in addressing the needs of the District, but also provides assistance to other fire service agencies during their times of need.

- **Strategic Planning Area 4:**

  Strategic Planning Area 4 is located on the eastern border of the state of Washington, in the center of Spokane County (north to south) and includes the communities of Spokane Valley, Liberty Lake, and Millwood, as well as surrounding areas of unincorporated Spokane County. Fire Services in the area are provided by City of Spokane Fire Department, and Spokane Valley Fire. The area is heavily developed residential and industrial area with significant areas of parkland, forestland, grassland, open space, scattered agricultural fields, and the Interstate 90 corridor. The Spokane River and several of its tributaries pass through the middle of this planning area providing recreation and other open space amenities. Forest vegetation is common in residential areas developed on the foothills surrounding the valley, especially near Liberty Lake to the east, Dishman-Mica/State Route 27 corridor to the south, and the Antoinne Peak/Otis Orchards areas to the north. Home site and subdivision development is increasing throughout the area expanding further into the foothills as well as the remaining farmland. Landownership is

predominantly private with several large tracts of park or open space/woodland owned by State, city, or county governments. The borders of the jurisdiction also contain a mosaic of commercial forestland, wooded stream channels, shrub land, and mixed conifer forest. Residents throughout most of SPA 4 have municipal water systems which provide public fire hydrants. New development is required by the International Fire Code to have hydrant placement in their building plan. Areas outside the Urban Growth Areas (UGAs) typically rely on personal, co-op, or multiple home well systems.

- **Ingress and Egress within SPA 4:**

  Ingress and egress within the heavily populated urban areas of SPA 4 is well developed through urban planning and building codes. This minimizes hazards associated with emergency access and provides multiple emergency escape routes. However, some residences in the foothills are accessed via unimproved, single-lane roads accessible by only small emergency vehicles. In these areas, access roads and driveways are often lined with shrubs and mature trees that can limit or prohibit access during wildfires. Many of these roads lack adequate turnout and turn-around areas, with one-way in, one-way out roads. The inability of emergency resources to safely access structures reduces or may even eliminate suppression response. Roads in newer subdivisions have been designed to accommodate emergency vehicles with either loop roads or cul-de-sacs with wide turning radii and easily negotiable grades for large emergency equipment.

15.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events which have occurred within the County. In the context of the planning region, it was determined that there are hazards which are unique to the special purpose district as follows. Table 15-1 lists all past occurrences which have impacted the district. If available, dollar loss data is also included.

Table 15-1
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Dollar Losses (if known)
Biological / COVID	EM-3427	03/13/2020	Significant cost associated with time loss (replacement personnel).
Severe winter storm	DR-1825	03/02/2009	Moderate damage to SVFD facilities and occupancies within the district.
Wildland Urban Interface Fire	FM-2783	07/11/2008	13 residential structures were destroyed with an estimated loss of at least $10 million and $3.5 million to combat the fire.

Table 15-1
Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Dollar Losses (if known)
Ice Storm	DR-1152	01/07/1997	Severe damage to residential and commercial occupancies within the district.
Fire Storm	FM-2079	10/18/1991	141 residential structures were destroyed.
Severe Ice/Winds	DR-769	05/20/1986	Unknown
Mt. St. Helens eruption	DR-623	05/22/1980	Unknown
Severe Ice/Winds	DR-545	10/10/1977	Unknown
Local Area Disaster – Not Declared			
3.1 Earthquake	N/A	06/2001	Minimal damage regionally

15.5 APPLICABLE REGULATIONS AND PLANS

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into the following sections: regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation efforts, and classifications under various community programs.

15.5.1 Regulatory Capability

The District has adopted/enacted codes, resolutions, policies and plans that compliment and support hazard mitigation planning and activities. The following existing District codes, resolutions, policies, and plans are applicable to this hazard mitigation plan:

Fire District Capabilities:

- CPSE Accreditation
    - Community Risk Assessment
    - Standards of Cover
    - Established Strategic Plan
- Capital Facilities and Equipment Plan
- Sprinkler Codes
- Emergency Operations Plan
- Emergency Procedures and Policies

- City/County Comprehensive Emergency Management Plan
- State of Washington Comprehensive Emergency Management Plan
- National Response Framework
- National Incident Management System
- Revised Code of Washington 52.26 (Regional Fire Protection Service)
- Revised Code of Washington 296.305 (Safety Standards for Firefighters)
- Mutual Aid Agreements
- Automatic Aid Agreements

15.5.2 Administrative and Technical Capabilities

The assessment of the district's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 15-2. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

Table 15-2
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Professionals trained in building or infrastructure construction practices.	Yes	SVFD Prevention Bureau
Planners or engineers with an understanding of natural hazards.	Yes	SVFD Prevention Bureau
Staff with training in benefit/cost analysis.	Yes	SVFD
Personnel skilled or trained in GIS.	Yes	SVFD Information Systems
Emergency Manager.	Yes	Spokane County DEM
Grant writers.	Yes	SVFD and Spokane County DEM
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?).	Yes	Spokane County DEM
Hazard data and information available to public.	Yes	SVFD Community Affairs
Specific equipment response plans.	Yes	SVFD
Specific operational plans.	Yes	SVFD
Water Shortage Contingency Plan.	Yes	Various Water Districts

Table 15-2 Administrative and Technical Capability		
Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Cooperative Agreements	Yes	Firefighting agencies within Spokane County, including the DNR, operate under mutual aid agreements established in accordance with the Washington State Interlocal Cooperation Act. Requests for assistance and operations conducted under these agreements follow the procedures outlined in the Spokane County Fire Resource Plan.
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness? (E.g., CERT, SAR, Medical Reserve Corps, etc.).	Yes	SVFD
Organization focused on individuals with access and functional needs populations.	Yes	SVFD Community Risk Reduction
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education).	Yes	SVFD Prevention Bureau
Natural disaster or safety related school programs.	Yes	SVFD Prevention Bureau
Multi-seasonal public awareness program.	Yes	SVFD Prevention Bureau
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	No	
Address signage for property addresses	Yes	SVFD Prevention Bureau

15.5.3 Fiscal Capability

The assessment of the district's fiscal capabilities is presented in Table 15-3. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 15-3 Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

15.6 COMMUNITY CLASSIFICATION

The district's classifications under various hazard mitigation programs are presented in Table 15-4. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community. Those which specifically require district participation or enhance mitigation efforts are indicated accordingly.

Table 15-4 Community Classifications		
	Participating (Yes/No)	Date Enrolled
CPSE Accreditation	Yes	2009
WSRB Protection Class 2	Yes	2017
Fire Adaptive Communities	Yes	2022
Firewise	Yes	2021

15.7 HAZARD RISK AND VULNERABILITY RANKING

The district's Planning Team reviewed the hazard list identified within the Base Plan and have identified the hazards that affect the Spokane Valley Fire Department. No additional hazards were identified.

In addition, the Planning Team also examined Volume 1, Chapter 4 of the Spokane County Multi-Jurisdictional Hazard Mitigation Plan to ensure an understanding of the application of the Calculated Priority Risk Index (CPRI) information which is utilized in determining the hazard impact and vulnerability.

The risk assessment process also included a review of critical facilities impacted, potential dollar losses at risk, and any additional information applicable within the hazard profiles for use in identifying each hazard of concern. Factors also include the length of time required for repairs, which could affect the district's ability for fire response to its service area.

Table 15-6 presents the results of the CPRI process. Table 15-6 illustrates the hazards ranked in order of magnitude or potential vulnerability. A qualitative ranking was also applied based on the following:

- Extremely Low – No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact on government functions with no disruption to essential services.
- Low (Negligible) – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.
- Medium (Limited) – Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.
- High (Critical) – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at ~50% operations with limited delivery of essential services.
- Extremely High (Catastrophic) – Very widespread with catastrophic impact. Government functions are significantly impacted for more than one month.

Table 15-5.
Calculated Priority Risk Ranking

Hazard	Probability				Magnitude/ Severity				Geographic Extent and Location				Warning Time				Duration				CPRI Score
	Unlikely / Low (1)	Possible / Medium (2)	Likely / High (3)	Highly Likely / Very High (4)	Negligible (1)	Limited (2)	Critical (3)	Catastrophic (4)	Negligible (1)	Limited (2)	Significant (3)	Extensive (4)	< 6 hours (4)	6 - 12 hours (3)	12 - 24 hours (2)	> 24 hours (1)	< 6 hours (1)	< 24 hours (2)	< 1 week (3)	> 1 week (4)	Total
Drought				4		2				2						1				4	2.75
Earthquake			3				3			2			4				1				2.85
Flood				4		2					3				2			2			3.00
Landslides				4		2				2			4					2			3.10
Severe Weather				4			3					4			2			2			3.40
Wildfire				4			3			2			4					2			3.30

Table 15-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact (e.g., dollar loss, how it impacted structures, capability to provide services, etc.)
1	Severe Weather	3.4	High	Moderate damage to SVFD facilities and occupancies within the district.
2	Wildfire	3.3	High	Varied impact with the potential for significant loss of both property and life. Based on WA DNR assessment, the perimeter of the district features a significant wildland-urban interface, with approximately 2,596 homes identified as "at risk" through SVFD Residential Wildfire Hazard Assessments. With respect to SPA 4 in general, the wildfire potential is low to moderate in the urban areas of the Spokane Valley but increases in the residential areas adjacent to open space, forestland, wooded foothills, and river drainages. Large ponderosa pine and other conifer and deciduous species are common landscape vegetation throughout the wooded foothills and in many of the older residential areas. This creates a semi-continuous canopy cover producing tree litter accumulations in yards and on roof tops. Seclusion and privacy created by landscaping is highly desirable in dense residential housing areas such as those within SPA 4, which limits opportunities for a defensible space. Under extreme wildfire conditions, residential areas have the potential to carry an advancing fire front fueling the fire with landscape vegetation, litter and ultimately the home itself. Wildfire potential is moderate to high in the more rural, foothills areas of the SPA. Wildland fuels in rural areas consist of mixed conifer forests, seasonal agricultural crops, wooded riparian areas, shrub land, and pasture.
3	Landslide	3.1	Medium	Potential to hinder delivery of service in portions of the district.
4	Flood	3	Medium	Residential, businesses and roadways may be impacted.
5	Earthquake	2.85	Medium	Minimal damage regionally

Table 15-6
Hazard Risk and Vulnerability Ranking

Hazard Rank	Hazard Type	CPRI Score	Vulnerability Rank	Description of Impact (e.g., dollar loss, how it impacted structures, capability to provide services, etc.)
6	Drought	2.75	Medium	Drought customarily does not impact structures but would increase fire danger.

15.8 CWPP ANALYSIS

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted the SVFD in completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk as it relates specifically within the Spokane Valley Fire Department service area. The analysis focuses specifically on eight highly valued resources and assets (HVRA), to include people and property, critical facilities, drinking water, ecological integrity, wildlife, timber, agriculture, and recreation. This analysis varies slightly from the analysis within the HMP document, which looks at all assets exposed, in addition to the critical facilities, as well as impact to the people, property, environment, and economy. The resulting maps of the analysis completed by DNR are incorporated at the end of this Annex.

15.9 MITIGATION GOALS AND OBJECTIVES

The district adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1, Chapter 12, as well as the CWPP specific goals identified in Chapter 10, Section 10.1.5.

15.10 HAZARD MITIGATION ACTION PLAN

The Planning Team for the district identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the district's assets and hazards of concern. Table 15-7 lists the action items/strategies that make up the district's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, who will benefit from the activity, and the type of initiative associated with each item are also identified.

Table 15-7
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE # SVFD 1 - Develop a Continuity of Operations Plan (COOP).									
New and existing	All-Hazards	1,3, 9	SVFD	Low	SVFD	Short term	Yes	Planning/Emergency Services	Local and County
INITIATIVE # SVFD 2 - Develop an employee family support plan to facilitate employee availability during disaster events.									
Response based initiative	All-Hazards	1	SVFD	$20,000	SVFD	Short term	Yes	Emergency Services	Local
INITIATIVE # SVFD 3 - Support countywide initiatives that promote the information exchange to the public concerning the hazards of concern.									
New and existing	All-Hazards	All	DEM, SVFD	Low	Grants (various), SVFD	Short term	Yes	Public education, Preventive Activities	Local and County
INITIATIVE # SVFD 4 – Acquire reliable performance data from outside providers.									
New and existing	All-Hazards	1,2,4,5,8, 9, 11, 12	SVFD	Medium	SVFD	Short term	No	Preventative Activities	Local
INITIATIVE # SVFD 5 - Utilize data (see above) to determine trends and opportunities related to service delivery.									
New and existing	All-Hazards	1,2,4,5,8, 9, 11, 12	SVFD	Medium	SVFD	Short term	No	Preventative Activities	Local
INITIATIVE # SVFD 6 – Institute Wildfire Mitigation Measures throughout the service area on an annual basis which increase the resilience of the landscape, including elements such as fuels reduction, capacity building, and prescribed burns, while also increasing community involvement, education, and outreach throughout the service area.									
New and Existing	Wildfire	12	SVFD	High	Fire Grants, SVFD as resources allow	Long-Term	No	All	Local, County, Region

15.11 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 15-8 identifies the prioritization for each initiative.

Table 15-8
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
SVFD 1	2	High	Low	Yes	No	Yes	High
SVFD 2	1	Medium	$20,000.00	Yes	No	Yes	Low
SVFD 3	6	High	Low	Yes	Yes	Yes	High
SVFD 4	8	High	Low	Yes	No	Yes	Medium
SVFD 5	8	High	Low	Yes	No	Yes	High
SVFD 6	12	High	High (when fully implemented)	Yes	Yes	Yes - in part (such as public outreach, but not project-specific efforts)	High

a. See Chapter 1 for an explanation of priorities.

15.12 STATUS OF PREVIOUS PLAN INITIATIVES

Table 15-9 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 15-9
Status of Previous Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	**2025 Project Status**	**Completed**	**Continual /Ongoing Nature**	**Removed /No Longer Relevant /No Action**	**Carried Over**
Develop a continuity of operations plan (COOP)	SVFD has not taken significant steps toward achieving this objective.				✓
Develop an employee family support plan to facilitate employee availability during disaster events.	SVFD has not taken significant steps toward achieving this objective.				✓

Table 15-9
Status of Previous Hazard Mitigation Action Plan

		Current Status			
2020 Mitigation Strategy	**2025 Project Status**	**Completed**	**Continual /Ongoing Nature**	**Removed /No Longer Relevant /No Action**	**Carried Over**
Support countywide initiatives that promote the education of the public and natural hazards within.	Regional initiatives were undertaken by various divisions within the organization, to include Community Risk Reduction, the Prevention Bureau, and Community Affairs.		✓		
Conduct a Standard of Cover needs analysis.	Completed through the Center for Public Safey Excellence reaccreditation process.	✓			
Participate in the maintenance strategy identified in this plan.	Ongoing initiative achieved in coordination with the Spokane County DEM.		✓		

15.13 FUTURE NEEDS TO BETTER UNDERSTAND RISK/ VULNERABILITY

SVFD conducted a Community Risk Assessment (CRA) in 2019 and will embark on a complete review and update of our assessment to better understand the changes that have occurred since the last assessment. SVFD will contract with a third party Technical Advisory Group to facilitate and evaluate the CRA.

15.14 ADDITIONAL COMMENTS

The Spokane Valley Fire Department serves the area east of the city of Spokane, north of Spokane County Fire District #8 south of Fire Districts #9 and Fire District #13, and west of the Washington/Idaho border. The district sits in the valley formed by the foothills of the Selkirk range to the north and Mica foothills to the south.

The SVFD district includes three municipalities:

- The City of Millwood sits in the northwest portion of the SVFD district and is surrounded by the City of Spokane Valley to the west, south, and east, and the unincorporated area of Spokane County. (light blue area on the map below)
- The City of Spokane Valley is the largest municipality in the district. It is surrounded by unincorporated areas of Spokane County and the City of Liberty Lake to the east (dark blue area of the map below).

- The City of Liberty Lake lies in the eastern part of the fire district and is surrounded on three sides by unincorporated areas of Spokane County and the City of Spokane Valley to the west (dark green area of the map below).
- Unincorporated areas of the district are governed by Spokane County. These areas add up to 29.82 square miles. The SVFD district boundaries are illustrated on the map below.

15.15 ISSUES OF CONCERN

1. The Washington State Office of Financial Management estimates population changes from 2020 to 2024 as follows: Spokane Valley (+5.66%), Liberty Lake (+15.55%), Millwood (+2.34%), and unincorporated Spokane County (+4.54%). This data suggests that growth is most pronounced in semi-rural urban interface areas. While some new developments may reduce wildfire risk by eliminating wildland voids, minimum lot size restrictions ensure that significant interface areas will persist and likely expand.

2. Fire department communications are primarily managed through the Spokane Regional Emergency Communications Center (SREC), which provides countywide voice and data services. While a new Computer-Aided Dispatch (CAD) system is planned for 2025, funding challenges remain due to competing priorities. The once unified support for regionalization is shifting, with the City of Spokane considering establishing its own communications center. Additionally, there are efforts to change the law to bifurcate funding, diverting resources from countywide emergency services to support Spokane's separate center. This shift threatens the economic efficiency needed to maintain the 700/800 MHz radio infrastructure, which has met federal emergency communication requirements since coming online in 2014.

3. Political distractions are overshadowing the critical need for agencies to improve disaster response capabilities. Despite experiencing the worst wildfire on record on August 18, 2023, which tested the emergency system beyond its limits, the region benefited from a unified approach. However, potential funding reductions and fragmentation of services threaten to reverse these gains. Instead of exploring ways to enhance emergency response and preparedness, agencies are now forced to consider budget cuts and resource reductions, undermining regional cooperation and effectiveness.

4. Much of the district falls within the Urban Growth Area (UGA) and lies entirely within the Spokane Regional Clean Air Agency's Restricted Burn Area. These regulations prohibit most types of burning. The Washington Department of Natural Resources (DNR) may issue limited burn permits within these boundaries. Residential burning of yard and garden debris is banned throughout Spokane County, with exceptions in certain rural fire districts. Despite the regulations, continued education is needed due to the repetitive nature of illegal burning occurrences.

5. Another significant concern is limited access to developing urban interface areas. SVFD has proactively worked to assure new resolutions for construction type, house spacing,

and green spaces. However, some areas were developed prior to modern codes and still feature single-access roads, posing challenges for emergency response and evacuation. Addressing these legacy issues remains a priority for the department.

6. SVFD has not conducted a comprehensive wildland-urban interface risk assessment since 2011, but a new assessment is currently in development. To date, up to 1,800 visual home assessments have been completed in coordinated neighborhoods to evaluate wildfire risks. These assessments have been conducted using an intern with limited access and resources. Ideally, the department could benefit by establishing a dedicated position focused not only on visual home assessments but also on conducting one-on-one evaluations with homeowners. A specialized role could significantly enhance risk mitigation efforts, benefiting both the department and the community.

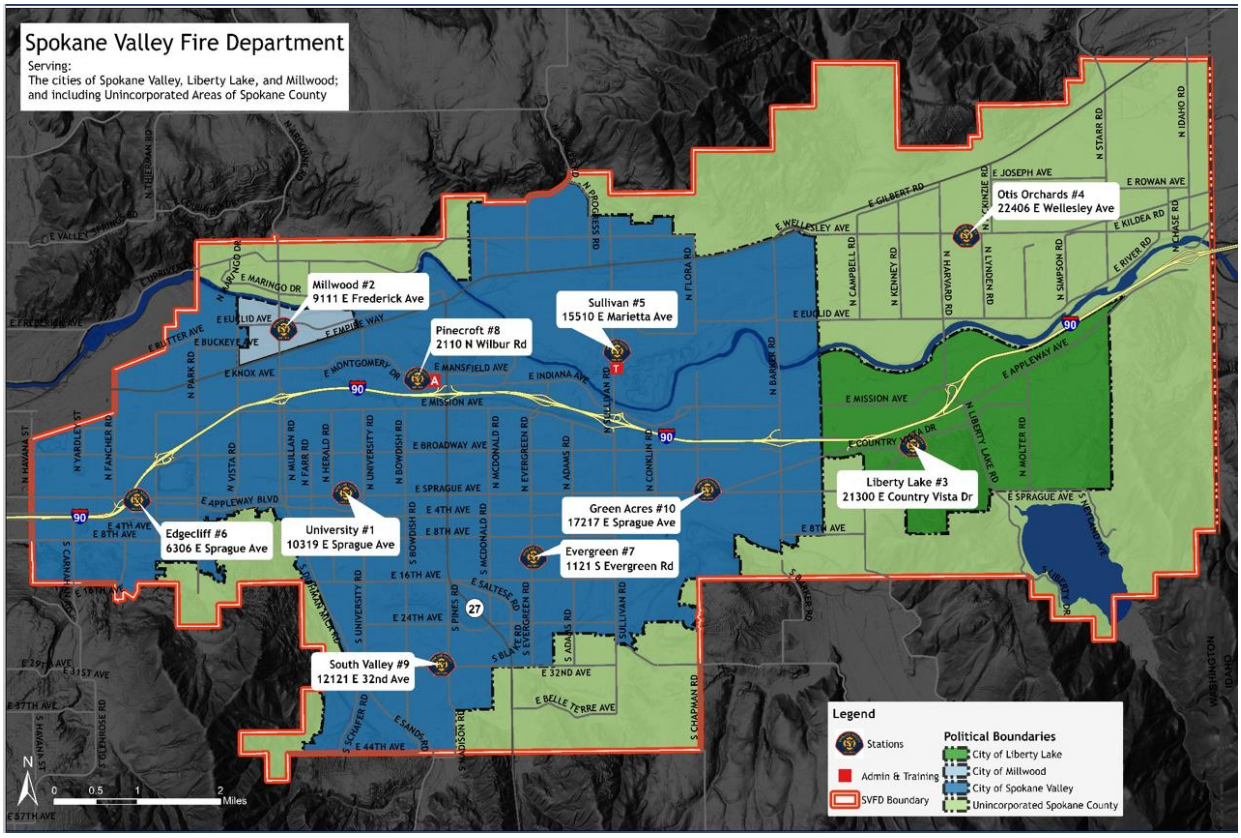


Figure 15-1 Spokane Valley Fire District Service Area and Structure Location

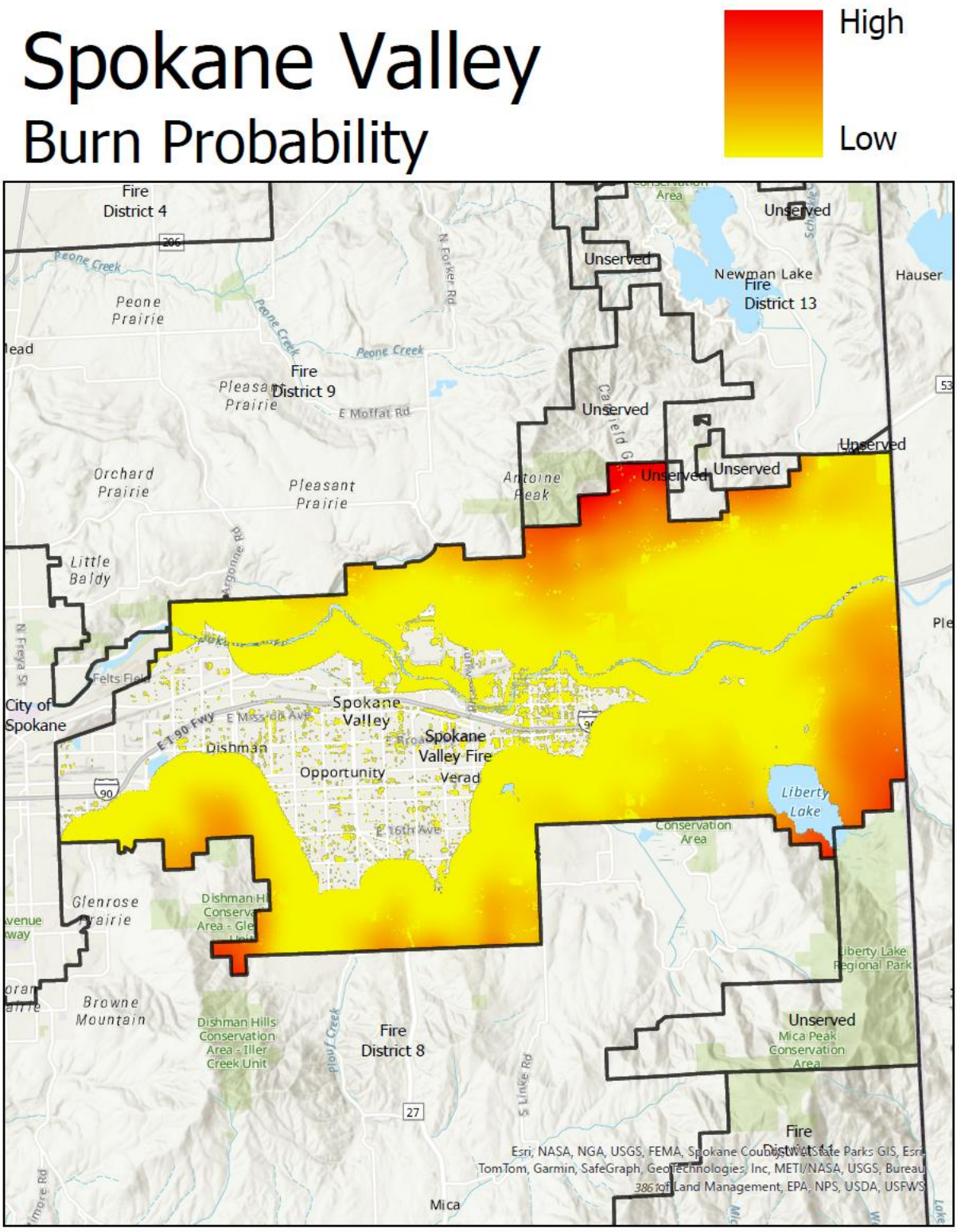


Figure 15-2 Burn Probability (WA DNR, 2024)

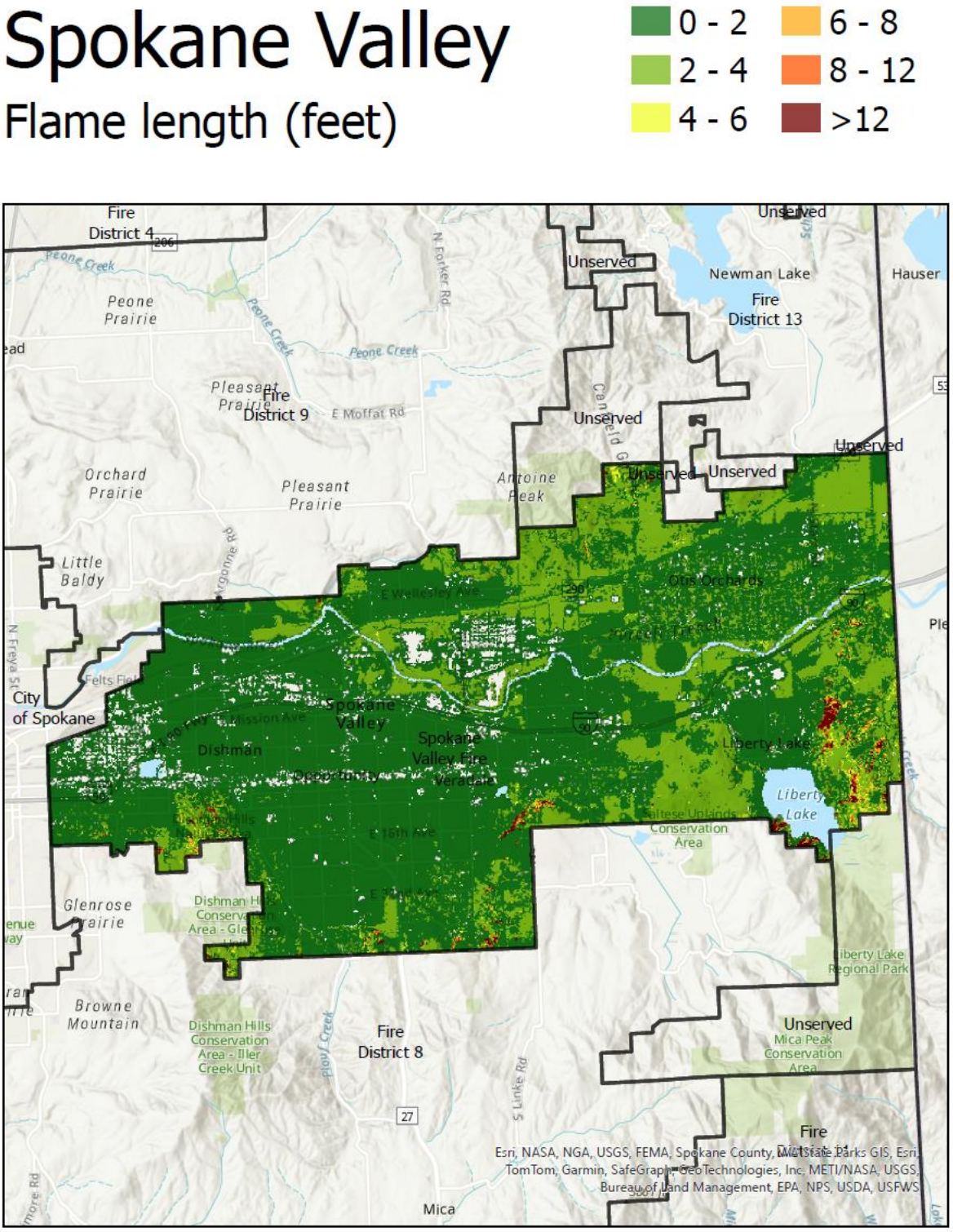


Figure 15-3 Flame Length (WA DNR, 2024)

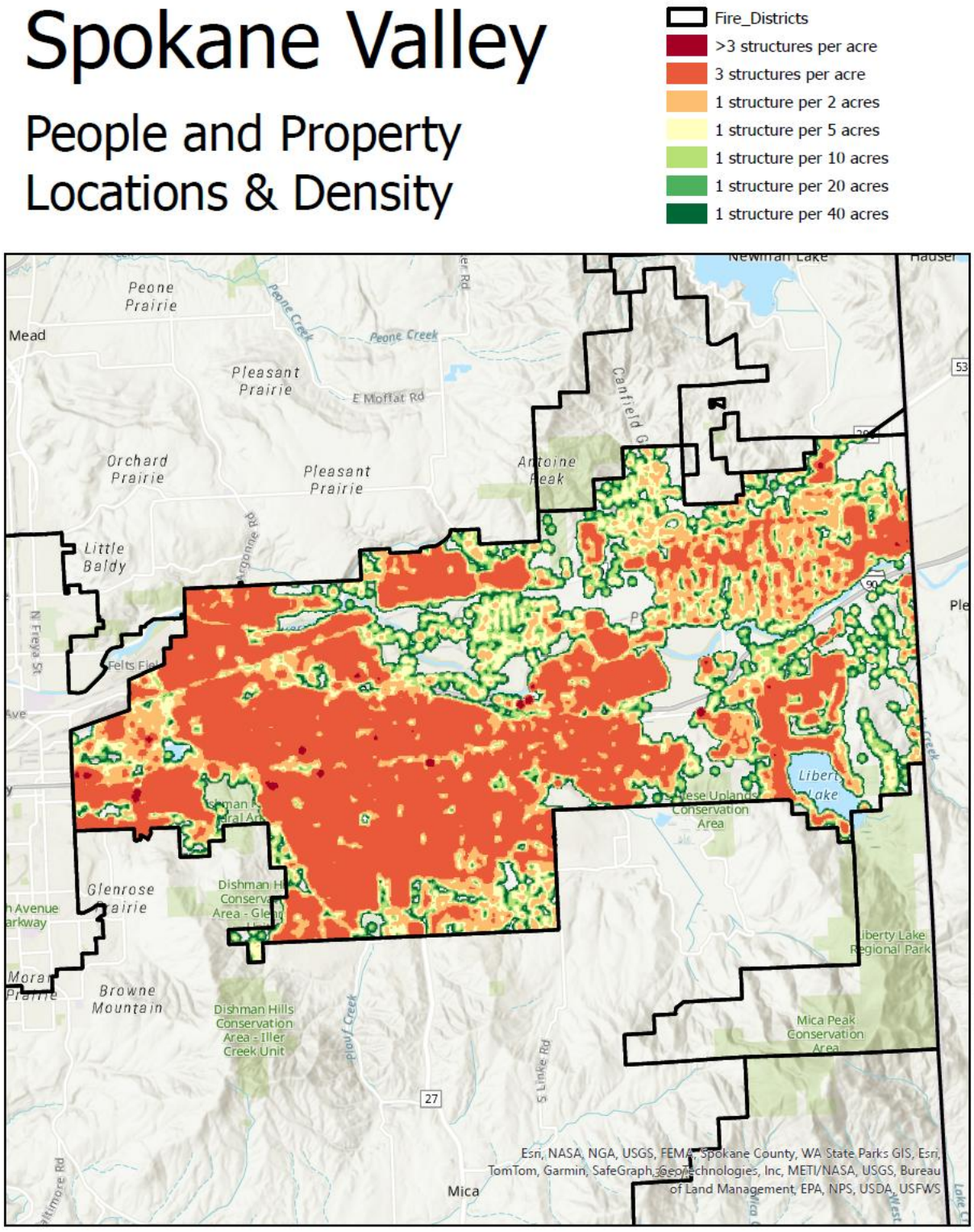


Figure 15-4 Structure and Density Locations (WA DNR, 2024)

Response Function
People and Property

The response function describes how the HVRA value will change in response to fire at different intensities, described by the different flame length classes. For each flame length class there is a map of the probability of a given location experienced that flame length (not included in this packet). The integration of all six maps into one results in the flame length map in this packet.

