

**PART 3—
FIRE AND RESCUE DISTRICT ANNEXES**

CHAPTER 7. FIRE DISTRICT #1 ANNEX

7.1. HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

DJ Evans Fire Chief
PO Box 34 / 10700 N. Thorp Hwy
Thorp Wash. 98946
Telephone: 509-964-2435
e-mail Address: kcfd1@elltel.net

Alternate Point of Contact

Dean Evans Fire Commissioner Chairman
PO Box 34 / 10700 N. Thorp Hwy
Thorp Wash. 98946
Telephone: 509-964-2435
e-mail Address: kcfd1@elltel.net

7.2. JURISDICTION PROFILE

Kittitas County Fire District #1 is mostly a rural area with small to medium residential areas interspersed through the wildland-urban interface areas. The District provides emergency medical service and fire protection, shoreline water rescue, high angle rescue for wind turbines, and rope rescue, all on over 43.5 sq. miles, which is intersected by 11 miles of Interstate 90, 10 miles of SR 10, 9 miles of SR 97, 12 miles of Yakima River, and 12 miles of BNSF Railway track. All of this service is provided by a crew of 19 volunteer firefighters/emergency medical technicians. Funding comes to the junior taxing district through property taxes and grants.

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

- **Population Served**—2500 as of 2009 (Amended)
- **Land Area Served**—43.5 sq. miles
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$171,631,639
- **Land Area Owned**—2.95 acres (two stations)
- **List of Critical Infrastructure/Equipment Owned by the Jurisdiction:**
 - 1974 Pumper \$30,000
 - 1985 Int. Tender \$85,000
 - 2000 GMC pumper \$270,000
 - 2002 Ford Minipumper \$185,000
 - 1970 Jeep Tender \$40,000
 - 1985 Chev Light Rescue \$25,000
 - 1990 Ford Tender \$65,000
 - 1984 Ford MCI vehicle \$5,000
 - 1978 Int. Brush engine \$55,000
 - 1977 Int. Rehab bus \$10,000
 - 1999 Ford Command vehicle \$25,000

- 2000 Ford Light Rescue \$20,000
- 1993 GMC pumper \$75,000
- 1995 Chev Aid Unit \$50,000
- **Total Value of Critical Infrastructure/Equipment**—The total value of critical infrastructure and equipment owned by the jurisdiction is \$940,000
- **List of Critical Facilities Owned by the Jurisdiction:**
 - Station 11 Thorp \$350,957
 - Station 12 Clark Flats 2 bldgs. \$179,305
 - Station 11 storage container \$3,000
- **Total Value of Critical Facilities**—The total value of critical facilities owned by the jurisdiction is \$533,262
- **Current and Anticipated Service Trends**—The District’s calls for service have leveled out due to the economic downturn of the country. Up till then calls were accelerating at a rapid pace (from 25 in 2000 to 180 in 2009). Once the economy starts going again, the growing call demand will resume. The fire district area has plans for two more truck stops, one having a motel and small strip mall attached. Also, a winery/event center planned for downtown Thorp is in progress of being built.

7.3. JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 7-1 lists all past occurrences of natural hazards within the jurisdiction.

7.4. HAZARD RISK RANKING

Table 7-2 presents the ranking of the hazards of concern.

7.5. APPLICABLE REGULATIONS AND PLANS

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

- None

7.6. CLASSIFICATION IN HAZARD MITIGATION PROGRAMS

The jurisdiction’s classifications under various hazard mitigation programs are presented in Table 7-3.

7.7. HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 7-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan. Table 7-5 identifies the priority for each initiative. Table 7-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

**TABLE 7-1.
NATURAL HAZARD EVENTS**

Type of Event	Date	Preliminary Damage Assessment
Winter Weather	3/25/2011	N/A
Winter Weather	3/02/2009	N/A
Winter Weather	1/30/2009	N/A
Flooding	1/9/2009	N/A
Wildfire	8/3/2005	N/A
Wildfire	7/30/2004	N/A
Wildfire	7/26/2004	N/A
Wildfire	7/2/2004	N/A
Wildfire	7/29/2003	N/A
Flooding	1/31/2003	N/A
Earthquake (Nisqually)	3/1/2001	N/A
Winter Weather	1/17/1997	N/A
Flooding	2/9/1996	N/A
Flooding/High Winds	1/3/1996	N/A
Winter Weather	2/19/1993	N/A
Flooding	11/26/1990	N/A
Flooding	1/18/1986	N/A
Volcanic Eruption	5/21/1980	N/A
Flooding/Mudslide	12/10/1977	N/A
Flooding	12/13/1975	N/A
Flooding/Landslide	12/22/1972	N/A
Landslide	6/70	N/A
Flooding/Landslide	1/26/1965	N/A
Heavy Rains/ Flooding	12/29/1964	N/A

