

## ANNEX H: BUFFALO MOUNTAIN METROPOLITAN DISTRICT

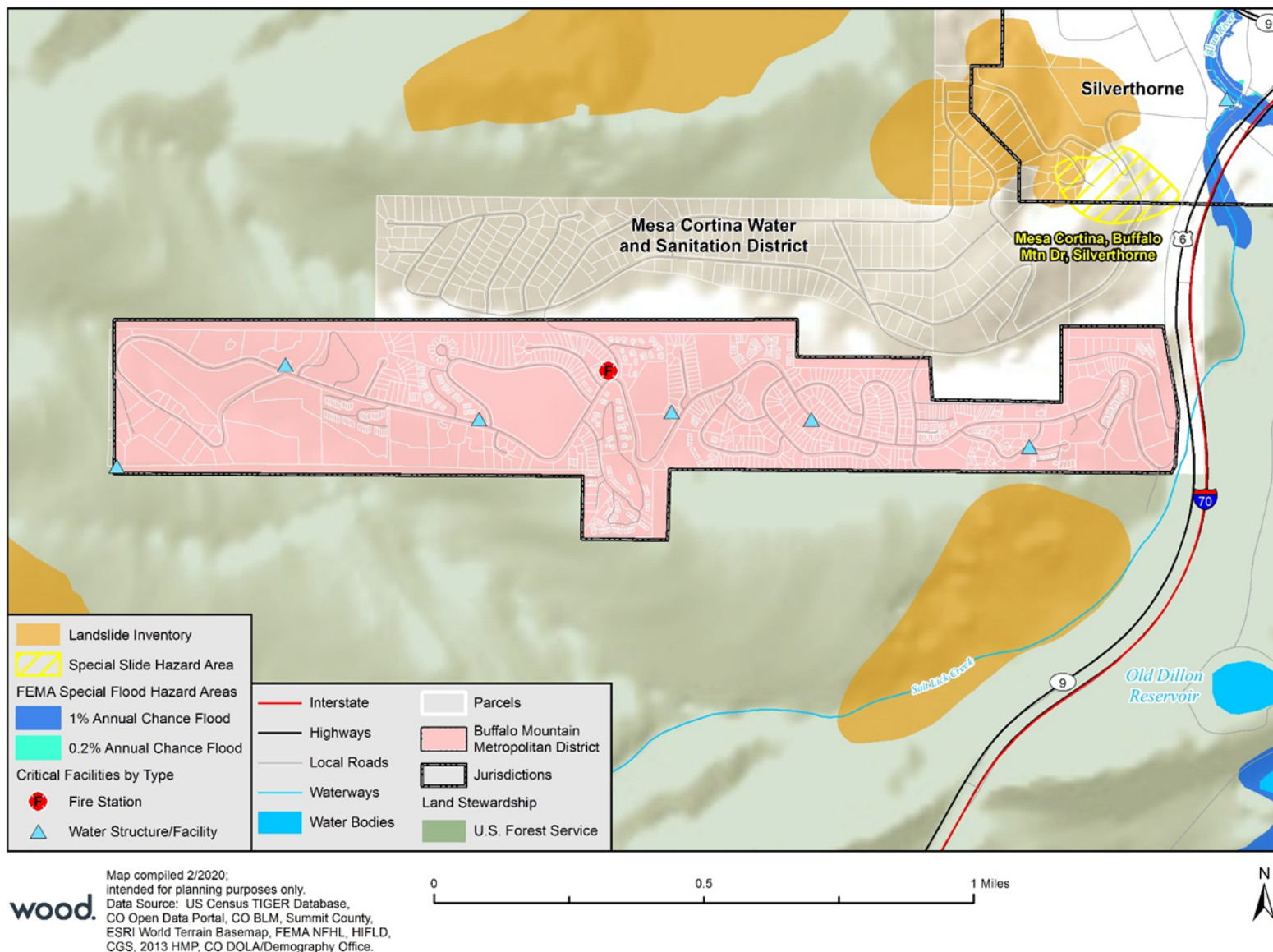
### H.1 Community Profile

Buffalo Mountain Metropolitan District is a special district in Summit County, which provides services for the Wilderrest subdivision located on the southwest side of the Town of Silverthorne. The District provides water and sewer, road maintenance, and snow removal services and also functions as a homeowners' association providing architectural review and covenant enforcement. The District also coordinates with the U.S. Forest Service and Summit County, who own and manage most of the surrounding land.

