

Annex E Chouteau County

E.1 Mitigation Planning and County Planning Team

This County Annex builds on previous versions of the Chouteau County Hazard Mitigation Plan completed in 2017. As part of the regional planning process, the County established a County Planning Team (CPT) to develop the mitigation plan and identify potential mitigation projects. The following incorporated communities participated in the DMA planning process with the County:

- City of Fort Benton
- Town of Big Sandy

The Towns of Geraldine and Highwood participated in the 2017 County HMP and was invited to participate in the 2023 Regional HMP but was unable to fully participate due to limited staff availability. Information on the Town's capabilities, vulnerabilities, and activities have been retained in the plan document for reference and in case the Towns are able to join the regional planning process in the future.

More details on the planning process followed and how the counties, municipalities and stakeholders participated can be referenced in Chapter 3 of the base plan. A full list of local government departments and stakeholders that participated can be found in Appendix A.

E.2 Community Profile

E.2.1 Geography and Climate

Chouteau County is in north-central Montana, about 100 miles south of the Canadian border and covers 3,936 square miles. The terrain is primarily gently rolling plains that are dissected in the central portion by the eastward-flowing Missouri River. The land is a complex of uplands, valleys, coulees, and broad plains and two mountain ranges, the Bears Paw to the north and the Highwoods to the south. The primary surface water sources are the Missouri, Marias, and Teton Rivers. Streams of secondary importance are Highwood, Shonkin, Big Sandy and Arrow Creek. The elevations in the County range from 7,680 feet in the Highwoods to less than 2,300 where the Missouri River exits the County. Figure E-1 displays a map of the County.

Chouteau County has a moderate, seasonal climate. The average daily high temperature in the County is between 80 and 90 degrees in the summer and between 20 and 40 degrees in the winter. The average daily low temperature in Chouteau County is between 40 and 55 in the summer season and between 10 and 25 in the winter. Chouteau County averages about 13 inches of rain per year with the vast majority of the precipitation occurring from April to September. Snowfall averages about 44 inches per year. Chinook winds can lead to rapid snow melt conditions which can lead to flooding of small streams and rivers.

E.2.2 Population Trends

According to the 2020 U.S. Census, Chouteau County has a population size of 5,731. The U.S. Census Bureau reported the County experienced a 0.6% decrease in population since the 2010 census, with the greatest concentration of people residing in the City of Fort Benton. Specific demographic variables for the County are provided in the Social Vulnerability section in Table E-1.

Table E-1 Population Trends in Chouteau County 1980-2020

Incorporated Community	1980	1990	1980-1990 Change	2000	1990-2000 Change	2010	2000-2010 Change	2020	2010-2020 Change
City of Fort Benton	1,693	1,660	-1.9%	1,596	-3.9%	1,478	-7.4%	1,410	-4.6%
Town of Big Sandy	835	744	-10.9%	644	-13.4%	654	1.6%	637	-2.5%
Town of Geraldine	305	299	-2.0%	284	-5.0%	234	-17.6%	174	-25.6%
Town of Highwood	-	-	0%	190	0%	170	-10.5%	229	-29.4%
Chouteau County	6,092	5,452	-10.5%	5,771	5.9%	5,765	-0.1%	5,731	-0.6%

Source: US Census 2010-2020, U.S. Decennial Census 1980-2000

E.2.3 Demographics

The 2016-2020 American Community Survey (ACS) reports demographic estimates for Chouteau County, summarized in the Table E-2 below.

Table E-2 Demographic Estimates for Chouteau County (2016-2020 ACS)

Characteristic	Chouteau County	State of Montana
Percentage of persons below 150% poverty estimate	24.8%	24.1%
Unemployment Rate estimate	4.1%	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	15.3%	21.4%
Percentage of persons with no high school diploma (age 25+) estimate	7.0%	7.5%
Percentage uninsured in the total civilian noninstitutionalized population estimate	7.2%	9.6%
Percentage of persons aged 65 and older estimate	21.1%	22.1%
Percentage of persons aged 17 and younger estimate	22.9%	21.3%
Percentage of civilian noninstitutionalized population with a disability estimate	10.9%	15.6%
Percentage of single-parent households with children under 18 estimate	5.0%	3.9%

Characteristic	Chouteau County	State of Montana
Percentage of persons (age 5+) who speak English "less than well" estimate	0.3%	0.3%
Minority (other than white non-Hispanic) estimate	23.1%	14.6%
Percentage of housing in structures with 10 or more units estimate	3.6%	3.3%
Percentage of mobile homes estimate	13.8%	13.1%
Percentage of occupied housing units with more people than rooms estimate	1.6%	2.1%
Percentage of households with no vehicle available estimate	6.3%	4.9%
Percentage of persons in group quarters estimate	1.3%	2.8%
Percentage Female estimate	49.4%	49.7%
Median Age estimate	42.1	40.1
Median Gross Rent estimate	\$404	\$836
Median House Value estimate	\$157,700	\$244,900
Percent Unoccupied Housing Units estimate	22.4%	15.3%

Source: ACS 2016-2020

E.2.4 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. Additional details on social vulnerability and the NRI can be found in Section 4.1.1.5 of the Base Plan.

The NRI ranked the social vulnerability in Chouteau County as "Relatively High", with a score of 54.6. This is higher than 16% of counties in Montana. Refer to HIRA for more information on social vulnerability. Demographic factors that can influence the social vulnerability rating are displayed in Table 3. The ACS reports that a significant portion of the population in Chouteau County (around a quarter) is below the 150% poverty level. Additionally, 15.3% of the population in Chouteau County experiences the housing cost-burden, which is 5% greater than the State of Montana average. Nearly a quarter of the population is aged 17 and younger, indicating that many individuals are still dependent on a caretaker, and 5% of families are single-parent households with children under 18, which is nearly double that of the Montana average. Finally, 3.6% of houses are structures with 10 or more units, which is slightly higher than the state average.

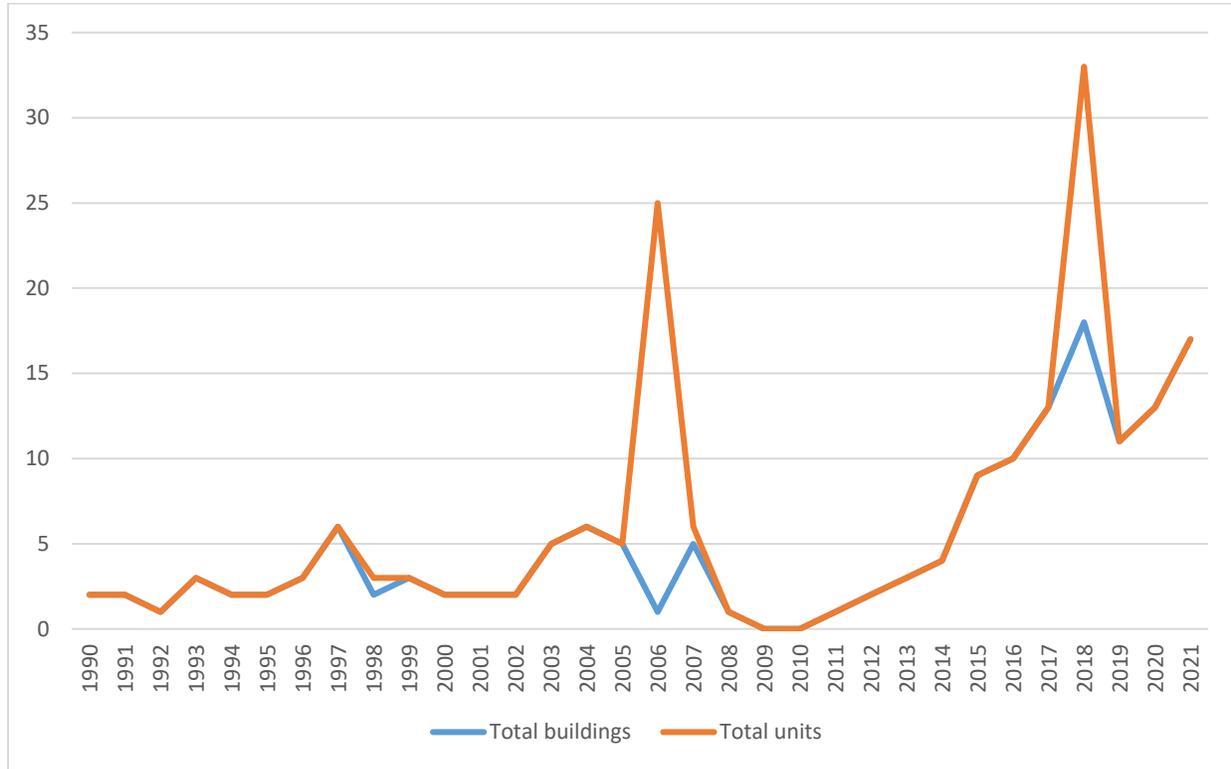
E.2.5 Development Trends

Much of the population growth in Chouteau County is occurring in residential areas, where there have been single family home developments of 30 or more. There also has been a development of a new fertilizer plant, a EGT elevator and a new HEMP Plant. Chouteau County stated in their plan update guide that 90% of new developments will be outside of its established special flood hazard areas.

The U.S. Census Bureau Building Permit Survey provides information and local statistics on new privately-owned residential construction. Figure E-2 below displays the new privately owned housing unit authorizations by year in Chouteau County. This data indicates that there was a significant increase in unit authorizations in 2014, a decline in 2018 and then another rise since 2019 onward. An increase in the

number of housing unit authorizations in the county could indicate an increase in the total number of buildings exposed to hazard events. However, it is unknown how this development will impact vulnerability to specific hazards, such as wildfire and flooding.

Figure E-2 New Privately Owned Housing Unit Authorizations



Source: US Census Bureau, https://www.census.gov/construction/bps/data_visualizations/index.html

E.2.6 Economy

Table E-3 below provides a brief overview of economic characters in Chouteau County. The following information is provided by the U.S. Census Bureau American Community Survey (ACS) 5-year estimates from 2016-2020.

Table E-3 Chouteau County Economic Profile

Economic Characteristics	Chouteau County
Families Below Poverty Level	12%
Individuals Below Poverty Level	14.6%
Median Home Value	\$157,700
Median Household Income	\$48,237
Per Capita Income	\$26,856
Population > 16 Years Old in Labor Force	57.3%
Population Employed	54%

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

Table E-4 below shows the breakdown of employment in Chouteau County by the industry sector. According to the ACS, the leading employment sectors in the County are "Agriculture, forestry, fishing and hunting, and mining and Educational services, and health care and social assistance", which composes nearly half of the total employment in the County, followed by the "Public Administration" industry.

Table E-4 Chouteau County Occupation by Industry Profile

Industry	Population Employed	Percent of Labor Force
Agriculture, forestry, fishing and hunting, and mining	675	26.4%
Construction	167	6.5%
Manufacturing	63	2.5%
Wholesale trade	66	2.6%
Retail trade	178	7%
Transportation and warehousing, and utilities	111	4.3%
Information	1	0.03%
Finance and insurance, and real estate and rental and leasing	121	4.7%
Professional, scientific, and management, and administrative and waste management services	117	4.6%
Educational services, and health care and social assistance	565	22.1%
Arts, entertainment, and recreation, and accommodation and food services	142	5.5%
Other services, except public administration	66	2.6%
Public administration	287	11.2%

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

E.3 Hazard Identification and Risk Assessment

E.3.1 Identified Hazards

The CPT reviewed significant hazards for inclusion in the hazard mitigation plan. Several changes were made from the 2017 Chouteau County Hazard Mitigation Plan to be consistent with the 2023 Montana Central Region Hazard Mitigation Plan. In this plan update, railroad, aircraft, and highway incidents were combined to transportation incidents, which encompass all modes of transportation. Wildfire and structure fire were also combined into one wildfire hazard and the avalanche hazard was removed from the plan.

Chouteau County's Overall Hazard Significance* Summary Table provides a summary of the overall hazard significance for the hazards evaluated in this plan, showing variability by jurisdiction in Table E-5 below. More details on hazards can be found in Chapter 4 of the base plan.

Table E-5 Chouteau County Overall Hazard Significance by Hazard and Jurisdiction*

Hazard	Chouteau County	City of Fort Benton	Town of Big Sandy	Town of Geraldine	Town of Highwood
Communicable Disease	Medium	Medium	Medium	Medium	Medium
Cyber-Attack	Medium	Medium	Low	Low	Low
Dam Failure	Medium	Medium	Low	Low	Low
Drought	High	High	High	High	High
Earthquake	Low	Medium	Low	Low	Low
Flooding	Medium	High	Medium	Medium	Medium
Hazardous Materials Incident	Low	Medium	Low	Low	Low
Landslide	Low	Low	Low	Low	Low
Severe Summer Weather	Medium	Medium	Medium	Medium	Medium
Severe Winter Weather	Medium	Medium	Medium	Medium	Medium
Human Conflict	Medium	Medium	Low	Low	Low
Tornadoes & Windstorms	High	High	Medium	Medium	Medium
Transportation Accidents	Medium	Medium	Medium	Medium	Medium
Volcanic Ash	Low	Low	Low	Low	Low
Wildfire	Medium	High	Medium	Medium	Low

*Significance based on a combination of Geographic Extent, Potential Magnitude/Severity and Probability as defined below.

Geographic Extent	Probability of Future Occurrences
<u>Negligible</u> : Less than 10 percent of planning area or isolated single-point occurrences	<u>Unlikely</u> : Less than 1 percent probability of occurrence in the next year or has a recurrence interval of greater than every 100 years.
<u>Limited</u> : 10 to 25 percent of the planning area or limited single-point occurrences	<u>Occasional</u> : Between a 1 and 10 percent probability of occurrence in the next year or has a recurrence interval of 11
<u>Significant</u> : 25 to 75 percent of planning area or frequent	

<p>single-point occurrences</p> <p><u>Extensive</u>: 75 to 100 percent of planning area or consistent single-point occurrences</p> <p>Potential Magnitude/Severity</p> <p><u>Negligible</u>: Less than 10 percent of property is severely damaged, facilities and services are unavailable for less than 24 hours, injuries and illnesses are treatable with first aid or within the response capability of the jurisdiction.</p> <p><u>Limited</u>: 10 to 25 percent of property is severely damaged, facilities and services are unavailable between 1 and 7 days, injuries and illnesses require sophisticated medical support that does not strain the response capability of the jurisdiction, or results in very few permanent disabilities.</p> <p><u>Critical</u>: 25 to 50 percent of property is severely damaged, facilities and services are unavailable or severely hindered for 1 to 2 weeks, injuries and illnesses overwhelm medical support for a brief period of time or result in many permanent disabilities and a few deaths. overwhelmed for an extended period of time or many deaths occur.</p> <p><u>Catastrophic</u>: More than 50 percent of property is severely damaged, facilities and services are unavailable or hindered for more than 2 weeks, the medical response system is overwhelmed for an extended period of time, or many deaths occur.</p>	<p>to 100 years.</p> <p><u>Likely</u>: Between 10 and 90 percent probability of occurrence in the next year, or has a recurrence interval of 1 to 10 years</p> <p><u>Highly Likely</u>: Between 90 and 100 percent probability of occurrence in the next year or has a recurrence interval of less than 1 year.</p> <p>Overall Significance</p> <p><u>Low</u>: Two or more of the criteria fall in the lower classifications or the event has a minimal impact on the planning area. This rating is also sometimes used for hazards with a minimal or unknown record of occurrences/impacts or for hazards with minimal mitigation potential.</p> <p><u>Medium</u>: The criteria fall mostly in the middle ranges of classifications and the event’s impacts on the planning area are noticeable but not devastating. This rating is also sometimes utilized for hazards with a high impact rating but an extremely low occurrence rating.</p> <p><u>High</u>: The criteria consistently fall along the high ranges of the classification and the event exerts significant and frequent impacts on the planning area. This rating is also sometimes utilized for hazards with a high psychological impact or for hazards that the jurisdiction identifies as particularly relevant.</p>
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E.3.2 Building Inventory and Assets

People, property, critical facilities/infrastructure, and other important assets in Chouteau County are exposed to the hazards identified in this plan. Table E-6 summarizes the property inventory for the County and each participating jurisdiction, based on improvement value (i.e., structures) and includes the building count and value grouped by parcel type and jurisdiction. This is an assessment of the overall property exposed within the County and by jurisdiction.

Assets inventoried to determine vulnerability include people, structures, critical facilities, and natural, historic, or cultural resources. For the regional planning process, locally available GIS databases were utilized. Parcel and assessor data was obtained through Montana’s MSDI Cadastral website. This Statewide database provided the basis for building exposure and property types. The focus of the analysis was on “improved” or developed parcels. These parcels were identified based on an improvement value greater than zero. Property Types were used to identify occupancy types as shown in the following table, which includes summations of total improved value for the various property types.