TABLE 7-2. HAZARD RISK RANKING		
Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Flood	3x6=18
1	Wild Fire	3x6=18
2	Severe Storms/Wind	3x5=15
3	Earthquake	2x6=12
4	Landslides	2x5=10
5	Volcano/Lahar	1x3=3
5	Dam Failure	1x3=3
6	Drought	2x1=2
7	Avalanche	0
7	Tsunami (Seiche)	0

TABLE 7-3. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Public Protection	Yes	6/9	—
Storm Ready	No	—	—
Firewise	No	—	—

**TABLE 7-4.
HAZARD MITIGATION ACTION PLAN MATRIX**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
Initiative #KCFD1-1 —Participate in the “Firewise” program by identifying project site locations and promoting Firewise techniques as a defensible space initiative.						
New and Existing	Wildfire	6,7,9	KCFD-1	Low	District Funds	Short-term, Ongoing
Initiative# KCFD1-2 —Continue to provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via web pages, signage and outreach.						
New and Existing	Wildfire	6,7,9	KCFD-1	Low	Firewise Grant, District Funds	Short Term
Initiative KCFD1-3 —Develop and maintain a coordinated approach between fire jurisdictions and water supply agencies to identify needed improvements to the water distribution system, initially focusing on areas of highest wildfire hazard.						
New & Existing	Wildfire	1,9,10	KCFD-1	Low	District Funds	Short-term, Ongoing
Initiative KCFD1-4 —Require that development in high fire hazard areas provide adequate access roads, onsite fire protection systems, evacuation signage and fire breaks.						
New	Wildfire	1,2,3,9,10	KCFD-1	Low	County/District Funds	Short-term, Ongoing
Initiative # KCFD1-5 —Continue to support the implementation, monitoring, maintenance and updating of this plan.						
New and Existing	All Hazards	All	KCFD-1	Low	HMGP, District funds	Short-term, ongoing
Initiative #KCFD1-6 —Continue to support through active participation the countywide initiatives identified in volume 1 of the Kittitas County Hazard Mitigation Plan.						
New and Existing	All Hazards	5,6,9	KCFD-1	Low	District Funds	Short-term, Ongoing

**TABLE 7-5.
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 ^a
KCFD1-1	3	High	Low	Yes	Yes	Yes	High
KCFD1-2	3	High	Low	Yes	No	Yes	High
KCFD1-3	3	High	Low	Yes	No	Yes	High
KCFD1-4	5	High	Low	Yes	No	Yes	High
KCFD1-5	10	High	Low	Yes	Yes	Yes	High
KCFD1-6	3	High	Low	Yes	No	Yes	High

a. See Section 1.3 for definitions of high, medium and low priorities.

**TABLE 7-6.
ANALYSIS OF MITIGATION INITIATIVES**

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

1. 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.
4. 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.

CHAPTER 8. FIRE DISTRICT #7 ANNEX

8.1. HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

Russell Hobbs
11042 Teanaway Rd.
Cle Elum, WA 98922
Telephone: 509-674-4880
e-mail Address: chief_hobbs@yahoo.com

Alternate Point of Contact

Paul Blume
1473 Lower Peoh Pt. Rd.
Cle Elum, WA 98922
Telephone: 509-674-8154
e-mail Address: pblume@kcf7.com

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 and the townships of South Cle Elum and 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 5 paid positions and 80-plus volunteer firefighters. The district actively pursues automatic aid agreements and 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**—3,526 as of the 2010 Census
- **Land Area Served**—110 square miles (See Figure 8-1)
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$2,024,267,022
- **Land Area Owned**—11.5 acres

