

City of Cripple Creek – Jurisdiction Annex –  
Teller County  
Multi-Jurisdictional Hazard Mitigation Plan

November 2020

**DRAFT**

Prepared for:



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# Cripple Creek

## 1. Hazard Mitigation Plan Points of Contact

### Primary Point of Contact

Ray White, City Administrator, [rwhite@cripple-creek.co.us](mailto:rwhite@cripple-creek.co.us), 719-689-2502

### Secondary Point of Contact

Ryan Lohmeier, Acting Fire Chief, [rlahmeier@cripple-creek.co.us](mailto:rlahmeier@cripple-creek.co.us), 719-689-0240

Throughout the 2020 update process, the Hazard Mitigation Plan (HMP) includes the following participation roles:

*Table 1-1*

2020 Cripple Creek Plan Update Participants		
Name	Position	Role in Hazard Mitigation
Diann Pritchard	Cripple Creek Police	Supporting Point of Contact (POC)
Chief Charles "Bud" Bright	Cripple Creek Police	Supporting POC
Paul Harris	Finance Director, City of Cripple Creek	Supporting POC

## 2. Jurisdiction Profile

The City of Cripple Creek is the seat of Teller County, Colorado. Cripple Creek Colorado (n.d.) was the site of the last and greatest mining boom in the State, attracting tens of thousands of people to the western flank of Pikes Peak in the 1880s. The town was destroyed by fire in 1896. The town and surrounding mining districts were rebuilt and reached peak production and population in the early twentieth century before experiencing a long decline. After World War II, the town turned to tourism for its primary economic engine. Since the 1970s, the large Cripple Creek and Victor Gold Mine has also provided steady production and employment.

In 1990, Colorado voters allowed Cripple Creek to establish legalized gambling. Casino gambling has successfully brought revenue and vitality back into the area and provides funding for the State Historical Fund, administered by the Colorado Office of Archaeology and Historic Preservation. In 2012, Colorado casinos produced over \$104 million in tax revenue for these programs (Cripple Creek Colorado, n.d.).

### 2.1 Population and Employment

According to the United States Census Bureau (2018a.) American Community Survey (ACS) 5-Year Estimates the population of Cripple Creek was 1,136 people. In 2018, 95 percent of the population was White, 0.0 percent were Black or Africa American, 0.0 percent were Native American or Alaskan Native, 0.3 percent two or more races, and 4.8 percent some other race. Additionally, 17.7 percent of the

population was Hispanic or Latino (United States Census Bureau, 2018a.). 92.1 percent only speak English at home, whereas 7.9 percent speak a language other than English, for example, 7.6 percent Spanish, 0.3 percent other Indo-European languages (United States Census Bureau, 2018a.).

The United States Census Bureau (2018b.) stated, approximately 970 people (61.1 percent) of Cripple Creek were employed. The two major industries are mining and gambling. Employment industries in Cripple Creek include:

- Agriculture
- Fishing and Hunting and Mining
- Manufacturing
- Transportation and Warehousing and Utilities
- Real Estate and Rental and Leasing
- Scientific
- General Administrative
- Educational Services
- Social Assistance
- Travel Accommodation
- Public Administration
- Forestry
- Construction
- Retail Trade
- Finance and Insurance
- General Professional
- Management
- Waste management services
- Healthcare
- Arts, Entertainment, and Recreation
- Food Services
- Other Services

Mean household income in 2018 was \$42,541, and an estimated 17.7 percent of the City's population was living below the poverty level in 2018, which is higher than the national average of 13.1% for the same year (United States Census Bureau, 2018b.).

## 2.2 Development Trends

The City of Cripple Creek (n.d.b.) Planning and Community Development Department's role is to develop and apply land use, building, and historic preservation regulations that retain the quality of life and heritage of the Cripple Creek community (City of Cripple Creek, n.d.b.). According to the City of Cripple Creek (2009) Master Plan, the City faced economic challenges. The City expanded gaming limits and hours through State legislation to improve the economy. However, the City of Cripple Creek again faces major fiscal challenges caused by the reduction of gaming devices over the past eleven years. The number of devices in town plummeted from an all-time high in 2008 of 5,170 to 3,608 in 2020. That is a total reduction of 1,565 machines, or 30 percent (City of Cripple Creek, 2019).

Tourism provides a significant source of revenue for the City, with about 62 percent of the City's budget coming from gambling taxes and device fees. The majority of the City's operating revenue comes from device fees, which declines with the reducing number of devices in town. To make up for the loss in device fee revenue, the City became more reliant on grants from outside agencies to operate and complete infrastructure projects. Future development seeks to improve the gaming, tourism, and lodging industries, with more hotel rooms in 2020-2022 (City of Cripple Creek, 2019).

According to the City of Cripple Creek (2009) Master Plan, the existing community boundaries are more than adequate to meet near, and long-term anticipated growth. The United States Census Bureau (2018a.) showed that residential development in the City has been slow, with the decrease of housing units from 891 housing units in 2010 to 730 units in 2018, according to ACS 5-year estimates.

### 2.3 Geography and Climate

Mount Pisgah (10,400 feet) overlooks the City of Cripple Creek. The City lies west of Colorado Springs in a granite pocket 9,600 feet above sea level at the edge of Pike National Forest. Cripple Creek has a natural setting, nestled in a valley and surrounded by steep slopes that remain undeveloped. The City has multiple active and abandoned mines nearby. The gold-bearing areas of the Cripple Creek district were the core of an ancient volcano within the central Colorado volcanic field, last active over 30 million years ago during the Oligocene era (City of Cripple Creek, 2009).

