

2 COMMUNITY PROFILE

2.1 Geography and Climate

Gunnison County is located in the Rocky Mountains of central-western Colorado. Gunnison County is known for its striking scenery of mountainous terrain, deep valleys, rivers, and Blue Mesa Reservoir, the largest reservoir in Colorado. It is bordered by Chaffee County to the east, Saguache and Hinsdale counties to the south, Montrose and Delta counties to the west, Ouray County to the southwest, and Mesa and Pitkin counties to the north. The County's eastern border is coterminous with the Continental Divide. Gunnison County encompasses 3,239 square miles. Roughly 78% of the land in the County is owned and managed by the US Forest Service (USFS) and Bureau of Land Management (BLM). The USFS owns 1,220,035 acres, and the BLM owns 355,350 acres. The Curecanti National Recreation Area encompasses 40,000 acres within Gunnison County.

Gunnison County has four distinct seasons and averages 300 days of sunshine per year. The climate varies widely among different locations in the County. Elevation in the County ranges from roughly 5,880 feet to over 14,285 feet at Castle Peak, the highest point in the County. Due to the topographic and geographic diversity of the County climate statistics were collected from three Western Regional Climate Center (WRCC) stations in Gunnison County to characterize the County's climate. Climate records for the Gunnison, Crested Butte, and Cochetopa Creek stations are summarized below.

In the City of Gunnison area, the warmest month is July with an average high of 80.7°F and an average low of 42.7°F. The coolest month is January with an average high of 25.8°F and an average low of -7.4°F. The warmest recorded temperature near Gunnison was 105°F, and the coolest temperature was -47°F. Average annual precipitation is 10.31 inches per year, and average annual snowfall is 49.7 inches per year. Vegetation in the area consists of grasses, shrubs, and timber.

The Crested Butte area receives significantly more snowfall than the Gunnison area. Average annual snowfall at the Crested Butte WRCC station is 197.5 inches, and average annual precipitation is 23.47 inches. The highest temperature ever recorded at this station was 91°F, and the lowest recorded temperature was -47°F. January is also the coolest month in the Crested Butte area; the average high is 27.8°F, and the average low is -4.4°F. July is the warmest month with an average high of 76.0°F and an average low of 38.5°F.

Climate records at the Cochetopa Creek station display similar numbers to the Gunnison station. Average annual snowfall is 50.3 inches with 10.97 inches in average annual precipitation. July is the warmest month with an average high of 81.1°F and an average low of 42.5°F. January is the coolest month with an average high of 28.0°F and an average low of -5.2°F. The warmest temperature ever recorded at this station was 94°F, and the coolest was -40°F.

2.2 History

Gunnison County is named for Captain John W. Gunnison, a U.S. Army engineer who was chosen to survey a route in the area for the transcontinental railroad in the 1850s. The area now encompassed by the County was originally home to the Ute Indian tribes, who were pushed out by ranchers, traders, and miners. Gunnison’s wealth as a mining area was short lived, lasting only a few years. Much of the population that had settled in Gunnison departed at that point. On May 22, 1877, the City of Gunnison became the official county seat. The cattle industry established a foothold in the area in the 1880s, but it was the arrival of two railroads in Gunnison in the early 1880s that truly enabled the area to flourish. Initially the Denver & Rio Grande Railroad and the Denver, South Park & Pacific Railroad both ran through Gunnison, but Denver, South Park & Pacific soon discontinued operations in the area. The Denver & Rio Grande Railroad served as the primary means of transport until the 1950s when cars and trucks achieved widespread use.

Around the 1960s, Gunnison County and other parts of the Rocky Mountains started to become popular vacation destinations for skiing. Communities in Gunnison County pushed to become popular summer tourism destinations as well in the 1980s. Today, the economic base of Gunnison County is rooted primarily in education, health care, tourism, ranching, and recreation.

2.3 Population

According to the Colorado State Demography Officer the estimated 2017 county population was 16,871 people. Population estimates for 2017 for the City of Gunnison, the Town of Crested Butte, the Town of Mt. Crested Butte, the Town of Pitkin, the Town of Marble, and the unincorporated county are provided in Table 2.1.

Table 2.1. 2017 Population Estimates

Jurisdiction	2017
City of Gunnison	6,443
Town of Crested Butte	1,656
Town of Marble	141
Town of Mt. Crested Butte	850
Town of Pitkin	71
Total Gunnison County	16,871

Source: <https://demography.dola.colorado.gov/population/population-totals-municipalities/#population-totals-for-colorado-municipalities>

Annual Estimates of the resident population by sex, race, and Hispanic origin for April 1, 2010 to July 1, 2017 are shown in Table 2.2. These statistics can be compared to the national averages to indicate social vulnerability. A population with a high percentage of people under 5 years of age or over 65 years of age may have increased social vulnerability; members of these age groups may require additional assistance or resources to find shelter or evacuate during an emergency. According to the 2017 U.S. Census, 15.6% of the nation’s population is 65 years of age or older, and 6.1% of the population is under 5 years old.

Table 2.2. Gunnison County 2017 Demographic and Social Characteristics

Characteristic	Gunnison County	City of Gunnison	Town of Crested Butte	Town of Marble	Town of Mt. Crested Butte	Town of Pitkin
Gender/Age						
Male %	54.08%	55.52%	56.79%	48.80%	57.84%	56.32%
Female %	45.92%	44.48%	43.21%	51.20%	42.16%	43.68%
Under 5 years %	4.38%	4.10%	5.60%	4.00%	0.30%	0.00%
65 years and over %	12.66%	6.60%	13.30%	20.80%	13.00%	10.30%
Race/Ethnicity (one race)						
White	87.20%	79.69%	98.05%	90.40%	94.25%	100.00%
American Indian/Alaska Native	0.73%	0.18%	0.31%	0.00%	0.00%	0.00%
Asian	0.76%	0.30%	0.00%	0.00%	0.00%	0.00%
Black or African American	0.59%	0.72%	0.00%	0.00%	0.00%	0.00%
Hispanic or Latino (of any race)	9.17%	18.67%	0.86%	9.60%	1.24%	0.00%
Education						
High school graduate or higher (among people age 25+) %	95.35%	89.01%	97.98%	94.23%	99.57%	100.00%

Source: State of Colorado Demography Office

According to population projections by the Colorado State Demography office, Gunnison County’s population is expected to reach 22,728 by 2050. The State Demography Office did not perform population forecasts at the municipal level. According to the State demography Office, Gunnison County’s population is expected to grow at roughly .99% per year between 2010 and 2050. This estimate is based on the average annual percent change estimates in Table 2.3. This is lower than the State Demography Office’s 5-year forecast for all of Colorado (1.30%) and lower than the World Bank’s population growth forecast for the U.S. (2.81%) from 2010-2050.

