

ANNEX L: WATER AND WATER AND SANITATION DISTRICTS

L.1 Community Profile

Several water and water and sanitation districts participated in the 2013 update process for the Summit County Multi-Hazard Mitigation Plan. Participating districts include Dillon Valley District, East Dillon Water District, Mesa Cortina Water and Sanitation District, and Snake River Water District. Dillon Valley is a Metropolitan District that provides water and sanitation services.

Figures L.1 through L.4 show maps of these districts and their locations within Summit County. The maps also show critical facilities, DFIRM and landslide deposits.

Figure L.1. Map of Dillon Valley District

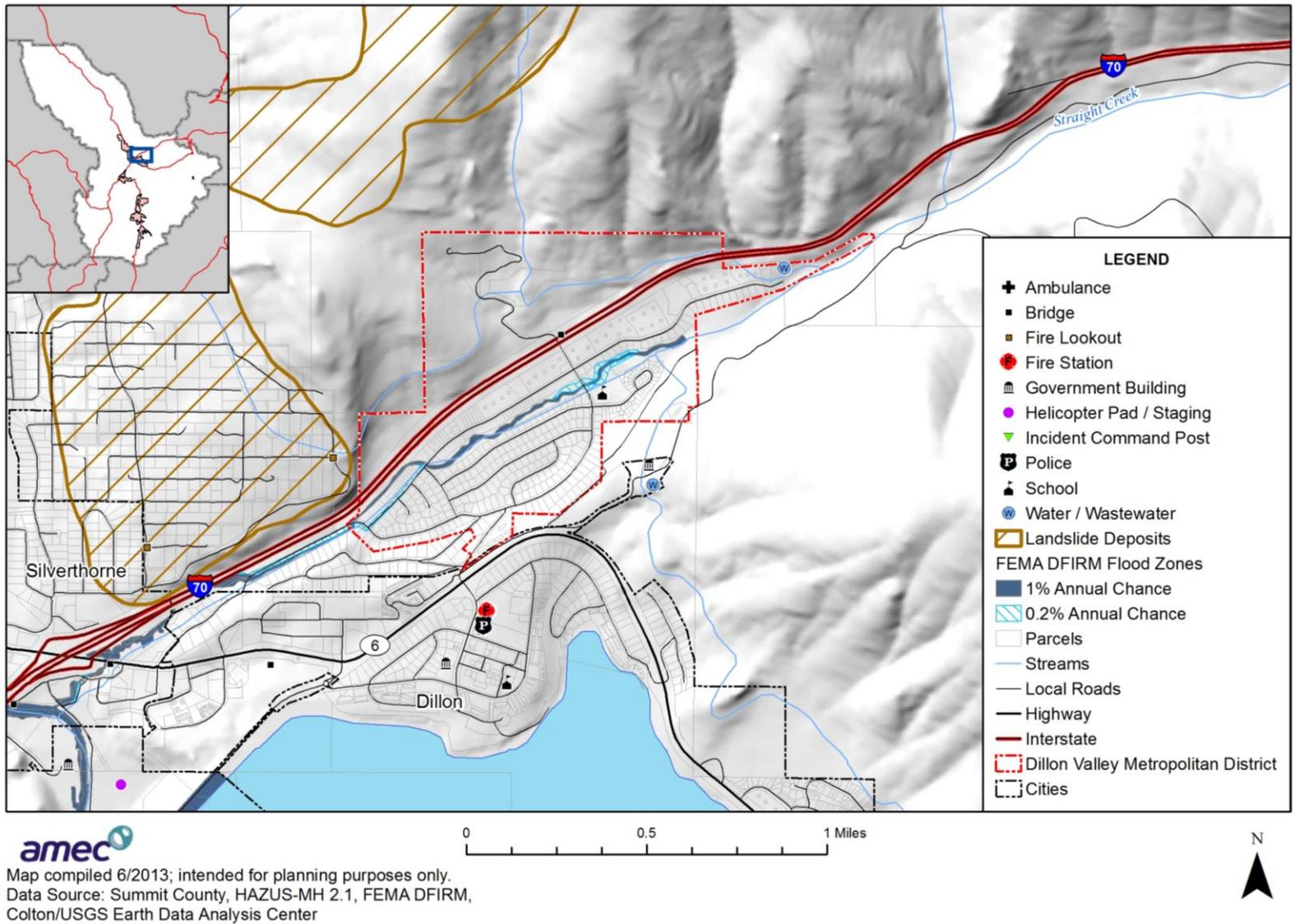


Figure L.2. Map of East Dillon Water District

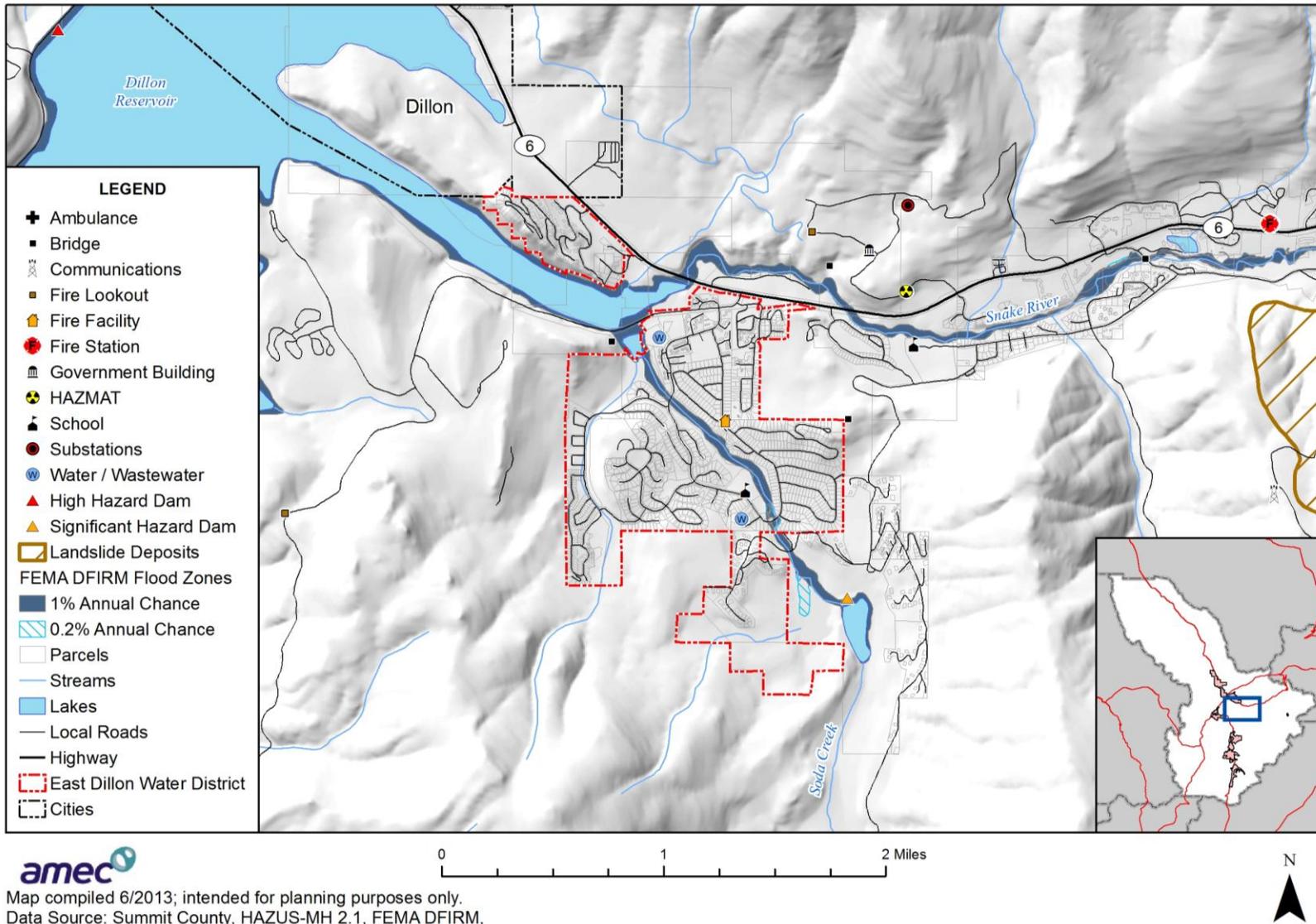
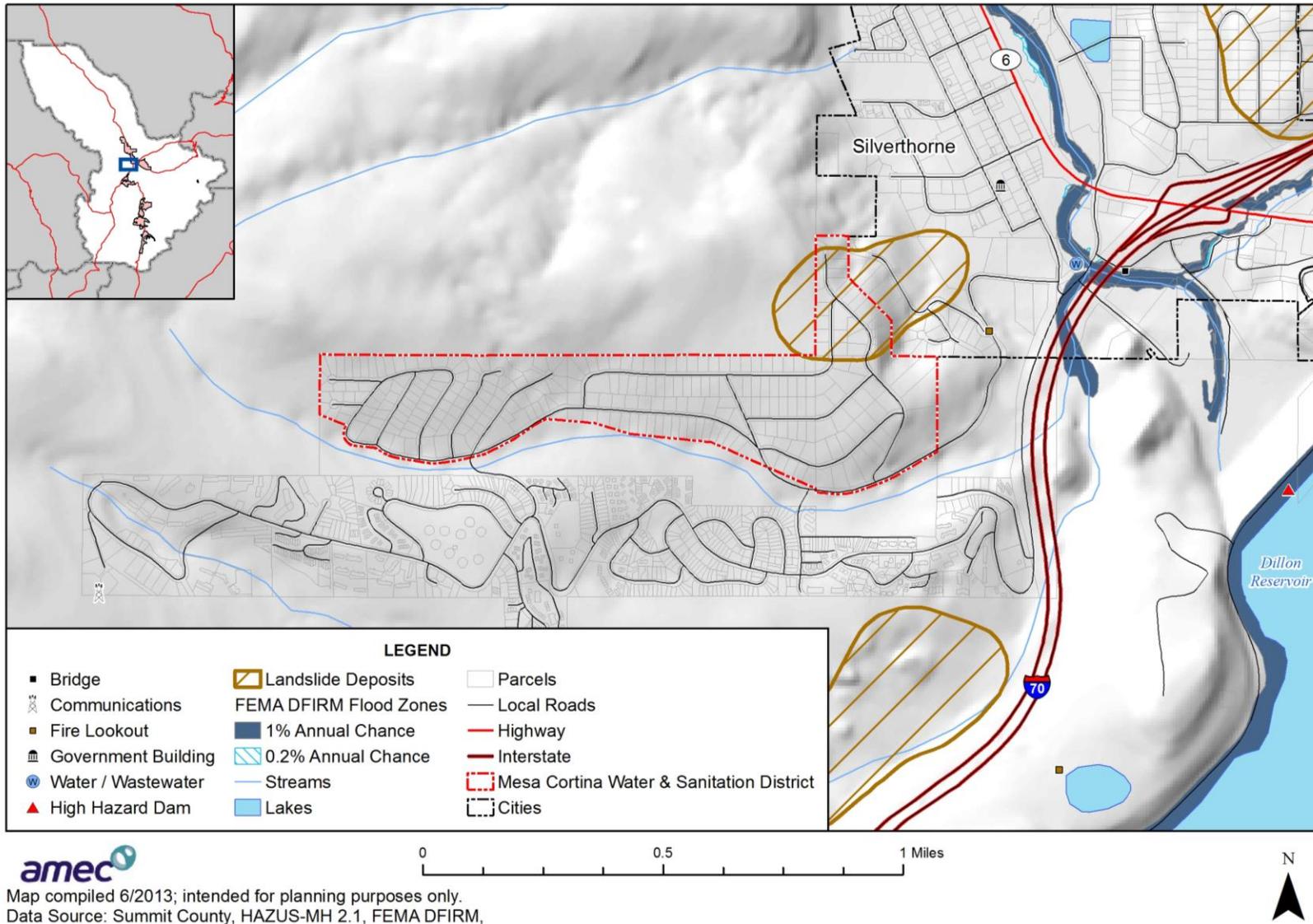
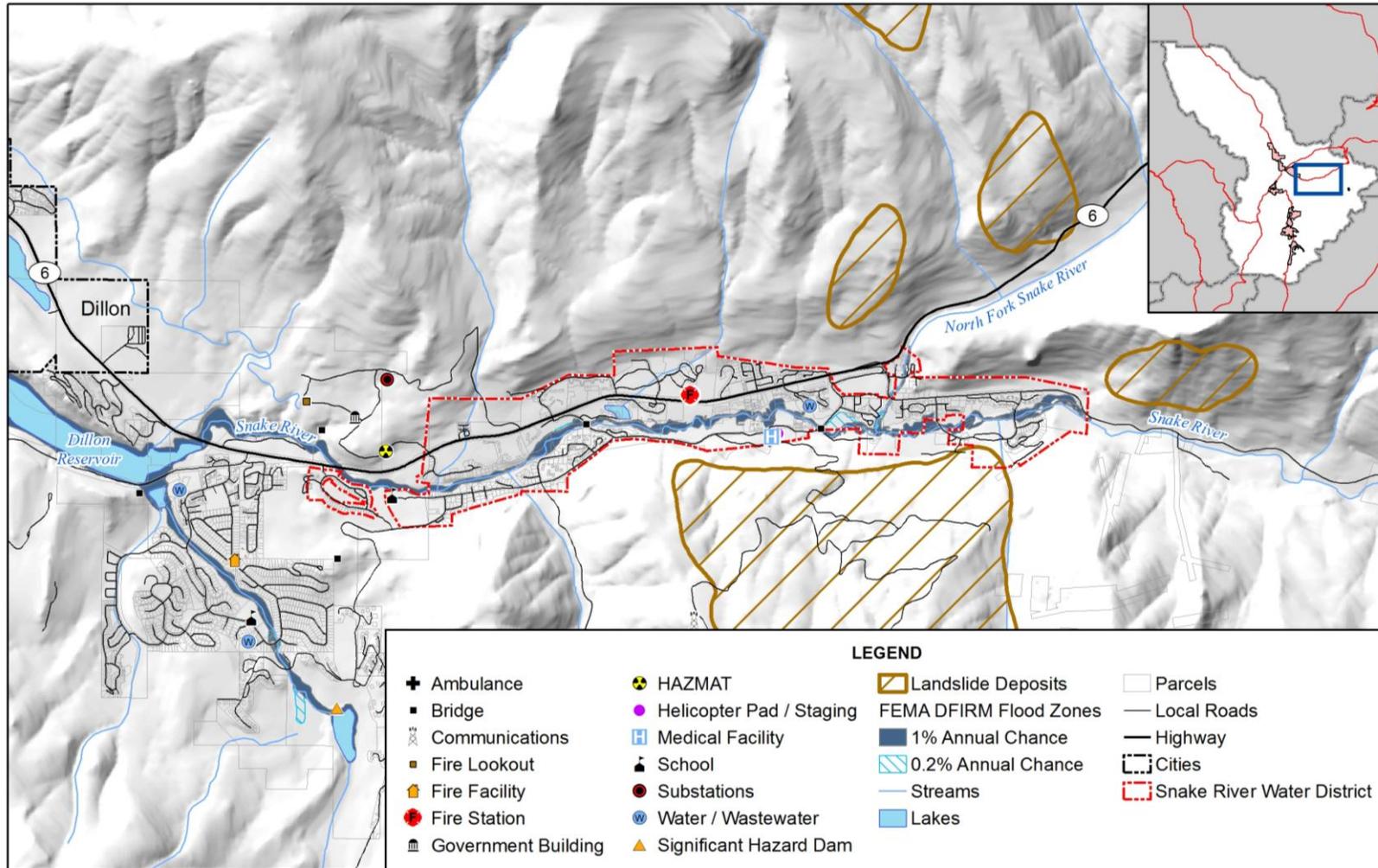


Figure L.3. Map of Mesa Cortina Water and Sanitation District

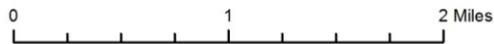


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 Map compiled 6/2013; intended for planning purposes only.
 Data Source: Summit County, HAZUS-MH 2.1, FEMA DFIRM,
 Colton/USGS Earth Data Analysis Center

Figure L.4. Map of Snake River Water District



Map compiled 6/2013; intended for planning purposes only.
 Data Source: Summit County, HAZUS-MH 2.1, FEMA DFIRM,
 Colton/USGS Earth Data Analysis Center



L.2 Hazard Identification and Profiles

Representatives of the districts in this annex identified the hazards that affect them and summarized their geographic location, probability of future occurrence, potential magnitude or severity, and planning significance specific to the Town (see Table L.1). In the context of the countywide planning area, there are no hazards that are unique to these districts.