Average temperatures decrease with an increase in elevation, about 4 degrees per 1,000 feet, and subzero temperatures are common in the winter. The majority of snowfall occurs during March and April. Due to the generally high elevation of the county, summers are relatively cool.


Precipitation is highest in July and August. However, there are exceptions with very dry summers. Early fall tends to be temperate and drier. Total annual precipitation is 16 inches, falling primarily in spring and summer.

### 2.4 Governance

The City Administrator governs the City of Cripple Creek (n.d.a.) The City Council appoints the Administrator. The mission statement of the City is to be responsive to the needs of the community and region and operate the City in a manner that is cost-effective and professional. City of Cripple Creek (n.d.a.) departments include:

- City Administrator
- Butte Theater
- Custodial Department
- Building Department
- Finance, Fire and Emergency Services
- Human Resources
- Jail Museum, Parks and Recreation
- Public Works
- Plant Operations
- Animal Control
- City Clerk
- Planning and Community Development Department
- Historic Preservation Department
- Heritage Center
- Marketing and Special Events
- Police & Dispatch
- Transportation

## 3. Risk Assessment

 <b>FEMA</b>	<p><b>B1.</b> Does the plan include a description of the type, location, and extent of all natural hazards affecting the City of Cripple Creek? (Requirement §201.6(c)(2)(i))</p> <p><b>B2.</b> Does the plan include information on previous occurrences of hazard events and the probability of future hazard events for the City of Cripple Creek? (Requirement §201.6(c)(2)(i))</p> <p><b>B3.</b> Does the plan include a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement 44 Code of Federal Regulations § 201.6(c)(2)(ii))</p>
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The risk assessment for Cripple Creek used the same methodology as the risk assessment in the base plan. The assessment identified past hazard events (shown in Table 3-1) and the mapped hazard areas

to determine current and future hazard risks and vulnerabilities. Risks to the City's critical facilities and individual parcels are quantified where possible.

The City of Cripple Creek reviewed the hazard rankings developed for Teller County during HMC Meeting #2 and concurred with the rankings. The hazard rankings are in Table 5-1 of the base plan.

### 3.1 Cripple Creek Specific Hazard Event History

Table 3-1 lists the hazard event history for Cripple Creek in reverse chronological order. Table data is from the Colorado Department of Public Safety (2018) and the Federal Emergency Management Agency (2020).

**Table 3-1**

<b>Past Hazard Events for the City of Cripple Creek</b>			
<b>Type of Event</b>	<b>FEMA Disaster # (if applicable)</b>	<b>Date of Hazard Event</b>	<b>Preliminary Damage Assessment (if available)</b>
<b>Colorado COVID-19 Pandemic</b>	DR-4498	Incident Period: January 20, 2020, and continuing; Major Disaster Declared on March 28, 2020	Total Public Assistance Grants Dollars Obligated: \$99,489,897.26
<b>Colorado COVID-19</b>	EM-3436	Incident Period: January 20, 2020, and continuing. Emergency Declaration declared on March 13, 2020	
<b>Colorado Chateau Fire</b>	FM-5247	Incident Period: June 30, 2018 - July 06, 2018 Fire Management Assistance Declaration declared on June 30, 2018	
<b>Drought, Teller County</b>	S3627	2014	
<b>Colorado Extreme Weather, Statewide</b>	State declaration	2014	
<b>Drought, Statewide</b>	S3405, S3508, S3518, S3539	2013	
<b>Drought, Statewide</b>	S3455, S3456, S3459, S3461, S3463, S3466	2013	
<b>Colorado Winter Storm, Statewide</b>	State declaration	2013	
<b>Drought, Teller County</b>	S3548	2013	
<b>Drought, Excessive Heat, High Winds, Statewide</b>	S3260	2012	

<b>Drought, Statewide</b>	S3267, S3269, S3276, S3281, S3282, S3284, S3289, S3290, S3315, S3319, S3347	2012	
<b>Wildfire, Teller County</b>	State declaration	2011	
<b>Severe Blizzard, Statewide</b>	State declaration	2009	
<b>Colorado Nash Ranch Fire</b>	FM-2778	Incident Period: June 24, 2008 Fire Management Assistance Declaration declared on June 27, 2008	
<b>Drought, Teller County</b>	S2750	2008	
<b>Colorado Snow</b>	EM-3270	Incident Period: December 18, 2006 - December 22, 2006 Emergency Declaration declared on January 07, 2007	Public Assistance - Dollars Approved \$8,606,436.54 Total Public Assistance Grants (PA) - Dollars Obligated \$8,610,144.47 Emergency Work (Categories A-B) - Dollars Obligated
<b>Wildfire- multiple Executive Orders, Teller County</b>	State declaration	2006	
<b>Flooding, Teller County</b>	State declaration	2006	
<b>Heat, High Winds, Insect Pests, Late Freeze, Drought, Teller County</b>	S2329	2006	
<b>Drought, Wind, Heavy Rain, Hail, Teller County</b>	S2188	2005	
<b>Colorado Snowstorm</b>	EM-3185	Incident Period: March 17, 2003 - March 20, 2003 Emergency Declaration declared on April 09, 2003	Public Assistance - Dollars Approved \$6,136,470.94 Total Public Assistance Grants (PA) - Dollars Obligated \$6,169,487.30