Table E-6 Chouteau County Building Inventory and Value by Jurisdiction

Jurisdiction	Improved Parcels	Improved Value	Content Value	Total Value
Big Sandy	388	\$35,353,997	\$22,085,821	\$57,439,818
Fort Benton	831	\$119,014,123	\$77,102,917	\$196,117,040
Geraldine	181	\$10,778,333	\$6,217,007	\$16,995,340
Chouteau County	1,894	\$231,969,083	\$223,364,453	\$455,333,536
Total	3,294	\$397,115,536	\$328,770,197	\$725,885,733

Source: MSDI Cadastral database, <https://msl.mt.gov/geoinfo/msdi/cadastral/>

Table E-7 shows the total building exposure within Chouteau County based on an analysis of improved parcels is nearly \$726 million, with nearly \$400 million in improved value properties and nearly \$329 million of contents at-risk. In regard to total building exposure in Chouteau County, the City of Fort Benton accounts for \$196,117,040 (27%). Residential properties represent the greatest portion of structures in the County, accounting for \$174,516,399 of the nearly \$400 million total (44%). Each jurisdiction in Chouteau County's total building exposure by property type is shown in Table E-7 below.

Table E-7 Chouteau County Total Exposure by Jurisdiction and Property Type

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value
Big Sandy	Agricultural	1	\$19,930	\$19,930	\$39,860
	Exempt	27	\$8,786,505	\$8,786,505	\$17,573,010
	Residential	359	\$26,536,352	\$13,268,176	\$39,804,528
	Vacant	1	\$11,210	\$11,210	\$22,420
	Total	388	\$35,353,997	\$22,085,821	\$57,439,818
Fort Benton	Commercial	1	\$119,330	\$119,330	\$238,660
	Exempt	45	\$22,108,670	\$22,108,670	\$44,217,340
	Industrial	5	\$6,448,390	\$9,672,585	\$16,120,975
	Residential	776	\$90,270,803	\$45,135,402	\$135,406,205
	Vacant	4	\$66,930	\$66,930	\$133,860
	Total	831	\$119,014,123	\$77,102,917	\$196,117,040
Geraldine	Exempt	15	\$1,441,010	\$1,441,010	\$2,882,020
	Industrial	1	\$103,630	\$155,445	\$259,075
	Residential	163	\$9,226,283	\$4,613,142	\$13,839,425
	Vacant	2	\$7,410	\$7,410	\$14,820
	Total	181	\$10,778,333	\$6,217,007	\$16,995,340
Chouteau County	Agricultural	1,393	\$148,459,960	\$148,459,960	\$296,919,920
	Exempt	31	\$1,937,696	\$1,937,696	\$3,875,392
	Industrial	6	\$31,273,700	\$46,910,550	\$78,184,250
	Residential	445	\$48,482,961	\$24,241,481	\$72,724,442
	Vacant	19	\$1,814,766	\$1,814,766	\$3,629,532
	Total	1,894	\$231,969,083	\$223,364,453	\$455,333,536
	Grand Total	3,294	\$397,115,536	\$328,770,197	\$725,885,733

Source: MSDI Cadastral database, <https://msl.mt.gov/geoinfo/msdi/cadastral/>

Critical Facilities, Infrastructure, and Other Important Community Assets

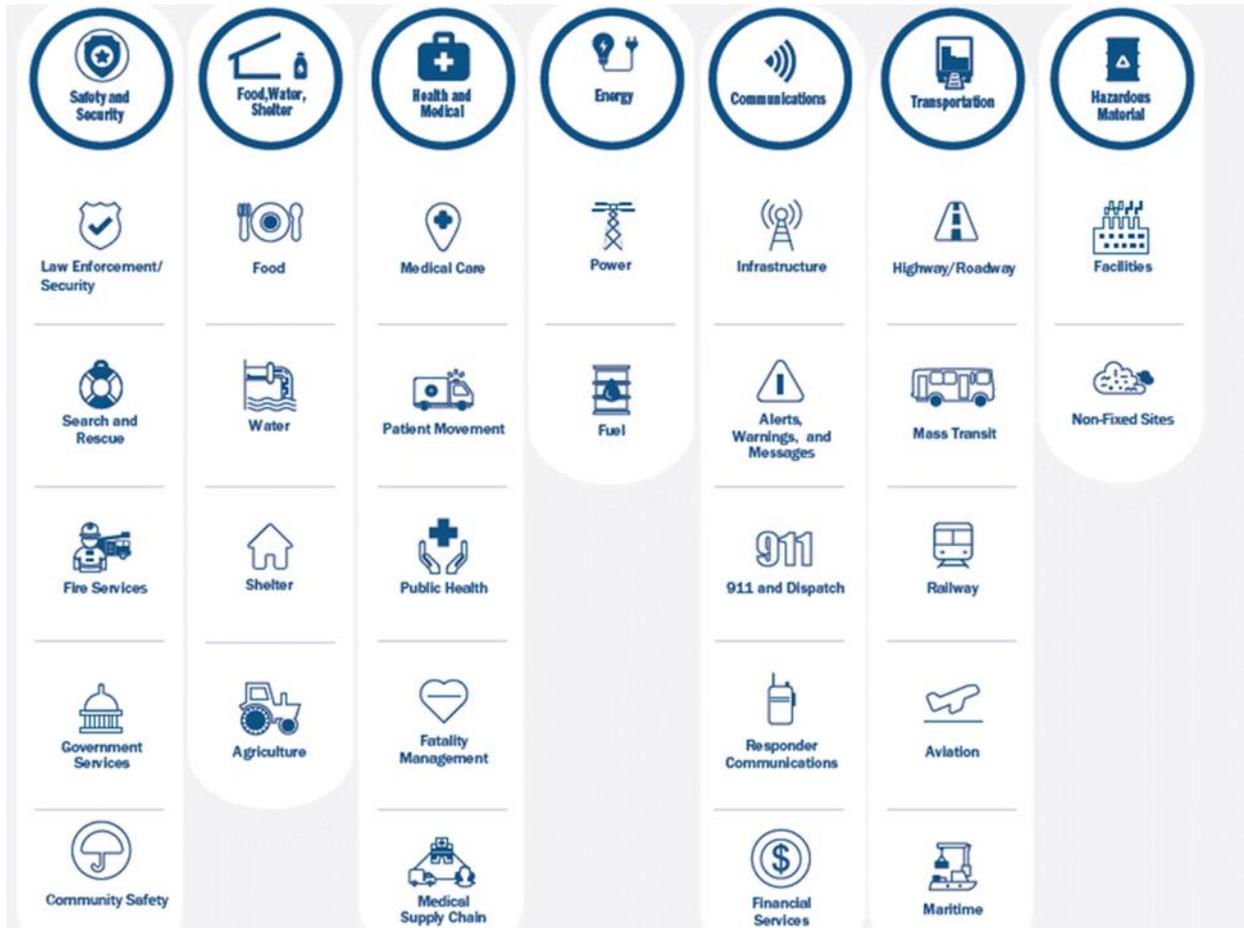
A critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation. Much of this data is based on GIS databases associated with the 2022 Homeland Infrastructure Foundation-Level Data (HIFLD). Other critical facility databases were also used, such as the National Bridge Inventory (NBI), with supplementation from the HMPC. Where applicable, this information was used in an overlay analysis for hazards such as dam incidents, flood, and wildfire.

FEMA organizes critical facilities into seven lifeline categories as shown in Figure E-3 below. These lifeline categories standardize the classification of critical facilities and infrastructure that provide indispensable service, operation, or function to a community. A lifeline is defined as providing indispensable service that enables the continuous operation of critical business and government functions, and is critical to human health and safety, or economic security. These categorizations are particularly useful as they:

- Enable effort consolidations between government and other organizations (e.g., infrastructure owners and operators).
- Enable integration of preparedness efforts among plans; easier identification of unmet critical facility needs.
- Refine sources and products to enhance awareness, capability gaps, and progress towards stabilization.
- Enhance communication amongst critical entities, while enabling complex interdependencies between government assets.
- Highlight lifeline related priority areas regarding general operations as well as response efforts.

Table E-8 below summarizes the number of critical facilities by jurisdiction. Figure E-4 through Figure E-7 displays the location of critical facilities by FEMA Lifeline in Chouteau County's jurisdictions.

Figure E-3 FEMA Lifeline Categories



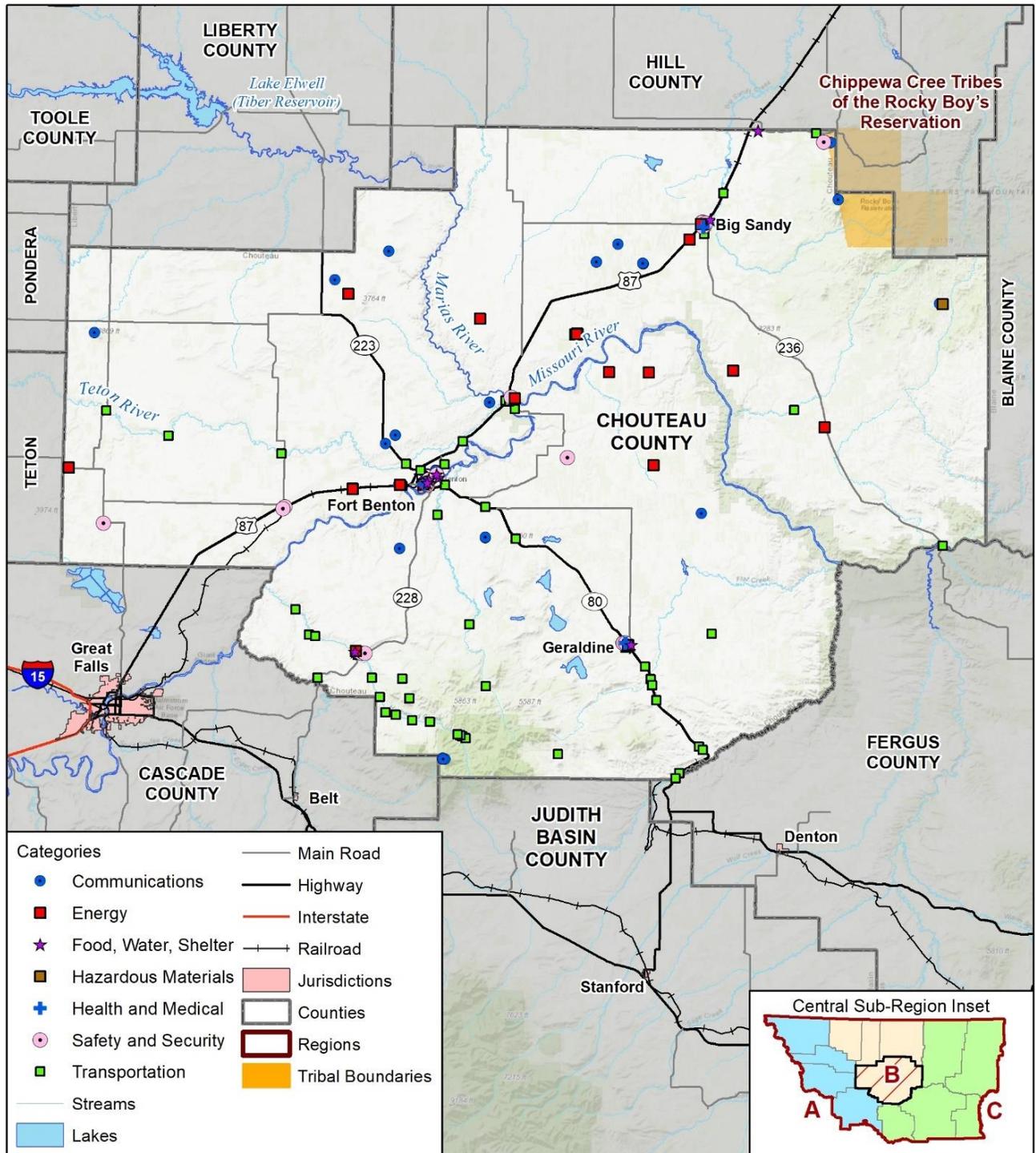
Source: FEMA

Table E-8 Chouteau County Critical Facilities by Jurisdiction

Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Material	Health and Medical	Safety and Security	Transportation	Total
Big Sandy	-	1	-	-	1	5	1	8
Fort Benton	3	-	3	-	1	9	-	16
Geraldine	-	1	-	-	1	4	1	7
Chouteau County	36	24	5	1	-	10	50	126
Total	39	26	8	1	3	28	52	157

Source: HIFLD 2022, MT DES, National Bridge Inventory

Figure E-4 Chouteau County Critical Facilities

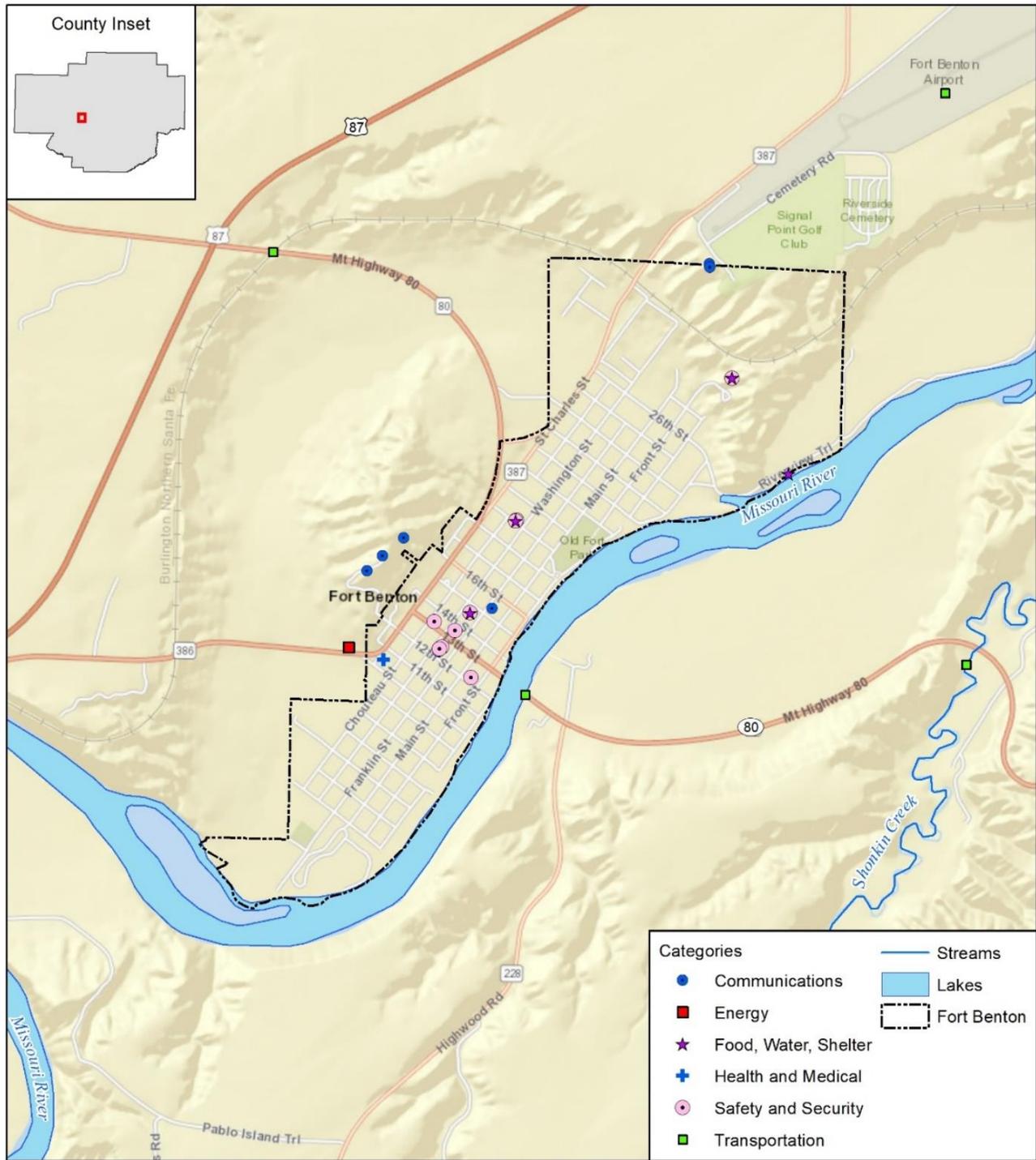


Map compiled 9/2022;
intended for planning purposes only.
Data Source: Montana State Library,
Montana DES, NIB, HIFLD