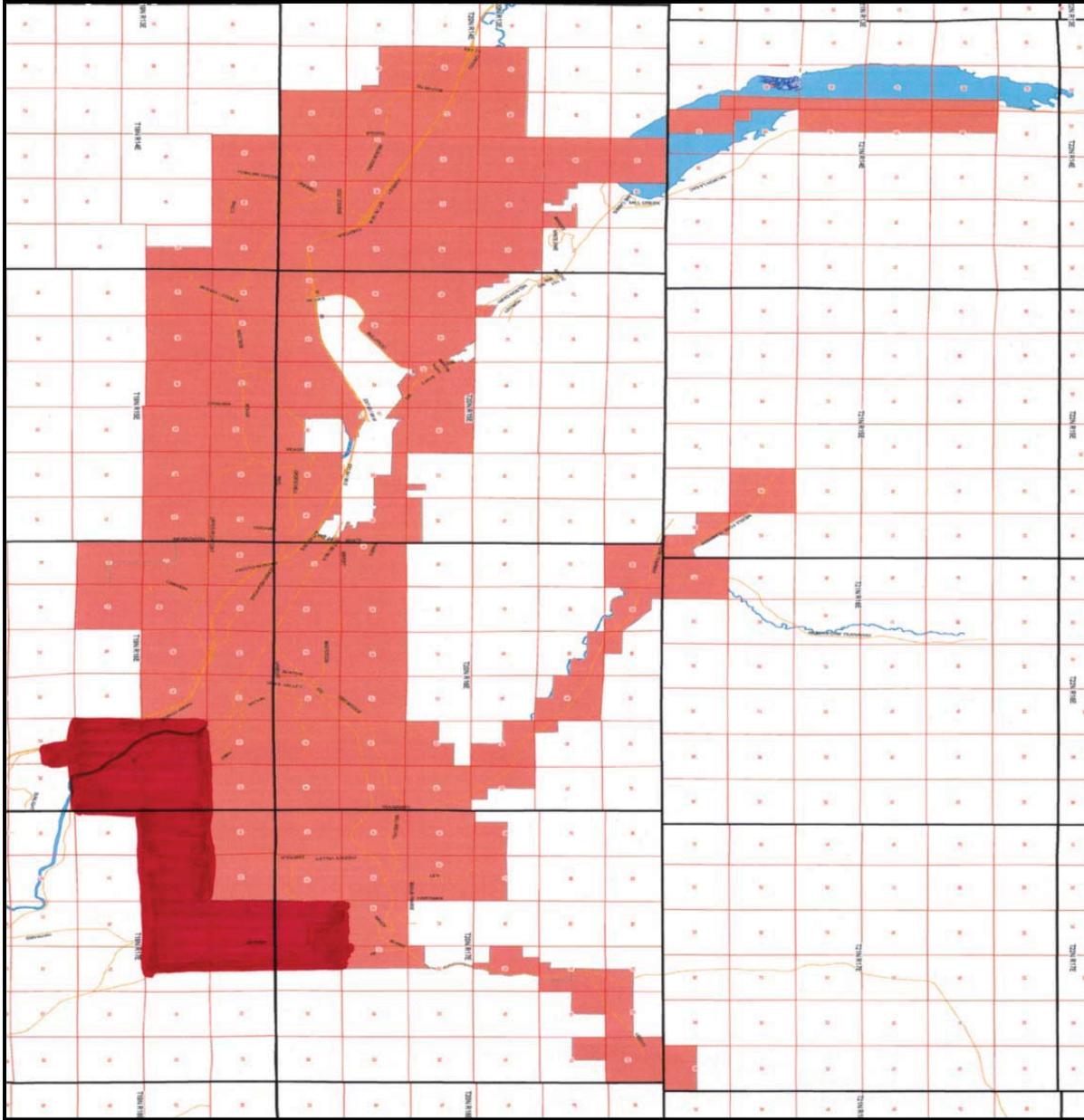


Figure 8-1. Fire District #7 Boundaries

- **List of Critical Infrastructure/Equipment Owned by the Jurisdiction:**
 - 8 Type 1 Engines, Total value \$775,000.
 - 2 Type 1 Ladder Trucks, Total Value \$150,000
 - 1 Mobile Air Unit, Total value \$5,000
 - 3 Aid Units, Total Value \$60,000
 - 5 Support Units, Total Value \$40,000
 - 7 Wild-land Units, Total Value \$140,000
 - 8 Water Tenders, Total Value \$310,000

- Communications/Radios, Total Value \$90,000
- Computer Equipment, Total Value \$10,000
- Small equipment, Total Value \$200,000
- **Total Value of Critical Infrastructure/Equipment**—The total value of critical infrastructure and equipment owned by the jurisdiction is \$1,780,000.
- **List of Critical Facilities Owned by the Jurisdiction:**
 - 6 fire stations
- **Total Value of Critical Facilities**—The total value of critical facilities owned by the jurisdiction is \$3,810,000.
- **Current and Anticipated Service Trends**—A slowdown in new construction, high fuel prices and a water moratorium represent a minor decrease in population growth. The estimated growth in 2010 was 67 percent increase, according to the Washington State Fire Marshal’s Office. In 2011, the district may see a slight decrease 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.

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.

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 there is a water moratorium in effect, preempting new critical facility construction projects. Federal and state agencies need to recognize and authorize allowances to support construction of emergency facilities that serve the community at large.

