

## Addendum O Fallon County Hazard Mitigation Plan

### O.1 Mitigation Planning

This Addendum serves to update the 2021 Fallon County Pre-Disaster Mitigation Plan (PDM), which was approved on April 8, 2022. The 2021 PDM includes a strategy for plan implementation and maintenance that includes a monitoring schedule, formal updates, plan evaluation, continued public outreach, and integration into existing planning mechanisms. This strategy allows the County to evaluate the effectiveness of the plan and make any necessary changes.

Because this plan was recently approved, Montana Disaster and Emergency Services (MT DES) and the Federal Emergency Management Agency (FEMA) Region VIII determined that it would only be necessary to provide implementation updates associated with the mitigation strategy in an Addendum rather than conducting new analysis in an Annex. The Addendum discusses the following topics, as each relates to plan implementation and maintenance:

- Natural hazard events that have occurred since the 2021 Plan was approved,
- Changes in risk exposure within the planning area,
- Review of the mitigation action plan and progress on mitigation actions,
- Changes in capabilities that could impact plan implementation, and
- Recommendations for changes/enhancement.

This Addendum also updates the 2021 PDM to be in full compliance with FEMA's updated *2022 Local Mitigation Planning Policy Guide*, which became effective April 19, 2023. Data and analysis added and described in this Addendum to meet the new policy and element requirements include:

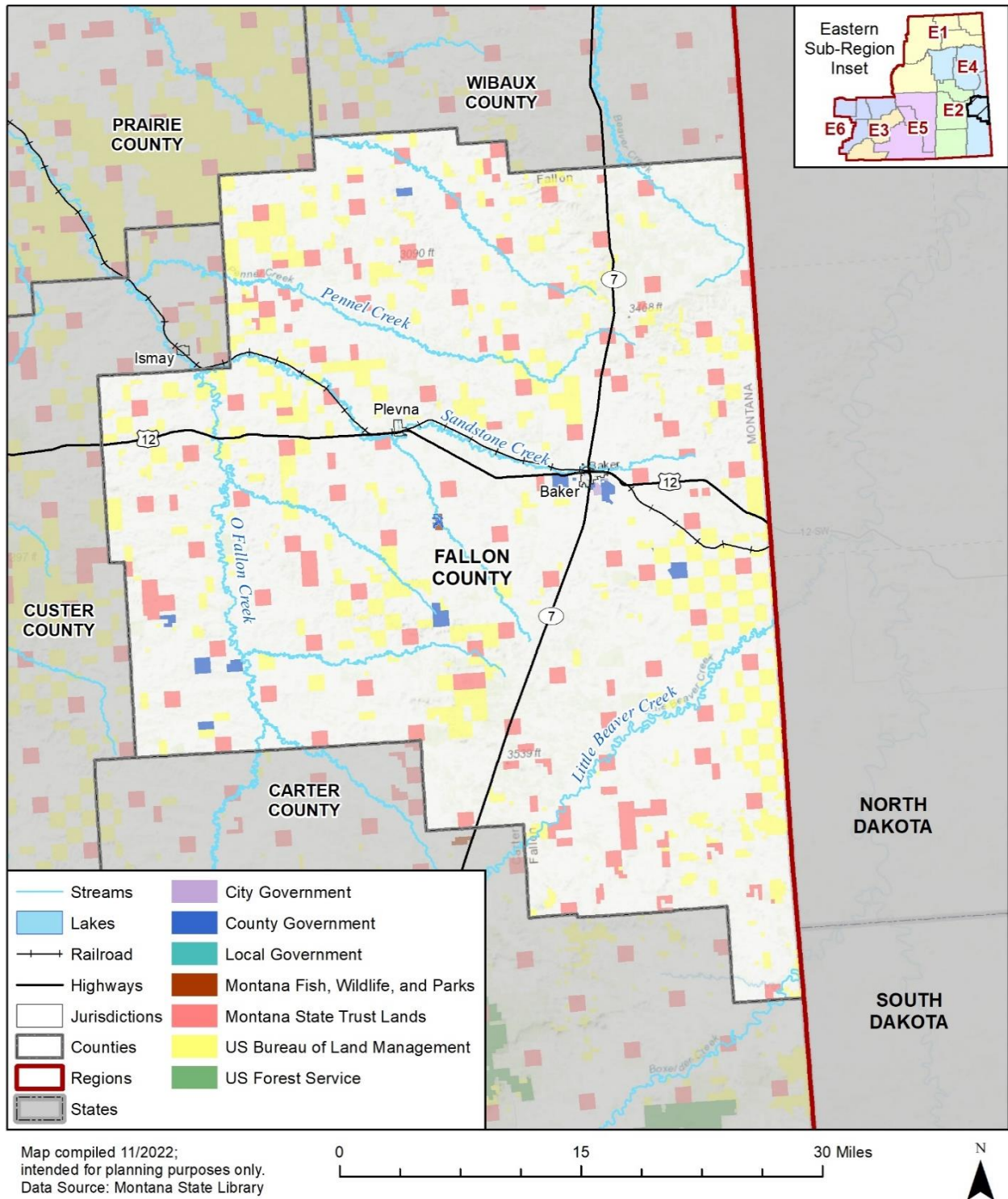
- Including a broader range of stakeholders, to consist of agencies that regulate land use and building codes, academia partners, climate change experts, agencies that support underserved communities, and community lifeline stakeholders.
- Describing targeted outreach opportunities to underserved communities.
- Considering the effects of climate change and other future conditions.
- Addressing requirements of the High Hazard Potential Dam (HHPD) grant program to include all dam risks (see Hazard Identification and Risk Assessment [HIRA] Section 4.2.5 Dam Failure).
- Describing building codes and land use and development ordinances.

The City of Baker and Town of Plevna participated in the Disaster Mitigation Act (DMA) planning process with the County. As part of the regional planning process, the County established a County Planning Team (CPT) to update the status of previous mitigation projects and identify opportunities for additional projects. This included consulting representatives from a broad range of sectors, including community lifelines, academia, and non-profits that support underserved communities.

