

Chapter 14. Kittitas County Conservation District Annex

14.1. HAZARD MITIGATION PLAN POINT OF CONTACT

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14.2. JURISDICTION PROFILE

The Kittitas Conservation District was created in 1942, followed by the Cle Elum Conservation District in 1948, as part of a national response to the Dust Bowl. The two districts combined in the 1960's to create the Kittitas County Conservation District (KCCD). The KCCD has worked for 75 years to assist local land managers to address the many challenges to long term sustainability. The KCCD serves the citizens of its community (county, state, country) to ensure the long term use of natural resources in an economically, socially, and environmentally sustainable manner using non-regulatory, voluntary approaches.

The KCCD is primarily grant funded and averages approximately 20 open grants at any time. The grants are secured predominantly from state and federal sources such as the Washington State Conservation Commission, Department of Natural Resources, Department of Ecology, Salmon Recovery Funding Board, Bonneville Power Administration, and the USDA Natural Resources Conservation Service. Over the last seven years, the state and federal grants have accounted for 94% of the revenue received. The remaining revenue is from local and private sources, including the Special Assessment, Kittitas County Public Works, and private organizations (e.g. Puget Sound Energy). The Special Assessment funding is used to secure many of the state and federal grants, so although the local funds are a small part of the overall revenue, they are critical to obtaining those grants.

Kittitas County Conservation District and other conservation districts are the ONLY organizations in Washington State that routinely design and apply on-the-ground solutions to nonpoint water quality problems on privately owned resource lands. Further, the technical help provided by conservation districts to private landowners is free for the asking. Each conservation district is led by a five-member board of volunteer supervisors - three elected locally and two appointed by the state's conservation agency, the Conservation Commission. These individuals serve three-year terms, during which time they remain aware of locally important natural resource or environmental issues and decide what projects their district will undertake each year. Also, Kittitas County Conservation District has seven paid staff that work to implement the annual and long range plans of the board of supervisors each managing several natural resource concerns ranging from agriculture, water quality, soil erosion, botany, forestry and wildfire. The Kittitas County Conservation District serves unincorporated Kittitas County and the cities of Cle Elum and Roslyn (about 20,828 population).

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

- **Population Served** - 20,828
- **Land Area Served** - 2,333 square miles
- **Value of Area Served** - \$5,725,414,660
- **Land Area Owned** - N/A

- **List of Critical Infrastructure/Equipment Owned by the Jurisdiction - N/A**
- **Total Value of Critical Infrastructure/Equipment - N/A**
- **List of Critical Facilities Owned by the Jurisdiction - N/A**
- **Total Value of Critical Facilities - N/A**
- **Current and Anticipated Service Trends -** Kittitas County population is expected to increase by an average annual growth rate of 1.08% annually (Kittitas County Population Projection Review and Analysis, 2016). Proposed population growth scenarios expects with current trends for the population growth from 2015-2037 to increase by 21,738. In 2037 population is expected to be at 64,408 (Kittitas County Population Projection Review and Analysis, 2016). With the increase population, natural resource issues such as flooding, wildfire and other concerns will put more residences and private properties at risk.