Table 2.3. Population Projections for Gunnison County: 2010-2050

	2010	2015	2020	2025	2030	2035	2040	2045	2050
Population	15,314*	16,097	17,202	18,255	19,282	20,277	21,238	22,024	22,728
Average Annual Percent Change (over 5-year increments)		1.0%	1.3%	1.2%	1.1%	1.0%	0.9%	0.7%	0.6%

Source: Colorado State Demography Office

*Note that the Colorado State Demography Office's population estimate for 2010 is 15,314 people, compared to the U.S. Census Bureau's estimate of 15,324.

2.4 Government

The Board of County Commissioners is the governing body for Gunnison County. Each of the three members serves a four-year term. They are elected from each of three districts, but by the County electorate as a whole. County government has very limited legislative power per state statute. The Board of County Commissioners select a County Manager to provide support, policy, budget transparency and strategic leadership to the Commissioners, public and the county organization.

The City of Gunnison is a home rule municipality. The governing body of the City consists of a City Council and a City Manager. The Council is composed of a mayor, a mayor pro tempore, and three councilors, all of whom are elected by the citizens of the City of Gunnison. The City Manager is appointed by the Council. The City Council determines policy and budget for Gunnison, with assistance from the City Manager.

The Town of Crested Butte adopted a Council-Manager form of government in 1974. A seven-member Town Council and Mayor govern the Home Rule community. The Mayor serves a two-year term. The Town of Mt. Crested Butte is also governed by a Mayor and Town Council. Seven citizens sit on the Mt. Crested Butte Town Council, serving four-year terms.

2.5 Economy

Early economic endeavors in Gunnison County included fur trapping and mining, though both were very short-lived. Cattle ranching emerged in the 1880s. In the last few decades, education, health care, recreation, tourism, construction, and retail have taken the lead. According to the 2010 Census, the industries that employed the most people in Gunnison County were educational services, health care, and social assistance (19.9%); arts, entertainment, recreation, accommodation, and food services (18.9%); construction (15.2%); and retail trade (10%). Select economic characteristics for Gunnison County from the 2010 Census are shown in Table 2.4.

Table 2.4. Gunnison County Economic Characteristics

Characteristic	Gunnison County	City of Gunnison	Town of Crested Butte	Town of Marble	Town of Mt. Crested Butte	Town of Pitkin
Population below poverty level %	15.37%	29.04%	7.88%	7.20%	6.88%	8.05%
Median home value, 2012-16	\$311,700	\$217,200	\$608,300	\$323,100	\$400,900	\$270,000
Median household income 2012-16	\$50,746	\$36,094	\$58,889	\$70,500	\$52,308	\$63,750
Per capita income 2012-16	\$25,920	\$17,408	\$34,282	\$57,686	\$32,438	\$25,362
Population in labor force (Labor Force Participation Rate)	73.2%	73.6%	76.3%	70.4%	78.9%	72.6%
Population employed	68.0%	64.8%	73.9%	65.2%	77.9%	72.6%
Unemployment Rate	7.1%	11.9%	3.1%	7.4%	1.3%	0.0%

Source: State of Colorado Demography Office

2.6 Mitigation Capabilities Assessment

As part of the 2018 plan update process, the County and participating jurisdictions developed a mitigation capability assessment. Capabilities include plans, policies, and procedures that are currently in place that contribute to reducing hazard losses. Combining the risk assessment with the mitigation capability assessment results in “net vulnerability” to disasters and more accurately focuses the goals, objectives, and proposed actions of this plan. The HMPC used a two-step approach to conduct this assessment. First, an inventory of common mitigation activities was made through the use of a questionnaire matrix. The purpose of this effort was to identify policies and programs that were either in place or could be undertaken, if appropriate. Second, the HMPC conducted an inventory and review of existing policies, regulations, plans, projects, and programs to determine if they contribute to reducing hazard related losses.

2.6.1 Gunnison County Mitigation Capabilities

This section presents Gunnison County’s mitigation capabilities as well as the capabilities of the City of Gunnison, Town of Crested Butte, Town of Mt. Crested Butte, Arrowhead Fire Protection District, Crested Butte Fire Protection District, Crested Butte South Metropolitan District, and Mt. Crested Butte Water and Sanitation District that are applicable to the planning area. This assessment describes existing capabilities, programs, and policies currently in use to reduce hazard impacts or capabilities that could be used to implement hazard mitigation activities. It addresses regulatory mitigation capabilities and administrative/technical mitigation capabilities for the participating jurisdictions.

Gunnison County Regulatory Mitigation Capabilities

Table 2.5 lists planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in Gunnison County. Excerpts from applicable policies, regulations, plans and programs descriptions follow to provide more detail on existing mitigation capabilities.

Table 2.5. Gunnison County Mitigation Capabilities

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
County Comprehensive Plan	Y	Crested Butte to Gunnison Corridor Comprehensive Plan and Upper Crystal River Valley Comprehensive Plan
Zoning ordinance	N	Abandoned in 1978 in favor of “performance-based” or “form-based” land use regulations
Subdivision ordinance	Y	
Growth management ordinance	N	No ordinance, but preferred growth scenarios in 2005 Crested Butte to Gunnison Corridor Comprehensive Plan, status quo future build-out study in 2005 Upper Crystal River Valley Comprehensive Plan
Floodplain ordinance	Y	Land Use Resolution Section 11-103
Other special purpose ordinance (stormwater, steep slope, wildfire)	Y	Land Use Resolution, Section 11-103: Flood Hazards, Section 11-104: Geologic Hazards, Section 11-105: Wildfire Hazards, Section 12-107: Fire Protection
Building codes	Y	International Building Code, International Fuel Gas Code, International Mechanical code, International Residential Code, International Energy Conservation Code
Fire department ISO rating		Varies by department
Erosion or sediment control program	Y	Land Use Resolution, Section 13-116
Stormwater management program		Stormwater management follows Colorado State guidelines
Site plan review requirements	Y	Land Use Resolution, Section 13-103
Capital improvements plan	Y	
Economic development plan	Y	2016 One Valley Prosperity Plan
Local emergency operations plan	Y	Currently being updated
Other special plans	Y	Gunnison County CWPP, Upper Crystal River Valley CWPP, Saguache County Hazard Mitigation Plan, Western Saguache County CWPP, USGS and CGS studies on various geologic hazards
Flood insurance study or other engineering study for streams	Y	“FIS for Gunnison County, Colorado, Unincorporated Areas” dated May 16, 2013
Elevation certificates (for floodplain development)	Y	

Source: www.gunnisoncounty.org, HMPC

As indicated in the table above, Gunnison County has several plans and programs that guide the County's mitigation of development in hazard-prone areas. Some of these plans and programs are described in more detail below.

Crested Butte to Gunnison Corridor Comprehensive Plan

The Crested Butte to Gunnison Corridor Comprehensive Plan provides a general statement of intended land use and environmental practices in the Crested Butte to Gunnison corridor. On request from the Gunnison County Planning Commission, the Crested Butte to Gunnison Corridor Comprehensive Plan developers examined future growth scenarios based on the assumption that trends in land use would remain the same over time. Population projections for the year 2020 were obtained from the Colorado State Demographer's Office to estimate population density in the land use planning areas. Estimated population growth rates were based on average growth rates from 1990-2000 and 1999-2000. The growth rates for the 1990-2000 period varied widely from 1.55 in the City of Gunnison to 8.87 in Pitkin. The county-wide growth rate was 3.11. Growth rates from 1999-2000 were much more moderate, and even negative in Pitkin. The county-wide growth rate was 2.14 from 1999-2000. These development scenarios took into account natural hazard areas such as floodplains, avalanches chutes, geologic constraint areas, etc., and assumed that development would not occur in those locations.