More details regarding how the counties, municipalities and stakeholders participated in the 2023 planning process can be found in Chapter 3 of the base plan. A full list of local government departments and stakeholders that were invited to participate and that participated can be found in Appendix A.

A map showing Fallon County land stewardship is displayed in Figure O-1.

**Figure O-1 Fallon County Base Map and Land Stewardship**



## O.2 Summary Overview of the 2021 Plan's Progress

The County PDM has targeted 22 continuing hazard mitigation initiatives to be pursued during the five-year performance period. The following overall progress can be reported:

- 10 out of 22 initiatives (45%) reported ongoing action toward completion.
- 12 out of 22 initiatives (54%) reported no action taken.
- 0 out of 22 initiatives (0%) were reported as completed or deleted.

## O.3 Social Vulnerability

Social vulnerability is broadly defined as the susceptibility of social groups to the adverse impacts of natural hazards, including disproportionate death, injury, loss, or disruption of livelihood. Social vulnerability considers the social, economic, demographic, and housing characteristics of a community that influence its ability to prepare for, respond to, cope with, recover from, and adapt to environmental hazards. Refer to HIRA for more information on social vulnerability.

The National Resilience Index (NRI) assessed Fallon County's social vulnerability as 'Very Low,' giving it a score of 14.48. This indicates that Fallon County is more socially vulnerable than 35.7% of the counties in Montana. Additional details on social vulnerability and FEMA's NRI can be found in Section 4.1.1.5 of the Base Plan.

An additional 21 variables from the 2020 American Community Survey (ACS) that can influence the social vulnerability of a community are displayed in Table O-1.

**Table O-1 Demographic Estimates for Fallon County (2020 ACS)**

Characteristic	Fallon County	State of Montana
Persons below 150% poverty estimate	15%	24.1%
Unemployment Rate estimate	1.4%	4.0%
Percentage of housing cost-burdened occupied housing units with annual income less than \$75,000 (30%+ of income spent on housing costs) estimate	18.6%	21.4%
Percentage of persons with no high school diploma (age 25+) estimate	4.5%	7.5%
Percentage uninsured in the total civilian noninstitutionalized population estimate	27.7%	9.6%
Percentage of persons aged 65 and older estimate	17.6%	22.1%
Percentage of persons aged 17 and younger estimate	24.8%	21.3%
Percentage of civilian noninstitutionalized population with a disability estimate	12.5%	15.6%
Percentage of single-parent households with children under 18 estimate	2.9%	3.9%
Percentage of persons (age 5+) who speak English "less than well" estimate	0.1%	0.3%
Minority (other than white non-Hispanic) estimate	4.9%	14.6%
Percentage of housing in structures with 10 or more units estimate	2.3%	3.3%
Percentage of mobile homes estimate	20.3%	13.1%
Percentage of occupied housing units with more people than rooms estimate	0.5%	2.1%
Percentage of households with no vehicle available estimate	6.7%	4.9%
Persons in group quarters estimate	3.5%	2.8%
Percentage Female estimate	51.4%	49.7%
Median Age estimate	35.1	40.1

Characteristic	Fallon County	State of Montana
Median Gross Rent estimate	\$766	\$836
Median House Value estimate	\$165,900	\$244,900
Unoccupied Housing Units estimate	24.9%	15.3%

Source: U.S. Census Bureau ACS 5-year estimates, 2020

Fallon County faces a steady economic outlook, with only 15% of its population living below the 150% poverty line. The County's unemployment rate is estimated at 1.4% compared to the 4% State average. Additionally, the County has a demographic distribution that is close to State norms, with the proportion of residents over 65 being only 5 points lower than the State, while the percentage of those under 17 is only 3 points higher than that of the State. The median age in Fallon County is slightly lower at 35.1 years, compared to the State median of 40.1 years. An important note is that the percentage of unoccupied housing units is 9 percentage points higher than the State average, presenting a potential loss in tax revenue. These economic and demographic similarities highlight a steady growth in the County. Additional sources of social vulnerability in Fallon County encompasses factors such as economic well-being, education access, and healthcare availability.

Table O-2 below provides a brief overview of economic characters in Fallon County. The following information is provided by the U.S. Census Bureau ACS 5-year estimates from 2016-2020.

**Table O-2 Fallon County Economic Profile**

Economic Characteristics	Fallon County
Families Below Poverty Level	10.3%
Individuals Below Poverty Level	12.6%
Median Home Value	\$197,100
Median Household Income	\$69,792
Per Capita Income	\$36,409
Population > 16 Years Old in Labor Force	64%

Source: U.S. Census Bureau ACS 5-year estimates, 2020

Table O-3 below shows the breakdown of employment in Fallon County by the industry sector. According to the ACS, the leading employment sectors in the County are "Agriculture, forestry, fishing and hunting, and mining," which composes 34% of the total employment in the County with an estimated 529 people. This is followed by "Educational services, and health care and social assistance" with 238 people and "Transportation and warehousing, and utilities" with 196 people.

**Table O-3 Fallon County Occupation by Industry Profile**

Industry	Population Employed	Percent of Labor Force
Agriculture, forestry, fishing and hunting, and mining	529	34%
Construction	142	9.1%
Manufacturing	35	2.3%
Wholesale trade	0	0%
Retail trade	128	8.2%
Transportation and warehousing, and utilities	196	12.6%

Industry	Population Employed	Percent of Labor Force
Information	16	1.0%
Finance and insurance, and real estate and rental and leasing	4	0.3%
Professional, scientific, and management, and administrative and waste mgmt. services	77	5.0%
Educational services, and health care and social assistance	238	15.3%
Arts, entertainment, and recreation, and accommodation and food services	117	7.5%
Other services, except public administration	40	2.6%
Public administration	33	2.1%

Source: U.S. Census Bureau ACS 5-year estimates, 2020

## O.4 Hazard Events within the Planning Area

During the reporting period (November 2021 through October 2023), there was one Statewide emergency declaration and 12 natural hazard events within Fallon County. A summary of these events is as follows:

- January 19, 2022, Governor Greg Gianforte signed Executive Order 1-2022, declaring a statewide emergency due to increased demand for propane and heating oil caused by harsh winter conditions.
- Between November 1, 2021, and July 31, 2023, there were 9 unique natural hazard events recorded by the National Centers for Environmental Information (NCEI) Storm Events Database, detailed in Table O-4 below. This culminated in 12 recorded natural hazard events in Fallon County during the reporting period.