The District operates under the direction of an elected Board of Directors that sets policy decisions. The District serves over 2,400 properties located on 300 acres. Figure H-1 shows the location of the Buffalo Mountain Metropolitan District as well as all available local hazards. Nine critical facilities are located within the district boundaries.



Figure H-1 Buffalo Mountain Metropolitan District and Local Hazards



## H.2 Hazard Identification and Profiles

Representatives of the Buffalo Mountain Metropolitan District identified the hazards that affect the District and summarized their geographic location, probability of future occurrence, potential magnitude or severity, and planning significance specific to the District (see Table H-1). In the context of the countywide planning area, there are no hazards that are unique to the Buffalo Mountain Metropolitan District.

**Table H-1 Buffalo Mountain Metropolitan District—Hazard Summary**

Hazard Type	Geographic Location	Probability of Future Occurrence	Magnitude/Severity	Overall Hazard Rating
Avalanche	Isolated	Unlikely	Negligible	Low
Dam Incidents	Isolated	Unlikely	Limited	Low
Drought	Large	Likely	Limited	Medium
Earthquake	Large	Occasional	Limited	Low
Erosion/Deposition	Small	Likely	Limited	Low
Flood	Isolated	Occasional	Limited	Low
Hazardous Materials Release (Transportation)	Isolated	Unlikely	Limited	Low
Landslide, Mudflow/Debris Flow, Rockfall	Small	Occasional	Limited	Low
Lightning	Large	Likely	Limited	Low
Pest Infestation (Forest and Aquatic)	Large	Highly Likely	Limited	Low
Severe Winter Weather	Large	Highly Likely	Critical	High
Wildfire	Large	Highly Likely	Critical	High
Wildlife-Vehicle Collisions	Small	Likely	Negligible	Low
Windstorm	Large	Likely	Limited	Low

Note: See Section 3.2 of the HIRA document for definitions of these hazard categories.

Information on past events for each hazard can be found in Section 3.2 Hazard Profiles of the main plan.

## H.3 Vulnerability Assessment

The intent of this section is to assess Buffalo Mountain Metropolitan District’s vulnerability separate from that of the planning area as a whole, which has already been assessed in Section 3.3 Vulnerability Assessment of the main plan. This vulnerability assessment analyzes the population, property, critical facilities, and other assets at risk for the more significant hazards or where available data permits a more in-depth analysis. For more information about how hazards affect the County as a whole, see Chapter 3 Risk Assessment of the Base Plan.

### H.3.1 District Asset Inventory

Table H-2 shows the total number of improved parcels, properties, and their improvement and content values for the District. Note that only those parcels with improvement values greater than \$0, or those which were classified as “exempt,” were accounted here and in vulnerability assessments to follow, so that those non-developed or non-improved parcels were left out for the purposes of conducting the vulnerability assessments in this annex. Counts and values are based on the latest county assessor’s data (as of November 2019), which was provided in GIS format. Contents exposure values were estimated as a



percent of the improvement value here and under the hazard vulnerability assessment, specifically: 50% of the improvement value for Residential structures, 100% for Commercial structures, and 0% for Exempt parcels. These percentage calculations are based on standard FEMA Hazus methodologies. Finally, Total Values were aggregated by adding the improvement and content values for each parcel type category. The districts’ property and critical facility exposures are also included in the county-wide exposures. These counts are also included here for additional clarity of property and critical facilities within the districts.

**Table H-2 Buffalo Mountain Metropolitan District—Property Exposure**

Parcel Type	Total Properties	Improved Value	Content Value	Total Value
Commercial	7	\$1,279,652	\$1,279,652	\$2,559,304
Exempt	82	\$0	--	\$0
Residential	2,352	\$862,389,213	\$431,194,607	\$1,293,583,820
<b>TOTAL</b>	<b>2,441</b>	<b>\$863,668,865</b>	<b>\$432,474,259</b>	<b>\$1,296,143,124</b>

Source: Summit County Assessor Data, DOLA, November 2019

Table H-3 lists critical facilities in the District that are important to protect in the event of a disaster. Note that there is one critical facility the HMPC indicated should not be disclosed in terms of location or name, so while it was considered in the GIS analysis within each hazard’s vulnerability assessment for planning purposes, it will not be described in detail nor will it be shown in any maps. For additional information on the definitions behind each critical facility category, source, and other details refer to Section 3.3.2 of the main plan HIRA document.