Upper Crystal River Valley Comprehensive Plan

The Upper Crystal River Valley Comprehensive Plan was designed to provide direction for land use in the Upper Crystal River watershed within Gunnison County. The Plan provided profiles of several natural hazards, including geologic constraints, flooding, and wildfire in the watershed, including the Town of Marble. The slope profile was also relevant as it relates to potential risk of avalanches, severe wildfires, debris flows, landslides, and mudslides. Taking hazard locations into account, the Upper Crystal River Valley Comprehensive Plan steering committee developed land use recommendations based on the findings of the plan and a community-based survey distributed to Upper Crystal River watershed residents. The survey respondents expressed significant support for protecting the local environment and confining future development near existing development. The steering committee's recommendations reflected these priorities. Some of the recommendations, while not related explicitly to hazard mitigation, have mitigating impacts. For example, the recommendations to require developers to build at least 100 feet away from streams can have the dual benefit of protecting viewsheds and keeping development out of potential flood zones.

Gunnison County Community Wildfire Protection Plan

The Gunnison County CWPP was completed in 2011. The fire plan outlines the County's fire response capabilities and mitigation strategies. The Gunnison County CWPP was built on several existing community-specific CWPPs and wildfire operating plans. 32 CWPP communities and seven areas of special interest were identified within Gunnison County's wildland urban interface (WUI). An exhaustive GIS analysis was used to determine each

community's risk to wildland fire. No community was ranked lower than moderate risk, and some were ranked as extreme risk. Mitigation recommendations, such as fuel-breaks and defensible space projects, were provided for all 32 communities. The CWPP also took inventory of the wildland fire mitigation capabilities among the several fire departments in the County. Recommendations were made for increasing firefighter safety, improving training, and enhancing local water supplies for wildfire response. Representatives from local, regional, state, and federal agencies collaborated throughout the planning process and assisted with plan development. It should be noted that while the 2011 CWPP is a valuable tool, our intent going forward is to develop community-specific CWPP's, which will allow for greater focus on each communities unique characteristics, risk, and gaps.

Western Saguache County Community Wildfire Protection Plan

The Western Saguache County CWPP was completed in 2008. The fire plan outlines the fire response capabilities and mitigation strategies in this area of the County. Much of the fire protection responsibility for western Saguache County falls to Gunnison area fire protection districts; emergency personnel from the Gunnison County area are able to provide a more timely response than personnel in eastern Saguache County. The plan made a number of recommendations that impact communities in the Saguache portion of the Gunnison County response area, namely Sargents, Gold Basin, and Vulcan. Wildland fire mitigation recommendations from the CWPP include:

- Provide FireWise information to all property owners with structures on their land and new property owners and applicants for building permits.
- Work with County Commissioners on wildland fire standards for subdivision developments.
- Conduct one FireWise workshop for WUI residents.
- Provide interested parties with FireWise onsite consultations.
- Mow safety zones in the vicinity of Gold Basin and Vulcan on a bi-annual basis or when grass growth makes it necessary.
- Wildland firefighter training for Gunnison Fire Protection District personnel. Get 6 more firefighters qualified as FF2 plus increase qualifications of existing personnel.
- Wildland firefighter training for Sargents personnel. Get nine more firefighters qualified as FF2.
- Add five more sets of web-gear and tools to Sargents wildland fire cache.
- Develop two additional dry hydrant water sources in the Sargents area.
- Thin and mow along WUI evacuation routes.
- Improve natural vegetation resistance to wildfire using prescribed burning.
- Complete Vulcan hazardous fuel treatments.
- Develop Fuels Mitigation Plan for Vulcan.
- Acquire five new handheld radios.
- Develop Gold Basin fuelbreak complex.
- Acquire five new handheld radios.

- Develop Gold Basin fuelbreak complex.

GIS maps illustrated recommended locations for wildland fire mitigation projects in Deer Haven, Sargents, Gold Basin, and Vulcan.

Saguache County Multi-Hazard Mitigation Plan

The Saguache County Multi-Hazard Mitigation Plan was completed in 2010. The Plan covers communities in western Saguache County, which falls within the Gunnison County Emergency Response Area. The Plan states that the Gunnison Fire Protection District provides fire response and protection for the Sargents subdivision through an intergovernmental agreement. The Saguache County HMP lists mitigation recommendations from the Western Saguache CWPP but does not list other actions specific to the portion of Saguache in the Gunnison County response area. Those mitigation actions are discussed previously in the *Western Saguache County Community Wildfire Protection Plan, 2008* section.

Gunnison County Land Use Resolution

The purpose of the Gunnison County Land Use Resolution is to promote health, safety, general welfare, and the environment; simplify the land use planning and regulatory review process; protect the heritage of the County’s rural character; provide for orderly use of land; preserve neighborhood character; encourage housing diversity; evaluate cumulative impacts; encourage innovations; regulate land use based on impacts; and not to deprive all reasonable economic use of real property. The intent of the code is to regulate development and activities in Gunnison County, to give special attention to hazardous areas, to protect lands from activities that would cause immediate or foreseeable material danger to significant wildlife habitats, to regulate the use of land on the basis of impact on the communities or surrounding areas, and to secure safety from fire and other damages, among other things. The code includes specific standards for developing in areas subjects to flooding, geologic hazards, and wildland fire in Article 11.

Gunnison County Administrative and Technical Mitigation Capabilities

Table 2.6 identifies the County personnel responsible for activities related to mitigation and loss prevention in Gunnison County.

Table 2.6. Gunnison County Administrative/Technical Mitigation Capabilities

Personnel Resources	In Place?	Department/Position	Comments
Planner/engineer with knowledge of land development/land management practices	Y	Community and Economic Development Department	
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Y	Community Development Department/Building Office	

Personnel Resources	In Place?	Department/Position	Comments
Planner/engineer/scientist with an understanding of natural hazards	Y	Community and Economic Development Department Director	
Personnel skilled in GIS	Y	GIS/Maps	
Full time building official	Y	Community Development Dept./Building Inspector	
Floodplain manager	Y	Community Development Dept. /Assistant Director	
Emergency manager	Y	Emergency Management	
Grant writer	Y	Emergency Management (for mitigation-relevant grants)	
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Y	GIS/Maps	Flood, geologic hazards, and wildfire, address points, critical facilities, structure footprints, parcels
Warning Systems/Services	Y	Emergency Management	Code Red Notification System, Notify Me, Facebook, Twitter.