0 10 20 Miles



Figure E-5 City of Fort Benton Critical Facilities

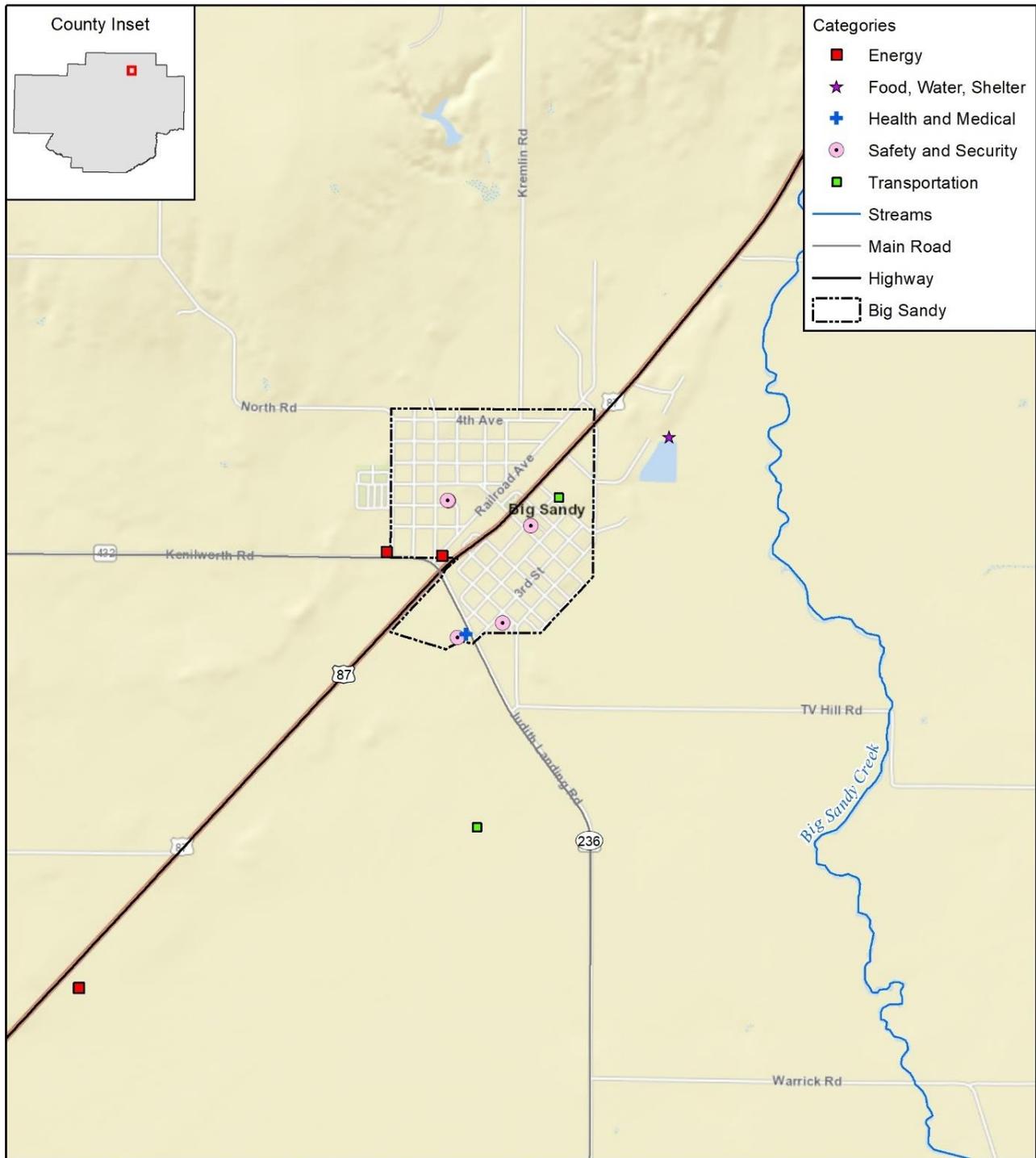


Map compiled 10/2022;
 intended for planning purposes only.
 Data Source: Montana State Library,
 Montana DES, NIB, HIFLD

0 0.5 1 Miles



Figure E-6 Town of Big Sandy Critical Facilities

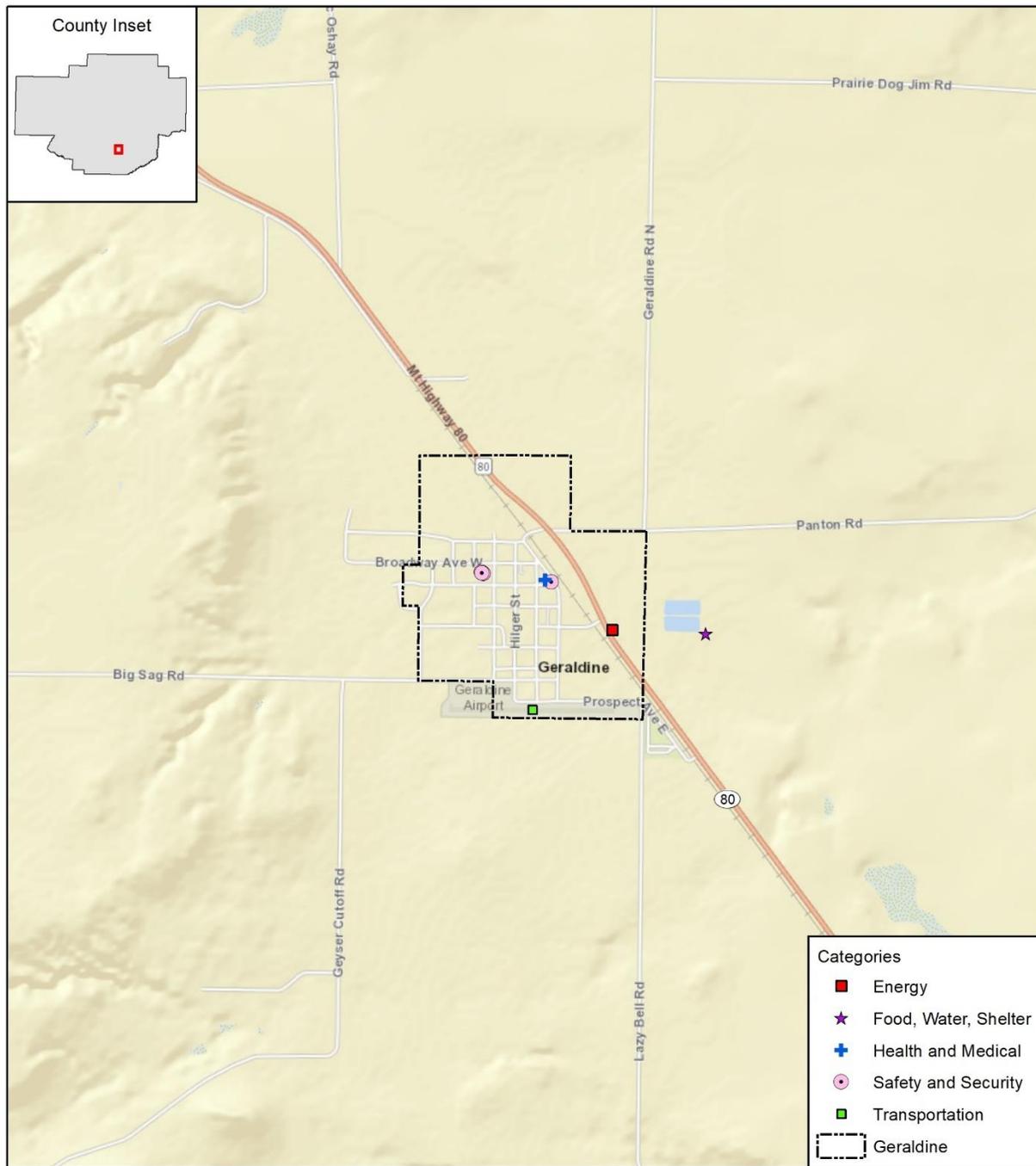


Map compiled 10/2022;
intended for planning purposes only.
Data Source: Montana State Library,
Montana DES, NIB, HIFLD

0 0.5 1 Miles



Figure E-7 Town of Geraldine Critical Facilities



Map compiled 10/2022;
intended for planning purposes only.
Data Source: Montana State Library,
Montana DES, NIB, HIFLD

0 0.5 1 Miles



Natural, Historic, and Cultural Assets

Assessing the vulnerability of Chouteau County to hazards also involves inventorying the natural, historical, and cultural assets of the area. This step is important for the following reasons:

- The community may decide that these types of resources warrant more protection due to their unique and irreplaceable nature and contribution to the overall economy.
- If these resources are impacted by a hazard, knowing so ahead of time allows for more prudent care in the immediate aftermath, when the potential for additional impacts are higher.
- The rules for reconstruction, restoration, rehabilitation, and/or replacement are often different for these types of designated resources.
- Natural resources can have beneficial functions that reduce the impacts of natural hazards, such as wetlands and riparian habitat, which help absorb and attenuate floodwaters.

Historic and Cultural Assets

By definition, a historic property not only includes buildings or other types of structures, such as bridges and dams, roads, byways, historic landscapes, and many other features. The National Register of Historic Places, managed by the National Park Service and U.S. Department of Interior, is the nation's official list of cultural resources worthy of preservation. Table E-9 below lists the properties that are identified as having cultural and historic significance in Chouteau County as recorded by the National Register of Historic Places.

Table E-9 Historic Properties and Districts on National Registers

Property Name	City/Town	Location	Date Listed
Lewis and Clark Camp at Slaughter River	Big Sandy	40 mi. S of Big Sandy River on Missouri River	12/16/74
Teton River Crossing on the Whoop-Up Trail	Carter	Address Restricted	4/15/93
Baker, I. G., House	Fort Benton	1604 Front St.	11/20/80
Chouteau County Courthouse	Fort Benton	1308 Franklin St.	9/29/80
Chouteau County Jail	Fort Benton	Washington and Fourteenth Sts.	
Citadel Rock	Fort Benton	E of Fort Benton	11/13/74
Eagle Butte School	Fort Benton	Eagle Butte School Rd., 23 mi. off MT 80	1/28/09
Fort Benton	Fort Benton	Front St. (1220 through 1900 block) levee, and bridge	10/15/66
Fort Benton Bridge	Fort Benton	Crosses the Missouri River at Fort Benton	
Fort Benton Bridge	Fort Benton	Spans Missouri River	8/6/80
Fort Benton Engine House	Fort Benton	Front and 15th Sts.	11/20/80
Grand Union Hotel	Fort Benton	14th and Front Sts.	1/2/76
Masonic Building	Fort Benton	1418 Front St.	10/14/80
St. Paul's Episcopal Church	Fort Benton	14th and Chouteau Sts.	9/29/80
First National Bank of Geraldine	Geraldine	311 Main St.	1/9/08
Geraldine Milwaukee Depot	Geraldine	Railroad Ave., approximately 10 mi S of MT 80	3/21/97
Lonetree	Geraldine	S of Geraldine	9/11/80
Shonkin Creek Bridge	Geraldine	Approx. mi. 21 on Shonkin Rd.	3/26/12
Burlington Northern Loma Bridge No. 62.5	Loma	Crosses the Marias River at Loma	
Square Butte Jail	Square Butte	Salsbury Ave.	7/23/98
Square Butte School	Square Butte	NW corner of Diederick St. and Broadway	7/15/13
West Quincy Granite Quarry	Square Butte	Flat Creek Rd.	3/3/00
Virgelle Mercantile and Virgelle State	Virgelle	Co. Rd. 430, approximately 6.3 mi. S of US	4/15/97

Property Name	City/Town	Location	Date Listed
Bank		87	
Judith Landing Historic District	Winifred	Address Restricted	12/6/75

Source: National Register of Historic Places, <https://irma.nps.gov/DataStore/Reference/Profile/2210280>

Natural Resources

Natural resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands preserves sensitive habitats as well as attenuates and stores floodwaters.

Wetlands are a valuable natural resource for communities, due to their benefits to water quality, wildlife protection, recreation, and education, and play an important role in hazard mitigation. Chouteau County encompasses 13 lakes in addition to 12 reservoirs. The Missouri River is the most significant river that runs through Chouteau County.

Endangered Species

A table of endangered and threatened species in the State of Montana, as identified by the U.S. Fish and Wildlife Service, Montana Ecological Services Field Office, can be found in the Assets Summary Section in Chapter 4 of the base plan.

E.4 Vulnerability to Specific Hazards

This section details vulnerability to specific hazards, where quantifiable, only where it differs from that of the Region as a whole. The results of detailed GIS analyses used to estimate potential for future losses are presented here, in addition to maps of hazard areas and details by jurisdiction and building type. For a discussion of the methodology used to develop the loss estimates, refer to Chapter 4 of the base plan. In many cases Chapter 4 contains information that differentiates the risk by county thus the information is not duplicated here. For most of the weather-related hazards the risk does not vary significantly enough from the rest of the Region and thus the reader should refer to Chapter 4. Only unique issues or vulnerabilities are discussed, where applicable.

- Communicable Disease
- Cyber-Attack
- Dam Failure
- Drought
- Earthquake
- Flooding
- Hazardous Materials Incident
- Landslide
- Severe Summer Weather
- Severe Winter Weather
- Human Conflict
- Tornadoes & Windstorms
- Transportation Accidents
- Volcanic Ash
- Wildfire

E.4.1 Communicable Disease

All populations are vulnerable to communicable disease. Elder populations, young children, and individuals with pre-existing medical conditions are more likely to face long lasting impacts from communicable disease. While areas of high population density, such as the City of Fort Benton, are likely to experience a greater number of cases due to a larger population, these larger cities also have greater access to medical resources. Communicable disease is ranked as medium for all counties in the Central Region and there were no noted differences in ranking of communicable disease by jurisdiction in Chouteau County.

Refer to Chapter 4 for a discussion of the communicable disease risk relative to Chouteau County and the Central Region.

E.4.2 Cyber-Attack

All servers, networks, and users are vulnerable to cyber-attacks in Central Montana. Chouteau County is ranked as medium, along with most other counties in the Region. There are no significant variations in vulnerability to cyber-attack between jurisdictions in Chouteau County due to no recorded history of cyber-attacks. However, the Towns of Big Sandy, Geraldine, and Highwood are ranked as low risk due to smaller population in these areas, resulting in less people exposed to cyber-attack, when compared to the City of Fort Benton, which is ranked as medium risk.

Refer to Chapter 4 for a discussion of the cyber-attack risk relative to Chouteau County and the Central Region.

E.4.3 Dam Failure

Dam failure in Chouteau County is ranked as medium. There is one high hazard dams and eight significant hazard dams located in Chouteau County. The table below identifies the dams and the downstream communities which may be affected by a dam incident. Refer to Chapter 4 for a discussion of the dam failure risk relative to Chouteau County and the Central Region.

Table E-10 Dams in Chouteau County

Hazard Class	Dam Name	Owner	River	Nearest Downstream City	Distance to Nearest Downstream City (Miles)	Emergency Action Plans (EAP)
High	Bonneau	BIA	Boxelder Creek	Box Elder	7	Yes
Significant	Phantom Coulee Reservoir	John/Edwinna Engellant	Phantom Coulee	Virgelle	26	N/A
Significant	Little Phantom	Will Muir	Phantom Coulee	Virgelle	35	N/A
Significant	Delilah	Wilt Cavitt	Birch Creek	None	0	N/A
Significant	Drga Dam	Jim Drga	Sage Coulee	Iliad	4	N/A
Significant	Pirate Dam	Harrison Land & Livestock	Shaw Creek	Highwood	11	N/A
Significant	Kheta	Lost Lake Ranch	Diffused Surface Water	Virgelle	30	N/A
Significant	Rocky Crossing Reservoir	Joseph Schmit	Big Sandy Creek	Box Elder	5	N/A
Significant	Homesteaders Settlement	Dorothy/Guy Willson	Homestead Coulee	None	5	N/A

Source: National Inventory of Dams (NID)

With one high and eight significant hazard dams in the planning area, dam failure flooding could result in significant property losses, and there is potential for injury and loss of life as well. Although loss to human life is potentially less likely than other counties. Much of the mapped inundation risk to Chouteau County is along rural and largely unpopulated stretches of the Teton River and originates from high hazard dams upstream of the county (Bynum Reservoir Dam and Eureka Reservoir Dam in Teton County). Additionally, much of the mapped inundation risk from dams located in Chouteau County actually pose a greater threat to downstream communities located in neighboring counties. Inundation data is only available for high hazard dams which are not federally owned, so it is important to note that a lack of mapped

inundation areas does not necessarily indicate a lack of risk. There are numerous high hazard dams upstream of Fort Benton along the Missouri River in neighboring Chouteau County. Additionally, the Tiber Dam and Tiber Dike upstream in Liberty County pose a risk to Chouteau County. Any upstream high hazard dam could potentially cause damage or injuries due to downstream inundation. Figure E-8 below displays the location of dams in Chouteau County.

