

Addendum BB Sweet Grass County Hazard Mitigation Plan

BB.1 Mitigation Planning

This Addendum serves to update the 2021 Sweet Grass County Hazard Mitigation Plan (HMP), which was approved in November 2021. The 2021 HMP includes a strategy for plan implementation and maintenance that includes a monitoring schedule, formal updates, plan evaluation, continued public outreach, and incorporation into existing planning mechanisms. The following incorporated community participated in the planning process with the County:

- City of Big Timber

The 2021 MHMP and 2023 Addendum will undergo annual reviews by the Local Emergency Planning Committee (LEPC) to assess new hazards, vulnerabilities, and potential mitigation projects. The county's DES Coordinator will ensure this review is on the LEPC agenda, documenting outcomes with meeting notes posted on the county website. Any updates or new projects will be incorporated through a memorandum submitted to the County Commissioners and Big Timber City Council. The MHMP will also be evaluated after major disasters, revisiting the risk assessment. Three years post-adoption, the county may seek FEMA planning grants for the 2026 MHMP update, with the DES Coordinator overseeing the process. The updated Plan will be submitted to FEMA for approval before being adopted by the County Commissioners and City Council, with stakeholders notified through email and online availability of the Plan. This strategy allows the County to evaluate the effectiveness of the plan and make any necessary changes. 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. This 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 HMP 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:

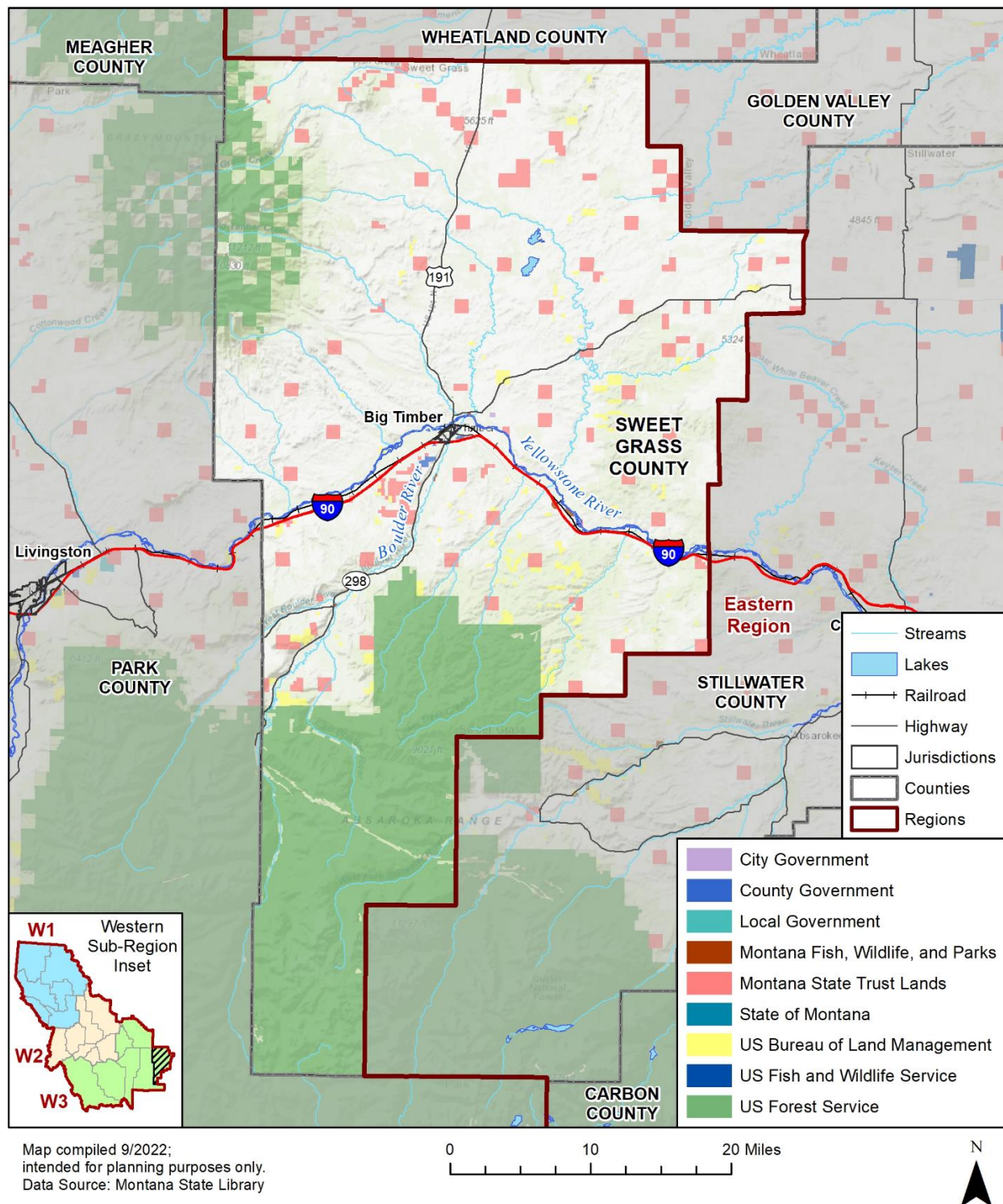
- Including a broader range of stakeholders, to include agencies that regulate land use and building codes, academia partners, climate change experts, agencies that support underserved communities, and community lifeline stakeholders.
- Describing targeted outreach opportunities to underserved communities.
- 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 HIRA Section 4.2.5 Dam Failure).
- Describing building codes and land use and development ordinances.

The City of Big Timber 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, to include 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 participated can be found in Appendix A.

A map showing Sweet Grass County land stewardship is displayed in Figure BB-1.

Figure BB-1 Sweet Grass County Base Map and Land Stewardship**BB.1.1 Integration of HMP with Other Plans**

Two plans have been updated since the November 2021 approval of the Sweet Grass County HMP and incorporated information from the HMP.

The Sweet Grass County / City of Big Timber Emergency Operations Plan (EOP) used the 2021 HMP to update the Direction, Control and Warning Annex and the Evacuation Annex. These changes are for all hazards.

The County Capital Improvement Plan (CIP) was updated and partially integrated with capital improvement projects. Those projects included key bridge replacements identified in the HMP plan as high priority projects needed to ensure open travel during disasters (fire, floods, hazardous materials, severe weather, earthquakes, and subcategories of those listed). The CIP also listed the acquisition of a service to disseminate Alerts and Warnings for all hazards.

In addition, the County's Community Wildfire Protection Plan (CWPP) is being updated during this HMP update. Individuals involved in this HMP update project are also involved in the CWPP update. Information from the 2021 HMP and new items in this current HMP were integrated into the updated CWPP. Most of the items related to fire mitigation, public education, evacuation planning and public notification were integrated.

Several other plans for the City of Big Timber and Sweet Grass County will require updates in the near future. Integration of the HMP with those plans will be implemented as set forth in the base plan, Section 6 *Plan Adoption, Implementation, and Maintenance*.

BB.2 Summary Overview of the 2021 Plan's Progress

The County HMP has targeted 51 hazard mitigation initiatives to be pursued during the 5-year performance period. The jurisdictions' progress on implementing these initiatives is shown below:

- 36 out of 57 initiatives (63%) reported ongoing action toward completion.
- 2 out of 57 initiatives (4%) were reported as being complete.
- 19 out of 57 initiatives (33%) reported no action taken.

BB.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 NRI ranked the social vulnerability in Sweet Grass County as Relatively Low, with a score of 36.6. This is higher than 75.0% of counties within Montana. Additional details on social vulnerability and FEMA's National Risk Index (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 BB-1.