The following departments are involved in hazard mitigation in Gunnison County:

Community and Economic Development Department

The Community Development Department is composed of three offices: Planning, Building, and Environmental Health. The Community Development Department is responsible for administering and maintaining land use regulations, issuing various permits related to land use, administering the County’s floodplain management regulations, and conducting site reviews.

Emergency Management Department

The Emergency Management Department serves all of Gunnison County and assists northwestern Saguache County with emergency management and coordination. The Department is responsible for maintaining and exercising the County’s Emergency Operations Plan, as well as providing training and exercises in emergency management. The Emergency Management Department is also charged with maintaining the County’s hazard mitigation plan and served as the lead during the 2018 HMP update process. The Department manages resources received from local, state, and private sources, and facilitates mutual aid agreements or intergovernmental agreements between agencies and jurisdictions.

Geographic Information Systems (GIS) Department

The GIS Department maintains the County’s GIS system and databases. Their mapping services are used in the County’s long-range planning and project site planning. Their datasets include geologic hazards, flood hazards, and wildfire hazards. These datasets and layers were used to determine the areas within the County that have the highest risk to certain natural hazards, which is discussed in Chapter 4 of this plan.

Planning Commission

The Planning Commission consists of seven members, including five regular members serving three-year terms and two alternates serving one-year terms. The Planning Commission makes recommendations to the County’s governing body concerning matters related to planning, zoning, land use regulations and wildlife conservation. The Planning Commission administers and maintains the County’s Land Use Resolution and floodplain studies. They conduct site inspections and hazard site reviews. The Planning Commission also works with the Board of Commissioners and the Community Development Department to develop planning documents such as master/comprehensive plans and corridor plans. The Planning Commission takes the County’s natural hazards into account when developing these plans. Per House Bill 74-1041 passed by the state legislature in 1974 and the Local Government Land Use Control Enabling Act of 1974, the local government has the right to regulate land use in natural hazard areas.

Public Works Department

The Public Works Department is responsible for the repair, plowing, and maintenance of County, Forest Service, and BLM roads and bridges within the planning area.

2.6.2 City of Gunnison Mitigation Capabilities

City of Gunnison Regulatory Mitigation Capabilities

Table 2.7 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 City of Gunnison. Excerpts from applicable policies, regulations, plans, and program descriptions follow to provide more detail on existing mitigation capabilities.

Table 2.7. City of Gunnison Regulatory Mitigation Capabilities Matrix

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
Master Plan (2007)	Y	Available at http://www.gunnisonco.gov/Planning/City%20of%20Gunnison%20Master%20Plan.pdf
Comprehensive Plan Update		

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
Zoning ordinance	Y	City of Gunnison Land Development Code
Subdivision ordinance	Y	City of Gunnison Land Development Code
Growth management ordinance	N	
Floodplain ordinance	Y	Gunnison Municipal Code Title 14 Technical Codes
Building code	Y	Gunnison Municipal Code Title 14 Technical Codes
Fire department ISO rating	Y	
Erosion or sediment control program	Y	Construction erosion & Stormwater in Land Development Code. Per State erosion control mandates
Stormwater management program	Y	Draft Stormwater and Erosion Control Standards are developed but have not been adopted
Site plan review requirements	Y	City of Gunnison Land Development Code
Capital improvements plan	Y	
Local emergency operations plan	Y	Update Adoption February 2012
Flood insurance study or other engineering study for streams	Y	FIS and DFIRM effective date of May 16, 2013.
Elevation certificates (for floodplain development)	Y	Building Permit Files

Source: www.cityofgunnison-co.gov, HMPC

As indicated in the table above, the City of Gunnison has several plans and programs that guide the City's development, including avoidance of development in floodplains of the Gunnison River and Tomichi Creek. Some of the plans identified in Table 2.7 are described in more detail in the following paragraphs.

City of Gunnison Master Plan, 2007

The Land Development Code regulates setbacks from river corridors and wetlands. Wetlands can help mitigate flood hazards by essentially functioning as a natural sponge for flood waters and rainfall runoff. It is important to protect these natural resources to avoid exacerbating flood hazards in the City.

City of Gunnison Land Development Code, 2014

The City of Gunnison Land Development Code was written to establish standards for proposed development within the City, protect and enhance the quality of life for the City's residents, establish a clear land development review process, provide guidelines for orderly development

within the City, ensure adequate public facilities, and conserve property values. The City’s Land Development Code deals specifically with natural hazards such as flooding, steep slopes, and avalanches. The City developed storm water management criteria based on the Denver Urban Drainage and Flood Control District’s *Urban Storm Drainage Criteria Manuals (USDCM), Volumes 1-3*. The Land Development Code provides guidelines for when building on slopes is acceptable or prohibited. The City will conduct a review of any proposed development site where the slope is greater than or equal to 10% grade. New construction is also prohibited on any portion of a parcel that shows evidence of slope instability, avalanches, landslides, flooding, alluvial fans, and other hazards.

City of Gunnison Administrative and Technical Mitigation Capabilities

Table 2.8 identifies the City personnel responsible for activities related to mitigation and loss prevention in the City of Gunnison.

Table 2.8. City of Gunnison Administrative/Technical Mitigation Capabilities

Personnel Resources	In Place?	Department/Position
Planner/engineer with knowledge of land development/land management practices	Y	Community Development Director
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Y	City Engineer Public Works Dept.
Planner/engineer/scientist with an understanding of natural hazards	Y	Community Development Director
Personnel skilled in GIS	Y	Planning Department Staff
Full time building official	Y	Community Development Dept Building Official
Floodplain manager	Y	Community Development Dept CD Director and Building Official
Emergency manager	Y	Community Development Dept. Fire Marshal
Grant writer	Y	Community Development Dept Staff Parks and Rec Staff
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Y	Community Development Dept Planning Staff
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	Y	Police Department Chief and Captain

The following departments are involved in hazard mitigation in the City of Gunnison:

Community Development Department

The City of Gunnison Community Development Department is responsible for administering the Land Development Code. The Building Department within Community Development provides floodplain management services for the City of Gunnison; the City’s Building Official and Director are also Certified Floodplain Managers.

Planning and Zoning Commission

The Planning and Zoning Commission has a role in hazard mitigation as it relates to land use and development decisions. The Commission ensures compliance with the City’s Land Development Code by reviewing development applications. The Commission also writes the City’s Master Plan. The Commission works closely with the Community Development Department to guide land use in the City of Gunnison. Seven citizens are appointed by the City Council to serve on the Planning and Zoning Commission for five-year terms. One of the seven members functions as a liaison between the Commission and the City Council.

Public Works – Streets and Alleys

The Public Works Streets and Alleys Department is responsible for the repair, plowing, and maintenance of 35 miles of centerline streets and 24 miles of alleys within the City of Gunnison.

2.6.3 Town of Crested Butte Mitigation Capabilities

Town of Crested Butte Regulatory Mitigation Capabilities

The Town of Crested Butte has several regulatory plans and projects related to hazard mitigation. Table 2.9 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 Town of Crested Butte. Excerpts from applicable policies, regulations, plans, and program descriptions follow to provide more detail on existing mitigation capabilities.