Table L.1. Water and Water and Sanitation Districts—Hazard Summary

Hazard Type	Geographic Location*	Probability*	Magnitude*	Hazard Rating
Dillon Valley District				
Avalanche	Isolated	Unlikely	Negligible	Low
Dam Failure	Medium	Unlikely	Critical	Medium
Drought	Large	Likely	Negligible	Medium
Earthquake	Isolated	Occasional	Limited	Low
Erosion/Deposition	Isolated	Unlikely	Negligible	Low
Flood	Medium	Likely	Critical	High
Hazardous Materials Release	Small	Likely	Limited	High
Landslide, Mudflow/Debris Flow, Rock Fall	Isolated	Occasional	Limited	Medium
Lightning	Large	Highly Likely	Negligible	Low
Mountain Pine Beetle Infestation	Large	Highly Likely	Limited	Medium
Severe Winter Weather	Large	Likely	Negligible	Low
Wildfire	Large	Occasional	Critical	High
Windstorm	Large	Likely	Limited	Low
East Dillon Water District				
Avalanche	Isolated	Unlikely	Negligible	Low
Dam Failure	Medium	Unlikely	Critical	Low
Drought	Large	Likely	Negligible	Medium
Earthquake	Isolated	Occasional	Limited	Low
Erosion/Deposition	Isolated	Unlikely	Negligible	Low
Flood	Medium	Likely	Critical	High
Hazardous Materials Release	Isolated	Unlikely	Negligible	Low
Landslide, Mudflow/Debris Flow, Rock Fall	Isolated	Unlikely	Negligible	Low
Lightning	Isolated	Highly Likely	Negligible	Low
Mountain Pine Beetle Infestation	Large	Highly Likely	Limited	Medium
Severe Winter Weather	Large	Likely	Negligible	Low
Wildfire	Large	Occasional	Critical	High
Windstorm	Large	Likely	Limited	Low
Mesa Cortina Water and Sanitation District				
Avalanche	Isolated	Unlikely	Negligible	Low
Dam Failure	Isolated	Unlikely	Limited	Low
Drought	Large	Likely	Negligible	Medium
Earthquake	Isolated	Occasional	Limited	Low
Erosion/Deposition	Isolated	Unlikely	Negligible	Low