		Fire Intensity Level (flame length)					
		FIL1	FIL2	FIL3	FIL4	FIL 5	FIL6
Sub-HVRA (based on structure density)	Share of HVRA relative importance	0-2'	2-4'	4-6'	6-8'	8-12'	>12'
Very low density	<1%	-10	-20	-40	-80	-100	-100
Low density	1%	-10	-20	-40	-80	-100	-100
Moderately low density	3%	-10	-20	-40	-80	-100	-100
Moderate density	7%	-10	-20	-40	-80	-100	-100
Moderate high density	14%	-10	-30	-50	-80	-100	-100
High density	47%	-20	-40	-60	-80	-100	-100
Very high density	28%	-30	-50	-70	-100	-100	-100

		Fire Intensity Level (flame length)					
		FIL 1	FIL 2	FIL 3	FIL 4	FIL 5	FIL 6
Sub-HVRA	Share of HVRA RI	*0 - 2'*	*2 - 4'*	*4 - 6'*	*6 - 8`*	*8 - 12'*	*>12'*
Very low density; > 0 structures - 1 structure per 40 acres	< 1%	-10	-20	-40	-80	-100	-100
Low density; 1 structure per 40 - 1 structure per 20 acres	1%	-10	-20	-40	-80	-100	-100
Moderately low density; 1 structure per 20 - 1 structure per 10 acres	3%	-10	-20	-40	-80	-100	-100
Moderate density; 1 structure per 10 - 1 structure per 5 acres	7%	-10	-20	-40	-80	-100	-100
Moderately high density; 1 structure per 5 - 1 structure per 2 acres	14%	-10	-30	-50	-80	-100	-100
High density; 1 structure per 2 - 3 structures per acre	47%	-20	-40	-60	-80	-100	-100
Very high density; > 3 structures per acre	28%	-30	-50	-70	-100	-100	-100

Figure 15-5 Response Function Defined (WA DNR, 2024)

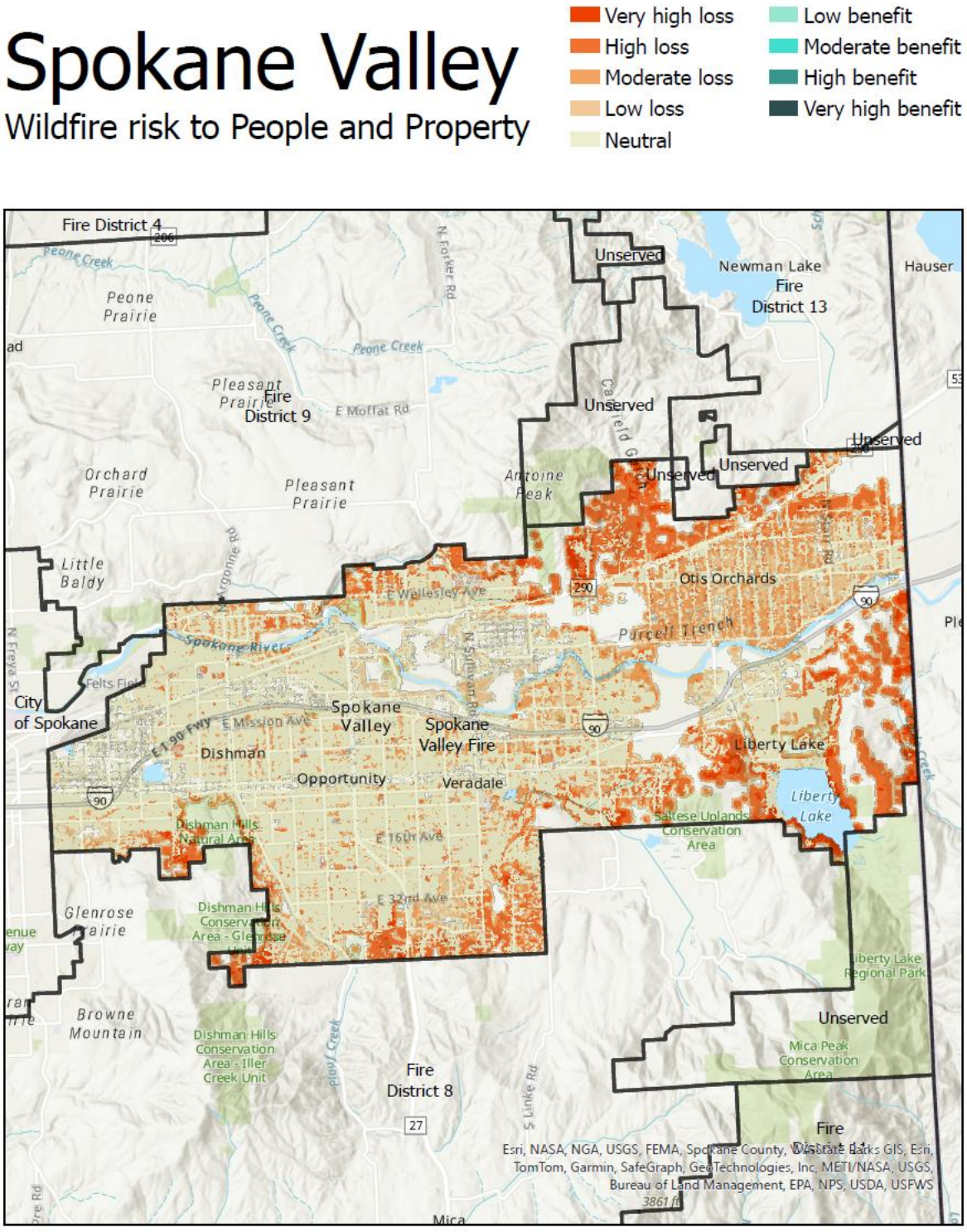


Figure 15-6 Wildfire Risk to People and Property (WA DNR, 2024)

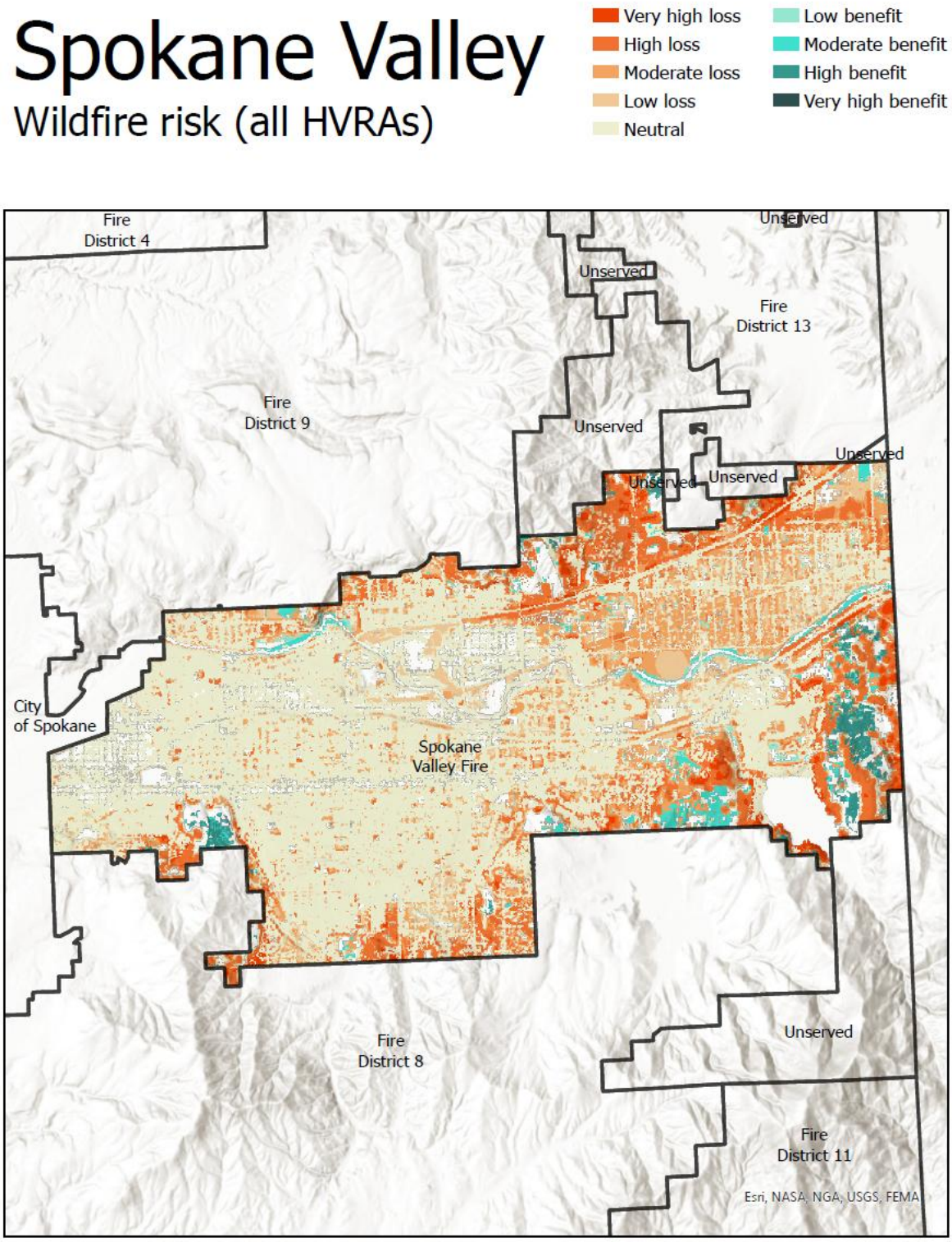


Figure 15-7 Wildfire Risk to High Value Risk Assets (HVRA) (WA DNR, 2024)

CHAPTER 16.
SPOKANE COUNTY FIRE DISTRICT 13 / NEWMAN LAKE FIRE DEPARTMENT COMMUNITY WILDFIRE PROTECTION ANNEX

16.1 INTRODUCTION

This Annex details the Community Wildfire Protection elements specific to Spokane County Fire District #13 - the Newman Lake Fire Department, a participating special purpose district to the Spokane County Community Wildfire Protection Plan (CWPP). Fire District 13 is not complete a Hazard Mitigation Plan but did attend all planning meetings and public outreach events as an active participant for the purposes of this CWPP. As such, all sections of the base plan, including the planning process and other procedural requirements apply to and were met by the Spokane County Fire District #13. For planning purposes, this Annex provides additional information specific to the district, with a focus on providing greater details on the risk assessment and mitigation strategy for the District only. Spokane County Fire District #13/Newman Lake Fire Department falls within Strategic Planning Area 2. Data specific to SPA 2 has also been included in this Annex document. This Annex is not intended to be a standalone document but rather appends to and supplements the information contained in the base plan document. This Annex did not go through FEMA review for approval but has gone through review for State DNR review and approval for the CWPP components. Adoption documents by the District for the CWPP are incorporated with all other HMP/CWPP adoption documents.

16.2 PLANNING TEAM POINT(S) OF CONTACT

Spokane County Fire District 13 followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, the Spokane County Fire District 13 also formulated their own internal planning team to support the broader planning process. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated.

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
Daron Bement (509)-214-5121	Chief Primary Point of Contact	Attended planning team meetings, served as primary author of the plan, conducted internal planning team meetings,

Local Planning Team Members		
Name	**Position/Title**	**Planning Tasks**
		captured information from other personnel.
Josh Ambach	Division Chief - Operations Alternate Point of Contact	Attended planning team meetings, assisted with development of the annex, attended internal planning meetings, worked to capture data and information from other FD #13 personnel.

16.3 DISTRICT PROFILE

The following is a summary of key information about the district:

- **District Summary** - District #13 is located in the East portion of Spokane County. It borders the Idaho State line to the East, Trent (Hwy 290) to the South, Spokane Valley Fire Department to the West, and Fire District 9 to the North. The terrain is characterized by rolling hills, with the primary fuel source consisting of dense, heavy timber. Fire District 13 covers much of the southern end of SPA 2; however, the central and northern portions are not incorporated into any organized fire protection organization. Fire District 13 has two fire stations in the district; one in the Newman Lake community, and one on the north end of Newman Lake. These stations provide the first level of emergency response within the district.
- **Governing Authority** – Spokane County Fire District #13 Board of Commissioners
- **Population Served -** There is a population of 2,500 to 3,000 year-round residents with a potential for 5,000 during the summer months.
- **Land Area Served -** District #13 covers 25 square miles that are mostly wildland and urban interface areas.
- **List of Equipment Owned by the District:**
  - Attack13-1,Brush 13-1,Brush 13-2
  - Brush 13-3, Engine 13-1,Engine 13-2
  - Tender 13-3,Tender 13-4
  - Squad 13-2, Squad 13-1

- **Current and Anticipated Service Trends:**
  Request for service continues to increase particularly during the summer months when the District's service area is saturated with tourists and families that are

seasonal residents. Increased fire risks and people with limited knowledge of the area make access and egress difficult, and often hinders response abilities or evacuations, when necessary.

- **Staffing** - District #13 is staffed by one (1) full-time Chief, two (2) Full-time officers, one (1) Full-time Administrative Support, and 40 volunteers.
- **Ingress-Egress -** Starr Road, West Newman Lake Drive, and Thompson Creek Road are the primary ingress and egress routes traveling north and south through the south end of SPA 2. Highway 206 (Mt Spokane Park Drive) is the primary access to Mount Spokane State Park and surrounding timberlands. Blanchard Road, traveling east and west through the northern part of this planning area, is a major access route between home sites along Blanchard Creek and the Highway 2 corridor north of Spokane. Many residences in the forested areas are accessed via unimproved, steep, narrow roads accessible by only small emergency vehicles. In these areas, access roads and driveways are often lined with shrubs and mature trees that can limit or prohibit access during wildfires. Many of these roads lack adequate turnout and turn-around areas for emergency vehicles. The inability of emergency resources to safely access structures reduces or may even eliminate suppression response. Roads in newer subdivisions have been designed to accommodate emergency vehicles with either loop roads or cul-de-sacs with wide turning radiuses and easily negotiable grades for large emergency equipment.

16.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified many wildfire hazard events which have occurred throughout the County. In the context of Fire District #13, the CWPP focuses only on the wildfire hazard, and not all hazards identified within the HMP, although some additional risk data is included as it relates to district structural assets. Significant hazard events occurring within Fire District 12's area of response are identified in Table 16-1.

Table 16-1
Natural Hazard Events

Type of Event	Name or Disaster # (if applicable)	Date	Dollar Losses (if known)
Pandemic	DR-4481/EM-3427 COVID	2020	Unknown
Wildfire	Cougar Lane	2022	Unknown
Wildfire	Foothills Drive	2023	Unknown

16.5 APPLICABLE REGULATIONS AND PLANS

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other on-going efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into the following sections: regulatory capabilities which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other on-going mitigation efforts; fiscal capabilities which support mitigation efforts, and classifications under various community programs.

16.5.1 Regulatory Capability

The District has adopted/enacted codes, resolutions, policies and plans that compliment and support hazard mitigation planning and activities. The following existing District codes, resolutions, policies, and plans are applicable to this hazard mitigation plan:

Fire District Capabilities:

- Capital Facilities and Equipment Plan
- Sprinkler Codes
- Emergency Operations Plan
- Emergency Procedures and Policies
- City/County Comprehensive Emergency Management Plan
- State of Washington Comprehensive Emergency Management Plan
- National Response Framework
- National Incident Management System
- Revised Code of Washington 52.26 (Regional Fire Protection Service)
- Revised Code of Washington 296.305 (Safety Standards for Firefighters)
- Mutual Aid Agreements
- Automatic Aid Agreements

16.5.2 Administrative and Technical Capabilities

The assessment of the district's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 16-2. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information. In addition to those listed below, Mutual Aid Agreements are in place with DNR, Spokane Valley Fire Department, and Hauser Lake Fire Department. The District has hydrants

located only on the Southern portion of the District and a fire boat supplied by Newman Lake in the summer months.

Table 16-2
Administrative and Technical Capability

Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Professionals trained in building or infrastructure construction practices.	Yes	SCFD #3 Firefighter
Planners or engineers with an understanding of natural hazards.	No	
Staff with training in benefit/cost analysis.	Yes	SFD #13 (Currently completed by Fire Chief Bement)
Personnel skilled or trained in GIS.	No	The District does have the ability to use Spokane County GIS
Emergency Manager.	Yes	Spokane County DEM
Grant writers.	Yes	Spokane County DEM
Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?).	Yes	Spokane County DEM
Hazard data and information available to public.	Yes	FD #12, Spokane County DEM, Town of Latah
Specific equipment response plans.	Yes	FD #12
Specific operational plans.	Yes	FD #12
Water Shortage Contingency Plan.	Yes	Various Water Districts
Cooperative Agreements	Yes	Firefighting agencies within Spokane County, including the DNR, operate under mutual aid agreements established in accordance with the Washington State Interlocal Cooperation Act. Requests for assistance and operations conducted under these agreements follow the procedures outlined in the Spokane County Fire Resource Plan.
Education and Outreach		
Local citizen groups or non-profit organizations focused on emergency preparedness? (E.g., CERT, SAR, Medical Reserve Corps, etc.).	Yes	Spokane County CERT; Wildland Neighborhood Ready
Organization focused on individuals with access and functional needs populations.	No	
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education).	Yes	Spokane County DEM, Town of Latah

Table 16-2 Administrative and Technical Capability		
Staff/Personnel Resources	Available (Yes/No)	Department/Agency/Position
Natural disaster or safety related school programs.	Yes	School District through FD #12
Multi-seasonal public awareness program.	Yes	Spokane County DEM, Town of Latah
On-Going Mitigation Efforts		
Hazardous Vegetation Abatement Program	Yes	Spokane County Conservation District
Address signage for property addresses	Yes	Spokane County Conservation District

16.5.3 Fiscal Capability

The assessment of the district's fiscal capabilities is presented in Table 16-3. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

Table 16-3 Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

16.6 COMMUNITY CLASSIFICATION

The district's classifications under various hazard mitigation programs are presented in Table 16-4. Each of the classifications identified establishes requirements which, when met, are known to increase the resilience of a community. Those which specifically require district participation or enhance mitigation efforts are indicated accordingly.

Table 16-4
Community Classifications

	Participating (Yes/No)	Date Enrolled
Building Code Effectiveness Grading Schedule – Commercial – 4	Yes	Unknown
Building Code Effectiveness Grading Schedule – Dwelling – 4	Yes	Unknown
Fire Protection Class – 6	Yes	Unknown

16.7 HAZARD RISK AND VULNERABILITY

Within SPA 2, there is a moderate risk for fires in the rural farmland and high level of risk in the forested and wooded riparian areas. Wildland fuels in forested areas consist of several conifer species mixed with a variety of understory shrubs and grasses. Timber management has created a mosaic of timber stands with widely varying age and size classes enhancing stand density and structure, which often increases ladder fuels; therefore, the wildland fire potential. Forested areas to the south and along Blanchard Creek are generally adjacent to agricultural crops or rangeland.

Agricultural and Riparian lands lying next to forested land are a wildfire concern. Depending on the time of year, slope, and weather, fuels such as grasses, brush and agricultural crops can easily ignite. If these types of fuels are adjacent to forested areas, a surface fire may move into the forest canopy creating a wildfire situation during times when forest fire risk is normally low. A wind-driven fire in agricultural fuels or dry native fuel complexes would produce a rapidly advancing, but variable intensity fire. Fires burning in some types of un-harvested fields would be expected to burn more intensely with larger flame lengths due to the greater availability of fuels.

16.7.1 CWPP Analysis

As a result of the 2023 wildfires occurring within Spokane County, Washington State Department of Natural Resources (DNR) assisted the various fire districts throughout the Spokane County in completing a *Scaled Quantitative Wildfire Risk Assessment Summary (2024),* which is a more geographically defined analysis with respect to the wildfire risk as it relates specifically within Fire District 13's service area. The analysis focuses specifically on eight highly valued resources and assets (HVRA), to include people and property, critical facilities, drinking water, ecological

integrity, wildlife, timber, agriculture, and recreation. This analysis varies slightly from the analysis within the HMP document, which looks at all assets exposed, in addition to the critical facilities, as well as impact to the people, property, environment, and economy. The resulting maps of the analysis completed by DNR are incorporated at the end of this Annex.

16.7.2 Infrastructure at Risk

Review of structures owned by the districted included within the 2026 HMP/CWPP risk assessment process identifies two structures falling within the Intermix, Low Structure Density area. Strong shaking is expected with respect to the Latah Cree M 6.8 earthquake scenario utilized for the HMP, with limited risk from liquefaction. Structures fall within a *less than 15 percent slope* with respect to the landslide hazard and are not included within DNR's Landslide Compilation data. The structures are aged (1979). The type of construction material is unknown. None of the structures identified fall within FEMA's flood inundation zone for a 100-year flood event.

With respect to other assets at risk identified within the DNR portion of the CWPP study, residents within the community of Newman Lake are identified as having a municipal water system. Public fire hydrants are available to a limited extent throughout the community up to West Newman Lake Drive. Outside of this area, development typically relies on personal or multiple home well systems. Creeks, ponds, and stock tanks provide additional water sources for emergency fire suppression in the rural areas.

16.8 MITIGATION GOALS AND OBJECTIVES

The district adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1, Chapter 12, as well as the CWPP specific goals identified in Chapter 10, Section 10.1.5.

16.9 HAZARD MITIGATION ACTION PLAN

The Planning Team for the district identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the district's assets and hazards of concern. Table 16-5 lists the action items/strategies that make up the district's hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, who will benefit from the activity, and the type of initiative associated with each item are also identified.

Table 16-5
Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost (High/ Medium/ Low) or $ Figure if Known	Sources of Funding (List Grant type, General Fund, etc.)	Timeline (Long-Term, Short-Term)	Included in Previous Plan? Yes/No	Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection	Who or What Benefits? Facility, Local, County, Region
INITIATIVE # 1 - FD 13 - Support countywide initiatives that promote the education of the public of all natural hazards, including wildfire.									
New and existing	All-Hazards	All	DEM, FD#13	Low	Grants, FD 13 General Funds	Short term	No	Public education, Preventive Activities	Local and County
INITIATIVE # 2 FD 13 - Utilize risk and response data to determine trends and opportunities related to service delivery.									
New and existing	All-Hazards	1,2,4,5,8, 9, 11, 12	FD #13	Medium	FD 13 General Funds	Short term	No	Preventative Activities	Local
INITIATIVE # 3 FD 13 – Institute Wildfire Mitigation Measures throughout the service area on an annual basis which increase the resilience of the landscape, including elements such as fuels reduction, capacity building, ensuring residential address signage, and prescribed burns, while also increasing community involvement, education, and outreach throughout the service area.									
New and Existing	Wildfire	12	FD 13	High	Fire Grants, FD 13 as resources allow	Long-Term	No	All	Local, County, Region

16.10 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of six different initiative types for each identified action item was conducted. Table 16-6 identifies the prioritization for each initiative.

Table 16-6
Mitigation Strategy Priority Schedule

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority[a]
1	12	High	Low	Yes	No	Yes	High
2	8	Medium	Low	Yes	No	Yes	Medium

Table 16-6
Mitigation Strategy Priority Schedule

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

a. See Chapter 1 for an explanation of priorities.

16.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/ VULNERABILITY

According to data provided by the Washington Department of Natural Resources for the period of 1970 through 2024 (November), lightning is the primary source of wildfire ignition in SPA 2. Lightning accounted for the largest number of ignitions during this period of time, but human caused fire ignitions accounted for the largest number of total acres burned. Human caused fire ignitions include debris burning, smoking, campfires, fireworks, electrical fence, railroad sparks, arson and equipment. As such, wildland fire prevention and pre-fire mitigation are a high priority. Continued public outreach and enhanced regulatory authority with respect to permitting, required maintenance, enforcement, and building codes would be of benefit to decrease fuels within the area.

16.12 ISSUES OF CONCERN

1. Many access routes in this SPA, especially those surrounding the Newman Lake waterfront properties, have restricted access and are located in areas of moderate to high fire risk due to the close proximity of continuous fuels. In the event of a wildland fire, it is likely that one or more of the escape routes would become impassable. Signing of unrestricted alternate escape routes would reduce confusion and save time in a wildfire situation. Many roads and driveways accessing rural residential areas do not have adequate road widths or turnouts for firefighting equipment, particularly in older developments. Current fire codes now require compliance with minimum road standards for new construction.

2. Since District 13 is primarily residential with limited industrial and commercial areas, the District would like to see a county-wide, or failing that, an ordinance requiring residential fire sprinklers. Continued residential growth impacts the District's ability to provide services with a combination mostly volunteer workforce. There is currently not enough revenue to go to a model of full-paid staffing.

3. Maintaining wildland fire readiness across our district is a shared responsibility between the fire district, homeowners, and the State Forest Service. It is essential to continue and

strengthen this partnership, creating opportunities to enhance the wildland urban interface areas within our district and region.

4. Roads can be made more fire-resistant by frequently mowing along the edges to reduce the fuels or planting more fire-resistant grasses in these highly prone areas. Aggressive initial attack on fires occurring along travel routes will help ensure that these ignitions do not spread to nearby home sites. Citizens and municipal officials should be encouraged to manage the lands along roadways.

5. Maintaining developed drafting sites and mapping alternative water resources such as ponds and stock tanks near developed areas will increase the effectiveness and efficiency of emergency response in a wildfire situation. Local officials should work to maintain this type of data, which could be shared with County Dispatch to provide the information during wildfire events.