Table E-11 summarizes the estimated number of improved parcels, building values, and people within inundation zones (private dams only) in Chouteau County by property type. Residential property has the greatest total number of improved parcels and greatest total value at stake, at nearly \$5.8 million. There are an estimated 175 residents living in the inundation zone in Chouteau County. Table E-12 summarizes the critical facilities located in Chouteau County which are at risk to dam inundation. The Transportation Lifeline has the greatest number of exposed facilities, the majority of which are likely bridges.

Table E-11 Chouteau County Parcels at Risk to Overall Dam Inundation by Property Type

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Population
Chouteau County	Agricultural	17	\$2,592,480	\$2,592,480	\$5,184,960	
	Exempt	6	\$351,850	\$351,850	\$703,700	
	Residential	71	\$3,841,917	\$1,920,959	\$5,762,876	175
	Total	94	\$6,786,247	\$4,865,289	\$11,651,536	175

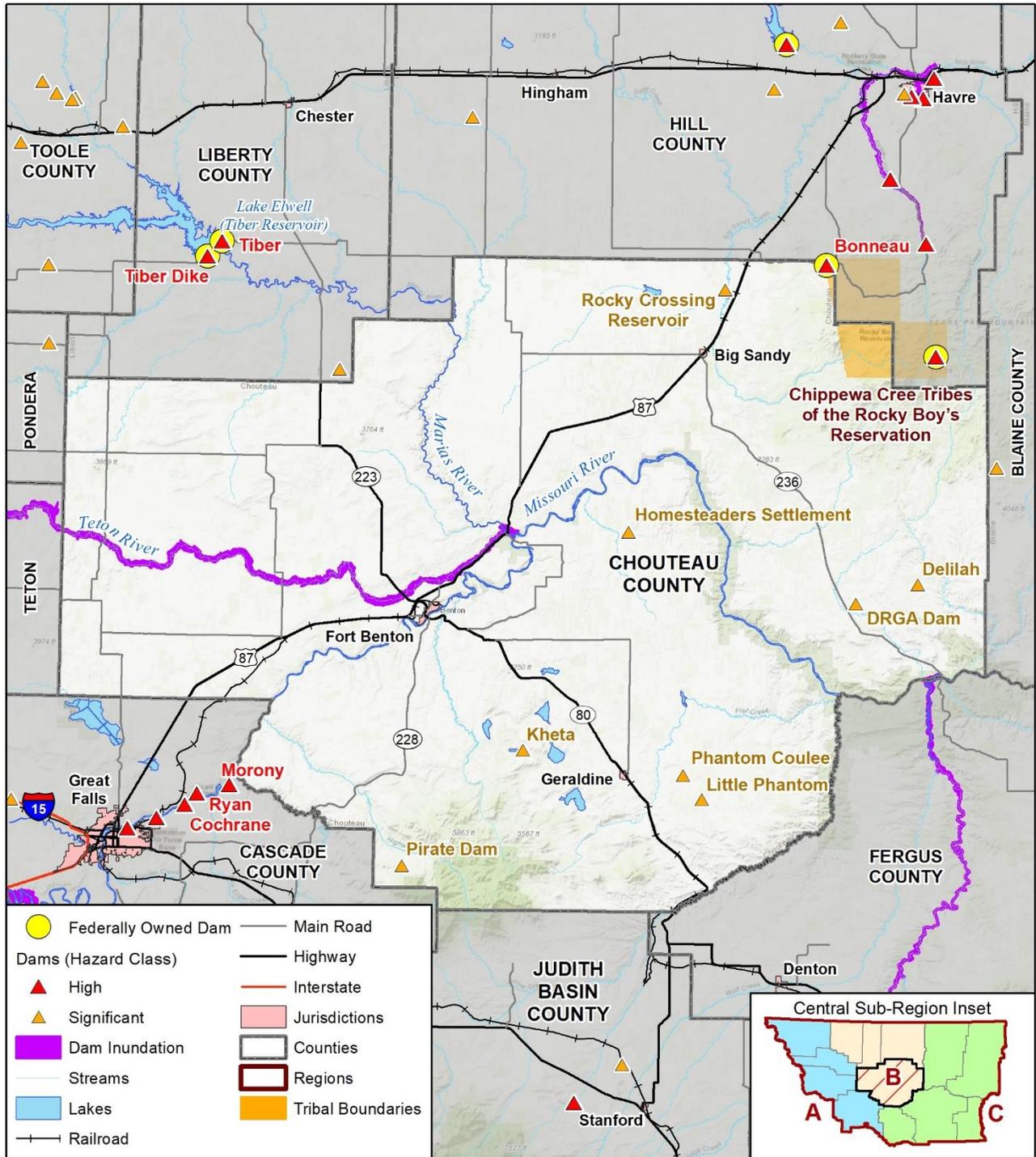
Source: County Assessor data, NID, MT DNRC, WSP GIS Analysis

Table E-12 Chouteau County Critical Facilities at Risk to Dam Inundation by FEMA Lifeline

Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health and Medical	Safety and Security	Transportation	Total
Chouteau County	-	1	-	-	-	1	7	9
Total	0	1	0	0	0	1	7	9

Source: Montana DNRC Dam Safety Program, Montana State Library, NID, HIFLD 2022, Montana DES, NBI

Figure E-8 Chouteau County Dams



Map compiled 10/2022;
intended for planning purposes only.
Data Source: Montana State Library,
NID, MT DNRC Dam Safety Program

0 10 20 Miles



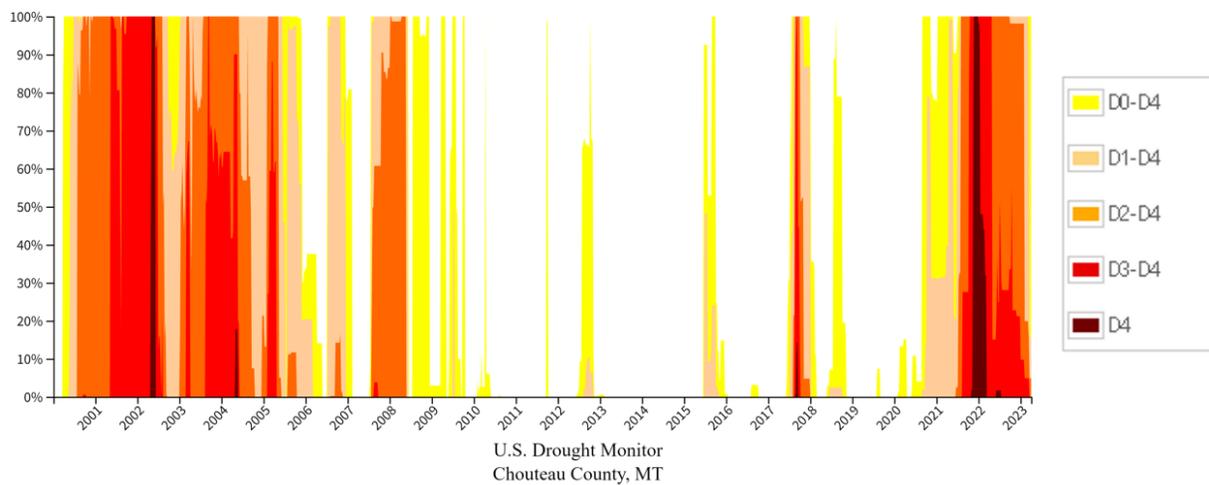
E.4.4 Drought

Drought was rated as a hazard of high concern in Chouteau County. Between 2012 and 2021, Chouteau County experienced 18 USDA emergency drought declarations, which is greatest number of drought declarations by county in the Central Region. The Drought Impact Reporter (2000-2021) reported that Chouteau County has 48 recorded drought impacts. The HMPC also noted that drought in the county has significant impacts on the agricultural community.

The U.S. Drought Monitor (USDM) is a national data set released weekly, showing the severity of drought in locations across the nation. A time series showing the severity of drought in Chouteau County between 2000 and 2022 (since the USDM came into being) is shown below.

Refer to Chapter 4 for a discussion of the drought risk relative to Chouteau County and the Central Region.

Table E-13 USDM Drought Timeseries for Chouteau County



Source: USDM; www.drought.gov

E.4.5 Earthquake

There are several known fault systems throughout the State of Montana, mostly concentrated in the Western Region. However, large magnitude earthquakes that occur in the Western Region are likely to have impacts on counties in the Central Region. The potential severity of shaking and impacts to casualties and damage is not uniform across the Central Region and is likely to have a greater impact to counties along the Western portion of the Region. Earthquake hazards in Chouteau County are therefore ranked as low overall significance.

According to a Hazus probabilistic loss analysis conducted for a scenario with 2% in 50 years recurrence, Chouteau County has one of the lowest expected direct economic losses in the Central Region, with an estimated \$2.3 million in total direct losses expected. Older and historic buildings are typically more vulnerable to earthquake shaking due to their age and construction methods.

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

E.4.6 Flooding

There have been five federally declared flooding events in Chouteau County since 1974. The city of Fort Benton is the only community in Chouteau County that participates in the National Flood Insurance Program. This includes five current policies with a coverage amount of \$1,470,000. This can be viewed in Section 4.2.7 of the Montana Central Region HIRA. There are no established repetitive loss structures. Chouteau County has 492 people located in the special flood hazard area.

Table E-14 below summarize the counts and improved value of parcels in the county, broken out by jurisdiction, that fall within the 1% chance floodplains. Additionally, the table also summarizes loss estimate values, which are calculated based upon the improved value and estimated contents value and assumes a two-foot-deep flood which usually results in 25% of the total value, based on FEMA depth-damage curves. Chouteau County has no mapped FEMA floodplain data currently. Therefore, Hazus floodplain data was used as a substitute to perform the analysis. Figure E-9 through Figure E-11 indicates the greatest flood losses is in the City of Fort Benton. Most of the structures at risk are residential. Refer to Chapter 4 of the HIRA for more in depth detail on Chouteau County's Flooding Hazard Analysis.

Table E-14 Chouteau County Parcels at Risk to 1% Flood Hazard by Jurisdiction

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Estimated Loss	Population
Fort Benton	Exempt	11	\$2,535,280	\$2,535,280	\$5,070,560	\$1,267,640	
	Residential	186	\$24,616,061	\$12,308,031	\$36,924,092	\$9,231,023	458
	Total	197	\$27,151,341	\$14,843,311	\$41,994,652	\$10,498,663	458
Chouteau County	Agricultural	46	\$4,737,140	\$4,737,140	\$9,474,280	\$2,368,570	
	Residential	14	\$1,349,385	\$674,693	\$2,024,078	\$506,019	34
	Vacant	1	\$379,576	\$379,576	\$759,152	\$189,788	
	Total	61	\$6,466,101	\$5,791,409	\$12,257,510	\$3,064,377	34
Grand Total		258	\$33,617,442	\$20,634,719	\$54,252,161	\$13,563,040	492

Sources: DNRC, Hazus, FEMA NFHL

Chouteau County has a total of 29 critical facilities located in the 1% annual chance floodplain. 26 are transportation lifelines, two are food, water and one is a safety and security lifeline. This is shown in Table E-15 below.

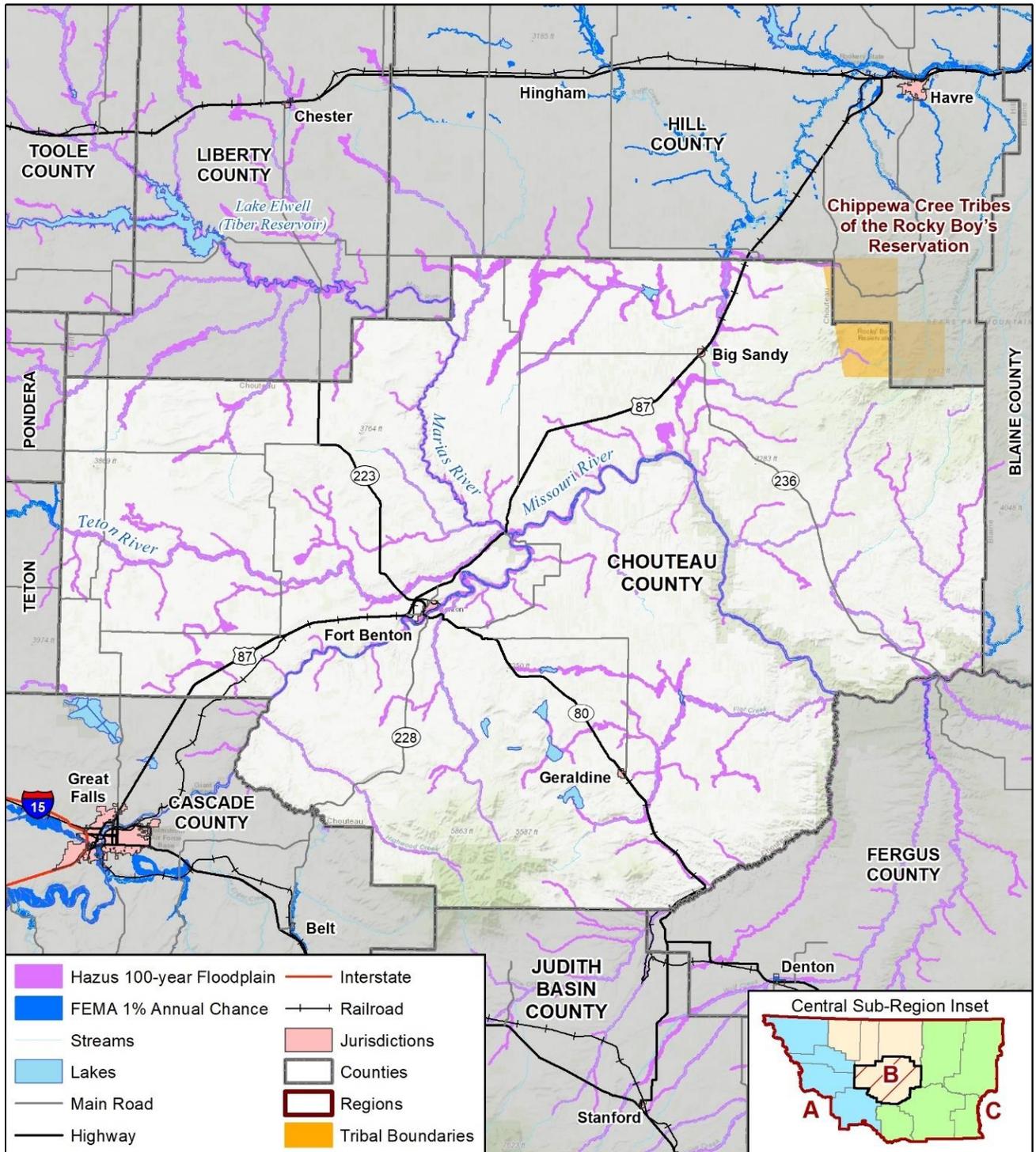
Table E-15 Chouteau County Critical Facilities at Risk to 1% Annual Chance Flood Hazards

Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health and Medical	Safety and Security	Transportation	Total
Fort Benton	-	-	-	-	-	1	-	1
Chouteau County	-	-	2	-	-	-	26	28
Total	0	0	2	0	0	1	26	29

Source: Montana DNRC, FEMA, HAZUS, HIFLD 2022, MT DES, NBI

All participating jurisdictions in Chouteau County contain structures located in the floodplain, as seen in Figure E-10 through Figure E-12 below.