**Table O-4 Hazard Events in Fallon County, November 2021-June 2023**

Event Type	Number of Events	Deaths	Injuries
Blizzard	3	0	0
Hail	4	0	0
High Wind	1	0	0
Thunderstorm Wind	2	0	0
Winter Storm	2	0	0
<b>Grand Total</b>	<b>12</b>	<b>0</b>	<b>0</b>

Source: NCEI Storm Events Database

## O.5 Changes in Risk Exposure in the Planning Area

Temperatures have risen almost 2.5°F in Montana since the beginning of the 20th century (Frankson et al 2022). This temperature increase, combined with shifting precipitation patterns, accelerates soil moisture loss during dry spells, intensifying the occurrence of drought and subsequently increasing the risk of wildfires. These projected increases in drought and wildfire have the capacity to impact the County's agricultural sector.

As noted in the 2021 PDM, considering historical events and current conditions, Fallon County is expected to maintain a high likelihood of experiencing drought in the future. The National Integrated Drought Information System reports that the entire County is presently classified as being in an extreme drought, with 42.85 percent classified as experiencing an exceptional drought. Extreme drought conditions result in non-harvestable crops, the opening of winter pastures for grazing, and the development of large cracks in the soil. Livestock, particularly cattle, may face scarcity of water, leading farmers to bring in water, purchase

supplemental feed, cull their cattle stock, and opt for early sales. In cases of exceptional drought, widespread pasture loss and crop destruction are common.

The predominant vegetation in Fallon County consists mainly of mixed-grass prairie, interspersed with a limited number of trees. Notable exceptions include small timbered areas, scattered pine on certain uplands, and a variety of trees and shrubs along drainages. Dryland crops encompass around 241,326 acres of land, with more than 45,000 acres participating in the Conservation Reserve Program. South of Plevna, there is a 250-acre timber patch, and further south lies a timbered section of land spanning 10 to 20 miles from Plevna.

In terms of wildfire severity, Fallon County exhibits five distinct factors, namely the presence of hydrocarbons, wind conditions, low precipitation, limited water access, and the extent of acreage enrolled in the Conservation Reserve Program.

This warming has, and will continue to, result in the steady receding of Montana's glaciers. This increased run-off, combined with an increasingly variable precipitation regime, will likely lead to more frequent and severe flooding. Flooding is possible in the County. Due to excessive snow and rainfall in 2011, Fallon County and several other counties in eastern Montana declared a Disaster Emergency, resulting in damage to County roads and bridges. As noted in the 2021 PDM, the County documented approximately \$550,000 in damages that were reimbursed by FEMA. From 1960-2019, flooding has caused \$3,813,259 in property damage and \$35,229 in crop loss in the County. If flooding intensifies, maintenance and repairs may become more frequent and costly.

The variability in precipitation, coupled with climbing summer temperatures, can give rise to more intense summer storms. These storms, often accompanied by severe wind, hail, and heavy rain, are common in the County but can have a greater impact on the vulnerable populations, such as the aging populations and the segment of the population with a disability. Tornadoes have also been recorded in the County, including in 2016, an F3 tornado was reported, with an estimated damage of over \$1 million. In instances where precipitation variability coincides with cold weather, blizzards, heavy snowfall, and ice storms may occur. Given Fallon County's history of these events it is likely that severe weather, drought, wildfire, and increased flooding hazards will continue to occur.

Avalanches do not affect Fallon County.

### **O.5.1 Earthquake**

Earthquake was not included in the 2021 Fallon County HMP, but it is profiled in Section 4.2.6 of the Regional Base Plan. That section provides an analysis of this hazard relative to the Eastern Region including Fallon County.

All the Eastern Region could be impacted by earthquakes, but the greatest potential for damaging quakes is in the southwestern portion of the Region. The State of Montana is one of the most seismically active states in the United States according to the US Geological Survey. However, the Eastern Region is less susceptible to earthquake hazards when compared to the Central and Western Region, where large seismic events have centered in the past. Fallon County is in an area that has very low potential losses, therefore earthquake hazard in Fallon County is ranked as low overall significance.

The Hazus model estimates earthquake-related building losses broken out into two categories: direct building losses and business interruption losses. Direct building losses are the costs associated with repairing or replacing damage to buildings and their contents caused by an earthquake. Business

interruption losses include the financial impacts of disrupted business operations due to earthquake damage. These losses also include temporary living expenses for individuals displaced from their homes.

For the 2,500-year probabilistic earthquake scenario, total building related losses for Fallon County is estimated at \$459,000. Of this total, direct building losses are estimated at \$331,000, shown in Table O-5, and income related losses are estimated at \$128,000, shown in Table O-6.

**Table O-5 Fallon County Hazus Capital Stock Losses**

County	Structural Damage	Non-Structural Damage	Contents Damage	Inventory Loss
Fallon County	\$86,000	\$185,000	\$58,000	\$2,000

Source: Hazus 2500 yr probabilistic EQ

**Table O-6 Fallon County Hazus Income Losses**

County	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss
Fallon County	\$53,000	\$22,000	\$32,000	\$21,000

Source: Hazus 2500 yr probabilistic EQ

Due to the low likelihood of exposure to ground shaking, there were not specific areas of concern in Fallon County, nor the City of Baker or Town of Plevna. Additionally, climate change will not affect the physical hazards associated with an earthquake.

Refer to Chapter 4 for a discussion of the earthquake risk relative to Fallon County and the Eastern Region.