			Emergency Work (Categories A-B) - Dollars Obligated
<b>Wildfires, Statewide and Hayman Fire</b>	DR-1421	Incident Period: April 23, 2002 - August 06, 2002 Major Disaster Declaration declared on June 19, 2002	
<b>Colorado Drought</b>	EM-3025	Incident Period: January 29, 1977 Emergency Declaration declared on January 29, 1977	
<b>Colorado Heavy Rains, Snowmelt, Flooding</b>	DR-385	Incident Period: May 23, 1973 Major Disaster Declaration declared on May 23, 1973	
<b>Colorado Tornadoes, Severe Storms, Flooding</b>	DR-200	Incident Period: June 19, 1965 Major Disaster Declaration declared on June 19, 1965	

### 3.2 Critical Infrastructure Risk Assessment

Table 3-2 provides an assessment of the exposure of critical infrastructure and facilities in Cripple Creek based on the best-available hazard data.

Table 3-2

Type of Facility	Earthquake	Flood (100-year floodplain)	Landslide Debris Area	Wildfire		Hazardous Materials (Less than 2 miles away)
				Low	Very Low	
<b>Bridge</b>	1	1	-	-	1	1
<b>Communication Tower</b>	1	-	-	-	1	1
<b>Electric Substation</b>	1	-	-	-	1	1
<b>Fire Station</b>	1	1	-	-	1	1
<b>Hospital</b>	3	2	-	-	3	3
<b>Law Enforcement</b>	2	1	-	-	2	2
<b>National Shelter System</b>	3	-	-	-	3	3



School	2	-	-	-	2	2
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### 3.3 Vulnerability to Specific Hazards

Vulnerability to some hazards occurs within specific geographic areas. The City of Cripple Creek’s vulnerability to these hazards, including flood, wildfire, landslide, dam failure, and earthquake, differs from that of Teller County as a whole. The sections below discuss locations and residential populations vulnerable to these identified hazards, where quantifiable.

#### 3.3.1 Flood

Mapped floodplains in the City of Cripple Creek occur primarily along two small drainages, Cripple Creek and Pony Creek. Approximately 109 acres, or 11 percent of the area of the City, are within the mapped 100-year floodplain. Historically, flooding along these drainages has not affected structures in the City. However, as shown in Table 3-3, 337 parcels in the City are within the 100-year floodplain and are vulnerable to flooding. The floodplain area includes 81 residential, mixed-use residential, and mobile home parcels. According to the United States Census Bureau (2018a.) ACS five-year estimates, the average household size in Cripple Creek is 2.1 people. Based on the number of residential parcels in the 100-year floodplain, an estimated residential population of 170 people is exposed to flood hazards.

The City of Cripple Creek plans to preserve land within the floodplain for natural resources protection and recreational use, as indicated in Action Ef2 in the City of Cripple Creek (2009) Community Master Plan. The City will revise mapping for the floodplains and introduce a preservation framework for the floodplain, creek edges, and buffers (City of Cripple Creek, 2009). Preservation of the floodplains for these uses will reduce the vulnerability of developed areas near floodplains in the City.

#### Probability

As noted in Section 6.4 of the base plan, changes in snowmelt patterns and more intense precipitation in the future will increase the probability of flooding in Cripple Creek, which can affect buildings of all types indicated in the table below.

Table 3-3

Parcels Within 100-Year Floodplain		
Parcel Type	# of Parcels	Value
Agricultural	7	
Commercial (Vacant)	72	\$2,654,580
Commercial	9	\$7,546,450
Exempt	27	\$3,101,820
Mineral	0	\$0
Mixed Use Commercial	3	\$340,950
Mixed Use Residential	1	\$14,770
Mobile Home	3	\$4,430
None (Uncategorized)	1	\$0
Residential	77	\$712,030

<b>State</b>	19	\$160
<b>Vacant</b>	118	\$484,370
<b>Total</b>	<b>337</b>	<b>\$14,859,710</b>

### 3.3.2 Wildfire

Areas within the city boundaries have a low or very low potential for a wildfire of any intensity (Dillon, 2018). However, according to the Colorado Wildfire Risk Assessment (CO-WRA), areas within the Wildland-Urban Interface (WUI) outside of the developed area of the City have a moderate to a high probability of experiencing a wildfire that is low to moderate in intensity (Colorado State Forest Service 2020). Mountainous areas in the Front Range west of the City also have a moderate to a high probability of experiencing more intense fires, which could affect Cripple Creek indirectly as a result of public health concerns due to wildfire smoke or directly by threatening homes and other structures and displacing residents.

As shown in Table 3-4, the total number of parcels in Cripple Creek, 1,686 parcels, are in areas with a very low or low potential for wildfire, including 628 residential parcels. Based on this analysis, the entire residential population of the City (an estimated 1,136 people) lives in areas with very low or low potential for wildfire.

Cripple Creek effectively plans for future development within the existing city boundaries. The boundary is not likely to extend into the WUI outside of the developed area of the City, which will substantially minimize future development impact on the wildfire risk. However, future population growth may increase the risk of wildfires near Cripple Creek.

#### *Probability*

As noted in 6.4 of the base plan, extreme climatic events, including wildfire, will become more frequent. Climate change necessitates an improvement in fuel load reduction and emergency response.