Hazard Type	Geographic Location*	Probability*	Magnitude*	Hazard Rating
Flood	Isolated	Unlikely	Negligible	Low
Hazardous Materials Release	Isolated	Unlikely	Negligible	Low
Landslide, Mudflow/Debris Flow, Rock Fall	Isolated	Unlikely	Negligible	Low
Lightning	Isolated	Highly Likely	Negligible	Low
Mountain Pine Beetle Infestation	Large	Highly Likely	Limited	Medium
Severe Winter Weather	Large	Likely	Negligible	Low
Wildfire	Large	Occasional	Critical	High
Windstorm	Large	Likely	Limited	Low
Snake River Water District				
Avalanche	Isolated	Unlikely	Negligible	Low
Dam Failure	Isolated	Unlikely	Negligible	Low
Drought	Large	Likely	Negligible	Medium
Earthquake	Isolated	Occasional	Limited	Low
Erosion/Deposition	Isolated	Unlikely	Negligible	Low
Flood	Small	Likely	Limited	Medium
Hazardous Materials Release	Isolated	Likely	Critical	High
Landslide, Mudflow/Debris Flow, Rock Fall	Isolated	Likely	Critical	Medium
Lightning	Isolated	Highly Likely	Negligible	Low
Mountain Pine Beetle Infestation	Large	Highly Likely	Limited	Medium
Severe Winter Weather	Large	Likely	Negligible	Low
Wildfire	Large	Occasional	Critical	High
Windstorm	Large	Likely	Limited	Low

*See Section 3.2 for definitions of these factors

Information on past events for each hazard can be found in Section 3.2 Hazard Profiles in the body of this document.

L.3 Vulnerability Assessment

The intent of this section is to assess the water and water and sanitation districts' vulnerability separately from that of the planning area as a whole, which has already been addressed in Section 3.3 Vulnerability Assessment in the main plan. For more information about how hazards affect the County as a whole, see Chapter 3 Risk Assessment.

District Asset Inventory

Table L.2 shows the number of structures, land value, and assessed value of improvements to parcels in the districts in this annex. Land values have been purposely excluded from the Total Value because land remains following disasters, and subsequent market devaluations are frequently short-term and difficult to quantify. Additionally, state and federal disaster assistance programs generally do not address loss of land or its associated value.

Table L.2. Water and Water/Sanitation Districts—Building Exposure

Land Use	Total Parcel Count	Improved Parcel Count	Land Value	Improvements Value	Estimated Content Value*	Total Value**
Dillon Valley District						
Government	7	1	\$121,864	\$250,694	\$250,694	\$501,388
Mixed Use	5	4	\$41,651	\$2,325,777	\$2,325,777	\$4,651,554
Open Space	3	0	\$0	\$0	\$0	\$0
Residential	369	349	\$40,173,178	\$177,099,380	\$177,099,380	\$354,198,760
Total	384	354	\$40,336,693	\$179,675,851	\$179,675,851	\$359,351,702
East Dillon Water District						
Commercial	1	1	\$0	\$1,335,195	\$1,335,195	\$2,670,390
Government	8	0	\$0	\$0	\$0	\$0
Mixed Use	2	0	\$100,387	\$0	\$0	\$0
Open Space	35	1	\$408,349	\$43,102	\$43,102	\$86,204
Other	2	0	\$0	\$0	\$0	\$0
Residential	1,231	1,068	\$194,768,332	\$439,419,032	\$219,709,516	\$659,128,548
Total	1,279	1,070	\$195,277,068	\$440,797,329	\$221,087,813	\$661,885,142
Mesa Cortina Water and Sanitation District						
Mixed Use	3	2	\$535,052	\$840,627	\$840,627	\$1,681,254
Open Space	1	0	\$0	\$0	\$0	\$0
Residential	277	229	\$52,336,933	\$85,001,408	\$42,500,704	\$127,502,112
Total	281	231	\$52,871,985	\$85,842,035	\$43,341,331	\$129,183,366
Snake River Water District						
Commercial	15	12	\$7,037,888	\$33,504,698	\$33,504,698	\$67,009,396
Government	21	16	\$1,685,567	\$221,480,456	\$221,480,456	\$442,960,912
Mixed Use	7	7	\$2,559,239	\$65,121,816	\$65,121,816	\$130,243,632
Open Space	44	5	\$1,022,520	\$27,745,829	\$27,745,829	\$55,491,658
Residential	496	370	\$138,298,272	\$822,942,743	\$411,471,372	\$1,234,414,115
Total	583	410	\$150,603,486	\$1,170,795,542	\$759,324,171	\$1,930,119,713
Grand Total	2,527	2,065	\$439,089,232	\$1,877,110,757	\$1,203,429,166	\$3,080,539,923

Source: Summit County Assessor 2013

*Content Value estimated; ** Improvements and Contents

Table L.3 lists critical facilities and other community assets identified by each district as important to protect in the event of a disaster.

Table L.3. Water and Water and Sanitation Districts—Critical Facilities and Other Community Assets

Name of Asset	Replacement Value (\$)	Occupancy/ Capacity #	Hazard Specific Info/Comments
Dillon Valley District			
Water treatment plant	3,500,000		Wildfire, contamination, flood, and lightning
Water tanks	2,500,000		Earthquake
Water source	Unknown		Wildfire, contamination, and flood
Maintenance building	300,000		Wildfire and flood
Water and sewer lines	1,000,000		Flood
East Dillon Water District			
Water treatment plant	2,000,000		Wildfire and lightning
Water tanks	4,500,000		Earthquake and lightning
Water source	Unknown		Wildfire, contamination, and flood
Domestic water wells	3,000,000		Flood and contamination
Water and sewer lines	1,000,000		Flood
Well house	500,000		Flood
Mesa Cortina Water and Sanitation District			
Water treatment plant	750,000		Wildfire and lightning
Water tank	1,000,000		Wildfire, earthquake, and lightning
Water source	Unknown		Wildfire, drought, and contamination
Domestic water wells	500,000		Drought and contamination
Snake River Water District			
2 water treatment plants	3,200,000 each		Wildfire
4 water storage tanks	3,000,000 each		Landslide, wildfire
7 domestic water wells	60,000 each		Contamination
Water transmission lines	1,000,000		Landslide

Sources: HCMD

Vulnerability by Hazard

This section examines those existing and future structures and other assets at risk to hazards ranked of moderate or high significance that vary from the risks facing the entire planning area and estimates potential losses. This includes wildfire.

Wildfire

Existing Development

A wildfire threat ranking was developed for the Summit County Community Wildfire Protection Plan by the County, fire protection districts, and U.S. Forest Service. It is based on fuel hazards, risk of wildfire occurrence, essential infrastructure at risk, community values at risk, and local preparedness and firefighting capability and classifies the wildfire threat as low, medium, high, and extreme. The wildfire threat GIS layer, updated in 2011, was used to determine the number of acres in each wildfire threat zone and map the wildfire threat in the districts (see Table L.4 and Figure L.5 through L.8). Figure L.9 through L.12 show the wildfire focus areas from the County CWPP and treatment areas in the districts.

Table L.4. Districts—Acreage in Wildfire Threat Zones

District	Low		Medium		High		Extreme		Total Acres
	Acres	%Total	Acres	%Total	Acres	%Total	Acres	%Total	
Dillon Valley	201	49%	193	47%	17	4%	-	-	411
East Dillon Water	13	1.4%	469	49%	460	48%	14	1.5%	956
Mesa Cortina Water & Sanitation	14	8%	104	57%	66	36%	-	-	184
Snake River Water	23	2%	709	67%	325	31%	1	0.1%	1,058
Totals	251	10%	1,475	57%	868	33%	15	0.57%	2,609

Source: AMEC analysis with Summit County data

Based on the methodology described for wildfire in Section 3.3.3 Vulnerability by Hazard, the property values in the districts were separated into wildfire threat zones. The breakdown of property values in the districts by wildfire threat zone is shown in Table L.5. Most of the acreage in the districts is in medium to high wildfire threat zones. These zones have the most property value at risk as well.