**Table H-3 Buffalo Mountain Metropolitan District Critical Facilities**

FEMA Lifeline	Critical Facility Type	Total
Communications	Public Safety Transmitters*	1
Safety and Security	Fire Station	1
Water Intake Facility	Water Plant For Community	1
Water Tank 2	Water Storage & Pump Station	1
Water Tank 2B	Water Storage & Pump Station	1
Water Tank 3	Water Storage & Pump Station	1
Water Tank 4	Water Storage & Pump Station	1
Water Tank 5	Water Storage & Pump Station	1
Water Tank 6A & 6B	Water Storage	1
<b>TOTAL</b>		<b>9</b>

\* This facility’s location will not be disclosed, and no additional details will be provided.

Source: Summit County, DOLA, HIFLD.

### H.3.2 Vulnerability by Hazard

This vulnerability section analyzes existing and potential future risk to hazards deemed significant for the District. Vulnerability details for all hazards other than Wildfire are often difficult to compile or estimate for specific communities and are already sufficiently described in Section 3.3.3 of the Base Plan. All hazards available for mapping are represented in Figure H-1. Note that the Buffalo Mountain Waste Water



Treatment Plant is located within the Town of Silverthorne’s boundaries, and as such is exposed to potential inundation from the Dillon Dam. However, the dam incident hazard is not profiled or discussed further due to lack of relevance to the rest of the Buffalo Mountain Metropolitan District.

## Wildfire

### General Property

Wildfire threat was estimated from the County’s Wildfire Protection Assessment Rating layer, which breaks up areas into Low, Medium, High, and Extreme ratings. This wildfire layer was used in GIS to determine the number, type, and improvement values for properties found to overlap with them, and hence estimate potential property risk to wildfire threat in the Buffalo Mountain Metropolitan District. For the purposes of this analysis, the wildfire zone that intersected a parcel centroid was assigned as the threat zone for the entire parcel. Improvement values were then summed by wildfire rating area and then sorted by parcel type. Property improvements and estimated content values were then totaled to arrive at the Total Value column, which is also the estimated potential loss as wildfires typically result in complete loss to structure and contents.

The District was found to intersect with wildfire areas rated as Medium and High, and results are summarized by property type in Table H-4. There are 780 properties falling in the Medium threat category with over \$453 million at potential risk, most being Residential in nature. A total of 88 properties are located in High threat categories, with over \$54 million in total values at risk, with most also being Residential properties.

**Table H-4 Buffalo Mountain Metropolitan District—Property Values in Wildfire Zones**

Wildfire Threat	Parcel Type	Total Properties	Improved Value	Content Value	Total Value and Loss Estimate	Population
High	Exempt	2	\$0	--	\$0	--
	Residential	86	\$36,082,388	\$18,041,194	\$54,123,582	267
	<b>TOTAL</b>	<b>88</b>	<b>\$36,082,388</b>	<b>\$18,041,194</b>	<b>\$54,123,582</b>	<b>267</b>
Medium	Commercial	3	\$687,642	\$687,642	\$1,375,284	--
	Exempt	33	\$0	--	\$0	--
	Residential	744	\$301,144,430	\$150,572,215	\$451,716,645	2,306
	<b>TOTAL</b>	<b>780</b>	<b>\$301,832,072</b>	<b>\$151,259,857</b>	<b>\$453,091,929</b>	<b>2,306</b>
<b>GRAND TOTAL</b>		<b>868</b>	<b>\$337,914,460</b>	<b>\$169,301,051</b>	<b>\$507,215,511</b>	<b>2,573</b>

Source: Summit County GIS/Assessor Office, DOLA, CO-WRAP, U.S. Census, Wood analysis

Many residents in the Wilderrest subdivision in Buffalo Mountain Metropolitan District do not have access to private transportation in the event of an emergency, so evacuation is a concern for wildfire and other emergency events.

### People

The last column of Table H-4 above summarizes the number of people at risk to wildfire in the analyzed fire zones. Based on the assessment conducted, Buffalo Mountain Metropolitan District has an estimated 2,573 people at risk of Medium and High rated wildfire zones. These totals were estimated by multiplying



the average persons per household in Summit County, which is 3.1, times the number of residential properties falling within the fire threat zone/s.

### ***Critical Facilities and Infrastructure***

All of the critical facilities managed by the District are found in wildfire assessment areas, but only 6 of them are located in wildfire assessment areas rated as Medium in severity. These are as listed below.

- Public Safety Transmitter (Communications Lifeline)
- Fire Station 14 in Wildernest (Safety and Security Lifeline)
- Water Storage Facility (Food/Water/Shelter Lifeline)
- Water Storage & Pump Station structures (Food/Water/Shelter Lifeline)

### ***Economy***

Tourism, the accommodation and food services industry (e.g. hotels and restaurants), and retail are major components of Summit County's economy, and the district's as well. Wildland fires can, for example, lead to significant tourism reductions due to health and safety concerns, causing lost revenues from lack of visitation, stays in hotels, spending on restaurants and other commerce sources, and more.

