Chapter 8. Fire District #7 Annex

8.1. HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

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8.2. JURISDICTION PROFILE

Kittitas County Fire District #7 (Kittitas County Fire & Rescue) is a large rural fire district on the east slope of the Cascade mountain range, 90 miles east of Seattle and 35 miles west of Ellensburg. KCFD #7 encompasses 110 square miles, with a population of 3,526 people. The district protects a 20-mile stretch of the I-90 corridor, a major transportation route from Seattle. The district borders the town of Easton to the west and surrounds the cities of Cle Elum and Roslyn, South Cle Elum and the township of Ronald (KCFD #6). The district lies in a high value forest and open range environment along the east slope of the Cascade mountain range.

The district actively responds to wildfires, structure fires, light rescue and emergency medical incidents, with an average call volume of 500 incidents per year. The district has 16 paid positions and 40-plus volunteer firefighters. The district participates in the countywide mutual aid agreement.

The fire district is a junior taxing district organized in 1980 under Revised Code of Washington, (RCW) Title 52. The governing body is a three-member elected board of commissioners that will assume the responsibility for adoption and implementation of this plan. The fire chief is the chief executive officer for the district and is responsible for the administration of any policies or program adopted by the board of fire commissioners.

The district population is predominately located in the wildland-urban interface, along the slopes of the upper Kittitas valley. In an area known for intense wildfire behavior, the fire district actively partners with the Washington State Department of Natural Resources and U.S. Forest service to prevent and extinguish wildland fires.

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

- **Population Served -** 4,511 as of the 2018 population estimate
- Land Area Served 126 square miles (See Figure 8-1)
- Value of Area Served The estimated value of the area served by the jurisdiction is \$2,429,120,426
- Land Area Owned 11.5 acres

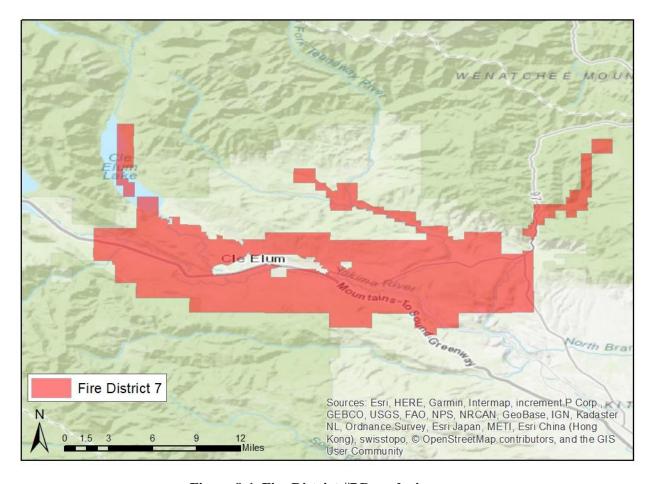


Figure 8-1. Fire District #7 Boundaries

• List of Critical Infrastructure/Equipment Owned by the Jurisdiction:

- 8 Type 1 Engines, Total value \$775,000.
- 1 Type 1 Ladder Trucks, Total Value \$150,000
- 1 Mobile Air Unit, Total value \$5,000
- 4 Aid Units, Total Value \$60,000
- 7 Support Units, Total Value \$40,000
- 9 Wild-land Units, Total Value \$140,000
- 7 Water Tenders, Total Value \$310,000
- Communications/Radios, Total Value \$150,000
- Computer Equipment, Total Value \$200,000
- Small equipment, Total Value \$500,000
- **Total Value of Critical Infrastructure/Equipment** The total value of critical infrastructure and equipment owned by the jurisdiction is \$3,829,367.
- List of Critical Facilities Owned by the Jurisdiction
 - 8 Fire Stations

- **Total Value of Critical Facilities** The total value of critical facilities owned by the jurisdiction is \$8,584,851.
- Current and Anticipated Service Trends An increase in new vacation home construction, results in a minor increase in population growth but greater recreational intensity in the district. Due to the increase of tourism and recreational activity, the district may see a slight increase in overall responses.

8.3. JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 8-1 lists all past occurrences of natural hazards within the jurisdiction.

8.4. HAZARD RISK RANKING

Table 8-2 presents the ranking of the hazards of concern. The jurisdiction is most at risk from wildfire, with severe storms ranked second. The area has moderate risk from flooding, earthquakes and landslides. There is low risk from all other hazards.

8.5. APPLICABLE REGULATIONS AND PLANS

The following existing codes, ordinances, policies or plans are applicable to this hazard mitigation plan:

- Enhanced State hazard Mitigation Plan, final rule CFR part 201.4
- Building Code KCC 14.04
- Kittitas County Comprehensive Plan
- Emergency Response Plan
- Critical Areas KCC 17A.05
- Federal and state occupational safety and labor-and-industry mandates
- Firewise programs within the County supported by Kittitas County Conservation District,
 Washington Department of Natural Resources, U.S. Forest Service, and the fire districts.
- Kittitas County Community Wildfire Protection Plan

8.6. CLASSIFICATION IN HAZARD MITIGATION PROGRAMS

The jurisdiction's classifications under various hazard mitigation programs are presented in Table 8-3.