Table L.5. Districts—Property Values in Wildfire Threat Zones

Threat Zone	Land Use	Improved Parcel Count	Land Value	Improved Value	Estimated Content Value	Total Value
Dillon Valley District						
Low	Mixed Use	4	\$41,651	\$2,325,777	\$2,325,777	\$4,651,554
	Residential	64	\$6,644,250	\$14,969,810	\$7,484,905	\$22,454,715
	Total	68	\$6,685,901	\$17,295,587	\$9,810,682	\$27,106,269
Medium	Government	1	\$121,864	\$250,694	\$250,694	\$501,388
	Residential	257	\$30,348,319	\$154,377,653	\$77,188,827	\$231,566,480
	Total	258	\$30,470,183	\$154,628,347	\$77,439,521	\$232,067,868
High	Residential	28	\$3,180,609	\$7,751,917	\$3,875,959	\$11,627,876
	Total	28	\$3,180,609	\$7,751,917	\$3,875,959	\$11,627,876
Totals		354	\$40,336,693	\$179,675,851	\$91,126,161	\$270,802,012

Threat Zone	Land Use	Improved Parcel Count	Land Value	Improved Value	Estimated Content Value	Total Value
East Dillon Water District						
Medium	Residential	424	\$69,833,031	\$187,938,905	\$93,969,453	\$281,908,358
	Total	424	\$69,833,031	\$187,938,905	\$93,969,453	\$281,908,358
High	Commercial	1	\$0	\$1,335,195	\$1,335,195	\$2,670,390
	Open Space	1	\$96,897	\$43,102	\$43,102	\$86,204
	Residential	634	\$121,536,870	\$247,230,231	\$123,615,116	\$370,845,347
	Total	636	\$121,633,767	\$248,608,528	\$124,993,413	\$373,601,941
Extreme	Residential	10	\$3,398,431	\$4,249,896	\$2,124,948	\$6,374,844
	Total	10	\$3,398,431	\$4,249,896	\$2,124,948	\$6,374,844
Totals		1,070	\$194,865,229	\$440,797,329	\$221,087,813	\$661,885,142
Mesa Cortina Water and Sanitation District						
Low	Residential	7	\$1,391,392	\$2,912,611	\$1,456,306	\$4,368,917
	Total	7	\$1,391,392	\$2,912,611	\$1,456,306	\$4,368,917
Medium	Residential	105	\$26,158,893	\$39,669,417	\$19,834,709	\$59,504,126
	Total	105	\$26,158,893	\$39,669,417	\$19,834,709	\$59,504,126
High	Mixed Use	2	\$535,052	\$840,627	\$840,627	\$1,681,254
	Residential	117	\$24,786,648	\$42,419,380	\$21,209,690	\$63,629,070
	Total	119	\$25,321,700	\$43,260,007	\$22,050,317	\$65,310,324
Totals		231	\$52,871,985	\$85,842,035	\$43,341,331	\$129,183,366
Snake River Water District						
Low	Residential	7	\$1,933,384	\$5,382,161	\$2,691,081	\$8,073,242
	Total	7	\$1,933,384	\$5,382,161	\$2,691,081	\$8,073,242
Medium	Commercial	9	\$5,502,505	\$32,672,035	\$32,672,035	\$65,344,070
	Government	10	\$418,756	\$172,604,207	\$172,604,207	\$345,208,414
	Mixed Use	5	\$2,392,104	\$54,003,346	\$54,003,346	\$108,006,692
	Open Space	3	\$918,370	\$26,457,001	\$26,457,001	\$52,914,002
	Residential	166	\$69,066,022	\$554,952,526	\$277,476,263	\$832,428,789
	Total	193	\$78,297,757	\$840,689,115	\$563,212,852	\$1,403,901,967
High	Commercial	3	\$1,535,383	\$832,663	\$832,663	\$1,665,326
	Government	6	\$1,266,811	\$48,876,249	\$48,876,249	\$97,752,498
	Mixed Use	2	\$167,135	\$11,118,470	\$11,118,470	\$22,236,940
	Open Space	2	\$104,150	\$1,288,828	\$1,288,828	\$2,577,656
	Residential	195	\$66,603,576	\$261,383,817	\$130,691,909	\$392,075,726
Total	208	\$69,677,055	\$323,500,027	\$192,808,119	\$516,308,146	
Extreme	Residential	2	\$695,290	\$1,224,239	\$612,120	\$1,836,359
	Total	2	\$695,290	\$1,224,239	\$612,120	\$1,836,359
Totals		410	150,603,486	1,170,795,542	759,324,171	1,930,119,713
Grand Total		2,065	\$438,677,393	\$1,877,110,757	\$1,114,879,476	\$2,991,990,233

Source: AMEC analysis with County data

Figure L.5. Wildfire Threat and Critical Facilities in Dillon Valley District

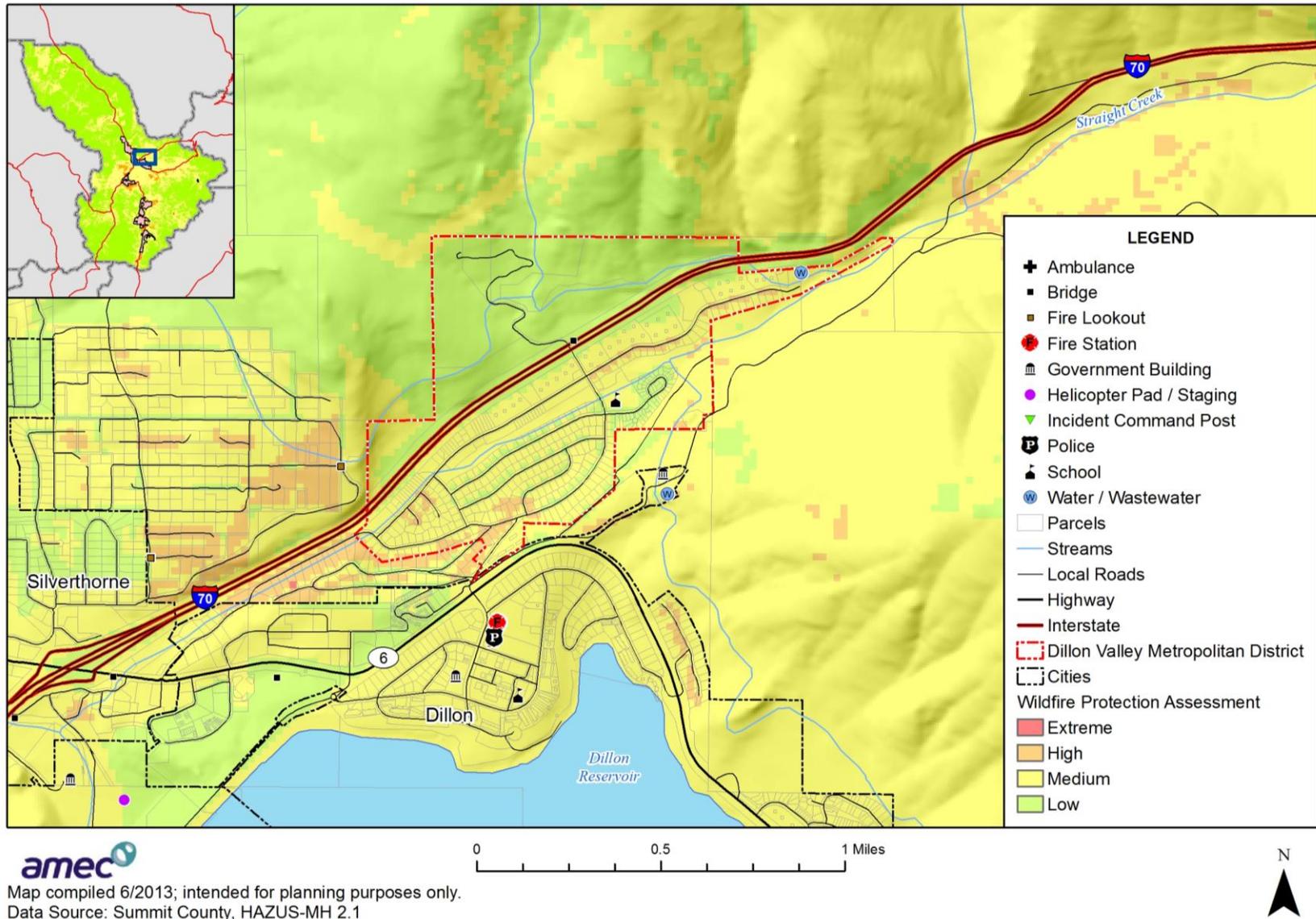


Figure L.6. Wildfire Threat and Critical Facilities in East Dillon Water District