Table BB-1 Demographic Estimates for Sweet Grass County (2020 ACS)

Characteristic	Sweet Grass County	State of Montana
Percentage of persons below 150% poverty estimate	16.7%	24.1%
Unemployment Rate estimate	1.2%	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	16.1%	21.4%
Percentage of persons with no high school diploma (age 25+) estimate	4.4%	7.5%

Characteristic	Sweet Grass County	State of Montana
Percentage uninsured in the total civilian noninstitutionalized population estimate	6.3%	9.6%
Percentage of persons aged 65 and older estimate	27.7%	22.1%
Percentage of persons aged 17 and younger estimate	20.8%	21.3%
Percentage of civilian noninstitutionalized population with a disability estimate	16.0%	15.6%
Percentage of single-parent households with children under 18 estimate	2.2%	3.9%
Percentage of persons (age 5+) who speak English "less than well" estimate	0.3%	0.3%
Minority (other than white non-Hispanic) estimate	7.4%	14.6%
Percentage of housing in structures with 10 or more units estimate	1%	3.3%
Percentage of mobile homes estimate	9.0%	13.1%
Percentage of occupied housing units with more people than rooms estimate	0.7%	2.1%
Percentage of households with no vehicle available estimate	4.2%	4.9%
Percentage of persons in group quarters estimate	0.6%	2.8%
Percentage Female estimate	50.4%	49.7%
Median Age estimate	46.8	40.1
Median Gross Rent estimate	\$678	\$836
Median House Value estimate	\$243,300	\$244,900
Percent Unoccupied Housing Units estimate	28.6%	15.3%

Source: ACS 2020

A significant portion of the population in Sweet Grass County (over a quarter) is 65 or older. The median age of Sweet Grass County residents is 46.8 years, well over the Statewide average of 40.1 years. A relatively high percentage of its housing stock is unoccupied (28.6%). These statistics suggest an aging population which may pose difficulties as residents retire and income taxes decrease. The Sweet Grass County CPT noted that their greatest concern regarding access and functional needs populations is evacuation.

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

Table BB-2 Sweet Grass County Economic Profile

Economic Characteristics	Sweet Grass County
Families Below Poverty Level	3.7%
Individuals Below Poverty Level	4.6%
Median Home Value	\$243,300
Median Household Income	\$63,438
Per Capita Income	\$27,553
Population > 16 Years Old in Labor Force	60.2%
Population Employed	59.5%

Source: U.S. Census Bureau ACS 5-year estimates, 2021

Table BB-3 below shows the breakdown of employment in Sweet Grass County by the industry sector. According to the ACS, the leading employment sectors in the County are "Educational services, and health

care and social assistance,” which composes almost a fifth of the total employment in the County with an estimated 333 people. This is followed by “Construction” with 294 people and “Agriculture, forestry, fishing and hunting, and mining” with 264 people.

Table BB-3 Sweet Grass County Occupation by Industry Profile

Industry	Population Employed	Percent of Labor Force
Agriculture, forestry, fishing and hunting, and mining	264	14.8%
Construction	294	16.5%
Manufacturing	97	5.4%
Wholesale trade	37	2.1%
Retail trade	163	9.2%
Transportation and warehousing, and utilities	109	6.1%
Information	17	1.0%
Finance and insurance, and real estate and rental and leasing	48	2.7%
Professional, scientific, and management, and administrative and waste management services	135	7.6%
Educational services, and health care and social assistance	333	18.7%
Arts, entertainment, and recreation, and accommodation and food services	120	6.7%
Other services, except public administration	91	5.1%
Public administration	73	4.1%

Source: U.S. Census Bureau ACS 5-year estimates, 2016-2020

BB.4 Hazard Events within the Planning Area

During the reporting period (November 2021 through June 2023), there was one FEMA disaster declaration, one Statewide emergency declaration, and 32 natural hazard events within Sweet Grass 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.
- July 5, 2022, FEMA declared a state of emergency (DR-4655-MT) for Sweet Grass and an additional six counties due to severe storms and flooding. According to the NCEI Storm Event Database, this flooding occurred as a result of unstable southwest flows of air and a strong jet stream in the upper atmosphere combined with a moist easterly flow near the Earth’s surface. Each of these components created an environment conducive to the development of severe thunderstorms which were accompanied by large hail and heavy rain.
- Between November 1, 2021, and June 21, 2023, there were 32 unique natural hazard events recorded by the NCEI Storm Events Database, detailed in Table BB-4 below. Some of these events contained multiple natural hazard occurrences, such as the February 20, 2022, winter storm and heavy snow event; and some events occurred over multiple regions, such as the April 11, 2022, winter storm event which was recorded in the Beartooth Foothills Zone, the Absaroka / Beartooth Mountains Zone, and the Crazy Mountains Zone. This culminated in 44 combined natural hazard events in Sweet Grass County during the reporting period.

- Three injuries and three deaths due to avalanches in the Absaroka / Beartooth Mountains were recorded by the NCEI Storm Events Database during the reporting period. Two injuries and one death were recorded on December 27, 2021. One injury and one death were recorded on February 29, 2022, and one death was recorded on December 31, 2022.

Table BB-4 Hazard Events in Sweet Grass County, November 2021-June 2023

Event Type	Number of Events	Deaths	Injuries
Avalanche	3	3	3
Flood	1	0	0
Hail	1	0	0
Heavy Snow	2	0	0
High Wind	8	0	0
Thunderstorm Wind	2	0	0
Winter Storm	27	0	0
Grand Total	44	3	3

BB.5 Changes in Risk Exposure in the Planning Area

Wildfire, severe weather and drought, flooding and dam failure, communicable disease, cyber security, hazardous material incidents and transportation accidents, landslide, and terrorism, violence and civil unrest were prioritized in the County's 2021 HMP update. Several of these hazard events continued to occur through 2023, as shown in Table BB-4 above. Based on this information, winter storms and high winds have a high probability of future occurrence. Details on additional hazards, including several that were not included in the 2021 County HMP, are included in the subsections below