**Table 3-4**

<b>Parcels Exposed to Wildfire Hazards</b>				
	<b>Very Low Risk Area</b>		<b>Low Risk Area</b>	
<b>Parcel Type</b>	<b># of Parcels</b>	<b>Value</b>	<b># of Parcels</b>	<b>Value</b>
<b>Agricultural</b>	10	\$110	1	\$90
<b>Commercial (Vacant)</b>	196	\$11,054,360	5	\$116,620
<b>Commercial</b>	59	\$29,372,280	0	\$0
<b>Exempt</b>	88	\$4,487,320	8	\$778,610
<b>Mineral</b>	1	\$3,910	0	\$0
<b>Mixed Use Commercial</b>	12	\$2,496,360	0	\$0
<b>Mixed Use Residential</b>	2	\$70,590	0	\$0
<b>Mobile Home</b>	24	\$24,620	0	\$0

<b>None (Uncategorized)</b>	1	\$0	1	\$0
<b>Residential</b>	593	\$4,986,420	9	\$71,500
<b>State</b>	6	\$4,320	17	\$160
<b>Vacant</b>	622	\$2,034,400	31	\$142,100
<b>Total</b>	1,614	\$54,534,690	72	\$1,109,080

### 3.3.3 Landslide

Previous landslides indicate the probability of future events. Cripple Creek does not have a history of past landslides. The topography of Cripple Creek is relatively flat, compared to the surrounding mountainous areas of the Front Range. Therefore, there is a low probability of landslides occurring within the City.

At an elevation of 9,494 feet and just below timberline, Cripple Creek lies in a broad open valley surrounded by steep slopes that remain undeveloped (City of Cripple Creek, 2009). Chapter 17-Subdivisions of the City of Cripple Creek (2020) municipal code outlines specifications and plans to accompany final plats. The municipal code requires a report prepared by a licensed engineering geologist to examine the slope, stability, and erosion characteristics of the property. If the geologist finds evidence of an unsuitable surface and/or subsurface conditions, the application can be denied (City of Cripple Creek, 2020). Section 13-2-110 of the City of Cripple Creek (2020) municipal states that a watershed district permit application requires submitting elevations, dimensions, location, extension, and slopes shown by contours and/or other means, for all proposed excavating, grading, filling, or surfacing. These permitting requirements minimize the potential for development in areas of increased landslide risk.

#### *Probability*

The probability of a landslide occurring in Cripple Creek is low, based on the absence of debris fields from previous landslides and steep slopes.

### 3.3.4 Dam Failure

The City owns two operational dams, Cripple Creek #2 and Cripple Creek #3, both located in unincorporated areas of the County on the slopes of Pikes Peak. Both dams are considered significant hazard, which means that failure of the dam could cause economic loss, environmental damage, or disruption of lifeline facilities. Loss of human life would not be probable. Cripple Creek #2 dam was constructed in 1971, and Cripple Creek #3 dam was constructed in 1891. If either of these dams were to fail, properties in the Gillette Flats area of the County would potentially be within the dam inundation area. The City plans to complete inspection of these dams to assess maintenance needs in 2022.

Dam failures have affected City-owned dams in the past. In 1965, flooding caused the Cripple Creek #3 dam to fail, and the subsequent release of water caused the Cripple Creek #1 and Cripple Creek #2 dams to fail as well. The Cripple Creek #2 and Cripple Creek #3 dams were reconstructed after this incident.

#### *Probability*

The probability of a dam failure in Teller County is considered low. Dam failure events are infrequent; their frequency coincides with that of the events that may cause them, including earthquakes, landslides, and excessive rainfall and snowmelt. Dams may pose “residual risk” – risk remaining after

implementation of safeguards. Residual risk is associated with events that go beyond a dam’s design to withstand. Based on two occurrences of dam failure in the past 45 years in Teller County, there is an estimated 1 and 10 percent chance of occurrence in any given year.

3.3.5 Earthquake

Earthquake hazards across unincorporated areas of Teller County are similar to earthquake hazards in Cripple Creek. A full hazard profile for earthquakes is in Section 18 of the base plan. The expected peak ground acceleration (PGA) is a measure of the ground shaking produced by an earthquake. In the Cripple Creek area, future earthquakes have a 2 percent probability of exceeding the expected severity over 50 years. The expected PGA ranges from 11 to 12 percent severity. This level of shaking could feel strong to people on the ground, but would likely result in only light damage to buildings and infrastructure.

The City of Cripple Creek's Planning and Community Development Department and Building Department guides land use, subject to current zoning and subdivision regulations. The City of Cripple Creek (2020) municipal code does not directly address earthquake hazards; however, any new development is subject to the standards of the 2015 International Building Code. The International Building Code includes standards to reduce seismic risks to structures. This international code is also in the City of Cripple Creek (2020) municipal code, Chapter 18- Building Regulations, Article 3-International Building Code.


*Probability*

The seismic hazard in Cripple Creek is low, but it is possible a damaging earthquake could occur.

**Table 3-5**

Parcels Within Earthquake Hazard Area		
Parcel Type	# of Parcels (PGA 0.110 – 0.119)	Value
Agricultural	11	\$200
Commercial (Vacant)	201	\$11,170,980
Commercial	59	\$29,372,280
Exempt	96	\$5,265,930
Mineral	1	\$3,910
Mixed Use Commercial	12	\$2,496,360
Mixed Use Residential	2	\$70,590
Mobile Home	24	\$24,620
None (Uncategorized)	2	-
Residential	602	\$5,057,920
State	23	\$4,480
Vacant Land	653	\$2,176,500
<b>Total</b>	<b>1,686</b>	<b>\$55,643,770</b>

## 4. Capabilities Assessment

 <b>FEMA</b>	<b>C1.</b> Does the City of Cripple Creek plan document existing authorities, policies, programs, resources, and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))
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This section identifies Cripple Creek's existing capabilities related to the City's hazard mitigation program. Local hazard mitigation capabilities include the planning and regulatory, administrative and technical, financial, and education and outreach capabilities that are currently being leveraged or are available to reduce risk.