Table 2.9. Town of Crested Butte Regulatory Mitigation Capabilities Matrix

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
General or Comprehensive plan	Y	The Crested Butte Land Use Plan and the Crested Butte Area Plan
Zoning ordinance	Y	Crested Butte Town Code Chapter 16
Subdivision ordinance	Y	Crested Butte Town Code Chapter 17
Floodplain ordinance	Y	Crested Butte prohibits development in the 100 year floodplain. Established in Crested Butte Area Plan and Subdivision Regulations
Building code	Y	Crested Butte Town Code Chapter 18

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
Fire department ISO rating	Y	ISO Rating 5
Erosion or sediment control program	Y	Developers are encouraged to use low impact development strategies to minimize storm water drainage and minimize erosion.
Site plan review requirements	Y	Setbacks and snow shed issues are considered during design review by the Crested Butte Board of Zoning and Architectural Review
Capital improvements plan	Y	Available at Town of Crested Butte Finance Department
Local emergency operations plan	Y	Town of Crested Butte Disaster Emergency Management Plan, 2008 Crested Butte Flood Response Plan
Other special plans	Y	2014 Transportation Plan and 2009 Weed Management Plan
Flood insurance study or other engineering study for streams	Y	Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM) Effective Date: May 16, 2013 Floodplain Information Report for Coal Creek Crested Butte, Colorado, September 18, 1992
Elevation certificates (for floodplain development)	Y	Any development must provide floodplain elevations and first floor elevations if it is located in Zone A on FEMA floodplain maps.

As indicated in the table above, the Town of Crested Butte has several plans and programs that guide the Town’s mitigation of development in hazard-prone areas. Some of the plans identified in Table 2.9 are described in more detail in the following paragraphs.

Crested Butte Land Use Plan

The Crested Butte Land Use Plan provides guidance for decision-making regarding land use and development within the Town. The Land Use Plan’s policies and recommendations take into account community goals and desires for growth and development. The Plan builds on and ties together several plans, planning projects and studies that were completed prior to the 1996 Land Use Plan.

Crested Butte Area Plan

The Crested Butte Area Plan establishes the three-mile planning area regulations and recommendations. Colorado Revised Statutes (CRS) Sections 31-13-101 mandate that municipalities establish plans for the three-mile area from any point of the municipal boundary prior to annexation. Crested Butte’s three-mile plan area is known as the Middle Slate River Valley. The Area Plan also addresses proposed development in unincorporated Gunnison County near the Town of Crested Butte. The Area Plan emphasizes the importance of mitigation activities in land development, such as wetland preservation, building away from steep grades and cliffs for wildland fire mitigation, open space planning, and maintaining wildlife corridors.

Crested Butte Charter and Municipal Code

The Crested Butte Charter and Municipal Code is the Town’s governing document. It includes provisions for zoning, subdivision development, watershed protection, building codes, and floodplain regulations.

Town of Crested Butte Flood Plan

The Town of Crested Butte Flood Plan serves as an action plan for three different flooding scenarios: bank overtopping, obstructions on banks and bridges from debris (e.g. trees washed downstream and lodged under bridges), and bank failure. The plan focuses on Coal Creek as the main source of flooding in the Town. The plan proposes specific actions for dealing with each individual scenario. For bank overtopping, the Town would use sand bags, loose sand, reinforced visqueens, jersey barriers, and ADS culvert pipes. Initial efforts would work to contain flooding within existing stream banks. If containment is not feasible, the Town will then attempt to divert flood waters into containment structures or to another location of Coal Creek where water capacity increases.

Debris-caused flooding can result from trees or logs becoming trapped under bridges and blocking the flow of water. This is most likely to happen when water levels are already high, leaving less room for debris to pass under bridges or other structures. In the case of debris causing Coal Creek to backup and flood, the Town will attempt to remove the blockage with a backhoe, track hoe, pikes, grappling hooks, or chainsaws where safe and feasible. The Town has pinpointed the First Street bridge and the bridges on Elk Avenue and Second Street as the areas of most concern for debris-caused flooding.

The third scenario, bank failure, is mostly likely north of Maroon Avenue where no creek wall improvement projects have occurred. Creek walls on the outside curve of the stream are subjected to the most erosion and are the most likely to fail. It is especially important to monitor stream banks during periods of high water. Sand bags or “rip-rap” (e.g. rocks or concrete) can be used to stabilize stream banks. Jetty-like structures can also be used to divert waters away from weaker bank areas. The Town will monitor stream banks and evaluate specific sites for stabilization or diversion activities.

Town of Crested Butte Noxious Weed Control Program

The Town of Crested Butte manages weeds through integrated management methods outlined in the Town’s Noxious Weed Management Plan (“Plan”). The intent of the Plan is to provide guidelines for managing state and locally designated noxious weeds which represent a threat to the environmental and economic value of lands in Crested Butte. The Plan can be found online at www.townofcrestedbutte.com under the Community Information tab.

Smith Hill Preservation Project

The Town helped to preserve 280 acres on Smith Hill at a cost of \$4,600,000. The Gunnison Valley Land Preservation Board contributed \$100,000 to the project. Mitigation aspects of the project included eradicating noxious weeds on the site.

Town of Crested Butte Administrative and Technical Mitigation Capabilities

Table 2.10 identifies the Town personnel responsible for activities related to mitigation and loss prevention in the Town of Crested Butte.

Table 2.10. Town of Crested Butte Administrative/Technical Mitigation Capabilities

Personnel Resources	In Place?	Department/Position	Comments
Planner/engineer with knowledge of land development/land management practices	Y	Community Development	
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Y	Community Development Director/Public Works Director	
Planner/engineer/scientist with an understanding of natural hazards	Y	Community Development Director	
Personnel skilled in GIS	Y	GIS Specialist	
Full time building official	Y	Building Department/Building Official and Building Inspector	
Floodplain manager	Y	Building Inspector	
Emergency manager	Y	Gunnison County Emergency Manager	Also Crested Butte Marshals and Crested Butte Fire Protection District
Grant writer	Y	Community Development Director	All department heads act as grant writers
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Y	GIS Specialist	
Warning Systems/Services	Y	Crested Butte FPD	

The following departments are involved in hazard mitigation in the Town of Crested Butte:

Community Development Department - Building Division

The Building Division ensures compliance with the Town’s zoning ordinances, issues and administers building permits, administers the floodplain ordinance, and conducts the building design review process. The Building Department is responsible for ensuring that structures in the Town adhere to building codes, which may include provisions related to natural hazard mitigation.

Community Development Department – Planning Division

The Planning Division manages current planning, long range planning, and special planning in the Town of Crested Butte. Generally, the Planning Division works to provide recommendations to the Town Council for land use and development within the Town.

Public Works – Street Division

The Streets Division of the Crested Butte Public Works Department maintains the Town’s streets and alleys. Maintenance includes snow removal, construction, upkeep, and signage.