### ***Historical, Cultural, and Natural Resources***

Wildfires are a common and naturally occurring phenomenon in forested areas and can benefit forest health in many respects. But the climate change trend which is leading to hotter, more widespread, and destructive fires can make it more difficult for the environment to recover, and lead to increased flood runoff or other secondary/cascading hazards. This can severely impact water quality and watershed health for years after the fire.

With regards to historic or cultural structures and resources, wildfires would affect those in similar ways as general property and critical facilities/infrastructure, having the potential for burn downs and hence possible complete loss of important natural resources in the District and nearby areas.

### ***Future Development***

The Wildernest subdivision has reached 95 percent buildout, so future development will be limited and subject to wildfire mitigation policies of Summit County. There has been no pressure to develop hazardous areas, including wildfire zones.

## **H.3.3 Growth and Development Trends**

As previously stated, the Wildernest subdivision is a high-density residential neighborhood that has reached 95 percent buildout, so future development will be limited and subject to codes and ordinances of Summit County, as well as the subdivision covenant. Only a 1% development increase has occurred since 2008. There has been no pressure to develop hazardous areas.

## **H.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 four sections:



regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, and mitigation outreach and partnerships.

### H.4.1 Regulatory Mitigation Capabilities

Regulatory mitigation capabilities include the planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities. The District is governed under the policies and programs of Summit County, including its building codes and land use planning. There are architectural guidelines that are part of the site plan review requirements in the Wilderrest subdivision. The District also has a service plan, which includes information on the services the District has the authority to provide, and a long range financial plan. The table below 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 District.

**Table H-5 Regulatory Mitigation Capabilities**

Regulatory Tool (Ordinances, Codes, Plans)	Yes/No	Comments
Master Plan	Yes	District Services Plan(s)
Zoning Ordinance	N/A	
Subdivision Ordinance	Yes	Declaration of Protective Covenants
Growth Management Ordinance	No	
Floodplain Ordinance	N/A	
Other Special Purpose Ordinance (Stormwater, Steep Slope, Wildfire)	N/A	
Building Code	Yes	2006 International Building Code
Fire Department ISO Rating	Yes	2
Erosion or Sediment Control Program	Yes	Summit County Building Code
Stormwater Management Program	Yes	Article VII of District Rules & Regulations
Site Plan Review Requirements	Yes	District Architectural Review Documents
Capital Improvements Plan	Yes	2015 Infrastructure Improvements Plan
Economic Development Plan	No	
Local Emergency Operations Plan	Yes	Summit County Emergency and Disaster Preparedness
Other Special Plans	No	
Flood Insurance Study or Other Engineering Study For Streams	No	
Elevation Certificates	N/A	

### H.4.2 Administrative/Technical Mitigation Capabilities

The District works with Summit County departments of engineering, emergency management, and GIS on activities related to hazard mitigation and loss prevention within the District. Summit Fire & EMS Authority provides wildfire protection within the Buffalo Mountain Metropolitan Service District. The District has one full-time employee, the district manager, and one part-time Administrator. Other services are contracted through a separate business.



The table below identifies the personnel responsible for activities related to mitigation and loss prevention in the District.

**Table H-6 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	Sub-Contractor Engineering Firm Works For the District	
Planner/Engineer/Scientist with an Understanding of Natural Hazards	No		
Personnel Skilled in GIS	Yes	Manager & Water/Sewer Department	
Full Time Building Official	No		
Floodplain Manager	No		
Emergency Manager	Yes	Manager	
Grant Writer	Yes	Manager	
Other Personnel	Yes	Water/Sewer/Road Operations	
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Yes	ARC GIS On-Line	
Warning Systems/Services (Reverse 9-11, Cable Override, Outdoor Warning Signals)	Yes	Electronic Message Board, Group emails to all property owners	
Other			

### H.4.3 Fiscal Mitigation Capabilities

The District receives revenue from rates, fees, property taxes, and interest on investments. Fiscal mitigation capabilities are financial tools or resources that the Buffalo Mountain Metropolitan District could or already does use to help fund mitigation activities. These include the following:

- Capital improvements project funding
- Taxes for specific purposes
- Fees for water, sewer, and other services
- Impact fees for new development
- General obligation bonds

### H.4.4 Mitigation Outreach and Partnerships

Other mitigation related activities include the following:

- Since 2004, the District’s summer newsletter has included outdoor watering guidelines to promote water conservation.