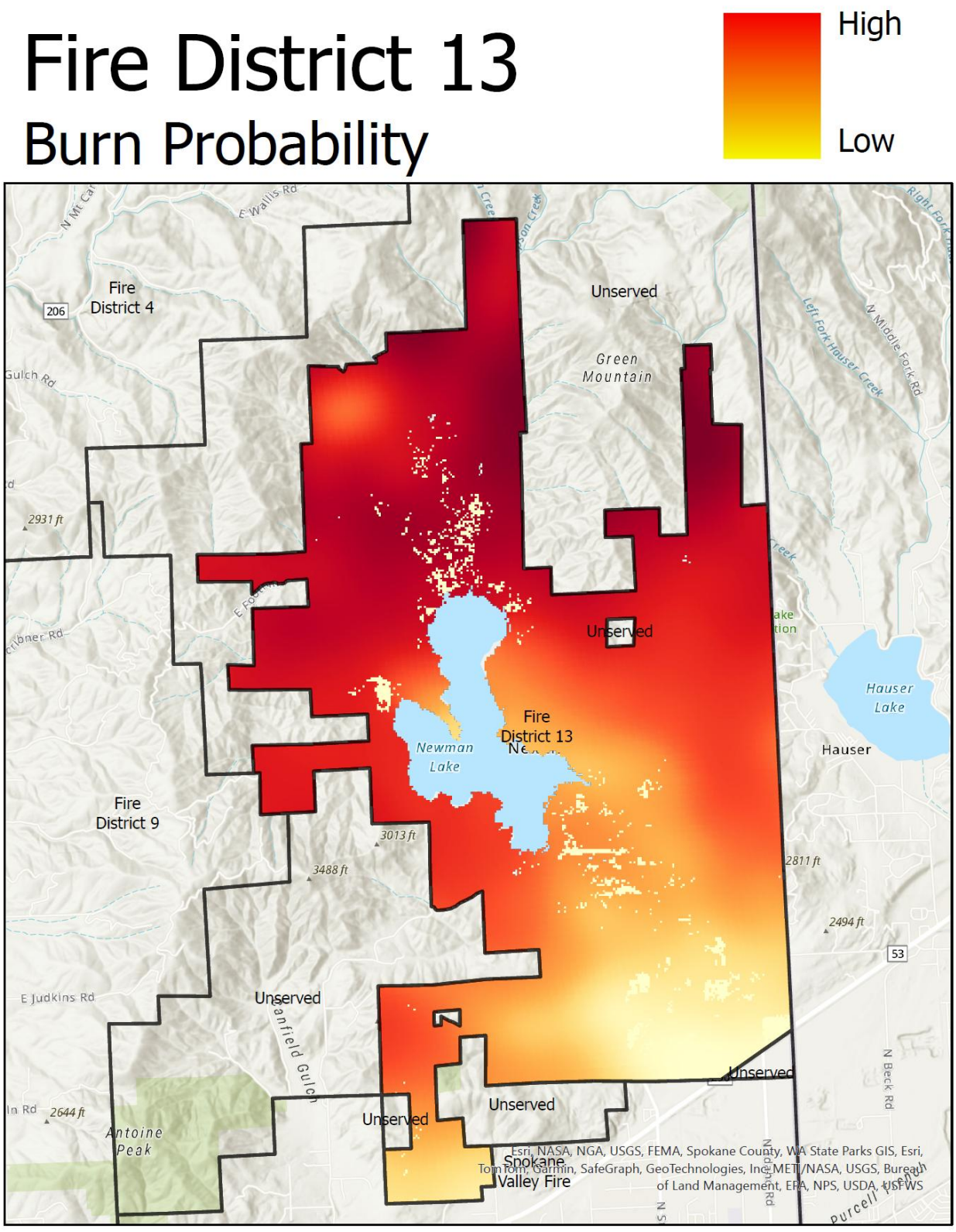


Figure 16-1 Burn Probability (WA DNR, 2024)

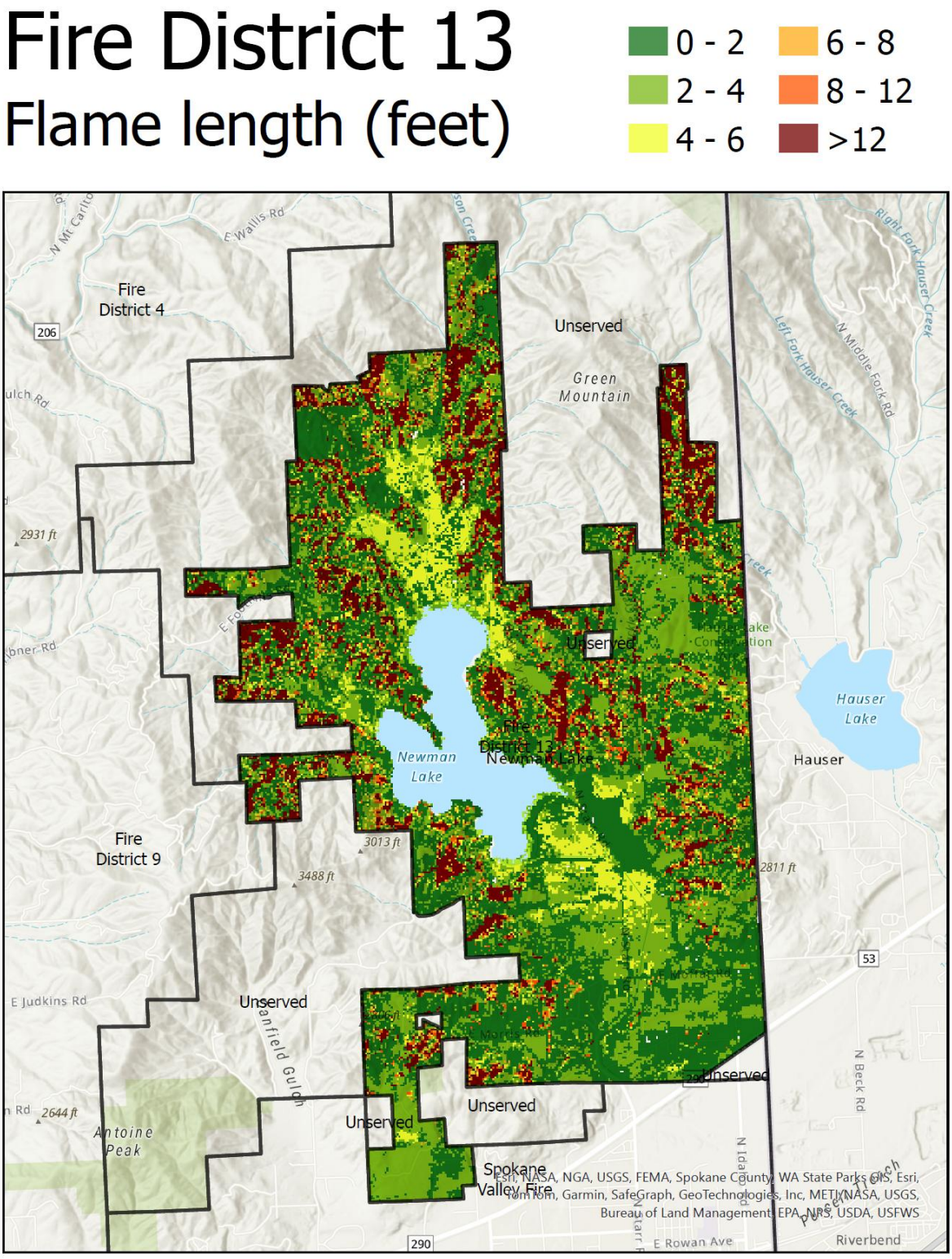


Figure 16-2 Flame Length (WA DNR, 2024)

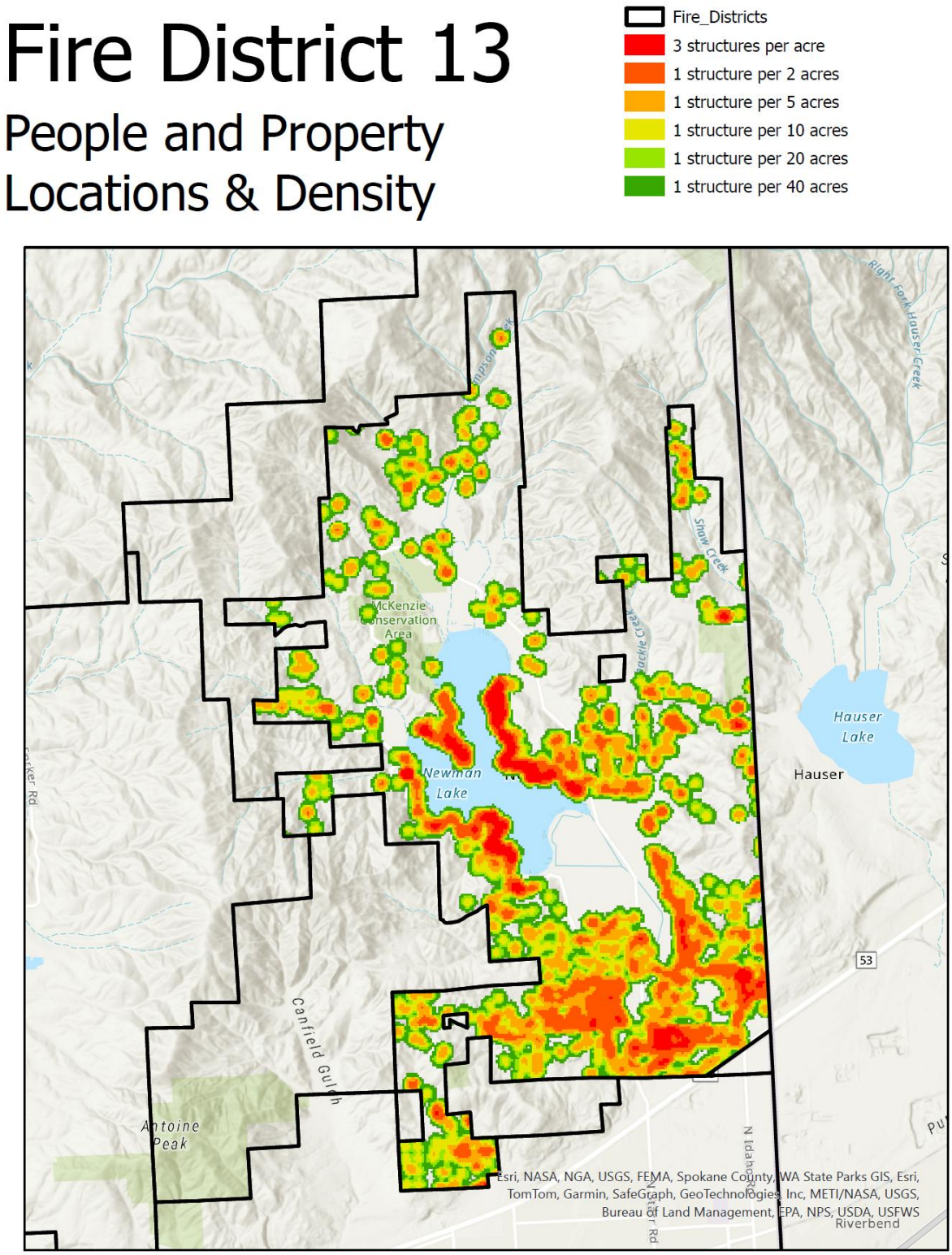


Figure 16-3 People and Property Locations and Density (WA DNR, 2024)

Response Function
People and Property

The response function describes how the HVRA value will change in response to fire at different intensities, described by the different flame length classes. For each flame length class there is a map of the probability of a given location experienced that flame length (not included in this packet). The integration of all six maps into one results in the flame length map in this packet.

		Fire Intensity Level (flame length)					
		FIL1	**FIL2**	**FIL3**	**FIL4**	**FIL 5**	**FIL6**
Sub-HVRA (based on structure density)	Share of HVRA relative importance	0-2'	2-4'	4-6'	6-8'	8-12'	>12'
Very low density	<1%	-10	-20	-40	-80	-100	-100
Low density	1%	-10	-20	-40	-80	-100	-100
Moderately low density	3%	-10	-20	-40	-80	-100	-100
Moderate density	7%	-10	-20	-40	-80	-100	-100
Moderate high density	14%	-10	-30	-50	-80	-100	-100
High density	47%	-20	-40	-60	-80	-100	-100
Very high density	28%	-30	-50	-70	-100	-100	-100

		Fire Intensity Level (flame length)					
		FIL 1	**FIL 2**	**FIL 3**	**FIL 4**	**FIL 5**	**FIL 6**
Sub-HVRA	Share of HVRA RI	*0 - 2'*	*2 - 4'*	*4 - 6'*	*6 - 8`*	*8 - 12'*	*>12'*
Very low density; > 0 structures - 1 structure per 40 acres	< 1%	-10	-20	-40	-80	-100	-100
Low density; 1 structure per 40 - 1 structure per 20 acres	1%	-10	-20	-40	-80	-100	-100
Moderately low density; 1 structure per 20 - 1 structure per 10 acres	3%	-10	-20	-40	-80	-100	-100
Moderate density; 1 structure per 10 - 1 structure per 5 acres	7%	-10	-20	-40	-80	-100	-100
Moderately high density; 1 structure per 5 - 1 structure per 2 acres	14%	-10	-30	-50	-80	-100	-100
High density; 1 structure per 2 - 3 structures per acre	47%	-20	-40	-60	-80	-100	-100
Very high density; > 3 structures per acre	28%	-30	-50	-70	-100	-100	-100

Figure 16-4 Response Function - People and Property (WA DNR, 2024)

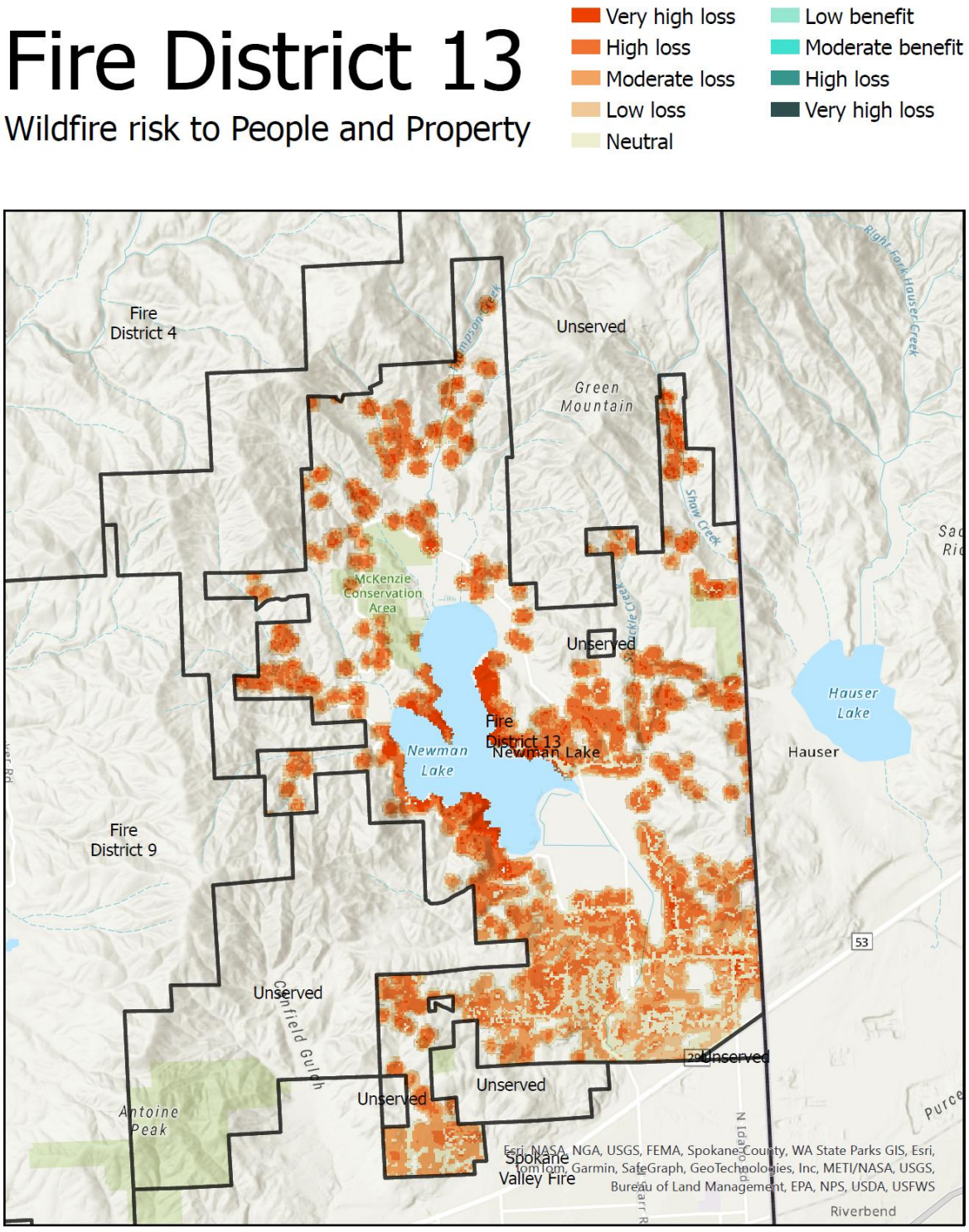


Figure 16-5 Wildfire Risk to People and Property (WA DNR, 2024)

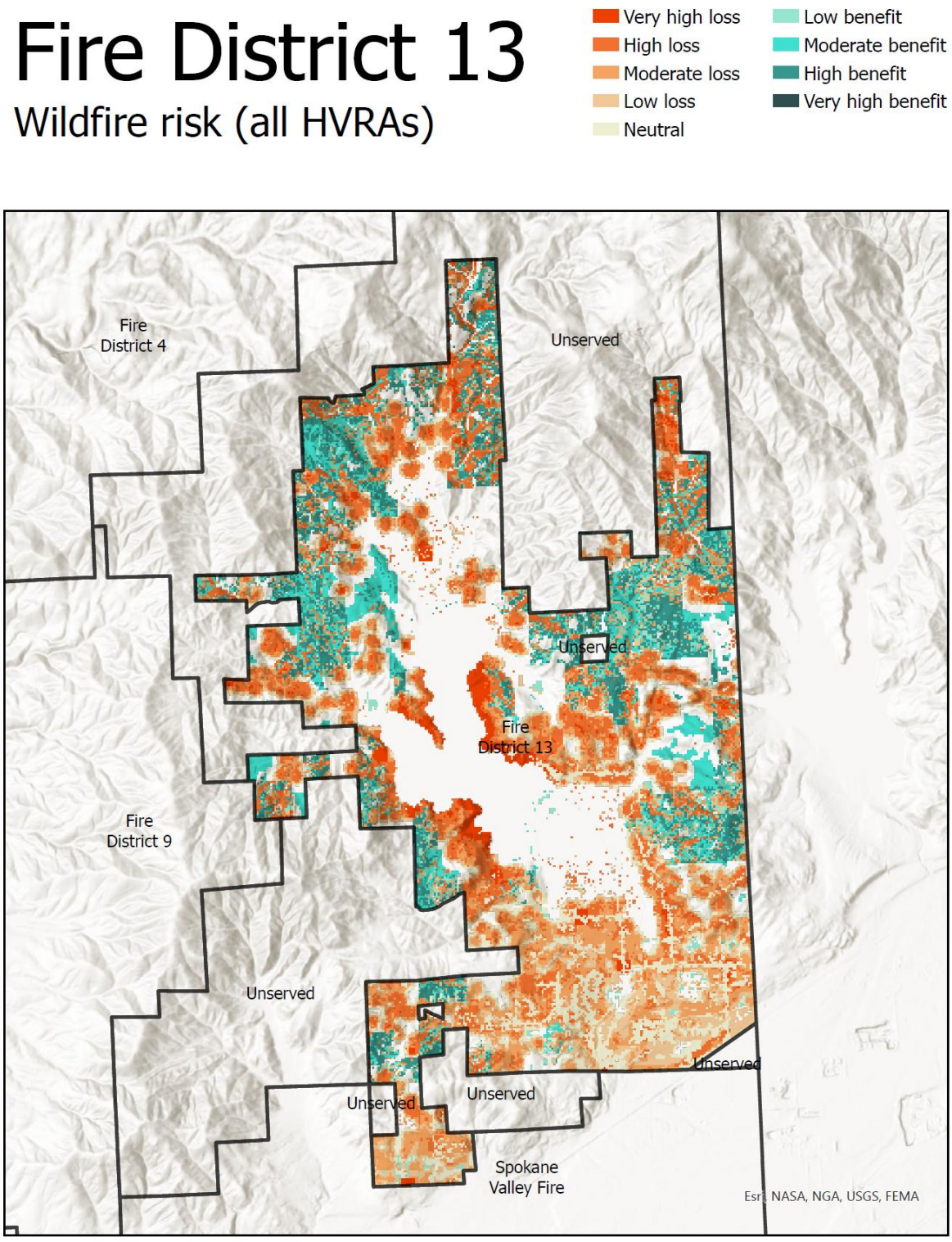


Figure 16-6 Wildfire Risk to High Value Risk Assets (HRVAs) (WA DNR, 2024)

APPENDIX A.
PLANNING PARTNER EXPECTATIONS

APPENDIX A.
PLANNING PARTNER EXPECTATIONS

Achieving DMA Compliance

One of the goals of the multi-jurisdictional approach to hazard mitigation planning is to achieve compliance with the Disaster Mitigation Act (DMA) for all participating members in the planning effort. There are several different groups who can be involved in this process at different levels, and as determined by the planning partnership. In order to provide clarity, the following is a general breakdown of those groups:

- ✓ The Hazard Mitigation Plan Development Staff (referred to herein as "planning team", whose makeup includes the project management team (county and consultant), consultant members, and those planning partners responsible for the plan's written development;

- ✓ The planning partners, which are those jurisdictions or special purpose districts that are actually developing an annex to the regional plan; and

- ✓ The planning stakeholders, which are the individuals, groups, businesses, academia, etc., from which the planning team gains information to support the various elements of the plan.

DMA compliance requires that *participation* be defined in order to maintain eligibility with respect to meeting the requirements which allows a jurisdiction or special purpose district to develop an annex to the base plan. To achieve compliance for *all* partners, the plan must clearly document how each planning partner that is seeking linkage to the plan participated in the plan's development. The best way to do this is to clearly define "participation". For this planning process, "participation" is defined by the following criteria examples (this list is not all-inclusive):

- ✓ **Estimated level of effort**. It is estimated that the total time commitment to meet these "participation" requirements for a planning partner would be ***approximately 40 - 50 hours over the twelve-month period, including workshop attendance.*** This time is reduced somewhat for special purpose districts.

- ✓ **Participate in the process.** As indicated, it must be documented in the plan that each planning partner "participated" in the process to the best of your capabilities. There is flexibility in defining "participation," which can vary based on the type of planning partner (i.e.: City or County, vs. a Special Purpose District) involved. However, the level of participation must be defined at the onset of the planning process, and we must demonstrate the extent to which this level of participation has been met for each partner.

- ✓ **Public Involvement**. The planning team will be responsible for supporting the partnership during the public involvement phases of the planning process. Support could be in the form of providing venues for public meetings, attending these meetings as participants, providing technical support, etc. *Each entity completing an annex will be required to complete their own public outreach strategy*.

- ✓ **Duration of planning process.** This process is anticipated to take approximately twelve months to complete (not including state and FEMA review). It will be easy to become disconnected with the process objectives if you do not participate in some of these meetings to some degree. General tasks associated with this effort include review of existing plans, updating of general profile and Census data, identification and/or verification of critical infrastructure, and public outreach efforts (to be identified and defined during planning meetings or workshops, but at a minimum will require two efforts).

- ✓ **Capability Assessment.** All planning partners will be asked to identify their capabilities during this process. This capability assessment will require a review of existing documents (plans, studies, and ordinances) pertinent to each jurisdiction to identify policies or recommendations that are consistent with those in the "base" plan or have policies and recommendations that complement the hazard mitigation initiatives selected (i.e.: comp plans, basin plans, or hazard specific plans or information, studies, reports, etc.).

- ✓ **Hazard Identification and Risk Ranking.** All planning partners will participate in the identification of hazards to be addressed during this effort and the overall risk ranking exercise for the base plan. (Other hazards not addressed by the general body of the group may be included in specific annex documents.) Once the base plan risk ranking has occurred, each planning partner will complete their own risk ranking exercise for their own jurisdiction/entity. This is a facilitated process and requires mandatory attendance at the risk ranking planning meeting to gain compliance. This meeting will be mandatory attendance.

- ✓ **Action/Strategy Review.** All previous planning partners will be required to perform a review of the strategies from their respective prior action plan to determine those that have been accomplished and how they were accomplished; and why those that have not been accomplished were not completed. Note – even if your plan has expired, it is still considered an update, and not a new plan. The planning team will be available to assist with this task; however, for existing planning partners, this is mandatory.

- ✓ **Annex Template Development.** Each planning partner will be required to develop their own annex template, which will be the data specific to their entity or jurisdiction.

Information contained in this document will include, but is not limited to community profile, population or service area data, disaster history information, identification of critical facilities. The template itself will be provided; however*, the actual completion of the document is a requirement of each planning partner.* This element is mandatory for active participation.

- ✓ **Consistency Review.** All planning partners will be required to review the entire base plan when completed, and their respective annex document after final editing by the planning team. Customarily, there is a minimum of two weeks provided for this review process, but normally we attempt to give an entire month for this element of the project.

- ✓ **Plan adoption.** Each jurisdiction and special purpose district involved in the effort must adopt the plan once FEMA and State approval have been gained. If not adopted by each jurisdiction, that jurisdiction's plan is not considered to be "in place," meaning that in essence, they have no hazard mitigation plan in place even though they have gone through the process. *Adoption is mandatory per FEMA guidelines.*

One of the benefits of multi-jurisdictional planning is the ability to pool resources. This means more than monetary resources. Resources such as staff time, meeting locations, media resources, technical expertise will all need to be utilized to generate a successful plan.

It is anticipated that two or three workshop sessions will be required to complete this plan, in addition to two public outreach sessions. Those workshop sessions will last three or four hours each and take the place of monthly meetings. While the workshop sessions will provide the bulk of actual meeting attendance, based on the progress of the planning partnership as a whole, there may be additional meetings which may be required; *however, each planning partner will be required to attend, at a minimum, 75% of the workshop sessions and provide data as requested*. Much of the data exchange can occur through email or telephone calls, which will supplement the workshops.

With the above participation requirements in mind, each planning partner will be asked to aid this process by being prepared to develop its own section of the plan. To be an eligible planning partner in this effort, each Planning Partner will be asked to provide the following:

A. A "Letter of Intent to Participate" or Resolution to participate to the Planning Team.

B. Designate a lead point of contact for this effort. This designee will be listed as the hazard mitigation point of contact for your jurisdiction in the plan. An alternate point of contact is also highly recommended in case the designated lead becomes unavailable to ensure the 75% meeting requirement is met.

C. Identify their hourly rate of pay for this point of contact, which will be used to calculate the in-kind match for the grant that is funding this project.

D. If requested, provide support in the form of mailing list, possible meeting space, and public information materials, such as newsletters, newspapers or direct mailed brochures, required to implement the public involvement strategy developed during this planning process.

E. Participate in the process. There will be many opportunities as this plan evolves to participate. Opportunities such as:

    a. Hazard Mitigation Planning Team meetings;

    b. Public meetings or open houses;

    c. Workshops/ Planning Partner specific training sessions;

    d. Public review and comment periods prior to adoption.

At each and every one of these opportunities, attendance will be recorded. Attendance records will be used to document participation for each planning partner. While attendance at every meeting may not be practical, there are meetings which are mandatory. Each planning partner should attempt to attend as many meetings and events as possible but must attend the minimum established requirement.

F. There will be ***mandatory*** workshops that all planning partners will be required to attend. These workshops will cover specific items, one of which will be the proper completion of the jurisdictional annex template which is the basis for each partner's jurisdictional chapter in the plan. Failure to have a representative at these mandatory workshops will disqualify the planning partner from participation in this effort. The scheduling for these workshops will be far enough in advance to allow the planning partners to attend.

G. In addition to participation in the mandatory workshops, each partner will be required to complete their annex document and provide it to the planning team in the time frame established. Technical assistance in the completion of these annexes will be available, *but the actual writing of the annex document is the responsibility of each planning partner*. Failure to complete your annex in the required time frame *may* lead to disqualification from the partnership.

H. Each partner will be asked to perform a "consistency review" and "capabilities assessment" of all technical studies, plans, ordinances specific to hazards to determine the existence of any not consistent with the same such documents reviewed in the

preparation of the County (base) Plan. In the same category, each partner will also be required to review the entire base plan once completed, as well as their edited annex.

I. Each partner will be asked to review the Risk Assessment and identify hazards and vulnerabilities specific to its jurisdiction. Resources will be provided to the jurisdiction with specific mapping and technical consultation to aid in this task if the jurisdiction/entity does not have their own capacity, but the determination of risk and vulnerability will be up to each partner (through a facilitated process during one of the mandatory workshops).

J. Each partner will be asked to review and determine if the mitigation recommendations chosen in the base plan will meet the needs of its jurisdiction. Projects within each jurisdiction consistent with the base plan recommendations will need to be identified and prioritized and reviewed to determine their benefits vs. costs.

K. Each partner will be required to create its own action plan (mitigation strategies) that identifies each project, who will oversee the task, how it will be financed and when it is estimated to occur.

L. Each partner will be required to formally adopt the plan.

Planning tools and instructions to aid in the compilation of this information will be provided to all committed planning partners. Each partner will be asked to complete their annexes in a timely manner and according to the timeline established during the initial planning meeting.

**** Note**: Once this plan is completed and FEMA approval has been determined for each partner, maintaining that eligibility will be dependent upon each partner implementing the plan's maintenance protocol identified in the plan.**

Exhibit A.
Example Letter of Intent to Participate

Insert Date: _____

Spokane County Hazard Mitigation Planning Partnership
C/O: Gerry Bozarth, CEM
Spokane County DEM
1121 W Gardner
Spokane, WA 99201

Via email at: GBozarth@spokanecounty.org

Dear Spokane County Planning Partnership,

Please be advised that the _____ (***insert City or district name***) is committed to participating in the update to the Spokane County Natural Hazards Mitigation Plan. As the Chief Administrative Official for this jurisdiction, I certify that I will commit all necessary resources in order to meet Partnership expectations as outlined in the "Planning Partners expectations" document provided by the planning team, in order to obtain Disaster Mitigation Act (DMA) compliance for our jurisdiction.

Mr./Ms. _____ will be our jurisdiction's point of contact for this process and they can be reached at ***(insert: address, phone number and e-mail address)***. We understand that this designated point of contact's time will be applied to the "in-kind" local match for the grant that is funding this project. To aid in the determination of this local match, we have determined that the hourly rate (salary and benefits included) for our designated point of contact is $_____. The funding source for our point of contact's position within our jurisdiction is not through federal funds.

Sincerely,

APPENDIX B. PROCEDURES FOR LINKING TO THE HAZARD MITIGATION PLAN UPDATE

APPENDIX B.
PROCEDURES FOR LINKING TO THE HAZARD MITIGATION PLAN

Not all eligible local governments within Spokane County are included in the 2020 Spokane County Hazard Mitigation Plan. It is assumed that some or all of these non-participating local governments may choose to "link" to the Plan at some point to gain eligibility for programs under the federal Disaster Mitigation Act. In addition, some of the current planning partners may not continue to meet eligibility requirements due to a lack of participation as prescribed by the plan. The following "linkage" procedures define the requirements established by the planning partners for dealing with an increase or decrease in the number of planning partners linked to this plan. It should be noted that a currently non-participating jurisdiction within the defined planning area is not obligated to link to this plan. These jurisdictions may elect to do their own "complete" plan that addresses all required elements of 44 CFR Section 201.6.