### 4.1 Introduction to Administrative and Technical Resources

Table 4-1 shows Cripple Creek's administrative and technical resources available to engage in and improve mitigation planning and program implementation.

**Table 4-1**

Human and Technical Resources Integrated with Hazard Mitigation	
Resource:	Yes/No
<b>Emergency Manager</b>	Yes
<b>Floodplain Administrator</b>	No
<b>Community Planning:</b>	
- <b>Planner/Engineer (Land Development)</b>	Yes, Historic Preservation and Planning Coordinator
- <b>Planner/Engineer/Scientist (Natural Hazards)</b>	No
- <b>Engineer/Professional (Construction)</b>	No
- <b>Resiliency Planner</b>	No
- <b>Transportation Planner</b>	No
<b>Building Official</b>	Yes, Planning and Community Development Director (Building Department)
<b>GIS Specialist and Capability</b>	No
<b>Grant Manager, Writer, or Specialist</b>	No
<b>Warning Systems/Services:</b>	
- <b>General</b>	Yes
- <b>Flood</b>	Yes
- <b>Wildfire</b>	Yes
- <b>Tornado</b>	Yes
- <b>Geological Hazards</b>	Yes
<b>Other</b>	N/A

### 4.2 Financial Resources

Cripple Creek maintains fiscal and financial resources to support its mitigation program. Table 4-2 identifies specific resources that may be available to fund mitigation activities.

Table 4-2

Accessible Financial Resources	
Financial Resource	Yes/No
Levy for Specific Purposes with Voter Approval	Yes
Utility Fees	Yes
System Development / Impact Development Fee	Yes
General Obligation Bonds to Incur Debt	Yes
Special Tax Bonds to Incur Debt	Yes
Withheld Spending in Hazard-Prone Areas	No
Stormwater Service Fees	No
Capital Improvement Project Funding	Yes
Community Development Block Grants	Yes
Other	Yes – General and Enterprise Funds

Table 4-3 identifies current and potential sources of funding to implement identified mitigation actions contained within the HMP. Funds are also available from federal and state agencies and programs.

Table 4-3

Financial Resources Integrated with Hazard Mitigation		
Funding Source	Fund Administrator	Description
<b>LOCAL</b>		
<b>General Fund</b>	City Council	Funding available for mitigation efforts supporting government-wide projects and activities.
<b>Enterprise Fund</b>	City Council	Funding available for capital projects.
<b>FEDERAL</b>		
<b>Building Resilient Infrastructure and Communities (BRIC) Program</b>	Federal Emergency Management Agency (FEMA)/Colorado Division of Homeland Security and Emergency Management (DHSEM)	Authorized by the Disaster Relief and Recovery Act of 2018, the BRIC program is replacing FEMA's Pre-Disaster Mitigation Program. BRIC will support states, local communities, tribes, and territories to undertake projects that mitigate hazard risks and increase community resiliency. Grant awards will prioritize infrastructure projects and projects that support community lifelines: safety and security; food, water, shelter; health and medical; energy; communications; transportation; and hazardous material.
<b>Hazard Mitigation Grant Program</b>	Colorado Division of Homeland Security and Emergency Management (DHSEM)	Post-disaster funds to hazard reduction projects impacted by recent disasters.
<b>Flood Mitigation Assistance Program</b>	Colorado Division of Homeland Security	Provides funds for flood mitigation on buildings that carry flood insurance and have been damaged by

	and Emergency Management (DHSEM)	flooding. Provides funding to support the development of the flooding hazard portion of state and local mitigation plans and up to 100% of the cost of eligible mitigation activities. This funding is only available to communities participating in the NFIP.
<b>Community Development Block Grant Program</b>	U.S. Department of Housing and Urban Development/ Colorado Department of Local Affairs	Funds projects that benefit low- and moderate-income communities, prevent or eliminate slums or blight, or meet urgent community development needs posing a serious and immediate threat to community health or welfare.
<b>Emergency Management Performance Grants Program</b>	Federal Emergency Management Agency (FEMA)/Colorado Division of Homeland Security and Emergency Management (DHSEM)	Provides funding to states for local or tribal planning, operations, acquisition of equipment, training, exercises, and construction and renovation projects.
<b>National Earthquake Hazards Reduction Program (NEHRP)</b>	Colorado Geological Survey (CGS)	Supports enhanced earthquake risk assessments in local HMPs. Provides funding for earthquake modeling and loss estimation, partnership building, planning, and training activities. Provides funding for prevention materials and activities. Provides support for limited post-event inspection and reporting.
<b>State Fire Assistance Program</b>	U.S. Forest Service/ Colorado Division of Homeland Security and Emergency Management (DHSEM)	Provides funding opportunities for local wildland-urban interface planning, prevention, and mitigation projects, including fuels reduction work, education and prevention projects, community planning, and alternative uses of fuels.
<b>National Dam Safety Program State Assistance Grants</b>	Federal Emergency Management Agency (FEMA)/Division of Water Resources (DWR) Dam Safety	Grant assistance to State Dam Safety programs to reduce risks to life and property associated with dams, increase awareness of the benefits and risks related to dams, and advance the state in the practice of dam risk management.
<b>Rehabilitation of High Hazard Potential Dams Grant Program</b>	FEMA/DWR Dam Safety	Provides technical, planning, design, and construction assistance in grants for the rehabilitation of eligible high hazard potential dams.
<b>Risk Mapping, Assessing, and Planning</b>	FEMA	Provides funding and technical support for hazard studies, flood mapping products, risk assessment