2.6.4 Town of Mt. Crested Butte Mitigation Capabilities

Town of Mt. Crested Butte Regulatory Mitigation Capabilities

Table 2.11 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 Town of Mt. Crested Butte. Excerpts from applicable policies, regulations, plans, and program descriptions follow to provide more detail on existing mitigation capabilities.

Table 2.11. Town of Mt. Crested Butte Regulatory Mitigation Capabilities Matrix

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
General or Comprehensive plan	Y	Mt. Crested Butte Code
Zoning ordinance	Y	Mt. Crested Butte Code – Chapter 21
Subdivision ordinance	Y	Mt. Crested Butte Code – Chapter 18
Floodplain ordinance	Y	Mt Crested Butte Code – Chapter 23
Building code	Y	Mt. Crested Butte Code – Chapters 6 & 8 Currently working under 2012 I-Codes as amended
Fire department ISO rating		See Crested Butte FPD
Erosion or sediment control program	Y	Required for all major construction projects
Stormwater management program	Y	Required for all major construction projects

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
Site plan review requirements	Y	Mt. Crested Butte Code – Chapter 21
Capital improvements plan	Y	
Economic development plan	Y	Five Year Plan
Local emergency operations plan	Y	Housed with Mt. Crested Butte Police Department
Other	Y	Noxious/invasive weed management courses

As indicated in the table above, the Town of Mt. Crested Butte has several plans and programs that guide the Town’s mitigation of development in hazard-prone areas. Some of the plans identified in Table 2.11 are described in more detail in the following paragraphs.

Mt. Crested Butte Code

The Mt. Crested Butte Code serves as a governing document for the Town and contains several codes related to the governance of Mt. Crested Butte, building regulations, fire prevention and protection, and zoning. Chapter 6 establishes building regulations and details the various building and development codes used in Mt. Crested Butte. Chapter 8 summarizes open burning restrictions as related to fire prevention and protection and adopts the 2012 International Fire Code (as amended). Chapter 18 establishes subdivision regulations and wetland development standards, which can impact the Town’s flood hazards. Chapter 21, Zoning, explains avalanche zone districts in the community and related development restrictions. Chapter 21 also establishes the procedures for structure design review.

Avalanche Mitigation Projects

Mt. Crested Butte installed avalanche fences in 2007 to mitigate the avalanche hazard. Avalanche signage was also put up to make residents aware of the danger.

Town of Mt. Crested Butte Administrative and Technical Mitigation Capabilities

Table 2.12 identifies the Town personnel responsible for activities related to mitigation and loss prevention in the Town of Mt. Crested Butte.

Table 2.12. Town of Mt. Crested Butte Administrative/Technical Mitigation Capabilities

Personnel Resources	In Place?	Department/Position
Planner/engineer with knowledge of land development/land management practices	Y	Community Development
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Y	Community Development

Personnel Resources	In Place?	Department/Position
Personnel skilled in GIS	Y	Community Development
Full time building official	Y	Community Development
Emergency manager	Y	Town Manager/Police Chief
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Y	Community Development
Warning Systems/Services	Y	Reverse 911

The following departments are involved in hazard mitigation in the Town of Mt. Crested Butte:

Community Development Department

The Mt. Crested Butte Community Development Department is responsible for administering the Planning and Building functions for the Town. The Planning function includes preparing long-range plans, ensuring compliance with the town code as it relates to planning, conducting future growth studies, and processing certain land use applications. The Building function entails implementing and enforcing development laws, ordinances, and codes. The Building function also serves to ensure compliance with Downtown Development Authority design standards, and prepares building design reviews for the Planning Commission.

Town Maintenance – Streets and Roads

The Town Maintenance Streets and Roads division maintain and improves all roads and streets within Mt. Crested Butte. Streets and Roads also maintains culverts, wetlands, drainages, and retaining walls; the department plays an important role in flood mitigation in the Town.

2.6.5 Special Districts

Arrowhead Fire Protection District

The Arrowhead Fire Protection District (FPD) provides fire protection for the Arrowhead community in southwestern Gunnison County. The Arrowhead FPD is composed of approximately 10 firefighters, nine Emergency Medical Services (EMS) responders, and 10 logistics/support personnel. The Arrowhead community has its own CWPP, which identified high wildland fire risk areas and recommended mitigation projects. The Arrowhead FPD was also included in the 2011 Gunnison County CWPP. The Arrowhead FPD has gone to great lengths to educate residents and execute projects related to wildland fire mitigation. In 2011, the FPD conducted a wildland fire preplanning project, which included site visits from firefighters to educate residents about their unique wildland fire risk level. Each residence was categorized into one of three categories defined within the National Wildfire Coordinating Group (NWCG) Incident Response Pocket Guide. Firefighters then made recommendations to homeowners on

how to improve their individual rating. This project collected data on the preparatory needs of the Arrowhead residences. The data for each residence was linked to GIS software for use during a wildland fire response.

The Arrowhead Improvement Association (AIA) has also played a significant role in wildland fire mitigation in the community. The AIA developed covenants and regulations for defensible space and wildland fire mitigation. The AIA routinely works with the FPD to hold public outreach meetings and create and distribute wildland fire mitigation fliers to Arrowhead residents. The AIA Forest Manager works closely with the Colorado State Forest Service to obtain funding for mitigation projects. Through these partnerships, the majority of extreme wildland fire risk communities in the Arrowhead CWPP have been mitigated.

Table 2.13 and Table 2.14 summarize the plans, personnel, and ordinances with a role in hazard mitigation in the Arrowhead community.

Table 2.13. Arrowhead FPD Regulatory Mitigation Capabilities Matrix

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
General or Comprehensive plan		Gunnison County
Subdivision ordinance	Y	Arrowhead Improvements Association – Covenants and Regulations http://www.arrowhead1.org/pdf/docs/covenants.pdf http://www.arrowhead1.org/pdf/docs/regs_11-01-19.pdf
Floodplain ordinance	Y	Gunnison County Land Use Resolution Section 11-103
Other special purpose ordinance (stormwater, steep slope, wildfire)	Y	Gunnison County Land Use Resolution, Section 11-103: Flood Hazards, Section 11-104: Geologic Hazards, Section 11-105: Wildfire Hazards, Section 12-107: Fire Protection, Section 13, structural snowload requirements. Stormwater management follows Colorado State guidelines
Fire department ISO rating	ISO 9	
Erosion or sediment control program	Y	Gunnison County Land Use Resolution, Section 13-116
Site plan review requirements	Arrowhead Improvements Association – Design Review Committee	
Capital improvements plan	Contact AIA Office @ (970)240-9599	
Economic development plan	Y	Gunnison County 2011 Community Economic Development Plan
Local emergency operations plan	Arrowhead CWPP, Gunnison County CWPP, Arrowhead Evacuation Plan	

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
Other special plans	Y	Gunnison County CWPP
Flood insurance study or other engineering study for streams	Y	"FIS for Gunnison County, Colorado, Unincorporated Areas" dated September 29, 1989
Elevation certificates (for floodplain development)	Y	Gunnison County