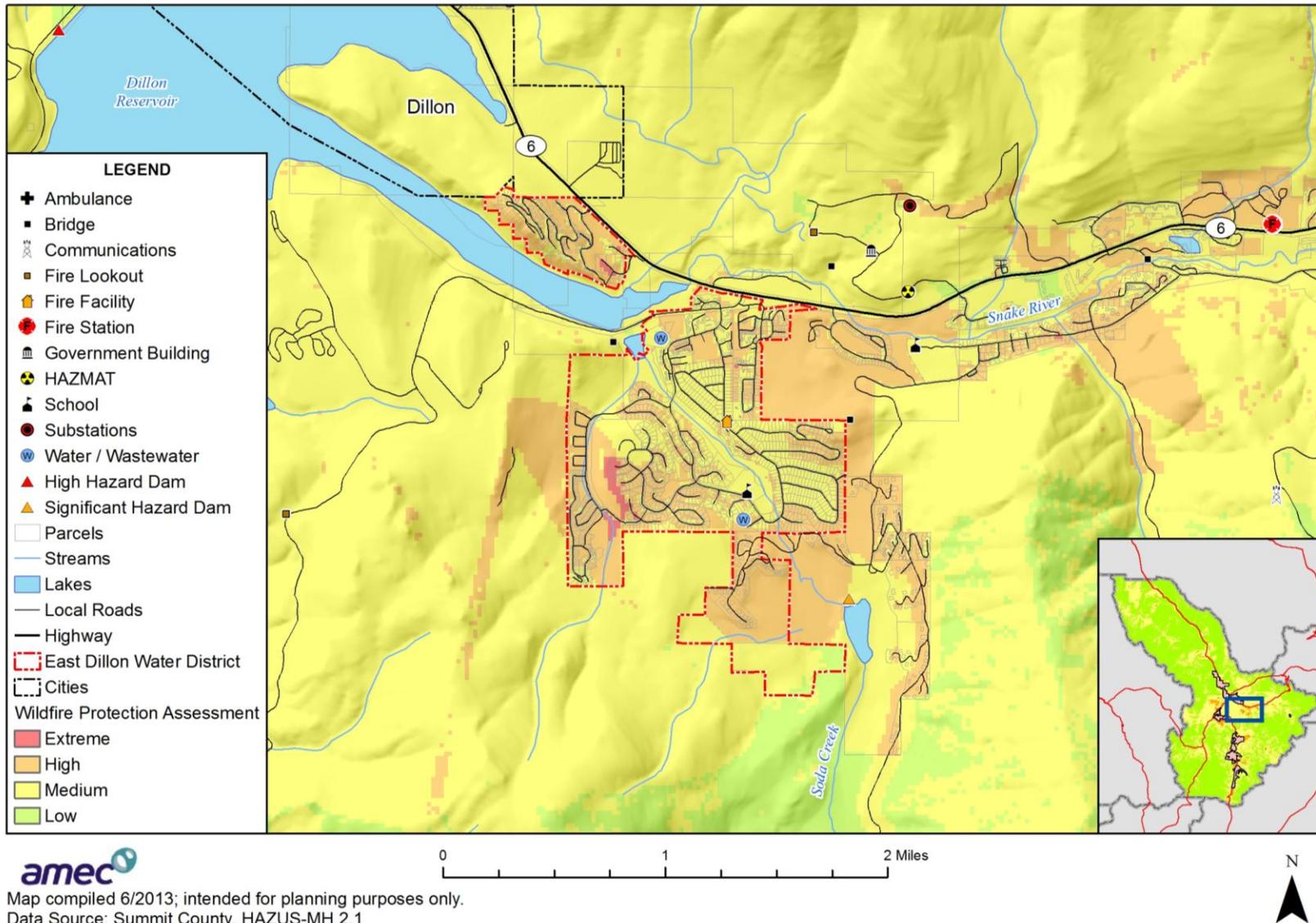


Figure L.7. Wildfire Threat and Critical Facilities in Mesa Cortina Water and Sanitation District

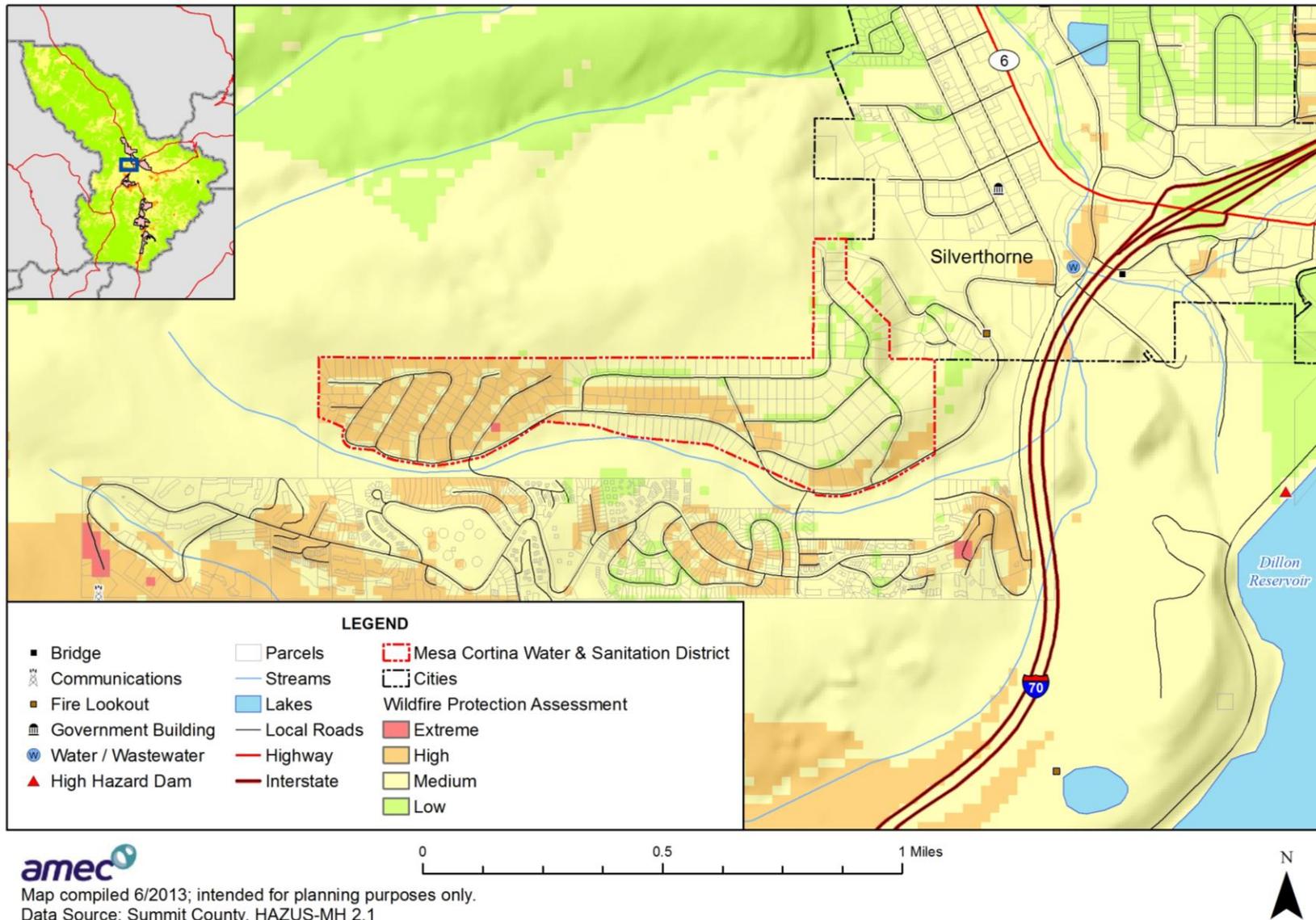


Figure L.8. Wildfire Threat and Critical Facilities in Snake River Water District

