

Chapter 10. Snoqualmie Pass Utility District Annex

10.1. HAZARD MITIGATION PLAN POINT OF CONTACT

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10.2. JURISDICTION PROFILE

Snoqualmie Pass Utility District was formed in 1984 when the Summit Sewer District and Kittitas County Sewer District 1 were consolidated into a single district operating under RCW Chapter 57. Those original districts were located on opposite sides of the King-Kittitas county line. The joined District operates in both counties to provide water and sewer service to residential and commercial customers. The District is located near the western summit of Snoqualmie Pass along I-90 at an elevation of approximately 3,000 feet, and serves the needs of year-round residents, travelers, and recreational visitors. The area is adjacent to the popular “Summit at Snoqualmie” day-use ski area, with heavy visitation during winter weekends.

A Board of Commissioners consisting of three local citizens elected on a non-partisan basis governs the District. The Commissioners establish policies, set rates, adopt system plans for water and sewer utilities and approve the revenue obligations. In addition, the Commissioners appoint the General Manager. The General Manager is directly responsible to the board of Commissioners and is the Chief Executive of the District.

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

- **Population Served**—300 full time and 20,000 peak
- **Land Area Served**—1,785 acres
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$70,000,000
- **Land Area Owned**—7 acres
- **List of Critical Infrastructure/Equipment Owned by the Jurisdiction:**
 - 13.87 miles of water mains, 4 production wells, 3 reservoirs, 5 pressure-reducing-valve stations, with an estimated value of \$4,535,740
 - 16.56 miles of sanitary sewer mains, 2 pump stations and 1 treatment plant, with an estimated value of \$6,793,258
- **Total Value of Critical Infrastructure/Equipment**—The total value of critical infrastructure and equipment owned by the jurisdiction is \$11,328,998
- **List of Critical Facilities Owned by the Jurisdiction:**
 - Wastewater Treatment Plant. Located at 370 Treatment Plant Road, Snoqualmie Pass. Onsite buildings consist of the Treatment Plant (3,942 square feet), constructed in

1983, the Headworks building (600 square feet) constructed in 2009 and the Maintenance Shop (4,042 square feet) constructed in 1995 with an addition constructed in 2003. A remote building known as the Pipe Galley (286 square feet), located 1 mile southwest, was constructed in 1983. Joint Hyak maintenance facility (4,000 square feet) (shared property between SPUD and County) located at 930 Hyak Drive East, constructed in 2013.

- Future Capital Projects: See Snoqualmie Pass Utility District Water Comprehensive Plan and Snoqualmie Pass Utility District Sewer Comprehensive Plan for a list of upcoming capital projects. These projects will have a combined estimated value of \$10,000,000 - \$13,000,000.
- **Total Value of Critical Facilities**— The total value of critical facilities owned by the jurisdiction is \$2,770,591. The value of future capital projects (water and sewer) will total \$10,000,000 - \$13,000,000.
- **Current and Anticipated Service Trends**— The District estimates that 300 full-time residents currently live at Snoqualmie Pass, with an additional 500 seasonal residents on a peak winter ski weekend. In addition to residential population, the area has a large transient population, including travelers on I-90 who stop to use facilities at the pass, and day-use winter sports participants. A peak day-use population of 20,000 was estimated for a recent heavy ski year. The District’s current growth rate of single family homes is 8%.

10.3. JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 10-1 lists all past occurrences of natural hazards within the jurisdiction.

10.4. HAZARD RISK RANKING

Table 10-2 presents the ranking of the hazards of concern. The jurisdiction is most at risk from severe storm, earthquake, and wildfire, with moderate risk from avalanche, flooding, and landslides. There is low risk from all other hazards.

10.5. APPLICABLE REGULATIONS AND PLANS

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

- Snoqualmie Pass Utility District Water Comprehensive Plan
- Snoqualmie Pass Utility District Sewer Comprehensive Plan
- Emergency Response Plan
- King County Hazard Mitigation Plan

10.6. CLASSIFICATION IN HAZARD MITIGATION PROGRAMS

The jurisdiction’s classifications under various hazard mitigation programs are presented in Table 10-3.