		tools, mitigation and planning, and outreach and support.
<b>STATE</b>		
<b>Flood Response Fund</b>	Colorado Water Conservation Board (CWCB)	Created and appropriated funding to the Flood Response Fund, administered by CWCB.
<b>Emergency Dam Repair Cash Fund</b>	Colorado Water Conservation Board (CWCB)	As determined by CWCB, money is transferred from the CWCB Construction Fund to the Emergency Dam Repair Cash Fund as needed.
<b>Forest Restoration and Wildfire Risk Mitigation Grant</b>	Colorado State Forest Service (CSFS)	Assists with funding community-level actions across the State implemented to protect populations and property in the wildland-urban interface and to promote forest health and the utilization of woody material. Includes funding for capacity building.
<b>Rockfall Mitigation Program</b>	Colorado Department of Transportation (CDOT)	Provides internal mitigation design and review for projects funded by rockfall mitigation budget; provides personnel designated as first responders during rockfall related emergencies; installs control devices on rock walls for prevention; post falling rock signs on highways.
<b>Colorado Wildfire Preparedness Plan and Fund</b>	Division of Fire Prevention & Control (DFPC)	Amended to read Wildfire Emergency Response Fund creation, Wildfire Preparedness Fund creation. DFPC may use the money from the Wildfire Preparedness Fund to implement the Wildfire Preparedness Plan.
<b>Conservation Reserve Program</b>	U.S. Department of Agriculture Farm Service Agency and Natural Resource Conservation Service	Retires eligible cropland from agricultural production and plants the land with permanent grass cover to reduce wind erosion and dust hazards.
<b>OTHER</b>		
<b>Community Planning Assistance Teams</b>	American Planners Association Foundation	Provides pro bono technical assistance for planning frameworks or community vision plans for communities needing extra assistance. Local governments are responsible for travel costs.

### 4.3 Planning and Regulatory Resources

Table 4-4 summarizes Cripple Creek's planning and regulatory capabilities, including plans, policies, and programs with integrated hazard mitigation principles.

**Table 4-4**

Planning and Regulatory Resources Integrated with Hazard Mitigation	
Planning/Regulatory Resource	Yes/No
Building Codes (Year)	Yes, 2015



Building Code Effectiveness Grading Schedule (BCEGS) Rating	No
Capital Improvements Program or Plan	Yes
Community Rating System (CRS)	Yes
Community Wildfire Protection Plan (CWPP)	Yes, 2018
Comprehensive, Master, or General Plan	Yes, 2009
Economic Development Plan	No
Elevation Certificates	Yes
Erosion/Sediment Control Program	Yes
Floodplain Management Plan or Ordinance	Yes
Flood Insurance Study	Yes, 2009
Growth Management Ordinance	Yes
Non-Flood Hazard-Specific Ordinance or Plan (e.g., steep slope, wildfire, snow load)	Yes, snow removal
National Flood Insurance Program	Yes
Site Plan Review Requirements	Yes, Article 4 of the Development Code
Stormwater Program, Plan, or Ordinance	Yes
Zoning Ordinance	Yes
Other	Yes – Cripple Creek Development Code 2014


#### 4.4 Education and Outreach Resources

Table 4-5 summarizes Teller County's education and outreach capabilities, including programs that educate and notify residents, business owners, and other stakeholders regarding hazard risks.

**Table 4-5**

Education and Outreach Resources	
Education and Outreach Resource	No or Yes
Local Citizen Groups that communicate hazard risks	Yes, Aspen Mine Center 2012
StormReady	No
Firewise	Yes

#### 4.5 National Flood Insurance Program Participation

	<p><b>C2.</b> Does the Plan address [Cripple Creek's] participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3))</p>
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The City of Cripple Creek voluntarily participates in the National Flood Insurance Program (NFIP) through its adoption and enforcement of floodplain regulations since 1985. The City of Cripple Creek Municipal Code, Chapter 16, Article 2- Flood Damage Prevention regulates and promotes public health, safety, and general welfare to minimize public and private losses due to flood conditions in specific areas. The City of Cripple Creek (2020) floodplain regulations help:

- Protect human life and health
- Minimize expenditure of public money for costly flood control projects
- Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public
- Minimize prolonged business interruptions
- Minimize damage to critical facilities, infrastructure, and other public facilities (e.g., water, sewer, gas mains, electric and communication stations, and streets and bridges located in floodplains)
- Help maintain a stable tax base by providing for the sound use and development of flood-prone areas
- Ensure notification for potential buyers that a property is in a flood hazard area
- Ensure those that occupy special flood hazard areas assume responsibility for their actions (*Section 16-2-10*)

The City of Cripple Creek (2020) regulations apply to all areas of Special Flood Hazard Areas and areas removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F) within the jurisdiction of the City based on a scientific and engineering report *The Flood Insurance Study for Teller County and Incorporated Areas* from September 25, 2009, with accompanying Flood Insurance Rate Maps (FIRMs). To accomplish its purpose, the City of Cripple Creek (2020) relies on the following methods for reducing flood losses (*Section 16-2-20*):