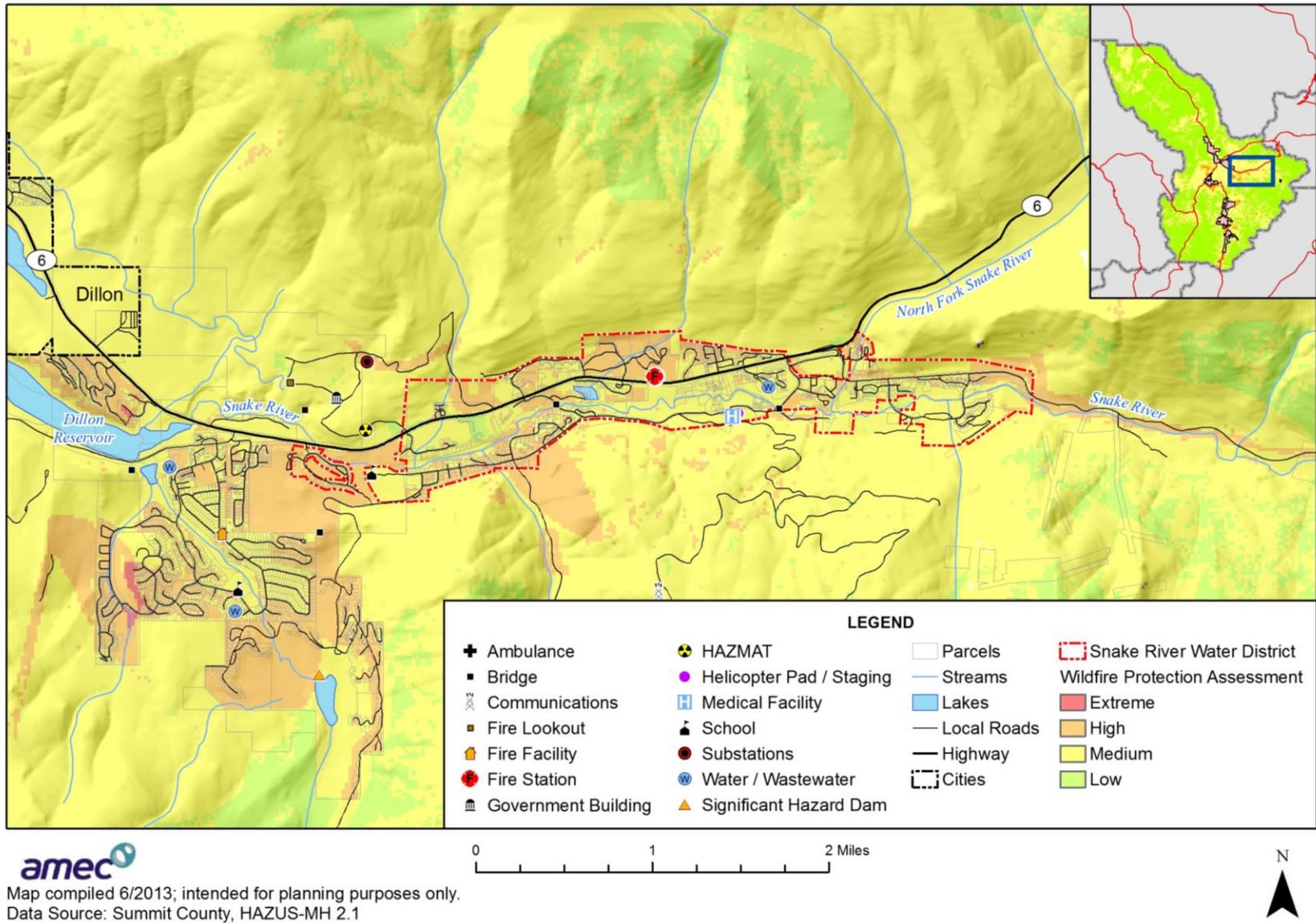


Figure L.9. Wildfire Focus Areas and Treatment Areas in Dillon Valley District

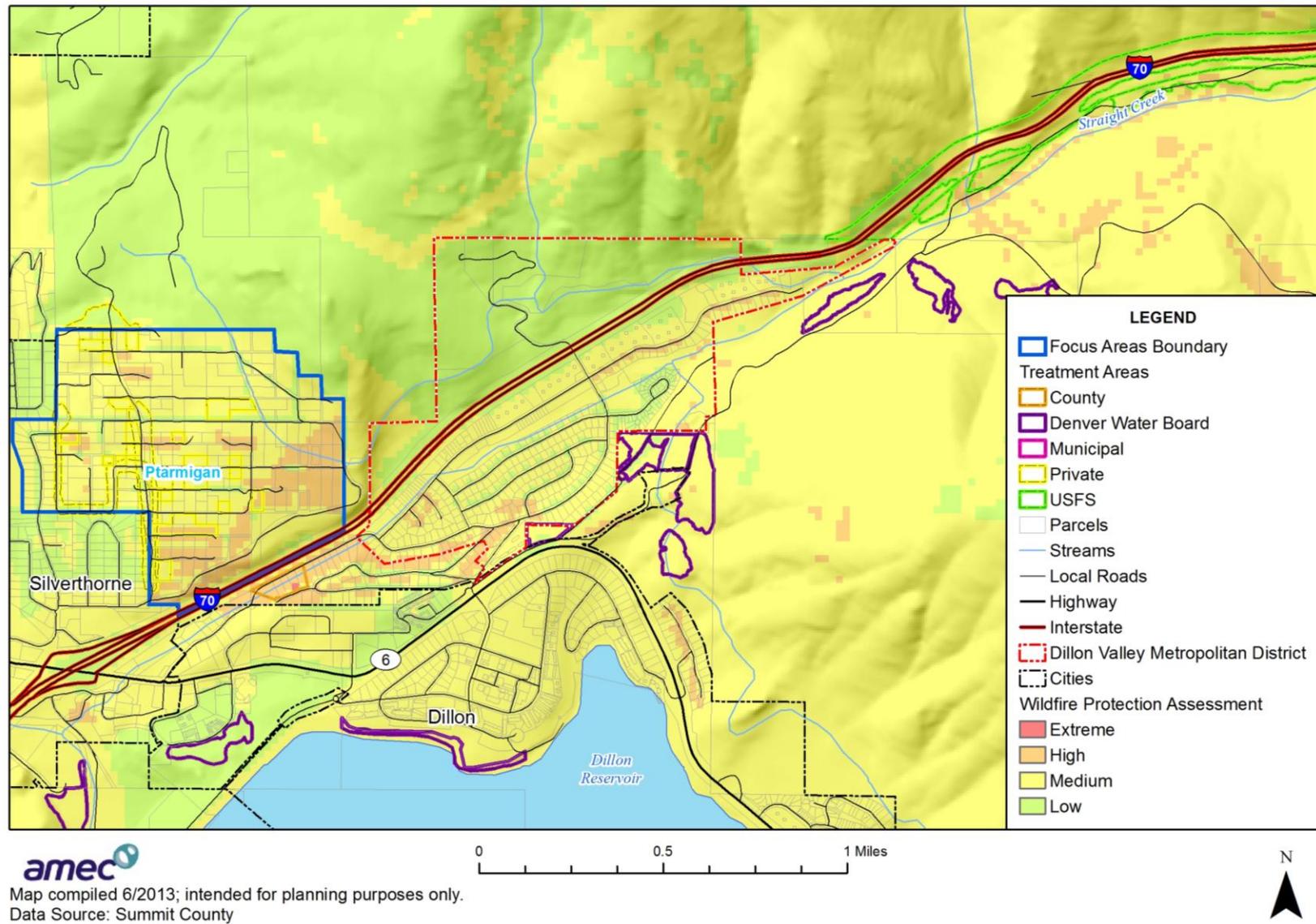


Figure L.10. Wildfire Focus Areas and Treatment Areas in East Dillon Water District

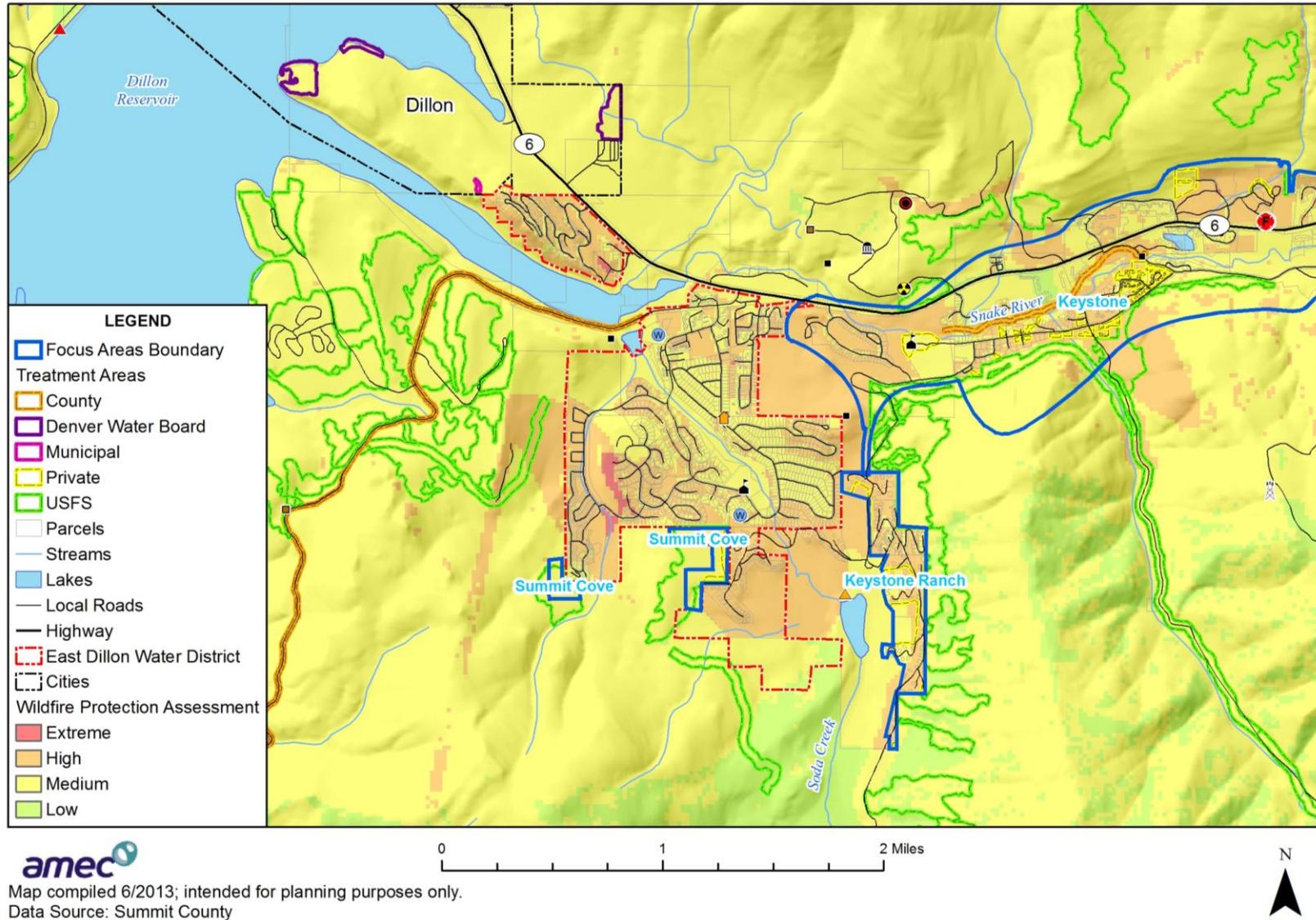


Figure L.11. Wildfire Focus Areas and Treatment Areas in Mesa Cortina Water and Sanitation District