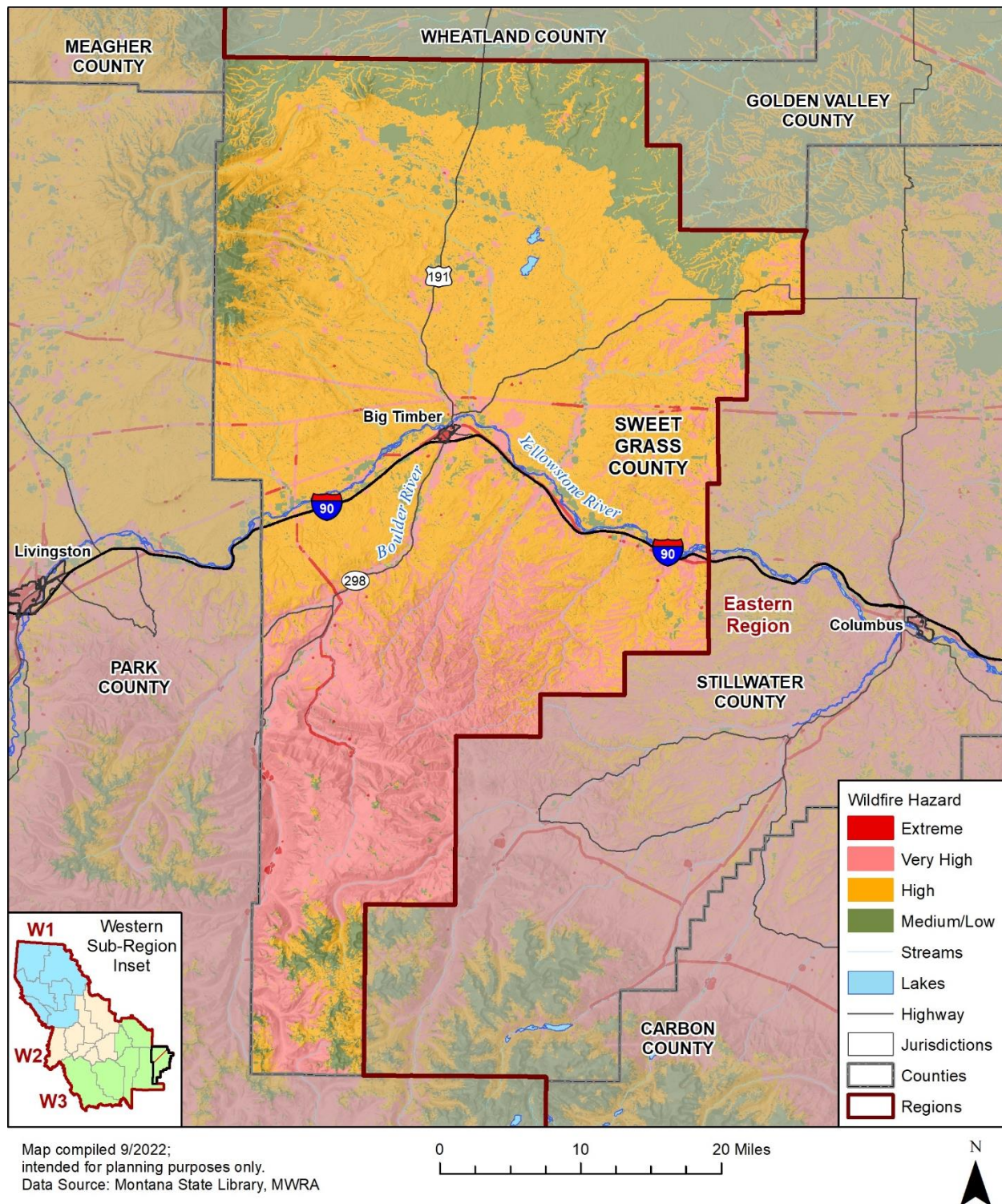
Temperatures have risen almost 2.5°F in Montana since the beginning of the 20th century (Frankson et al 2022). This warming has, and will continue to, result in the steady receding of Montana's glaciers. Increased run-off from melting glaciers, combined with an increasingly variable precipitation regime, will likely lead to more frequent and severe flooding in the relatively flat Sweet Grass County. The City of Big Timber will be especially vulnerable to flooding due to its location along the confluence of the Yellowstone and Boulder Rivers, as shown in Figure BB-2 below.

Increasing temperatures, combined with a shift in precipitation patterns, can increase the rate of soil moisture loss during dry spells, increasing the intensity of naturally occurring drought in the region. This can lead to increased wildfire risk, especially in the wilderness area in the southern County, as shown in Figure BB-3 below. These projected increases in flooding, drought, and wildfire may cause habitat changes and shifts in species distribution that could have further effects on the ecosystem in Sweet Grass County.

Changes in development within high hazard areas can also affect risk exposure. However, there has been no notable development since the last plan update that affects vulnerability to any hazard.

This map displays the Eastern Region of the Western Sub-Region in Montana. The region is outlined in red and includes Sweet Grass County, Stillwater County, and Carbon County. Major features include the Yellowstone River, Big Timber, and Livingston. The map also shows the Hazus 100-year Floodplain (pink) and FEMA 1% Annual Chance Floodplain (blue). County boundaries are shown in black, and the legend identifies various geographical features like streams, lakes, highways, and jurisdictions. An inset map shows the Western Sub-Region divided into three areas: W1 (Western), W2 (Central), and W3 (Eastern).

Map compiled 9/2022;
intended for planning purposes only.
Data Source: Montana State Library,
DNRC, FEMA, Hazus

Figure BB-3 Sweet Grass County Wildfire Hazards**BB.5.1 Avalanche**

Avalanche was not included in the 2021 Sweet Grass County HMP as it is not a significant hazard to the county, but it is profiled in Section 4.2.2 of the Western Region Base Plan. That section provides an analysis

of this hazard relative to Western Region as a whole. Specific to Sweet Grass County, avalanche is considered low overall significance and does not pose a risk to the county due to the populated areas being concentrated away from steep slopes and avalanche prone locations.

BB.5.2 Earthquake

Earthquake was not included in the 2021 Sweet Grass County HMP, but it is profiled in Section 4.2.7 of the Western Region Base Plan, which provides an analysis of this hazard relative to Western Region including Sweet Grass County. Earthquake is considered a low significance hazard for Sweet Grass County.

BB.5.3 Dam Failure

Section 4.2.5 *Dam Failure* in the base report describes patterns of the location and extent of dam inundation hazards in the Western Region. There are four high hazard dams in Sweet Grass County, Upper Glasston North and West Dams, Lower Glasston Dam, and the East Boulder Mine tailings dam. All high hazard dams in Sweet Grass County have completed Emergency Action Plans (EAP), as required by the State. These EAPs typically have maps of dam inundation areas and are available to local emergency managers and is one way to overcome the lack of digital inundation mapping. No high hazard dams exist upstream of Sweet Grass County. There are an estimated 12 people residing within mapped inundation zones in Sweet Grass County.

Dam condition assessments conducted by the Montana Bureau of Mines & Geology between 2015 and 2022 determined that there are three high hazard dams, each of the three Glasston Dams, in poor condition with the potential to impact Sweet Grass County. All three of these dams report the same deficiency of requiring rehabilitation of the conduits due to the age of the dams. Additionally, the Lower Glasston Dam is suffering from high foundation seepage posing piping risk. None of these dams are located upstream of the City of Big Timber, Sweet Grass County's main population center. However, the unincorporated community of Greycliff is located approximately 29 miles downstream and may be at risk of inundation. Mitigation Action #25, detailed in Table BB-13, seeks to address these three dams and bring them up to appropriate safety ratings.

Table BB-5 Dams in Sweet Grass County

Hazard Class	Dam Name	Owner	River	Nearest Downstream City	Distance to Nearest Downstream City (Miles)	Emergency Action Plans (EAP)
High	East Boulder Tailings Dam	Stillwater Mining Co	N/A	N/A	N/A	Yes
High	Lower Glasston Dam	Sweetgrass Canal & Res Co	Sweetgrass Canal	Greycliff	26	Yes
High	Upper Glasston North Dam	Sweetgrass Canal & Res Co	Sweetgrass Canal	Greycliff	29	Yes
High	Upper Glasston West Dam	Sweetgrass Canal & Res Co	Sweetgrass Canal	Greycliff	29	Yes
Significant	Donald	Cayuse Livestock Co	Fish Creek	Greycliff	45	Not Required

Hazard Class	Dam Name	Owner	River	Nearest Downstream City	Distance to Nearest Downstream City (Miles)	Emergency Action Plans (EAP)
Significant	Robbie	Justin T Cumin	Middle Creek	Wheat Basin	20	Not Required
Significant	Ryan-Tronrud Dam	Chuck M Rein	Sweetgrass Creek	Melville	14	Not Required

Source: National Inventory of Dams (NID)

