

## Annex M Pondera County

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### M.1 Mitigation Planning and County Planning Team

This County Annex builds on previous versions of the Pondera County Hazard Mitigation Plan last updated in 2018. 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 Conrad

The Town of Valier 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 Town is 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.

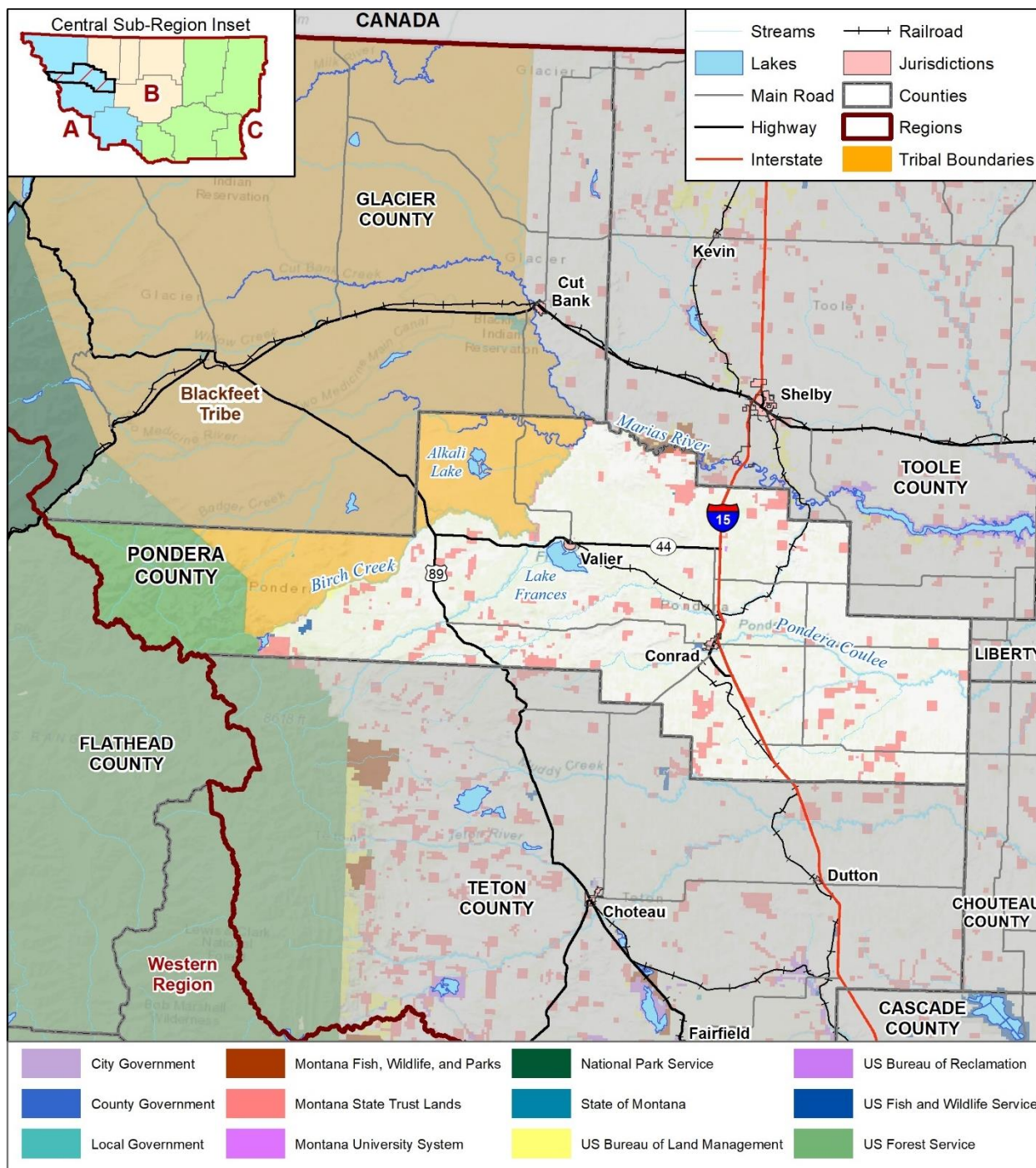
### M.2 Community Profile

#### M.2.1 Geography and Climate

Pondera County is located in the north-central Montana, with Conrad serving as the County seat. It covers an area of approximately 1,640 square miles and has a population of around 6,000 people. The county is bounded by Glacier County to the north, Toole County to the northeast, Liberty County to the east, Teton County to the south, and Flathead County to the west. Pondera County is a relatively flat region that is dominated by the Great Plains. The eastern part of the county is characterized by rolling hills and prairies, while the western part is more mountainous, with the Rocky Mountains rising to the west of the county. The county is home to several rivers, including the Marias River, which flows through the eastern part of the county, and the Teton River, which flows through the western part. The Two Medicine River also flows through the southern part of the county. Figure M-1 displays a map of the County.

According to the National Weather Service, Pondera County has a semi-arid continental climate, which is characterized by cold winters and warm summers. The County receives relatively low precipitation, with an average annual precipitation of around 12-15 inches. In the winter, temperatures can be quite cold, with average temperatures ranging from 15°F to 35°F. Snowfall is common during the winter months, with an average snowfall of around 40-50 inches per year. In the summer, temperatures are generally warm, with average temperatures ranging from 70°F to 85°F.

**Figure M-1 Pondera County Base Map and Land Stewardship**



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

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## M.2.2 Population Trends

According to the 2020 U.S. Census, Pondera County is the 33rd most populous county in Montana with a total population of 4,971. The U.S. Census Bureau reported the County experienced a -7.1% change in population since the 2010 census. The population of Pondera County has had periods oscillating between population growth and decline over the past 40 years. Table M-1 below shows the population trends for Pondera County, the City of Conrad, and the Towns of Valier and Heart Butte over the last 40 years, where data was available. See Section M.2.3 for information on the demographics and description of populations in the County its participating jurisdiction, the City of Conrad, compared to the rest of the State of Montana.

**Table M-1 Population Trends in Pondera County 1980-2020**

Incorporated Community	1980	1990	1980-1990 Change	2000	1990-2000 Change	2010	2000-2010 Change	2020	2010-2020 Change
City of Conrad	3,074	2,902	-6%	2,766	-4.7%	2,570	-7.1%	2,318	-9.8%
Town of Valier	-	519	-	526	1.3%	509	-3.2	530	4.1%
Town of Heart Butte	-	-	-	698	-	582	-16.6	609	4.6%
Pondera County	5,572	5,050	-9.4%	5,267	4.2%	5,324	1.6%	4,971	-7.1%

Source: US Census 1980-2020, <https://data.census.gov/>

## M.2.3 Demographics

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

**Table M-2 Demographic Estimates for Pondera County (2016-2020 ACS)**

Characteristic	City of Conrad	Pondera County	State of Montana
Percentage of persons below 150% poverty estimate	22.4%	24.9%	24.1%
Unemployment Rate estimate	4.8%	8.7%	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	-	17.7%	21.4%
Percentage of persons with no high school diploma (age 25+) estimate	6.8%	6.8%	7.5%
Percentage uninsured in the total civilian noninstitutionalized population estimate	6.5%	7.7%	9.6%
Percentage of persons aged 65 and older estimate	21.9%	20.6%	22.1%

Characteristic	City of Conrad	Pondera County	State of Montana
Percentage of persons aged 17 and younger estimate	24.3%	24.1%	21.3%
Percentage of civilian noninstitutionalized population with a disability estimate	19.4%	17.7%	15.6%
Percentage of single-parent households with children under 18 estimate	3.5%	1.4%	3.9%
Percentage of persons (age 5+) who speak English "less than well" estimate	1.7%	1.3%	0.3%
Minority (other than white non-Hispanic) estimate	8.4%	18.8%	14.6%
Percentage of housing in structures with 10 or more units estimate	8.7%	1.4%	3.3%
Percentage of mobile homes estimate	9.1%	7.3%	13.1%
Percentage of occupied housing units with more people than rooms estimate	-	1.2%	2.1%
Percentage of households with no vehicle available estimate	4.2%	2.5%	4.9%
Percentage of persons in group quarters estimate	-	3.3%	2.8%
Percentage Female estimate	52.8%	50.5%	49.7%
Median Age estimate	40.0	41.1	40.1
Median Gross Rent estimate	\$845	\$746	\$836
Median House Value estimate	\$134,900	\$149,700	\$244,900
Percent Unoccupied Housing Units estimate	18.6%	20.5%	15.3%

Source: ACS 2016-2021, <https://data.census.gov/>

## M.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 influences its ability to prepare for, respond to, cope with, recover from, and adapt to environmental hazards. Additional details on social vulnerability and the National Risk Index (NRI) can be found in Section 4.1.1.5 of the Base Plan.

The NRI ranked the social vulnerability in Pondera County as Relatively High, with a score of 71.9. This is higher than 18% of counties within Montana. Refer to HIRA for more information on social vulnerability. Demographic factors that can influence the social vulnerability rating are displayed in Table M-2. The ACS reports that a significant portion of the population in Pondera County (around a quarter of the population) is below the 150% poverty level. Nearly 25% of the population is aged 17 and younger, indicating that many individuals are still dependent on a caretaker; similarly, approximately 20% of the county is aged 65 or older,

indicating the possibility for issues living independently and increased vulnerability to some specific hazards. The estimated population living with a disability is 17.7%, which is greater than the state. While the NRI does not provide data at a city level, it is possible to view data on a census tract level at the online FEMA NRI website.