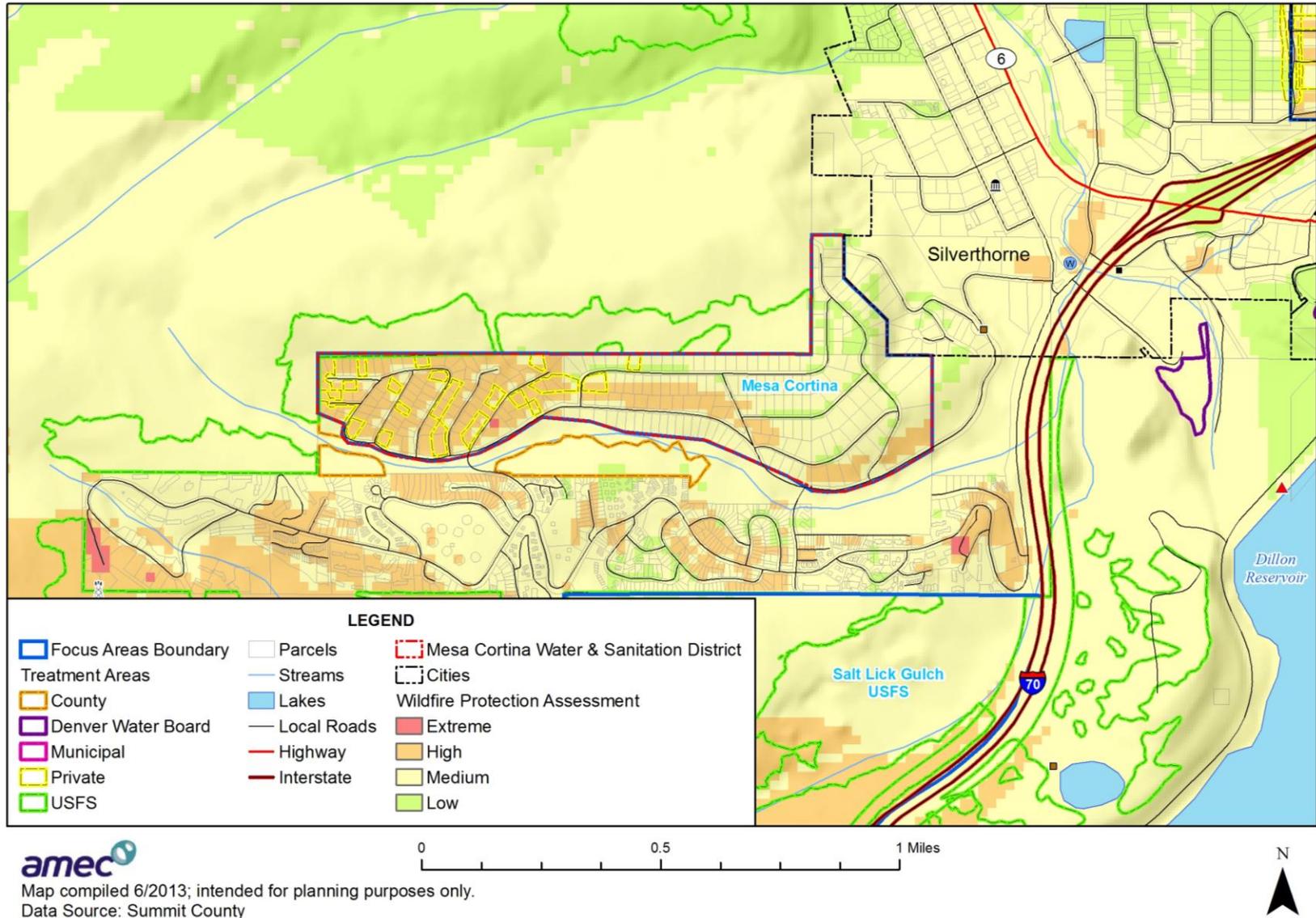
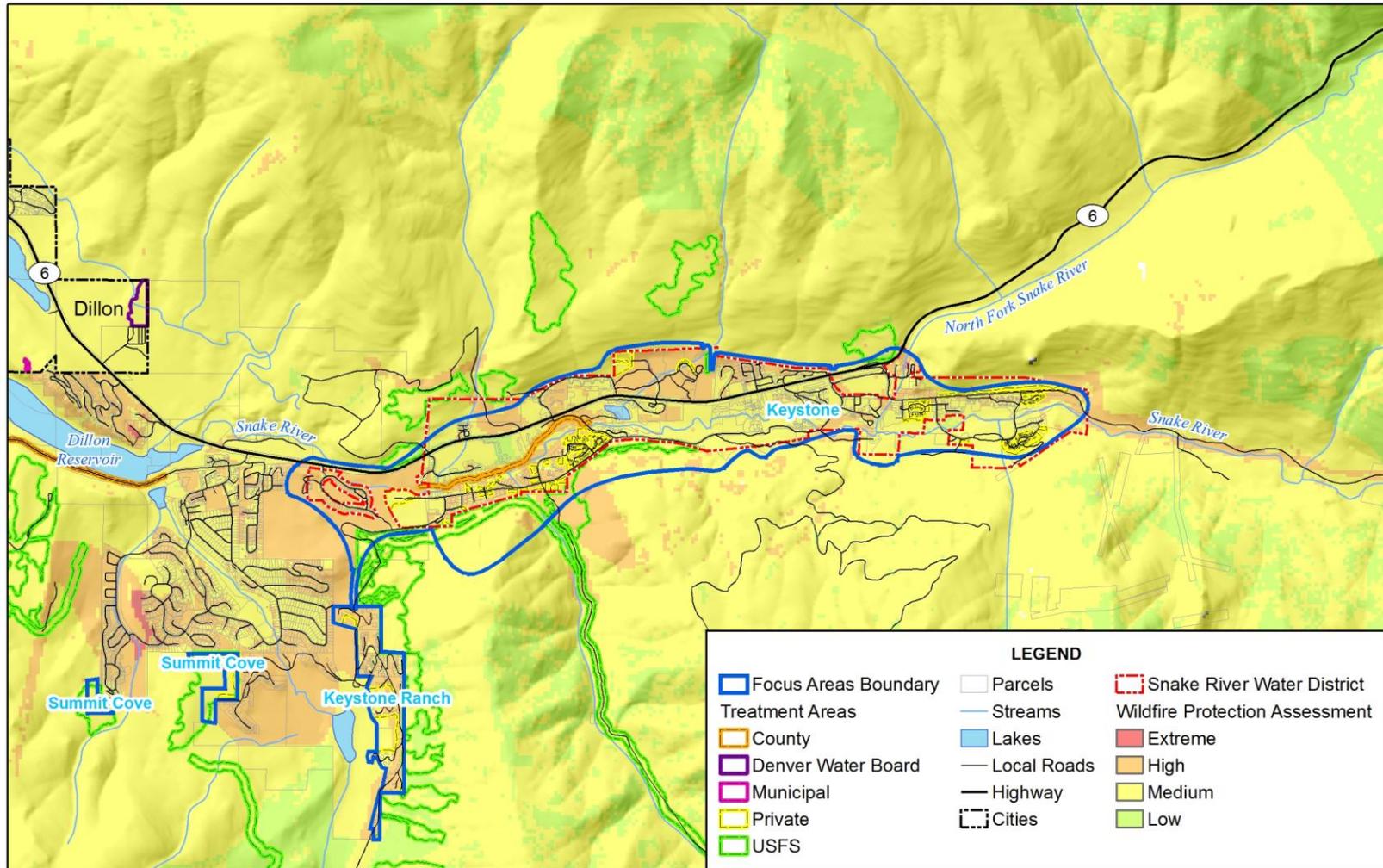


Figure L.12. Wildfire Focus Areas and Treatment Areas in Snake River Water District



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 Map compiled 6/2013; intended for planning purposes only.
 Data Source: Summit County

Future Development

Residential development continues to occur in the wildland-urban interface where limited access, lack of a central water supply with fire hydrants, and longer response times elevate the risk associated with the a wildfire event. Development in wildland-urban interface areas is regulated through the building code and land use planning policies of the jurisdiction in which the development is located. Summit County has wildfire mitigation policies as a part of their county code.

Growth and Development Trends

L.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

Regulatory Mitigation Capabilities

Regulatory mitigation capabilities include the planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities. The water and water and sanitation districts are governed under the policies and programs of Summit County or the Towns (if the district falls within town boundaries), including their building codes and land use planning. Tables L.6 through L.9 lists planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in the districts.