- Restrict or prohibit uses that are dangerous to health, safety, or property in times of flood, or cause excessive increases in flood heights or velocities
- Require that uses vulnerable to floods, including facilities which serve such uses, protect against flood damage at the time of construction
- Control the alteration of natural floodplains, stream channels, and natural protective barriers
- Control filling, grading, dredging, and other development which may increase flood damage
- Prevent or regulate the construction of flood barriers which will naturally divert floodwaters, or which may increase flood hazards to other lands
- Require development permits for new construction or development in Special Flood Hazard Areas

The City Administrator is appointed to administer and implement the City's flood damage prevention regulations. The City of Cripple Creek (2020) Administrator is responsible for:

- Permit review

- Maintenance of base flood data (e.g., floodplain studies), and other information, including the elevation of all new or substantially improved structures, floodproofing certifications, and records of public inspections
- Notifying adjacent communities and the CWCB before alteration or relocation of a watercourse
- Interpretation of FIRM boundaries

Provisions for flood hazard reduction include the following:

- General standards (anchoring, construction materials and methods, utilities, and subdivision proposals)
- Specific standards for residential and non-residential construction (elevation to or above Base Flood Elevation, floodproofing, and structural components)
- Specific standards for manufactured homes and recreational vehicles (anchoring, elevation)
- Special Standards for floodways (areas within Areas of Special Flood Hazard), areas of shallow flooding, and extensive alteration of the floodway fringe

In 2020, the Colorado Water Control Board (CWCB) provided the following information on flood losses in Cripple Creek under the NFIP:

**Table 4-6**

Flood Loss Properties			
Total Policies	Total Claims	Number of Repetitive Losses	Total Payments since 1978
9	0	0	\$0

#### 4.6 FEMA Funded Hazard Mitigation Projects


Table 4-6 outlines potential funding sources available to local jurisdictions with a FEMA-approved HMP.


**Table 4-6**

Mitigation Plan Requirement for Governments Applying for Certain FEMA Grants			
Enabling Legislation	FEMA Assistance Program	Is a Mitigation Plan Required?	
		State Applicant	Local Sub- Applicant
Stafford Act	<a href="#">Individual Assistance (IA)</a>	No	No
	<a href="#">Public Assistance (PA)</a> Categories A and B (e.g., debris removal, emergency protective measures)	No	No
	<a href="#">Public Assistance (PA)</a> Categories C through G (e.g., repairs to	Yes	No

	damaged infrastructure, publicly-owned buildings)		
	<a href="#">Fire Mitigation Assistance Grants (FMAG)</a>	Yes	No
	<a href="#">Hazard Mitigation Grant Program (HMGP) planning grant</a>	Yes	No
	<a href="#">Hazard Mitigation Grant Program (HMGP) project grant</a>	Yes	Yes
	<a href="#">Pre-Disaster Mitigation (PDM) planning grant</a>	No	No
	<a href="#">Pre-Disaster Mitigation (PDM) project grant</a>	Yes	Yes
	<a href="#">Building Resilient Infrastructure and Communities (BRIC)</a>	Yes	Yes
<b>National Flood Insurance Act</b>	<a href="#">Flood Mitigation Assistance (FMA) planning grant</a>	Yes	No
	<a href="#">Flood Mitigation Assistance (FMA) project grant</a>	Yes	Yes

#### 4.7 Integration of Mitigation into Existing Planning Mechanisms

 <b>FEMA</b>	<b>C1.</b> Does the plan document [the City of Cripple Creek's] existing authorities, policies, programs, and resources, and its ability to expand on an improve these existing policies and programs? (Requirement §201.6(c)(3))
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 <b>FEMA</b>	<b>C6.</b> Does the plan describe a process by which [the City of Cripple Creek] will incorporate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))
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Integration of the principles of mitigation into Cripple Creek's daily operations and ongoing planning activities is a priority of the City's mitigation program. These activities will support:

- Raising awareness of the importance of hazard mitigation for the whole community
- Facilitating an understanding that hazard mitigation is not just an "emergency services" function and building ownership of mitigation activities across the organization
- Reduction in duplication or contradiction across regional plans
- Maximize planning resources through linked or integrated planning efforts

The City will consider integrating mitigation principles into planning mechanisms, including:

- Budget decision-making

- Building and zoning ordinances and decision-making
- Emergency planning mechanisms
- Economic development planning and decision-making

4.71. Existing Plans

The existing plans listed in Table 4-7 provide ongoing opportunities for integrating hazard mitigation, and the City will consider hazard mitigation data and principles and ensure that plans align with the HMP when these plans are updated.


*Table 4-7*

Existing Plans	
Plan	Description
<b>City of Cripple Creek Community Master Plan 2009</b>	This document outlines a set of guidelines and principles for preserving, developing, and planning the future of Cripple Creek. This plan includes floodplain data and mapping to address flooding and provide options for "green" stormwater improvements.
<b>City of Cripple Creek Transit Five-Year Development and Coordination Plan 2009</b>	The purpose of this study is to develop a five-year business plan that will guide Cripple Creek Transit (CCT) in policy, funding, capital, and service development decisions through 2020.
<b>Cripple Creek Fire Department Strategic Plan 2019</b>	The intent of the Cripple Creek Fire Department Strategic Plan is to guide the department in providing results-oriented services throughout the community. The Cripple Creek Fire Department is an all-hazards response organization that seeks to improve the level of service provided to the community continually. This plan addresses wildland fire in unincorporated Teller County, which presents significant risk and planning challenges to the Cripple Creek Fire Department.