Figure E-9 Chouteau County Flood Hazard

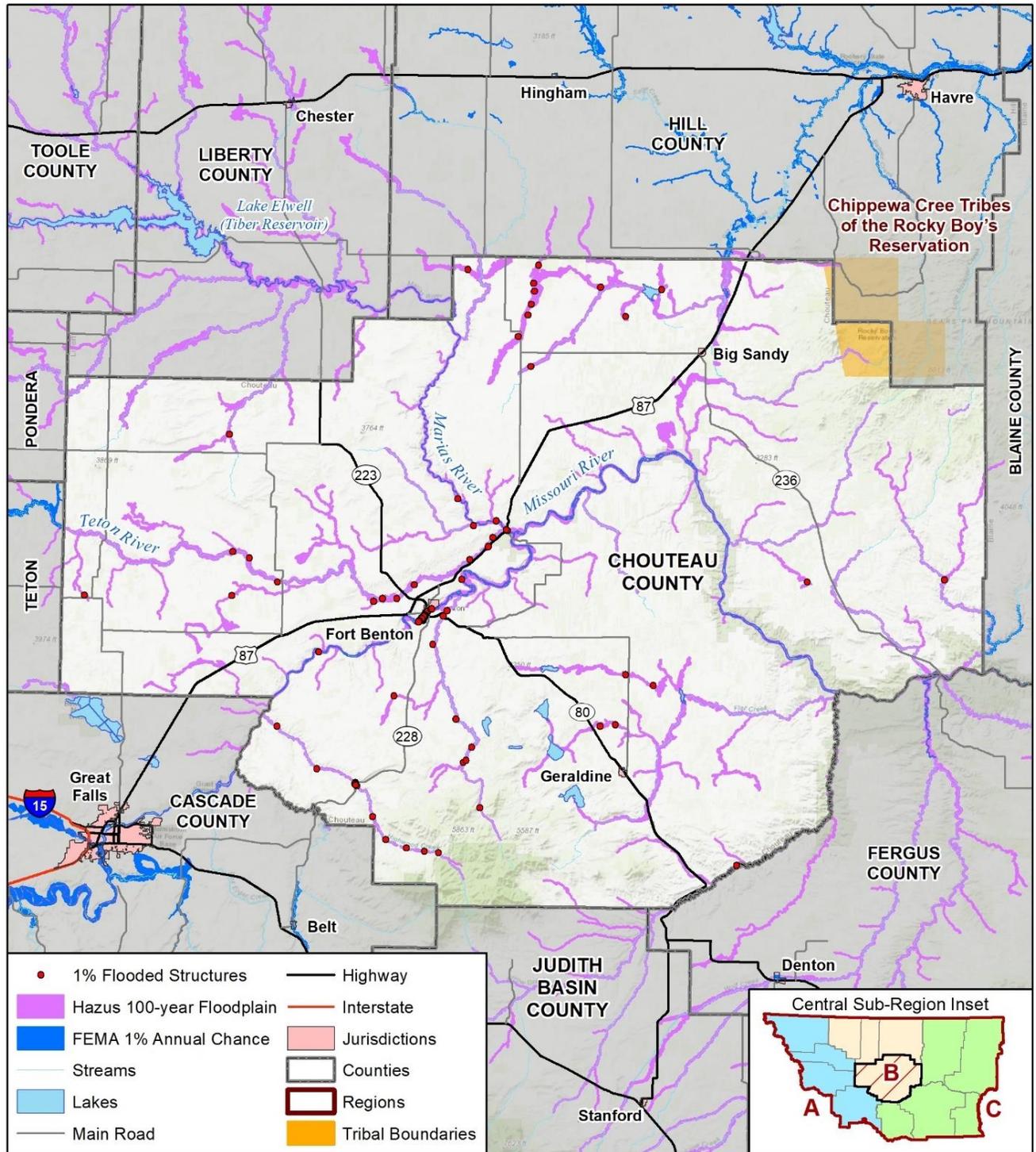


Map compiled 9/2022;
intended for planning purposes only.
Data Source: Montana State Library,
DNRC, FEMA, Hazus

0 10 20 Miles



Figure E-10 Chouteau County Flood Hazard and Structures

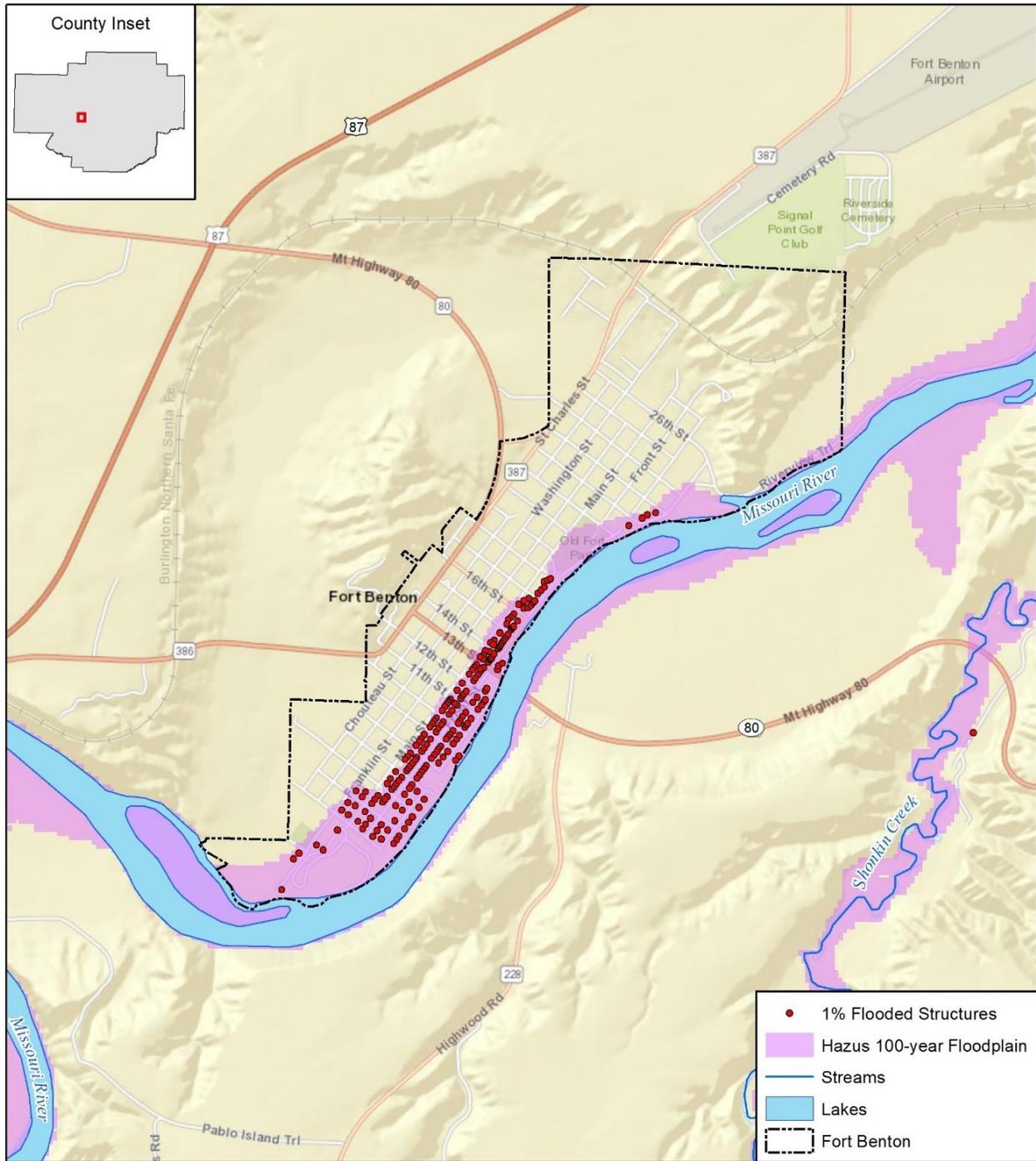


Map compiled 9/2022;
intended for planning purposes only.
Data Source: Montana State Library,
DNRC, FEMA, Hazus

0 10 20 Miles

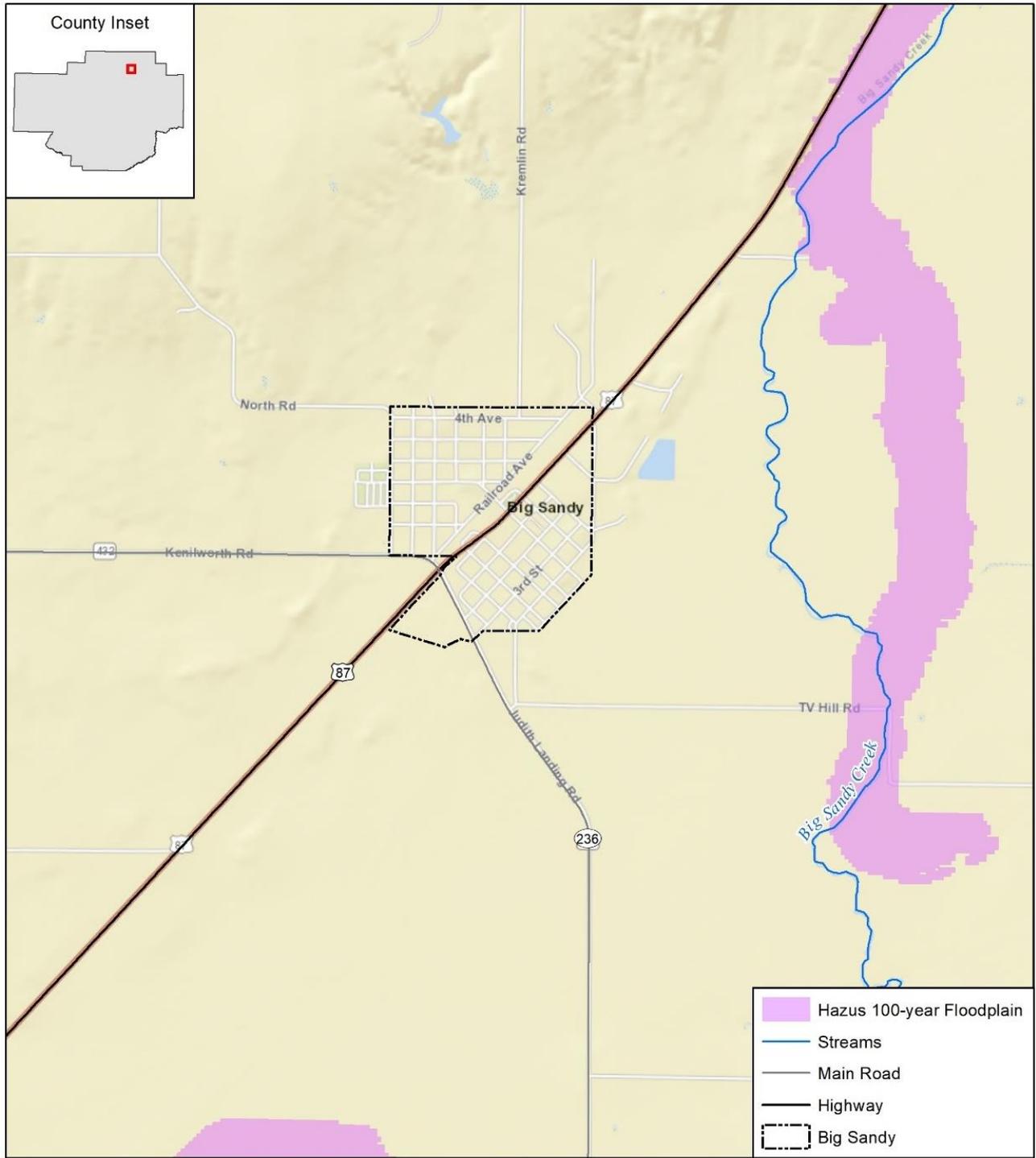


Figure E-11 City of Fort Benton Flood Hazard and Structures



Map compiled 10/2022;
intended for planning purposes only.
Data Source: Montana State Library,
FEMA NFHL, Hazus

Figure E-12 Town of Big Sandy Flood Hazard and Structures



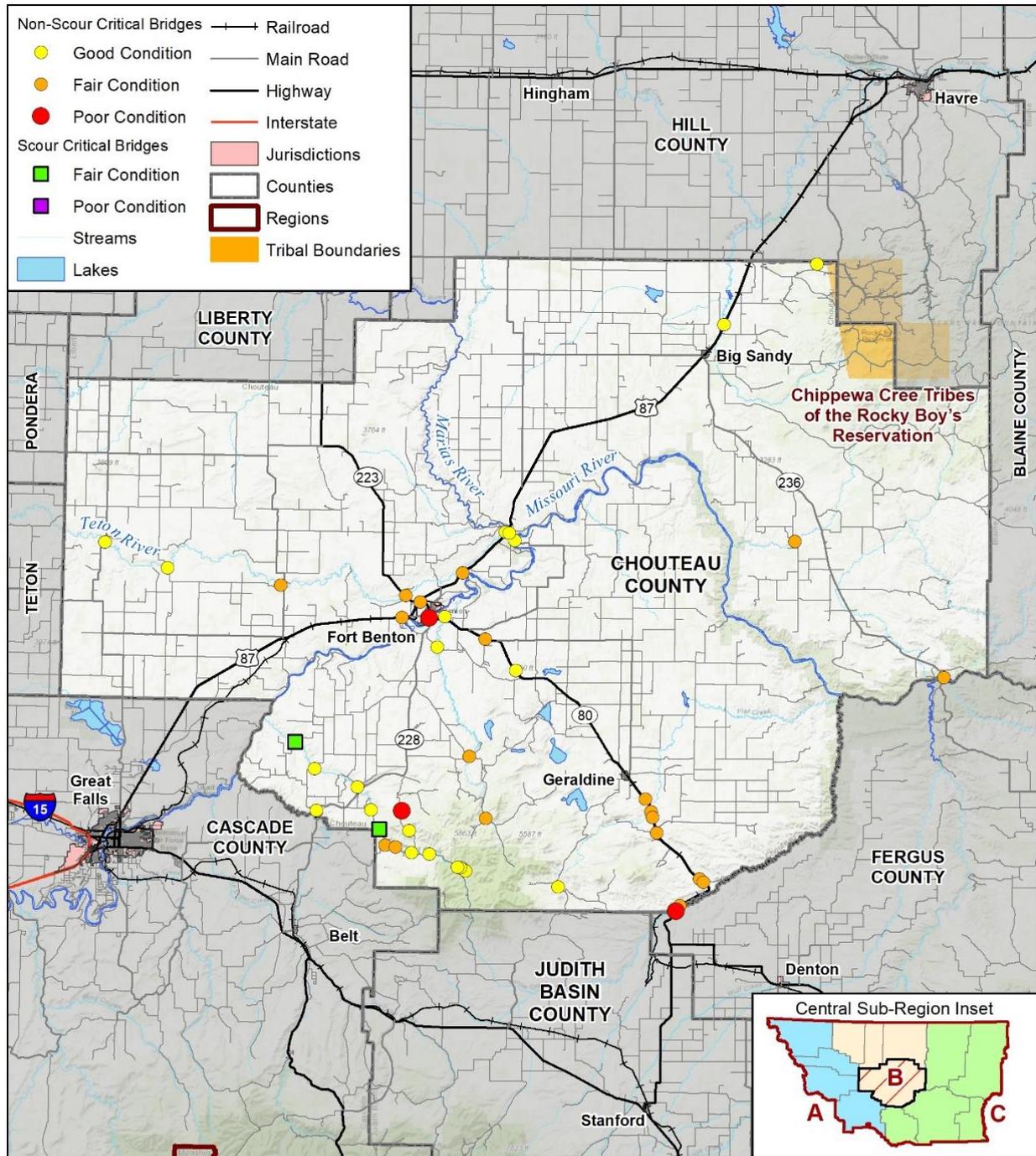
Map compiled 10/2022;
intended for planning purposes only.
Data Source: Montana State Library,
FEMA NFHL, Hazus

0 0.5 1 Miles



Figure E-13 below displays the location of bridges in Chouteau County and their condition. Refer to Chapter 4 for a discussion of the flood risk relative to Chouteau County and the Central Region.

Figure E-13 Chouteau County Bridges



Map compiled 10/2022;
intended for planning purposes only.
Data Source: Montana State Library,
National Bridge Inventory

E.4.7 Hazardous Materials Incident

Chouteau County has one Risk Management Program (RMP) facility. Additionally, eight hazardous material incidents have occurred in Chouteau County since 1990. Refer to Chapter 4 for a discussion of the hazardous materials incident risk relative to Chouteau County and the Central Region.

E.4.8 Landslide

Landslides are ranked as a low overall significance hazard in Chouteau County. There has been one recorded instance of a federal disaster declaration due to landslides in the County in 1986. There were no documented differences in landslide vulnerability between jurisdictions in Chouteau County. Although Glacier County has a relatively moderate Risk Index Rating, Chouteau County also has a relatively moderate expected annual loss rating. This can be due to have a higher population than other counties in the region. Refer to Chapter 4 for a discussion of the landslide risk relative to Chouteau County and the Central Region.

E.4.9 Severe Summer Weather

Chouteau County ranked severe summer weather as a medium overall significance hazard. Chouteau County experienced a significant number of recorded severe summer weather events, ranking 4th in the Central Region for number of hazard events. Chouteau County experienced 144 hail events from 1955 to March of 2022 and 9 heavy rain events from 1996 to March 2022. There were no excessive heat events or lightning events recorded in the county, and Chouteau County was the only county in the Central Region with no recorded damages from severe summer weather events. This is likely due to losses going unreported in the county. Due to the regional nature of severe summer weather events and comparable population across jurisdictions, there is no significant variation in vulnerability between jurisdictions in the county.

Refer to Chapter 4 for a discussion of the severe summer weather risk relative to Chouteau County and the Central Region.

E.4.10 Severe Winter Weather

Chouteau County ranked severe winter weather as a medium overall significance hazard. The Chouteau Zone experienced the 92 recorded severe winter weather events, which is an average number of events for counties in the Central Region. While no reported damages, injuries, or deaths were recorded in Chouteau County by the NCEI dataset, the HMPC notes the potential threats of severe winter storms and ranks all jurisdictions in the county as medium. There are no notable differences in vulnerability between jurisdictions to severe winter weather.