### 0.5.2 Landslide

Landslide was not included in the 2021 Fallon County HMP, but it is profiled in Section 4.2.9 of the Regional Base Plan. This section provides an analysis of the landslide hazard relative to Fallon County and the Eastern Region. The FEMA NRI assigns Fallon County a "Relatively Low" risk rating for landslides. The County has no recorded landslide events, an annualized frequency of 0.01, and no federal disaster declarations associated with landslides.

Despite this, approximately \$61.99 million in building value and 659 residents are exposed to potential landslide impacts. Historical loss ratios for both buildings (0.00087) and population (0.00035) reflect minimal past impacts. Expected annual losses are also minimal, with buildings estimated to incur \$539.20 in damages, and population losses effectively negligible. This corresponds to an expected annual loss score of 12.71, rated as "relatively low."

The potential effects of climate change on landslide hazards are discussed in the *Climate Change Considerations* subsection of Section 4.2.9. While no specific projections exist for the planning area, climate change may indirectly increase landslide risks by intensifying rainfall or exacerbating wildfire activity, which could destabilize slopes. If a landslide were to occur, some assets may be vulnerable, following patterns described in the *Vulnerability Assessment* subsection of Section 4.2.6.

Given the low probability of landslides and limited susceptibility of assets, the overall vulnerability to this hazard is rated as low for Fallon County, the City of Baker, and the Town of Plevna.

### 0.5.3 Volcanic Ash

Volcanic ash was not included in the 2021 Fallon County HMP, but it is profiled in Section 4.2.15 of the Regional Base Plan. That section provides an analysis of this hazard relative to the Eastern Region including

Fallon County. The frequency and extent of volcanic ashfall is uniform across the Eastern Region and is discussed in Section 4.2.15, subsections *Past Occurrences* and *Frequency/Likelihood of Occurrence*.

All assets are potentially exposed to volcanic ash. Even assets located indoors are exposed when ash penetrates the ventilation system of buildings. Many assets in Fallon County are susceptible to damage from volcanic ash, following the pattern described in Section 4.2.10, subsection *Vulnerability Assessment*.

Climate change will not affect exposure to volcanic ash and is not expected to affect susceptibility or vulnerability to this hazard.

All jurisdictions in the Eastern Region, including those jurisdictions within Fallon County, ranked volcanic ash as an overall low significance hazard.

## O.6 Mitigation Capabilities Assessment

As part of the regional plan development, the Region and participating jurisdictions developed a mitigation capability assessment. Capabilities are those plans, policies and procedures that are currently in place to 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 Fallon County CPT used a two-step approach to conduct this assessment. First, an inventory of common mitigation activities was made using a 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 CPT conducted an inventory and review of existing policies, regulations, plans, projects, and programs to determine if they contribute to reducing hazard related losses.

### O.6.1 Regulatory Mitigation Capabilities

Table O-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 Eastern Region and each participating jurisdiction.

**Table O-7 Fallon County and Jurisdictions Regulatory Mitigation Capabilities**

Plans and Regulations	Fallon County	City of Baker	Town of Plevna
Local Building Codes	*State Codes	*State Codes	*State Codes
Building Codes Year	n/a	n/a	n/a
BCEGS Rating	No	No	No
Capital Improvements Program (CIP) or Plan	Yes	Through County	Through County
Community Rating System (CRS)	No	No	No
Community Wildfire Protection Plan (CWPP)	Yes	Through County	Through County
Comprehensive, Master, or General Plan	Yes	No	No
Economic Development Plan	No	No	No
Elevation Certificates	No	No	No
Emergency Operations Plan	Yes	Through County	Through County
Erosion/Sediment Control Program	No	No	No
Floodplain Management Plan	No	No	No
Flood Insurance Study	Yes, 1988	Yes, 1988	No
Growth Management Ordinance	No	No	No



Plans and Regulations	Fallon County	City of Baker	Town of Plevna
Hazard-Specific Ordinance (Floodplain, Slope, Wildfire)	No	No	No
National Flood Insurance Program (NFIP)	Yes	Yes	No
Site Plan Review Requirements	No	No	No
Stormwater Program, Plan, or Ordinance	No	No	No
Zoning Code or Ordinance	Yes	Yes	Yes

### Discussion of Existing Regulatory Mitigation Capabilities

Despite the absence of an economic development plan within the County or its jurisdictions, the Baker Chamber of Commerce and Agriculture's Southeast Montana Area Revitalization Team District serves as a resource for small business development to serving as a liaison between the community and local government entities. This team plays a crucial role by assisting primarily the smaller towns and counties in the region. It helps them secure grants and loans to support business development and employment, as well as providing technical assistance and training. Its vision is to see the future of Fallon County as a stable, local hub for business and social functions by providing current businesses with incentive to remain, encourage new enterprises to develop for continued economic growth, thus providing a stable economy.

Additionally, while the County drafted a CWPP that encompasses each jurisdiction, rapidly changing environmental conditions coupled with a landscape altered by past fires may necessitate the development of an updated plan to ensure effective and current wildfire management strategies.

The County also enforces floodplain and subdivision zoning permits for both Baker and Plevna. There is also a growth management ordinance which assists the community in embracing a vision for the future and planning for future growth and offers an opportunity to evaluate nearly all facets of a community and document successes and challenges.

Neither the County, City of Baker, or Town of Plevna implement or enforce local building codes. However, the State of Montana has adopted and enforces the following range of building codes:

- **2021 Editions:** International Building, Residential, Existing Building, Mechanical, Fuel Gas, Energy Conservation, Swimming Pool & Spa, and Wildland Urban Interface Codes.
- **2017 & 2018 Editions:** ICC A117.1 Accessibility, NFPA 99 for Health Care Facilities, ASME Safety Codes for Elevators, Escalators, Platform Lifts, and Stairway Chairlifts.
- **2020 Edition:** National Electrical Code with a technical advisory issued in August 2022.
- **2017 & 2018 Editions:** ASME Boiler and Pressure Vessel Code, CSD-1 Controls, and Safety Devices for Boilers.