Table L.6. Dillon Valley District—Regulatory Mitigation Capabilities

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
General or Comprehensive plan	No	
Zoning ordinance	No	
Subdivision ordinance	Yes	
Growth management ordinance	No	
Floodplain ordinance	No	
Other special purpose ordinance (stormwater, steep slope, wildfire)	No	
Building code	Yes	
Fire department ISO rating	N/A	
Erosion or sediment control program	No	

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
Stormwater management program	No	
Site plan review requirements	Yes	
Capital improvements plan	Yes	
Economic development plan	No	
Local emergency operations plan	No	
Other special plans	Yes	Source Water Protection Plan
Flood insurance study or other engineering study for streams	No	
Elevation certificates (for floodplain development)	No	
Other	No	

Table L.7. East Dillon Water District—Regulatory Mitigation Capabilities

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
General or Comprehensive plan	No	
Zoning ordinance	No	
Subdivision ordinance	Yes	
Growth management ordinance	No	
Floodplain ordinance	No	
Other special purpose ordinance (stormwater, steep slope, wildfire)	No	
Building code	Yes	
Fire department ISO rating	N/A	
Erosion or sediment control program	No	
Stormwater management program	No	
Site plan review requirements	Yes	
Capital improvements plan	Yes	
Economic development plan	No	
Local emergency operations plan	Yes	
Other special plans	Yes	Source Water Protection Plan
Flood insurance study or other engineering study for streams	No	
Elevation certificates (for floodplain development)	No	
Other	No	

Table L.8. Mesa Cortina Water and Sanitation District—Regulatory Mitigation Capabilities

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
General or Comprehensive plan	No	
Zoning ordinance	No	
Subdivision ordinance	Yes	
Growth management ordinance	No	
Floodplain ordinance	No	
Other special purpose ordinance (stormwater, steep slope, wildfire)	No	
Building code	No	
Fire department ISO rating	N/A	
Erosion or sediment control program	No	
Stormwater management program	No	
Site plan review requirements	Yes	
Capital improvements plan	Yes	
Economic development plan	No	
Local emergency operations plan	No	
Other special plans	Yes	Source Water Protection Plan
Flood insurance study or other engineering study for streams	No	
Elevation certificates (for floodplain development)	No	
Other	No	

Table L.9. Snake River Water District—Regulatory Mitigation Capabilities

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
General or Comprehensive plan	No	
Zoning ordinance	No	
Subdivision ordinance	Yes	
Growth management ordinance	No	
Floodplain ordinance	No	
Other special purpose ordinance (stormwater, steep slope, wildfire)	No	
Building code	Yes	
Fire department ISO rating	N/A	

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
Erosion or sediment control program	No	
Stormwater management program	No	
Site plan review requirements	Yes	
Capital improvements plan	Yes	
Economic development plan	No	
Local emergency operations plan	No	
Other special plans	Yes	Source Water Protection Plan
Flood insurance study or other engineering study for streams	No	
Elevation certificates (for floodplain development)	No	
Other	No	

Administrative/Technical Mitigation Capabilities

Tables L.10 through L.13 identify the personnel responsible for activities related to mitigation and loss prevention in the districts.

Table L.10. Dillon Valley District—Administrative and Technical Mitigation Capabilities

Personnel Resources	Yes/No	Department/Position	Comments
Planner/engineer with knowledge of land development/land management practices	No		
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Contracted	
Planner/engineer/scientist with an understanding of natural hazards	Yes	Contracted	
Personnel skilled in GIS	Yes	Contracted	
Full time building official	No		
Floodplain manager	No		
Emergency manager	No		
Grant writer	No		
Other personnel	No		
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	No		
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	No		

Personnel Resources	Yes/No	Department/Position	Comments
Other	No		

Table L.11. East Dillon Water District—Administrative and Technical Mitigation Capabilities

Personnel Resources	Yes/No	Department/Position	Comments
Planner/engineer with knowledge of land development/land management practices	No		
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Contracted	
Planner/engineer/scientist with an understanding of natural hazards	Yes	Contracted	
Personnel skilled in GIS	Yes	Contracted	
Full time building official	No		
Floodplain manager	No		
Emergency manager	No		
Grant writer	No		
Other personnel	No		
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	No		
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	No		
Other	No		

Table L.12. Mesa Cortina Water and Sanitation District—Administrative and Technical Mitigation Capabilities

Personnel Resources	Yes/No	Department/Position	Comments
Planner/engineer with knowledge of land development/land management practices	No		
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Contracted	
Planner/engineer/scientist with an understanding of natural hazards	Yes	Contracted	
Personnel skilled in GIS	No		
Full time building official	No		
Floodplain manager	No		

Personnel Resources	Yes/No	Department/Position	Comments
Emergency manager	No		
Grant writer	No		
Other personnel	No		
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	No		
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	No		
Other	No		

Table L.13. Snake River Water District—Administrative and Technical Mitigation Capabilities

Personnel Resources	Yes/No	Department/Position	Comments
Planner/engineer with knowledge of land development/land management practices	No		
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Contracted	
Planner/engineer/scientist with an understanding of natural hazards	Yes	Contracted	
Personnel skilled in GIS	Yes	Contracted	
Full time building official	No		
Floodplain manager	No		
Emergency manager	No		
Grant writer	No		
Other personnel	No		
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	No		
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	No		
Other	No		

Fiscal Mitigation Capabilities

Fiscal mitigation capabilities are financial tools or resources that the water and water and sanitation districts could or already do use to help fund mitigation activities.

Mitigation Outreach and Partnerships

- Homeowner meetings, website postings, and newsletters regarding wildfire, drought, and evacuation

Past Mitigation Efforts

- Forest fuel reduction, alternate water sources
- Keystone fuels reduction project
- Straight Creek fuel reduction project

L.5 Mitigation Goals and Objectives

The districts discussed in this annex have adopted the hazard mitigation goals and objectives developed by the HMPC and described in Chapter 4 Mitigation Strategy.

L.6 Mitigation Actions

The special districts in this annex identified and prioritized the following mitigation actions based on the risk assessment. Background information on how each action will be implemented and administered, such as ideas for implementation, responsible agency, potential funding, estimated cost, and timeline also are included.

Mitigation Action: Water and Water/Sanitation Districts—1

Jurisdiction:	East Dillon Water District, Mesa Cortina Water & Sanitation District, Dillon Valley District, Snake River Water District
Action Title:	Backup power connection
Priority:	High
Issue/Background:	Long term power outages have the potential to disrupt water treatment and supply. This project would entail the installation of a connection to temporary backup power for the districts' treatment plants and pumps to maintain water production.
Ideas for Implementation:	A roll-up generator is being considered for purchase outside of this project that could be used as a countywide resource when and where needed.
Responsible Agency:	District
Partners:	Summit County; Hamilton Creek Metropolitan District
Potential Funding:	District and outside grants.
Cost Estimate:	\$50,000
Benefits: (Losses Avoided)	Provide domestic water service to residents in the event of a long-term power outage. Reduce losses due to service interruption.
Timeline:	Five years
Status:	New in 2013. In planning stages.

Mitigation Action: Water and Water/Sanitation Districts—2

Jurisdiction:	East Dillon Water District, Mesa Cortina Water & Sanitation District, Dillon Valley District, Snake River Water District
Action Title:	Trailer mounted generator
Priority:	High
Issue/Background:	A roll-up generator would be purchased that could be used as a countywide resource when and where needed.
Ideas for Implementation:	Facilitate a collaborative discussion between utility providers on the capability of this resource. Look for grant funding to fully fund or match fund the project. Create a shared use and cooperative agreement between the parties.
Responsible Agency:	District
Partners:	Summit County; Hamilton Creek Metropolitan District
Potential Funding:	District and outside grants.
Cost Estimate:	\$100,000
Benefits: (Losses Avoided)	Provide domestic water service to residents in the event of a long-term power outage. Reduce losses due to service interruption. A mobile generator would reduce installation and maintenance costs associated with permanent generators.
Timeline:	Five years
Status:	New in 2013. In planning stages.

Mitigation Action: Water and Water/Sanitation Districts—3

Jurisdiction:	East Dillon Water District, Mesa Cortina Water & Sanitation District, Dillon Valley District, Snake River Water District
Action Title:	Maintain existing wildfire mitigation efforts and identify access road mitigation needs
Priority:	High
Issue/Background:	<p>The districts have done defensible space projects at the facility and service tank locations for each of these areas. This project would continue the mitigation benefits accomplished by these projects through continued maintenance of these sites including removal of ladder fuels, mowing of brush, and FireWise landscaping techniques.</p> <p>This project would also include working with Summit County OEM and GIS to identify district facility access roads that may need additional wildfire mitigation. Overlaying existing wildfire treatments with these roads might identify 'gaps' that may warrant additional mitigation efforts.</p>
Ideas for Implementation:	Ongoing work conducted at a district level. The mapping project would be done in coordination with Summit County OEM and GIS.
Responsible Agency:	Districts
Partners:	Summit County
Potential Funding:	District and outside grants.
Cost Estimate:	\$2,500.00 annually
Benefits: (Losses Avoided)	Reduce impacts from wildfire to Critical facilities. Continued access to facilities for fire protection and enhanced first responder safety.
Timeline:	Five years
Status:	New in 2013. In planning stages.

Mitigation Action: Water and Water/Sanitation Districts—4

Jurisdiction:	East Dillon Water District, Mesa Cortina Water & Sanitation District, Dillon Valley District, Snake River Water District
Action Title:	Develop Source Water Protection Plan (SWPP)
Priority:	High
Issue/Background:	The program would encourage community-based protection and non-regulatory preventive management strategies to ensure that all Districts' drinking water resources are kept safe from future contamination. SWPP have been completed for Mesa Cortina Water & Sanitation District, Dillon Valley District, Snake River Water District
Ideas for Implementation:	Delineate the source water protection area, inventory potential sources of contamination, develop best management practices and implement protection measures. Work with CO Rural Water Association to complete plan for East Dillon Water District.
Responsible Agency:	District
Partners:	Summit County; CO Rural Water Association
Potential Funding:	CO Department of Public Health and Environment's SWAP Development and Implementation Grant.
Cost Estimate:	\$50,000
Benefits: (Losses Avoided)	Provide protection of water resources from hazard impacts.
Timeline:	1-3 years
Status:	New in 2013