Refer to Chapter 4 for a discussion of the severe winter weather risk relative to Chouteau County and the Central Region.

E.4.11 Human Conflict

Human conflict is ranked as an overall low significance for Chouteau County, along with nearly all other counties in the Central Region. None of the 23 recorded human conflict events recorded in the Central Region occurred in Chouteau County, and all jurisdictions in the county are equally vulnerable to experiencing a human conflict event in the future.

Refer to Chapter 4 for a discussion of the human conflict risk relative to Chouteau County and the Central Region.

E.4.12 Tornadoes & Windstorms

Chouteau County ranked tornadoes and windstorms as a high overall significance hazard. The Chouteau Zone experienced a significant number of high wind and strong wind events, with 123 total events. Additionally, Chouteau County experienced an average number of thunderstorm wind events (125) and tornado events (15). Chouteau County also experienced the second greatest total property losses from tornado events in the Central Region, with nearly \$3 million in damages and 5 recorded injuries from 1950 to March 2022.

Refer to Chapter 4 for a discussion of the tornadoes and windstorms risk relative to Chouteau County and the Central Region.

E.4.13 Transportation Accidents

Chouteau County ranked transportation accidents as an overall medium significance. Chouteau County had 498 roadway crashes documented from 2016-2020 by the Montana DOT. While transportation accidents can occur along any type of transportation route in the county and region, the presence of the railway located in Big Sandy may result in more railway-highway accidents in this area. The HMPC noted that all jurisdictions in the county should be ranked as medium due to potential for accidents on all transportation routes in the county.

Refer to Chapter 4 for a discussion of the transportation accident risk relative to Chouteau County and the Central Region.

E.4.14 Volcanic Ash

All counties in the Central Region and all jurisdictions within Chouteau County ranked volcanic ash as an overall low significance hazard. Vulnerability throughout the county is largely uniform and dependent on the scale of volcanic activity impacting the region.

Refer to Chapter 4 for a discussion of the volcanic ash risk relative to Chouteau County and the Central Region.

E.4.15 Wildfire

Chouteau County's vulnerability to wildfire differs from the region, and the county has ranked wildfire fire as a low significance hazard. Figure E-14 below displays the wildfire risk in Chouteau County. As shown, most of the county is areas of medium-low risk with small pockets of high to very high risk peppered throughout the county. The CPT commented that it is a very high possibility for future grass fires in the county due to high winds and dry conditions in the area.

Table E-16 below summarizes the estimated exposed value of improvements in each wildfire risk category. The majority of the at-risk properties in the county are within the Very High wildfire risk areas, with a total exposed value of approximately \$258 million. Countywide, approximately 80% of the total value at risk is in residential properties. Wildfires typically result in a total building loss, including contents. See Chapter 4 in the base plan for details on the methodology of this analysis.

Table E-16 Chouteau County Parcels at Risk to Wildfire by Jurisdiction and Risk Rating

At Risk Rating	Jurisdiction	Improved Parcels	Improved Value	Content Value	Total Value	Population
At Risk to Extreme Wildfire	Big Sandy	145	\$14,900,640	\$9,926,085	\$24,826,725	337
	Fort Benton	24	\$4,295,769	\$2,285,490	\$6,581,259	57
	Geraldine	14	\$1,057,773	\$616,287	\$1,674,060	30

At Risk Rating	Jurisdiction	Improved Parcels	Improved Value	Content Value	Total Value	Population
Hazards	Chouteau County	2	\$482,870	\$448,685	\$931,555	2
	Total	185	\$20,737,052	\$13,276,546	\$34,013,598	426
At Risk to Very High Wildfire Hazards	Big Sandy	234	\$19,041,826	\$10,937,556	\$29,979,382	534
	Fort Benton	785	\$107,905,486	\$66,314,873	\$174,220,359	1,811
	Geraldine	165	\$9,714,740	\$5,596,410	\$15,311,150	369
	Chouteau County	288	\$23,496,051	\$14,772,564	\$38,268,615	600
	Total	1,472	\$160,158,103	\$97,621,402	\$257,779,505	3,314
At Risk to High Wildfire Hazards	Fort Benton	12	\$5,382,690	\$7,619,300	\$13,001,990	22
	Geraldine	2	\$5,820	\$4,310	\$10,130	2
	Chouteau County	396	\$92,640,562	\$98,064,204	\$190,704,766	342
	Total	410	\$98,029,072	\$105,687,814	\$203,716,886	367

Source: MSDI 2022, MWRA

Table E-17 summarizes the potential impact of wildfire on critical facilities and lifelines in Chouteau County and its associated jurisdictions. The table highlights the type and number of facilities in each jurisdiction in the County that are in Low/Moderate, High, Very High, or Extreme Wildfire risk areas. See Chapter 4 for the methodology of the critical facilities at risk analysis.

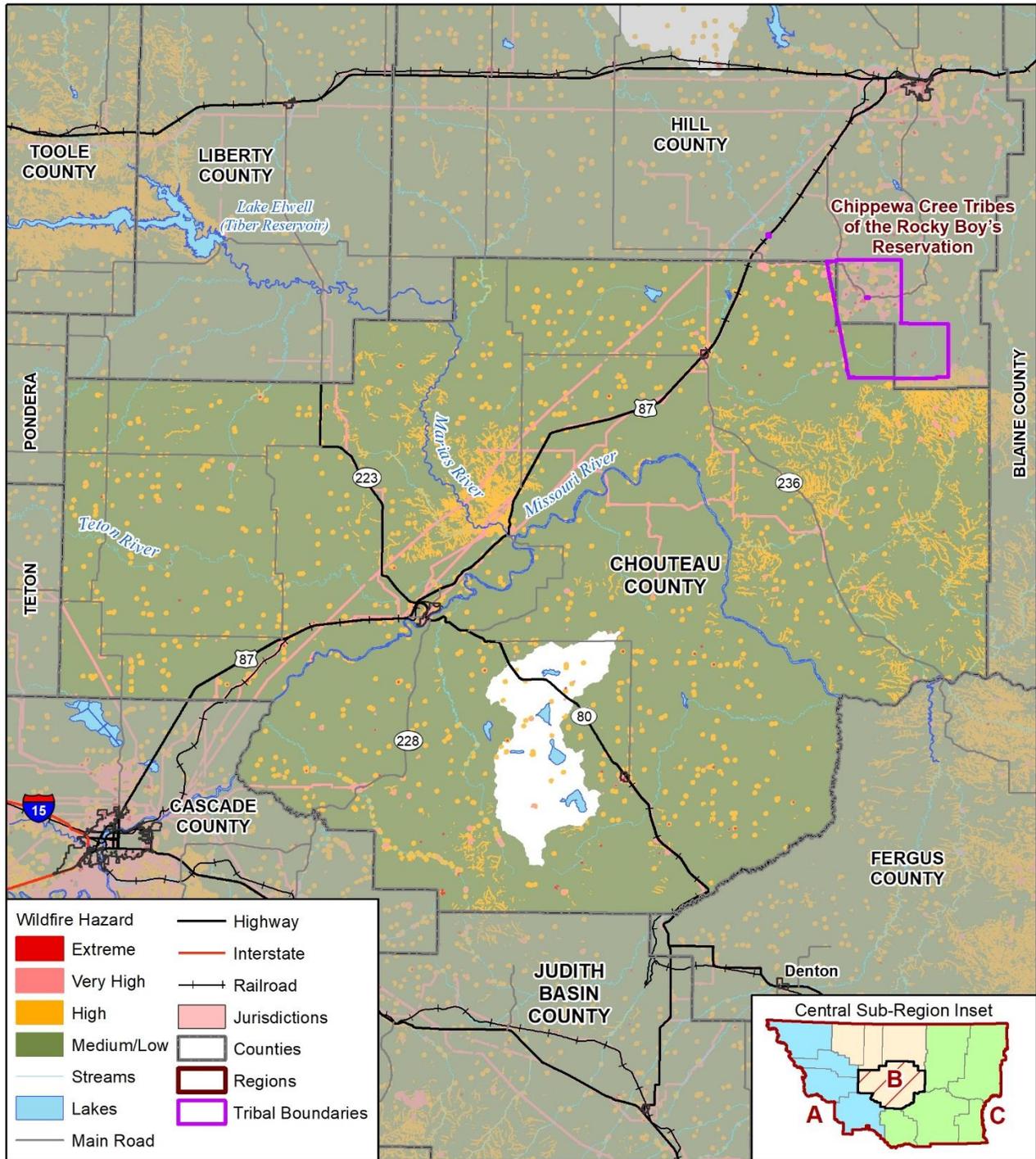
Table E-17 Chouteau County Critical Facilities at Risk to Wildfire Hazards by Jurisdiction, Facility Type, and Risk Rating

Risk Rating	Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health & Medical	Safety & Security	Transportation	Total
At Risk to Extreme Wildfire Hazards	Big Sandy	-	-	-	-	-	1	-	1
	Fort Benton	1	-	-	-	-	1	-	2
	Geraldine	-	-	-	-	1	1	-	2
	Chouteau County	12	-	-	-	-	-	-	12
	Total	13	0	0	0	1	3	0	17
At Risk to Very High Wildfire Hazards	Big Sandy	-	1	-	-	1	4	1	7
	Fort Benton	1	-	1	-	1	3	-	6
	Geraldine	-	1	-	-	-	3	1	5
	Chouteau County	17	22	-	-	-	7	8	54
	Total	18	24	1	0	2	17	10	72

Risk Rating	Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health & Medical	Safety & Security	Transportation	Total
At Risk to High Wildfire Hazards	Fort Benton	-	-	1	-	-	1	-	2
	Chouteau County	6	-	4	-	-	-	21	31
	Total	6	0	5	0	0	1	21	33
At Risk to Medium/Low Wildfire Hazards	Fort Benton	1	-	1	-	-	4	-	6
	Chouteau County	1	2	1	1	-	3	20	28
	Total	2	2	2	1	0	7	20	34

Source: HIFLD 2022, MT DES, NBI, MWRA

Figure E-14 Chouteau County Wildfire Hazard



Map compiled 10/2022;
intended for planning purposes only.
Data Source: Montana State Library, MWRA

0 10 20 Miles



E.5 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 that contribute to reducing hazard losses. Combining the risk assessment with the mitigation capability assessment results in “net vulnerability” to disasters and more accurately focuses the goals, objectives, and proposed actions of this plan. The 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.

E.5.1 Regulatory Mitigation Capabilities

Table E-18 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 Central Region and each participating jurisdiction.

Table E-18 Chouteau County and Jurisdictions Regulatory Mitigation Capabilities

Plans and Regulations	Chouteau County	City of Fort Benton	Town of Big Sandy
Building Codes	Yes, County has development permits requiring addresses, sanitarian visit and culverts in roads if new	Yes - 2018 IBC	N/A
Building Codes Year	No	2018 IBC	N/A
BCEGS Rating	No	N/A	N/A
Capital Improvements Program (CIP) or Plan	Yes, Bridge engineering	Yes	Yes
Community Rating System (CRS)	N/A	No	No
Community Wildfire Protection Plan (CWPP)	Yes	No	No
Comprehensive, Master, or General Plan	Yes, Chouteau County Growth Policy (last update 2014)	No	No
Economic Development Plan	Yes, Bear Paw development does this for the county	No	No
Elevation Certificates	No	Yes	No
Emergency Operations Plan (EOP)	Yes, Basic plan was updated 2020-21 other parts are being worked on now	Yes	No
Erosion/ Sediment Control Program	No	No	No
Floodplain Management Plan	No	No	No
Flood Insurance Study	No	Yes	Yes
Floodplain Management Ordinance	No	Yes - reference	Yes - reference
National Flood Insurance Program (NFIP) Participant	No	Yes – 11/06/96	Not Mapped
Growth Management Ordinance or Policy	No	No	No
Other Hazard-Specific Ordinance or Plan (Steep Slope,	Yes	No	No

Plans and Regulations	Chouteau County	City of Fort Benton	Town of Big Sandy
Wildfire)			
Site Plan Review Requirements	Yes	No	No
Stormwater Program, Plan, or Ordinance	Yes	No	No
Zoning Code or Ordinance	Yes	Yes	No

Discussion of Existing Regulatory Mitigation Capabilities

The CPT noted that Chouteau County has limited staff available for floodplain management. They are however creating new Subdivision Regulations with the assistance of the county commissioners and county planners. There are no current plans to update building codes. Chouteau County officials also noted that a wildfire related grant in 2008 helped landowners to create a defensible space to help reduce fire danger. 15-16 landowners participated and it was a successful county project.

The Town of Big Sandy also noted limited staffing, which has limited their opportunities to expand or enhance mitigation capabilities. Big Sandy also has issued a community decay ordinance to help with land development. They also are upgrading storm drains on Main Street.

Discussion on NFIP Participation and Compliance

The City of Fort Benton, Town of Geraldine, and Town of Highwood participate in the National Flood Insurance Program (NFIP). The HMPC noted that Chouteau County currently does not participate in the NFIP because the county does not have land in the floodplain. The County does however have five current NFIP polices with a combined coverage of \$1,470,000. The CPT noted that 90% of new floodplain development will be outside the Special Flood Hazard Area. Floodplain Management Administrators are present for the City of Fort Benton, the Town of Geraldine, and the Town of Highwood.

E.5.2 Administrative and Technical Mitigation Capabilities

Table E-19 identifies the County and participating jurisdictions personnel responsible for activities related to mitigation and loss prevention in Chouteau County.

Table E-19 Chouteau County Jurisdictions Administrative/Technical Mitigation Capabilities

Administrative and Technical	Chouteau County	City of Fort Benton	Town of Big Sandy
Emergency Manager	1 Manager and 1 part time deputy	No	No
Floodplain Administrator/Position/ Department	No	Yes	No
Community Planning:	No	No	No
- Planner/Engineer (Land Development)	Yes	No	No
- Planner/Engineer/Scientist (Natural Hazards)	No	No	No
- Engineer/Professional (Construction)	Yes	Yes	Yes
- Resiliency Planner	No	No	No
- Transportation Planner	No	No	No
Full-Time Building Official	No	No	No
GIS Specialist and Capability	Yes	No	No
Grant Manager, Writer, or Specialist	Maybe, Bears Pay development	No	No

Administrative and Technical	Chouteau County	City of Fort Benton	Town of Big Sandy
Housing Authority	Maybe, Chouteau Co. and Cascade Co. together	No	No
Warning Systems: (list the hazards each system is used for)	Yes	No	Yes
- Sirens	No	No	Yes
- Reverse 911	Yes	No	No
- IPAWS/Wireless Emergency Alerts (WEA)	Yes,	No	No
- Opt-In Notifications (CodeRed, Everbridge, etc.)	Yes, Code Red	No	No

E.5.3 Financial Capabilities

Table E-20 identifies the County and participating jurisdictions financial tools or resources that the jurisdictions have access or are eligible to use and could potentially be used to help fund mitigation activities.

Table E-20 Chouteau County Jurisdictions Financial Capabilities

Financial Capabilities	Chouteau County	City of Fort Benton	Town of Big Sandy
Ability to fund projects through Capital Improvements funding	Yes	No	No
Ability to incur debt through general obligation bonds	Yes	Yes	No
Ability to incur debt through private activities	No	No	No
Ability to incur debt through special tax bonds	Yes	Yes	No
Authority to levy taxes for a specific purpose with voter approval	Yes	Yes	No
Authority to withhold spending in hazard prone areas	Yes	No	No
Community Development Block Grants	Yes	No	Yes
FEMA Hazard Mitigation Assistance grants	Yes, Sheriff's Office did for communication	No	Yes
FEMA Public Assistance funds	Yes	No	Yes
Stormwater Service Fees	Yes, Through Taxes	Yes	No
System Development Fee		No	No
Utility fees (water, sewer, gas, electric, etc.)	Yes	Yes	Yes
Gas Tax/BaRSAA (Roads and Streets)	No	No	No
Montana Coal Endowment Program (MCEP)	No	No	No
State Revolving Fund	No	No	No
Department of Natural Resources & Conservation	No	No	No

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 (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. Chouteau County and its jurisdictions have participated in several of these hazard mitigation assistance projects, summarized in the Table E-21 below.

Table E-21 Chouteau County Hazard Mitigation Assistance Projects

Program	Date Approved	Project Type	Status	Location
HMGP	2019-04-11	200.6: Acquisition of Private Real Property (Structures and Land) - Landslide	Closed	Chouteau County
HMGP	2020-12-17	302.1: Landslide Stabilization - Structural	Closed	Chouteau County

Source: Fema.gov

E.5.4 Education and Outreach Capabilities

Table E-22 identifies the education and outreach programs in place at the County and participating jurisdictions are or could be used to help promote mitigation activities.