Table 2.14. Arrowhead FPD Administrative/Technical Mitigation Capabilities

Personnel Resources	In Place?	Department/Position	Comments
Planner/engineer with knowledge of land development/land management practices		County Community Development Dept./Planner	Gunnison County
Engineer/professional trained in construction practices related to buildings and/or infrastructure			Gunnison County
Planner/engineer/scientist with an understanding of natural hazards			Gunnison County
Personnel skilled in GIS		County GIS/Maps Dept.	Gunnison County
Full time building official		County Community Development Dept./Building Inspector	Gunnison County
Floodplain manager		County Community Development Dept./Assistant Director	Gunnison County
Emergency manager	Y	Arrowhead Fire Protection District – Fire Chief, Gunnison County Emergency Manager	
Grant writer	Y	Arrowhead Improvements Association – Forest Manager (Fire mitigation grants), Arrowhead Improvements Association Board or their designee for other grants	
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)		County GIS/Maps Dept.	Gunnison County has data for flood, geologic hazards, and wildfire, address points, critical facilities, structure footprints, parcels
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)		Gunnison County Emergency Management	Gunnison County has opt-in Intrado Target Notification system

Crested Butte Fire Protection District

The Crested Butte Fire Protection District (CBFPD) provides fire protection, prevention, and rescue services for Crested Butte, Mt. Crested Butte, and the surrounding area. Their response area covers 220 square miles in the Crested Butte Valley. The CBFPD serves a population of roughly 2,500 people, although this number can swell to as many as 10,000 people during major tourist seasons. The CBFPD is governed by a Board of Directors consisting of five members. 35 volunteer firefighters and six paid staff members make up the CBFPD work force. The CBFPD was included in the 2011 Gunnison County CWPP. Nine CWPP communities were identified within the CBFPD response area. Seven of the CWPP communities were ranked as having a high or greater wildland fire hazard rating. Wildland fire mitigation projects were identified for each of the nine CWPP communities. The projects are executed on an ongoing basis with funding from the Colorado State Forest Service. The CBFPD meets with subdivision HOAs annually.

Table 2.15 and Table 2.16 summarize the CBFPD’s mitigation capabilities.

Table 2.15. Crested Butte Fire Protection District Regulatory Mitigation Capabilities Matrix

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
General or Comprehensive plan	Y	General or comprehensive plans for Mt. Crested Butte, Crested Butte, and Gunnison County
Zoning ordinance	Y	Zoning ordinances for Mt. Crested Butte and Crested Butte
Subdivision ordinance	Y	Subdivision ordinances for Mt. Crested Butte, Crested Butte, and Gunnison County
Other special purpose ordinance (stormwater, steep slope, wildfire)	Y	Gunnison County defensible space ordinances
Building code	Y	Building codes for Mt. Crested Butte, Crested Butte, and Gunnison County
Fire department ISO rating	Y	
Site plan review requirements	Y	Site plan review requirements for Mt. Crested Butte, Crested Butte, and Gunnison County
Local emergency operations plan	Y	

Table 2.16. Crested Butte Fire Protection District Administrative/Technical Capabilities

Personnel Resources	In Place?	Department/Position
Personnel skilled in GIS	Y	Gunnison County GIS/Maps Department

Personnel Resources	In Place?	Department/Position
Full time building official	Y	Building officials for Mt. Crested Butte, Crested Butte, and Gunnison County
Emergency manager	Y	Gunnison County Emergency Manager
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Y	Gunnison County GIS/Maps Department
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	Y	

Crested Butte South Metropolitan District

Crested Butte South Metropolitan District is a special service district that supplies municipal-type services, such as water and sanitation, to residents. As a special district, Crested Butte South Metropolitan District meets FEMA’s definition of a “local government.” The District developed a responsible water use resolution which was passed by the District’s Board of Directors. It educates residents on the use of water, as well as restricting water use to certain times of the day. This can help mitigate drought and the related wildland fire impacts to the community. The District is primarily concerned with man-made hazards as they relate to future growth in the community. Crested Butte South Metro is currently at roughly 45% build out, so the potential exists for a population boom to occur. The District’s regulatory and administrative/technical mitigation capabilities are summarized in Table 2.17 and Table 2.18.

Table 2.17. Crested Butte South Metropolitan District Regulatory Mitigation Capabilities Matrix

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
Zoning ordinance	Y	CB South POA (Property Owners Association) www.cbsouth.net
Subdivision ordinance	Y	Same as above
Floodplain ordinance	Y	FEMA through Gunnison County Planning
Building code	Y	Gunnison County UBC
Fire department ISO rating	Y	5
Stormwater management program	N	No storm water infrastructure
Site plan review requirements	Y	CB South POA
Capital improvements plan	Y	CB South Metro District

Regulatory Tool (ordinances, codes, plans)	In Place?	Comments
		cbsouthmetro@crestedbutte.net
Local emergency operations plan	Y	Emergency Response Plan
Other special plans	Y	Source Water Protection Plan
Elevation certificates (for floodplain development)	Y	CB South Metro District

Table 2.18. Crested Butte South Metropolitan District Administrative/Technical Mitigation Capabilities

Personnel Resources	In Place?	Department/Position	Comments
Planner/engineer with knowledge of land development/land management practices	Y	Norm Whitehead P.E. Independent Contractor	CB South Resident
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Y	Norm Whitehead P.E.	
Planner/engineer/scientist with an understanding of natural hazards	Y	Norm Whitehead P.E.	
Personnel skilled in GIS	Y	Norm Whitehead P.E.	
Full time building official	Y	Dan Vaughn CB South POA	Planning Specialist
Emergency manager	N	Scott Morrill Gunnison County	Personnel at county level
Other personnel	Y	CB South Metro District Crew	We have a lot of equipment
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	N	Mike Pelletier Gunnison County	Personnel at county level
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	N	Gunnison County Emergency Management	Reverse 911

Mt. Crested Butte Water and Sanitation District

The Mt. Crested Butte Water and Sanitation (MCBWS) District was created in 1963. The organization is governed by an elected Board of Directors composed of five Directors who serve four-year terms. The District is currently staffed by 13 full-time employees. The MCBWS District serves roughly 6,500 residential and commercial customers, although this number can increase to over 10,000 during ski season. The District's boundaries cover 3.055 square miles

and encompass the Town of Mt. Crested Butte and the Meridian Lake Park subdivision. The Water and Sanitation District’s mitigation capabilities include newsletters and policies that encourage efficient water use among their customers. The District has also placed sand bags at the East River to mitigate flood impacts.

Table 2.19 summaries the administrative and technical mitigation capabilities for the Mt. Crested Butte Water and Sanitation District.