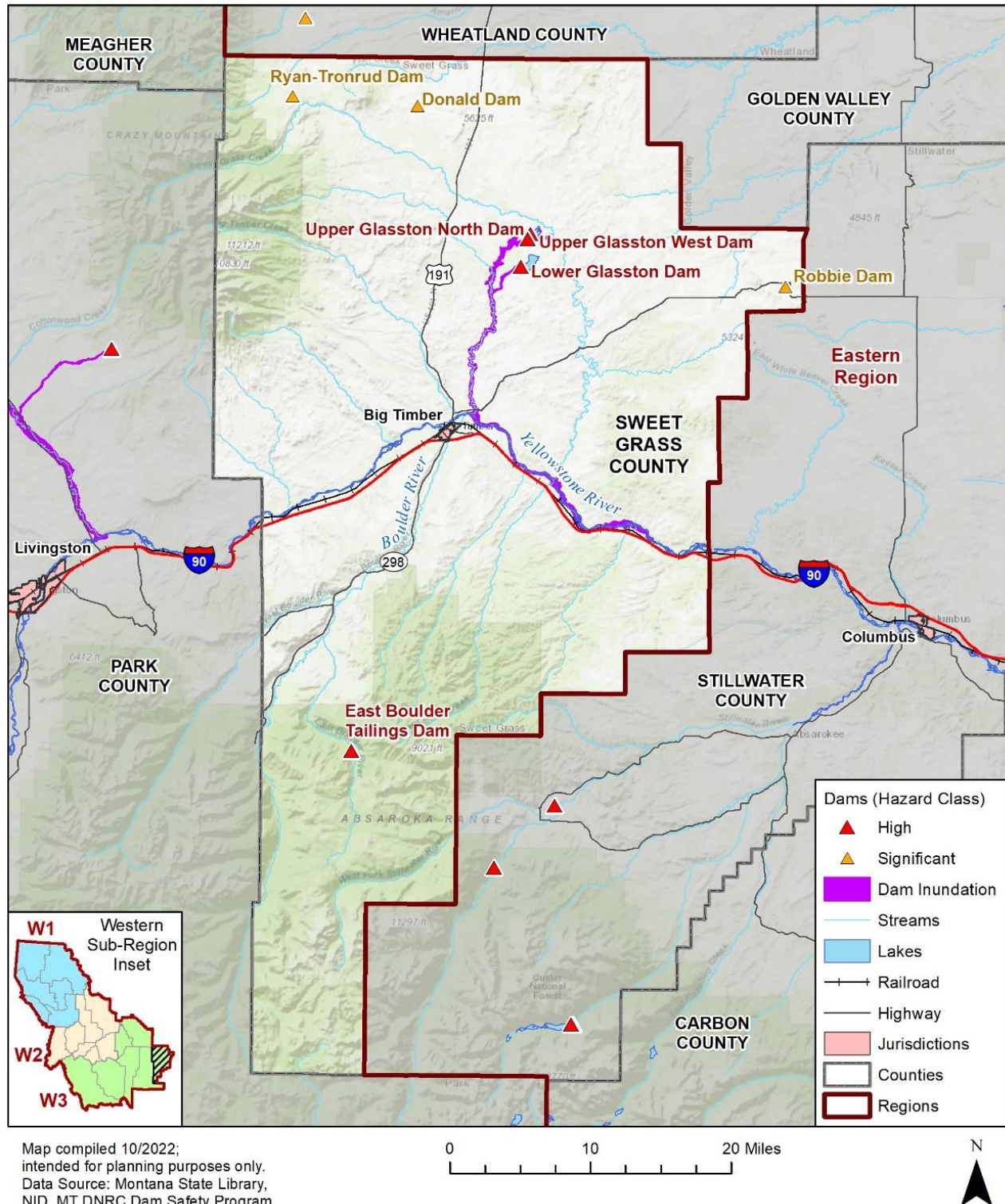
Table BB-6 summarizes the estimated number of improved parcels, building values, and people within available inundation zone maps, typically available only for high hazard dams that are not federally owned.

Table BB-6 Sweet Grass County Parcels at Risk to Dam Inundation by Property Type

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Population
Sweet Grass County	Agricultural	7	\$1,241,580	\$1,241,580	\$2,483,160	
	Residential	5	\$1,129,461	\$564,731	\$1,694,192	12
	Vacant	1	\$21,210	\$21,210	\$42,420	
	Total	13	\$2,392,251	\$1,827,521	\$4,219,772	12

Source: County Assessor data, NID, MT DNRC, WSP GIS Analysis

Figure BB-4 displays the location of dams and mapped inundation zones, shown as purple areas, in Sweet Grass County. A significant limitation of the analysis done for this HMP update is the unavailability of dam inundation zones. The inundation zone for East Boulder Tailings Dam was unavailable, preventing analysis of assets potentially exposed by this structure. Opportunities to address the limitation of missing dam inundation area delineations is discussed in the base plan, Section 4.2.5.2 *Geographical Area Affected*. Refer to Chapter 4 for a discussion of the dam failure risk relative to Sweet Grass County and the Western Region.

Figure BB-4 Sweet Grass County Dam Inundation

BB.5.4 Volcanic Ash

Volcanic ash was not included in the 2021 Sweet Grass County HMP, but it is profiled in Section 4.2.16 of the Western Region Base Plan, which provides an analysis of this hazard relative to Western Region including Sweet Grass County. Volcanic Ash is considered a low significance hazard for Sweet Grass County.

Exposure to volcanic ash fallout is relatively uniform throughout Sweet Grass County for any given event. Variability in vulnerability throughout the county depends on the distribution of assets and the susceptibility of each type of asset to volcanic ash (base plan, Section 4.2.16.7). The greatest property losses are likely to occur in the City of Big Timber, where people and infrastructure are more concentrated.

BB.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 Sweet Grass 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.

BB.6.1 Regulatory Mitigation Capabilities

Table BB-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 Western Region and each participating jurisdiction.

Table BB-7 Sweet Grass County and City of Big Timber Regulatory Mitigation Capabilities

Plans and Regulations	Sweet Grass County	City of Big Timber
Building Codes	No local codes; Montana State codes enforced	No local codes; Montana State codes enforced
Building Codes Year	N/A	N/A
BCEGS Rating	No	N/A
Capital Improvements Program (CIP) or Plan	Yes, adopted in March 2023	No
Community Rating System (CRS)	Yes	No
Community Wildfire Protection Plan (CWPP)	Yes, update to 2008 plan is in progress	Yes, County Plan
Comprehensive, Master, or General Plan	Yes, Growth Plan	No
Economic Development Plan	No	No
Elevation Certificates	No	No
Emergency Operations Plan	Yes, updated in 2021	No
Erosion/Sediment Control Program	No	No

Plans and Regulations	Sweet Grass County	City of Big Timber
Floodplain Management Plan	Yes, 2002 County Flood Mitigation Plan	No
Flood Insurance Study	Yes, updated in 2015	Yes, updated in 2015
Growth Management Ordinance	Yes, 2014 County Growth Policy	Yes, 2009 City GP
Hazard-Specific Ordinance or Plan (Floodplain, Steep Slope, Wildfire)	Yes, 2015 County Floodplain Regulations	Yes, 2015 City Floodplain Ordinance
National Flood Insurance Program (NFIP)	Yes	Yes
Site Plan Review Requirements	No	No
Stormwater Program, Plan, or Ordinance	No	No
Zoning Code or Ordinance	No	Yes

Discussion of Existing Regulatory Mitigation Capabilities

Sweet Grass County does not have local city or County building codes. The County does adhere to Montana State building codes, which are enforced by State inspectors. Land use and development ordinances are limited, although floodplain restrictions are monitored through a subdivision review process. Both the City of Big Timber and the County updated their FEMA FIRM (Flood Insurance Rate Map) Panels and Flood Insurance Studies (FIS) in 2015. The City of Big Timber updated their floodplain ordinance following the FIRM and FIS updates, and the County updated their Countywide floodplain regulations.

BB.6.2 Administrative and Technical Mitigation Capabilities

Table BB-8 identifies the County and City of Big Timber personnel responsible for activities related to mitigation and loss prevention in Sweet Grass County.