10.7. HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 10-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan. Table 10-5 identifies the priority for each initiative. Table 10-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

Table 10-1. Natural Hazard Events

Type of Event	Date	Preliminary Damage Assessment
Severe Winter Storm And Record And Near Record Snow (DR-1825)	3/2/2009	N/A
Winter Storm (DR 1817)	1/17/2009	\$50,000
Severe Winter Storms, Land & Muds Slides, & Flooding, (DR-1159)	1/17/1997	N/A
Severe Storms & Flooding (DR-883)	11/26/1990	N/A
Severe Storms, Mudslides, & Flooding, (DR-545)	12/10/1977	N/A

Table 10-2. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Severe Winter Storm	24
1	Earthquake	24
1	Wildland Fire	24
2	Avalanche	6
2	Flood	6
2	Landslide	6
3	Dam Failure	0
3	Volcano	0
3	Tsunami	0
3	Drought	0

Table 10-3. Community Classifications

	Participating?	Classification	Date Classified
Public Protection	No	—	—
Storm Ready	No	—	—
Firewise	No	—	—

Table 10-4. Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
Initiative #SPUD-01 —Continue to support the implementation, monitoring, maintenance and updating of this plan.						
New and Existing	All Hazards	2,8,9	SPUD	Low	District funds	Short-term/ongoing
Initiative #SPUD-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	SPUD	Low	District Funds	Short-term/Ongoing
Initiative #SPUD-03 —Develop a continuity of operations plan that looks at sustaining operations following disasters.						
New and Existing	All Hazards	1, 9, 10	SPUD	Low	District Funds, DHS Grant funding	Short-term
Initiative #SPUD-04 —Partner with other local governments in educating citizens on potential consequences associated with natural hazards and opportunities to mitigate their impacts.						
New and Existing	All Hazards	2, 8, 9	SPUD	Low	District General Fund	Short-term, ongoing
Initiative #SPUD-05 — Consider hazard mitigation and resiliency during the implementation of projects listed in the Snoqualmie Pass Utility District Water Comprehensive Plan and the Snoqualmie Pass Utility District Sewer Comprehensive Plan.						
New	All Hazards	1, 2, 10	SPUD	High	District General Fund, USDA Funds	Long-term
Initiative #SPUD-06 — Increase fire flow storage across the Snoqualmie Pass Utility District. Two expansions are planned in the Snoqualmie Pass Utility District Water Comprehensive Plan.						
New	Earthquake, Flood, Wildfire	1, 8	SPUD	High	District General Fund, USDA Funds, grants	Long-term
Initiative #SPUD-07 — Implement wastewater treatment facility improvements, with the goal of improving the resiliency of the wastewater treatment system to the impacts of natural hazards.						
New	Earthquake, Flood, Wildfire	1, 8	SPUD	High	District General Fund, USDA Funds, grants	Long-term

Table 10-5. 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*
1	3	Medium	Low	Yes	Yes	Yes	High
2	3	Medium	Low	Yes	Yes	Yes	High
3	3	High	High	Yes	Yes	No	Medium
4	3	Low	Low	Yes	No	Yes	Yes
5	3	High	High	Yes	Yes	No	High
6	2	High	High	Yes	Yes	No	High
7	2	High	High	Yes	Yes	No	High

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

Table 10-6. 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	1, 2	5, 7	1, 2, 4		3	
Dam Failure	1, 2	5, 7	1, 2, 4		3	
Drought	—	5, 7	—	—	—	—
Earthquake	1, 2	5, 7	1, 2, 4		3	
Flood	1, 2	5, 7	1, 2, 4		3	
Landslide	1, 2	5, 7	1, 2, 4		3	
Severe Weather	1, 2	5, 7	1, 2, 4		3	
Seiche	—	5, 7	—	—	—	—
Volcano	—	5, 7	—	—	—	—
Wildfire	1, 2	5, 6, 7	1, 2, 4	6	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.