INCREASING THE PARTNERSHIP THROUGH LINKAGE

Eligible linking jurisdictions are instructed to complete ***all*** of the following procedures during this time frame:

- The eligible jurisdiction requests a "Linkage Package" by contacting the Point of Contact (POC) for the plan:

  Mark Conrad
  Planning Coordinator
  Spokane County Department of Emergency Management
  Phone: 509-477-3008
  Email: mconrad@spokanecounty.gov

- The POC will provide a linkage packages that includes:
  - Copy of Volume 1 and 2 of the plan
  - Planning partner's expectations package.
  - A sample "letter of intent" to link to the Hazard Mitigation Plan Update.
  - A Special Purpose District or City template and instructions.
  - FEMA's 2013 Hazard Mitigation Catalog
  - A copy of Section 201.6 of Chapter 44, the Code of Federal Regulations (44 CFR), which defines the federal requirements for a local hazard mitigation plan.
- The new jurisdiction will be required to review both volumes of the Hazard Mitigation Plan Update, which includes the following key components for the planning area:

  - The planning area risk assessment
  - Goals and objectives
  - Plan implementation and maintenance procedures
  - Comprehensive review of alternatives
  - Countywide initiatives.

  Once this review is complete, the jurisdiction will complete its specific annex using the template and instructions provided by the POC. Technical assistance can be provided upon request. This TA may be provided by the POC or any other resource within the Planning Partnership or a currently participating City or Special Purposes District partner. The POC will determine who will provide the TA and the possible level of TA based on resources available at the time of the request.

- The new jurisdiction will be required to develop a public involvement strategy that ensures the public's ability to participate in the plan development process. At a minimum, the new jurisdiction must make an attempt to solicit public opinion on hazard mitigation at the onset of this linkage process and a minimum of one public meeting to present their draft jurisdiction specific annex for comment, prior to adoption by the governing body. The Planning Partnership will have resources available to aid in the public involvement strategy such as the Plan website. However, it will be the new jurisdiction's responsibility to implement and document this strategy for incorporation into its annex. It should be noted that the Jurisdictional Annex templates ***do not*** include a section for the description of the public process. This is because the original partnership was covered under a uniform public involvement strategy that covered the planning area described in Volume 1 of the plan. Since new partners were not addressed by that strategy, they will have to initiate a new strategy and add a description of that strategy to their annex. For consistency, new partners are encouraged to follow the public involvement format utilized by the initial planning effort as described in Volume 1 of the plan.
- Once their public involvement strategy is completed and they have completed their template, the new jurisdiction will submit the completed package to the POC for a pre-adoption review to ensure conformance with the plan format.
- The POC will review the following:
  - Documentation of Public Involvement strategy
  - Conformance of template entries with guidelines outlined in instructions
  - Chosen initiatives are consistent with goals, objectives and mitigation catalog of the Planning Area Hazard Mitigation Plan Update
  - A Designated point of contact

  - A ranking of risk specific to the jurisdiction.

  The POC may utilize members of the Planning Team or other resources to complete this review. All proposed linked annexes will be submitted to the Planning Team for review and comment prior to submittal to the Washington Emergency Management Division (WAEMD).

- Plans approved and accepted by the Planning Team will be forwarded to WAEMD for review with a cover letter stating the forwarded plan meets local approved plan standards and whether the plan is submitted with local adoption or for criteria met/plan not adopted review.
- WAEMD will review plans for federal compliance. Non-Compliant plans are returned to the Lead agency for correction. Compliant plans are forwarded to FEMA for review with annotation as to the adoption status.
- FEMA reviews the new jurisdiction's plan in association with the approved plan to ensure DMA compliance. FEMA notifies new jurisdiction of results of review with copies to WAEMD and approved planning authority.
- New jurisdiction corrects plan shortfalls (if necessary) and resubmits to WAEMD through the approved plan lead agency.
- For plans with no shortfalls from the FEMA review that have not been adopted, the new jurisdiction governing authority adopts the plan (if not already accomplished) and forwards adoption resolution to FEMA with copies to lead agency and WAEMD.
- FEMA regional director notifies new jurisdiction governing authority of plan approval.

The new jurisdiction plan is then included with the regional plan with the commitment from the new jurisdiction to participate in the ongoing plan implementation and maintenance.

DECREASING THE PARTNERSHIP

The eligibility afforded under this process to the planning partnership can be rescinded in two ways. First, a participating planning partner can ask to be removed from the partnership. This may be done because the partner has decided to develop its own plan or has identified a different planning process for which it can gain eligibility. A partner that wishes to voluntarily leave the partnership shall inform the POC of this desire in writing. This notification can occur any time during the calendar year. A jurisdiction wishing to pursue this avenue is advised to make sure that it is eligible under the new planning effort, to avoid any period of being out of compliance with the Disaster Mitigation Act.

After receiving this notification, the POC shall immediately notify both WAEMD and FEMA in writing that the partner in question is no longer covered by the Hazard Mitigation Plan Update,

and that the eligibility afforded that partner under this plan should be rescinded based on this notification.

The second way a partner can be removed from the partnership is by failure to meet the participation requirements specified in the "Planning Partner Expectations" package provided to each partner at the beginning of the process, or the plan maintenance and implementation procedures specified in Volume 1 of the plan. Each partner agreed to these terms by adopting the plan.

Eligibility status of the planning partnership will be monitored by the POC. The determination of whether a partner is meeting its participation requirements will be based on the following parameters:

- Are progress reports being submitted annually by the specified time frames?
- Are partners notifying the POC of changes in designated points of contact?
- Are the partners supporting the Planning Partners by attending designated meetings or responding to needs identified by the body?
- Are the partners continuing to be supportive as specified in the Planning Partners expectations package provided to them at the beginning of the process?

Participation in the plan does not end with plan approval. This partnership was formed on the premise that a group of planning partners would pool resources and work together to strive to reduce risk within the planning area. Failure to support this premise lessens the effectiveness of this effort. The following procedures will be followed to remove a partner due to the lack of participation:

- The POC will advise the Planning Partnership of this pending action and provide evidence or justification for the action. Justification may include multiple failures to submit annual progress reports, failure to attend meetings determined to be mandatory by the Planning Partnership, failure to act on the partner's action plan, or inability to reach designated point of contact after a minimum of five attempts.
- The Planning Partnership will review information provided by POC and determine action by a vote. The Planning Partnership will invoke the voting process established during the formation of this body.
- Once the Planning Partnership has approved an action, the POC will notify the planning partner of the pending action in writing via certified mail. This notification will outline the grounds for the action and ask the partner if it is their desire to remain as a partner. This notification shall also clearly identify the ramifications of removal from the partnership. The partner will be given 30 days to respond to the notification.

- Confirmation by the partner that they no longer wish to participate or failure to respond to the notification shall trigger the procedures for voluntary removal discussed above.
- Should the partner respond that they would like to continue participation in the partnership, they must clearly articulate an action plan to address the deficiencies identified by the POC. This action plan shall be reviewed by the Planning Partnership to determine whether the actions are appropriate to rescind the action. Those partners that satisfy the Planning Partnership's review will remain in the partnership, and no further action is required.
- Automatic removal from the partnership will be implemented for partners where these actions have to be initiated more than once in a 5-year planning cycle

AGENDA ITEM NO.: 11.A.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Meeting Minutes

Dept of Origin: **Dept. Head Approval:**

Exhibit(s):
April 14, 2026, Meeting Minutes Draft

Expenditure Required	
Budgeted	
City Program	

Summary Statement

Recommended Action

Approve the April 14, 2026 Meeting Minutes.

CITY COUNCIL MEETING
TUESDAY, APRIL 14, 2026,
HELD IN PERSON & REMOTELY

6:00 P.M. Regular Session:

Invocation: Given by Mayor Kaminskas.

Pledge of Allegiance: Led by the Mayor, City Council and Staff.

Call to Order: Mayor Kaminskas called the meeting to order at 6:00 p.m.

Roll Call: City officials who physically attended the meeting: Mayor Kaminskas; Mayor Pro Tem Dunne; Councilmembers Severs, Kurtz, Darrow, Klingler, Fisher, and Ball; Mark McAvoy, City Administrator; Sean Boutz, City Attorney; Deputy Chief Darin Morgan; Jandy Humble, Library Director; David Goehner, Communications Specialist; Ben Turner, Public Works Director; Dan Maus, Horticulture Division Supervisor; Shane Miller, IT Manager; and Rochelle Caton, City Clerk.

City officials who remotely attended the meeting via Zoom: Kyle Dixon, Finance Director; Jen Camp, Parks and Recreation Director; and Amy Mullerleile, Interim Community Development Director.

Agenda Approval: Mayor Pro Tem Dunne moved to approve the agenda as presented. Councilmember Severs seconded the motion, which passed unanimously.

Citizen Comments:

Lynn Atkins, a city resident, provided comments regarding the Capital Facilities Plan.
Tom Sahlberg, a city resident, provided comments regarding the Comp Plan.
Mark Saba, a city resident, provided comments regarding the new City Hall development.
Craig Fobes, a city resident, provided comments regarding the Capital Facilities Plan.

Announcements / Proclamations / Special Presentations:

Spokane Conservation District: Vikki Carter, Director of the Spokane Conservation District provided a presentation including the Rate and Charges Proposal that will be forthcoming in 2027. Questions were asked and answered.

Proclamation- Arbor Day: Rochelle Caton, City Clerk, read the proclamation. Mayor Pro Tem Dunne moved to affirm the proclamation, seconded by Councilmember Severs. The motion carried unanimously. Mayor Kaminskas then read the remainder of the proclamation, recognizing April 24, 2026, as Arbor Day.

Volunteer Recognition: City Administrator McAvoy recognized and presented a letter of appreciation to Joko Cailles for volunteering and providing legislative analysis during the recent short session, assisting in monitoring the city's 2026 legislative priorities.

Reports & Inquiries:

City Council: Mayor Pro Tem Dunne provided an update on attending the AWC Council Leaders Exchange in Ellensburg, Washington, as well as participating in a walking tour of local correctional facilities with the Safe and Healthy Taskforce.

Councilmember Ball provided an update on recently attended training sessions and meetings, including CERT Training, the Spokane River Forum, and the Regional Council of Governments.

Mayor: Mayor Kaminskas provided an update on recent and upcoming meetings, including the Spokane Council Elected Officials Meeting, GSI Regional Advocacy Board, MultiCare Elected Officials Listening Session, and the Arbor Day tree planting, among others.

City Administrator: City Administrator McAvoy provided updates and reminders. He then invited Deputy Chief Morgan, who read a letter of commendation recognizing School Resource Officer David Howard for his impactful service.

Jandy Humble, Library Director, then spoke about her recent completion of the High-Performance Leadership Academy for Professional Development.

Community Engagement Commission: Robin Bekkedahl, Community Engagement Commission Member, presented the commission's City of Liberty Lake logo refresh strategy. Council discussion followed, and consensus was reached to revise the timeline and communication plan to accelerate rollout and meet the anticipated July 2026 completion date.

Workshop Discussions:

20-Year Capital Facilities Plan: Ben Turner, Public Works Director, provided a presentation regarding the 20-year Capital Facilities Plan. Questions were asked and answered throughout. A final version will come before the Council at a future meeting.

Ordinance 142 repeal: Kyle Dixon, Finance Director, provided a brief presentation on repealing Ordinance 142 as part of a broader effort to clean up the municipal code and eliminate conflicting or outdated provisions. Questions were asked and addressed throughout.

Memorandum of Understanding (MOU) between the cities of Liberty Lake, Airway Heights, Millwood, Medical Lake, and Cheney: City Administrator McAvoy provided an overview of the MOU between the cities of Liberty Lake, Airway Heights, Millwood, Medical Lake, and Cheney. Discussion ensued, and questions were asked and answered. With Council consensus reached, this item will return for action at the April 21, 2026, meeting.

General Business – Consent Agenda: Mayor Pro Tem Dunne made a motion to approve Consent Agenda Items 10.A, 10.B, 10.C, 10.D, 10.E, 10.F, 10.G. and 10. H.

The motion was seconded by Councilmember Severs, passing unanimously, approving the following items:

10.A Approve the March 17, 2026, Meeting Minutes.

10.B Approve the March 14, 2026, vouchers and the March 1-15 payroll and benefits in an amount not to exceed $1,126,507.48.

10.C Special Inspection Services Contract with GeoProfessional Innovation for the New City Hall Project.

10.D Construction Services Contract for Trash Enclosure at Ballfields Parking Lot

10.E Turner & Townsend Heery Project Management Services Agreement

Extension.

10.F Construction Services contract with KB Markings LLC to re-stripe Madsen Road north of Appleway Avenue.

10.G Annual maintenance fee for Bitco and Permittrax Software.

10.H Project Management Services Task Order with Turner & Townsend Heery for the Parks and Recreation Facility Project:

General Business - Action Items:

11.A Donation - LL Historical Society Pavillion Park Sign: Mayor Pro Tem Dunne moved to approve Item 11.A. The motion was seconded by Councilmember Severs. Jen Camp, Parks and Recreation Director, provided additional information about the donation. Questions were asked and answered. The Mayor called for a vote, and the motion passed unanimously.

Council Comments: Mayor Pro Tem Dunne had a question regarding item 10.F. Ben Turner, Public Works Director, provided answers.
Councilmember Ball raised questions regarding dates of upcoming events. Questions were answered by staff.

Public Hearings / Appeals-No items currently:

Resolutions:

Resolution No. 12-156H, Amending the City Council Rules of Procedure:

City Administrator McAvoy provided an overview of the principal changes incorporated in the resolution. Rochelle Caton, City Clerk, read the resolution by title only. Mayor Pro Tem Dunne moved to approve Resolution 12-156H as presented. The motion was seconded by Councilmember Fisher. No public comments were received. The motion passed unanimously.

Ordinances:

Ordinance 142A - An Ordinance of the City of Liberty Lake, Washington, Repealing Ordinance 142 Adopting Regulations for Special Events: Rochelle Caton, City Clerk, read Ordinance 142A by title only (first reading). Mayor Pro Tem Dunne moved to suspend the rules of procedure and proceed to a second reading. Councilmember Ball seconded the motion, which passed unanimously.

Rochelle Caton then read Ordinance 142A for the second reading. No public comments were received. Mayor Pro Tem Dunne moved to approve the ordinance, seconded by Councilmember Severs. The motion passed unanimously.

Emergency Ordinances-No items currently:

Introduction of Upcoming Agenda Items: Upcoming workshop items were discussed.

Citizen Comments: Craig Fobes, a city resident, provided comments related to the library size in the Capital Facilities Plan.

Executive Session:

Executive Session per RCW 42.30.110(1)(g) Evaluation of the qualifications of an applicant for public employment.:

At 8: 25 p.m., the Mayor and Council retreated to executive session pursuant to RCW 42.30.110(1)(g) regarding the qualifications of an applicant for public employment. Mayor and Council reconvened in council chambers at 8:40.

Adjournment: With there being no further business, the meeting was adjourned at 8:40 p.m.

These minutes were approved April 21, 2026.

_____

Cris Kaminskas, Mayor
City of Liberty Lake

_____

These minutes were prepared by Rochelle Caton. This meeting was also recorded. Anyone who desires to listen to the recording may visit the city's website or contact the City Clerk.

AGENDA ITEM NO.: 11.B.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: April 21, 2026 Vouchers

Dept of Origin: **Dept. Head Approval:** Kyle Dixon

Exhibit(s):
4.21.2026 Vouchers, 04212026 Council

Expenditure Required	
Budgeted	
City Program	

Summary Statement

Recommended Action

Approve the April 21, 2026, vouchers and the March 16–31 payroll and benefits in an amount not to exceed $744,090.01.

City of Liberty Lake

Consent Agenda for April 21, 2026
City Council Meeting

Report from the Mayor for pending claims and payment of previously approved obligations through April 7, 2026

Payee	Description	Amount
	See attached voucher report.	
Total vouchers through April 21, 2026		
Check(s)	36179-36222	$ 190,012.47
EFT		$ 128,861.64
		$ 318,874.11
March 16-31, 2026, payroll and benefits		
Check(s)		
EFT		$ 425,215.90
	TOTAL	**$ 744,090.01**

RECOMMENDATION:	Approve and Authorize for Payment
ATTACHMENTS:	All original invoices are on file with the City Treasurer.

SIGNATURES:

City Clerk

Mayor

City Council Member

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
1910	04/21/2026	Claims	3	EFT	ACRANET	534.65	SERVICES
		110 - 542 90 41 00 - Maint Admin & Overhead - Prof				231.63	MCKEEVER, MORGAN / MACINNES, SHAYNE / ROBISON, JUSTIN / SCALF, BRANDON BACKGROUND CHECKS
		001 - 558 50 41 00 - CP&ED-Professional Services				76.30	LEMONS, MARIANNE BACKGROUND CHECK
		001 - 571 00 41 00 - Recreational Activities Professio				71.39	MCREE, CATHERINE BACKGROUND CHECK
		420 - 576 65 41 00 - Professional Services-Golf Greer				155.33	GONZALES, ANTONIO / PRINS, CORNELIS / PEARSON, SHAWN BACKGROUND CHECKS
1911	04/21/2026	Claims	3	EFT	ACUSHNET COMPANY	1,522.92	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				625.00	GOLF BALLS
		420 - 576 61 34 01 - Pro Shop Merchandise				523.82	GOLF CLUBS
		420 - 576 61 34 01 - Pro Shop Merchandise				374.10	GOLF CLUBS
1912	04/21/2026	Claims	3	EFT	AMAZON CAPITAL SERVICES	4,350.55	MATERIALS
		001 - 518 80 30 00 - Supplies For Consumption IT				43.56	PHONE CASES
		001 - 521 10 31 00 - Law Enforcement Supplies				89.62	PAPER PLATES, PLASTIC FORKS, DESK DRAWER ORGANIZER TRAY SET
		110 - 542 70 31 01 - Roadside - Supplies				33.13	VEHICLE FLASHING STROBE LIGHTS
		110 - 542 70 31 01 - Roadside - Supplies				69.28	JUMP STARTERS
		110 - 542 70 31 02 - Roadside - Horticulture Supplies				85.08	HIGH VIS SHIRTS
		110 - 542 70 31 02 - Roadside - Horticulture Supplies				90.42	MULTI TOOL, DAILY PLANNER, WALL CALENDAR
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				157.02	GARDEN KNIFE, NOISE REDUCING EARMUFFS, DRY ERASE MARKERS, BYPASS PRUNER AND LEATHER HOLSTER
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				152.56	HIS VIS SHIRTS, BATTERIES
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				103.52	HI-VIS COOLING SHIRTS
		001 - 558 50 31 00 - CP&ED Supplies				64.23	POLO SHIRTS
		001 - 558 50 31 00 - CP&ED Supplies				13.03	SMALL WHITEBOARD
		001 - 571 00 31 04 - Special Events Supplies				144.61	CAMERA TRIPOD, WIRELESS MICROPHONE
		001 - 571 00 31 04 - Special Events Supplies				8.72	MICROPHONE WINDSCREEN
		001 - 571 00 31 04 - Special Events Supplies				686.59	PORTABLE INVERTER GENERATOR, INFLATABLE COSTUMES, YARD GAMES
		001 - 572 10 31 00 - Library Supplies				15.99	ROTARY BLADES
		001 - 572 10 31 00 - Library Supplies				98.09	PORTABLE POWER STATION
		001 - 572 10 31 00 - Library Supplies				-14.50	RETURN OF LOW-PILE CARPET RUNNER
		001 - 572 10 31 00 - Library Supplies				343.78	BLACK TONER CARTRIDGE, CYAN TONER CARTRIDGE, COFFEE PODS
		001 - 572 10 31 00 - Library Supplies				19.61	SMALL DESK LAMP POWER STRIP
		001 - 572 10 31 00 - Library Supplies				13.07	USB DESK FAN
		001 - 572 10 31 05 - Children & Adult Prgrm Supplies				283.23	FLOWER SHAPE CUT OUTS, TABLECLOTH, SANDWICH COOKIES, COMPOSTABLE BOWLS, METAL BUCKETS, CHOCOLATE PUDDING CUPS, FLOWER PAPER CRAFTS, CEREAL, CAMERA, CRANBERRIES, FLOWER SEEDS, SUNFLOWER BUTTER
		001 - 572 10 31 05 - Children & Adult Prgrm Supplies				46.81	GUMMY CANDY, POTTING SOIL MIX
		001 - 572 10 31 05 - Children & Adult Prgrm Supplies				50.81	PAPER FLOWERS GIFT BAGS, SUNFLOWER SEED BUTTER, GEMS STICKERS, HOLOGRAPHIC STICKERS
		001 - 572 20 34 06 - Library Books & Other Materials				32.97	BOOKS, GUITAR TUNER CLIP
		001 - 572 20 34 06 - Library Books & Other Materials				132.13	BOOKS
		420 - 576 61 31 03 - Maintenance Supplies				435.98	TIRES
		420 - 576 61 31 03 - Maintenance Supplies				38.76	FUEL FILTERS
		420 - 576 61 31 03 - Maintenance Supplies				69.29	JUMP STARTERS

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
			420 - 576 65 31 01 - Maintenance Of Golf Course			166.74	WATERPROOF PANTS, WATERPROOF SAFETY RAIN PANTS
			420 - 576 65 31 01 - Maintenance Of Golf Course			289.87	HI-VISIBILITY WATERPROOF SAFETY RAIN PANTS, HI VIS WINDBREAKER JACKETS, SOFTSHELL REFLECTIVE JACKETS
			420 - 576 65 31 01 - Maintenance Of Golf Course			10.89	PASS THROUGH CONNECTORS
			001 - 576 80 30 01 - Parks - Horticulture Supplies			33.56	PLASTIC NURSERY POTS
			001 - 576 80 31 01 - Parks Supplies			38.76	FUEL FILTERS
			001 - 576 80 31 01 - Parks Supplies			88.51	TURN SIGNAL INDICATOR SWITCH
			001 - 576 80 31 01 - Parks Supplies			69.29	JUMP STARTERS
			001 - 576 80 31 01 - Parks Supplies			1,074.94	MUD-TERRAIN TIRES, BALL JOINTS
			001 - 576 80 31 01 - Parks Supplies			67.08	ENGRAVED MEMORIAL PLATE, TAMPER-PROOF HEX BIT SOCKET SET
			001 - 576 80 31 15 - Ballfields Supplies			61.42	PRIMER VALVE
			001 - 576 80 31 35 - Town Square Supplies			22.88	COUPLING ASSEMBLY
			001 - 576 80 31 35 - Town Square Supplies			175.67	URINAL DIAPHRAGM REBUILD KITS, VALVE MASTER REPAIR KITS
			001 - 594 72 64 00 - Capital Expenditures/Expenses-L			-1,056.45	RETURN OF LAPTOP
1913	04/21/2026	Claims	3	EFT	APOLLO SHEET METAL INC	2,445.69	SERVICES
			001 - 518 30 41 10 - Facility - Professional Services_C			617.49	HVAC PREVENTATIVE MAINTENANCE SVCS
			110 - 518 30 41 20 - Facility - Professional Services_P			274.95	HVAC PREVENTATIVE MAINTENANCE SVCS
			001 - 521 50 41 00 - Facility - Professional Services_P			776.62	HVAC PREVENTATIVE MAINTENANCE SVCS
			001 - 572 50 41 00 - Facility - Professional Services_Li			776.63	HVAC PREVENTATIVE MAINTENANCE SVCS
1914	04/21/2026	Claims	3	EFT	AT&T MOBILITY LLC	7,411.73	SERVICES
			001 - 511 60 42 00 - Legislative-Telephone,Internet,P			274.71	CELL PHONE
			001 - 513 10 42 00 - Executive - Communications			91.74	CELL PHONE
			001 - 514 23 42 00 - Administrative Services-Telepho			198.12	CELL PHONE
			001 - 518 10 40 00 - Human Resources Services			50.92	CELL PHONE
			001 - 518 30 42 00 - Central Services - Communicatic			137.61	CELL PHONE
			001 - 518 80 42 00 - Information Technology Services			274.03	CELL PHONE/MIFI
			001 - 521 10 42 00 - Law Enforcement-Telephone,Int			3,978.90	CELL PHONE/LAPTOP
			110 - 542 90 42 00 - Maint Admin & Overhead - Tele			603.58	CELL PHONE
			001 - 558 60 42 00 - Communications-Planning			640.55	CELL PHONE/TABLET
			001 - 571 00 41 00 - Recreational Activities Professior			45.87	CELL PHONE
			420 - 576 61 42 01 - Golf Pro Shop-Telephone,Interne			92.81	MIFI
			001 - 576 80 41 25 - Pavillion Park-Professional Servi			40.54	MIFI
			001 - 576 80 42 00 - Parks-Telephone,Internet,Postag			941.81	CELL PHONE
			001 - 576 80 42 45 - Orchard Park-Telephone,Interne			40.54	MIFI
1915	04/21/2026	Claims	3	EFT	AW REHN & ASSOCIATES	1,508.80	SERVICES
			001 - 514 23 41 00 - Administrative Services-Professi			382.50	MONTHLY SVC FEE MAR 2026-85 PARTICIPANTS
			502 - 517 30 29 00 - Health Insurance Services			718.20	EMPLOYER FUNDING NOTIFICATION 04/02-04/05/2026
			502 - 517 30 29 00 - Health Insurance Services			408.10	EMPLOYER FUNDING NOTIFICATION 04/06-04/12/2026
1916	04/21/2026	Claims	3	EFT	IOSIF BRICI	301.00	TRAVEL
			001 - 521 10 43 00 - Law Enforcement Travel-Lodging			301.00	PER DIEM FOR PERPPERBALL INSTRUCTOR/ARMORER CERT COURSE
1917	04/21/2026	Claims	3	EFT	CALLAWAY	125.49	MERCHANDISE
			420 - 576 61 34 01 - Pro Shop Merchandise			125.49	BEANIE, VISORS, HAT
1918	04/21/2026	Claims	3	EFT	CITY SERVICE VALCON-CREDIT CARD	1,344.76	FUEL
			110 - 542 90 32 00 - Maint Admin & Overhead - Fuel			1,344.76	FUEL

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
1919	04/21/2026	Claims	3	EFT	CMC DESIGN LLC	902.34	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				902.34	POUCH BAGS, MARKER SETS, HEAD COVERS, LEATHER HEAD COVERS, HATS, TOUR TEE COMBO PACKS
1920	04/21/2026	Claims	3	EFT	COBRA PUMA GOLF INC	1,892.82	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				1,169.50	GOLF CLUBS
		420 - 576 61 34 01 - Pro Shop Merchandise				-620.00	RETURN OF SHORTS
		420 - 576 61 34 01 - Pro Shop Merchandise				219.67	GOLF CLUB
		420 - 576 61 34 01 - Pro Shop Merchandise				1,123.65	HATS, GLOVES
1921	04/21/2026	Claims	3	EFT	COUNTRY LOCK & KEY INC	55.63	MATERIALS
		420 - 576 61 31 04 - Facilities - Supplies_Trailhead				38.19	5 BEST KEYS, 2 SMALL MAGNETIC KEY BOXES
		420 - 576 61 31 04 - Facilities - Supplies_Trailhead				17.44	5 BEST KEYS, 2 SMALL MAGNETIC KEY BOXES
1922	04/21/2026	Claims	3	EFT	COUNTRY VISTA CAR WASH	373.50	SERVICES
		001 - 521 10 41 00 - Law Enforcement-Professional S				305.00	61 WASHES
		110 - 542 90 41 00 - Maint Admin & Overhead - Prof				68.50	7 WASHES
1923	04/21/2026	Claims	3	EFT	ENVISIONWARE INC	583.44	SUBSCRIPTION
		001 - 572 10 41 01 - Software Maint/data Ba				583.44	VERIFONE TERMINAL GATEWAY SUBSCRIPTION 04/01/2026-03/31/2027
1924	04/21/2026	Claims	3	EFT	ALFREDO ESPARZA 3RD	473.00	TRAVEL
		001 - 521 10 43 00 - Law Enforcement Travel-Lodgin				473.00	PER DIEM FOR DT INSTRUCTOR TRAINING
1925	04/21/2026	Claims	3	EFT	EXECUTECH UTAH LLC	2,430.42	SERVICES
		001 - 518 80 41 00 - Information Technology Service				2,430.42	APRIL 2026 IT SVCS
1926	04/21/2026	Claims	3	EFT	FEED CO LLC	248.47	MATERIALS
		001 - 576 80 31 01 - Parks Supplies				248.47	HAY ALFALFA COMPRESSED, HAY TIMOTHY COMPRESSED, MANNA PRO GOAT TREATS LICORICE, STANDLEE GRAZLEE HONEY GOAT TREATS, HEATED BUCKET, SALT BLOCKS, DECORATIVE STRAW BALES
1927	04/21/2026	Claims	3	EFT	EDWARD G HINKELMAN	157.50	SERVICES
		001 - 572 10 41 01 - Software Maint/data Ba				157.50	ATOZ WORLD TRAVEL RENEWAL
1928	04/21/2026	Claims	3	EFT	HOME DEPOT CREDIT SERVICES	3,548.72	MATERIALS
		001 - 518 30 31 00 - Facility - Central Supplies				209.50	SCREWDRIVER, VOLTAGE DETECTORS, BREAKER FINDER ACCESSORY KIT, GFCI RECEPTACLE TESTER, BREAKER FINDER, ZIP POUCHES
		001 - 518 30 31 00 - Facility - Central Supplies				7.46	FELLING WEDGE
		001 - 518 30 31 10 - Facility - Supplies_City Hall				87.63	LIGHT BULBS, CAUTION TAPE
		001 - 521 50 31 00 - Facility - Supplies_Public Safety				48.98	SWIVEL HEAD RIVET KIT
		110 - 542 70 31 01 - Roadside - Supplies				66.34	LANDSCAPE LIGHTING CABLE
		110 - 542 70 31 01 - Roadside - Supplies				-67.58	RETURN OF LANDSCAPE LIGHTING CABLE
		110 - 542 70 31 02 - Roadside - Horticulture Supplies				160.11	NURSERY CONTAINERS, THUMB CONTROL WAND, GROWING MIX, TARP, POTTING MIX
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				81.68	SELF DRAINING VACUUM BREAKERS
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				27.23	WATERING HOSE
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				-81.68	RETURN OF SELF DRAINING VACUUM BREAKERS
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				58.79	HOSE CONNECTION VACUUM BREAKERS
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				128.36	GLOVES, FLASHLIGHTS, FOLDING KNIVES, UTILITY KNIFE
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				29.64	MARKING SPRAY PAINT, GLOVES