Table BB-8 Sweet Grass County Jurisdictions Administrative/Technical Mitigation Capabilities

Administrative and Technical	Sweet Grass County	City of Big Timber
Emergency Manager	Yes	No
Floodplain Administrator/ Position/ Department	Yes	No
Community Planning:	Yes	No
- Planner/Engineer (Land Development)	Yes	No
- Planner/Engineer/ Scientist (Natural Hazards)	No	No
- Engineer/Professional (Construction)	No	No
- Resiliency Planner	No	No
- Transportation Planner	No	No
Full-Time Building Official	No	No
GIS Specialist and Capability	Yes	No
Grant Manager, Writer, or Specialist	No	No
Housing Authority	No	No
Warning Systems: (list the hazards each system is used for)	-	
- Sirens	No	Yes
- Reverse 911	Yes	No

Administrative and Technical	Sweet Grass County	City of Big Timber
- IPAWS/Wireless Emergency Alerts (WEA)	Pending authorization	No
- Opt-In Notifications (CodeRed, Everbridge, etc.)	Yes	No
- Other system	Social media (Website, Facebook)	No

Discussion on NFIP Participation and Compliance

Both the County and the City of Big Timber participate in the NFIP. The County joined the NFIP on August 2, 1982, with their current map becoming effective on May 18, 2015. The City of Big Timber joined the NFIP August 29, 1975, with their current map also becoming effective on May 18, 2015. The Sweet Grass County Planning Director is appointed as the Floodplain Administrator for both the County and City of Big Timber.

The Floodplain Administrator is required to administer and implement the provisions of the floodplain regulations, and to meet NFIP requirements. Per the 2015 Sweet Grass County Floodplain Hazard Management Regulations and the 2015 City of Big Timber Floodplain Hazard Management Regulations, floodplain development permits shall be granted or denied by the Floodplain Administrator on the basis of whether the proposed establishment, alteration, or substantial improvement of an artificial obstruction meets the requirements of each applicable regulation. After a flood, the floodplain administrator enforces substantial improvement/substantial damage rules, applicable when the cost of any repair, reconstruction or improvement of a structure equals or exceeds fifty percent of the market value of the Structure. They conduct a street view survey in the flood hazard area, notify owners of permit requirements for repairs, and ensure structures meet minimum building standards for safety and resilience.

Sweet Grass County does not have any properties classified under the National Flood Insurance Program (NFIP) as Repetitive Loss (RL) or Severe Repetitive Loss (SRL).

BB.6.3 Financial Capabilities

Table BB-9 identifies the financial tools or resources that the County and City of Big Timber have access to, or are eligible to use, and that could potentially be used to help fund mitigation activities.

Table BB-9 Sweet Grass County Jurisdictions Financial Capabilities

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

Sweet Grass County has qualified for Hazard Mitigation Grant Program (HMGP) and Post-Disaster Mitigation (PDM) funding in the past. The City of Big Timber received a HMGP grant in 2011 for utility protective measures. The County received a similar HMGP grant in 1997 for road and bridge protective measures. The County also received a PDM grant to fund their local hazard mitigation plan in 2008.

The CPT noted few changes in community priorities related to hazard mitigation. One conservation group in the County is concerned about an expansion of a mine tailings storage facility along the East Boulder River which could store an estimated 1.17 trillion gallons. The group is concerned about contamination if a dam failure were to occur. The CPT also noted community concerns about wildland fire.

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
- 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.

BB.6.4 Education and Outreach Capabilities

Table BB-10 identifies the education and outreach programs in place that the County and City of Big Timber could use to help promote mitigation activities.

Table BB-10 Sweet Grass County Education and Outreach Capabilities

Education & Outreach Programs	Sweet Grass County	City of Big Timber
Ongoing public education programs (fire safety, responsible water use, household preparedness, etc.)	No	No
Local citizen groups that communicate hazard risks	No	No
Firewise or other fire mitigation program	Yes, past activities	No
National Weather Service StormReady	Yes	No

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

Table BB-11 shows the local chapters partnered with the County and City of Big Timber.

Table BB-11 Sweet Grass County Non-Governmental Organizations (NGOs)

Non-Governmental Organizations (NGOs)	Sweet Grass County	City of Big Timber
American Red Cross	No, Supported by neighboring chapter (Gallatin County)	No

Non-Governmental Organizations (NGOs)	Sweet Grass County	City of Big Timber
Chamber of Commerce	Yes	No
Community Organizations (Lions, Kiwanis, etc.)	Yes	No
Environmental Groups	No	No
Homeowner Associations	Yes	No
Neighborhood Associations	No	No
Salvation Army	No	No
Veterans Groups	Yes	No
Other?	Yes, Faith-based organizations	No

BB.6.6 Opportunities for Enhancement

The Sweet Grass CPT noted challenges in implementing mitigation capabilities due to limited staffing resources.

Since the update of their last HMP in 2021, the County has updated several regulatory plans, including their emergency operations plan (2021) and capital improvement plan (2023). The County has a LEPC that is involved with each of these plans and updates. The LEPC leverages their familiarity with each of these plans to cross-reference and ensure consistency throughout the County's regulatory capabilities. Other specific opportunities for improvement include:

Sweet Grass County:

- Consider community implementing a community outreach program to educate residents on wildfire mitigation, communicable disease, or cyber-security, the hazards deemed highly likely to occur.
- Consider adopting local building codes to increase resiliency of structures in the wildland-urban interface.
- Consider conducting an evacuation study and creating an emergency evacuation plan to identify potential areas of inadequate egress and to allow the County to react quickly and efficiently to future destructive events.

City of Big Timber:

- Consider adopting building codes to increase resiliency of structures to flood hazards.
- Consider joining FEMA Community Rating System (CRS) to lower the cost of flood insurance.

BB.6.7 Monitoring, Evaluation and Updating the Plan

Sweet Grass County will follow the procedures to review and update this plan in accordance with Montana Western 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 Sweet Grass County Addendum to the Montana Western 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 Sweet Grass CPT noted that many individuals involved in updating the previous HMP have since updated various plans. Although these individuals indicated they would incorporate the latest HMP into existing mechanisms, this has not been done formally. Opportunities for formal incorporation for each jurisdiction are listed below.

Sweet Grass County

- Sweet Grass County Capital Improvement Plan
- Sweet Grass County Emergency Operations Plan
- Sweet Grass County Floodplain Regulations
- Sweet Grass County Growth Policy
- Sweet Grass County Subdivision Regulations

City of Big Timber

- Big Timber Growth Policy
- City of Big Timber Zoning Regulations
- City of Big Timber Floodplain Regulations

The process for incorporation of the Regional HMP into these planning mechanisms by each jurisdiction can be as simple as cross-referencing the Hazard Mitigation Plan where applicable or including data, goals, or actions from the HMP in these mechanisms. For example, Sweet Grass County and the City of Big Timber use a growth policy to guide development, which addresses protecting life and property from natural and man-made hazards. Mitigation goals from the HMP will be recommended for incorporation into future revisions of these growth policies to ensure high-hazard areas are considered for low-risk uses. Additionally, findings from the flood hazard profile can be leveraged to update the County and City of Big Timber floodplain regulations.

BB.6.8 Continued Public Involvement

Sweet Grass County is committed to involving the public in the review and updates of the HMP. The public will have multiple opportunities to provide feedback. Hard copies of the plan will be available at County and City of Big Timber municipal offices, with an electronic copy on the County website. The locations of the hard copies will be publicized online. The Sweet Grass County DES will track public comments on the plan.

The public will be invited to LEPC meetings where the HMP is discussed, providing a forum for expressing concerns, opinions, or ideas. The DES Coordinator will use County resources to publicize these meetings and maintain public involvement through print, broadcast, and social media. The CPT will continuously observe and evaluate public outreach processes, making necessary changes during plan updates. Additional public outreach will be followed as outlined in Chapter 6 of the base plan, with an emphasis on vulnerable populations or groups that may have been missed during the 2023 process.

BB.7 Review of the Mitigation Action Plan

The matrices below review the 57 actions listed in the Sweet Grass County action plan, reporting the status of each initiative. Reviewers of this report should refer to the *2021 Sweet Grass County Multi-Hazard Mitigation Plan* 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.