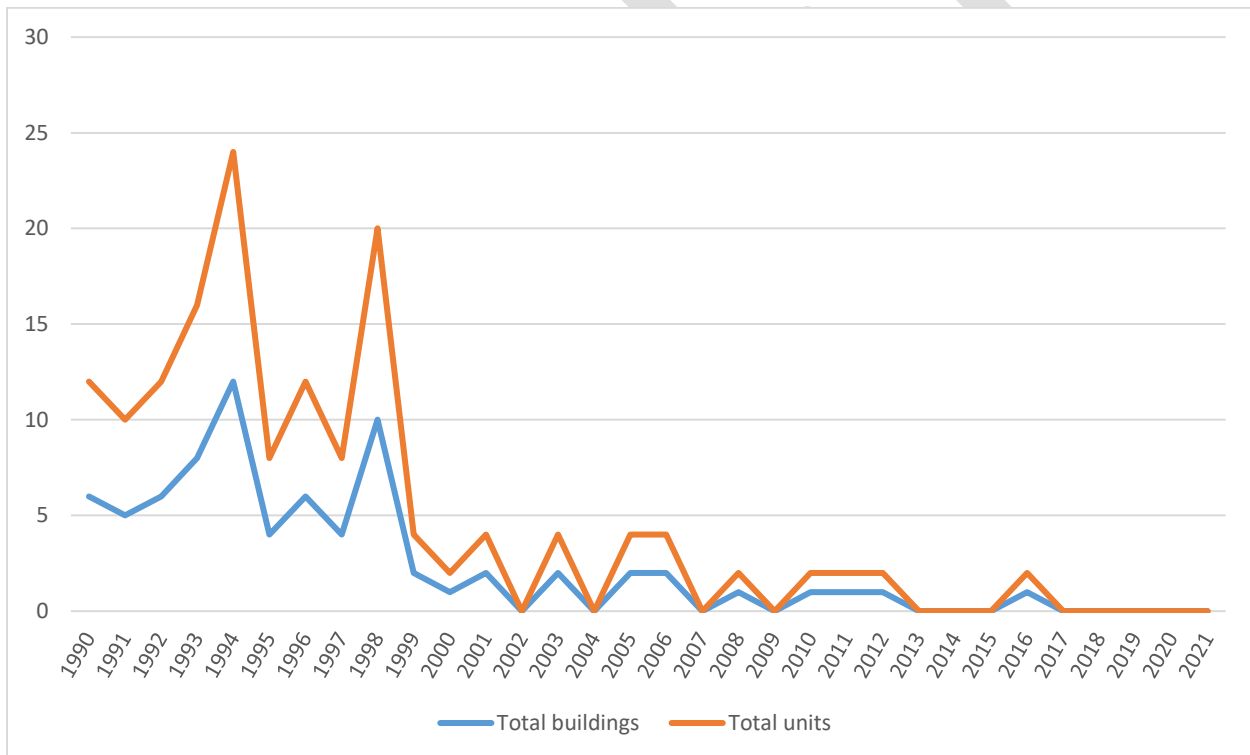
### M.2.5 Development Trends

Pondera County is not experiencing significant population growth or residential construction; however, the County Planning Team (CPT) has noted that there is continuous building in the City of Conrad. The previous 2018 HMP also noted little growth or population increases in the planning area.

- City of Conrad: The CPT noted that Industrial and commercial building has been stagnant, although building is ongoing. The City adopted and currently operates under the 2021 IRC building codes.

The U.S. Census Bureau Building Permit Survey provides information and local statistics on new privately-owned residential construction. Figure M-2 below displays the new privately owned housing unit authorizations by year in Pondera County. Since the last plan update, there has been no new residential development in the county with zero building permits issued since 2018.

**Figure M-2 New Privately Owned Housing Unit Authorizations**



Source: US Census Bureau, [https://www.census.gov/construction/bps/data\\_visualizations/index.html](https://www.census.gov/construction/bps/data_visualizations/index.html)

### M.2.6 Economy

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

**Table M-3 Pondera County Economic Profile**

Economic Characteristics	Pondera County
Families Below Poverty Level	10.0%
Individuals Below Poverty Level	17.6%
Median Home Value	\$149,700
Median Household Income	\$54,235
Per Capita Income	\$27,114
Population > 16 Years Old in Labor Force	62.0%
Population Employed	57.8%

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

Table M-4 below shows the breakdown of employment in Pondera County by the industry sector. According to the ACS, the leading employment sectors in the County are educational services, and health care and social assistance, which composes over a quarter of the total employment in the County, followed by agriculture, forestry, fishing and hunting, and mining.

**Table M-4 Pondera County Occupation by Industry Profile**

Industry	Population Employed	Percent of Labor Force
Agriculture, forestry, fishing and hunting, and mining	499	19.5%
Construction	110	4.3%
Manufacturing	29	1.1%
Wholesale trade	165	6.4%
Retail trade	304	11.9%
Transportation and warehousing, and utilities	160	6.2%
Information	23	0.9%
Finance and insurance, and real estate and rental and leasing	64	2.5%
Professional, scientific, and management, and administrative and waste management services	111	4.3%
Educational services, and health care and social assistance	680	26.5%
Arts, entertainment, and recreation, and accommodation and food services	147	5.7%
Other services, except public administration	85	3.3%
Public administration	187	7.3%

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

## M.3 Hazard Identification and Risk Assessment

### M.3.1 Identified Hazards

The County Planning Team (CPT) reviewed significant hazards for inclusion in the hazard mitigation plan. The 2018 Pondera County plan identified the following hazards:

- Dam Failure
- Droughts
- Flooding
- Severe Summer Weather
- Severe Winter Weather
- Tornadoes
- Wildfire

Several changes were made from the 2018 Pondera County Hazard Mitigation Plan to be consistent with the 2023 Montana Central Region Hazard Mitigation Plan. Dam failure, drought, flooding, severe summer weather, and severe winter weather are still profiled. Tornadoes has been amended to include windstorms, and wildland fire has been changed to wildfire. In addition, numerous new hazard profiles have been added, including communicable disease, cyber-attack, earthquake, hazardous materials incidents, landslide, human conflict, transportation accidents, and volcanic ash.

Pondera 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 M-5 below. More details on hazards can be found in Chapter 4 of the base plan.

**Table M-5 Pondera County Overall Hazard Significance by Hazard and Jurisdiction\***

Hazard	Pondera County	City of Conrad
Communicable Disease	Medium	Medium
Cyber-Attack	High	High
Dam Failure	Medium	Medium
Drought	Medium	Medium
Earthquake	Medium	Medium
Flooding	Medium	Medium
Hazardous Materials Incident	High	High
Landslide	Low	Low
Severe Summer Weather	High	High
Severe Winter Weather	High	High
Human Conflict	Low	Low
Tornadoes & Windstorms	High	High
Transportation Accidents	High	High
Volcanic Ash	Low	Low
Wildfire	High	High

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

<p><b>Geographic Extent</b></p> <p><u>Negligible</u>: Less than 10 percent of planning area or isolated single-point occurrences</p> <p><u>Limited</u>: 10 to 25 percent of the planning area or limited single-point occurrences</p> <p><u>Significant</u>: 25 to 75 percent of planning area or frequent single-point occurrences</p> <p><u>Extensive</u>: 75 to 100 percent of planning area or consistent single-point occurrences</p> <p><b>Potential Magnitude/Severity</b></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><b>Probability of Future Occurrences</b></p> <p><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.</p> <p><u>Occasional</u>: Between a 1 and 10 percent probability of occurrence in the next year or has a recurrence interval of 11 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><b>Overall Significance</b></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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### M.3.2 Building Inventory and Assets

People, property, critical facilities/infrastructure, and other important assets in Pondera County are exposed to the hazards identified in this plan. Table M-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, 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 M-6 Pondera County Building Inventory and Value by Jurisdiction**

Jurisdiction	Improved Parcels	Improved Value	Content Value	Total Value
City of Conrad	1,120	\$164,632,369	\$97,344,735	\$261,977,104
City of Valier	351	\$34,470,201	\$18,168,953	\$52,639,154
Pondera County	1,198	\$233,715,635	\$211,212,488	\$444,928,123
<b>Total</b>	<b>2,704</b>	<b>\$437,500,385</b>	<b>\$330,942,235</b>	<b>\$768,442,620</b>

Source: MSDI Cadastral database, <https://msl.mt.gov/geoinfo/msdi/cadastral/>, accessed 4/14/2022

Total building exposure within Pondera County based on an analysis of improved parcels is approximately \$768 million, with over \$437 million in improved value properties and \$330 million of contents at-risk. Of the \$768 million of total building exposure in Pondera County, approximately 35% is located in the City of Conrad and over half is located in the unincorporated County. Residential properties represent the greatest portion of structures in the County, accounting for \$355 million in total value (46.2%).