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				338.59	PAINT ROLLER COVER WITH FRAME, VALVE RESPIRATORS, STRAINERS, HAND-TIGHT GUARD, SPRAY TIP, PLASTIC ROLLER TRAY, CARDBOARD PAINT SHIELDS, PAINT, BUCKET
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				32.44	ALUMINUM ANGLE
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				107.92	BRAIDED CABLE, SPRAY PAINT, GLASS CLEANER
		001 - 572 10 31 05 - Children & Adult Prgrm Supplies				12.77	WHITEWOOD STUDS
		001 - 572 50 31 00 - Facilities - Supplies_Library				54.48	LED POST CAPS
		001 - 572 50 31 00 - Facilities - Supplies_Library				213.78	TUBE LIGHT BULBS
		001 - 572 50 31 00 - Facilities - Supplies_Library				-217.78	RETURN OF TUBE LIGHT BULBS
		001 - 572 50 31 00 - Facilities - Supplies_Library				138.03	TUBE LIGHT BULBS
		420 - 576 61 31 00 - Pro Shop Supplies				24.57	DUAL FLEX CONNECT SHUT-OFF HOSE ADAPTOR, HI-VISIBILITY NOZZLE
		420 - 576 61 31 03 - Maintenance Supplies				126.75	SLIP JOIN, DIAGONAL PLIERS, SELF-ADJUSTING PIPE WRENCH, BAR CLAMPS, SHARPIE, WIRE HOOKS, SEALANT, MENDING PLATE, BRACE, WOOD GLUE
		420 - 576 61 31 03 - Maintenance Supplies				81.85	MICROFIBER CLOTHS, BOTTLED WATER, WORK GLOVES, COMBO LOCK, UTILITY GLOVES
		420 - 576 61 31 04 - Facilities - Supplies_Trailhead				355.34	KEYLESS TOUCHSCREEN DOOR LOCK AND HANDLE, KEYLESS TOUCHSCREEN DEADBOLT
		420 - 576 65 31 01 - Maintenance Of Golf Course				231.50	EPOXY FLOOR PAINT KIT, PRESS CONNECT INLET TO COMPRESSION OUTLET STRAIGHT VALVE, PAINT, MINERAL SPIRITS
		420 - 576 65 31 01 - Maintenance Of Golf Course				75.88	REAR-TRIGGER 7-PATTERN NOZZLES, RUBBER HOSE
		420 - 576 65 31 01 - Maintenance Of Golf Course				365.79	PAINT, PAINT SPRAYER
		420 - 576 65 31 01 - Maintenance Of Golf Course				134.75	RUBBER HOSE, REUSABLE RESPIRATORS
		001 - 576 80 30 01 - Parks - Horticulture Supplies				39.53	GROWING MIX
		001 - 576 80 30 01 - Parks - Horticulture Supplies				167.48	POTTING MIX, ODOR ABSORBER, SUNSHINE MIX, NURSERY CONTAINERS
		001 - 576 80 31 01 - Parks Supplies				36.37	PTFE TAPE, PTFE THREAD TAPE, GAS VALL VALVE, VRASS BALL VALVE
		001 - 576 80 31 01 - Parks Supplies				126.74	SLIP JOIN, DIAGONAL PLIERS, SELF-ADJUSTING PIPE WRENCH, BAR CLAMPS, SHARPIE, WIRE HOOKS, SEALANT, MENDING PLATE, BRACE, WOOD GLUE
		001 - 576 80 31 01 - Parks Supplies				81.85	MICROFIBER CLOTHS, BOTTLED WATER, WORK GLOVES, COMBO LOCK, UTILITY GLOVES
		001 - 576 80 31 01 - Parks Supplies				34.50	NITRILE GLOVES, S TRAP
		001 - 576 80 31 15 - Ballfields Supplies				-122.41	RETURN OF CONCRETE MIX AND PALLET
		001 - 576 80 31 15 - Ballfields Supplies				9.12	WHITEWOOD COMMON BOARD
		001 - 576 80 31 15 - Ballfields Supplies				2.31	PLUG
		001 - 576 80 31 25 - Pavillion Park Supplies				5.43	COMB CAP
		001 - 576 80 31 55 - Rocky Hill Park Supplies				105.85	MICROFIBER ROLLS, FLAT CHIP BRUSHES, DUAL BLADE FLOOR SQUEEGEE, SPRAY PAINT, ROUND HEAD ZINC PLATED MACHINE SCREWS, FLAT WASHER, FENDER WASHERS
		001 - 576 80 31 55 - Rocky Hill Park Supplies				228.83	BUCKETS, WASP AND HORNET KILLER, WATERING WANDS, BUNGEES, HOSES
1929	04/21/2026	Claims	3	EFT	HORIZON	1,182.32	MATERIALS

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		110 - 542 70 31 01 - Roadside - Supplies				379.06	PLASTIC VALVES
		110 - 542 70 31 01 - Roadside - Supplies				277.31	HUNTER BLUE JACKET WIRE
		110 - 542 70 31 01 - Roadside - Supplies				102.30	ANTENNA EXTENSION KIT, VALVE BOX STANDS W/ GREEN LIDS
		110 - 542 70 31 01 - Roadside - Supplies				35.38	LATCHING SOLENOID POTTED
		110 - 542 70 31 01 - Roadside - Supplies				16.63	PVC COUPLING, PRO-SPAN REPAIR COUPLING
		001 - 576 80 31 45 - Orchard Park Supplies				145.62	BOW RAKE, ALUMINUM SCOOP SHOVEL
		110 - 595 64 63 00 - Roads/Streets Const. & Other In				226.02	TREATED LODGE POLES
1930	04/21/2026	Claims	3	EFT	HRA VEBA TRUST	4,533.34	CONTRIBUTIONS
		110 - 542 90 28 06 - HRA VEBA				2,040.00	ROBISON, JUSTIN CONTRIBUTIONS
		110 - 542 90 28 06 - HRA VEBA				2,040.00	MACINNES, SHAYNE CONTRIBUTIONS
		310 - 595 30 28 00 - Capital Expenditures/Expenses -				226.67	ROBISON, JUSTIN CONTRIBUTIONS
		310 - 595 30 28 00 - Capital Expenditures/Expenses -				226.67	MACINNES, SHAYNE CONTRIBUTIONS
1931	04/21/2026	Claims	3	EFT	INGRAM LIBRARY SERVICES	1,484.13	BOOKS
		001 - 572 20 34 06 - Library Books & Other Materials				1,484.13	BOOKS
1932	04/21/2026	Claims	3	EFT	LIBERTY LAKE SEWER AND WATER DISTRICT	3,860.02	SERVICES
		001 - 518 30 47 00 - Facility - Utilities_City Hall				550.00	CITY HALL
		001 - 518 30 47 00 - Facility - Utilities_City Hall				75.00	CITY HALL IRR2
		001 - 518 30 47 00 - Facility - Utilities_City Hall				50.00	23129 E MISSION AVE
		001 - 518 30 47 00 - Facility - Utilities_City Hall				110.00	23129 E MISSION AVE-IRR
		001 - 521 50 47 00 - Facility - Utilities_Public Safety				151.80	LLPD/LLML BLDG
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				100.00	HARVARD RD IRR21
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				25.00	LIBERTY LAKE DR IRR1
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				25.00	MDWD VISTAS IRR5
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				25.00	MDWD VISTAS IRR8
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				25.00	MISSION&MOLTER IRR15
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				100.00	MISSION/MOLTER ROUNDABOUT IRR16
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				25.00	MOLTER RD IRR4
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				25.00	MDWD VISTAS IRR7
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				25.00	MDWD VISTAS IRR6
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				25.00	MISSION&SIGNAL IRR
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				75.00	MDWD VISTAS 4 TR C IRR9
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				75.00	WOODBROOK TR B IRR11
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				25.00	LIBERTY LAKE RD IRR22
		410 - 531 00 40 00 - Storm Drainage Utilities - Utilitie				25.00	GRAYHAWK HOA IRRIG PID 55141.3602
		110 - 542 30 47 01 - Roadway - Utility Services_Irriga				75.00	APPLEWAY (A) AVE IRR19
		110 - 542 30 47 01 - Roadway - Utility Services_Irriga				75.00	APPLEWAY (B) AVE IRR20
		110 - 542 90 47 00 - Maint Admin & Overhead Utility				25.00	375 N KRAMER PKWY IRR
		110 - 542 90 47 00 - Maint Admin & Overhead Utility				184.96	375 N KRAMER PKWY
		001 - 572 50 47 00 - Facility - Utilities_Library				68.20	LLPD/LLML BLDG
		420 - 576 61 47 00 - Facilities - Utilities_Trailhead				990.00	TRAILHEAD
		420 - 576 61 47 00 - Facilities - Utilities_Trailhead				100.00	TRAILHEAD GOLF COURSE IRR PID 55155.9145
		420 - 576 61 47 00 - Facilities - Utilities_Trailhead				40.06	WASH STATION GOLF COURSE
		420 - 576 61 47 00 - Facilities - Utilities_Trailhead				25.00	22302 E COUNTRY VISTA DR RR/SETTLER
		001 - 576 80 47 15 - Ballfields Utilities-Elec/Gas,Wtr/S				110.00	BALLFIELDS DRINKING FOUNTAIN/RESTROOMS 23900 E BOONE AVE
		001 - 576 80 47 25 - Pavillion Park Utilities-Elec/Gas,V				110.00	PAVILLION PARK RESTOOM&SPLASH PAD
		001 - 576 80 47 35 - Town Square Utilities-Elec/Gas,V				110.00	TOWN SQUARE PARK
		001 - 576 80 47 35 - Town Square Utilities-Elec/Gas,V				100.00	TOWN SQUARE IRR18
		001 - 576 80 47 55 - Rocky Hill Park Utilities-Elec/Gas				110.00	ROCKY HILL RESTROOMS

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		001 - 576 80 47 55 - Rocky Hill Park Utilities-Elec/Gas				100.00	ROCKY HILL PARK IRR14
		001 - 576 80 47 55 - Rocky Hill Park Utilities-Elec/Gas				100.00	ROCKY HILL PARK WINROCK&MISSION IRR13
1933	04/21/2026	Claims	3	EFT	MARX GOLF OPERATIONS INC	617.49	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				617.49	MAGNET TOWELS
1934	04/21/2026	Claims	3	EFT	MASTERCARD	16,817.42	SERVICES, REGISTRATION, TRAVEL, MATERIALS
		001 - 511 60 41 00 - Legislative - Professional Service				94.99	ZOOM
		001 - 511 60 41 00 - Legislative - Professional Service				94.99	ZOOM
		001 - 513 10 41 00 - Executive-Professional Services				47.97	ZOOM
		001 - 513 10 41 00 - Executive-Professional Services				47.97	ZOOM
		001 - 513 10 41 00 - Executive-Professional Services				10.00	ANNUAL FEE
		001 - 514 23 41 00 - Administrative Services-Professi				10.00	ANNUAL FEE
		001 - 514 23 41 00 - Administrative Services-Professi				10.00	ANNUAL FEE
		001 - 514 23 41 00 - Administrative Services-Professi				65.75	LICENSING FEES
		001 - 514 23 41 00 - Administrative Services-Professi				10.00	ANNUAL FEE
		001 - 514 23 42 00 - Administrative Services-Telepho				15.60	STAMPS
		001 - 514 23 43 00 - Administrative Services Travel-Lo				1,399.53	WORKMAN, HEIDI SHRM 2026 ANNUAL CONFERENCE AIRFARE/HOTEL
		001 - 514 23 43 00 - Administrative Services Travel-Lo				655.81	DIXON, KYLE GFOA ANNUAL CONFERENCE AIRFARE
		001 - 514 23 43 00 - Administrative Services Travel-Lo				159.30	CATON, ROCHELLE WA MUNICIPAL CLERKS ASSOCIATION HOTEL
		001 - 514 23 43 00 - Administrative Services Travel-Lo				449.43	CATON, ROCHELLE HOTEL FOR WMCA CONFERENCE
		001 - 514 23 49 01 - Administrative Services-Dues,Su				220.00	CATON, ROCHELLE WA MUNICIPAL CLERKS ASSOCIATION REGISTRATION FEE
		001 - 514 23 49 01 - Administrative Services-Dues,Su				2,595.00	WORKMAN, HEIDI SHRM26 IN PERSON REGISTRATION
		001 - 518 10 40 00 - Human Resources Services				15.99	ZOOM
		001 - 518 10 40 00 - Human Resources Services				15.99	ZOOM
		001 - 518 10 40 00 - Human Resources Services				94.19	ROADSIDE SEASONAL RECRUITMENT SPONSORSHIP
		001 - 518 30 49 00 - Central Services-Dues,Subscripti				10.00	ANNUAL FEE
		001 - 518 80 30 00 - Supplies For Consumption IT				125.33	KEYBOARDS
		001 - 518 80 30 00 - Supplies For Consumption IT				27.24	ETHERNET CABLE
		001 - 518 80 41 00 - Information Technology Services				10.00	ANNUAL FEE
		001 - 518 80 41 00 - Information Technology Services				16.35	UNLIMITED IMAGE & VIDEO DOWNLOADS-VECTEEZY
		001 - 521 10 31 00 - Law Enforcement Supplies				611.10	BUSINESS CARDS
		001 - 521 10 31 00 - Law Enforcement Supplies				133.98	RETRACTABLE BANNERS
		001 - 521 10 41 00 - Law Enforcement-Professional S				10.00	ANNUAL FEE
		001 - 521 10 41 00 - Law Enforcement-Professional S				10.00	ANNUAL FEE
		001 - 521 10 41 00 - Law Enforcement-Professional S				10.00	ANNUAL FEE
		001 - 521 10 42 00 - Law Enforcement-Telephone,Int				14.83	POSTAGE
		001 - 521 10 42 00 - Law Enforcement-Telephone,Int				3.29	FAX
		001 - 521 10 43 00 - Law Enforcement Travel-Lodging				15.00	MORGAN, DARIN IA PRO TRAINING PARKING
		001 - 521 10 49 00 - Law Enforcement-Dues,Subscrip				927.82	RIPPEE, JORDAN INDOOR FLIGHT/DRONE SEARCH & RESCUE TRAINING
		110 - 542 90 41 00 - Maint Admin & Overhead - Prof				5.32	ZOOM
		110 - 542 90 41 00 - Maint Admin & Overhead - Prof				5.32	ZOOM
		110 - 542 90 43 00 - Maint Admin & Overhead - Lod				98.73	FUEL
		001 - 558 50 32 00 - CP&ED Fuel Consumed				133.01	MCCARY, THOREN, BLACKWELL FUEL FOR WABO CONFERENCE
		001 - 558 50 41 00 - CP&ED-Professional Services				31.98	ZOOM

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		001 - 558 50 41 00 - CP&ED-Professional Services				31.98	ZOOM
		001 - 558 50 41 00 - CP&ED-Professional Services				10.00	ANNUAL FEE
		001 - 558 50 42 00 - CP&ED-Telephone,Internet,Post				10.48	POSTAGE
		001 - 558 50 43 00 - CP&ED Travel-Lodging,Meals,M				1,700.70	MCCARY, THOREN, BLACKWELL HOTEL FOR WABO CONFERENCE
		001 - 558 50 43 00 - CP&ED Travel-Lodging,Meals,M				199.87	HUDSON-RAU WSAPT SPRING CONFERENCE HOTEL
		001 - 558 50 49 00 - CP&ED-Dues,Subscriptions,Mbrs				50.00	HUDSON-RAU WSAPT MEMBERSHIP APPLICATION: GOV'T VOTING MEMBER
		001 - 558 50 49 00 - CP&ED-Dues,Subscriptions,Mbrs				125.00	HUDSON-RAU WSAPT SPRING REGISTRATION
		001 - 571 00 31 00 - Recreational Activities Supplies				25.46	POLICE STATION EXCURSION SNACKS
		001 - 571 00 49 00 - Recreational Activities-Members				561.19	STEVENS, MICKAEL WFEA SPRING CONFERENCE REGISTRATION
		001 - 572 10 31 00 - Library Supplies				108.00	HOTSPOTS
		001 - 572 10 31 00 - Library Supplies				502.97	TOTE BAGS
		001 - 572 10 41 00 - Library-Professional Services				10.00	ANNUAL FEE
		001 - 572 10 41 00 - Library-Professional Services				-1.00	TEST ON COPY MACHINE REFUND
		001 - 572 10 41 00 - Library-Professional Services				31.98	ZOOM
		001 - 572 10 41 00 - Library-Professional Services				31.98	ZOOM
		001 - 572 10 41 00 - Library-Professional Services				10.00	ANNUAL FEE
		001 - 572 10 41 01 - Software Maint/data Ba				152.59	NORTON SUBSCRIPTION
		001 - 572 10 43 00 - Library Travel-Lodging,Meals,Mi				622.41	HUMBLE, JANDY UBER/HOTEL FOR DIRECTORS MEETING
		001 - 572 10 49 00 - Library-Dues,Subscriptions,Mbrs				14.16	SPOTIFY SUBSCRIPTION
		001 - 572 20 34 06 - Library Books & Other Materials				44.94	MAGAZINES
		001 - 572 40 49 00 - Library-Trainings				244.13	LARKIN, JORDAN WLA CONFERENCE REGISTRATION
		001 - 572 40 49 00 - Library-Trainings				244.13	KITTILSTVED, MIKAYLA WLA CONFERENCE REGISTRATION
		001 - 572 40 49 00 - Library-Trainings				244.13	BESSENT, ERIN WLA CONFERENCE REGISTRATION
		420 - 576 61 31 03 - Maintenance Supplies				62.91	PESTICIDE BOOKS
		420 - 576 61 31 04 - Facilities - Supplies_Trailhead				305.70	GLOBAL SLIDE LATCH W/INDICATOR STANLESS STEEL
		420 - 576 61 42 01 - Golf Pro Shop-Telephone,Intern				252.28	CABLE SVCS
		420 - 576 61 49 01 - Golf-Dues,Subscriptions,Mbrshi				647.86	BURNS, TY SUPERVISOR BOOTCAMP TRAINING
		420 - 576 61 49 01 - Golf-Dues,Subscriptions,Mbrshi				51.50	SHERMAN/DEPAULO PEST RENEWAL LICENSE FEE
		420 - 576 65 41 00 - Professional Services-Golf Greer				5.32	ZOOM
		420 - 576 65 41 00 - Professional Services-Golf Greer				5.32	ZOOM
		111 - 576 80 30 00 - General Parks Supplies				88.93	STORY WALK LAMINATION
		001 - 576 80 31 01 - Parks Supplies				62.90	PESTICIDE BOOKS
		001 - 576 80 41 00 - Parks-Professional Services				5.35	ZOOM
		001 - 576 80 41 00 - Parks-Professional Services				15.99	ZOOM OPS DIR
		001 - 576 80 41 00 - Parks-Professional Services				5.35	ZOOM
		001 - 576 80 41 00 - Parks-Professional Services				15.99	ZOOM OPS DIR
		001 - 576 80 41 00 - Parks-Professional Services				10.00	ANNUAL FEE
		001 - 576 80 41 00 - Parks-Professional Services				7.36	INTEREST/FINANCE CHARGE
		001 - 576 80 41 00 - Parks-Professional Services				10.00	ANNUAL FEE
		111 - 576 80 41 11 - Parks & Arts-Professional Servic				282.31	SOLAR SPOT LIGHT
		001 - 576 80 49 01 - Parks-Registration Fees,Mbrship				349.90	THOMPSON-FINN COMMUNICATION/MANAGING CONFLICT TRAININGS
		001 - 576 80 49 01 - Parks-Registration Fees,Mbrship				21.79	ARLO SUBSCRIPTION
		001 - 576 80 49 01 - Parks-Registration Fees,Mbrship				21.79	ARLO SUBSCRIPTION

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		001 - 576 80 49 01 - Parks-Registration Fees,Mbrship				51.50	SHERMAN/DEPAULO PEST RENEWAL LICENSE FEE
		310 - 594 18 60 00 - Capital Expenditures/Expenses-(				205.00	FUEL STATION PERMIT
		310 - 594 18 60 00 - Capital Expenditures/Expenses-(				448.95	FUEL STATION PERMIT REVIEW
		001 - 594 76 64 01 - Parks-Furniture,Computers&Equ				696.51	HP LASERJET PRINTER PRO - PARKS
1935	04/21/2026	Claims	3	EFT	MOBILE MODULAR	1,083.46	SERVICES
		110 - 518 30 41 20 - Facility - Professional Services_P				541.73	OFFICE RENTAL 01/23-02/21/2026
		110 - 518 30 41 20 - Facility - Professional Services_P				541.73	OFFICE RENTAL 02/22-03/23/2026
1936	04/21/2026	Claims	3	EFT	NATIONAL BARRICADE CO	265.96	MATERIALS
		110 - 542 64 31 00 - Traffic Control Devices - Supplie				265.96	SPEED LIMIT SIGNS
1937	04/21/2026	Claims	3	EFT	NORTHWEST BUSINESS STAMP	52.30	MATERIALS
		001 - 513 10 31 00 - Executive Supplies				17.40	NAME TAG FOR MERKEL, LORI
		001 - 521 10 41 00 - Law Enforcement-Professional S				15.95	ID CARD FOR MAHONEY, JILL
		110 - 542 90 41 00 - Maint Admin & Overhead - Prof				18.95	NAME TAG FOR ROBISON, JUSTIN
1938	04/21/2026	Claims	3	EFT	O'REILLY AUTO PARTS	585.67	MATERIALS
		001 - 521 10 48 00 - Vehicle Maintenance				58.10	HEADLIGHT
		110 - 542 70 31 01 - Roadside - Supplies				129.41	BUTT SPLICES, BATTERY
		110 - 542 70 31 01 - Roadside - Supplies				57.66	BRAIDED LOOMS
		110 - 542 70 31 01 - Roadside - Supplies				11.83	DRIVE KEY
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				117.39	BATTERY, CORE CHARGE
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				23.97	CONNECTOR, WIRE MF CONN, DISCONNECT
		110 - 542 90 41 00 - Maint Admin & Overhead - Prof				-23.98	CORE RETURN
		420 - 576 61 31 03 - Maintenance Supplies				88.66	BATTERY
		420 - 576 61 31 03 - Maintenance Supplies				16.99	PAPER, MCASE FUSES
		001 - 576 80 31 01 - Parks Supplies				88.65	BATTERY
		001 - 576 80 31 01 - Parks Supplies				16.99	PAPER, MCASE FUSES
1939	04/21/2026	Claims	3	EFT	OFFICE DEPOT	479.75	MATERIALS
		001 - 518 10 30 00 - Human Resources Supplies For (				353.64	TONER CARTRIDGES
		001 - 558 50 31 00 - CP&ED Supplies				63.06	NOTES, PAPER CLIPS, BINDER CLIPS, SHARPIE MARKER, COPY PAPER, LAM POUCH
		001 - 576 80 31 01 - Parks Supplies				63.05	NOTES, PAPER CLIPS, BINDER CLIPS, SHARPIE MARKER, COPY PAPER, LAM POUCH
1940	04/21/2026	Claims	3	EFT	OPPORTUNITY INDUSTRIES INC	9,405.17	SERVICES
		001 - 521 50 41 00 - Facility - Professional Services_P				303.67	LLPD-TROUBLESHOOT LIGHTING IN DETECTIVES OFFICE
		001 - 572 50 41 00 - Facility - Professional Services_Li				5,177.50	LLML-INSTALLATION OF (4) POWER POLES AT THE WORKSTATIONS IN THE LIBRARY
		310 - 594 18 60 00 - Capital Expenditures/Expenses-(				3,924.00	PW-INSTALLATION OF A CIRCUIT TO THE NEWLY INSTALLED VEHICLE LIFT
1941	04/21/2026	Claims	3	EFT	OXARC	414.66	SERVICES; MATERIALS
		110 - 542 70 41 00 - Roadside - Professional Services				2.02	SERVICE CHARGE
		110 - 542 70 41 00 - Roadside - Professional Services				15.19	GAS TANK RENTALS
		420 - 576 61 31 03 - Maintenance Supplies				170.79	WELDING HELMET
		420 - 576 61 41 00 - Golf Pro Shop-Professional Serv				2.03	SERVICE CHARGE
		420 - 576 61 41 00 - Golf Pro Shop-Professional Serv				15.20	GAS TANK RENTALS
		420 - 576 65 41 00 - Professional Services-Golf Greer				2.00	SERVICE CHARGE
		420 - 576 65 41 00 - Professional Services-Golf Greer				2.00	SERVICE CHARGE
		420 - 576 65 41 00 - Professional Services-Golf Greer				2.34	SERVICE CHARGE
		420 - 576 65 41 00 - Professional Services-Golf Greer				4.56	SERVICE CHARGE
		420 - 576 65 41 00 - Professional Services-Golf Greer				4.56	SERVICE CHARGE

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		420 - 576 65 41 00 - Professional Services-Golf Greer				22.10	GAS TANK RENTALS
		420 - 576 65 41 00 - Professional Services-Golf Greer				22.80	GAS TANK RENTALS
		420 - 576 65 41 00 - Professional Services-Golf Greer				22.80	GAS TANK RENTALS
		420 - 576 65 41 00 - Professional Services-Golf Greer				20.69	GAS TANK RENTALS
		001 - 576 80 41 00 - Parks-Professional Services				2.03	SERVICE CHARGE
		001 - 576 80 41 00 - Parks-Professional Services				22.09	GAS TANK RENTALS
		001 - 576 80 41 00 - Parks-Professional Services				22.79	GAS TANK RENTALS
		001 - 576 80 41 00 - Parks-Professional Services				22.79	GAS TANK RENTALS
		001 - 576 80 41 00 - Parks-Professional Services				20.68	GAS TANK RENTALS
		001 - 576 80 41 00 - Parks-Professional Services				15.20	GAS TANK RENTALS
1942	04/21/2026	Claims	3	EFT	PROCOM LLC	144.00	SERVICES
		110 - 542 90 41 00 - Maint Admin & Overhead - Prof				144.00	DOT DRUG SCREEN FOR MACINNES, SHAYNE AND ROBISON, JUSTIN
1943	04/21/2026	Claims	3	EFT	PUBLIC SAFETY TESTING INC	224.00	SERVICES
		001 - 521 10 41 00 - Law Enforcement-Professional S				224.00	SUBSCRIPTION FEES Q1 - JANUARY THROUGH MARCH 2026 RECRUITING
1944	04/21/2026	Claims	3	EFT	RODDA PAINT	573.05	MATERIALS
		110 - 542 30 31 01 - Roadway - Supplies_Striping				573.05	2 FINGER FLEX GUN, HOSE, RAC X TIPS
1945	04/21/2026	Claims	3	EFT	ROSEDREW INC	237.84	MATERIALS
		001 - 572 10 31 00 - Library Supplies				237.84	VINYL DVD ALBUM
1946	04/21/2026	Claims	3	EFT	SAMBA HOLDINGS INC	426.18	SERVICES
		001 - 518 10 40 00 - Human Resources Services				426.18	ESSENTIALS SVCS 04/01-04/30/2026, MVR SERVICE FEE / STATE FEE / DATA FEE 03/01-03/31/2026
1947	04/21/2026	Claims	3	EFT	SHEA CARR & JEWEL INC	7,869.25	SERVICES
		001 - 558 60 40 05 - Professional Services - Developr				7,869.25	SVCS THROUGH 02/28-03/27/2026
1948	04/21/2026	Claims	3	EFT	SITEONE LANDSCAPE SUPPLY LLC	2,417.19	MATERIALS
		420 - 576 65 31 01 - Maintenance Of Golf Course				101.12	TURF BUILDER SOIL BULK
		420 - 576 65 31 01 - Maintenance Of Golf Course				101.12	TURF BUILDER SOIL BULK
		001 - 576 80 31 15 - Ballfields Supplies				72.34	BALLFIELDS MIX SOIL CONDITIONER BULK
		001 - 576 80 31 25 - Pavillion Park Supplies				6.68	BULK LOAMY SAND
		001 - 576 80 31 25 - Pavillion Park Supplies				73.83	AGED/DARK BARK FINES BULK
		110 - 595 64 63 00 - Roads/Streets Const. & Other In				932.60	SOD STAPLE FLAT TOPS, WOVEN WEED FABRIC BARRIERS
		110 - 595 64 63 00 - Roads/Streets Const. & Other In				738.94	BULK BASALT CHIP GRAVEL
		110 - 595 64 63 00 - Roads/Streets Const. & Other In				390.56	BULK BASALT CHIP GRAVEL
1949	04/21/2026	Claims	3	EFT	TIRE-RAMA	638.54	SERVICES
		001 - 521 10 48 00 - Vehicle Maintenance				576.49	2021 DODGE CHARGER-DIAGNOSTIC TEST AND LABOR, NEW SEAT BELT BUCKLE, OIL CHANGE
		001 - 521 10 48 00 - Vehicle Maintenance				62.05	2018 FORD EXPLORER POLICE INTERCEPT-OIL CHANGE
1950	04/21/2026	Claims	3	EFT	US CRAFT BRANDS LLC	1,355.42	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				845.00	BALL MARKERS, GOLF CLUB COVERS, GOLF BAG, HATS, SHIRTS, POLOS
		420 - 576 61 34 01 - Pro Shop Merchandise				510.42	BALL MARKERS, GOLF CLUB COVERS
1951	04/21/2026	Claims	3	EFT	VANGUARD CLEANING SYSTEMS	2,505.00	SERVICES
		001 - 518 30 41 10 - Facility - Professional Services_C				526.05	SVCS THROUGH 04/01-04/30/2026
		001 - 521 50 41 00 - Facility - Professional Services_P				1,302.60	SVCS THROUGH 04/01-04/30/2026