Success Stories: The County completed two key projects to mitigate natural hazards, in addition to the development of key regional planning documents. Key success stories and actions related to the County's HMP included:

- In June 2022, the County purchased a large mobile electronic message board for alerting and advising the public.

- In July 2022, the County signed a contract with OnSolve CodeRED for an emergency notification system. It has been in use since that time.

BB.7.1 Progress on Previous Actions

During the 2023 planning process, the Sweet Grass County CPT reviewed all the mitigation actions from the 2021 plan. As shown in Table BB-12, 2 of 57 actions in the previous plan, and 3 have been completed.

Table BB-12 Completed and Deleted Actions

ID	Action Name & Description	Hazards	Jurisdiction	Status
9.1.5	Obtain a portable electronic message board for alerting and advising the public.	All Hazards	Sweet Grass County, Big Timber	Complete
9.1.7	Obtain an updated Emergency Notification System for the county.	All Hazards	Sweet Grass County, Big Timber	Complete.

According to the CPT, many planning documents were updated since the last MHMP was updated. Participants responsible for updating those plans and assessment indicated that they would reference the latest 2021 MHMP and 2023 Addendum during future updates. Each jurisdiction can 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 involve cross-referencing the HMP where applicable or incorporating data, goals, or actions from the HMP. The CPT will coordinate with the staff responsible for the above plans or programs.

BB.7.2 Mitigation Action Plan

As a part of the 2023 regional planning process, the Sweet Grass 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. Sweet Grass County carried over 55 uncompleted or ongoing mitigation actions from the previous plan and added an additional four new actions.

Table BB-13 lists the 2023 Mitigation Action Plan for Sweet Grass County and its participating jurisdictions. The Sweet Grass 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 (indicated with **bold** font), 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 Big Timber participate in the NFIP. Participating jurisdictions 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 Sweet Grass County Plan; little to no work has been completed.
- In Progress: project is continued from the 2021 Sweet Grass County Plan; work has begun on the project and is proceeding.
- Annual: project is continued from the 2021 Sweet Grass 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 BB-13 below lists the mitigation actions for each participating jurisdiction in Sweet Grass County. All jurisdictions have developed mitigation actions for each identified hazard in the HMP.

Table BB-13 Mitigation Action Plan

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
1	Encourage at risk landowners to participate in cost-share fuel reduction programs to reduce fuels round homes.	Wildfire	Sweet Grass County	County Fire , DES; DNRC	High	USFS, DNRC, County General Funds, BRIC Grants, USDA Community Wildfire Defense Grant (CWDG)	Annual Implementation	High	Continue - Not Started
2	Support stakeholder groups and agencies for present and future fuels reduction projects.	Wildfire	Sweet Grass County	County Fire , Commissioners, DES; DNRC	High	USFS, DNRC, County General Funds, BRIC Grants, USDA Community Wildfire Defense Grant (CWDG)	Annual Implementation	High	Continue - Not Started
3	Encourage the U.S. Forest Service to participate in the "Good Neighbor Authority" fuel reduction program to improve forest health and resiliency from large and destructive wildfires.	Wildfire	Sweet Grass County	USFS , DNRC, County Fire; DES	High	USFS, DNRC, County General Funds, BRIC Grants, USDA Community Wildfire Defense Grant (CWDG)	Annual Implementation	High	Annual Implementation.
4	Continually update subdivision regulations as new state wildfire standards become available.	Wildfire	Sweet Grass County, Big Timber	County & City Planning ; Big Timber Planning, County Fire, DES	High	County General Funds, Municipal General Funds, Staff Time	Annual Implementation	High	Continue - Not Started
5	Implement a burn permit system which will restrict burning when unsafe conditions exist.	Wildfire	Sweet Grass County	County Fire , Dispatch; Commissioners, DES	High	County General Funds, Staff Time	Medium Term	High	Continue - Not Started
6	Provide FireWise outreach to private landowners on adapting to life with wildfire and taking action.	Wildfire	Sweet Grass County	County DES , PIO; DNRC, Planning	High	USFS, DNRC, County General Funds, BRIC Grants, USDA Community Wildfire Defense Grant (CWDG)	Annual Implementation	High	Continue - Not Started

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
7	Provide timely messaging on wildfire smoke to protect vulnerable populations.	Wildfire	Sweet Grass County, Big Timber	County/City Public Health; DES, PIO	High	County Public Health General Funds, Staff Time	Annual Implementation	High	Continue - In Progress
8	Encourage the Forest Service and private landowners to restore wildfire burn areas to prevent flood damage and water contamination.	Wildfire	Sweet Grass County	USFS, DNRC; County Fire, DES	High	USFS, DNRC, County General Funds, BRIC Grants, USDA Community Wildfire Defense Grant (CWDG)	Annual Implementation	High	Annual Implementation.
9	Continue widening roads and installing culverts along the Main Boulder Road to enhance wildfire evacuation and response.	Wildfire	Sweet Grass County	County Roads Dept.; DES, PIO	High	County Road Dept. General Funds, BRIC, MDT General Funds	Long Term	High	Continue - In Progress
10	Update the Sweet Grass County Community Wildfire Protection Plan.	Wildfire	Sweet Grass County	County Fire, DES; Planning, Commissioners	High	DNRC CWPP Grant	Long Term	Medium	In Progress. SG County applied for DNRC grant to fund CWPP update. County was selected in Aug 2022 for an award amount of \$41,500. Anticipate 2 years to complete. (9-6-2022 CB)
11	Install snow fencing in areas prone to blowing snow to enhance emergency response and rescue efforts.	Multi: Dam Failure, Drought, Flooding, Summer Weather, Winter Weather, Tornado/Wind, Volcanic Ash, Wildfire	Sweet Grass County	County Roads Dept.; GIS	Moderate	County General Funds, Staff Time,	Long Term	Medium	Continue - Not Started
12	Provide more opportunities for public education in cooperation with the National Weather Service.	Multi: Dam Failure, Drought, Flooding, Summer Weather, Winter Weather, Tornado/Wind, Volcanic Ash, Wildfire	Sweet Grass County, Big Timber	County DES, Big Timber City Council, NWS;	Low	DES General Funds, Staff Time, NWS Partnership	Annual Implementation	High	In Progress. County DES and NWS continues to push out alerts and info. Info shared with LEPC members. (9-6-2022 CB)

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
13	Maintain trees that could impact city and private property.	Multi: Dam Failure, Drought, Flooding, Summer Weather, Winter Weather, Tornado/Wind, Volcanic Ash, Wildfire	Big Timber	City Public Works, Tree Board;	Moderate	Big Timber General Funds, BRIC Grants, MT DNRC Urban and Community Forestry Program	Annual Implementation	High	Continue - In Progress
14	Encourage voluntary water conservation by domestic, municipal, and industrial users.	Drought	Sweet Grass County, Big Timber	County Public Works, City Water Dept., County DES;	Moderate	County General Funds, US Dept. of Interior LWCF, Staff Time	Annual Implementation	High	Continue - Not Started
15	Support drought programs and follow recommendations of the Conservation District and watershed groups.	Drought	Sweet Grass County	County Extension	Moderate	Conservation District General Funds, US Dept. of Interior LWCF, MSU Extension Funding, Staff Time	Annual Implementation	High	Continue - Not Started
16	Upgrade bridges, culverts, and roads to allow sufficient passage of flood waters.	Flooding	Sweet Grass County, Big Timber	County Roads Dept., Big Timber Planning	High	County Public Works General Funds, BRIC, MT DOT General Funds	Long Term	High	Continue - In Progress
17	Prioritize bridge, culvert, and road projects throughout the county.	Flooding	Sweet Grass County	County Planning; County Roads Dept.	High	County Public Works General Funds, BRIC, MT DOT General Funds	Medium Term	Medium	Continue - In Progress
18	Obtain new floodplain mapping for creeks within the county.	Flooding	Sweet Grass County	County Floodplain Administrator; DES	High	County Floodplain Admin Funds, NFIP CAP, RiskMAP	Medium Term	High	Continue - In Progress
19	Obtain additional river gauges to predict flooding.	Flooding	Sweet Grass County	County Floodplain Administrator, Road Dept.; DES	Moderate	USGS Streamgage funding, HMGP	Medium Term	High	Continue - Not Started
20	Investigate options for flood mitigation for the property below the park on the south end of Big Timber.	Flooding	Sweet Grass County	County Planning;	High	County General Funds, FMA, BRIC	Long Term	Medium	Continue - Not Started