While local jurisdictions have the option to enforce their own building, electrical, plumbing, and mechanical codes, provided they are certified by the State's Building Codes Program, those areas that opt not to enforce their own codes are subject to the Building Codes Program and the codes listed above. This approach ensures that all regions within the State adhere to minimum standards for the construction, design, and maintenance of buildings and structures to ensure buildings are resilient to natural hazard events.

### O.6.2 Administrative and Technical Mitigation Capabilities

Table O-8 identifies the personnel responsible for activities related to mitigation and loss prevention in Fallon County and its jurisdiction.

**Table O-8 Fallon County Jurisdictions Administrative/Technical Mitigation Capabilities**

Administrative and Technical	Fallon County	City of Baker	Town of Plevna
Emergency Manager	Yes	No	No
Floodplain Administrator/ Position/ Department	Yes	No	No
Community Planning:	–	–	–
- Planner/Engineer (Land Development)	No	Yes	No
- Planner/Engineer/ Scientist (Natural Hazards)	No	No	No
- Engineer/Professional (Construction)	No	No	No
- Resiliency Planner	No	No	No
- Transportation Planner	No	No	No
Full-Time Building Official	No	No	No
GIS Specialist and Capability	No	Yes	No
Grant Manager, Writer, or Specialist	No	No	No
Housing Authority	No	No	No
Warning Systems: (list the hazards each system is used for)	–	–	–
- Sirens	Yes	Through County	Through County
- Reverse 911	Yes	Through County	Through County
- Integrated Public Alert and Warning System (IPAWS)/Wireless Emergency Alerts (WEA)	Yes	Through County	Through County
- Opt-In Notifications (CodeRed, Everbridge, etc.)	Yes	Through County	Through County

### Discussion on NFIP Participation and Compliance

Fallon County and the City of Baker have formally adopted the National Flood Insurance Program's (NFIP) minimum floodplain management criteria through the County's 2014 Floodplain Regulations. This includes requirements for flood-resistant construction, elevation standards, and development restrictions within Special Flood Hazard Areas (SFHAs). Each jurisdiction has adopted the most recent Flood Insurance Rate Map (FIRM) from 1988.

Local floodplain management regulations are actively implemented and enforced by the County Planning Department for both the County and City of Baker to regulate and permit development within SFHAs. This includes reviewing construction and land use permits to confirm compliance with elevation, structural, and zoning requirements aimed at reducing flood risk to properties and residents.

Following flood or other damage events, the County's ordinance enforces a substantial improvement/substantial damage provision by evaluating damaged properties to determine if they meet thresholds requiring them to comply with updated floodplain management standards. If substantial damage is determined, properties must undergo upgrades to meet current floodplain standards before they can be repaired or rebuilt. This process helps to reduce future risk by ensuring that post-event repairs and reconstructions contribute to long-term flood resilience.

There are no repetitive loss (RL) or severe repetitive loss (SRL) properties in Fallon County, the City of Baker, or Town of Plevna. The Town of Plevna has not been mapped by the NFIP and is therefore not required to participate in the NFIP.

### O.6.3 Financial Capabilities

Table O-9 identifies the financial tools or resources that the County and its jurisdictions have access to, or are eligible to use, and that could potentially be used to help fund mitigation activities.

**Table O-9 Fallon County Jurisdictions Financial Capabilities**

Financial Capabilities	Fallon County	City of Baker	Town of Plevna
Ability to fund projects through Capital Improvements funding	Yes	No	No
Ability to incur debt through general obligation bonds	Yes	No	No
Ability to incur debt through private activities	No	No	No
Ability to incur debt through special tax bonds	Yes	No	No
Authority to levy taxes for a specific purpose with voter approval	Yes	No	No
Authority to withhold spending in hazard prone areas	No	No	No
Community Development Block Grants	No	No	No
FEMA Hazard Mitigation Assistance grants	Yes	No	No
FEMA Public Assistance funds	Yes	No	No
Stormwater Service Fees	No	No	No
System Development Fee	No	No	No
Utility fees (water, sewer, gas, electric, etc.)	Yes	No	No

The most recent update to the County's 2021 PDM was undertaken to ensure the County and its jurisdictions maintain eligibility for applying for FEMA mitigation grants and funding.

#### **FEMA and Other Grant Funding Leveraged for Hazard Mitigation**

Funding for the proposed mitigation projects may come from a variety of sources. Below is a list of funding possibilities. This list is not tied directly to each proposed project; however, these programs could work for specific projects or multiple projects.

- FEMA Hazard Mitigation Assistance Grants including:
  - Building Resilient Infrastructure and Communities (BRIC)
  - Flood Mitigation Assistance Program (FMA)
  - Hazard Mitigation Grant Program (HMGP)
- US Army Corp of Engineers funding
- US Department of Agriculture (USDA) Environmental Quality Incentive Program.
- USDA Conservation Reserve and Conservation Reserve Enhancement Program.
- USDA Small Watersheds, a program in the Natural Resource Conservation Service (NRCS)

There are many more potential funding opportunities available to the municipalities and County. Funding research will be done during the scoping process for each project. New funding mechanisms may be present that were not before.

#### **O.6.4 Education and Outreach Capabilities**

Table O-10 identifies the education and outreach programs in place that the County and its jurisdictions could use to help promote mitigation activities.

**Table O-10 Fallon County Education and Outreach Capabilities**

Education & Outreach Programs	Fallon County	City of Baker	Town of Plevna
Ongoing public education programs (fire safety, responsible water use, household preparedness, etc.)	Yes	No	No
Local citizen groups that communicate hazard risks	Yes	No	No
Firewise or other fire mitigation program	No	No	No

Education & Outreach Programs	Fallon County	City of Baker	Town of Plevna
National Weather Service StormReady	Yes	No	No

### O.6.5 Non-Governmental Organizations (NGOs) and Mitigation Partnerships

Table O-11 shows the local chapters that have partnered with the County its jurisdictions.