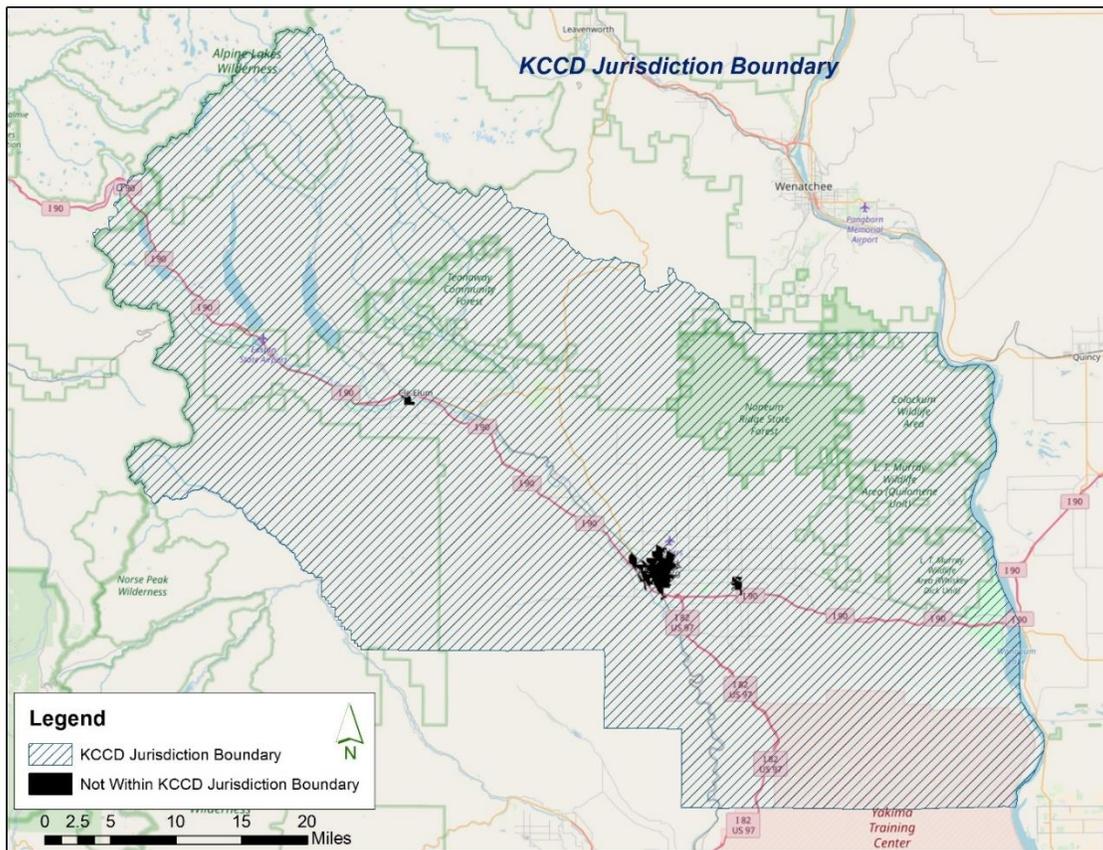


Figure 14-1. Kittitas County Conservation District Boundaries

14.3. KITTITAS COUNTY CONSERVATION DISTRICT NATURAL HAZARD HISTORY

Table 14-1 lists all past occurrences of natural hazards in the KCCD. Repetitive loss records are as follows:

- Number of FEMA-Identified Repetitive Flood Loss Properties: 0
- Number of Repetitive Flood Loss Properties that have been mitigated: 0

14.4. HAZARD RISK RANKING

Table 14-2 summarizes the ranking of the hazards of concern. The jurisdiction is most at risk from wildfire, earthquake, and severe storms. Drought, flooding, avalanche, and landslide present moderate risk, and there is low risk from all other hazards.

14.5. CAPABILITY ASSESSMENT

The assessment of the jurisdiction's administrative and technical capabilities is presented in Table 14-3. The assessment of the jurisdiction's fiscal capabilities is presented in Table 14-4. Classifications under various community mitigation programs are presented in Table 14-5.

14.6. HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Kittitas County Conservation District understands the basic federal grant program criteria which will drive the identification, selection, and funding of the most competitive and worthy mitigation projects. FEMA's grant programs (the Hazard Mitigation Grant Program, the Flood Mitigation Assistance, and Pre-Disaster Mitigation program) that offer federal mitigation funding to state and local governments all include the benefit-cost and repetitive loss selection criteria. The prioritization of new projects and deletion of completed projects will occur annually and be facilitated by the Kittitas County Emergency Manager and the joint planning committee. All mitigation activities, recommendations, and action items mentioned in this document are dependent on available funding and staffing.

14.7. FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

No future needs identified.

Table 14-1. Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Wildfire (Ryegrass Coulee)	FM-5253	7/10/2018	\$3 Million Dollars
Wildfire (Jolly Mountain)	FM-5200	7/2/2017- 7/22/2017	\$55 Million Dollars
Drought	N/A	2015	
Wildfire (Snag Canyon)	FM-5071	8/2/2014	\$14 Million Dollars
Wildfire (Saddle Mountain)	FM-5064	7/18/2014	
Wildfire (Colockum Tarps)	FM-5038	7/29/2013	\$7.6 Million Dollars
Wildfire (Table Mountain)	FM-5020	9/19/2012	\$3.2 Million Dollars
Wildfire (Taylor Bridge)	FM-5005	8/13/2012	\$59.8 Million Dollars
Severe Winter Storm, Flooding, Landslides and Mudslides	DR-1963	3/25/2011	
Severe Winter Storm and Record Near Record Snow	DR-1825	3/2/2009	
Severe Winter Storm, Landslides, Mudslides and Flooding	DR-1817	1/30/2009	
Drought	N/A	2005	
Drought	N/A	2001	
Earthquake (Nisqually)	DR-1361	3/1/2001	
Severe Winter Storms/Flooding	DR-1159	1/17/1997	
Severe Storms/Flooding	DR-1100	2/2/1996	
Storms/High Winds/Floods	DR-1079	1/3/1996	
Flooding, Severe Storm	DR-883	11/26/1990	
Volcanic Eruption, Mt St. Helens	DR-623	5/21/1980	
Severe Storms, Mudslides, Flooding	DR-545	12/10/1977	
Severe Storms, Flooding	DR-492	12/13/1975	