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
21	Look at a mechanism to reduce a major flood event at the County Fairgrounds.	Flooding	Sweet Grass County	County Planning;	High	County General Funds, USGS	Medium Term	High	Continue - Not Started
22	Promote participation in the National Flood Insurance Program.	Flooding	Sweet Grass County	County Floodplain Administrator, County Planning	Low	County Floodplain Admin General Funds, Staff Time, FEMA NFIP CAP	Annual Implementation	High	Continue - In Progress
23	Encourage emergency response partners to participate in dam exercises.	Dam Failure	Sweet Grass County, Big Timber	County DES, County and City First Responders	Low	County General Funds, Staff Time	Annual Implementation	High	In Progress. Tabletop exercise hosted by East Boulder Mine for their TSF held on May 13, 2021. Attended by Local, State and Fed partners. (9-6-2022 CB)
24	Target potentially affected citizens with information about the dam failure risk in their area and include information on exercises.	Dam Failure	Sweet Grass County, Big Timber	County DES, LEPC; PIO	Low	County General Funds, Sibanye-Stillwater Mining, MT DNRC Dam Safety Grants	Annual Implementation	High	In Progress. Tabletop exercise hosted by East Boulder Mine for their TSF held on May 13, 2021. Attended by Local, State and Fed partners. (9-6-2022 CB)
25	Monitor and facilitate a study for rehabilitation of the poor-condition Upper North and West Glasston Dams, and the Lower Glasston Dam.	Dam Failure	Sweet Grass County	MT DNRC Dam Safety, County Planning	High	DNRC Staff Time, FEMA HHPD, General Funds	Medium Term	Medium	New For 2024
26	Provide public outreach on compliance with the County Floodplain Ordinance and the floodplain permitting process.	Flooding	Sweet Grass County, Big Timber	County and City Planning; PIO	Low	County & City General Funds, Staff Time – Floodplain Admin.	Annual Implementation	High	Continue - In Progress
27	Prevent and control communicable disease through surveillance, testing and immunization.	Communicable Disease	Sweet Grass County, Big Timber	County and City Public Health; PIO	Low	County General Funds, Staff Time	Annual Implementation	High	Annual Implementation.
28	Monitor disease outbreaks in neighboring counties and states	Communicable Disease	Sweet Grass County, Big Timber	County and City Public Health; PIO	Low	County General Funds, Staff Time	Annual Implementation	High	Annual Implementation.

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
	through the use of the Health Alert Network.								
29	Collaborate with community partners to train and exercise public health emergency response and mass vaccination plans.	Communicable Disease	Sweet Grass County, Big Timber	County and City Public Health; Sheriff's Office, PIO	Low	County General Funds, Staff Time	Annual Implementation	High	Annual Implementation.
30	Provide more opportunities for public education on Public Health topics.	Communicable Disease	Sweet Grass County, Big Timber	County and City Public Health; PIO	Low	County General Funds, Staff Time	Annual Implementation	High	Continue - In Progress
31	Plan for a disease outbreak in livestock.	Communicable Disease	Sweet Grass County	County Extension, MT Dept. Livestock; Sheriff's Office, DES	Moderate	County General Funds, MT Dept. of Livestock	Annual Implementation	Medium	Continue - Not Started
32	Conduct vulnerability assessments of critical cyber infrastructure systems.	Cyber Attack	Sweet Grass County, Big Timber	County Commissioners, City of Big Timber; DES, IT , Sheriff's Office	Moderate	BRIC Grants, State and Local Cybersecurity Grant Program	Short Term	High	Annual Implementation. 1) Sheriff's Office and dispatch has implemented multifactor authentication in Nov/Dec of 2021. (9-6-2022 CB); 2) County implemented training in 2021 through MACo for employees that do not have cybersecurity training. (9-6-2022 CB); 3) County implemented of-site cloud backup for County Annex server system in early 2022). (9-6-2022 CB); 4) County participates in annual cybersecurity assessment around

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
									Oct. to Dec. (9-6-2022 CB)
33	Develop and implement a training protocol on network security and email-related threats.	Cyber Attack	Sweet Grass County, Big Timber	County & Big Timber HR; DES, IT, Sheriff's Office	Moderate	BRIC Grants, State and Local Cybersecurity Grant Program, Staff Time	Annual Implementation	High	Annual Implementation. County implemented training in 2021 through MACo for employees that do not have cybersecurity training. (9-6-2022 CB)
34	Continue preparedness and response planning efforts on hazmat issues through the LEPC including working with private, local, regional, and state groups.	Hazmat	Sweet Grass County, Big Timber	County DES; All departments and responders	Moderate	County General Funds, FEMA Assistance to Firefighters Grants, BRIC Grants	Annual Implementation	High	Annual Implementation. Local responders attended Pipeline exercises hosted by the MLGPA and other groups in January 2019 and 2022. (9-6-2022 CB)
35	Ensure local emergency responders have adequate training to respond to hazmat events consistent with local capabilities.	Hazmat	Sweet Grass County, Big Timber	County DES, Sheriff's Dept.; All county and municipal department heads	Low	County General Funds, FEMA Assistance to Firefighters Grants, EMPG, BRIC Grants	Annual Implementation	High	Annual Implementation. Local responders attended Pipeline exercises hosted by the MLGPA and other groups in January 2019 and 2022. (9-6-2022 CB)
36	Conduct tabletop exercise on evacuation procedures for homes near transportation networks that commonly carry hazardous materials.	Hazmat, Transportation Accidents	Sweet Grass County, Big Timber	County DES; All county and municipal department heads	Low	County General Funds, FEMA Assistance to Firefighters Grants, EMPG, BRIC Grants	Annual Implementation	High	Annual Implementation. Local responders attended Pipeline exercises hosted by the MLGPA and other groups in January 2019 and 2022. (9-6-2022 CB)

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
37	Invite Montana Rail Link to be part of the LEPC and participate in exercises once every two or three years.	Hazmat, Transportation Accidents	Sweet Grass County, Big Timber	County DES , MRL	Low	County General Funds, FEMA Assistance to Firefighters Grants, EMPG, BRIC Grants, MRI	Annual Implementation	High	Annual Implementation. 1) MRL has assigned 1 or 2 employees to attend the LEPC monthly meetings; 2) MRL has sent invitations to SGC first responders to attend exercises at various MLR locations free of charge. (9-6-2022 CB)
38	Implement preservation/stabilization measures of slide-prone areas.	Landslide	Sweet Grass County	County Roads Dept. ; DES, Planning	High	USDA Emergency Watershed Protection (EWP) Grant, USDA NRCS Conservation Programs, USDA Water Processes and Water Resources Grants	Annual Implementation	High	Continue - Not Started
39	Encourage state and federal agencies to implement preservation and stabilization measures at slide-prone areas, as needed.	Landslide	Sweet Grass County	County Roads Dept. ; DES, Planning, Commissioners	High	USDA Emergency Watershed Protection (EWP) Grant, USDA NRCS Conservation Programs, USDA Water Processes and Water Resources Grants	Short Term	High	Continue - Not Started
40	Continue to conduct active shooter and lock down training for employees of critical facilities and at schools.	Human Conflict	Sweet Grass County, Big Timber	Sheriff's Dept. , DES, County and City First Responders	Low	County General Funds, Staff Time	Annual Implementation	High	Continue - In Progress