**Table M-7 Pondera County Total Exposure by Jurisdiction and Property Type**

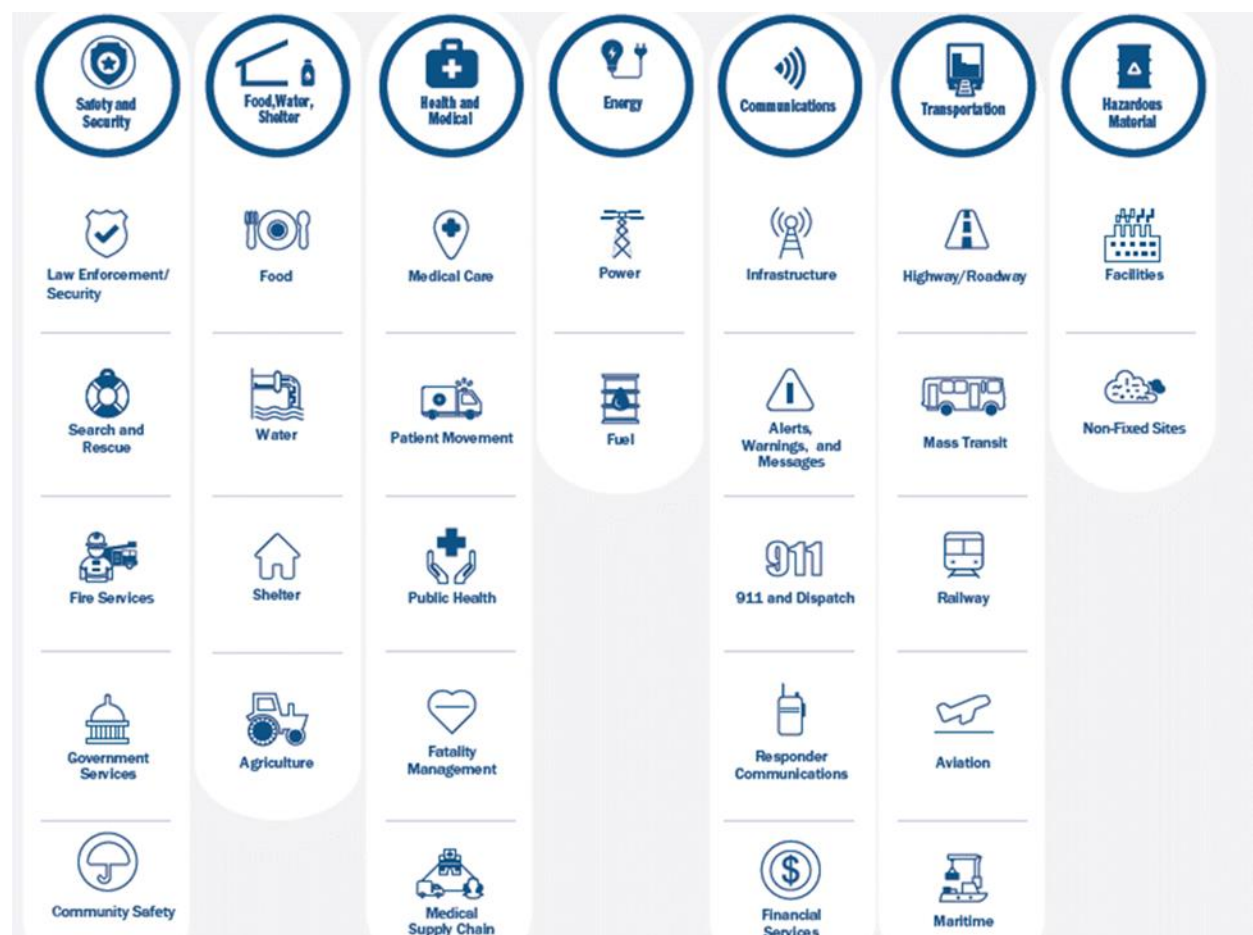
Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value
City of Conrad	Commercial	2	\$27,830	\$27,830	\$55,660
	Exempt	29	\$26,022,800	\$26,022,800	\$52,045,600
	Industrial	5	\$1,999,420	\$2,999,130	\$4,998,550
	Residential	1,081	\$136,574,689	\$68,287,345	\$204,862,034
	Vacant	3	\$7,630	\$7,630	\$15,260
	<b>Total</b>	<b>1,120</b>	<b>\$164,632,369</b>	<b>\$97,344,735</b>	<b>\$261,977,104</b>
City of Valier	Agricultural	1	\$11,950	\$11,950	\$23,900
	Commercial	1	\$152,870	\$152,870	\$305,740
	Exempt	9	\$1,701,225	\$1,701,225	\$3,402,450
	Residential	339	\$32,602,496	\$16,301,248	\$48,903,744
	Vacant	1	\$1,660	\$1,660	\$3,320
	<b>Total</b>	<b>351</b>	<b>\$34,470,201</b>	<b>\$18,168,953</b>	<b>\$52,639,154</b>
Pondera County	Agricultural	511	\$91,652,798	\$91,652,798	\$183,305,596
	Commercial	2	\$48,590	\$48,590	\$97,180
	Exempt	25	\$53,498,702	\$53,498,702	\$106,997,404
	Industrial	5	\$21,710,030	\$32,565,045	\$54,275,075
	Residential	644	\$66,716,325	\$33,358,163	\$100,074,488
	Vacant	11	\$89,190	\$89,190	\$178,380
	<b>Total</b>	<b>1,198</b>	<b>\$233,715,635</b>	<b>\$211,212,488</b>	<b>\$444,928,123</b>
<b>Grand Total</b>	<b>2,704</b>	<b>\$437,500,385</b>	<b>\$330,942,235</b>	<b>\$768,442,620</b>	

Source: MSDI Cadastral database, <https://msl.mt.gov/geoinfo/msdi/cadastral/>, accessed 4/14/2022

## 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.

**Figure M-3 FEMA Lifeline Categories**



Source: FEMA

FEMA organizes critical facilities into seven lifeline categories as shown in Figure M-3. 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.

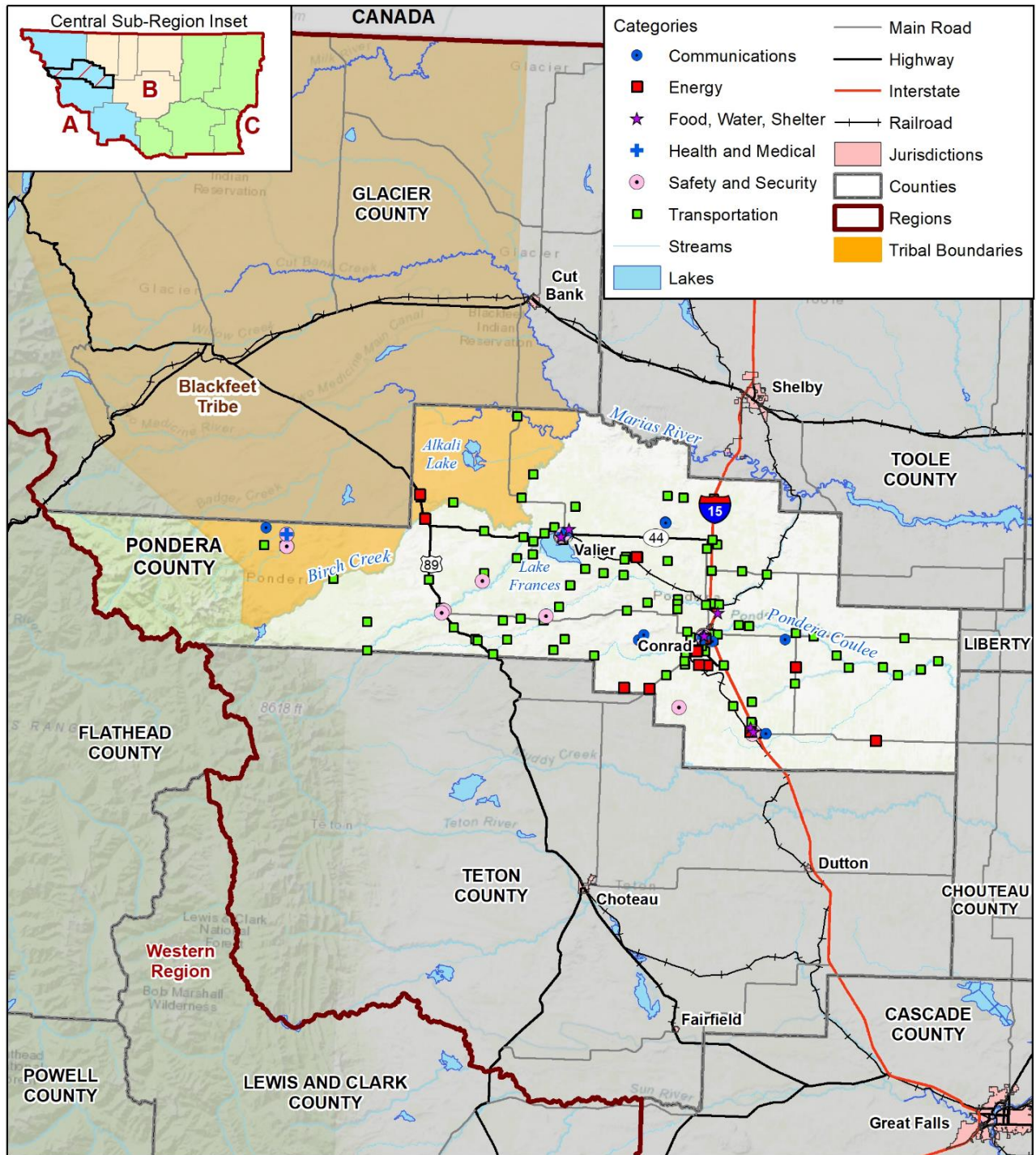
Table M-8 below summarizes the number of critical facilities by jurisdiction. Figure M-4 through Figure M-5 displays the location of critical facilities by FEMA Lifeline in Pondera County and its jurisdictions.