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

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Earthquake	54
2	Severe winter storm	27
3	Flooding	18
4	Wild land urban interface fire	12
5	Volcano/Lahars	8
6	Landslide	2
7	Avalanche	2
8	Dam failure	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						
New & Existing	Fire Hazards	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 wild-fire hazard.						
New & Existing	Wild-fire	1, 4, 9	KCFD #7	Low	District funds	Short term/ongoing
Initiative # FD7-03 —Provide for an emergency operations center in upper Kittitas County						
New	All Hazard	9	KCFD #7	MED	District funds/FEMA grant	Long term
Initiative # FD7-04 —Enforce a minimum road width of 20 feet on all roadways greater than 50 feet in length						
New & Existing	All Hazard	1, 4, 10	Fire marshal	Low	County Funds	Short term/ongoing
Initiative # FD7-05 —Adopt a Firewise program creating a 30-foot defensible space along all public roadways, allowing for safe evacuation routes.						
New & Existing	All Hazard	1, 4, 10	Community development	Low	County Funds	Short term/ongoing
Initiative # FD7-06 —Replace or significantly retrofit existing fire stations to meet critical infrastructure standards.						
New & Existing	Earthquake	4	KCFD #7	High	District funds	Long term
Initiative #FD7-07 —Ensure all dead-end public roads have adequate turn around for fire equipment.						
New & Existing	All Hazard	1, 4	Community Development	Low	County Funds	Short term/ongoing

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 #FD7-08 —Continue to support the implementation, monitoring, maintenance and updating of this plan.						
New & Existing	All Hazards	9	KCFD# 7	Low	District funds	Short term/ongoing
Initiative #FD7-09 —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 ^a
01	2	High	Med	Yes	Yes	No	Medium
02	3	High	Low	Yes	Yes	Yes	High
03	1	High	Med	Yes	Yes	No	Medium
04	3	High	Low	Yes	No	Yes	High
05	1	High	Low	Yes	Yes	Yes	Medium
06	1	Medium	Med	Yes	Yes	Yes	Medium
07	2	Medium	Low	Yes	No	Yes	Med
08	1	High	Low	Yes	Yes	Yes	High
09	1	High	Low	Yes	No	Yes	High

a. See Section 1.3 for definitions of high, medium and low priorities.

**TABLE 8-6.
ANALYSIS OF MITIGATION INITIATIVES**

Hazard Type	Initiative Addressing Hazard, by Mitigation Type					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Avalanche			9		3,4	
Dam Failure			9		3,4,6,7	
Drought	—	—	—	—	—	—
Earthquake	8,9		9		3,4,6,7	
Flood	8,9		9		3,4,6,7	
Landslide	8,9		9		3,4,6,7	
Severe Weather	8,9		9		3,4,6,7	
Seiche			9		3,4,6,7	
Volcano			9		3,4,6,7	
Wildfire	8,9	1,2,4,5,7	9	1,4,5	1,2,3,4,5,6,7,8	

1. 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.
4. 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.

CHAPTER 9. FIRE DISTRICT #8 ANNEX

9.1. HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

Monty Moore – Fire Chief
PO Box 618
Easton, WA 98925
Telephone: 206-617-4521
e-mail Address: montlm@aol.com

Alternate Point of Contact

John Storch
PO Box 618
Easton, WA 98925
Telephone: 509-260-0604
e-mail Address: jstorch@cityofcleelum.com

9.2. JURISDICTION PROFILE

Kittitas County Fire District 8 is a fire protection district that provides structural fire, wildland fire, emergency medical response and rescue operations in the Lake Kachess / Stampede Pass areas of Kittitas County and along I-90 from Milepost 54.5 to Milepost 67. The district was formed in the early 1980s and is funded through property taxes and is run by an elected Board of Fire Commissioners who appoint a Chief of the Department for day-to-day operations. Besides the property owners and residents within KCFD 8, the District also provides service to the I-90 corridor, which has up to 40,000 vehicles per day travel across it. The following is a summary of key information about the jurisdiction:

- **Population Served**—500 as of 2011
- **Land Area Served**—Approximately 20 square miles
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$100,665,000
- **Land Area Owned**—Approximately 1/3 acre
- **List of Critical Infrastructure/Equipment Owned by the Jurisdiction:**
 - 1 – Fire Engine: \$100,000
 - 1 – Aid Car: \$35,000
 - 2 – Brush Trucks: \$100,000
 - All portable equipment located in the emergency vehicles and station: \$100,000
- **Total Value of Critical Infrastructure/Equipment**—The total value of critical infrastructure and equipment owned by the jurisdiction is \$335,000
- **List of Critical Facilities Owned by the Jurisdiction:**
 - Fire Station #83: \$150,000
- **Total Value of Critical Facilities**—The total value of critical facilities owned by the jurisdiction is: \$150,000
- **Current and Anticipated Service Trends**—As the transient population traveling over I-90 continues to increase, so do the District’s calls for service. The vast majority of responses are directly related to incidents on I-90.