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		001 - 572 50 41 00 - Facility - Professional Services_Li				676.35	SVCS THROUGH 04/01-04/30/2026
1952	04/21/2026	Claims	3	EFT	VISIT SPOKANE	7,840.55	TOURISM Q1 2026
		117 - 557 30 41 17 - Intergov't Payment TPA				7,840.55	
1953	04/21/2026	Claims	3	EFT	WASHINGTON STATE DEPARTMENT OF REVENUE	2,067.58	USE TAX Q1 2026
		001 - 511 60 31 00 - Legislative Supplies				2.70	NAME PLATES FOR FISHER, ARLENE & DUNNE, DAN
		001 - 511 60 41 00 - Legislative - Professional Service				8.55	ZOOM
		001 - 513 10 31 00 - Executive Supplies				2.59	NAME TAGS FOR CARLBERG, RALPH & SITTON, BRITTANY
		001 - 513 10 41 00 - Executive-Professional Services				4.32	ZOOM
		001 - 514 23 31 00 - Administrative Services Supplies				4.49	NAME PLATES, NAME PLATE HOLDERS
		001 - 514 23 41 00 - Administrative Services-Professi				1.73	AGILEBITS INC. (1PASSWORD) - ANNUAL BUSINESS LICENSES FOR 2 USERS
		001 - 514 23 41 00 - Administrative Services-Professi				0.83	AGILEBITS INC. (1PASSWORD) - ADDED 1 USER
		001 - 514 23 41 00 - Administrative Services-Professi				-0.06	ROUNDING
		001 - 518 10 40 00 - Human Resources Services				1.44	ZOOM
		001 - 518 30 49 00 - Central Services-Dues,Subscripti				475.92	ASSETPLANNER ANNUAL SOFTWARE SUBSCRIPTION FEE, ASSETPLANNING AND AUDITPLANNER APP FEB 2026 - JAN 202
		001 - 518 80 41 00 - Information Technology Services				0.79	1PASSWORD USER ADD ON 02/01/26-01/01/27
		001 - 521 10 31 00 - Law Enforcement Supplies				3.76	WALMART - BURNER PHONE
		001 - 521 10 35 00 - Law Enforcement Small Tools &				14.33	PACIFIC STEEL & RECYCLING - SQUARE TUBE, HR FLATS, CHANNEL
		001 - 521 10 35 00 - Law Enforcement Small Tools &				253.93	HOLSTERS, RAPID FORCE EXPANSION STANDARD PADDLES, RAPID FORCE QUICK DISCONNECT SYSTEMS
		001 - 521 10 41 00 - Law Enforcement-Professional S				486.87	BLUETEAM NEXTGEN AND IAPRO NEXTGEN SUBSCRIPTIONS 02-01/2026-01/31/2027
		110 - 542 70 31 01 - Roadside - Supplies				0.08	TRAILER BOSS - MAXXD DUMP DOOR HINGES
		110 - 542 70 31 02 - Roadside - Horticulture Supplies				0.23	SPOKANE CONSERVATION DISTRICT - PLANTS
		110 - 542 70 31 02 - Roadside - Horticulture Supplies				0.04	SPOKANE CONSERVATION DISTRICT - PLANTS
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				1.50	FOX TRAILERS - SHOP SUPPLIES
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				0.76	SPALDING AUTO PARTS - TAILGATE
		110 - 542 90 41 00 - Maint Admin & Overhead - Prof				0.48	ZOOM
		001 - 558 50 41 00 - CP&ED-Professional Services				2.88	ZOOM
		001 - 558 50 41 00 - CP&ED-Professional Services				1.62	NAME PLATE
		001 - 572 10 31 00 - Library Supplies				0.43	WALMART - DRY ERASE BAORD
		001 - 572 10 31 00 - Library Supplies				16.11	DVD POLY SLEEVES, BLU-RAY DVD CASES
		001 - 572 10 41 00 - Library-Professional Services				2.88	ZOOM
		001 - 572 10 49 00 - Library-Dues,Subscriptions,Mbrs				32.40	VEACLOUD PLATFORM AND SAFE SPACE REAL-TIME OCCUPANCY MONITORING SUBSCRIPTIONS 03/31/2026-03/31/2027
		001 - 572 20 34 06 - Library Books & Other Materials				49.22	BOOKS
		001 - 572 20 34 06 - Library Books & Other Materials				86.74	BOOKS
		001 - 572 20 34 06 - Library Books & Other Materials				0.29	THE ECONOMIST - DIGITAL PLUS PRINT ANNUAL SUBSCRIPTION 01/28/2026-01/27/2027
		001 - 572 20 34 06 - Library Books & Other Materials				22.71	BOOKS
		001 - 572 20 34 06 - Library Books & Other Materials				37.35	BOOKS
		001 - 572 20 34 06 - Library Books & Other Materials				79.99	BOOKS

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		420 - 576 61 31 00 - Pro Shop Supplies				181.67	SCORECARDS
		420 - 576 61 31 00 - Pro Shop Supplies				122.80	PENCILS
		420 - 576 65 41 00 - Professional Services-Golf Greer				0.48	ZOOM
		001 - 576 80 30 01 - Parks - Horticulture Supplies				0.23	SPOKANE CONSERVATION DISTRICT - PLANTS
		001 - 576 80 30 01 - Parks - Horticulture Supplies				0.04	SPOKANE CONSERVATION DISTRICT - PLANTS
		001 - 576 80 31 01 - Parks Supplies				107.17	DOG WASTE ROLLS BAGS
		001 - 576 80 31 55 - Rocky Hill Park Supplies				24.24	DOG WASTE DEPOT - DOG WASTE BAGS
		001 - 576 80 41 00 - Parks-Professional Services				1.71	ID BADGE FOR BOLLINGER, MEGHAN
		001 - 576 80 41 00 - Parks-Professional Services				0.48	ZOOM
		001 - 576 80 41 00 - Parks-Professional Services				1.44	ZOOM OPS DIR
		111 - 594 76 60 02 - Capital Outlays Public Art				14.71	INSTALLATION OF UTILITY BOX CUSTOMIZED WRAP
		111 - 594 76 60 02 - Capital Outlays Public Art				14.71	INSTALLATION OF UTILITY BOX CUSTOMIZED WRAP
1954	04/21/2026	Claims	3	EFT	WASHINGTON STATE DEPARTMENT OF REVENUE	6,674.64	TH B&O/SALES TAX MAR 2026
		420 - 576 61 40 00 - Business & Occupation, Sales Ta				6,674.64	
1955	04/21/2026	Claims	3	EFT	WASHINGTON STATE DEPT OF REVENUE	3,505.32	LEASEHOLD EXCISE TAX RETURN Q1 2026
		630 - 589 30 00 01 - Rents and Leases Leasehold Exci				3,505.32	
1956	04/21/2026	Claims	3	EFT	WASTE MGMT OF SPOKANE	1,028.50	SERVICES
		001 - 518 30 41 00 - Central Services-Professional Se				514.25	CH GARBAGE SVCS 03/01-03/31/2026
		001 - 576 80 47 45 - Orchard Park Utilities-Elec/Gas,V				514.25	ORCHARD GARBAGE SVCS 03/01-03/31/2026
1957	04/21/2026	Claims	3	EFT	WEST COAST CODE CONSULTANTS INC	390.00	SERVICES
		001 - 558 50 40 04 - CP&ED Cost Recovery All Other				390.00	LIBERTY LAUNCH ACADEMY FIELDHOUSE MEETING - MARTY GILLIS
1958	04/21/2026	Claims	3	EFT	WEX BANK-FUEL CARDS	7,151.10	FUEL
		001 - 521 10 32 00 - Law Enforcement Fuel Consume				7,151.10	LLPD FUEL
1959	04/21/2026	Claims	3	EFT	BEN WICK	3,108.00	SERVICES
		001 - 558 70 41 00 - Econ. Dev. - Advertising				1,554.00	FEB 2026 SPLASH ADS
		001 - 558 70 41 00 - Econ. Dev. - Advertising				1,554.00	MAR 2026 SPLASH ADS
1960	04/21/2026	Claims	3	EFT	WILBUR-ELLIS COMPANY LLC	638.46	MATERIALS
		420 - 576 65 31 01 - Maintenance Of Golf Course				638.46	CONTEC DG 14-7-14 SGN 75, QUALI-PRO PROPICONAZOLE 14.3
1961	04/21/2026	Claims	3	EFT	WILSON SPORTING GOODS	8,395.55	MERCHANDISE
		420 - 576 61 31 00 - Pro Shop Supplies				7,196.62	GOLF BALLS
		420 - 576 61 34 01 - Pro Shop Merchandise				1,198.93	GLOVES
1962	04/21/2026	Claims	3	EFT	YOKES FRESH MARKET	27.30	MATERIALS
		001 - 572 10 31 05 - Children & Adult Prgrm Supplies				27.30	CHIPS, FRUIT SNACKS, STRAWBERRIES
1963	04/21/2026	Claims	3	EFT	ZERO FRICTION LLC	651.05	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				651.05	MINI PACK RACKS AND TEES
1964	04/21/2026	Claims	3	36179	ACE LANDSCAPING CORP	13,897.50	AGENDA ITEM 10.D 03172026 COUNCIL
		410 - 594 31 60 01 - Capital Expenditures/Expenses				13,897.50	BLVD IRRIGATION RENOVATIONS ON MOLTER RD FROM BOONE TO MAXWELL
1965	04/21/2026	Claims	3	36180	ADIDAS AMERICA INC	531.65	MERCHANDISE

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		420 - 576 61 34 01 - Pro Shop Merchandise				531.65	SHORTS
1966	04/21/2026	Claims	3	36181	AED AUTHORITY	801.16	SERVICES
		001 - 518 30 41 00 - Central Services-Professional Se				801.16	AED CONCIERGE PROGRAM RENEWAL 05/01/2026-05/01/2027
1967	04/21/2026	Claims	3	36182	AMERICAN ON-SITE SERVICES	1,770.68	SERVICES
		110 - 542 90 41 00 - Maint Admin & Overhead - Prof				120.00	PORTABLE RESTROOM
		420 - 576 65 41 00 - Professional Services-Golf Greer				125.90	PORTABLE RESTROOM, HAND SANITIZER
		001 - 576 80 41 15 - Ballfields-Professional Services				200.90	PORTABLE RESTROOM, HAND SANITIZER
		001 - 576 80 41 25 - Pavillion Park-Professional Servi				200.90	PORTABLE RESTROOM, HAND SANITIZER
		001 - 576 80 41 35 - Town Square-Professional Servic				190.00	PORTABLE RESTROOM
		001 - 576 80 41 45 - Orchard Park-Professional Servic				401.80	PORTABLE RESTROOMS, HAND SANITIZER
		001 - 576 80 41 55 - Rocky Hill Park-Professional Serv				200.90	PORTABLE RESTROOM, HAND SANITIZER
		001 - 576 80 41 55 - Rocky Hill Park-Professional Serv				35.96	PORTABLE RESTROOM, HAND SANITIZER
		001 - 576 80 41 65 - Centennial Trail Professional Ser				200.90	PORTABLE RESTROOM, HAND SANITIZER
		001 - 576 80 41 65 - Centennial Trail Professional Ser				35.96	PORTABLE RESTROOM, HAND SANITIZER
		001 - 576 80 47 45 - Orchard Park Utilities-Elec/Gas,V				57.46	PORTABLE RESTROOM, HAND SANITIZER
1968	04/21/2026	Claims	3	36183	ASSOCIATED INDUSTRIES MANAGEMENT SERVICE	2,852.00	SERVICES
		001 - 518 10 40 00 - Human Resources Services				2,852.00	EXECUTIVE LEGACY ANNUAL MEMBERSHIP
1969	04/21/2026	Claims	3	36184	AVISTA UTILITIES	20,280.13	UTILITIES
		001 - 518 30 47 00 - Facility - Utilities_City Hall				1,571.59	22710 E COUNTRY VISTA DR CITY HALL
		001 - 518 30 47 00 - Facility - Utilities_City Hall				288.34	22710 E COUNTRY VISTA DR CH LITTLE HOUSE
		001 - 518 30 47 00 - Facility - Utilities_City Hall				48.96	LL RD/CV COMMUNITY MESSAGE BRD
		110 - 518 30 47 20 - Facility - Utilites_Public Works				647.23	375 N KRAMER PKWY MAINTENANCE SHOP PUBLIC WORKS YARD
		110 - 518 30 47 20 - Facility - Utilites_Public Works				871.37	375 N KRAMER PKWY MAINTENANCE SHOP CT SVC
		001 - 521 50 47 00 - Facility - Utilities_Public Safety				2,240.57	LLML/LLPD BLDG
		110 - 542 63 47 00 - Street Lighting - Utility Services_				7,776.32	STREET LIGHTS
		110 - 542 63 47 00 - Street Lighting - Utility Services_				215.28	HARVEST AND MISSION ROUNDABOUT LIGHTS
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				128.90	MOLTER & APPLEWAY SIGNAL
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				88.77	APPLEWAY & LLAKE RD SIGNAL
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				85.72	LLAKE RD & CVISTA SIGNAL
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				32.88	924 N MOLTER RD SCHOOL SPEED SIGN
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				31.92	21806 E MISSION AVE HARVARD RD ROUNDABOUT
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				79.65	APPLEWAY & MADSON TRFC LIGHT
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				57.37	SIGNAL/APPLEWAY TRAFFIC SIGNAL
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				35.22	23500 E MISSION AVE MISSION/MOLTER ROUNDABOUT
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				81.76	20150 E COUNTRY VISTA DR TRAFFIC SIGNAL
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				93.91	COUNTRY VISTA DR&KRAMER PKWY SIGNAL
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				87.05	E COUNTRY VISTA DR & N LEGACY RIDGE DR TRAFFIC LIGHT
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				84.20	HARVARD RD & INDIANA AVE TRAFFIC LIGHT
		110 - 542 64 47 00 - Traffic Control Devices - Utility S				151.29	KRAMER PKWY & MISSION RAB S LIGHTS
		110 - 542 70 47 00 - Roadside - Utility Services_Electr				30.94	HARVARD & INDIANA IRRIG CLOCK
		110 - 542 70 47 00 - Roadside - Utility Services_Electr				41.11	2701 N HARVARD RD MONUMENTS
		110 - 542 70 47 00 - Roadside - Utility Services_Electr				31.15	1425 N LIBERTY LAKE RD SPRINKLER

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		110 - 542 70 47 00 - Roadside - Utility Services_Electr				30.79	23104 E APPLEWAY AVE SPKL IRRIG CLOCK
		110 - 542 70 47 00 - Roadside - Utility Services_Electr				30.77	22427 E APPLEWAY AVE SPKL IRRIG CLOCK
		110 - 542 70 47 00 - Roadside - Utility Services_Electr				30.00	MISSION & KRAMER IRRIG
		001 - 572 50 47 00 - Facility - Utilities_Library				1,006.63	LLML/LLPD BLDG
		420 - 576 61 47 00 - Facilities - Utilities_Trailhead				2,052.37	1102 N LIBERTY LAKE RD TRAILHEAD GOLF COURSE
		420 - 576 61 47 00 - Facilities - Utilities_Trailhead				168.75	1102 N LIBERTY LAKE RD PUMP
		420 - 576 61 47 00 - Facilities - Utilities_Trailhead				1,068.77	22302 E COUNTRY VISTA DR, RESTAURANT
		420 - 576 61 47 00 - Facilities - Utilities_Trailhead				20.93	22302 E COUNTRY VISTA DR TRAILHEAD
		001 - 576 80 47 01 - Parks Utilities-Elec/Gas,Wtr/Swr,				32.84	21851 E WELLINGTON PKWY
		001 - 576 80 47 15 - Ballfields Utilities-Elec/Gas,Wtr/S				88.96	23820 E BOONE AVE LIBERTY LAKE BALL FIELDS
		001 - 576 80 47 25 - Pavillion Park Utilities-Elec/Gas,V				181.94	727 N MOLTER RD PAVILLION PARK IRRIG
		001 - 576 80 47 25 - Pavillion Park Utilities-Elec/Gas,V				30.00	24501 E VALLEYWAY PP PUMP LOCATED @MEADOWWOOD GC
		001 - 576 80 47 35 - Town Square Utilities-Elec/Gas,V				193.78	1420 N MEADOWWOOD LN TOWN SQ PARK LIGHTS
		001 - 576 80 47 45 - Orchard Park Utilities-Elec/Gas,V				436.87	20300 E INDIANA AVE ORCHARD PARK
		001 - 576 80 47 45 - Orchard Park Utilities-Elec/Gas,V				30.82	20298 E INDIANA AVE ORCHARD PARK
		001 - 576 80 47 55 - Rocky Hill Park Utilities-Elec/Gas				74.41	24800 E MISSION AVE ROCKY HILL PARK IRRIG
1970	04/21/2026	Claims	3	36185	BCRA INC	7,840.54	SERVICES
		310 - 594 59 60 00 - Capital Expenditures - City Hall I				7,840.54	SVCS THROUGH 03/01-03/31/2026
1971	04/21/2026	Claims	3	36186	BLUE TEES ENTERPRISES LLC	2,318.90	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				2,318.90	RANGEFINDERS, SPEAKERS
1972	04/21/2026	Claims	3	36187	CIRCLE M CONSTRUCTION AND LANDSCAPE SUPP	1,731.06	MATERIALS
		001 - 576 80 31 45 - Orchard Park Supplies				1,731.06	ENGINEERED PLAYGROUND CHIPS
1973	04/21/2026	Claims	3	36188	CITY OF LIBERTY LAKE	25.00	PERMIT
		310 - 594 76 63 09 - Capital Expenditures - Other Imp				25.00	TRASH ENCLOSURE PERMIT
1974	04/21/2026	Claims	3	36189	DYNAMIC BRANDS	154.95	MATERIALS
		420 - 576 61 31 00 - Pro Shop Supplies				154.95	RENTAL PUSH CART PARTS-UPPER BAG BRACKET, HANDLE ADJUSTMENT JOINT
1975	04/21/2026	Claims	3	36190	FIRSTTWO INC	5,886.00	SERVICES
		001 - 521 10 41 00 - Law Enforcement-Professional S				5,886.00	CENTRALSQUARE FIRSTTWO ANNUAL SUBSCRIPTION 04/01/26-03/31/27
1976	04/21/2026	Claims	3	36191	GALLS LLC	761.63	MATERIALS
		001 - 521 22 26 11 - Uniforms-Duty & Reserv				761.63	LEE JUMPSUIT
1977	04/21/2026	Claims	3	36192	GARDEN GATE NURSERY LLC	10,335.38	MATERIALS
		110 - 595 64 63 00 - Roads/Streets Const. & Other In				6,104.00	TREES
		110 - 595 64 63 00 - Roads/Streets Const. & Other In				4,231.38	TREES
1978	04/21/2026	Claims	3	36193	GLOCK INC	428.15	MATERIALS
		001 - 521 10 35 00 - Law Enforcement Small Tools &				428.15	CONNECTORS, EXTRACTORS, FIRING PIN, SPACER SLEEVE, FIRING PIN SPRING CUP, LOCKING BLOCK PIN, SLIDE LOCK, TRIGGER MECHANISM
1979	04/21/2026	Claims	3	36194	GRAINGER	696.85	MATERIALS
		001 - 518 30 31 00 - Facility - Central Supplies				247.58	HALF MASK RESPIRATORS, COMBINATION CARTRIDGES, BLEACH-FREE MOLD AND MILDEW REMOVER, SAFETY GLASSES
		001 - 518 30 31 00 - Facility - Central Supplies				23.24	RESPIRATOR WIPES

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		001 - 521 50 31 00 - Facility - Supplies_Public Safety				304.06	LEVER LOCKSETS
		001 - 572 50 31 00 - Facilities - Supplies_Library				121.97	LIGHT BULBS
1980	04/21/2026	Claims	3	36195	GREATER SPOKANE INC	54.55	REGISTRATION
		001 - 513 10 49 00 - Dues,Subscriptions,Mbrships,Re				54.55	KAMINSKAS, CRIS 2026 LEGISLATIVE WRAP UP TICKET
1981	04/21/2026	Claims	3	36196	GREENLEAF LANDSCAPING INC	299.76	SERVICES
		001 - 553 60 41 00 - Weed Control Professional Servi				299.76	BARE GROUND WEED CONTROL
1982	04/21/2026	Claims	3	36197	GS4 LLC	373.29	MATERIALS
		110 - 542 70 31 01 - Roadside - Supplies				196.66	HEX NUT, RECIPROCATING SAW BLADES, RECIPROCATING SAW
		110 - 542 70 31 01 - Roadside - Supplies				19.61	GORILLA TAPE
		110 - 542 70 31 02 - Roadside - Horticulture Supplies				157.02	WORK FLEECES
1983	04/21/2026	Claims	3	36198	LEE EQUIPMENT LLC	407.82	MATERIALS
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				192.26	OIL FILTERS, FILTER ELEMENT, FLUID HYDRAULIC VG68
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				215.56	ELEMENT FILTER, FILTER ELEMENT, FILTER OIL ENGINE, FILTER FUEL IN-LINE
1984	04/21/2026	Claims	3	36199	MACKIN BOOK COMPANY	1,234.89	BOOKS
		001 - 572 20 34 06 - Library Books & Other Materials				1,234.89	BOOKS
1985	04/21/2026	Claims	3	36200	MCCUNES INSTRUMENTS INC	239.80	MATERIALS
		110 - 542 70 41 00 - Roadside - Professional Services				119.90	CERTIFICATION OF BACKFLOW TEST KIT W/NEW MANIFOLD & LABOR TO REPAIR
		001 - 576 80 41 01 - Unemployment Claims-Parks				119.90	CERTIFICATION OF BACKFLOW TEST KIT W/NEW MANIFOLD & LABOR TO REPAIR
1986	04/21/2026	Claims	3	36201	MILLER MENDEL	17.24	SERVICES
		001 - 521 10 41 00 - Law Enforcement-Professional S				17.24	JAN-MAR 2026 DATA STORAGE
1987	04/21/2026	Claims	3	36202	MOSCA DESIGN INC	12,913.15	AGENDA ITEM 10.H 02032026 COUNCIL
		001 - 571 00 31 04 - Special Events Supplies				12,913.15	HOME FOR THE HOLIDAYS LIGHT DISPLAYS-SILHOUETTE CAROLING BOY, SILHOUETTE CAROLING GIRL, JUGGLING SNOWMAN, PLAYING POLAR BEAR CUBS, SKATING PENGUIN
1988	04/21/2026	Claims	3	36203	NORTH 40 OUTFITTERS	3.26	MATERIALS
		110 - 542 90 31 00 - Maint Admin & Overhead - Sup				3.26	POLE 2 FLAT EXTENSION
1989	04/21/2026	Claims	3	36204	PACIFIC GOLF & TURF LLC	3,352.29	MATERIALS
		420 - 576 61 31 03 - Maintenance Supplies				1,066.79	HYDRAULIC CYLINDER
		420 - 576 61 31 03 - Maintenance Supplies				2,285.50	BRUSH KITS, HITCH, NUTS, WASHERS, CAP SCREWS
1990	04/21/2026	Claims	3	36205	PLANET TURF	1,027.34	MATERIALS
		420 - 576 61 31 03 - Maintenance Supplies				238.44	PLANET SPORT PLUS SEED
		420 - 576 65 31 01 - Maintenance Of Golf Course				550.46	KICK 10-2-4, MICRO-SEA MICRO NUTRIENT, IRON POLYAMINE, CHLOROTHALONIL FUNGICIDE
		001 - 576 80 31 01 - Parks Supplies				238.44	PLANET SPORT PLUS SEED
1991	04/21/2026	Claims	3	36206	ROGER CLEVELAND GOLF COMPANY INC	538.63	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				144.30	GOLF CLUB
		420 - 576 61 34 01 - Pro Shop Merchandise				125.83	GOLF CLUB
		420 - 576 61 34 01 - Pro Shop Merchandise				268.50	STAND BAG

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
1992	04/21/2026	Claims	3	36207	ROYAL BUSINESS SYSTEMS INC	16.35	MATERIALS
		001 - 514 23 31 00 - Administrative Services Supplies				16.35	KYOCERA YELLOW TONER, KYOCERA CYAN TONER
1993	04/21/2026	Claims	3	36208	SEVRINA RYAN	125.00	REFUND SHELTER PERMIT
		001 - 362 00 00 05 - Space And Facilities Rentals (Sh				-125.00	
1994	04/21/2026	Claims	3	36209	ROGER SANDERS	6,707.38	SERVICES
		001 - 518 80 41 00 - Information Technology Service				6,707.38	MIGRATION PLAN - FORTGATE SSL VPN TO SPLASHTOP REMOTE ACCESS WITH MFA
1995	04/21/2026	Claims	3	36210	SENSKE LAWN & TREE CARE INC	563.54	SERVICES
		110 - 553 60 41 10 - Weed Control - Professional Ser				563.54	VEGETATION CONTROL TREATMENT SVCS
1996	04/21/2026	Claims	3	36211	SPOKANE ARTS FUND	1,955.00	SERVICES
		111 - 594 76 60 02 - Capital Outlays Public Art				1,955.00	KAREN MOBLEY CONSULT HOURS, SKYLER OBERST CONSULT HOURS
1997	04/21/2026	Claims	3	36212	SPOKANE COUNTY ENVIRONMENTAL SERVICES	50.41	SERVICES
		001 - 576 80 47 45 - Orchard Park Utilities-Elec/Gas,V				50.41	APRIL SEWER CHARGES
1998	04/21/2026	Claims	3	36213	SPOKANE COUNTY TREASURER	27,034.43	SERVICES
		001 - 512 52 40 00 - Contracted Court				3,347.97	APRIL 2026 CONFINEMENT PROGRAM JAIL
		001 - 521 10 40 00 - Sheriff (EMS Agreement)				21,327.00	LE DISPATCH SVCS APRIL 2026
		001 - 554 30 41 00 - Animal Services				2,359.46	ANIMAL CONTROL SVCS MAR 2026
1999	04/21/2026	Claims	3	36214	SPOKANE REGIONAL CLEAN AIR AGENCY	8,689.25	LOCAL ASSESSMENT FEE
		001 - 553 70 40 00 - Pollution Control And Remediat				8,689.25	2026 LOCAL ASSESSMENT Q2
2000	04/21/2026	Claims	3	36215	STADIUM SPORTS	90.33	SERVICES
		001 - 558 50 41 00 - CP&ED-Professional Services				90.33	EMBROIDERED POLOS
2001	04/21/2026	Claims	3	36216	SUN MOUNTAIN SPORTS	205.77	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				205.77	PUSH CART
2002	04/21/2026	Claims	3	36217	SUNRISE INC	74.05	MATERIALS
		001 - 576 80 31 01 - Parks Supplies				42.16	GRAVEL
		001 - 576 80 31 25 - Pavillion Park Supplies				31.89	GRAVEL
2003	04/21/2026	Claims	3	36218	SWANNIES GOLF APPAREL CO	244.98	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				129.39	HOODIES
		420 - 576 61 34 01 - Pro Shop Merchandise				115.59	POLOS
2004	04/21/2026	Claims	3	36219	USCAPE APPAREL LLC	2,525.20	MERCHANDISE
		420 - 576 61 34 01 - Pro Shop Merchandise				2,525.20	T-SHIRTS, HOODIES, CREW SWEATSHIRTS
2005	04/21/2026	Claims	3	36220	VERMEER MOUNTAIN WEST	42,939.95	AGENDA ITEM 10.F 01062026 COUNCIL
		312 - 595 64 60 02 - Capital Expenditures/Expenses-E				42,939.95	VACUUM EXCAVATOR TRAILER
2006	04/21/2026	Claims	3	36221	WASHINGTON STATE TREASURER	7,013.78	Q1-26 WA STATE REMIT
		630 - 586 00 40 00 - Court Remittances				6,202.78	
		630 - 589 30 00 00 - State Bld Code Surcharge				811.00	
2007	04/21/2026	Claims	3	36222	WHITLEY FUEL LLC	1,003.45	FUEL
		001 - 518 30 32 00 - Central Services Fuel Consumed				130.45	UNLEADED
		410 - 531 00 32 00 - Storm Drainage Utilities - Fuel				40.14	UNLEADED
		110 - 542 70 32 00 - Roadside - Fuel				240.83	UNLEADED
		001 - 558 50 32 00 - CP&ED Fuel Consumed				100.35	UNLEADED

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
		420 - 576 61 32 00 - Golf Course-Fuel Consumed				160.55	UNLEADED
		001 - 576 80 32 00 - Parks Fuel Consumed				301.04	UNLEADED
		001 - 576 80 32 15 - Ballfields Fuel Consumed				30.09	UNLEADED

001 General Fund	146,446.95	
110 Street Fund	37,074.02	
111 Parks & Art Fund	2,355.66	
117 Tourism Promotion Area (TPA)	7,840.55	
310 REET 1 Capital Projects Fund	12,896.83	
312 Street Capital Fund	42,939.95	
410 Stormwater Utility Fund	14,537.64	
420 Golf Operations Fund	43,137.11	
502 Medical Reimbursement (Bridge) Fund	1,126.30	
630 Custodial Fund-State Of Washington Collections	10,519.10	
	Claims:	318,874.11
* Transaction Has Mixed Revenue And Expense Accounts	318,874.11	

"I, the undersigned, do hereby certify under penalty of perjury that the materials have been furnished, the services rendered or the labor performed as described herein, that any advance payment is due and payable pursuant to a contract or is available as an option for full or partial fulfillment of a contractual obligation, and that the claim a just, due and unpaid obligation against the City of Liberty Lake, and that I am authorized to authenticate and certify to said claim."

_____ _____

City Clerk Date

"I, the undersigned, do hereby certify under penalty of perjury that the claim is a just, due and unpaid obligations against the City of Liberty Lake, and that I am authorized to certify to said claim."

_____ _____

City Clerk Date

AGENDA ITEM NO.: 11.C.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Memorandum of Understanding (MOU) between the cities of Liberty Lake, Airway Heights, Millwood, Medical Lake, and Cheney

Dept of Origin: Executive **Dept. Head Approval:** Mark McAvoy

Exhibit(s):
STA MOU_Final_4.14.2026

Expenditure Required	No
Budgeted	N/A
City Program	Legislative Governance

Summary Statement

The Spokane Transit Authority (STA) exists to provide public transportation throughout Spokane County, including the City of Liberty Lake. According to the STA By-laws, the cities of Liberty Lake, Airway Heights, Millwood, Medical Lake, and Cheney ("the small cities") are represented by a single director on its Board of Directors. The small cities' representative rotates between the cities every two years. The MOU seeks to formalize the communications policies and expectations of the small cities and their STA Board representative as he or she acts on the cities' behalf.