Table E-22 Chouteau County Education and Outreach Capabilities

Education & Outreach Programs	Chouteau County	City of Fort Benton	Town of Big Sandy
Ongoing public education programs (fire safety, responsible water use, household preparedness, etc.)	Yes	Yes	No
Local citizen groups that communicate hazard risks	No	No	No
Firewise or other fire mitigation program	Yes	No	No
National Weather Service StormReady	Yes, DES Manager	No	No
Other?			No

E.5.5 Non-Governmental Organizations (NGOs) and Mitigation Partnerships

Table E-23 shows the local chapters partnered with the County and participating jurisdictions.

Table E-23 Chouteau County Non-Governmental Organizations (NGOs)

Non-Governmental Organizations (NGOs)	Chouteau County	City of Fort Benton	Town of Big Sandy
American Red Cross	No	No	No
Chamber of Commerce	Yes	Yes	No
Community Organizations (Lions, Kiwanis, etc.)	Yes, Lions, Woman's club, Kiwanis	No	Yes, Rotary
Environmental Groups	Yes, Friends of the Missouri Breaks	No	No
Homeowner Associations	Maybe, new residential development might create one	No	No
Neighborhood Associations	No	No	No
Salvation Army	No	No	No
Veterans Groups	Yes	Yes	No

E.5.6 Opportunities for Enhancement

Based on the capabilities assessment, Chouteau County has several existing mechanisms in place that already help to mitigate hazards. There are also opportunities for the County to expand or improve on their policies, programs and fiscal capabilities and further protect the community. Future improvements may include providing training for staff members related to hazards or hazard mitigation grant funding in partnership with the County and DHSEM. This also includes dealing with staff limitations within Chouteau County. Additional training opportunities will help to inform County and local government staff members on how best to integrate hazard information and mitigation projects into their departments. Continuing to train staff on mitigation and the hazards that pose a risk to Chouteau County will lead to more informed staff members who can better communicate this information to the public.

Another opportunity for enhancement is to increase public education and outreach on hazards. Creating ongoing public education programs or becoming Firewise and StormReady communities can increase the community's preparedness for hazard events. Improved cross-jurisdictional communication on evacuation and awareness to mitigate life safety impacts during dam incidents, floods, or wildfires including the development of brochures and using existing communication capabilities through social media or other media. Other specific opportunities for improvement include:

Chouteau County:

- Consider adopting local building codes.
- Update the CWPP
- Additional partnerships with area agencies to further develop hazard mitigation programs.
- City of Fort Benton:
 - Consider preventive measures such as joining the NFIP or adopting Hazard Specific Ordinances
 - Consider adopting a Wildland Urban Interface Code (see recommendation in 2022 CWPP)
 - Also other plans and regulations referenced in the CPT

Town of Big Sandy:

- Consider adopting building codes.

- Formally adopt a zoning code to protect communities and businesses from unregulated growth.
- Consider joining the NFIP and CRS

Town of Geraldine

- Consider adopting building codes

Town of Highwood

- Consider adopting building codes

E.6 Mitigation Strategy

This section describes the mitigation strategy and mitigation action plan for Chouteau County. See Chapter 5 of the base plan for more details on the process used to develop the mitigation strategy.

E.6.1 Goals

During the creation of the 2023 Regional Plan, the counties in the Montana Central Region decided to collaborate and develop a set of new, uniform goals, which were adopted by all counties in the Region and move away from hazard-specific goals. The adopted goals are as follows:

- Goal 1: Reduce impacts to people, property, the environment, and the economy from hazards.
- Goal 2: Protect community lifelines and critical infrastructure to ensure the continuity of essential services.
- Goal 3: Increase public awareness and participation in hazard mitigation.
- Goal 4: Sustain and enhance jurisdictional capabilities to enact mitigation activities.
- Goal 5: Integrate hazard mitigation into other plans, processes, and regulations.
- Goal 6: Promote regional cooperation and leverage partnerships in mitigation solutions where possible.

E.6.2 Progress on Previous Actions

During the 2023 planning process, the Chouteau County Planning Team reviewed all the mitigation actions from the 2017 plan. Of their mitigation actions from 2017, 105 are in progress or are implemented annually, demonstrating ongoing progress, and building the community's resiliency to disasters. Two actions were deleted as being either too vague or redundant with another actions. This is shown in Table E-24. Several other actions were combined or deleted to eliminate redundancy and five new actions were added.

Table E-24 Completed and Deleted Actions

2017 ID	Mitigation Action	Hazards Mitigated	Jurisdiction	Status/ Implementation Notes
6.3	Establish a framework for reducing future losses from technological and natural disasters.	Multi-Hazard	Chouteau County	Deleted, too vague
3	Continue making the Chouteau County Multi-Hazard Mitigation Plan available to the public by placing it on the County's website and through the public library.	Multi: Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	Deleted, redundant.

E.6.3 NFIP Continued Compliance

Also important to reducing losses to future development is continued compliance with the NFIP. The City of Fort Benton, Town of Geraldine, and Town of Highwood All the jurisdictions will continue to make every effort to remain in good standing with the program. This includes 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.

E.6.4 Mitigation Action Plan

As a part of the 2023 regional planning process, the CPT developed an updated list of hazard mitigation actions or projects specific to Chouteau County and its jurisdictions. The process used to identify, develop, and prioritize these actions is described in Chapter 5 of the base plan.

Table E-25 represents Chouteau County's Mitigation Action and Plan. The 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.

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 carried over from the 2017 Plan; little to no work has been completed.
- In Progress: project is carried over from the 2017 Plan; work has begun on the project and is proceeding.
- Annual: project is carried over from the 2017 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 E-25 below the mitigation actions for each participating jurisdiction in Chouteau County. All jurisdictions have developed mitigation actions for each applicable hazard in the HMP.

Table E-25 Chouteau County Mitigation Action Plan

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
1	Maintain Public and private partnerships to foster multi-hazard program coordination and collaboration within Chouteau County.	Multi-Hazard	Chouteau County	LEPC, Fort Benton, Big Sand, Geraldine, Carter, Highwood, Loma	Moderate	Existing Resources	Short Term	High	Ongoing: Working on this, more progress has happened
2	Continue to periodically update the County's Emergency Operations Plan, enhancing public education.	Multi (all): Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	LEPC	Low	HMGP, BRIC, Local Budget	Short Term	Medium	Ongoing: Complete new EOP but now re-doing again
3	Continue educating all Chouteau County families to have provisions on hand to all of them to be self-sufficient for at least 72 hr. Encourage families to have a plan in place for emergencies	Multi (shelter): Dam Failure, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, BOH, LEPC, BOCC	Low	HMGP, BRIC, Local Budget	Short Term	Medium	We had a booth at fair and handed out emergency packs and lots of information
4	Maintain the Chouteau County LEPC to facilitate implementation, monitoring, and evaluation of Chouteau County mitigation projects.	Multi (all): Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	BOCC, DES	Low	Local Budget	Short Term	Medium	In Progress
5	Continue developing and updating SOP's & EOC checklists for the operation of the County's Emergency Coordination Center.	Multi (all): Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	BOCC, DES	Low	Local Budget	Short Term	Medium	Not Started

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
6	Establish a framework for reducing future losses from technological and natural disasters.	Multi (all): Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	DES, BOCC, LEPC	Low	HMGP, BRIC, Local Budget	Short Term	Medium	Not started. Working on understanding how to approach this
7	Continue updating the Continuity of Operations Plan for Chouteau County. Educating and encouraging people and businesses to prepare a plan. Encourage the businesses to think about those that have functional needs.	Multi (all): Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, BOCC	Low	HMGP, BRIC, Local Budget	Short Term	Medium	In Progress. We have one but not totally up to date yet
8	Continue ICS training, meeting Homeland Security requirements for all first responders and all public officials.	Multi: Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	DES, Fire LEPC, Law Enforcement, Schools, EMS, BOH, Health Care Facilities	Moderate	HMGP, BRIC, Local Budget	Long Term	Medium	Annual. We try to keep up with training, but a lot of people are tired of trainings
9	Increase Knowledge of the hazards and mitigation strategies in Chouteau County and adjust policies and programs based on this knowledge.	Multi (all): Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, BOCC, County Planning Board, Roads	Low	HMGP, BRIC, Local Budget	Long Term	Medium	In Progress. We know some hazards and mitigation needs but nothing has been started
10	Create a more efficient Emergency Operations Center. Educating the necessary entities on what the Emergency Operations Center is and how it functions.	Multi (shelter): Dam Failure, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation	Chouteau County	LEPC, BOCC, Law Enforcement, DES	Moderate	HMGP, BRIC, Local Budget	Long Term	Medium	In Progress. We have been working on our EOC

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
		Accident, Volcanic Ash, Wildfire							
11	Continue to improve public awareness & provide citizens with specific steps to reduce their risks to natural and man-made hazards. Provide information on social media as needed.	Multi (all): Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	DES, Fire, Law Enforcement, EMS, Public Health	Low	HMGP, BRIC, Local Budget	Long Term	Low	Annual. We try to keep public aware
12	Continue to refine the Critical Facilities List capable of offering safe haven to the citizens of Chouteau County during a disaster.	Multi (shelter): Dam Failure, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, Public Health	Low	Local Budget	Long Term	Medium	Annual. We update as we can
13	Work with the NGO & Faith Based network to assess the adequacy of service delivery in all areas of the County. Encourage the involvement in exercises.	Multi (shelter): Dam Failure, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, NGO's	Low	Local Budget	Long Term	Low	Annual. We have used the for a fire
14	Continue educating and encouraging the use of the Emergency Notification Program to effectively notify Chouteau County residents about impending disasters, evacuations, & etc.	Multi (shelter): Dam Failure, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	Sheriff, DES, Fire, 911 Advisory Board, Chouteau County, Fort Benton, Big Sandy & Geraldine-911 Advisory Board	Low	Existing 911 Funding	Long Term	High	Annual. We use this often
15	Sustain existing public safety programs by assessing current emergency services capabilities and identifying future needs.	Multi-Hazard	Chouteau County	DES, LEPC, EMS, Fire	Moderate	HMGP, BRIC, Local Budget	Long Term	Medium	Annual. Work with LEPC to identify hazards
16	Continue to create and maintain a system to support populations with functional needs (adults and children) within Chouteau County. Including evaluation and special sheltering needs.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation	Chouteau County	LEPC, DES, NGO's, Law Enforcement, Health Department,	Low	HMGP, BRIC, Local Budget	Long Term	Low	We have a plan and will be updating this; Each location in the county knows who their

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
		Accident, Volcanic Ash, Wildfire		Health Care Facilities					functional needs people are. Shelters are Churches
17	Continue making the Chouteau County Multi-Hazard Mitigation Plan available to the public by placing it on the County's website and through the public library.	Multi: Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	DES	Low	HMGP, BRIC, Local Budget	Short Term	Medium	We are in the process of updating our PDM
18	Continue to improve public awareness & provide citizens of Big Sandy with specific steps to reduce their risks to natural and man-made hazards.	Multi: Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	DES, Fire, Law Enforcement, EMS, Public Health	Low	HMGP, BRIC, Local Budget	Long Term	Low	Not Started. Haven't done anything directly for Big Sandy
19	Continue to refine the Critical Facilities List capable of offering safe haven to the citizens of Big Sandy during a disaster.	Multi-Hazard	Chouteau County	DES, LEPC, Public Health	Low	HMGP, BRIC, Local Budget	Long Term	Medium	Not Started
20	Continue updating the Continuity of Operations Plan for Big Sandy. Educating and encouraging people and businesses to prepare a plan	Multi: Communicable Disease, Cyber-Attack, Dam Failure, Drought, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, BOCC	Low	HMGP, BRIC, Local Budget	Short Term	Medium	In Progress. Big Sandy has a plan but will be needing to update
21	Continue to create and maintain a system to support populations with functional needs (adults and children) within Big Sandy. Including evaluation and special sheltering needs.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	LEPC, DES, NGO's, Law Enforcement, Health Dept, Health Care Facilities	Low	HMGP, BRIC, Local Budget	Long Term	low	In Progress. We have a plan and will be updating this.
22	Continue working with Big Sandy to create an EOP for their	Multi: Dam Failure, Earthquake,	Chouteau	DES, BOCC, City of	Low	Existing	Long	High	In Progress. Big Sandy

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
	drinking water.	Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	County	Big Sandy		Funds	Term		has a plan but will be needing to update
23	Educate the public about how to limit their exposure to hazardous materials incidents.	Hazmat	Chouteau County	County Extension, LEPC		HMGP, BRIC, Local Budget	Short Term	Medium	In Progress.
24	Continue training the emergency responders in Chouteau County to operations level response capability.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	LEPC	Moderate	HMGP, BRIC, Local Budget	Short Term	High	Annual
25	Support the regional hazardous material teams and utilize them on incidents exceeding Chouteau County's Capability	Hazmat	Chouteau County	LEPC, Fire, DES	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual
26	Work with fixed site hazardous materials facilities to develop plans to reduce risks of environmental pollution and life safety risks making	Hazmat	Chouteau County	LEPC, Businesses, County Extension	Moderate	HMGP, BRIC, Local Budget	Long Term	High	Annual. We receive Tier II reports every year.
27	Ensure hazardous materials plans, (keeping record of these plans) are in place for businesses that handle hazardous materials and ensure all are in compliance with State and Federal regulations.	Hazmat	Chouteau County	LEPC, Businesses, County Extension	Low	HMGP, BRIC, Local Budget	Long Term	Medium	Annual. We receive Tier II reports every year.
28	Work with farmers and ranchers to ensure they understand necessary precautions to take when using farm chemicals in their operations. Providing information, whether through social media or other forms, on how to dispose of their farm chemicals the proper way.	Hazmat	Chouteau County	LEPC, Farmers, Ranchers, County Extension		HMGP, BRIC, Local Budget	Long Term	High	Annual. Our extension agencies train on this.
29	Work with fixed site hazardous materials facilities to develop plans to reduce risks of environmental pollution and life safety risks making the sites more disaster resistant.	Hazmat	Chouteau County	LEPC, Businesses, County Extension	Moderate	HMGP, BRIC, Local Budget	Long Term	High	Annual. We receive Tier II reports every year.
30	Maintain partnership with the National Weather Service and local media to help educate public on preparedness and what to do when a storm warning goes off.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	LEPC, NWS, Local Newspaper	Low	HMGP, BRIC, Local Budget	Short Term	Medium	Annual. We promote weather spotter training.

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
31	Encourage the use of portable warning devices such as radios with severe weather warning alarms in critical facilities.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	LEPC, NWS, DES	Low	HMGP, BRIC, Local Budget	Short Term	Medium	Annual
32	Develop a public education program for outdoor enthusiasts, river traveler, and river outfitters. Adding information to the local welcoming booklet handed out to visitors and new residents. Encourage people to participate in the National Weather Service severe weather spotter training program.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	BLM, City Council, LEPC, River Outfitters, FWP, NWS	Moderate	HMGP, BRIC, Local Budget	Short Term	Medium	Not Started.
33	Encourage the purchase of portable generators for temporary power outages. Educate public on how to properly use them.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	LEPC	Moderate	HMGP, BRIC, Local Budget	Short Term	High	In Progress. Some information has been made available to the public.
34	Encourage and Support the concept of removal/replacement for trees that threaten or pose a risk to utilities and structures.	Multi: Summer Weather, Winter Weather, Tornado/Wind	Chouteau County	DES, LEPC, City Government, Utilities	Moderate	HMGP, BRIC, Local Budget	Long Term	Low	Not Started.
35	Support and Encourage the construction of underground utilities when and where feasible.	Multi: Summer Weather, Winter Weather, Tornado/Wind	Chouteau County	DES, Utilities	High	HMGP, BRIC, Local Budget	Long Term	Low	Not Started
36	Develop and maintain a plan for clearing debris from priority routes.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, Road Crew	High	HMGP, BRIC, Local Budget	Long Term	High	Annual
37	Develop and implement programs to reduce risks to public infrastructure	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, BOCC	Moderate	HMGP, BRIC, Local Budget	Long Term	Medium	Not Started.
38	Develop a public education program for outdoor enthusiasts, river traveler, and river outfitters. Adding	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer	Chouteau County	BLM, City Council, LEPC, River	Moderate	HMGP, BRIC, Local Budget	Short Term	Medium	Not Started.

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
	information to the local welcoming booklet handed out to visitors and new residents. Encourage people to participate in the National Weather Service severe weather spotter training program.	Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire		Outfitters, FWP, NWS					
39	Develop and maintain a plan for clearing debris from priority routes.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, Road Crew	High	HMGP, BRIC, Local Budget	Long Term	High	Annual
40	Develop and implement programs to reduce risks to public infrastructure. Looking at past history to create more permanent solutions.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, BOCC	Moderate	HMGP, BRIC, Local Budget	Long Term	Medium	Not Started
41	Encourage people to participate in the National Weather Service severe weather spotter training program.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	BLM, City Council, LEPC, River Outfitters, FWP, NWS	Low	HMGP, BRIC, Local Budget	Short Term	Medium	Annual
42	Develop and implement programs to reduce risks to public infrastructure. Looking at history to create a more permanent solution.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, BOCC	Moderate	HMGP, BRIC, Local Budget	Long Term	Medium	Not Started
43	Promote fire safety through community groups.	Wildfire	Chouteau County	Fire Department & Community groups	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual. Fire Dept. does training in schools
44	Retain and recruit adequate volunteer fire- fighters.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	Fire Departments	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual
45	Support the fire mutual aid response system.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer	Chouteau County	Fire Departments	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual. Used when needed.