**Table O-11 Fallon County Non-Governmental Organizations (NGOs)**

Non-Governmental Organizations (NGOs)	Fallon County	City of Baker	Town of Plevna
American Red Cross	Yes	No	No
Chamber of Commerce	Yes	No	No
Community Organizations (Lions, Kiwanis, etc.)	Yes	No	No
Environmental Groups	No	No	No
Homeowner Associations	No	No	No
Neighborhood Associations	No	No	No
Salvation Army	No	No	No
Veterans Groups	Yes	No	No
Other?	No	No	No

### O.6.6 Opportunities for Enhancement

While the County of Fallon has several plans and mechanisms in place to mitigate hazards and ensure the well-being of its residents, there are several ways these protections can be enhanced. For instance, Fallon County can address any concerns of social vulnerability that may necessitate targeted interventions, focusing on initiatives that support economic development, create employment opportunities, and cater to the specific needs of distinct age groups within the community. One way to address these needs would be through the development of a targeted economic development plan. Such a plan could focus on attracting growth to the County in a way that aims to enhance overall community resilience and reduce social disparities.

Other specific opportunities for improvement include:

#### Fallon County

- Consider joining Firewise or other fire mitigation program to increase resiliency to wildfires and potentially lower insurance costs.

#### City of Baker

- Partner with the County to develop an evacuation plan with clear instructions for emergency scenarios and that prioritizes infrastructure projects that can enhance evacuation efficiency and resilience.

#### Town of Plevna

- Partner with the County to increase awareness through public outreach specific to Plevna residents on emergency procedures for severe weather and hazardous material incidents. Utilize community centers or public spaces to hold informational sessions.

### O.6.7 Monitoring, Evaluation and Updating the Plan

Moving forward the Fallon County CPT will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Chapter 6 of the base plan.

Fallon County will follow the procedures to review and update this plan in accordance with Montana Eastern Region as outlined in Chapter 6 of the Regional Plan. The County and municipalities realize that it is important to review and update this plan regularly and update it on a five-year cycle. The Fallon County Addendum to the Montana Eastern Region Plan will be evaluated on a regular basis to determine the effectiveness of programs, and to reflect changes in land development or programs that may affect mitigation priorities.

The County implements policies and programs to reduce losses to life and property from hazards. This plan builds upon the momentum developed through previous and related planning efforts and mitigation programs and recommends implementing actions, where possible, through these other program mechanisms. Where applicable, these existing mechanisms could include:

**Fallon County:**

- Fallon County Capital Improvement Plan
- Fallon County Community Wildfire Protection Plan
- Fallon County General Plan
- Fallon County Emergency Operations Plan
- Fallon County Floodplain Regulations
- Fallon County Zoning Ordinance

**City of Baker:**

- Fallon County Capital Improvement Plan
- Fallon County Community Wildfire Protection Plan
- Fallon County Emergency Operations Plan
- City of Baker Floodplain Regulations
- City of Baker Zoning Ordinance

**Town of Plevna:**

- Fallon County Capital Improvement Plan
- Fallon County Community Wildfire Protection Plan
- Fallon County Emergency Operations Plan
- Town of Plevna Zoning Ordinance

The jurisdictions did not meaningfully integrate the 2021 PDM into other planning mechanisms, which has been noted as an area of improvement for the next five years. When the opportunity arises, each jurisdiction will follow the process outlined in Section 6.3.3 of the base plan to integrate information from the HMP into these mechanisms. This integration may encompass cross-referencing the HMP where applicable, or it may involve including data, goals, or actions from the HMP. The CPT will coordinate with the staff responsible for the above plans or programs.

For example, information from the wildfire hazard profile can be leveraged to update Fallon County's CWPP. Additionally, mitigation goals and actions can be leveraged to update the County, City of Baker, and Town of Plevna Zoning Ordinances. The CPT noted that additional opportunities to incorporate the new Regional HMP into existing planning mechanisms include referencing the HMP when developing training plans to determine necessary training, using the HMP for mitigation projects and grant applications, and making the HMP accessible to the public for input and increased awareness.

### **O.6.8 Continued Public Involvement**

Fallon County will follow the procedures to review and update this plan in accordance with Montana Eastern Region as outlined in Chapter 6 of the Regional Plan. Continued public involvement is imperative to the

overall success of the plan's implementation, with emphasis on vulnerable populations or groups that could have been missed during the 2023 process. Fallon County and the City of Baker and Town of Plevna will continue to solicit participation from the public in the following ways:

- Hard copies of the updated HMP will be available at County and municipal offices, with an electronic version available on the County website.
- The public will be invited to LEPC meetings where the HMP is discussed. The meetings will provide the public a forum for which they can express concerns, opinions, or ideas about the plan.
- The DES Coordinator will publicize meetings through newspapers, radio, and the internet.
- The CPT will monitor and evaluate public outreach processes for potential improvements during plan implementation.

The County will also make efforts during plan implementation to increase the participation of underserved communities, particularly rural and isolated communities by holding public meetings in convenient and familiar locations within each municipality. The County will also consider transportation options and meeting times that better accommodate different schedules, such as evening and weekend meetings. Continued public involvement will be followed as outlined in Chapter 6 of the base plan, with an emphasis on vulnerable populations or groups that could have been missed during the 2023 process.

## **O.7 Review of the Mitigation Action Plan**

The matrices below review the 22 actions listed in the 2021 Fallon County action plan, reporting the status of each initiative. Reviewers of this report should refer to the *2021 Update to the Fallon County PDM* for more detailed descriptions of each initiative and the prioritization process. The summary addresses the status of the action, what elements or tasks of the initiative were conducted during the reporting period based on the plan's maintenance schedule, an explanation if an action was not completed, the timing of additional implementation tasks, the current priority level, and if the initiative was completed, needs to be changed, or removed from the action plan.