The City Council discussed the proposed MOU during an April 14 workshop and reached a consensus to bring the MOU forward for action during the April 21 regular City Council meeting.

Recommended Action

Move to approve and authorize the Mayor to sign the Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING
By and Between
THE CITIES OF AIRWAY HEIGHTS, CHENEY, LIBERTY LAKE, MEDICAL LAKE, and MILLWOOD

This **Memorandum of Understanding ("MOU")** is made and entered into by and between the **City of Airway Heights,** whose address is 13120 W. 13th AVE, Airway Heights, Washington, ("Airway Heights"), the **City of Cheney**, whose address is 609 2nd Street, Cheney, Washington ("Cheney"), the **City of Liberty Lake**, whose address is 22710 East Country Vista Drive, Liberty Lake, Washington ("Liberty Lake"), the **City of Medical Lake**, whose address is 124 S. Lefevre Street, Medical Lake, Washington ("Medical Lake"), and the **City of Millwood**, whose address is 9103 E. Frederick Avenue, Spokane, Washington ("Millwood"), each individually referred to as "Party", and collectively referred to as "Parties".

WHEREAS, the Spokane Transit Authority, a municipal corporation ("STA"), exists to provide public transportation throughout the County of Spokane, including each city which is Party to this MOU; and

WHEREAS, Section 2.1(a) of the STA Bylaws provide that the Parties are collectively entitled to select one (1) member of the Board of Directors of STA (said director, the "Representative Director") based on the rotation set forth in the Bylaws, who serves on behalf of the Parties for a two (2) year term; and

WHEREAS, the Parties desire to enter into this MOU to formalize the communications policies and expectations of the Parties with respect to the Representative Director so as to support each of the Parties;

NOW, THEREFORE, based on the foregoing, the parties enter into the following agreement:

1. **Definition of Action Item**. For purposes of this MOU, the scope of an "Action Item" only includes those actions taken pursuant to a vote of the STA Board of Directors, and does not include those actions taken by a committee authorized by the STA Board of Directors.

2. **Duties of Each Party.** Each Party has a duty to review any agenda and other materials to be considered by the STA Board of Directors at any meeting, and to communicate the Party's position, concerns, and comments, with respect to all Action Items to the Representative Director prior to or during a meeting of the STA Board.

3. **Duty of the Representative Director.**

    a. The Representative Director shall consider communications in person, via telephone, electronic mail or other electronic means, from each Party regarding the Party's position on each Action Item to be considered by the Board of Directors STA prior to or during a meeting of the Board.

    b. With respect to any Action Item of the STA Board of Directors the Representative Director shall vote for, against, or take other action only on behalf of the Consensus of the Parties with respect to said action item.

c. For purposes of this MOU, a "Consensus" constitutes the majority of the Parties who have given input.

4. **Term.** This MOU shall continue in perpetuity and not expire unless or until (i) the Parties hereto agree to amend, modify, or supplement the same by a written instrument signed by all Parties.

ELECTRONIC SIGNATURES

This MOU may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. A signed copy of this MOU or any other ancillary agreement transmitted by email or other means of electronic transmission or electronically or digitally executed shall be deemed to have the same legal effect as delivery of any original executed copy of this MOU or such other ancillary agreement for all purposes.

[*Signature Page Follows*]

The Parties affirm the individuals signing this MOU have been granted the authority to do so and by their signature affirm the Parties will comply with the terms and conditions of this MOU.

City of Airway Heights

By: Larry Bowman
Title: Chair

Date:

City of Cheney

By: Elsa Martin
Title: Mayor

Date:

City of Liberty Lake

By: Cris Kaminskas
Title: Mayor

Date:

City of Medical Lake

By: Terri Cooper
Title: Mayor

Date:

City of Millwood

By: Shawna Beese
Title: Mayor

Date:

4918-0859-7901, v. 1

AGENDA ITEM NO.: 12.A.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Nomination for appointment to the SCRAPS Advisory Board

Dept of Origin: Executive **Dept. Head Approval:** Mark McAvoy

Exhibit(s):
None

Expenditure Required	No.
Budgeted	N/a
City Program	Call Respons (Law Enforcement)

Summary Statement

The City Council voted to approve the Interlocal Agreement (ILA) between the City of Liberty Lake and Spokane County for animal care and control services on November 3, 2025, which is effective from January 1, 2026, through December 31, 2030. The ILA establishes a SCRAPS Advisory Board to provide input and recommendations related to animal control services, operations, and best practices and further specifies that the Advisory Board shall consist of seven (7) members, including:

- Two representatives from Spokane County,
- Two representatives from each of the two largest municipal ILA participants, and
- One representative selected to represent the "remaining municipalities" that contract with SCRAPS.

Liberty Lake is eligible to nominate a SCRAPS Advisory Board representative to represent itself among the “remaining municipalities.” The representative should be qualified and able to:

- Represent regional municipal perspectives,
- Demonstrate an understanding of animal control services and policy, and
- Participate in quarterly advisory board meetings.

The proposed nominee, Mark McAvoy, meets these qualifications and has received support from other jurisdictions, including Medical Lake, Cheney, Airway Heights, and Rockford.

Recommended Action

Move to nominate Mark McAvoy to represent the "remaining municipalities" on the SCRAPS Advisory Board.

AGENDA ITEM NO.: 12.B.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Recreation Agreement with Inclusa Fitness for Adult Social Recreation Leagues

Dept of Origin: Parks and Recreation **Dept. Head Approval:** Jennifer Camp

Exhibit(s):
Agreement for Services (Inclusa Leagues 2026-2029)

Expenditure Required	No
Budgeted	N/A
City Program	Recreation Programs

Summary Statement

City staff is presenting this agreement with Inclusa Fitness and Nutrition, PLLC to offer adult social/recreational programs in our parks. This is something staff cannot facilitate at this time, and through this partnership we will be able to offer adult recreational programming for the citizens of the community. There will be minimal City staff time needed to facilitate or program these activities, so an 85/15 split is recommended to keep costs low for our community members and still allow the City to cover costs that would be incurred (staff time).

Some examples of programming include bocce ball, horseshoes, kickball, cornhole, and volleyball, etc. These programs are for ages 18 and older. The schedule is to be determined.

Recommended Action

Authorize the Mayor to sign the recreation agreement with Inclusa Fitness to provide adult recreation programming in City parks.

AGREEMENT FOR SERVICES

THIS AGREEMENT is made by and between the City of Liberty Lake, a code City of the State of Washington, hereinafter "City" and **Inclusa Fitness and Nutrition, PLLC** hereinafter "Service Provider", jointly referred to as "Parties".

IN CONSIDERATION of the terms and conditions contained herein the Parties covenant and agree as follows:

1. **Services to Be Performed.** The Service Provider will provide all labor, services, equipment, and material to satisfactorily complete the Scope of Services, example attached hereto as Exhibit "A". Social Recreational Leagues shall be held at Diamonds, Orchard Park, Pavillion Park, and Rocky Hill Park. Scheduling of such programs shall be coordinated with the City.

A. Administration. The Mayor or his/her designee shall administer and be the primary contact for the Service Provider. Prior to commencement of services, Service Provider shall contact the Mayor or his/her designee to review the Scope of Services, schedule, and date of completion. Upon notice from the Mayor or his/her designee, Service Provider shall commence work and perform the requested tasks in the Scope of Services or stop work and promptly cure any failure in performance under this Agreement.

B. Representations. The City has relied upon the qualifications of the Service Provider in entering into this Agreement. By execution of this Agreement, Service Provider represents it possesses the materials, equipment, experience, ability, skill and resources necessary to perform the services and is familiar with all current laws, rules and regulations which reasonably relate to the Scope of Services. No substitutions of personnel shall be made without the written consent of the City.

C. Modifications. The City may modify this Agreement and order changes in the services whenever necessary or advisable. The Service Provider will accept modifications when ordered in writing by the Mayor or his/her designee. The Service Provider shall make such revisions in the services as are necessary to correct errors or omissions appearing therein when required to do so by the City without additional compensation.

D. Performance. The City has expectations that the Service Provider will comply with all City stated performance standards including, but not limited to maintaining a ratio of one (1) staff person for every ten (10) participants, and no staff person shall ever be left one on one with a child. Failure to comply with this standard may result in termination of this Agreement.

2. **Term of Agreement.** This Agreement shall be in full force and effect upon execution and shall remain in effect until completion of all requirements herein, or December 31, 2028, whichever occurs first.

Either party may terminate this Agreement by providing ten (10) days written

notice to the other party. In the event of such termination, the Service Provider shall pay the City for all services previously authorized and satisfactorily performed prior to the termination date.

3. **Compensation and Payment.** The Service Provider agrees to pay the City fifteen percent (15%) of all registration fees as full compensation for everything done under this Agreement. Should the Scope of Services be adjusted to add or delete services, the Parties shall meet and negotiate a new fee for said services.

The City shall also be paid in a lump sum for all registrations received by the Service Provider with said payment received by the City no later than the completion of the Scope of Services. The Service Provider shall further provide the City with a roster of registrations identifying the basis for the payment of registration fees made to the City.

4. **Notice.** Notice shall be given in writing as follows:

TO THE CITY:	TO THE SERVICE PROVIDER:
Name: City of Liberty Lake	Name: Inclusa Fitness & Nutrition, PLLC
Phone Number: (509) 995-3588	Phone Number:
Address: 22170 E. Country Vista Drive	Address: 23403 E. Mission #231
Liberty Lake, WA 99019	Liberty Lake, WA 99109
Mickael Stevens, Recreation Coordinator	Attn: Stephanie Persondek, Owner
	E-Mail: dr.stephanie.persondek@gmail.com

5. **Applicable Laws and Standards.** The Parties, in the performance of this Agreement, agree to comply with all applicable Federal, State, Local laws, ordinances, and regulations.

6. **Relationship of the Parties.** It is understood, agreed and declared that the Service Provider shall be an independent contractor and not the agent or employee of the City, that the City is interested in only the results to be achieved and that the right to control the particular manner, method and means in which the services are performed is solely within the discretion of the Service Provider. All employees who provide services to the City under this Agreement shall be deemed employees solely of the Service Provider. The Service Provider shall be solely responsible for the conduct and actions of all employees under this Agreement and any liability that may attach thereto.

7. **Ownership of Documents.** All drawings, plans, specifications, and other related documents prepared by the Service Provider under this Agreement are and shall be the property of the City.

8. **Records.** The City or State Auditor or any of their representatives shall have full access to and the right to examine during normal business hours all of the Service Provider's records with respect to all matters covered in this Agreement. Such representatives shall be permitted to audit, examine and make excerpts or transcripts from such records and to make

audits of all contracts, invoices, materials, payrolls and record of matters covered by this Agreement for a period of three (3) years from the date final payment is made hereunder.

9. **Insurance.** Prior to the commencement of the Scope of Services, the Service Provider shall provide the City with a Certificate of Insurance confirming liability insurance in the event of a loss, damage, or personal injury for its actions, conduct, and performance as set forth in this Agreement. Service Provider shall maintain in force during the full term of this Agreement such liability insurance policy in the amount of one million dollars ($1,000,000) per occurrence and Abuse and Molestation insurance in the amount of one million dollars ($1,000,000) per occurrence should a child or children participate as provided for in this Agreement, which all shall be at the expense of the Service Provider. The City shall be named as additional insureds under all applicable policies.

If the Service Provider maintains higher insurance limits than the minimums shown above, the City shall be insured for the full available limits of liability maintained by the Service Provider, irrespective of whether such limits maintained by the Service Provider are greater than those required by this Agreement or whether any certificate of insurance furnished to the City evidences limits of liability lower than those maintained by the Service Provider.

The Service Provider's maintenance of insurance, its scope of coverage and limits as required herein shall also not be construed to limit the liability of the Service Provider to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

The Service Provider shall provide the City and all Additional Insureds for this work with written notice of any policy cancellations within two (2) business days of their receipt of such notice.

Failure on the part of the Service Provider to maintain the insurance as required shall constitute a material breach of this Agreement, upon which the City may, after giving five (5) business days' notice to the Service Provider to correct the breach, immediately terminate the Agreement or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Service Provider from the City.

10. **Indemnification and Hold Harmless.** Each party shall indemnify and hold the other, its officers, employees, agents, and volunteers harmless from and against any and all claims, demands, orders, decrees or judgments for injuries, death or damage to any person or property arising or resulting from any act or omission on the part of said party or its agents, employees or volunteers in the performance of this Agreement.

However, should a court of competent jurisdiction determine liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Service Provider and the City, its officers, officials, employees, and volunteers, the Service Provider's liability hereunder shall be only to the extent of the Service Provider's

negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Service Provider's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

11. **Waiver.** No officer, employee, agent, or other individual acting on behalf of either party has the power, right or authority to waive any of the conditions or provisions of this Agreement. No waiver in one instance shall be held to be waiver of any other subsequent breach or nonperformance. All remedies afforded in this Agreement or by law, shall be taken and construed as cumulative, and in addition to every other remedy provided herein or by law. Failure of either party to enforce at any time any of the provisions of this Agreement or to require at any time performance by the other party of any provision hereof shall in no way to be construed to be a waiver of such provisions nor shall it affect the validity of this Agreement or any part thereof.

12. **Assignment and Delegation.** Neither party shall assign, transfer or delegate any or all of the responsibilities of this Agreement or the benefits received hereunder without first obtaining the written consent of the other party.

13. **Subcontracts.** Except as otherwise provided herein, the Service Provider shall not enter into subcontracts for any of the services contemplated under this Agreement without obtaining written approval from the City.

14. **Confidentiality.** Service Provider may from time to time receive information which is deemed by the City to be confidential. Service Provider shall not disclose such information without the express consent of the City or upon order of a Court of competent jurisdiction.

15. **Jurisdiction and Venue.** This Agreement is entered into in Spokane County, Washington. Venue shall be in Spokane County, State of Washington.

16. **Cost and Attorney's Fees.** In the event a lawsuit is brought with respect to this Agreement, the prevailing party shall be awarded its costs and attorney's fees in the amount to be determined by the Court as reasonable. Unless provided otherwise by statute, Service Provider's attorney fees payable by the City shall not exceed the total sum amount paid under this Agreement.

17. **Entire Agreement.** This written Agreement constitutes the entire and complete Agreement between the Parties and supersedes any prior oral or written agreements. This Agreement may not be changed, modified, or altered except in writing signed by the Parties hereto.

18. **Anti-kickback.** No officer or employee of the City, having the power or duty to perform an official act or action related to this Agreement shall have or acquire any interest in

this Agreement, or have solicited, accepted, or granted a present or future gift, favor, service, or other thing of value from any person with an interest in this Agreement.

19. **Business License.** Service Provider shall, prior to performance of any services under this Agreement conducted inside City limits, apply for and obtain a City business license, as applicable (please contact the Washington State Department of Licensing at (360) 664-1400 or online at www.dol.wa.gov).

20. **Criminal Background Check.** The Service Provider shall conduct a thorough investigation of its employee's professional and personal background, including credit, criminal, and driving, as applicable to the terms and conditions of this Agreement. The Service Provider shall be responsible for the cost of any such background check. Upon request, the Service Provider shall provide the City with any such investigation.

The Service Provider understands and agrees to waive any claim or cause of action against the City relating to the use of any and all information gained through the investigation, or release of information therefrom, and promise to defend and hold harmless the City of Liberty Lake, its officers and employees from any claim or loss arising from such investigation and/or release of information.

IN WITNESS WHEREOF, the Parties have executed this Agreement this _____ day of April, 2026.

CITY OF LIBERTY LAKE:	SERVICE PROVIDER:
_____	_____
Cris Kaminskas, Mayor	By: Stephanie Persondesk, Owner
ATTEST:	APPROVED AS TO FORM:
_____	_____
Rochelle Caton, City Clerk	Sean P. Boutz, City Attorney

Exhibit "A"
SCOPE OF SERVICE

Adult Social Recreational Leagues
Description: An assortment of adult recreational programs offered in the parks of Liberty Lake. Programs would range from bocce ball, horseshoes, kickball, cornhole, volleyball etc.
Location: City of Liberty Lake Parks
Ages: 18+
Nights: TBD
Times: TBD
Session Lengths: TBD

AGENDA ITEM NO.: 12.C.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Easement Agreement between the City of Liberty Lake and Liberty Lake Internet Portal, LLC.

Dept of Origin: Executive **Dept. Head Approval:** Mark McAvoy

Exhibit(s):
Easement and Agreement (Clean.4.16.26)

Expenditure Required	No
Budgeted	N/a
City Program	Emergency Management

Summary Statement

This easement agreement is a win-win partnership that leverages City-owned property to deliver immediate and ongoing public benefit with minimal risk. In exchange for granting a limited easement for private utility infrastructure, the City receives $35,000 in direct revenue, guaranteed and supplemental parking capacity to offset that exchanged for the generator/chiller installation, and dedicated access to 125 kW of power to support the continuity of government and critical operations during periods of emergency and/or disaster. The private party assumes full responsibility for construction, operation, and maintenance, while the City retains strong protections, including property rights, restricted access, indemnification, and enforcement provisions. Overall, this agreement turns projected underused space into financial, operational, and strategic value for the City and supports local economic investment.

The executed easement and agreement will be recorded with the Spokane County Auditor.

Recommended Action

Move to approve and authorize the Mayor to sign the easement agreement.

RECORDED AT THE REQUEST OF and
AFTER RECORDING RETURN TO:
Sean P. Boutz
Evans, Craven & Lackie, P.S.
818 W. Riverside, Suite 250
Spokane, WA 99201

Legal Descriptions:	Attached
Tax Parcel No.	55104.9106
Grantor:	City of Liberty Lake, Washington, a municipal corporation
Grantee:	Liberty Lake Internet Portal, LLC

EASEMENT AND AGREEMENT

THIS EASEMENT AND AGREEMENT ("Easement") is granted and made as of the ____ day of _____, 2026, by and between the City of Liberty Lake, Washington, a municipal corporation ("Grantor"), whose address is 22710 East Country Vista Drive, Liberty Lake, Washington 99019 and Liberty Lake Internet Portal, LLC, a Washington limited liability company, whose address is 23403 E Mission Ave. Ste 200M, Liberty Lake, WA 99019 3029 E. Boone Ave, Spokane, Washington 99202 ("Grantee").

RECITALS

A. Grantor owns certain real property located in Spokane County, Washington, ("Grantor's Property"), more particularly described on Exhibit A attached hereto and made a part hereof.

B. Grantee and Grantor wish to establish an easement for installation of chillers and generators ("Facilities") on a portion of Grantor's Property for the benefit of Grantee's Property and provide for the maintenance thereof.

C. Grantee and Grantor intend by the terms of this Easement to establish an agreement between the parties for access and connection to, and maintenance of the Facilities via an easement.

AGREEMENT

In consideration of the foregoing and the performance of the mutual covenants herein contained, Grantor and Grantee agree as follows:

1. Grant of Easement. Subject to the terms contained in Paragraph 13, Grantor hereby conveys and quitclaims to Grantee a perpetual, exclusive easement across, along

and upon that portion of Grantor's Property that provides for access and connection to the Facilities, which is more particularly described on Exhibit B attached hereto and made a part hereof (the "Easement Area"), including any after-acquired title of Grantor thereto, for the purpose of Grantee using the Facilities. The easement is granted subject to and conditioned upon the terms and conditions of this Easement which Grantee hereby promises to faithfully and fully observe and perform. Grantor is granting Grantee this Easement as set forth herein and nothing more.

Further, for the grant of this Easement, Grantee agrees to provide Grantor the following:

a. Exclusive use of five (5) contiguous parking stalls in the Southwest Corner of Parcel No. 55104.9179 throughout the entirety of this Easement, and which are immediately adjacent to Grantor's Property;

b. Use of up to ten (10) additional parking stalls located on Parcel No. 55104.9179 throughout the entirety of this Easement, based upon daily availability;

c. Payment to the Grantor the sum of Thirty Five Thousand and 00/100 dollars ($35,000.00), which represents a portion of the present fair market value utilized for ingress and egress to and use of Grantor's Property; and

d. Dedicated use of 125 KW of power and/or electricity from Grantee's Facilities for use of Grantor's building(s) and/or improvements located on Grantor's Property, which such use shall be used by Grantor in its sole discretion and at any time without interference from Grantee, its representatives, agents, and assigns. Grantor shall be responsible for all connections, including the costs thereof, from Grantee's Facilities to Grantor's building(s) and/or improvements.

2. Construction and Use of Facilities. Grantee will arrange for the initial construction of the Facilities in accordance with prudent and customary engineering standards and applicable regulations, requirements and conditions imposed and approved by the City of Liberty Lake, Washington, and any other government authorities having jurisdiction, and of sufficient capacity to meet the requirements of Grantor. No structures may be constructed directly over or within the Easement Area that will interfere with the access to or use of the Facilities provided Grantor is not prohibited from constructing any structure on any other portion of Grantor's Property.

In the event Grantor determines, in its sole discretion, that the current or future improvements on Grantor's Property are to be moved or reconstructed elsewhere on Grantor's Property such that it would interfere with the Easement Area, Grantor shall provide such other location(s) on Grantor's Property to fulfill the intent and obligations of this Easement; provided Grantee is not in violation of this Easement, including but not limited to that set forth in Section 13.

3. Operation and Maintenance of Facilities. All of the systems required by this Easement, including but not limited to the Facilities and related components shall be

operated and maintained by Grantee and, if applicable, in accordance with any other governmental authority having jurisdiction. The Easement shall be used for the express purpose of location, installation, construction, improvement and maintenance of the Facilities. Grantee shall be responsible for the location, installation, construction, improvement and maintenance of the Facilities and related components with all action to be taken at the sole expense of Grantee. Such location, installation, construction, improvement and maintenance shall be completed in a workmanlike manner and which does not violate any federal, state or local laws, regulations or other governmental agency requirements. All maintenance required after the initial construction and/or installation of the Facilities and related components shall be performed by Grantee in a reasonably prompt manner. Further, in the performance of such maintenance and/or work, Grantee, or the party performing the maintenance on behalf of Grantee (i) shall take all reasonable actions necessary to prevent damage to Grantor's Property, and (ii) upon completion, shall reasonably restore any property disturbed by such maintenance or work as nearly as possible to the condition which it was in at the commencement of such maintenance or work.

4. Utility Easement. To the extent the Easement Area overlaps or incorporates any part of any pre-existing utility easement, the area contained within such overlap shall be considered non-exclusive.

5. Compliance with Laws and Rules. Grantee shall at all times exercise its rights under this Easement in accordance with the requirements of all applicable laws, orders, ordinances, rules and regulations of any public authority having jurisdiction.

6. Restrictions on Access by Grantee. Grantee shall exercise its rights under this Easement solely on the Easement Area and shall not have any right of ingress or egress over any other part of Grantor's Property.

7. Use of Easement Area by Grantor and Others. Grantor retains the right to fully use and enjoy the Easement Area, subject to the rights granted in this Agreement.

8. Attorneys' Fees. In the event of any action or proceeding to enforce, interpret, construe or otherwise resolve a dispute between the parties arising out of any term, condition, promise, covenant, representation or warranty set forth in this Easement, the prevailing party in such action or proceeding shall be entitled to recover, in addition to all other relief, all attorneys' fees and costs incurred in connection therewith (including, but not limited to, any appeal thereof). This Easement will be governed by laws of the State of Washington with venue to reside in Spokane County, Washington.

9. Release and Indemnity. Grantee, and all successors and assigns, releases and shall defend, indemnify and hold harmless Grantor and Grantor's successors and assigns from and against any and all liability, loss, harm, damage, expense, lien, demand, action or claim (including costs and reasonable attorneys' fees) of any kind or character asserted or arising directly or indirectly out of Grantee's breach of this Easement, Grantee's use, operation, and maintenance of the Facilities, Grantee's exercise of the rights herein granted, the acts

or omissions of Grantee and Grantee's servants, agents, employees, consultants, licensees, invitees, contractors and subcontractors (of any tier).

10. Notices. Notices under this Easement shall be in writing and deemed effective when personally delivered, or if mailed, upon the second day following deposit thereof in the United States mail, properly addressed to the address following each party's signature on this Easement, postage prepaid, certified or registered mail, return receipt requested. Either party may change its address for notice, by notice given pursuant to this Paragraph.

11. Successors and Assigns. Except as expressly provided otherwise in this Easement, (i) the easement granted herein shall run with the land and shall be binding upon all parties having or acquiring any right, title or interest in the property described herein, or any part thereof, and (ii) the rights and obligations of the parties hereto shall inure to the benefit of and be binding upon their respective successors and assigns. Any reference herein to "Grantor" or "Grantee" shall be deemed to refer to such party's successors and/or assigns in interest.

12. Recitals and Exhibits. The recitals and any exhibits attached to this Easement are hereby incorporated and made a part of this Easement.

13. Forfeiture. If Grantee shall materially violate any of the provisions of this Easement through material or unreasonable neglect or material or unreasonable failure to heed or comply with any notice given Grantee under the provisions of this Easement, then Grantee shall forfeit all rights conferred hereunder and this Easement may be revoked or annulled by the Grantor; provided, however, the Grantor shall give ten (10) days written notice of its intention to revoke or annul the Easement during which period Grantee shall have the opportunity to remedy any breach. No forbearance by the Grantor shall constitute a waiver of the Grantor's right to enforce any provision of this Easement. The following items shall constitute, at a minimum, grounds for forfeiture of this Easement:

a. Abandonment of the Facilities;

b. Failure to operate or maintain the Facilities consecutively for thirty (30) days;

c. Failure to comply with the requirements of any governmental authorities having jurisdiction over the Facilities and/or any related components, including any and all such requirements of Grantor; and

d. As provided by law.

In the event of forfeiture, as provided for herein or by law, Grantee shall remove the Facilities and any related components from Grantor's Property at Grantee's sole expense, including but not limited to, restoring the Easement Area and/or any other part of Grantor's Property disturbed by such removal to nearly as possible or better than the current condition of Grantor's Property at the time of removal.

If Grantee does not remove the Facilities and related components within the ten (10) day notice period to remedy any breach as provided for in this Section 13, Grantor may remove and dispose of the Facilities and related components at Grantee's expense, including restoring the condition of Grantor's Property as provided herein, with such expense paid to Grantor within fourteen (14) days of written notice to Grantee of the expense(s) if Grantor is required to pay for the removal and disposal of the Facilities and related components and/or restoration of Grantor's Property.

14. Insurance. Grantee shall procure and maintain for the duration of this Easement, insurance against all claims for injuries to persons or damages to property, which may arise from or in connection with the exercise of the easement granted herein and/or the use, operation, and maintenance of the Facilities.

15. Severability. If any paragraph, sentence, clause or phrase in this Easement shall be held to be invalid, unenforceable, or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity, enforceability, or the constitutionality of any other paragraph, sentence, clause or phrase of this Easement.

16. Entire Agreement. Grantor and Grantee mutually agree that this Easement contains the complete agreement of the parties and will supercede any and all other agreements, understandings and representations by and between the parties hereto relating to the transaction that is the subject hereof.

17. Captions. The captions in this Easement are for convenience only and shall not be considered a part hereof, nor affect the construction or interpretation of any provision hereof. No provision of this Easement shall be construed against any party merely because that party or counsel drafted or revised the provision in question. This Easement shall be deemed jointly prepared by the parties and therefore any ambiguity or uncertainty shall be interpreted accordingly.

[SIGNATURE PAGES TO FOLLOW]

CITY OF LIBERTY LAKE

LIBERTY LAKE INTERNET PORTAL, LLC

GRANTOR

GRANTEE

STATE OF WASHINGTON)
) ss
County of Spokane)

On this day personally appeared before me _____, to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he/she signed the same as his/her free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal this ____ day of _____, 2026.

_____
NOTARY PUBLIC in and for the
State of Washington
Residing at _____
My appointment expires: _____

STATE OF WASHINGTON)
) ss
County of Spokane)

On this day personally appeared before me _____, to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he/she signed the same as his/her free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal this ____ day of _____, 2026.

_____
NOTARY PUBLIC in and for the
State of Washington
Residing at _____
My appointment expires: _____

AGENDA ITEM NO.: 12.D.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Public Hearing - Code of Ethics Complaint

Dept of Origin: **Dept. Head Approval:** Mark McAvoy

Exhibit(s):
Ethics Investigation - Final Decision - 3.2026

Expenditure Required	
Budgeted	
City Program	

Summary Statement

The City of Liberty Lake received the Hearing Examiner's decision on March 13, 2026. The complaint was received and investigated in accordance with the City's code of ethics, after which the Hearing Examiner issued a decision (attached).

Pursuant to LLMC 1-10-8(G), the City Council must now hold a public hearing to either adopt, reject, amend, or modify the Hearing Examiner's findings, conclusions, and recommendations, or remand the matter for further investigation and consideration.

Recommended Action

CITY OF LIBERTY LAKE HEARING EXAMINER PRO TEM

Re:	Code of Ethics complaint by Annie Kurtz against Councilmembers Chris Cargill and Wendy Van Orman	DECISION FOLLOWING FORMAL INVESTIGATION HEARING

1. INTRODUCTION

Liberty Lake's City Clerk received two written complaints alleging that Councilmembers Chris Cargill and Wendy Van Orman violated the City's Code of Ethics. In accordance with the applicable procedures, the City Clerk provided the Hearing Examiner with written notice of the complaints. Section 1-10-8(B) of the Code of Ethics directs the Hearing Examiner to conduct a preliminary investigation to determine whether probable cause exists to believe that a violation of the Code of Ethics has occurred. The Hearing Examiner found that there is probable cause to believe that Mr. Cargill and Ms. Van Orman violated provisions of the City of Liberty Lake Code of Ethics. Therefore, pursuant to LLMC 1-10-8(D)&(E), the Hearing Examiner retained the matter for a formal investigation into these alleged violations. The Hearing Examiner conducted the formal investigative hearing, in accordance with the Code of Ethics procedures. This decision is the result of that formal investigative process.