**Table M-8 Pondera County Critical Facilities by Jurisdiction**

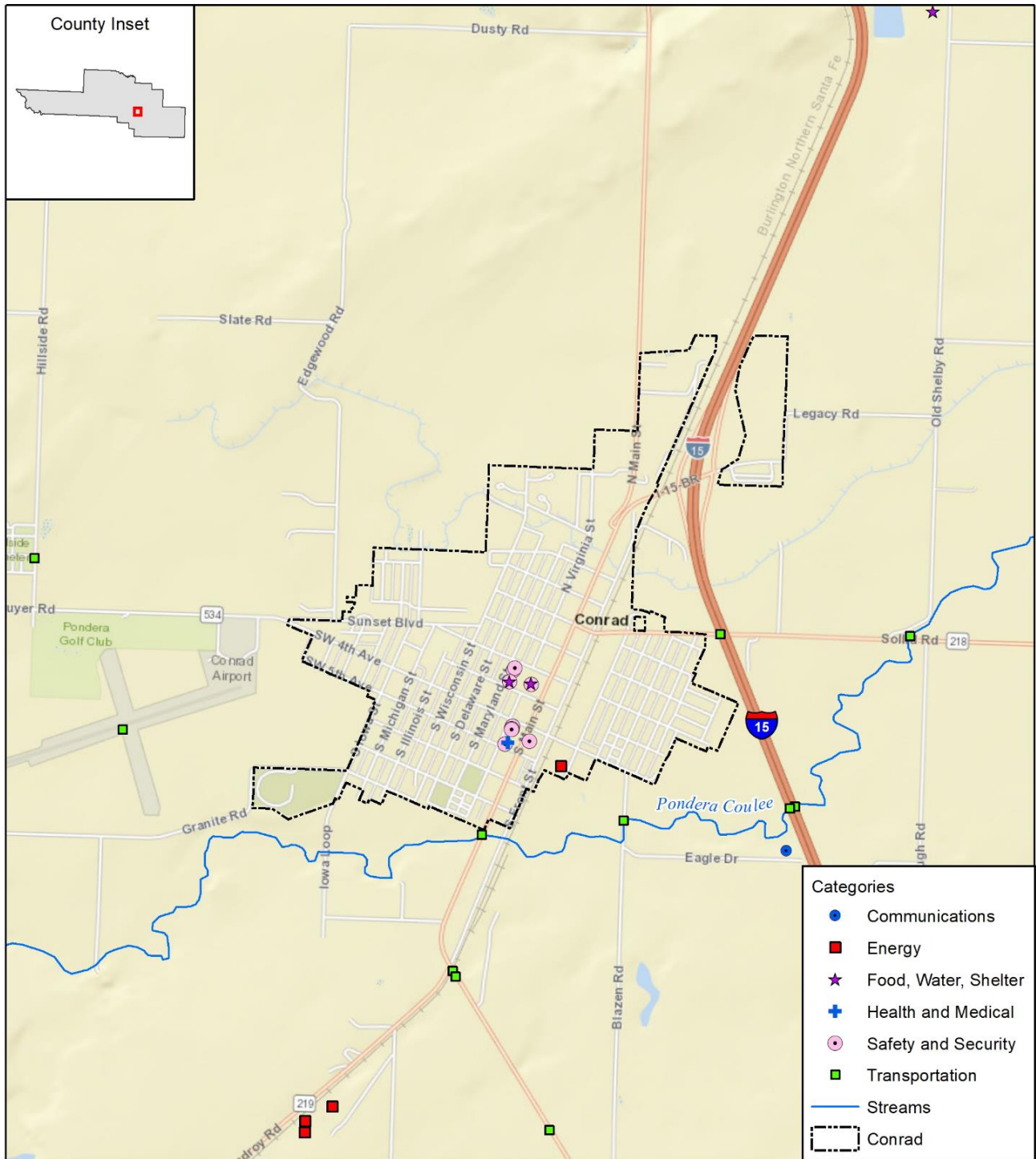
Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Material	Health and Medical	Safety and Security	Transportation	Total
City of Conrad	-	1	2	-	1	10	-	14
City of Valier	-	-	2	-	1	5	1	9
Pondera County	14	15	4	-	1	11	97	142
<b>Grand Total</b>	<b>14</b>	<b>16</b>	<b>8</b>	<b>0</b>	<b>3</b>	<b>26</b>	<b>98</b>	<b>165</b>

Source: HIFLD 2022, MT DES, National Bridge Inventory

**Figure M-4 Pondera County Critical Facilities**



**Figure M-5 City of Conrad Critical Facilities**



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

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## Natural, Historic, and Cultural Assets

Assessing the vulnerability of Pondera 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 includes many types of structures, such as buildings, 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 M-9 below lists the properties that are identified as having cultural and historic significance in Pondera County as recorded by the National Register of Historic Places.

**Table M-9 Historic Properties and Districts on National Registers**

Property Name	City/Town	Location	Date Listed
Two Medicine Fight Site	Browning	About 25 mi. SE of Browning	10/6/1970
Conrad City Hall (Library)	Conrad	15 4th Ave., SW	2/1/1980
Froggie's Stopping Place on the Whoop-Up Trail	Conrad	Address Restricted	4/15/1993
Valier Public School	Valier	820 3rd St.	3/28/1985

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.

In this regard, the Four Watersheds- Two Medicine, Milk River, Birch Creek, and Marias River- are considered as important natural resources in the county. The quality of surface water in these watersheds is directly impacted by run-off events, which usually occur during the spring snow melt and high precipitation events between April and June. During drought years in August through the fall, water quality in prairie potholes can become a concern for livestock consumption.

### 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.

## M.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 from the Region as a whole 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

### M.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 Conrad, 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 Pondera County.

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

### M.4.2 Cyber-Attack

All servers, networks, and users are vulnerable to cyber-attacks in Central Montana. Pondera County is ranked as high, due to the CPTs concern for future losses due to this hazard. There are no significant variations in vulnerability to cyber-attack across Pondera County due to no recorded cyber-attack events. However, the growing rates of cyber-attacks in the United States over the past decade indicates that any area in the United States could experience greater frequency of attacks in the future.

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

### M.4.3 Dam Failure

Dam failure in Pondera County is ranked as Medium. There are four high hazard dams and seven significant hazard dams located in Pondera County. The table below identifies the dams and the nearest downstream communities which could potentially be impacted in a dam failure or incident. Refer to Chapter 4 for a discussion of the dam failure risk relative to Pondera County and the Central Region.

**Table M-10 Dams in Pondera County**

Hazard Class	Dam Name	Owner	River	Nearest Downstream City	Distance To Nearest Downstream City (Miles)	Emergency Action Plans (EAP)
High	Lake Frances East Dam	Pondera Canal & Res. Co.	Offstream-Hein Coulee	Ledger	24	Yes

Hazard Class	Dam Name	Owner	River	Nearest Downstream City	Distance To Nearest Downstream City (Miles)	Emergency Action Plans (EAP)
High	Lake Frances North Dam	Pondera Canal & Res. Co.	Offstream-Birch Creek	Cut Bank	30	Yes
High	Swift Dike (Pondera)	Pondera Canal & Res. Co.	Birch Creek Offstream	None	0	Yes
High	Swift (Pondera)	Pondera Canal & Res. Co.	Birch Creek	None	0	Yes
Significant	Fowler Dam #2 (Pondera)	Orcutt Ranch Co	Fowler Coulee	Loma	82	N/A
Significant	Johnson, Howard (Pondera)	Howard S Johnson	Tr-Dead Indian Coulee	Loma	81	N/A
Significant	Fowl Mouth	Thomas McCracken	Tr-Fowler Coulee	Loma	53	N/A
Significant	Aldebaran	Michael Moore	Tr Little Flat Coulee	Ledger	7	N/A
Significant	Curry Dam	Curry Cattle Inc.	Cartwright Coulee		0	N/A
Significant	Cracker	Thomas McCracken	Tr-Dry Fork Marias River	Ledger	3	N/A
Significant	Walstom	Lavon F Walston	Tr-Pondera Coulee	Conrad	4	N/A

Source: National Inventory of Dams (NID)

With four high and seven significant hazard dams in the planning area, dam failure flooding could result in significant property losses and loss to human life. A dam incident at any of these locations could result in severe inundation to areas of Pondera County and downstream communities. Figure M-6 displays the location of dams in Pondera County and the extent of mapped inundation where data was available. There are no federally owned dams within Pondera County.