### **O.7.1 Progress on Previous Actions**

During the 2023 planning process, the Fallon County CPT reviewed all the mitigation actions from the 2021 plan. No actions have been completed or deleted. Mitigation Action Plan

As a part of the 2023 regional planning process, the Fallon County CPT developed an updated list of hazard mitigation actions or projects specific to the County and its jurisdictions. The process used to identify, develop, and prioritize these actions is described in Chapter 5 of the base plan. Fallon County carried over 22 uncompleted or ongoing mitigation actions from the previous plan and added an additional four new actions.

The Fallon County CPT identified and prioritized the following mitigation actions based on the risk assessment and goals, and objectives. It is grouped by hazard(s) mitigated. Background information as well as information on how the action will be implemented and administered, such as ideas for implementation, responsible office, partners, potential funding, estimated cost, and timeline also are described. Per the DMA requirement, actions have been identified that address reducing losses to existing development as well as future development.

Continued compliance with the NFIP is also important to reducing losses to future development. Currently, the County and the City of Baker participate in the NFIP and will continue to make every effort to remain in good standing with the program, including continuing to comply with the NFIP regarding adopting floodplain maps and implementing, maintaining, and updating floodplain ordinances. See Section 5.4.2 in the base plan for more discussion on NFIP compliance.

The **Cost Estimate** column describes the estimated project costs using the following categories:

- Little to no cost
- Low: Less than \$10,000
- Moderate: \$10,000-\$100,000
- High: \$100,000-\$1,000,000
- Very High: More than \$1,000,000

The **Timeline** column describes the estimated time of completion for each project using the following categories:

- Short Term: 1-2 years
- Medium Term: 3-5 years
- Long Term: 5+ years
- Ongoing: action is implemented every year

The **Status/Implementation Notes** column describes the progress made on the actions so far using the following categories:

- Not Started: project is continued from the 2021 Fallon County Plan; little to no work has been completed.
- In Progress: project is continued from the 2021 Fallon County Plan; work has begun on the project and is proceeding.
- Annual: project is continued from the 2021 Fallon County Plan and is implemented every year on an ongoing basis.
- New in 2023: The action is new to this plan update; little to no work has been completed.

Table O-12 lists the mitigation actions for Fallon County and its participating jurisdictions. All jurisdictions have developed mitigation actions for each identified hazard in the 2021 PDM.

**Table O-12 Mitigation Action Tracker**

ID	Action/Project Name & Description	Hazards Mitigated	Jurisdiction	Lead Agency	Partner Agencies	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
1	Train and collaborate with public health emergency response team on how to slow down the spread through procedural policies.	Communicable Disease	Fallon County	County Public Health Director	DES Coordinator	Moderate	County General Funds, Staff Time	Short Term	High	In Progress
2	Conduct a multi-hazard education and awareness campaign to inform public and agency partners of local hazard risk, the importance of mitigation plans, and how best to prepare and reduce impacts. Planned engagement activities include providing online resources through the county website, sending mailers to businesses and residents regarding hazard risks and mitigation resources, hosing annual briefings on recent advancements in the mitigation strategy, and seeing engagement at community events such as farmers markets. Engagement topics may include but are not limited to dam failure and earthquake hazards for vulnerable communities, wildfire preparedness for property owners, storm spotting (including tornadoes) course in partnership with local NWS office, home insurance policy and details on NFIP, and tips for water conservation.	Dam Failure, Drought, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Fallon County, City of Baker, Town of Plevna	Fallon County DES Coordinator	City of Baker, Town of Plevna	Moderate	County General Funds, Staff Time	Medium Term	Medium	New in 2023
3	Replace and upgrade Fallon County's dispatch consoles to enhance the accuracy and efficiency of emergency dispatch and paging services.	Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding,	Fallon County, City of Baker, Town of Plevna	Fallon County DES Coordinator	911 coordinator, City Treasurer, Town Council	Very High	FEMA HMGP and BRIC Grants, HSGP, Federal 911 Grant Programs, FEMA	Short Term	High	New in 2023



ID	Action/Project Name & Description	Hazards Mitigated	Jurisdiction	Lead Agency	Partner Agencies	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
		Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire					EOC Grant Program			
4	Replace microwave communication systems to ensure reliable dispatch and improve operational communications across Fallon, Carter, and Wibaux counties, including the cities of Baker, Plevna, Wibaux, and Alzada.	Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Fallon County, City of Baker, Town of Plevna	Fallon County DES Coordinator	911 coordinator, City Treasurer, Town Council	High	FEMA HMGP and BRIC Grants, HSGP, Federal 911 Grant Programs, FEMA EOC Grant Program	Short Term	High	New in 2023
5	Purchase additional back-up Personal Protection Equipment (PPE).	Communicable Disease, Hazardous Materials Incident	Fallon County	County Public Health Director	n/a	Moderate	County General Funds, Staff Time, CARES Act, ARPA, HMEP Grant Program, HSGP	Short Term	High	In Progress
6	Create a plan for if/when the system gets compromised (i.e. redundant systems or, cloud backup).	Cyber-attack	Fallon County	County IT Department	County Planning	High	HMGP, BRIC, State and Local Cybersecurity Grant Program, HSGP	Short Term	Medium	Not Started
7	Encourage or provide training on Cyber threats.	Cyber-attack	Fallon County	County IT Department	n/a	Moderate	City and County General Funds, EMPG, State and Local	Short Term	High	Annual Implementation