Table 2.19. Mt. Crested Butte Water and Sanitation District Administrative/Technical Mitigation Capabilities

Personnel Resources	In Place?	Department/Position	Comments
Planner/engineer with knowledge of land development/land management practices	Y	Community Development Depts./Planners	Resources in both Gunnison County and Town of Mt. Crested Butte
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Y	Community Development Dept.	Resources in Town of Mt. Crested Butte
Planner/engineer/scientist with an understanding of natural hazards	Y		
Personnel skilled in GIS	Y	County GIS/Maps Dept. and Mt. Crested Butte Community Development Dept.	Resources in both Gunnison County and Town of Mt. Crested Butte
Full time building official	Y	County Community Development Dept./Building Inspector and Mt. Crested Butte Community Development Dept.	Resources in both Gunnison County and Town of Mt. Crested Butte
Floodplain manager	Y	County Community Development Dept./Assistant Director	Resources in Gunnison County
Emergency manager	Y	County Emergency Management and Mt. Crested Butte Town Manager/Police Chief	Resources in both Gunnison County and Town of Mt. Crested Butte
Grant writer	Y	Gunnison County Emergency Management (for mitigation-relevant grants)	Resources in Gunnison County
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Y	County GIS/Maps and Mt. Crested Butte Community Development Dept.	County has data for flood, geologic hazards, and wildfire, address points, critical facilities, structure footprints, parcels
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	Y	County Emergency Management	County has opt-in Intrado Target Notification system/Mt. Crested Butte has Reverse 911

2.6.6 Participation in National Flood Insurance Program

Gunnison County, the Town of Crested Butte, City of Gunnison, and Town of Mt. Crested Butte all currently participate in the National Flood Insurance Program (NFIP). The NFIP allows private property owners to purchase affordable flood insurance and enables the community to retain its eligibility to receive certain federally backed monies and disaster relief funds. Gunnison County joined the NFIP on September 29, 1989, the City of Gunnison joined on April 18, 1983, and Crested Butte joined on September 4, 1985. Mt Crested Butte joined on April 28, 2008 as part of the emergency program.

Gunnison County and the City of Gunnison also participate in the Community Rating System (CRS). The CRS is a voluntary program for NFIP-participating communities. It provides flood insurance discounts to policyholders in communities that provide extra measures of flood protection above the minimum NFIP requirements. Gunnison County currently holds a CRS rating of Class 8, and the City of Gunnison is rated at Class 9. The Class 8 rating provides a 10% flood insurance discount for policyholders within a special flood hazard area (SFHA) and a 5% discount for those outside of the SFHA. The Class 9 rating provides a 5% discount for policyholders both within and outside of the SFHA.

The flooding discussion in *Section 4.3.4 Vulnerability by Hazard* includes greater detail on flood insurance coverage and claims for NFIP participant communities in Gunnison County.

2.6.7 Other State, Regional, and Local Agencies Related to Hazard Mitigation

Colorado Office of Emergency Management

The Colorado Office of Emergency Management (COEM) is responsible for the state's comprehensive emergency management program, which supports local and state agencies. Activities and services cover all aspects of emergency management. Assistance to local governments includes financial and technical assistance as well as training and exercise support. Services are made available through local emergency managers supported by COEM staff assigned to specific areas of the state.

Colorado Geological Survey

The Colorado Geological Survey is a state government agency within the Colorado Department of Natural Resources whose mission is to help reduce the impact of geologic hazards on the citizens of Colorado, to promote responsible economic development of mineral and energy resources, provide geologic insight into water resources, provide avalanche safety training and forecasting, and to provide geologic advice and information to a variety of constituencies. The Colorado Avalanche Information Center is housed in the Colorado Geological Survey.

Colorado State Forest Service

The mission of the Colorado State Forest Service is to provide for the stewardship of forest resources and to reduce related risks to life, property, and the environment for the benefit of present and future generations. Its fire preparedness and response strategic priority is to provide leadership in wildland fire protection for state and private lands in Colorado and reduce wildfire-related loss of life, property, and critical resources.

Colorado Water Conservation Board

The Colorado Water Conservation Board (CWCB) is an agency of the State of Colorado. The CWCB Flood Protection Program is directed to review and approve statewide floodplain studies and designations prior to adoption by local governments. The CWCB is also responsible for the coordination of the National Flood Insurance Program (NFIP) in Colorado and for providing assistance to local communities in meeting NFIP requirements. This includes CWCB prepared or partnered local floodplain studies. The CWCB has promulgated new floodplain rules and regulations that became effective on January 14, 2011. Increased protection for public health, safety, and welfare in the state is the primary reason for updating Colorado's floodplain rules. The CWCB's rules aim to reduce flood losses through sound flood protection actions, which are implemented at the local level and supported by State and Federal programs. Key provisions of the new floodplain rules include: higher freeboard for structures, a 0.5 foot floodway, and additional protection for "critical facilities" in the 100-year floodplain.

Colorado Department of Transportation

The Colorado Department of Transportation (CDOT) conducts planning and projects that relate to hazard mitigation. These include design of bridges to withstand scouring and convey flood flows in addition to rockfall hazard identification and mitigation along the State's highway system. CDOT employs message signs, road closure devices, and radio advisories to warn motorists of dangerous driving conditions and road closures due to severe weather or rockfall incidents. CDOT has a number of specialized programs involved in hazard mitigation, including the Avalanche Management Program and the Rockfall Program. CDOT's Avalanche Management Program involves a three-phased approach. The first phase trains CDOT staff in avalanche awareness, survival, and rescue. The second phase focuses on avalanche forecasting by monitoring conditions and recommending road closures or avalanche control operations. Avalanche control operations are implemented in the third phase of the program. Operations may include triggering avalanches in a safe, controlled environment; closing highways; or setting up structures to divert avalanches. The CDOT Rockfall Program, administered by the Geotechnical Program, entails design and implementation of rockfall hazard mitigation projects. The Rockfall Program puts control devices in place to prevent rocks from falling onto highways, and posts safety signs to alert motorists of rockfall dangers along state highways. The Rockfall Program uses the Colorado Rockfall Hazard Rating System (CRHRS), discussed in **Chapter 4 Risk Assessment**, to prioritize rockfall hazard areas for mitigation.

Gunnison Basin Wildfire Council

Gunnison County is fortunate to have an active and engaged fire safe council called the Gunnison Basin Wildfire Council (GBWC). The GBWC is comprised of representatives from local fire districts and departments, Colorado State Forest Service, United States Forest Service, Bureau of Land Management, Gunnison County Sheriff, and Gunnison County OEM. The GBWC has been involved in the development of local CWPPs since the 1990s. The GBWC formed the core stakeholder group for the development of this countywide CWPP and steered its development through participation at meetings, providing comments on drafts, and assisting with field visits.

West Region Wildfire Council

The West Region Wildfire Council (WRWC) combines federal, state, county, and local representatives from Delta, Gunnison Hinsdale, Montrose, Ouray, and San Miguel Counties. The WRWC strives to prepare counties, fire protection districts, communities, and interagency fire management partners to plan for and mitigate the potential threats from wildland fire. By promoting wildfire preparation, prevention and mitigation education, the WRWC strives to better mitigate the threat of catastrophic wildland fire to communities and natural resources. The West Region Wildfire Council CWPP Coordinator helps to facilitate the implementation of hazard reduction recommendations outlined in this plan and other community specific CWPPs.