Table M-11 summarizes the estimated number of improved parcels, building values, and people within inundation zones (limited to high hazard dams that are not federally owned) in Pondera County by property type. Total property value and population at risk in Pondera County is relatively limited compared to many other counties in the Central Region. However, total property value at risk is still estimated at upwards of \$8 million. Agricultural property types represent the greatest total number of improved parcels and most property value, with approximately \$5.8 million in total property value at risk. Table M-12 summarizes the critical facilities located in Pondera 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 M-11 Pondera County Parcels at Risk to Overall Dam Inundation by Jurisdiction**

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Population
Blackfeet Tribe	Agricultural	8	\$495,340	\$495,340	\$990,680	
	Residential	2	\$308,100	\$154,050	\$462,150	6
	<b>Total</b>	<b>10</b>	<b>\$803,440</b>	<b>\$649,390</b>	<b>\$1,452,830</b>	<b>6</b>

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Population
Pondera County	Agricultural	15	\$2,415,130	\$2,415,130	\$4,830,260	
	Residential	15	\$1,335,162	\$667,581	\$2,002,743	41
	Vacant	1	\$31,430	\$31,430	\$62,860	
	<b>Total</b>	<b>31</b>	<b>\$3,781,722</b>	<b>\$3,114,141</b>	<b>\$6,895,863</b>	<b>41</b>
	<b>Grand total</b>	<b>41</b>	<b>\$4,585,162</b>	<b>\$3,763,531</b>	<b>\$8,348,693</b>	<b>47</b>

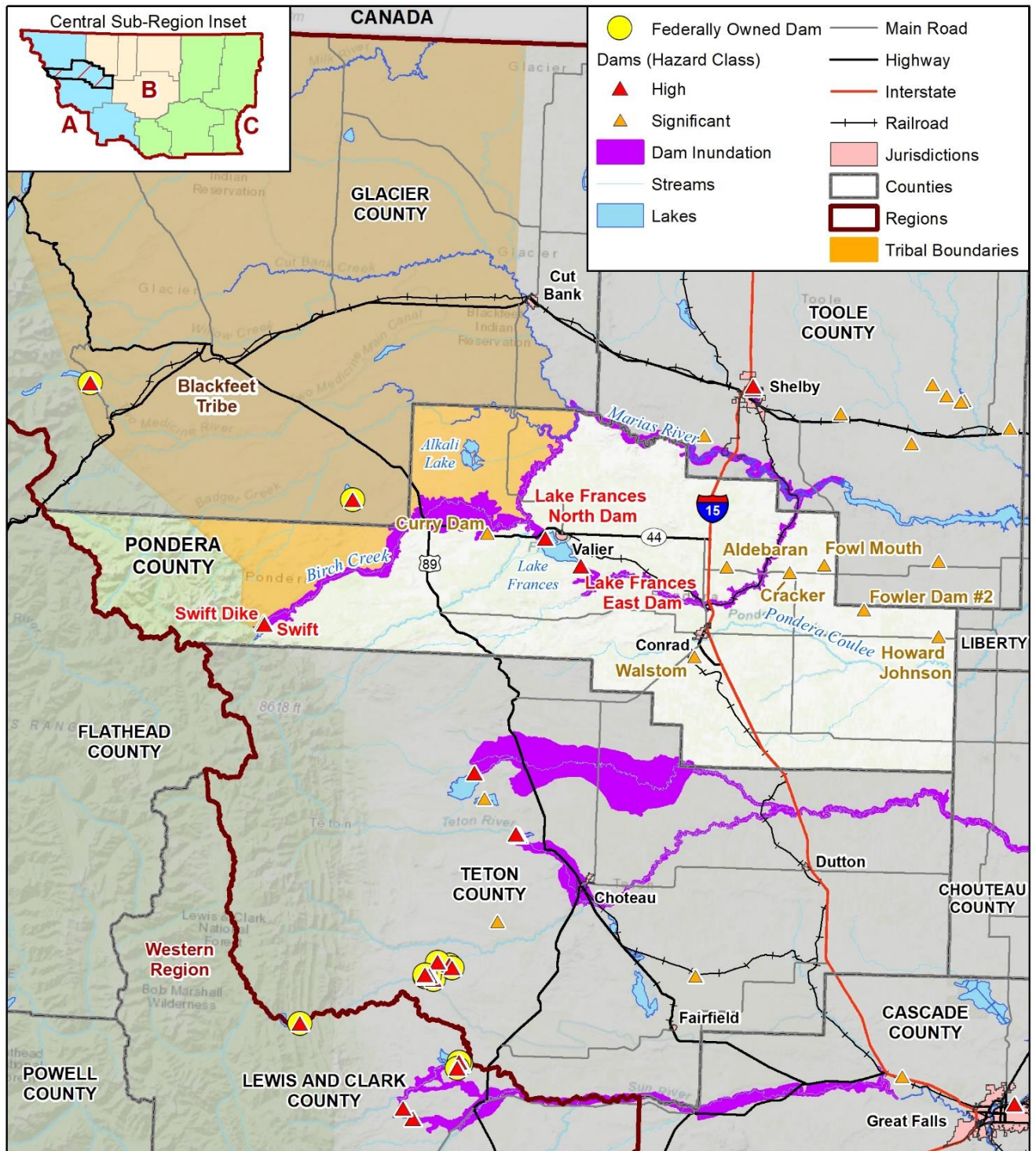
Source: County Assessor data, NID, MT DNRC, WSP GIS Analysis

**Table M-12 Pondera 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
Pondera County	-	1	-	-	-	-	19	20
<b>Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>20</b>

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

**Figure M-6 Pondera County Dam Inundation**



Map compiled 9/2022;  
intended for planning purposes only.  
Data Source: Montana State Library,  
NID, MT DNRC Dam Safety Program

0 10 20 Miles



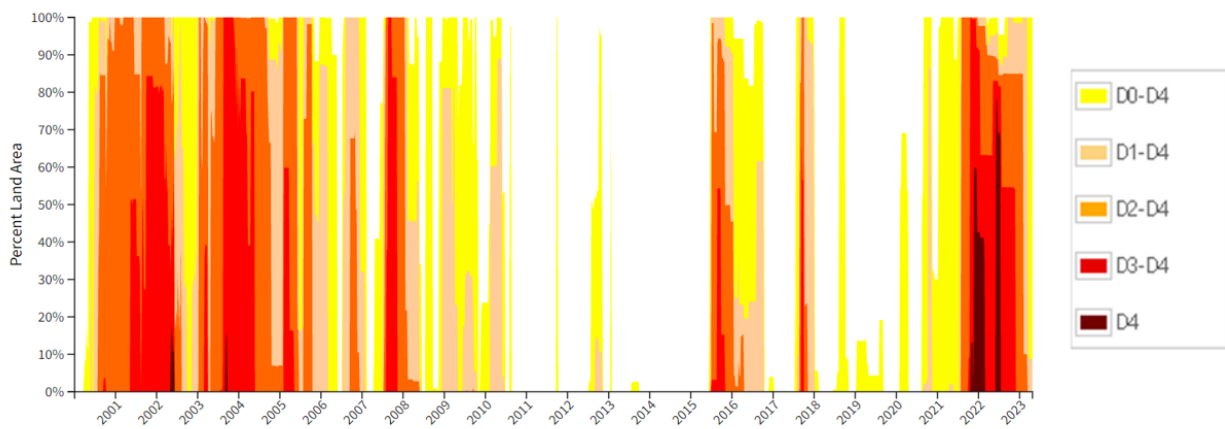
### M.4.4 Drought

Drought was rated as a hazard of medium concern in Pondera County. Between 2012 and 2021, Pondera County experienced 14 USDA emergency drought declarations, which is slightly more than the average number of drought declarations for the Central Region. The Drought Impact Reporter (2000-2021) reported that Pondera County had 32 drought impacts which affected agriculture and relief, response, and restrictions in the area.

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 Pondera County between 2000 and 2023 (since the USDM came into being) is shown below. The chart indicates that Pondera County experienced severe drought conditions (D4) in the years 2002 and late 2021 into 2022. Due to the regional nature of drought, there is no difference between risk rating between jurisdictions.

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

**Figure M-7 USDM Drought Timeseries for Pondera County**



Source: USDM; [www.drought.gov](http://www.drought.gov)

### M.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 impact counties along the Western portion of the Region, including Pondera County. Earthquake hazards in Pondera County are therefore ranked as medium overall significance.

According to a Hazus probabilistic loss analysis conducted for a scenario with 2% in 50 years recurrence, Pondera County has the fourth greatest direct economic losses expected in the Central Region, with an estimated \$21.6 million in total direct losses. Older and historic buildings will be more vulnerable to earthquake shaking.

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

### M.4.6 Flooding

Table M-13 below summarizes the building 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. Pondera County has no mapped digital FEMA floodplain data currently. Therefore, Hazus floodplain data was used as a substitute to perform the analysis.

Table M-13 below indicates the greatest flood losses in each applicable jurisdiction. Residential structures are the largest property type at risk to flooding. This coincides with residential structures have the highest improved value with a total of \$5.6 million and an estimated loss of over \$2.1 million due to the 1% annual chance of flooding.