- Since 2007, quarterly newsletters include fire safety, wildfire mitigation, and emergency preparedness information.
- The District has worked with property owners since 2005 to provide assistance with the removal of beetle-infested and dead trees to improve forest health and reduce wildfire risk. Over 4,000 trees have been removed.
- For the past four years, the District has assisted property owners in removing dead and fallen trees by offering free chipping services. As of 2013, 95% of the dead and fallen trees have been removed within the District boundaries.
- Partnership efforts, including a 900-acre fuel break created by the U.S. Forest Service around a subdivision near the Buffalo Mountain Metropolitan District, have resulted in demonstrated mitigation success within the County. The project was tested in June 2018 and helped to reduce damages from the Buffalo Mountain Fire.

#### H.4.5 Past Mitigation Efforts

- During the Buffalo Mountain Fire in 2018 which threatened the Wilderrest neighborhood, the District lost power leading to the inability to pump water to serve customers. As a result of this incident the District has purchased a generator to be able to pump water if power is lost again. At the time of this plan update, the generator has been put in place but has not been tested yet. Refer to mitigation action Buffalo Mountain Metropolitan District – 3 Backup Power for Critical Facilities.
- As of 2020 BMMMD is in the process of constructing a new 250,000-gallon underground water tank and pump station that will enhance water storage and supplies during times of drought.
- The District has installed one of four underground PRV vaults to upgrade the water distribution system to allow for automatic fire flow rather than rely on manual operation.

#### H.4.6 Opportunities for Enhancement

Based on the capability assessment, the District has several existing mechanisms in place that already help to mitigate hazards. There are also opportunities for the District to expand or improve on these policies and programs to further protect the community. Future improvements may include providing training for staff members related to hazards or hazard mitigation grant funding in partnership with the County and DHSEM. Additional training opportunities will help to inform District staff and board members on how best to integrate hazard information and mitigation projects into the District policies and ongoing duties of the District. Continuing to train District staff on mitigation and the hazards that pose a risk to the District will lead to more informed staff members who can better communicate this information to the public.

### H.5 Mitigation Goals and Objectives

The Buffalo Mountain Metropolitan District adopts the hazard mitigation goals and objectives developed by the Hazard Mitigation Planning Committee and described in Chapter 4 Mitigation Strategy.



## H.6 Mitigation Actions

The Buffalo Mountain Metropolitan District 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: Buffalo Mountain Metropolitan District—1 Defensible Space

<b>Jurisdiction:</b>	Buffalo Mountain Metropolitan District
<b>Action Title:</b>	Reduce the risk of wildfire in the Wilderrest subdivision by assisting property owners with the creation of defensible spaces around residential buildings.
<b>Hazard(s) Mitigated:</b>	Wildfire
<b>Priority:</b>	High
<b>Issue/Background:</b>	Wilderrest is a high-density residential subdivision of 2,970 living units on approximately 300 acres. It is heavily forested and surrounded by Summit County open space and national forest, both of which are also heavily forested. The District has identified approximately 2,500 trees within 10 feet of residential structures, putting these structures at high risk in the event of a forest fire.
<b>Ideas for Implementation:</b>	For the past three years, the District has provided assistance to property owners by chipping logs and branches removed from private property in addition to removing trees from rights-of-way within the subdivision. The District could provide greater assistance in creating defensible spaces if additional funding were available.
<b>Responsible Agency:</b>	Buffalo Mountain Metropolitan District
<b>Partners:</b>	Summit County
<b>Potential Funding:</b>	District revenue from rates, fees, property taxes, and interest on investments Summit County Wildfire Mitigation Grant Program FEMA Hazard Mitigation Grant Program and Pre-Disaster Mitigation Program
<b>Cost Estimate:</b>	\$250,000 to remove the estimated 2,500 trees from within 10 feet of residential structures.
<b>Benefits: (Losses Avoided)</b>	<ul style="list-style-type: none"><li>• Reduced risk of property damage and loss from wildfire. (Estimated replacement cost of all residential property in excess of \$500 million).</li><li>• Protection of public health and safety.</li></ul>
<b>Timeline:</b>	Annual Implementation
<b>Status:</b>	This action has been and continues to be implemented. BMMD continues to enforce Protective Covenant rules to mandate property owners remove dead and diseased flammable vegetation. Further, BMMD was awarded a \$25,000 wildfire defensible space



grant from Summit County this year as a pass along grant to community property owners to encourage removal of flammable vegetation within 30' of the home.