8.7. HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 8-4 lists the initiatives that make up the jurisdiction's hazard mitigation plan. Table 8-5 identifies the priority for each initiative. Table 8-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

8.8. FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Seismic data is needed to highlight specific hazard locations and potential vulnerabilities within the district, and to support potential remodeling or replacement.

8.9. ADDITIONAL COMMENTS

Currently, the county is under significant water availability restrictions. Federal and state agencies need to recognize and authorize allowances to support construction of emergency facilities that serve the community at large and in particular, provide for ready access to water for fire-fighting purposes.

Table 8-1. Natural Hazard Events

Type of Event	Date	Preliminary Damage Assessment		
Severe winter storm	03/25/2011	No estimate available		
Severe winter storm	03/02/2009	No estimate available		
Severe winter storm	01/30/2009	No estimate available		
Earthquake/Nisqually	03/01/2001	No estimate available		
Severe winter storm	01/17/1997	No estimate available		
Severe winter storm	02/09/1996	No estimate available		
Severe winter storm	01/03/1996	No estimate available		
Severe winter storm	11/26/1990	No estimate available		
Volcanic eruption/ St. Helens	05/21/1980	No estimate available		
Severe winter storm	12/10/1977	No estimate available		
Severe winter storm	12/13/1975	No estimate available		
Severe winter storm	12/29/1964	No estimate available		

Table 8-2. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)		
1	Wildland Fire	54		
2	Severe winter storm	27		
3	Flooding	18		
4	Earthquake	12		
5	Landslide	8		
6	Avalanche	2		
7	Dam Failure	2		
8	Volcano/Lahar	1		
9	Drought	1		
10	Tsunami/Seiche	1		

Table 8-3. Community Classifications

	Participating?	Classification	Date Classified
Public Protection	Yes	7/9	9/2009
Storm Ready	No	_	_
Firewise	No	_	—

Table 8-4. Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline			
Initiative # FD7-01 —Ensure a reliable source of water for fire suppression, meeting acceptable standards for minimum volume and flow requirements for existing and new development. ^a									
New & Existing	Wildfire	1, 4	Community development	Medium	Developers, FEMA	Short term/ ongoing			
	Initiative # FD7-02 —Develop and maintain a coordinated approach between fire jurisdictions and water supply agencies to identify improvements to the water distribution system, initially focusing on areas of highest wildfire hazard.								
New & Existing	Wildfire	1, 4, 9	KCFD #7	Low	District funds	Short term/ ongoing			
Initiative # FD7-	03—Enforce a	minimum road	width of 20 fee	et on all roadway	ys greater than 50 f	eet in length			
New & Existing	All Hazards	1, 4, 10	Fire marshal	Low	County Funds	Short term/ ongoing			
Initiative # FD7-		1 0	m creating a 30-	foot defensible	space along all pub	lic roadways,			
New & Existing	All Hazards	1, 4, 10	Community development	Low	County Funds	Short term/ ongoing			
Initiative # FD7-	05—Replace of	r significantly	retrofit existing	fire stations to r	meet critical infrast	ructure			
New & Existing	Wildfire	4	KCFD #7	High	District funds	Long term			
Initiative #FD7-0	6—Ensure all	dead-end publi	c roads have ad	equate turn arou	and for fire equipme	ent.			
New & Existing	All Hazards	1, 4	Community Development	Low	County Funds	Short term/ ongoing			
Initiative #FD7-07 —Continue to support the implementation, monitoring, maintenance and updating of this plan.									
New & Existing	All Hazards	5, 9	KCFD# 7	Low	District funds	Short term/ ongoing			
Initiative #FD7-08—Support countywide initiatives related to hazard mitigation efforts.									
New & Existing	All Hazards	9	KCFD #7	Low	District funds	Short term/ ongoing			

Table 8-5. 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*
01	2	High	Medium	Yes	Yes	No	High
02	3	High	Low	Yes	Yes	Yes	High
03	3	High	Low	Yes	No	Yes	High
04	1	High	Low	Yes	Yes	Yes	Medium
05	1	Medium	Medium	Yes	Yes	Yes	Medium
06	2	Medium	Low	Yes	No	Yes	Medium
07	2	High	Low	Yes	Yes	Yes	High
08	1	High	Low	Yes	No	Yes	High

^{*} See Section 1.3 for definitions of high, medium and low priorities.

Table 8-6. Analysis of Mitigation Initiatives: Initiative Addressing Hazard, by Mitigation Type

Hazard Type	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Avalanche	7, 8				3,4	
Dam Failure	7, 8				3,4,6	
Drought	7, 8					
Earthquake	7, 8				3,4,6	
Flood	7, 8				3,4,6	
Landslide	7, 8				3,4,6	
Severe Weather	7, 8				3,4,6	
Seiche	7, 8				3,4,6	
Volcano	7, 8				3,4,6	
Wildfire	2, 7, 8	1, 2, 4, 5, 7		1, 2, 4	1, 2, 3, 4, 5, 6	

Prevention: Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.

^{2.} Property Protection: Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.

^{3.} Public Education and Awareness: Actions to inform citizens and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.

Natural Resource Protection: Actions that minimize hazard loss and preserve or restore the functions of natural systems.
 Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

^{5.} Emergency Services: Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.

^{6.} Structural Projects: Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.