**Table M-13 Pondera County Parcels at Risk to 1% Flood Hazard by Jurisdiction**

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Estimated Loss	Population
Blackfeet Tribe	Agricultural	4	\$441,280	\$441,280	\$882,560	\$220,640	
	<b>Total</b>	<b>4</b>	<b>\$441,280</b>	<b>\$441,280</b>	<b>\$882,560</b>	<b>\$220,640</b>	<b>0</b>
Conrad	Residential	10	\$780,806	\$390,403	\$1,171,209	\$292,802	28
	<b>Total</b>	<b>10</b>	<b>\$780,806</b>	<b>\$390,403</b>	<b>\$1,171,209</b>	<b>\$292,802</b>	<b>28</b>
Pondera County	Agricultural	23	\$4,305,010	\$4,305,010	\$8,610,020	\$2,152,505	
	Residential	38	\$4,915,773	\$2,457,887	\$7,373,660	\$1,843,415	105
	<b>Total</b>	<b>61</b>	<b>\$9,220,783</b>	<b>\$6,762,897</b>	<b>\$15,983,680</b>	<b>\$3,995,920</b>	<b>105</b>
<b>Grand Total</b>		<b>75</b>	<b>\$10,442,869</b>	<b>\$7,594,580</b>	<b>\$18,037,449</b>	<b>\$4,509,362</b>	<b>132</b>

Sources: Hazus

Pondera County has a total of 52 critical facilities located in the 1% annual chance floodplain. 51 are transportation lifelines and one safety and security lifeline. This is shown in Table M-14 below.

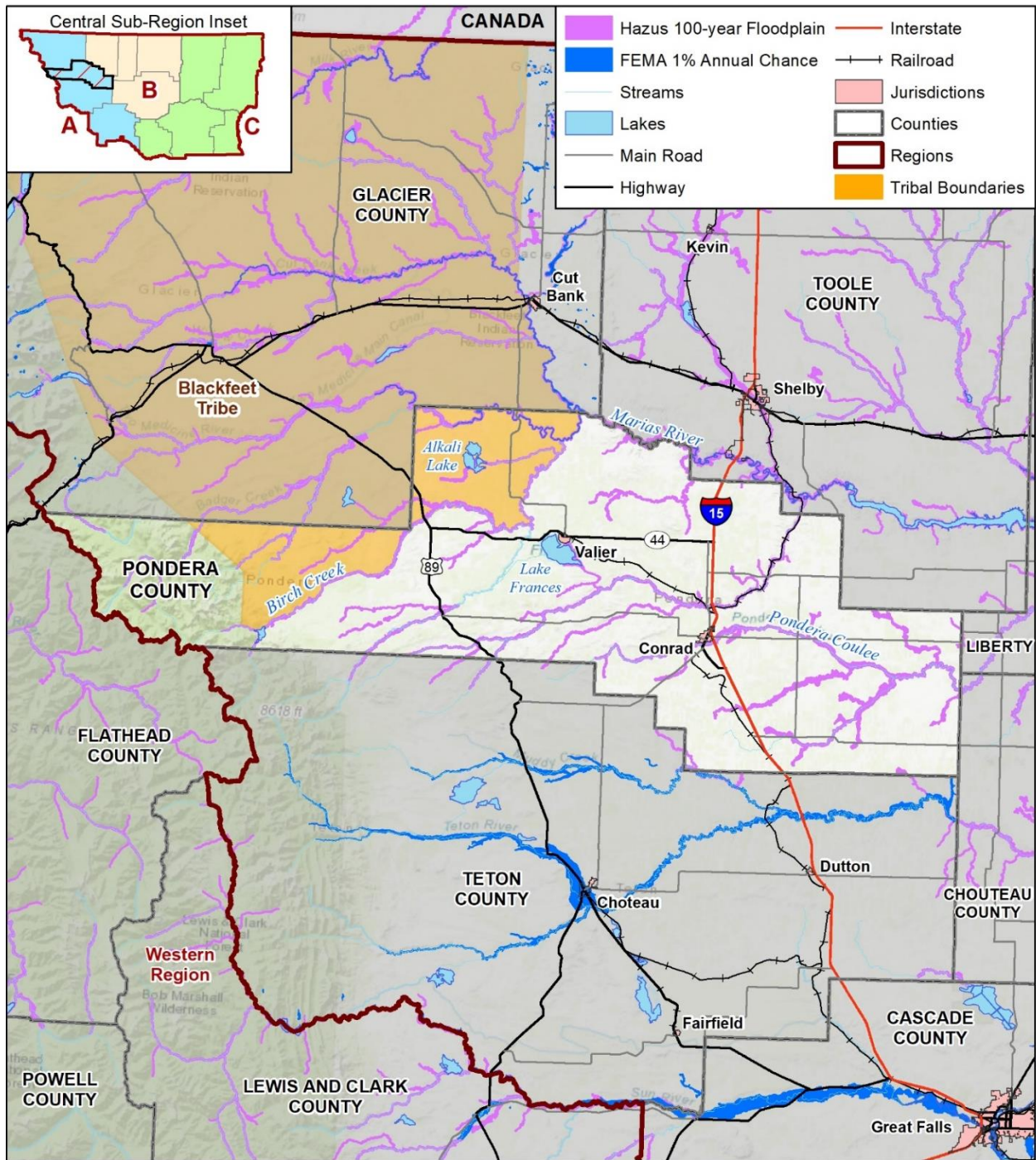
**Table M-14 Pondera County Critical Facilities at Risk to 1% Annual Chance Flood Hazards by FEMA Lifeline**

County	Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health and Medical	Safety and Security	Transportation	Total
Pondera	Pondera County	-	-	-	-	-	1	51	52
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>51</b>	<b>52</b>

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

Pondera County structures that are located in the floodplain, are shown in Figure M-8 though Figure M-11 below.

**Figure M-8 Pondera County Flood Hazard**

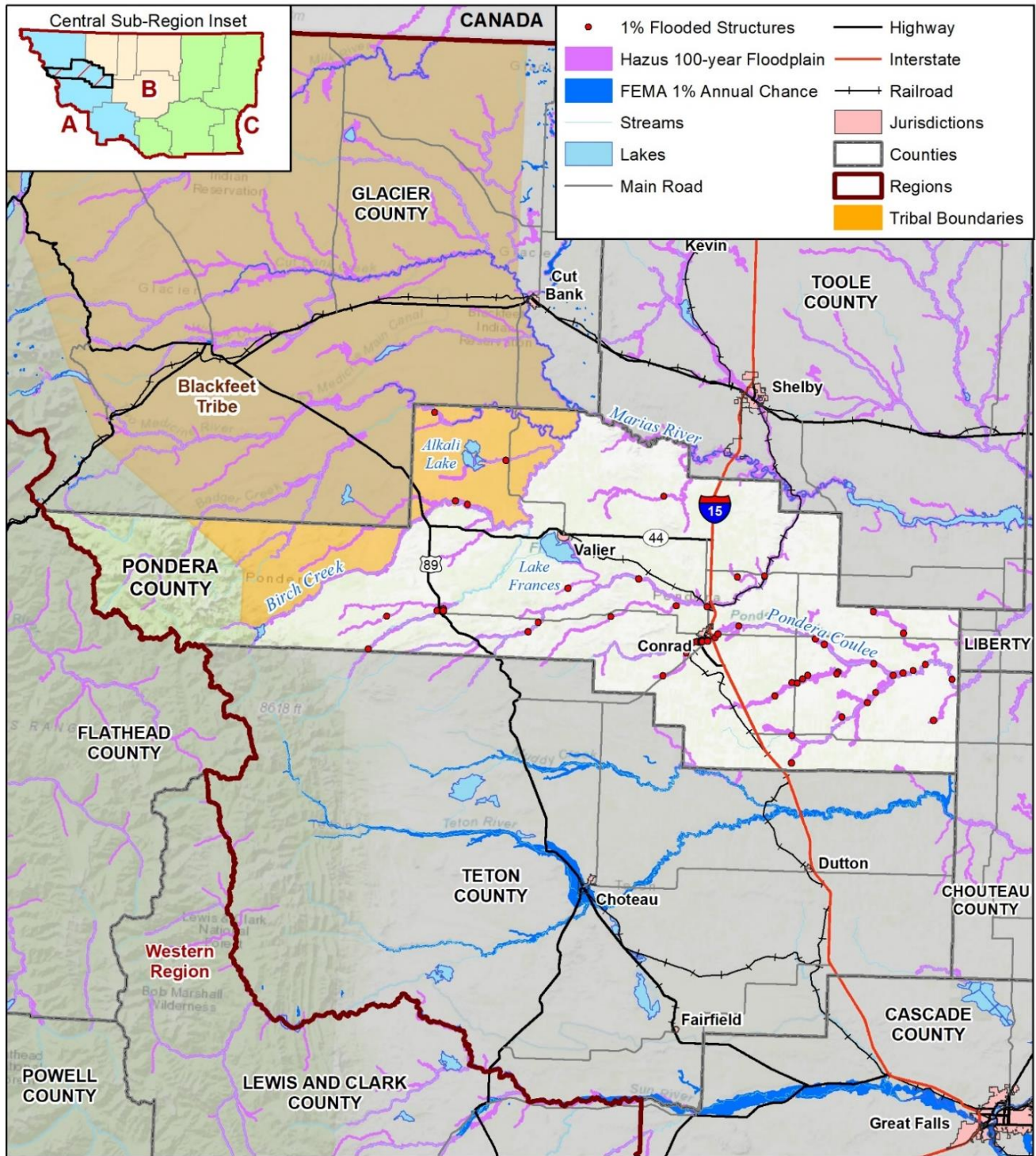


Map compiled 9/2022;  
intended for planning purposes only.  
Data Source: Montana State Library,  
DNRC, FEMA, Hazus