The City is encouraged to consider integration into planning mechanisms, such as:

- Operating and capital improvement budgets
- Building and zoning ordinances
- Comprehensive land-use planning
- Municipal ordinances
- Emergency response plans
- Local school district projects
- Economic development plans

## 5. Hazard Mitigation Action Plan and Evaluation of Recommended Initiatives

 <b>FEMA</b>	<b>C4.</b> Does the plan identify and analyze a comprehensive range of specific mitigation actions and projects to reduce the effects of hazards, emphasizing new and existing buildings and infrastructure in the City of Cripple Creek? (Requirement §201.6(c)(3)(ii))
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### 5.1 2015 Initiative Review and Status

The 2020 plan mitigation strategy included an assessment of each 2015 plan mitigation action. Results from the evaluation determined the current status of the mitigation action, if the action was ongoing or incomplete, and whether to carry over the action to the 2020 plan update. Members of the HMC worked through each previous action during HMC Meeting #2 to document steps to fulfill the action. See Appendix F of the base plan for an overview of the status of all actions from the 2015 plan update.

### 5.2 2020-2025 Mitigation Implementation Plan

The mitigation Implementation Plan (IP) lays the groundwork for how the City's mitigation actions will be prioritized, implemented, and administered. The IP includes both short-term strategies that focus on planning and assessment activities and long-term strategies that will result in ongoing capability or structural projects to reduce vulnerability to hazards. See Appendix F of the base plan for the Mitigation Action Worksheet instructions and completed Mitigation Action Worksheets. New actions are in Table 5-1.

Table 5-1

2020 – 2025 Mitigation Implementation Plan: City of Cripple Creek									
ID	Mitigation Action	Action Status	Type of Action and Hazard Addressed	Goals	Lead Entity	Support Entity	Implement Timeline + Anticipated Cost + Funding Source	STAPLEE + Mitigation Effectiveness Score	Priority: low, med, high
MH-10	Continue to inform the citizens and tourists of the City of Cripple Creek about emergencies, severe weather updates, dangers, etc. through website	Existing	Education and Awareness Programs Multiple	1(a), 1(b), 2(a), 2(b), 3(a), 3(b), 4(a), 4(b)	Cripple Creek Dispatch	-	Ongoing Medium General fund and Grants	N/A	High
MH-11	Work with Colorado Division of Reclamation, Mining, and Safety as well as the Cripple Creek & Victor mine to correct and prevent sinkholes, soil erosion, flooding, and landslides due to past, present, and future mining operations	Existing	Structure and Infrastructure Projects Multiple	1(a), 1(b), 2(a), 3(a), 3(b)	Cripple Creek Public Works	CO Division of Reclamation, Mining, and Safety, Cripple Creek & Victor Mine	Ongoing High State and Grant Funding	N/A	Med
MH-12	Develop infrastructure to redirect potential flooding off the City’s wastewater treatment plant facility and processing ponds. The wastewater treatment plant is on a sizable floodplain.	New	Structure and Infrastructure Projects Multiple	1(a), 1(b), 2(a), 2(b), 3(b)	Water/Waste water Department; City of Cripple Creek	Public Works Department – City of Cripple Creek; Army Corps of Engineers	1-3 years/ Mid-term High DOLA or State Water Resources Grant	21	Med

<b>MH-13</b>	Develop infrastructure to mitigate or redirect potential flooding at the City's Water Treatment Plant	New	Structure and Infrastructure Projects Multiple	1(a), 1(b), 2(a), 3(b)	Water/ Wastewater Department	Public Works Department – City of Cripple Creek; Army Corps of Engineers	1-3 years/ Mid-term  High  DOLA or State Water Resources Grant	29	High
<b>FL-4</b>	Continue to improve the City of Cripple Creek infrastructure and stormwater projects to minimize the impact of localized flooding	Existing	Structure and Infrastructure Projects Flood	1(a), 1(b), 2(a), 2(b), 3(b)	Cripple Creek Public Works	-	Ongoing  High  General fund	N/A	Low
<b>FL-5</b>	Work with the Army Corps of Engineers to update floodplain maps in the city	New	Local Plans and Regulations Flood	1(a), 1(b), 2(a), 2(b), 4(a)	Building Director	Public Works; Army Corps of Engineers; Double Eagle Hotel and Casino	1 – 3 years/ Mid-term  Low  Enterprise fund	23	High
<b>WF-7</b>	Continue to educate the public on wildfire mitigation and preparation using the National Fire Protection Association's Firewise program	Existing	Education and Awareness Programs Wildfire	1(a), 1(b), 2(a), 2(b), 3(a), 4(a), 4(b)	Cripple Creek Fire Chief	-	Ongoing  Low  General fund and National Fire Protection Association Grants	N/A	High
<b>DF-2</b>	Assess maintenance needs at Cripple Creek #2 and Cripple Creek #3 dams and complete repairs as needed	New	Structure and Infrastructure Projects Dam Failure	1(a), 1(b), 2(a), 3(b)	Cripple Creek Public Works	-	1 – 3 years/ Mid-term  Low  Enterprise fund	31	High



<b>WW -2</b>	Work with Colorado Department of Transportation, Teller County, and Cripple Creek Public Works to improve infrastructure and minimize the impacts of severe winter weather. Repave Galena Avenue, Bennett Street, and other main thoroughfares.	Existing	Structure and Infrastructure Projects  Severe Winter Weather	1(a), 1(b), 2(a), 3(a), 3(b)	Cripple Creek Public Works	CDOT	Ongoing  Low  General and State funding/ budgets	N/A	High
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