## Mitigation Action: Buffalo Mountain Metropolitan District—2 Digital Data and Maps

<b>Jurisdiction:</b>	Buffalo Mountain Metropolitan District
<b>Action Title:</b>	Enhance the ability to ensure continuity of water and sewer service during emergencies by converting paper as-built infrastructure drawings to digital format.
<b>Hazard(s) Mitigated:</b>	Multi-Hazard
<b>Priority:</b>	Medium
<b>Issue/Background:</b>	As-built drawings for the approximately 14 miles of water and sewer mains in Wildercrest exist only on 30-year old paper sheets. They are difficult to update, subject to loss or deterioration, and may not provide an appropriate level of detail during an emergency.
<b>Ideas for Implementation:</b>	Participate with other Summit County entities to obtain up-to-date aerial imagery, convert paper as-built drawings to digital format, field verify locations of water and sewer infrastructure components, and annotate digital drawings with critical infrastructure data.
<b>Responsible Agency:</b>	Buffalo Mountain Metropolitan District
<b>Partners:</b>	Other Summit County jurisdictions
<b>Potential Funding:</b>	District revenue from rates, fees, property taxes, and interest on investments,
<b>Cost Estimate:</b>	\$25,000 (\$2,000 for aerial imagery, \$16,000 for data conversion and field verification, \$7,000 for computer hardware and software).
<b>Benefits: (Losses Avoided)</b>	<ul style="list-style-type: none"><li>• Improve access to critical infrastructure data at all times, but especially during emergencies.</li><li>• Protect public health and safety.</li></ul>
<b>Timeline:</b>	Annual Implementation
<b>Status:</b>	<p>This action has been and continues to be implemented. In 2017, BMMD purchased a GPS to accurately locate water, sewer, road, and critical facilities throughout the community. The data was uploaded to the existing BMMD GIS map. On-going maintenance and repairs are also recorded in the GIS system. BMMD has also shared critical infrastructure information with the</p> <p>WildFire Decision Support System (WFDSS). The WFDSS system provides a web-based decision support tool created to help agency administrators and wildland fire managers make informed decisions by easily identifying critical facilities during fires.</p>



## Mitigation Action: Buffalo Mountain Metropolitan District—3 Backup Power for Critical Facilities

<b>Jurisdiction:</b>	Buffalo Mountain Metropolitan District
<b>Action Title:</b>	Obtain backup power for water pumping stations
<b>Hazard(s) Mitigated:</b>	Multi-Hazard
<b>Priority:</b>	High
<b>Issue/Background:</b>	The District provides water drawn from the Blue River alluvial to the Wilderdest subdivision by pumping to a series of underground storage tanks, the uppermost of which is approximately 1,200 feet higher in elevation than the treatment plant. There are five pumping stations, none of which have backup power. Providing backup power would improve continuity of services during emergencies requiring large volumes of water, such as forest fires, which may disrupt normal power supplies.
<b>Ideas for Implementation:</b>	Develop specification, identify suppliers, and purchase backup generators as funding allows.
<b>Responsible Agency:</b>	Buffalo Mountain Metropolitan District
<b>Partners:</b>	
<b>Potential Funding:</b>	District revenue from rates, fees, property taxes, and interest on investments. FEMA Hazard Mitigation Grant Program
<b>Cost Estimate:</b>	\$250,000 (five pumping stations at \$50,000 each)
<b>Benefits: (Losses Avoided)</b>	<ul style="list-style-type: none"><li>• Improve continuity of services during emergencies</li><li>• Reduce wildfire risk</li><li>• Protect public health and safety</li></ul>
<b>Timeline:</b>	Completed in 2019
<b>Status:</b>	<b>Completed.</b> BMMD recently purchased a portable generator in 2019 to power the water intake facility and all water pump stations throughout the District during power outages.