0 10 20 Miles

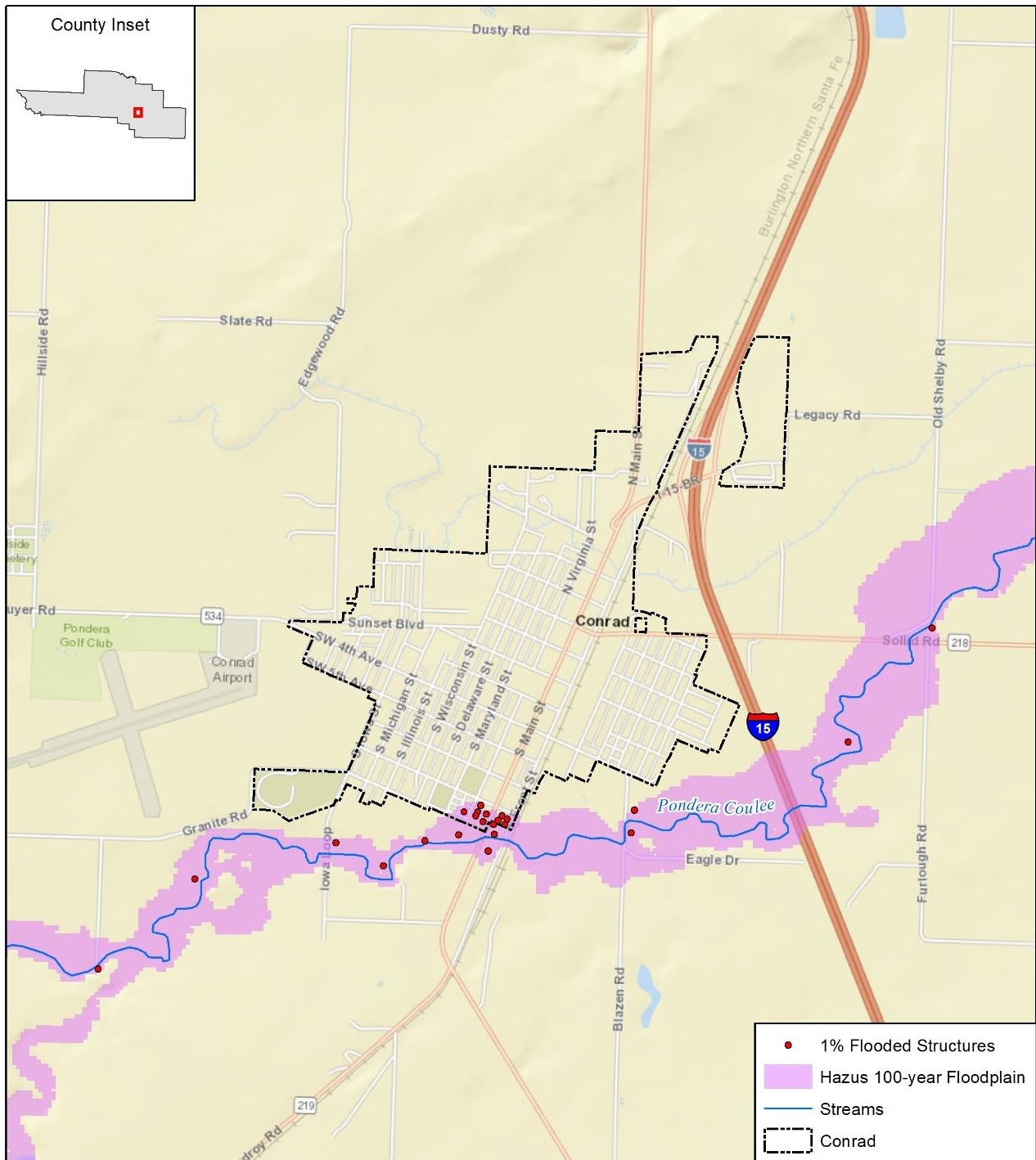


**Figure M-9 Pondera County Flood Hazard and Structures**



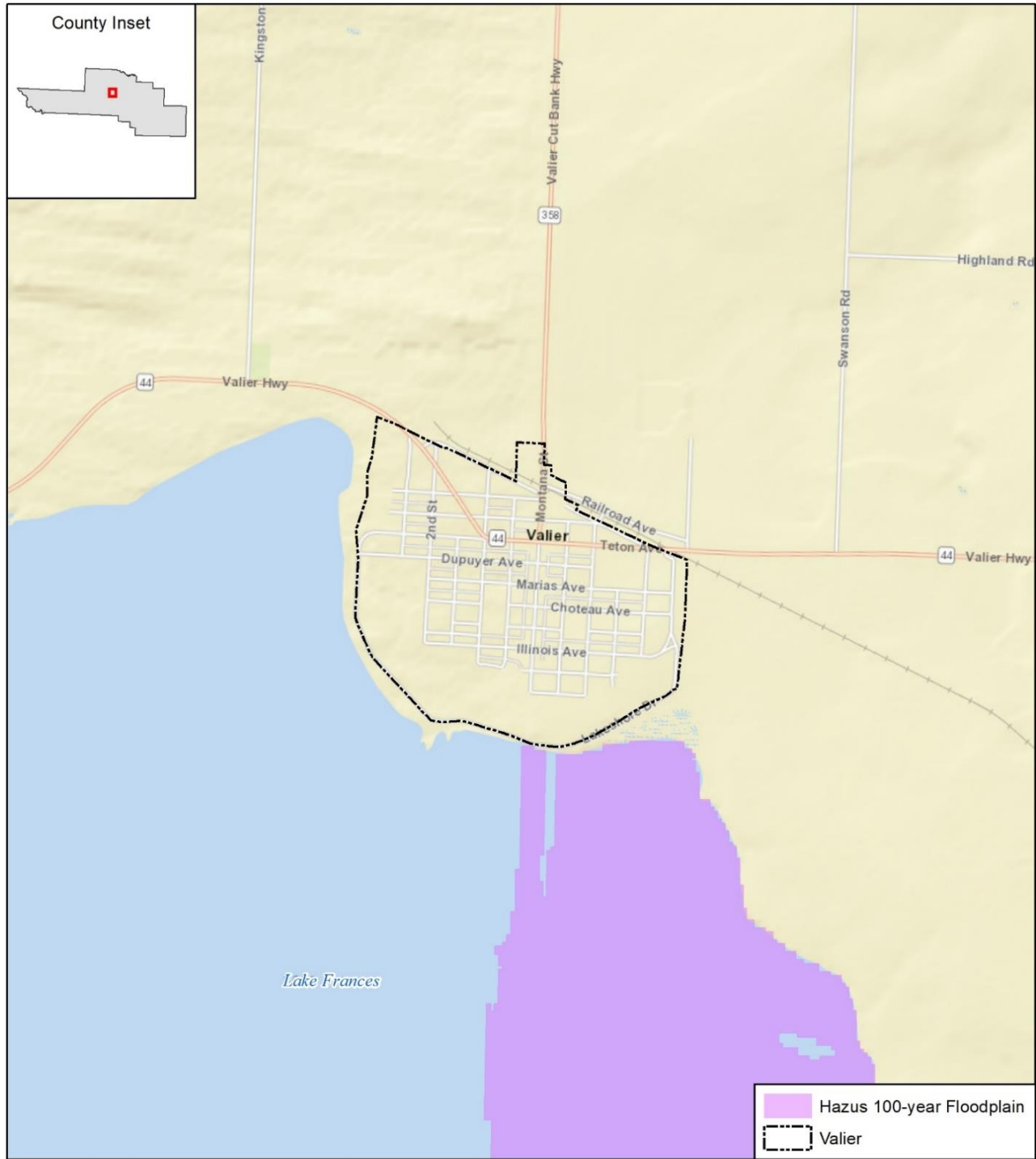
Map compiled 9/2022;  
intended for planning purposes only.  
Data Source: Montana State Library,  
DNRC, FEMA, Hazus