Table 14-2. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Wildfire	27
2	Earthquake	27
3	Severe Weather	27
4	Drought	18
5	Flood	18
6	Avalanche	9
7	Landslide	9
8	Dam Failure	3
9	Volcano	3

Table 14-3. Administrative and Technical Capability

Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Y	Kittitas County Conservation District/ District Manager, Engineer, Resource Tech, Project Managers
Engineers or professionals trained in building or infrastructure construction practices	Y	Kittitas County Conservation District/ District Engineer
Planners or engineers with an understanding of natural hazards	Y	Kittitas County Conservation District/ District Manager, Engineer, Resource Tech, Project Managers
Staff with training in benefit/cost analysis	Y	Kittitas County Conservation District/ Conservation Planners/ Project Managers
Floodplain manager	N	
Surveyors	N	
Personnel skilled or trained in GIS applications	Y	Kittitas County Conservation District/ GIS Specialist
Scientist familiar with natural hazards in local area	N	
Emergency manager	N	
Grant writers	Y	Kittitas County Conservation District / District Manager / Project Managers

Table 14-4. Fiscal Capability

Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	N
Capital Improvements Project Funding	N
Authority to Levy Taxes for Specific Purposes	N
User Fees for Water, Sewer, Gas or Electric Service	N
Incur Debt through General Obligation Bonds	N
Incur Debt through Special Tax Bonds	N
Incur Debt through Private Activity Bonds	N
Withhold Public Expenditures in Hazard-Prone Areas	N
State Sponsored Grant Programs	Y
Development Impact Fees for Homebuyers or Developers	N
Other	Y

Table 14-5. Community Classifications

	Participating?	Classification	Date Classified
Community Rating System	No	NA	N/A
Building Code Effectiveness and Grading Schedule	Yes	3/3	
Public Protection	Yes	6/9	
Storm Ready	No	NA	N/A
Firewise USA	Yes	High	2018
Voluntary Stewardship Plan	Yes	High	2018

Table 14-6. Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
Initiative # KCCD-01 —Continue to develop and implement public education programs which increase public awareness of the risks associated with hazards/disasters and emergency preparedness.						
Existing	All	6	KCCD Staff	High	KCCD public education programs	Ongoing
Initiative # KCCD-02 — Pre and post disaster technical, educational and financial assistance to private landowners including conducting damage assessments, recommending practices to address erosion risk (seeding, mulching, culvert replacements, etc.), encouraging residents to participate in the National Flood Insurance Program, and seeking funding to implement actions to reduce risk and protect homes and infrastructure.						
Existing	Flood, Dam Failure, Wildfire	1, 2, 6, 8, 10	KCCD Staff	High	KCCD led an interagency BAER team in 2012 fires	Ongoing
Initiative # KCCD-03 — Track conditions of and implement projects with private landowners conducting agricultural practices in frequently flooded areas, floodplains, and geologic hazard areas that improve resource conditions and maintain the viability of agriculture.						
New	Drought, Flood, Landslide	3, 6, 9, 10	KCCD Staff	Medium	Voluntary Stewardship Program	Ongoing
Initiative # KCCD-04 — Conduct individual property and community-wide wildfire risk assessments and evaluate potential mitigation projects.						
Current	Wildfire	1, 6, 7	KCCD Staff	High	KCCD experience with Firewise USA communities and individual risk assessments	Ongoing
Initiative # KCCD-05 — Continue to work on actions items and proposed projects in the Kittitas County Community Wildfire Protection Plan including implementation of landscape scale restoration and partnering with stakeholders through the Kittitas Fire Adapted Communities Coalition (KFACC).						
Existing	Wildfire	1, 2, 3, 6, 7, 8, 10	KCCD Staff	Medium	CWPP, KFACC	Ongoing
Initiative # KCCD-06 — Implement projects and conduct outreach and education for landowners to improve water use efficiencies and resiliency in drought conditions including drought resistant landscapes, reducing water system losses, and identifying alternate water supply options.						
New	Drought	1, 6, 10	KCCD Staff	High	Yakima Basin Integrated Water Resources Management Plan	Ongoing

Table 14-7. 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*
KCCD-01	1	High	Medium	Yes	Yes	No	High
KCCD-02	5	High	High	Yes	Yes	No	High
KCCD-03	4	Medium	Medium	Yes	Yes	No	Medium
KCCD-04	3	Medium	High	Yes	Yes	No	Medium
KCCD-05	7	High	Medium	Yes	Yes	No	High
KCCD-06	3	Medium	Medium	Yes	Yes	No	High

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

Table 14-8. 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			
Dam Failure		2	1, 2			2
Drought		3	1, 3, 6	3		
Earthquake			1			
Flood		2, 3	1, 2, 3	3		2
Landslide		3	1, 3	3		
Severe Weather			1			
Seiche			1			
Volcano			1			
Wildfire	5	2, 4, 5	1, 2, 4, 5	5		2, 4

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.