## Mitigation Action: Buffalo Mountain Metropolitan District—4 Drainage Improvement

<b>Jurisdiction:</b>	Buffalo Mountain Metropolitan District
<b>Action Title:</b>	Develop drainage improvement strategy to reduce erosion and flooding to avert severe winter weather hazard
<b>Hazard(s) Mitigated:</b>	Multi-Hazard: Flood, Erosion/Deposition, Severe Winter Weather
<b>Priority:</b>	Medium
<b>Issue/Background:</b>	The District topographical location includes steep grades, rising slopes, and varied terrain. During the spring snow melt and/or during summer thunderstorms, high volume water run-off occurs causing erosion to drainage ditches, undermining roadways, and flooding District properties.
<b>Ideas for Implementation:</b>	Engineer and build underground drainage culverts. Expand and/or build larger water quality ponds. Build concrete swell curb and gutter systems.
<b>Responsible Agency:</b>	Buffalo Mountain Metropolitan District – District Manager
<b>Partners:</b>	Summit County
<b>Potential Funding:</b>	FEMA Hazard Mitigation Grant Program, District revenue from rates, fees, and property taxes.
<b>Cost Estimate:</b>	\$5 million
<b>Benefits: (Losses Avoided)</b>	Provide flood protection. Protect District infrastructure. Maintain roads to allow citizens safe passage.
<b>Timeline:</b>	Annual Implementation.
<b>Status:</b>	Action added in 2013. This action has been and continues to be implemented. In 2015, BMMD constructed two separate underground storm sewer projects including curb/gutter improvements to manage erosion and flooding during high volume water run-off in spring and summer. BMMD is currently planning a similar storm sewer project to begin construction in 2020. This includes a drainage improvement project at the top of Ryan Gulch Road loop to address spring run-off issues and address spring water that runs year-round on the edge of the road.



## Mitigation Action: Buffalo Mountain Metropolitan District—5 Wildfire Defensible Space Public Education

<b>Jurisdiction:</b>	Buffalo Mountain Metropolitan District
<b>Action Title:</b>	Continue to educate District constituents about wildfire defensible space actions by removal of beetle-infested trees.
<b>Hazard(s) Mitigated:</b>	Wildfire, Pest Infestation (forest)
<b>Priority:</b>	Low
<b>Issue/Background:</b>	The District is a high-density residential subdivision of 2,970 living units on approximately 300 acres. It is heavily forested and surrounded by Summit County open space and national forest, both of which are also heavily forested.
<b>Ideas for Implementation:</b>	Continue to identify dead and fallen trees within the District boundaries and promote defensible space. Mandate property owner removal, pursuant to the District Rules and Regulations.
<b>Responsible Agency:</b>	Buffalo Mountain Metropolitan District – District Manager
<b>Partners:</b>	Other Summit County jurisdictions
<b>Potential Funding:</b>	FEMA Hazard Mitigation Grant Program, District revenue from rates, fees, and property taxes.
<b>Cost Estimate:</b>	\$20,000 annually
<b>Benefits: (Losses Avoided)</b>	Reduced risk of property damage and District facilities from wildfire and windstorm. Protection of public health and safety.
<b>Timeline:</b>	Annual Implementation
<b>Status:</b>	Action added in 2013. This action has been and continues to be implemented. As previously stated in Action #1, BMMD was awarded a \$25,000 wildfire defensible space grant from Summit County to pass along to community property owners to encourage removal of flammable vegetation within 30' of the home. In August 2019, BMMD mailed out to all community property owners a flyer with information about the importance of defensible space with tips on what to remove to improve a home's chance of surviving a wildfire. To date, 35 properties have applied for grant assistance. BMMD also disseminates information on the District website about the annual Summit County free wood chipping program and encourages property owner participation.



## Mitigation Action: Buffalo Mountain Metropolitan District—6 Source Water Protection Plan

<b>Jurisdiction:</b>	Buffalo Mountain Metropolitan District
<b>Action Title:</b>	Develop Source Water Protection Plan
<b>Hazard(s) Mitigated:</b>	Wildfire, Drought, HazMat
<b>Priority:</b>	High
<b>Issue/Background:</b>	The program would encourage community-based protection and non-regulatory preventive management strategies to ensure that all District drinking water resources are kept safe from future contamination.
<b>Ideas for Implementation:</b>	Delineate the source water protection area, inventory potential sources of contamination, develop best management practices and implement protection measures.
<b>Responsible Agency:</b>	Buffalo Mountain Metropolitan District – District Manager
<b>Partners:</b>	Other Summit County jurisdictions
<b>Potential Funding:</b>	CO Department of Public Health and Environment’s SWAP Development and Implementation Grant.
<b>Cost Estimate:</b>	\$50,000
<b>Benefits: (Losses Avoided)</b>	Provide protection of natural resources from hazard impacts.
<b>Timeline:</b>	March 16, 2017
<b>Status:</b>	<b>Completed.</b> Action added in 2013. In March 2017, BMMD completed a State approved Source Water Protection Plan. The planning effort consisted of public planning meetings and individual meetings with water operators, government, local community members, and agency representatives. The Plan provides an inventory of potential contaminant sources and best management practices to mitigate concerns.