ID	Action/Project Name & Description	Hazards Mitigated	Jurisdiction	Lead Agency	Partner Agencies	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
							Cybersecurity Grant Program, HSGP			
8	Continue coordination with NRCS regarding the Dam Maintenance.	Dam Failure	Fallon County, City of Baker	City Public Works	NRCS, DES Coordinator	Moderate	City and County General Funds, MT DNRC Funding	Ongoing	High	Annual Implementation
9	Conduct and participate in dam exercises with emergency response partners.	Dam Failure	Fallon County, City of Baker	Fallon County DES Coordinator	City Council	Moderate	City and County General Funds, MT DNRC Funding	Medium Term	High	Not Started
10	Identify residences with the highest risk and provide information about dam failure and provide information from dam failure exercises.	Dam Failure	Fallon County, City of Baker	Fallon County DES Coordinator	City Council	Moderate	City and County General Funds, MT DNRC Funding	Short Term	High	Not Started
11	Create a policy to adjust water usage in the City of Baker.	Drought	City of Baker	City Public Works	DES Coordinator	Moderate	City and County General Fund	Medium Term	High	Not Started
12	Limit Oil & Gas water usage.	Drought	Fallon County, City of Baker	City Council	City Public Works, DES Coordinator	Moderate	City and County General Funds	Short Term	High	Not Started
13	Participate in drought programs implemented through DNRC and the NRCS.	Drought	Fallon County, Town of Plevna	Fallon County DES Coordinator	DNRC	Moderate	County, BRIC, DNRC, HMGP	Short Term	High	Not Started
14	Educate the public on flood hazards, and flood protection measures.	Flooding	Fallon County, Town of Plevna	Fallon County Floodplain Administrator	DES Coordinator	Moderate	City and County General Funds, HMGP	Ongoing	High	Not Started
15	Evaluate options for making Monroe Street safer during flood events.	Flooding	City of Baker	City Public Works	DES Coordinator	High	HMGP, BRIC, FMA	Short Term	Medium	Not Started
16	Conduct routine channel cleanout from dam spillway to 6th West.	Flooding	City of Baker, Fallon County	Fallon County DES Coordinator	City Public Works	High	HMGP, NRCS, FMA	Ongoing	Medium	In Progress
17	Provide adequate training for emergency responders to respond to a hazardous materials incident.	Hazardous Materials	Fallon County	Fallon County DES Coordinator	Public Health Director	Moderate	HMGP, PHMSA HMEP	Short Term	High	In Progress

ID	Action/Project Name & Description	Hazards Mitigated	Jurisdiction	Lead Agency	Partner Agencies	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
18	Educate public near hazardous material facilities or corridors on how to limit exposure during an incident.	Hazardous Materials	Fallon County	Fallon County DES Coordinator	Public Health Director	High	City and County General Funds	Medium Term	Medium	Not Started
19	Pursue funding for hazardous materials (HAZ-MAT) supplies.	Hazardous Materials	Fallon County	Public Health Director	DES Coordinator	High	HMGP, US DOT HMEP	Short Term	Medium	Not Started
20	Continue training and awareness on active shooters in critical facilities.	Human Conflict	Fallon County, City of Baker	City Council	DES Coordinator	Moderate	County General Funds, Staff Time, SHSP, EMPG, HSGP	Ongoing	High	In Progress
21	Expand awareness and participation in the Community Notification System.	Severe Summer and Winter Weather	Fallon County, City of Baker, Town of Plevna	Fallon County DES Coordinator	City Council	Moderate	HMGP, BRIC, County and City General Funds	Short Term	High	In Progress
22	Create community outreach programs on how to prepare for severe weather and tornadoes.	Severe Summer and Winter Weather, Tornadoes & Windstorms	Fallon County	Fallon County DES Coordinator	County Planning	Moderate	HMGP, BRIC	Ongoing	High	In Progress
23	Collaborate with MDOT to install road closure gates and signage on both sides of Baker and Plevna along Highway 12 to enable safe closures during severe weather events.	Severe Summer Weather, Severe Winter Weather, Transportation Accidents	Fallon County, City of Baker, Town of Plevna	Fallon County Sheriff	MDOT, DES Coordinator, City Public Works, Town Council	Low	FEMA HMGP and BRIC Grants	Short Term	High	New in 2023
25	Install HVAC systems that meet air quality system specifications for high dust and ash filtration at all designated County emergency shelters to mitigate volcanic ash risk	Volcanic Ash	Fallon County, City of Baker, Town of Plevna	Fallon County Sheriff	City and Town Councils	Moderate	County General Funds, EMGP, ARPA Grant, FEMA HMA BRIC, HMGP Grants	Long Term	Low	New in 2023
26	Install water tanks and dry hydrants in rural parts of the County.	Wildfire	Fallon County	County Fire District	County Public Works	High	HMGP, DNRC, BRIC, DOI, Rural Fire Assistance Grant	Short Term	Medium	Not Started
27	Continue working with oil & gas companies to train and equip individuals	Wildfire	Fallon County	Fallon County DES Coordinator	Private oil and gas companies	Moderate	HMGP, BRIC	Short Term	High	In Progress

ID	Action/Project Name & Description	Hazards Mitigated	Jurisdiction	Lead Agency	Partner Agencies	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
	in the specialized areas of response of hydrocarbon incidents.									
28	Update Fallon County CWPP	Wildfire	Fallon County, City of Baker, Town of Plevna	County Fire District	City of Baker, Town of Plevna	Moderate	HMGP, BRIC	Medium Term		
29	Construct another crossing over or under railroad to access Baker to the North.	Wildfire, Severe Summer Weather, Severe Winter Weather	Fallon County, City of Baker	Fallon County DES Coordinator	County Public Works	Moderate	City and County General Funds, HMGP	Short Term	High	Not Started

**NOTES: Acronyms for lead agency, partners, and funding are defined below:**

ARPA – American Rescue Plan Act BRIC - Building Resilient Infrastructure and Communities CARES – Coronavirus Aid, Relief, and Economic Security Grant DES – Department of Emergency Services DNRC – Montana Department of Natural Resources and Conservation DOI – Department of the Interior EMPG – Emergency Management Performance Grant EOC – Emergency Operations Center FEMA – Federal Emergency Management Agency FMA – Flood Mitigation Assistance GIS – Geographic Information Systems	IT – Information Technology HMA – Hazard Mitigation Assistance HMEP – Hazardous Materials Emergency Preparedness Grant Program HMGP – Hazard Mitigation Grant Program HSGP – Homeland Security Grant Program MDOT – Montana Department of Transportation NRCS – Natural Resources Conservation Service PPE – Personal Protective Equipment PHMSA – Pipeline and Hazardous Materials Safety Administration US DOT – United States Department of Transportation
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