Ultimately, the Hearing Examiner finds that neither Mr. Cargill nor Ms. Van Orman violated the City's Code of Ethics.

2. FINDINGS OF FACT – PROCEDURAL HISTORY

2.1. On or about September 19, 2025, Ms. Annie Kurtz ("Complainant") submitted a written complaint to the City of Liberty Lake alleging that Councilmember Chris Cargill had violated the Code of Ethics. *See* Ethics Complaint 09-19-2025 ("First Complaint"). In the complaint, Ms. Kurtz alleged that Mr. Cargill violated several provisions of the Liberty Lake City Code ("LLCC"), centering around Mr. Cargill's role and use of the Liberty Lake Community Facebook Page ("LLCFP"). Ms. Kurtz further alleged that Mr. Cargill's role with the Mountain States Policy Center ("MSPC") was an ethical violation. *Id.*

2.2. On or about October 3, 2025, Complainant submitted a second written complaint to the City of Liberty Lake alleging that Councilmembers Chris Cargill and Wendy Van Orman ("Subjects") had violated the Code of Ethics. *See* Ethics Complaint 10-03-2025 ("Second Complaint"). This complaint largely mirrors the First Complaint, but includes Wendy Van Orman for her role as LLCFP administrator, and provides additional information and analysis with regards to the alleged ethics violations of both parties. The various allegations center around actions and behaviors on the LLCFP that implicate several provisions within City's Code of Ethics.

2.3. Pursuant to Section 1-10-8(B) of the Code of Ethics, the Hearing Examiner conducted a preliminary investigation to determine whether probable cause existed to believe that a violation of the Code of Ethics had occurred.

2.4. On October 30, 2025, the Hearing Examiner made an initial threshold determination that there was probable cause to believe that a violation of the Code of Ethics has occurred for both Mr. Cargill and Ms. Van Orman for their role and actions taken on the LLCFP, including those taken when acting as an administrator or moderator, when City matters were discussed. *See* Decision on Ethics Complaint 10-30-2025 Final ("PC Decision").

2.5. The Hearing Examiner's initial threshold determination of probable cause did not constitute a final decision that the Code of Ethics had been violated.

2.6. The Hearing Examiner retained the matter for a formal investigation pursuant to LLMC 1-10-8(8)(2). Pursuant to LLMC 1-10-8(D), the formal investigation is accomplished by holding a hearing to determine whether a violation occurred.

2.7. On November 13, 2025, the Hearing Examiner set the matter for hearing on December 16, 2025, and ordered a briefing schedule. *See* Order Setting Hearing and Briefing Schedule.

2.8. Pursuant to LLMC 1-10-S(D) the person complained against may choose whether the hearing shall be open or closed to the public. By e-mail dated November 24, 2025, Mr. Cargill stipulated that the hearing would be closed to the public. Ms. Van Orman did not stipulate one way or the other.

2.9. On November 25, 2025, the parties stipulated to a continuance to accommodate travel schedules. The Hearing Examiner continued the hearing to January 14, 2026, but did not modify the briefing schedule.

2.10. Pre-hearing briefs were submitted as scheduled by Ms. Kurtz (December 2, 2025) and Ms. Van Orman (December 9, 2025). Mr. Cargill had some difficulties with the file transfer system; as a result, he requested an extension to his filing deadline. Mr. Cargill submitted his pre-hearing brief on December 17, 2025.

2.11. On January 14, 2026, the Hearing Examiner conducted the formal investigation hearing on Ms. Kurtz's complaints against Mr. Cargill and Ms. Van Orman. The parties were allowed to make arguments, present evidence and present testimony, and cross-examine witnesses. The Complainant and Subjects testified at the hearing. Witnesses for the Subjects Ms. Merrifield and Mr. Kennedy also provided testimony.

2.12. During the hearing, several specific posts in the record were analyzed and discussed by the Parties and Hearing Examiner to determine whether any of them constituted public records. Most of the Complainant's alleged posts as public records were disputed by the Subject, with at least one exception admitted to by Mr. Cargill.

2.13. During the hearing, extensive testimony and argument centered around LLCFP moderator/administrator abilities and actions. This included a broad analysis of the basic functioning of the site, arguments and discussion around specific posts purportedly deleted, and other administrative actions to remove or block posts. The Subjects contended that many of the deletions are automatically done by Facebook, and those manually removed were typically in violation of site rules, including for duplicative "spam" posts. The Subjects denied any deletions for political reasons, or from posts they believed to be public records.

3. ISSUE UNDER REVIEW

The Complaints alleged that Mr. Cargill and Ms. Van Orman violated the Code of Ethics, principally for posts and administrative actions of the LLCFP. *See* Complaints. Other purported violations were alleged, but the Hearing Examiner did not find probable cause for these other allegations. *See* PC Decision. The formal investigation hearing conducted on January 14 was limited to one issue, whether any of Mr. Cargill's and Ms. Van Orman's actions taken, including as an administrator or moderator on the LLCFP, were in violation of the Code of Ethics.

4. DECISION STANDARD IN A FORMAL INVESTIGATION

The Hearing Examiner must make the decision based upon the preponderance of the evidence standard. *LLMC 1-10-8(F).* The "preponderance of the evidence" standard requires the decision-maker to conclude, upon considering all of the evidence, that the proposition asserted is more probably true than not true. *See e.g.,* State v. Arredondo, 188 Wn.2d 244, 257, 394 P.3d 348 (2017) (defining the "preponderance of the evidence" standard); *see also* State v. Otis, 151Wn.App. 572, 578, 213 P.3d 613 (2009) (same). To satisfy the standard, such evidence is sufficient to incline a fair and impartial mind to one side of the issue rather than the other. *See* Black's Law Dictionary (11th ed. 2019) (defining "preponderance of the evidence").

5. FINDINGS AND CONCLUSION

The Hearing Examiner's initial investigation, finding of probable cause, and subsequent orders limited this inquiry to whether Councilmembers Cargill's and Van Orman's roles and actions – taken personally or as an administrator or moderator, on the Liberty Lake Community Facebook Page when City matters are discussed – were in violation of LLMC 1-10-4 of the Code of Ethics, the Public Records Act (RCW 42.56; LLMC 1-10-4(D)), and/or the Records Retention Act (RCW 40.14; LLMC 1-10-4(C)).

This boils down to two key questions. First, should any specific posts identified in the record be considered "public records" and, if so, are they still available for production? Second, did any actions taken by the Subjects while acting as administrators or moderators of the page violate the Code of Ethics?"

With very limited exceptions, the Hearing Examiner finds that, based on a preponderance of the evidence, the answer to both questions is generally "no." The exceptions are limited situations where posts were admittedly public records but are still available to record requests. As such, there is insufficient evidence in the record to support a finding of ethical violations.

5.1. Posts as Public Records

The two cases providing the legal framework for Public Records Act ("PRA") analysis are *Nissen v. Pierce Cnty.*, 183 Wash. 2d 863, 357 P.3d 45 (2015) and *West v. Puyallup*, 2 Wash. App. 2d 586, 410 P.3d 1197 (2018). The Hearing Examiner provided a more extensive elaboration of these cases in the probable cause determination that will not be repeated in its entirety here. *See* PC Decision, p. 3-6. In short, posts on social media can be considered public records, but a case and record specific analysis must occur to determine if the "record" contains information that refers to or impacts the actions, processes, and functions of government. This leads to the exceedingly difficult task of delineating between "merely providing general information about City activities and occasionally about [Councilmember]'s activities" and acting in "official capacity." *Puyallup* at 598, 410 P.3d 1197.

It is critical to point out that *Nissen* and *Puyallup* revolve around contested public records requests, not purported ethical violations. The question in those cases was whether the City had failed to provide public records in violation of the PRA, in *Puyallup* that certain social media posts were not produced. The Hearing Examiner is not able to make a final ruling on whether the PRA has been explicitly violated for failing to produce records after a request by the public. Nonetheless, a councilmember's found potential violation of the PRA could constitute a violation of the City's Code of Ethics, as a putative finding here for failing to retain records for a possible PRA request could potentially expose the City to liability, and therefore be an ethical violation. So, the general inquiry is proper, on a limited basis, to that which is within the purview of the Hearing Examiner's authority: ethical violations related to potential PRA liability. This incorporates LLMC 1-10-4(D) especially, which calls for notification and retention of potentially public records on social media. However, the specific language in LLMC 1-10-4(D) exemplifies the intertwining problems with language such as "related to City business" and "may be considered a public record," but also the fact that these code provisions are applicable for all City employees and the official City accounts. As has been discussed by all parties and the Hearing Examiner throughout this process, the LLMC's use of permissive or suggestive language such as "preference," "should," and "strongly discouraged" sew further confusion. *See* LLMC 1-10-4(A)(3); (A)(4-5); (A)(3). As such, the Hearing Examiner has primarily endeavored to find specific instances that are more likely than not public records that were not retained.

The arguable situations that cut closest to the line of being public records are the LLCFP posts that are titled "Official City Council Thread." *Kurtz Exhibit 6, p. 1*. On first blush, this post does appear to bear the imprimatur of official city business and was a key document in the Hearing Examiner's initial determination of probable cause. However, credible testimony was provided at the hearing that dispelled much of this notion. According to the Subjects, a practical decision was made as administrators of the LLCFP page to collect all discussions on council meetings into one single thread, rather than a slew of separately created posts/threads on the same subject. *Testimony C. Cargill, Testimony W. Van Orman.* A practical administrative decision to collect disparate posts/threads into a single one is logical. Yet, it was indeed unwise to use the word "Official", but its use in itself does not transform this and similar threads into public records. A coalesced thread wherein members of the public can discuss City Council meetings is not inherently a public record. The language of the post itself is more akin to the *Puyallup* "merely providing general information about City activities" and guiding users of the page to a single comment thread. *Kurtz Exhibit 6, p. 1.* The Subjects creating the threads and removing duplicative ones does not inherently make them public records. The Hearing Examiner does not find that the use of the word "official" in the title of the post makes these discussions a public record. Though, it would be optimal if an alternative word or phrase were used in the future.

On the other hand, one of Mr. Cargill's posts is likely a public record. *Kurtz Exhibit 6, p. 5*. Mr. Cargill admitted to such at the hearing and stated that he forgot to switch to his "official" account before posting it. This post contains a statement by Mr. Cargill intended to "explain my vote today" and contained information about pending City business. This is the only instance in the record on which the Hearing Examiner can say definitively, based on a preponderance of the evidence, that this post specifically is likely a public record. However, there is no evidence in the record that this post is now unavailable for public inspection. Nor is there evidence in the record that any comments were deleted under this post.

Further yet, it is unclear whether posts or comments on a potentially public record – such as a Councilmember's explanatory post – are also themselves public records. At one end of the spectrum, an official City of Liberty Lake post on their account calling for public comment on a

specific proposal or council item is all likely public record. On the other hand, it is unclear how to treat unsolicited responses to a Councilmember's public record post. And especially unclear when automated systems or private site-specific rules of conduct call for their removal. In the end though, there were no allegations of deleted comments on this specific public record post by Mr. Cargill. The post itself is still available for production if necessary.

Most the Complainant's remaining alleged public records are most likely not public records. Many are posts by members of the LLCFP, not by the Subjects. *See* Kurtz Exhibit 6, p. 3-6. The posts that are by one of the Subjects therein do not rise to the level of "official business," except for Mr. Cargill's admitted public record post mentioned above. *Id. (e.g., W. Van Orman discussing a phone call she received; W. Van Orman relating that a resolution was passed and directing people the Official City Website; C. Cargill posting a poll about the dangerousness of city intersections; C. Cargill providing a rhetorical response to a comment).*

It should also be stated clearly that creating a public record is not a violation of the PRA; failing to retain likely public records and/or produce them upon request is a potential violation. But it is also imperative for the Hearing Examiner to reiterate that a definitive finding of a violation of the PRA is not within the scope of this review, only whether public records were likely created, but then not retained for a potential future production request. In any event, the Hearing Examiner could find no likely violation of the PRA, retention requirements, or Code of Ethics based solely on whether any post is or is not a public record, and especially without evidence of a failure to retain comments on the one admitted public record. Even so, the Hearing Examiner will discuss the deleted comments below.

5.2. Administrator/Moderator Actions – Deleting Comments

The Complainant alleges that the Subjects deleted specific posts or comments that were themselves, or attached to, public records. *See* Complaints. The Hearing Examiner's analysis addresses these allegations only through the lens of the PRA and records retention. *See* PC Decision. In this regard, administrative actions to remove posts are only potentially a violation of the Code of Ethics if the content is likely a public record. Even then, it remains unclear whether deleting posts/comments for site-rule violations – including "spam" posts – would constitute a violation of the PRA or retention rules. The issue is further confounded by the fact that Facebook's own automated systems frequently remove content for a variety of independent reasons. It also remains unresolved whether an obligation exists to retain comments that contained hate speech or similar rule violations. Neither the parties involved nor the Hearing Examiner could identify a specific City policy addressing these questions, and the Hearing Examiner was unable to locate applicable case law.

There are automated systems within Facebook that permanently delete certain categories of posts/language, without any reports or moderator activity. *Testimony W. Van Orman, Testimony E. Merrifield. Testimony C. Cargill.* There is also the widely known site functionality that "reporting" a post/comment can lead to its deletion, either automatically or after review by an administrator/moderator. The reporting function can lead to either automatic deletion or place a request for review into the moderator log. *Id.* Some reported posts are removed automatically by Facebook and are permanently removed. *Id.* The remainder end up in a "folder" to be later reviewed by an administrator or moderator. *Id.* Those moderator-reviewed reports are then reviewed by one of the individuals with page authority and are either removed or reinstated based upon a determination by that individual on whether it violates page rules. *Id.* If a comment is deleted, it is impossible to retrieve, no matter how or who deletes it. *Id. See also* Exhibit R-15.

Unfortunately, this well-known site function can be used (or abused) by any small group of concerted actors. The record reflects that the Complainant themself reported posts/comments with a presumable intention to have them deleted, on posts analogous to those the Complainant alleged that Subjects improperly deleted comments under. *Exhibit R-16.* This calls into question the amount of good faith exhibited in bringing forth this specific complaint about the Subjects' purported deletions of comments on potential public records.

Much of the claims of "censorship" or deleting comments come from a small handful of members of the public who appear to be prolific users of the site and the LLCFP. *See* Complaint. *See also* Kurtz Exhibits 9 and 23. For example, one LLFCP user who complained of censorship made multiple posts to several comments/posts that appear duplicative and are posted at the same exact time. *See, e.g.* Kurtz Exhibit 9. Many, if not all, social media sites have automated systems to track and delete spam posting.[1] This includes not just duplicative posts but may also include rapid successive comments that flood a thread. The record does not clearly reflect why these particular posts were deleted, but it seems more likely than not that these specific posts were deleted for violating spam rules, either automatically by Facebook or through the manual moderation process.

But still, and again, the Hearing Examiner was unable to find that these or other purportedly deleted comments were on a post that should be considered a public record. These deleted comments were on a post by a member of the public. *See* Kurtz Exhibit 9A, p. 3. As are the majority of the other alleged "censorship" claims. *See, e.g.,* Kurtz Exhibit 6, p. 3-6. The other examples provided in the record here that are posts by a Subject are not public records (except for the one admitted example by Mr. Cargill). *Id.* Yet, as found above, there is no allegation or evidence in the record that comments were deleted from Mr. Cargill's admitted public record post.

In review of the entirety of the record, the Hearing Examiner has had extreme difficulty in trying to cross correlate all the allegations with comments, administrator logs, and/or other evidence in the record. In the end, there is not a single coherent instance in the record where the Hearing Examiner can definitely find a comment that was deleted from a post that should be considered a public record. Admittedly though, it is true that there is scant evidence in the record of which specific comments were deleted and why. Once a post or comment is deleted, it is not retained. And the administrator logs typically do not provide a detailed analysis of why something was deleted. This does create a precarious situation, but again, it is unclear whether all comments need to be retained, and considering they are only possibly required to be retained if the original post or comment is likely a public record. None of the evidence in the record about deleted comments is tied to likely public records.

Insofar as may be ascertained here, the record reflects that the Subjects do retain all available records and testified themselves that nothing was ever "manually" deleted for political reasons, only for violations of site rules. *Testimony W. Van Orman, Testimony C. Cargill. Testimony E. Merrifield.* This is further exemplified by all parties, including the Complainant and those members of the public submitting evidence to support the Complainant, being able to access and produce posts and comments from the LLCFP, including the one that was admittedly a public record, and the "official" thread posts. The Subjects testified that they never deleted a comment on anything they perceived to be a public record. *Id.* There is no evidence in the record to conclude otherwise. As the Hearing Examiner has found that most of the alleged public records are likely not public

[1] Facebook defines spam principally as: "Posting, sharing, engaging with content or creating accounts, Groups, Pages, Events or other assets, either manually or automatically, ***at very high frequencies***." https://transparency.meta.com/policies/community-standards/spam/ (emphasis added).

records, there is insufficient evidence in the record to conclude that possible public record comments were deleted.

Administrative actions to remove posts are only potentially a violation of the Code of Ethics if the original post is a public record. And if even so, it is unclear whether deleting posts/comments for a violation of site rules (including for "spam" posts) would constitute a violation of the PRA or retention rules. The record is replete with screenshots of childish bickering, all too common to social media, and is often without context to the original posts or underlying issues that this Hearing Examiner can piece together in a coherent manner. Ping-ponging allegations and denials about posts being deleted, other desultory accusations, and generally untoward online behavior are the substantial majority of the record. Mostly from members of the public and not the Subjects. The Hearing Examiner can find no specific example where, based on a preponderance of the evidence, comments were deleted under a post that should be considered a public record.

5.3. General Use of Social Media

As has been stated numerous times by the Hearing Examiner throughout this process, the advent of social media has created a vast new legal gray area that is continuing to be delineated in the Courts, and which will likely continue into the foreseeable future. *See e.g.,* PC Decision, p. 3. On the one hand, yes, City officials have duties and responsibilities under the various levels of laws governing public records. On the other hand, elected officials have broad rights (and some would say responsibilities) to interact with the public, gather information and feedback, and communicate with the public, as well as their broader First Amendment rights.

As this case is also unfortunately illustrative of, squabbles from behinds screens and keyboards can bleed over into the real world in a way that would not have occurred without the perverting effects of social media use. After a full and thorough investigation into the particulars of this case, the Hearing Examiner can't help but view the entirety of this process as a petty Facebook quarrel that metastasized into an enormous waste of City resources.

6. RECOMMENDED DISPOSITION

The Hearing Examiner finds, based on a preponderance of the evidence in the record, that neither Mr. Cargill nor Ms. Van Orman violated the City's Code of Ethics. The Hearing Examiner does, however, think it perilous for sitting councilmembers to be in a position where they are moderating discussions on City issues. Yet elected officials can and should engage in public discussion, interface with the public, seek input, and disseminate information. And the reality is that much of this can and will take place on social media.

If a Councilmember is going to make a public record post, the Hearing Examiner recommends that comments be turned off to forestall potential issues with automatic or moderator deletion of comments. And in general, Councilmembers should be cautious and careful with their language when posting or responding on the LLCFP, or elsewhere online, so as not to create arguable public records. All sitting Councilmembers should endeavor to follow not just the letter of the Code of Ethics, but also the spirit and intent, and this should be reflected in their online presence.

The Hearing Examiner recommends that no sanctions be imposed.

SIGNED this 13th day of March 2026.



Karl J. Granrath
City of Liberty Lake Hearing Examiner Pro Tem
808 W. Spokane Falls Boulevard
Spokane WA 99201-3333
(509) 625-6010

AGENDA ITEM NO.: 15.A.

BUSINESS OF THE CITY COUNCIL, LIBERTY LAKE, WASHINGTON

For the Agenda Of: April 21, 2026

Subject: Establishing qualifications for the Community Development Director position

Dept of Origin: Executive **Dept. Head Approval:** Mark McAvoy

Exhibit(s):
Resolution No. 26-285 (CDD Job Description), Resolution No. 26-285_Exhibit A

Expenditure Required	No
Budgeted	N/a
City Program	Human Resources

Summary Statement

Title 1, Chapter 6, Section 1.6.7C of the Liberty Lake Municipal Code requires the Mayor and City Council to establish qualifications for the Community Development Director position, which are to be approved by Resolution of the Council. The proposed Resolution No. 26-285 establishes the qualifications for the Community Development Director through the adoption of the enclosed job description (Exhibit A).

Recommended Action

Move to approve Resolution No. 26-285.

CITY OF LIBERTY LAKE
SPOKANE COUNTY, WASHINGTON
RESOLUTION NO. 26-285

A RESOLUTION OF THE CITY OF LIBERTY LAKE, WASHINGTON ADOPTING THE QUALIFICATIONS FOR THE COMMUNITY DEVELOPMENT DIRECTOR POSITION.

WHEREAS, Title 1, Chapter 6, Section 1.6.7C of the Liberty Lake Municipal Code states that the Mayor and City Council shall confer to establish qualifications for the positions of City Administrator, Police Chief and Department Directors with such qualifications approved by Resolution of the Council; and

WHEREAS, the Mayor and City Council find that the job description attached to this Resolution as Exhibit A accurately reflects the qualifications required by the City for its Community Development Director.

NOW, THEREFORE, be it Resolved by the City Council of the City of Liberty Lake, Washington as follows:

1. Job Description. The City Council adopts the attached job description (Exhibit A), which is incorporated herein, containing the competencies, responsibilities and duties, minimum qualifications, skills and abilities, and physical demands for the Community Development Director position.

2. Effective Date. The Resolution shall be effective immediately upon passage by the Liberty Lake City Council.

Adopted this _____day of April, 2026.

_____
Cris Kaminskas, Mayor

ATTEST:

_____
Rochelle Caton, City Clerk

APPROVED AS TO FORM:

_____
Sean P. Boutz, City Attorney

The City of Liberty Lake, Washington
Director of Community Development

Updated: April 21, 2026

VISION: TOGETHER, we make a welcoming and flourishing community, united by the pursuit of enriching the quality of life for every resident, planning growth that respects our natural environment, and promoting a vibrant economy.

STRATEGIC PRIORITIES: Quality of Life & Connectedness; Public Safety & Well-being; Economic Vitality & Opportunity; Planned Growth & Infrastructure; and Public Service Excellence

JOB TITLE: Director of Community Development
STATUS: Exempt (FLSA); Salaried & Ineligible for Overtime
DIRECT REPORTS: Community Development Staff
REPORTS TO: City Administrator
DEPARTMENT: Community Development

ROLE SUMMARY: The Director of Community Development plans, supervises, and coordinates professional engineering and planning work in support of a wide range of complex projects for the City: serves as a Director of more complex planning, development and or capital projects engineering projects; directs the work of subordinate and consulting professional and technical engineering staff; responsible for the administration and supervision of the Community Development Department.

The following description outlines the role and its alignment with the City of Liberty Lake's Mission, Vision and Values.
These lists contain the essential job duties, functions and expectations. However, these are not necessarily all-inclusive. Employees may be required to perform other duties as assigned:

COMPETENCIES:

- Professional / Inter-Personal Communications: Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- English Language: Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- Clerical: Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, designing forms, and other office procedures and terminology.

RESPONSIBILITIES & DUTIES:

(Note: The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position).

A. Strategic Planning and Visioning: Develop and implement long-term community development strategies, including master plans for land use, economic revitalization, and sustainable growth. Conduct needs assessments and set measurable goals aligned with city priorities.

B. Representation and Advisory: Advise the City Administrator, Mayor, City Council, and other officials on community development matters. Represent the department and city at public events, professional meetings, boards/commissions, regional committees, and media interactions to communicate vital information about city priorities, codes, and policies.

C. Stakeholder Collaboration and Engagement: Build partnerships with government agencies, businesses, developers, community groups, and other stakeholders. Facilitate public meetings, workshops, and outreach to gather input and foster community buy-in for city initiatives.

D. Policy Development and Advocacy: Recommend and draft policies related to zoning, permitting, economic development, and community standards. Advocate for funding and resources at local, state, and federal levels, including grant writing and lobbying efforts.

E. Budget and Resource Management: Prepare and manage departmental budgets, allocate resources efficiently, and monitor departmental performance within the city's priority-based budgeting system. Identify and pursue funding opportunities through grants, public-private partnerships, and other sources to support city initiatives.

F. Economic Development: Collaborate on strategies to promote economic vibrancy, business retention & expansion, and redevelopment. Coordinate with other city departments to develop and implement projects that enhance the city's quality of life, economic vibrancy, and infrastructure.

G. Compliance and Regulatory Oversight: Ensure all development activities comply with local, state, and federal regulations, including environmental standards, building codes, and fair housing laws. Oversee code enforcement permitting processes and resolve compliance issues.

H. Data Analysis and Reporting: Collect and analyze data on a variety of demographic, economic, land-use, and level of service metrics. Prepare reports, dashboards, and presentations for leadership, boards, or the public to demonstrate progress and inform decision-making.

I. Resilience Planning and Response: Work collaboratively with other city departments, regional stakeholders, boards, and community groups to develop resilience strategies that meet the city's emergency management and continuity of operations priorities. Assist in developing response plans and coordinating recovery efforts for emergencies and disasters.

J. Team Leadership and Development: Recruit, train, and mentor staff within the department. Promote a collaborative work environment and ensure professional development opportunities to build a high-performing team.

MINIMUM QUALIFICATIONS:

[Note: To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the education, certification, licensing experience, knowledge, skill and/or ability required. A combination or accumulation of applicable work-related experience and/or education may be recognized as sufficiently meeting the pre-requisites outlined below.]

Required Experience:

❖ Minimum of five (5) years of increasingly responsible professional management experience in planning, economic development, housing, engineering, or real-estate development.

Required Credentials:

❖ Graduation from an accredited four-year (4) college or university with a degree in urban/regional planning, architecture, engineering, economics or closely related field.

Required Expertise & Skills:

- Management of Personnel Resources: Motivating, developing, and directing people as they work, identifying the best people for the job.
- Critical Thinking, Sound Professional Judgment and Decision Making: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems. Considering the relative costs and benefits of potential actions to choose the most appropriate one.

- Excellent Communication Skills (Written & Verbal): Communicating effectively as appropriate for the needs of the audience.
- Delivers and models the highest level of external (and internal) customer service with all stakeholder interactions.
- Computers and Electronics: Intermediate working knowledge and skill operating technology/computer-based work programs/software commonly used within professional settings.
- Time Management: Managing one's own time and the time of others.
- Service Orientation: Actively looking for ways to help people.

MENTAL & OTHER SKILLS/ABILITIES: For an employee to succeed in this position they must have:

I. Adaptability: ability to adapt to changes, delays or unexpected events in the work environment; ability to manage competing demands and prioritize tasks; ability to change approach or method to best fit the situation.

II. Analytical Ability: ability to maintain focus for extended periods of time; ability to complete research projects with resourcefulness and persistence; ability to synthesize complex or diverse information; ability to use intuition and experience to complement existing data.

III. Attendance: ability to consistently arrive and be able to work as scheduled.

IV. Computer/Technical Ability: working knowledge of:
   a. Word Processing software
   b. Spreadsheet software
   c. Internet software

V. Dependability: ability to follow instructions, both in written and verbal format; ability to respond to management direction; ability to complete tasks on time or notify the appropriate person with an alternate plan when necessary.

VI. Interpersonal Skills: ability to maintain satisfactory relationships with others, excellent customer service skills and a good overall understanding of appropriate human relations. Awareness of and sensitivity to the service population's culture and socioeconomic characteristics.

VII. Judgment: ability to make prudent and timely decisions; ability to exhibit sound and accurate judgment; ability to explain reasoning for decisions.

VIII. Language Ability:
   a. High Ability: ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations; ability to write reports, business correspondence, and procedure manuals; ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

IX. Mathematical Ability:
   a. Intermediate Ability: ability to calculate figures and amounts such as discounts, interest, commissions, proportions, percentages, area, circumference, and volume; ability to apply concepts of basic algebra and geometry.

X. Motor Coordination: the ability to coordinate eyes, hands, fingers, and feet accurately and handle precise movements.

XI. Problem Solving Ability: ability to identify and/or prevent problems before they occur; ability to formulate alternative solutions to problems when necessary; ability to transfer learning from past experiences to new experiences of similar nature.

XII. Quality Management: ability to complete duties, on time and with absolute precision, at least 95% of the time; ability to edit the accuracy and thoroughness of one's work as well as the work of others; ability to constructively apply feedback to improve performance, ability to generate ideas to improve and promote quality in work.

XIII. Reasoning Ability:

a. High Ability: ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists; ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

XIV. Supervisory Skills: ability to carry out supervisory responsibilities in accordance with the Company's policies and applicable laws. Applicable supervisory responsibilities include

a. interviewing, hiring, training, and coaching employees
b. planning, assigning and directing work
c. reviewing performance
d. appraising/disciplining employees when necessary
e. addressing complaints and questions and resolving problems

PHYSICAL DEMANDS & WORK ENVIRONMENT

[Note: The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.]

This position is an office environment-based role, there are no specific or unusual physical or environmental demands regularly required of the incumbent outside of a professional office environment. Frequent and continuous physical activities required include: Sitting, typing, writing, hearing, listening, talking, bending, stooping, and lifting up to 25 pounds. This role is mostly protected from weather conditions or contaminants, but not necessarily from the occasional temperature fluctuation.

EEO STATEMENT

The City of Liberty Lake is an Equal Opportunity Employer. The City of Liberty Lake does not discriminate based on race, religion, color, sex, gender identity, sexual orientation, age, non-disqualifying physical or mental disability, national origin, veteran status or any other basis covered by appropriate law. All employment is decided based on qualifications, merit, and business need.

STATEMENT OF INTENTION AND ACKNOWLEDGEMENT:

The above statements are intended to describe the general nature and level of work being performed by the individual assigned this position. This job description is not intended to be an exhaustive list of all responsibilities, duties and skills of the personnel in this position.

I have read and accept the duties and responsibilities as outlined. I have also been given the opportunity to discuss any questions or concerns regarding any or all the above directly with my supervisor prior to signing this document. Further, I agree to notify my supervisor immediately if I am unable to fulfill any or all the duties as outlined above. I understand that the City of Liberty Lake reserves the right to revise or change this job description as the need arises.

I have reviewed this job description and received a copy.

Employee Signature: _____ Date: _____

Print name: _____