## Mitigation Action: Buffalo Mountain Metropolitan District—7 Email Database for Emergency Communication with Public

<b>Jurisdiction:</b>	Buffalo Mountain Metropolitan District
<b>Action Title:</b>	Develop email database of District constituents to electronically communicate in cases of emergency.
<b>Hazard(s) Mitigated:</b>	Multi-Hazard
<b>Priority:</b>	High
<b>Issue/Background:</b>	In cases of emergency, or the need for evacuation, the District needs to create another source of direct communication with District property owners by obtaining email addresses.
<b>Ideas for Implementation:</b>	Request email addresses through quarterly billing statements, newsletter communications, or direct phone contact.
<b>Responsible Agency:</b>	Buffalo Mountain Metropolitan District – District Manager
<b>Partners:</b>	Summit County - Possibly link with SCAAlert
<b>Potential Funding:</b>	District revenue from rates, fees, and property taxes.
<b>Cost Estimate:</b>	\$2,000 annually
<b>Benefits: (Losses Avoided)</b>	Protection of public health and safety.
<b>Timeline:</b>	Annual Implementation
<b>Status:</b>	Action added in 2013. This action has been and continues to be implemented. BMMD has been successful in obtaining about 95% of customer email contact information. As properties change ownership, BMMD continues to update email information accordingly. This has proved to be an important tool to communicate with customers on a timely basis.





## Mitigation Action: Buffalo Mountain Metropolitan District—8 Water Storage Capacity

<b>Jurisdiction:</b>	Buffalo Mountain Metropolitan District
<b>Action Title:</b>	Increase Water Storage Capacity
<b>Hazard(s) Mitigated:</b>	Drought
<b>Priority:</b>	High
<b>Issue/Background:</b>	<p>Upgrade the existing water storage tank numbers three (3), four (4) and five (5) from 150,000 gallons to 250,000 gallons or more. Limited land exists at the current sites so the tanks would need to increase in height.</p> <p>In case of drought and limited water supply related thereto, increased water storage capacity would allow the District to supply the community demand. Currently storage capacity is limited to 2 days of supply if the District is unable replenish reserves. If the tanks sizes increase, the District will be able to store at least a week of supply allowing time to replenish in times of drought.</p>
<b>Ideas for Implementation:</b>	Request email addresses through quarterly billing statements, newsletter communications, or direct phone contact.
<b>Responsible Agency:</b>	Buffalo Mountain Metropolitan District – District Manager
<b>Partners:</b>	
<b>Potential Funding:</b>	FEMA Hazard Mitigation Grant Program, Colorado Department of Public Health & Environment (CDPHE), Department of Local Affairs (DOLA), Environmental Protection Agency (EPA)
<b>Cost Estimate:</b>	\$6 million
<b>Benefits: (Losses Avoided)</b>	Community health and safety issues if water is not supplied as needed. Avoid having to truck in water from another source.
<b>Timeline:</b>	2022-2027
<b>Status:</b>	New in 2020



## H.7 Implementation and Maintenance

Moving forward, the District will use the mitigation action worksheets in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Chapter 5 in the Base Plan.

### H.7.1 Incorporation into Existing Planning Mechanisms

The information contained within this plan, including results from the Vulnerability Assessment and the Mitigation Strategy, will be used by the Metropolitan District to help inform updates and the development of District plans, programs and policies.

#### **Integration of 2013 Plan into Other Planning Mechanisms**

The District did not integrate the 2013 risk information into current planning or regulation documents, but it did give a general awareness of the District's vulnerabilities to natural hazards and the need of mitigation projects to protect the District's critical facilities and lessen the impacts of hazard events.

#### **Process Moving Forward**

Moving forward, the District may use the vulnerability information to understand the hazards that pose a risk and the specific vulnerabilities to the jurisdiction in future capital improvement planning for the District. The County Planning and Building Department may utilize the hazard information when reviewing a site plan or other type of development applications within the boundaries of the Buffalo Mountain Metropolitan District area.

As noted in Chapter 5 Plan Maintenance, the HMPC representatives from the Buffalo Mountain Metropolitan District will report on efforts to integrate the hazard mitigation plan into local plans, programs and policies and will report on these efforts at the annual HMPC plan review meeting.

### H.7.2 Monitoring, Evaluation and Updating the Plan

The Buffalo Mountain Metropolitan District will follow the procedures to monitor, review, and update this plan in accordance with Summit County as outlined in Chapter 5 of the Base Plan. The District will continue to involve the public in mitigation, as described in Section 5.4 of the Base Plan. The District Manager will be responsible for representing the Metropolitan District in the County HMPC, and for coordination with County staff and departments during plan updates. The Buffalo Mountain Metropolitan District realizes it is important to review the plan regularly and update it every five years in accordance with the Disaster Mitigation Act Requirements.