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
41	Conduct comprehensive vulnerability assessments of critical facilities and schools.	Human Conflict	Sweet Grass County, Big Timber	Sheriff's Dept. , County and City First Responders	Moderate	County General Funds, Staff Time	Annual Implementation	High	In Progress. 1) Staff from the Sheriff's Office and the Schools met to review the existing plans and to identify vulnerabilities. Updates to the school plans were made and distributed in 2021 and Aug.2022. (9-6-2022 CB)
42	Review Crisis Action Plans in all schools and the hospital to ensure they include adequate security measures.	Human Conflict	Sweet Grass County, Big Timber	Sheriff's Dept. , DES, County and City First Responders	Moderate	County General Funds	Short Term	High	In Progress. 1) Staff from the Sheriff's Office and the Schools met to review the existing plans and to identify vulnerabilities. Updates to the school plans were made and distributed in 2021 and Aug.2022. (9-6-2022 CB)
43	Consider physical hardening of critical facilities (i.e. anti-vehicle barricades/interior barricades for locking doors/perimeter fencing/controlled access gates).	Human Conflict	Sweet Grass County, Big Timber	Sheriff's Dept. , County and City First Responders	Moderate	City & County General Funds, School District Budget, Staff Time	Annual Implementation	High	Continue - Not Started
44	Purchase additional handheld radios.	Multi: Cyber-Attack, Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind,	Sweet Grass County	Sheriff's Dept. , DES, County and City First Responders	Low	County General Funds	Annual Implementation	High	In Progress. Sheriff's Office has purchased several radios in 2021 and Aug. 2022 to replace outdated units. (9-6-2022 CB)

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
		Transportation Accidents, Volcanic Ash, Wildfire							
45	Research locations with poor communications and install additional radio repeaters.	Multi: Cyber-Attack, Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Sweet Grass County	Sheriff's Dept. , DES, County and City First Responders	Moderate	First Responder Dept. Operating Budgets, AFG Grants, Safer Grants, VFA Grants, FP&S Grants	Long Term	High	Continue - In Progress
46	Improve communications equipment in the mobile command/mobile dispatch trailer.	Multi: Cyber-Attack, Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Sweet Grass County	Sheriff's Dept. , DES, County and City First Responders	Moderate	First Responder Dept. Operating Budgets, AFG Grants, Safer Grants, VFA Grants, FP&S Grants	Medium Term	Medium	Continue - Not Started
47	Update the siren warning system in Big Timber.	Multi: Dam Failure, Flooding, Summer Weather, Winter Weather, Tornado/Wind, Volcanic Ash, Wildfire	Big Timber	County DES , Big Timber City Council	Moderate	BRIC Grant, EMPG, Law Enforcement Agency General Funds	Short Term	High	Continue - Not Started
48	Provide appropriate training for first responders and ranchers when appropriate.	Multi: Avalanche, Communicable Disease, Dam Failure, Earthquake, Flooding,	Sweet Grass County, Big Timber	Sheriff's Dept. , DES, County and City First Responders	Low	BRIC Grant, HSGP, EMPG, Law Enforcement Agency General	Annual Implementation	High	Continue - In Progress

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
		Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire				Funds, Staff Time, FP&S Grants			
49	Obtain both stationary and portable generators and associated equipment for backup power at critical facilities.	Multi: Cyber-Attack, Dam Failure, Earthquake, Flooding, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Volcanic Ash, Wildfire	Sweet Grass County, Big Timber	Sheriff's Dept., DES , County and City First Responders	Moderate	County General Funds, EMPG ARPA Grant, BRIC, FEMA HMGP Grant	Medium Term	High	In Progress. SG County had generator installed at Civic Center in Big Timber during spring of 2022. This facility is the Emergency Shelter. (1-9-2023 CB) The generator for the County Annex is ongoing project. (1-9-2023 CB)
50	Finalize Standard Operating Procedures for when Interstate-90 is closed.	Multi: Dam Failure, Drought, Flooding, Summer Weather, Winter Weather, Tornado/Wind, Volcanic Ash, Wildfire	Sweet Grass County	County DES ; County and City First Responders, MT DOT	Low	County General Funds, Staff Time	Short Term	Medium	Continue - In Progress
51	Encourage property owners to post reflective address signs at the end of their driveways to enhance emergency response efforts.	Multi: Dam Failure, Drought, Flooding, Summer Weather, Winter Weather, Tornado/Wind, Volcanic Ash, Wildfire	Sweet Grass County	County Planning Dept. ; DES, Responders, PIO	Moderate	County General Funds, Staff Time, Homeowners	Annual Implementation	High	In Progress. Several notices were sent out on FB to encourage people to update their address signs. No one has responded. (9-6-2022)
52	Expand the county website and social media presence to include hazard	Multi: Avalanche, Communicable Disease, Cyber-	Sweet Grass County, Big Timber	County DES , PIO, Big Timber City Council	Low	County and City General Funds, Staff Time	Annual Implementation	High	Annual Implementation.

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
	awareness and mitigation opportunities.	Attack, Dam Failure, Drought, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire							
53	Use GIS data to better assist with mitigation.	Multi: Avalanche, Dam Failure, Drought, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Sweet Grass County	County Planning Dept.; DES, Dispatch	Moderate	County and City General Funds, Staff Time	Annual Implementation	Medium	Continue - Not Started
54	Determine how to more efficiently update rural addressing for distribution to first responders.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Sweet Grass County	County Planning Dept.; DES, Dispatch	Low	County and City General Funds, Staff Time	Short Term	Medium	Continue - In Progress
55	Update the county growth policy to address all hazards and encourage growth in low hazard areas.	Multi: Dam Failure, Drought, Earthquake, Flooding, Hazmat,	Sweet Grass County	County DES, Planning Board, City and County	Moderate	County and City General Funds, Staff Time	Medium Term	High	Continue - In Progress

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
		Landslide, Summer Weather, Winter Weather, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire		Planning Departments					
56	Update countywide subdivision regulations to adopt higher minimum standards for subdivisions that improve their all-hazard disaster resistance.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Sweet Grass County	County DES, Planning Board;	Low	County and City General Funds, Staff Time	Medium Term	High	Continue - Not Started
57	Secure a Courthouse/Ambulance Hall/EOC generator. Replace 20+ years. Generator for emergency backup for CH/EMS/EOC	Multi: Cyber-Attack, Dam Failure, Earthquake, Flooding, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Volcanic Ash, Wildfire	Sweet Grass County	Sweet Grass County/Pioneer Medical Center	Moderate	County General Funds, EMPG ARPA Grant, BRIC, FEMA HMGP Grant	Short Term	Medium	New in 2024
58	Identification of at-risk populations who may need additional assistance with evacuation during hazard events. Conduct public awareness education and survey to identify set up notification best method-phone, computer, family outreach.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Volcanic Ash, Wildfire	Sweet Grass County	Public Health, Local Clinics/ Churches/Sr Center (Includes Adjacent Area)	Moderate	DHHS, Area Agency on Aging, Local Health Depts. Budgets	Short Term	Medium	New in 2024
58	Secure additional public water supply storage to give continuous supply of drinking water to community in the	Drought, flooding	City of Big Timber	Big Timber Public Works	Very High	USDA Emergency Watershed Protection (EWP)	Medium Term	High	New in 2024

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
	event that the treatment plant has been compromised or forced to shut down.					Grant, USDA NRCS Conservation Programs, USDA Water Processes and Water Resources Grants			