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
		Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire							
46	Maintain fire flows and hydrant maintenance.	Wildfire	Chouteau County	Fire Departments, Water Departments	High	HMGP, BRIC, Local Budget	Short Term	High	Annual
47	Promote fire sprinkler systems in older community structures.	Wildfire	Chouteau County	Fire Departments	High	HMGP, BRIC, Local Budget	Long Term	Low	Annual
48	Ensure there are adequate water supplies in areas of communities subject to large fires.	Wildfire	Chouteau County	Fire Departments, Water Departments, City Government	High	HMGP, BRIC, Local Budget	Long Term	Medium	Annual
49	Promote fire safety through Big Sandy community groups.	Wildfire	Chouteau County	Fire Departments & Community groups	Low	HMGP, BRIC, Local Budget	Short Term	High	Not Started
50	Retain and recruit adequate volunteer fire fighters for Big Sandy.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	Fire Departments	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual
51	Retain and recruit adequate volunteer fire fighters for Geraldine	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	Fire Departments		HMGP, BRIC, Local Budget	Short Term	High	Annual
52	Support the fire mutual aid response system	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	Fire Departments	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual. Used when needed.
53	Promote fire sprinkler systems in older community structure	Wildfire	Chouteau County	Fire Departments	High	HMGP, BRIC, Local Budget	Long Term	Low	Annual
54	Provide education to households and businesses on flood hazards.	Flooding	Chouteau County	DES, LEPC	Low	HMGP, BRIC, Local Budget	Short Term	Medium	Not Started.

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
55	Educate the public about purchasing National Flood Insurance or basement backup insurance.	Flooding	Chouteau County	City of Fort Benton, LEPC	Moderate	HMGP, BRIC, Local Budget	Short Term	High	Not Started
56	Update applicable City codes to improve risk reduction and prevention of flood impacts.	Flooding	Chouteau County	City of Fort Benton	Moderate	HMGP, BRIC, Local Budget	Short Term	Medium	Not Started.
57	Create planning and zoning regulations for development within the floodplain.	Flooding	Chouteau County	Count Planning Board, LEPC, City Council, BOCC	High	HMGP, BRIC, Local Budget	Long Term	Low	Not Started.
58	Develop and maintain mitigation and preparedness measures for critical public infrastructure and facilities located in flood hazard areas.	Flooding	Chouteau County	DES, LEPC, BOCC, City Council	High	HMGP, BRIC, Local Budget	Long Term	Medium	Not Started.
59	Provide education to households and businesses in Big Sandy on flood hazards.	Flooding	Chouteau County	DES, LEPC	Low	HMGP, BRIC, Local Budget	Short Term	Medium	Annual
60	Develop and maintain mitigation and preparedness measures for critical public infrastructure and facilities located in flood hazard areas.	Flooding	Chouteau County	DES, LEPC, BOCC, City Council	High	HMGP, BRIC, Local Budget	Long Term	Medium	Not Started
61	Continue building and utilizing the Faith-based network of volunteers	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, PH	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual. Has been used in the past but needs to be updated.
62	Educate the public and train the emergency responders on the POD concept.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, PH	Low	HMGP, BRIC, Local Budget	Short Term	High	In Progress. This was used for immunizations.
63	Maintain contact with MT DPHHS to regularly monitor the threat of communicable disease in Chouteau County.	Communicable Disease	Chouteau County	PH, DES	Low	HMGP, BRIC, Local Budget	Long Term	High	Annual. Monitored very closely due to Covid.
64	Increase the vaccination rate for Chouteau County residents; especially amongst the younger age groups, in schools and for emergency providers	Communicable Disease	Chouteau County	PH	Low	HMGP, BRIC, Local Budget	Long Term	High	Annual. Promoted heavily due to Covid.
65	Develop a resource list of personnel, supplies and equipment relative to response to a public health emergency.	Communicable Disease	Chouteau County	LEPC, DES, Health Care Facilities, PH	Low	HMGP, BRIC, Local Budget	Long Term	Medium	Annual

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
66	Research options and/or sources for medications in case of a widespread epidemic or pandemic when the SNS becomes short or we aren't able to obtain meds by the normal route.	Communicable Disease	Chouteau County	BOH	Low	HMGP, BRIC, Local Budget	Long Term	High	Not Started.
67	Work with the Hospitals to continue to address issues dealing with surge capacity.	Communicable Disease	Chouteau County	Health Care Facilities, PH	Moderate	HMGP, BRIC, Local Budget	Long Term	Medium	Annual
68	Continue updating the County EOP relative to Animal Diseases.	Communicable Disease	Chouteau County	Extension, BOH, DES & Veterinarian, S-CAP Committee	Moderate	HMGP, BRIC, Local Budget	Long Term	Medium	Not Started.
69	Educate the people of Big Sandy and train the emergency responders on the POD concept.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, PH	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual
70	Develop a resource list of personnel, supplies and equipment relative to response to a public health emergency.	Communicable Disease	Chouteau County	LEPC, DES, Health Care Facilities, PH	Low	HMGP, BRIC, Local Budget	Long Term	High	Not Started.
71	Educate the People of Geraldine and train the emergency responders on the POD concept.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, PH	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual
72	Update Geraldine's resource list of personnel, supplies and equipment relative to response to a public health emergency.	Communicable Disease	Chouteau County	LEPC, DES, Health Care facilities, PH	Low	HMGP, BRIC, Local Budget	Long Term	High	Not Started.
73	Continue training all emergency personnel on Chouteau County's Mass Casualty Plan	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, Law Enforcement, Fire, EMS, Hospitals	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual
74	Continue to offer critical incident stress debriefing as necessary in the event of multiple Casualty incidents.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation	Chouteau County	DES, EMS	Low to Moderate	HMGP, BRIC, Local Budget	Short Term	High	Annual. As needed

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
		Accident, Volcanic Ash, Wildfire							
75	Continue to develop exercises that will test the mass Casualty protocols, educate the public and train the Responders to appropriately handle a mass Casualty.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, EMS, Health Care Providers	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual.
76	Review and update yearly as needed the Mass casualty annex to the County EOP.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, BOH, Health Care Facilities, Coroner	Low	HMGP, BRIC, Local Budget	Long Term	High	Annual.
77	Working with DPHHS develop alternate standard of care protocols and any necessary legislation.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	Health Care Facilities, EMS, PH	Low	HMGP, BRIC, Local Budget	Long Term	Medium	Annual
78	Continue working on a more comprehensive protocol related to morgue guidelines and capacity issues.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	BOH, Coroner	Low	HMGP, BRIC, Local Budget	Long Term	Medium	Annual
79	Continue to identify alternate treatment and care sites in the county and test these sites to check feasibility of the locations.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, BOH	Low	HMGP, BRIC, Local Budget	Long Term	Medium	Annual.
80	Continue training all emergency personnel in Big Sandy on Chouteau County's Mass Casualty Plan	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, Law Enforcement, Fire, EMS, Hospitals	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual
81	Continue to develop exercises with Big Sandy that will test the mass Casualty protocols, educate the public and train	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer	Chouteau County	DES, LEPC, EMS Health Care	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
	the Responders to appropriately handle a mass Casualty.	Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire		Providers					
82	Continue training all emergency personnel in Geraldine on Chouteau County's Mass Casualty Plan	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, Law Enforcement, Fire, EMS, Hospitals	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual.
83	Continue to develop exercises with Big Sandy that will test the mass Casualty protocols, educate the public and train the Responders to appropriately handle a mass Casualty	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, EMS, Health Care Providers	Low	HMGP, BRIC, Local Budget	Short Term	High	Annual.
84	Continue to review and update personnel and equipment lists on a yearly basis.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC, Health Care Facilities, Road Crew	Low	HMGP, BRIC, Local Budget	Long Term	High	Annual
85	Ensure that all appropriate emergency personnel have completed a minimum of ICS 100, 200,700,800		Chouteau County	DES, EMS, Fire, Law Enforcement, Hospital			Long Term	High	Annual
86	Maintain partnership with SCAP (Strengthening Community Agro-security Planning) Continue working with the group to update ESF 11	Multi-Hazard	Chouteau County	DES, LEPC, Extension	Low	HMGP, BRIC, Local Budget	Long Term	High	Not Started.
87	Implement and maintain risk informed physical protections, countermeasures, and policies protecting people, structures, materials, products, and systems associated with key operational activities and critical infrastructure sectors including pets, livestock and cropland.	Communicable Disease, Human Conflict	Chouteau County	DES, LEPC, S-CAP	Low to Moderate	HMGP, BRIC, Local Budget	Long Term	Medium	Not Started.
88	Maintain resource directory, updating yearly or as needed for all of Chouteau County	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation	Chouteau County	DES	Low	HMGP, BRIC, Local Budget	Long Term	High	Annual.

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
		Accident, Volcanic Ash, Wildfire							
89	Educate public about Agro-Security and preparedness measures. Creating an exercise to simulate an emergency to help educate the public.	Communicable Disease, Human Conflict	Chouteau County	DES, Extension	Low	HMGP, BRIC, Local Budget	Short Term	Low	Not Started.
90	Maintain list of possible buildings and/or livestock yards to use for pet evacuation and also a shelter that companion animals can be with their owners. Update MOUs as needed to include these new places.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, Local Vets, S-CAP	Low	HMGP, BRIC, Local Budget	Short Term	Medium	Annual.
91	Educate first responders to be more familiar with special considerations of an animal security emergency. Encouraging them to take the NIMS course for animal security.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, EMS, Law Enforcement, Extension	Low	HMGP, BRIC, Local Budget	Long Term	High	Not Started
92	Educate Big Sandy public about Agro-Security and preparedness measures. Creating an exercise to simulate an emergency to help educate the public	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, Extension	Low	HMGP, BRIC, Local Budget	Short Term	High	Not Started
93	Maintain list of possible buildings and/or livestock yards to use for pet evacuation and also a shelter that companion animals can be with their owners. Update MOUs as needed to include these new places. Visit with Big Sandy Vet to encourage a working relationship.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, Local Vets, S-CAP	Low	HMGP, BRIC, Local Budget	Short Term	Medium	Annual.
94	Encourage key members of Big Sandy to be part of the S-CAP committee.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, S-CAP	Low	HMGP, BRIC, Local Budget	Long Term	High	Not Started.
95	Educate Geraldine public about Agro-Security and preparedness measures. Including residents to be part of exercises.	Communicable Disease, Human Conflict	Chouteau County	DES, Extension	Low	HMGP, BRIC, Local Budget	Short Term	Medium	Not Started
96	Maintain list of possible buildings and/or livestock yards to	Multi: Dam Failure, Earthquake,	Chouteau	DES, Local Vets, S-	Low	HMGP, BRIC,	Short	Medium	Annual

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
	use for pet evacuation and also a shelter that companion animals can be with their owners. Update MOUs as needed to include these new places.	Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	County	CAP		Local Budget	Term		
97	Encourage key members of Geraldine to be part of the S-CAP committee.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, S-CAP	Low	HMGP, BRIC, Local Budget	Long Term	High	Not Started.
98	Prepare a strategic water source plan & GPS map for the county, which shows the most efficient sources of water needed to support wildland firefighting efforts.	Wildfires	Chouteau County	DES, LEPC	Moderate	EMPG & BRIC	Medium Term	Low to Medium	In Progress
99	Collect data on critical structures, values and location in one easy to access database to utilize for future planning efforts. Updating as needed	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC	Low	BRIC	Medium	Low	Not Started
100	Prepare land use maps and flood plain maps which will be of aid to future administrators, planners and developers.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC	Low	BRIC	Medium Term	Low	Not Started
101	As future subdivisions or critical infrastructure are developed, review the hazards and risks associated with the development.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accident, Volcanic Ash, Wildfire	Chouteau County	DES, LEPC	Low to Moderate	Existing Resources	Ongoing	Low to Medium	Annual
102	Identify specific mitigation related criteria to be incorporated into the land use planning process.	Multi: Dam Failure, Earthquake, Flooding, Hazmat, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation	Chouteau County	DES, LEPC	Low	BRIC	Ongoing	Medium	Annual

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
		Accident, Volcanic Ash, Wildfire							
103	Collect information on different vendors that would be suitable for our County.	Cyber-Attack	Chouteau County	DES, LEPC	Low	Existing Resources	Short Term	Low	Not Started.
104	Continue to develop exercises that will test the mass casualty protocols, educate the public and train the responders to appropriately handle a mass casualty emergency.	Contagious Disease	Chouteau County	Chouteau County, Fort Benton, Big Sandy & Geraldine-DES, LEPC, EMS, Health Care Providers	Low	DPHHS	Ongoing	High	Annual
105	Maintain partnership with S-CAP. Continue working with group to update ESF-11.	Multi-Hazard	Chouteau County	DES, LEPC, Extension	Low	HMGP, BRIC, Local Budget	Long Term	High	Not Started
106	Water Valve Gate for storm flooding. Putting gate valves in drainage field to stop backflow flooding from River. Right now if we have a rise in water flooding is probable to backflow into the Town of Fort Benton. Right now we have no way to shut it down.	Flooding	Chouteau County, Town of Fort Benton	Town of Fort Benton	Moderate	HMG	Short Term	High	New in 2023
107	Create larger culverts along roadways. During the 2010-2011 floods it was clear that there was a need to replace some of the culverts in roads around Chouteau County. Replacing the smaller ones with larger would help mitigate roads being washed out during a flood event.	Flooding	Chouteau County	Chouteau County Emergency Management/ Chouteau County Commissioners	Moderate	FEMA HMA Grant	Short Term	High	New in 2023
108	Meet with local stakeholders to plan an emergency winter shelter that would provide warmth, meals, and sleeping facilities. Assess and select locations and then list and price resources needed.	Severe Winter Weather	Town of Big Sandy	City of Big Sandy, County of Chouteau, Fire Department, Law Enforcement, DES	Low	FEMA HMA Grant	Short Term	Medium	New in 2023
109	Purchasing a generator for Fort Benton Elementary and Fort Benton High School.	Multi (all): Cyber-Attack, Dam Failure, Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	Town of Fort Benton	Chouteau County Emergency Management and Fort Benton Schools	Moderate	FEMA HMA Grant	Short Term	High	New in 2023
110	Purchasing a generator for the County EOC to use so the	Multi (all): Cyber-Attack, Dam Failure,	Chouteau	Chouteau County	Moderate	FEMA HMA	Short	High	New in 2023

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
	facility has power needed to run an EOC during an event.	Earthquake, Flooding, Hazardous Materials Incident, Landslide, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Transportation Accidents, Volcanic Ash, Wildfire	County, Town of Big Sandy, Town of Fort Benton	Emergency Management		Grant	Term		

E.7 Plan Implementation and Maintenance

Moving forward the Chouteau 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. Chouteau Emergency Management will take the lead on implementation and maintenance in coordination with MT DES.

E.7.1 Incorporation into Existing Planning Mechanisms

The Chouteau County MHMP is required to include a process through which the planned mitigation measures are incorporated into other planning mechanisms available to the County and cities and towns. These include the County Growth Policy Plan's goals, policies, and implementation strategies, Development Regulation, Subdivision Regulations, Zoning District requirements, and the capital improvement program. The Chouteau County MHMP provides recommended mitigation measures that are often closely related to these planning programs, and which can and will be incorporated into them as appropriate.

The planned mitigation measures will also be considered and incorporated as appropriate into future revisions of the Regulations and Codes when updated by Chouteau County and the City of Fort Benton and Towns of Big Sandy and Geraldine. The sections most likely to be affected include the Subdivision Regulations, Development Regulation, and Zoning Regulations and sections pertaining to public improvements and emergency management. Revisions or additions to the Growth Policy Plan's goals, policies, and implementation strategies are often accompanied by revisions of the Subdivision Regulations needed to implement them. The planned mitigation measures will also be considered in the development of the Chouteau County's and the City and Town's Capital Improvement Programs and the updating of the Chouteau County Emergency Operations Plan. When the County considers new technology in data collection and mapping for utilization, its application to hazard assessment and mitigation will be considered.

E.7.2 Monitoring, Evaluation and Updating the Plan

Chouteau County will follow the procedures to review and update this plan in accordance with Montana Central 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 Chouteau County Annex to the Montana Central 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.

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.