- The jurisdiction’s boundaries are described as follows: Township 21; Range 12; Section. 22, 15, 14, 13, 23,24,25,36 and Township 21; Range 13; Section. 5 and 6. Township 21N; Range 13E; Section 18(North half only), Township 21N; Range 12E; Section 10, Township 21N; Range 11E; Section 1, Township 21N; Range 11E; Section 2, Township 21N; Range 11E; Section 11, Township 21N; Range 11E; Section 12, Township 21N; Range 11E; Section 13, Township 22N; Range 11E; Section 35 (East half only), Township 22N; Range 11E; Section 23 (From 50 feet East of the East shoulder of Interstate 90 to the West edge of the section boundary), Township 22N; Range 11E; Section 26 (From 50 feet East of the East shoulder of Interstate 90 to the West edge of the section boundary)

9.3. JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 9-1 lists all past occurrences of natural hazards within the jurisdiction.

9.4. HAZARD RISK RANKING

Table 9-2 presents the ranking of the hazards of concern.

9.5. 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.

9.6. CLASSIFICATION IN HAZARD MITIGATION PROGRAMS

The jurisdiction’s classifications under various hazard mitigation programs are presented in Table 9-3.

9.7. HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 9-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan. Table 9-5 identifies the priority for each initiative. Table 9-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

9.8. FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

The District’s service area is extremely vulnerable to avalanche events that could isolate the area or cause a large population to become trapped in the area. The other major concern is failure of the dam on either Lake Keechelus or Lake Kachess, which would cause a major flooding event and potentially isolate portions of the district. There are no facilities within the District that could serve as a command post or emergency shelter if a major hazard incident were to occur.

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

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Earthquake	54
2	Severe winter storm	27
3	Flooding	18
4	Wild land urban interface fire	12
5	Volcano/Lahars	8
6	Landslide	2
6	Avalanche	2
7	Dam failure	1
7	Drought	1
7	Tsunami/Seiche	1

	Participating?	Classification	Date Classified
Public Protection	Yes	8/9	—
Storm Ready	No	—	—
Firewise	No	—	—

**TABLE 9-4.
HAZARD MITIGATION ACTION PLAN MATRIX**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
Initiative #FD8-01 —Continue to support the implementation, monitoring, maintenance and updating of this plan.						
New & Existing	All Hazards	2,8,9	KCFD# 8	Low	District funds	Short term/ongoing
Initiative #FD8-02 —Continue to support through active participation the countywide initiatives identified in volume 1 of the Kittitas County Hazard Mitigation Plan.						
New and Existing	All Hazards	5,6,9	KCFD-8	Low	District Funds	Short-term, Ongoing
Initiative #FD8-03 —Participate in the Firewise program by identifying project site locations and promoting Firewise techniques as a defensible space initiative.						
New and Existing	Wildfire	6,7,9	KCFD-8	Low	District Funds	Short-term, Ongoing
Initiative #FD8-04 —Comply with all applicable building and fire codes, as well as other regulations when constructing or significantly remodeling infrastructure facilities.						
New & Existing	All Hazards	2,4,5,6	KCFD-8/County	Low	District Funds	Ongoing
Initiative #FD8-05 —Require that development in high fire hazard areas provide adequate access roads, onsite fire protection systems, evacuation signage and fire breaks.						
New	Wildfire	1,4,6,10	KCFD-8/County	Low	County/District Funds	Ongoing
Initiative #FD8-06 —Enhance communication capabilities between agencies, coordination of radio types and use of existing and new systems.						
New & Existing	All	1,7,9,10	County	Med	County, Bureau of Land Management, District & Grant Funds	Ongoing

**TABLE 9-5.
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 ^a
1	3	Medium	Low	Yes	Yes	Yes	High
2	3	Medium	Low	Yes	No	Yes	High
3	3	High	Low	Yes	Yes	Yes	High
4	4	High	Low	Yes	No	Yes	High
5	4	High	Low	Yes	No	Yes	High
6	4	High	Medium	Yes	Yes	No	Medium

a. See Section 1.3 for definitions of high, medium and low priorities.

**TABLE 9-6.
ANALYSIS OF MITIGATION INITIATIVES**

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

1. 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.
4. 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.