Figure M-10 Town of Conrad Flood Hazard and Structures



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

Figure M-11 Town of Valier Flood Hazard and Structures



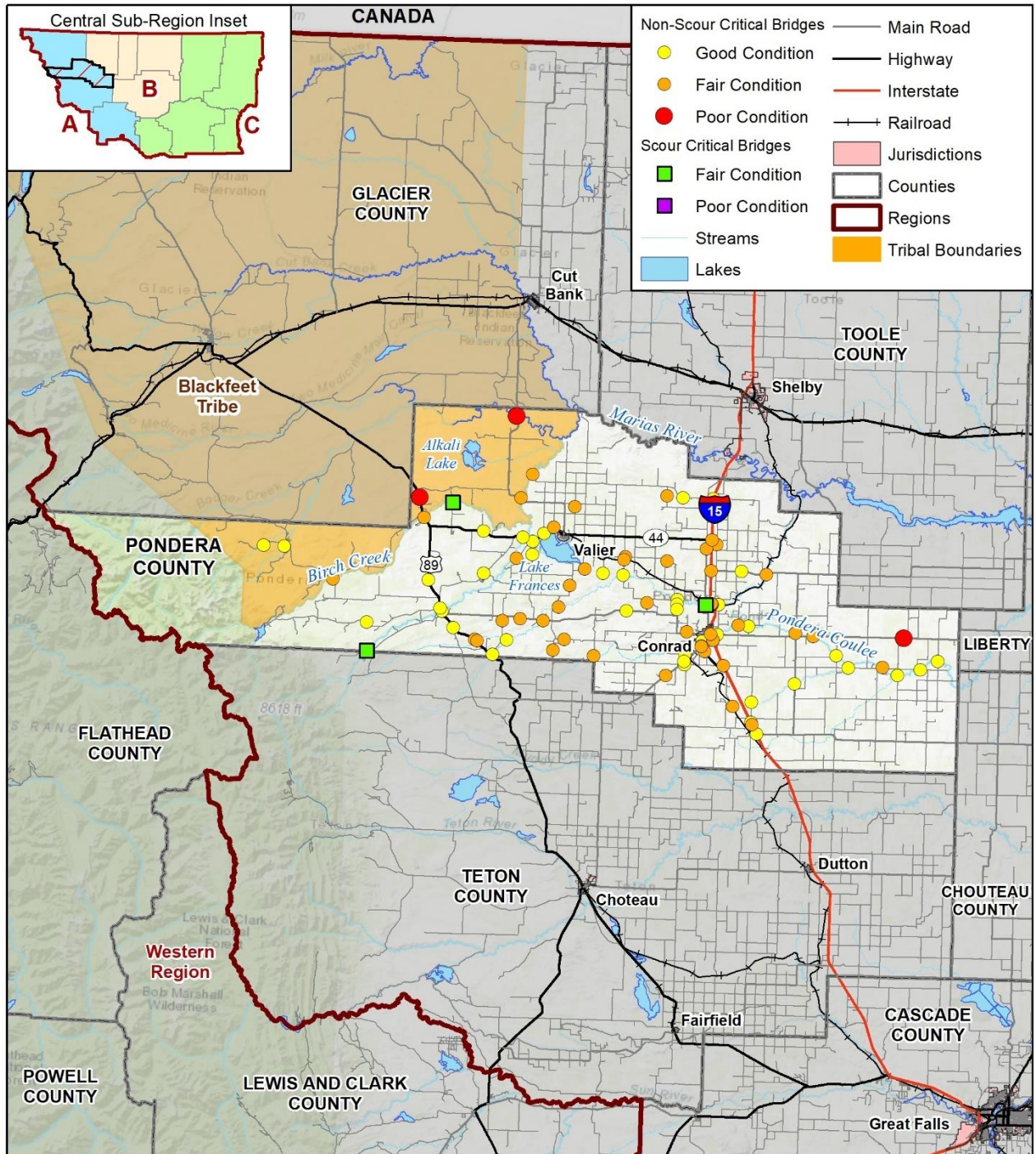
Map compiled 10/2022;  
intended for planning purposes only.  
Data Source: Montana State Library,  
DNRC, FEMA, Hazus

0 0.5 1 Miles



Figure M-12 below displays the location of bridges in Pondera County and their condition. Refer to Chapter 4 for a discussion of the flood risk relative to Pondera County and the Central Region.

**Figure M-12 Pondera County Bridges**



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

#### **M.4.7 Hazardous Materials Incident**

Pondera County has had 24 hazardous material incidents reported to the National Response Center since 1990. Gas transmission lines pass through the Towns of Conrad and Valier. Hazardous Liquid Pipelines also pass through the Towns of Brady and Conrad. The CPT noted that hazardous materials incidents should be ranked as high due to the potential for losses, especially at train/interstate intersections in the County.

Refer to Chapter 4 for a discussion of the hazardous materials incident risk relative to Pondera County and the Central Region overall.

#### **M.4.8 Landslide**

Landslides are ranked as a low overall significance hazard in Pondera County. There has been one recorded instance of federally declared disasters due to landslides in the County, therefore, annualized losses were found to be relatively low. There were no documented differences in landslide vulnerability between jurisdictions.

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

#### **M.4.9 Severe Summer Weather**

Pondera County ranked severe summer weather as a high overall significance hazard. Pondera County experienced an average number of summer weather events relative to other counties in the Central Region, but the HMPC noted that due to significant crop losses from severe summer weather, the hazard should be ranked as high. Property losses and crop losses from severe summer weather in Pondera County each totaled \$500,000, all of which occurred due to hail on June 6<sup>th</sup>, 1994. Additionally, there was one injury recorded in the County due to hail on July 10, 1989. Further details on these events were not provided by the NCEI database. All property and people are equally vulnerable to severe summer weather events in the County, and due to the regional nature of severe summer weather events, all jurisdictions in the county are rated as high.

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

#### **M.4.10 Severe Winter Weather**

Pondera County ranked severe winter weather as a high overall significance hazard. The NCEI records severe winter weather by zones rather than by county. The Eastern Pondera and Northern Rocky Mountain Front Zones are in Pondera County. The Eastern Pondera Zone experienced 43 recorded severe winter weather events, and the Northern Rocky Mountain Front Zone experienced 257 recorded events. Severe winter weather conditions in the Rocky Mountain Front Zone had recorded losses of downed powerlines, loss of livestock, and closed roads. The CPT noted that due to potential for future losses, the ranking of this hazard for the County and City of Conrad should be noted as high.

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

#### **M.4.11 Human Conflict**

Human conflict is ranked as an overall low significance for Pondera 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 Pondera 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 Pondera County and the Central Region.

#### **M.4.12 Tornadoes & Windstorms**

Pondera County ranked tornadoes and windstorms as a high overall significance hazard. The Eastern Pondera Zone (108) and Northern Rocky Mountain Front Zones (570) experienced a significant number of high wind and strong wind events. Additionally, Pondera County experienced 36 thunderstorm wind events, but no tornadoes, from 1950 to March 2022. Despite the relatively low number of historic events in Pondera County when compared to the rest of the region, Pondera County experienced the second greatest number of total losses from these events. The most damaging wind event that occurred in the county was recorded on June 6<sup>th</sup>, 1994, and resulted in \$5,000,000 in property damages and \$500,000 in crop damages. Due to the regional nature of these events, all jurisdictions in the county are equally vulnerable to tornado and wind events, although it should be noted that the county will experience a greater frequency of wind events than tornado events based on historic records.

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

#### **M.4.13 Transportation Accidents**

Pondera County ranked transportation accidents as an overall high significance. The Montana Department of Transportation reported 441 roadway crashes from 2016-2020 in the county. While transportation accidents can occur along any type of transportation route in the county, accidents are more likely to occur along major roadways such as US Highway 89 and Interstate 15, which run through the county. Additionally, the City of Conrad has a small airport.

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

#### **M.4.14 Volcanic Ash**

All jurisdictions in the Central Region and all jurisdictions within Pondera 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 Pondera County and the Central Region.

#### **M.4.15 Wildfire**

Pondera County ranked wildfire as a high significance hazard, while the Central Region as a whole ranked this hazard medium. There have been two FEMA disaster declarations due to fire in the County since 2000, DR-1340 in August of 2000 and DR- 5212 in September of 2017. The CPT also noted a recent grassfire which resulted in two deaths.

A vulnerability analysis was conducted for Pondera County to quantify the number and value of structures most vulnerable to wildfire in the county, as well as estimate the population living in these areas. According to the analysis, approximately 85% of residents reside in areas of high, very high, or extreme wildfire risk. Almost half of these residents reside in the City of Conrad, with the largest cluster of population residing in the very high wildfire risk zone. Table M-15 below displays the wildfire risk throughout Pondera County.

Table M-15 below also summarizes the estimated exposed value of improvements in each wildfire risk category. Of the 4,813 properties at risk, 88% of total structures are residential and 9% of total structures are agricultural. See Chapter 4 in the base plan for details on the methodology of this analysis.

**Table M-15 Pondera 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 <b>Extreme</b> Wildfire Hazards	Blackfeet Tribe	2	\$175,600	\$87,800	\$263,400	6
	City of Conrad	11	\$864,254	\$450,832	\$1,315,086	28
	Pondera County	12	\$752,982	\$376,491	\$1,129,473	33
	<b>Total</b>	<b>25</b>	<b>\$1,792,836</b>	<b>\$915,123</b>	<b>\$2,707,959</b>	<b>66</b>
At Risk to <b>Very High</b> Wildfire Hazards	Blackfeet Tribe	4	\$512,500	\$390,170	\$902,670	3
	City of Conrad	1,015	\$146,499,192	\$86,900,012	\$233,399,204	2,703
	City of Valier	345	\$34,243,461	\$18,055,583	\$52,299,044	916
	Pondera County	218	\$23,053,389	\$18,294,235	\$41,347,624	553
	<b>Total</b>	<b>1,582</b>	<b>\$204,308,542</b>	<b>\$123,640,000</b>	<b>\$327,948,542</b>	<b>4,175</b>
At Risk to <b>High</b> Wildfire Hazards	Blackfeet Tribe	8	\$1,592,180	\$1,592,180	\$3,184,360	0
	City of Conrad	18	\$4,579,345	\$3,177,363	\$7,756,708	47
	City of Valier	1	\$23,450	\$11,725	\$35,175	3
	Pondera County	359	\$63,932,855	\$49,837,383	\$113,770,238	523
	<b>Total</b>	<b>386</b>	<b>\$70,127,830</b>	<b>\$54,618,650</b>	<b>\$124,746,480</b>	<b>572</b>
<b>Grand Total</b>		<b>1,993</b>	<b>\$276,229,208</b>	<b>\$179,173,773</b>	<b>\$455,402,981</b>	<b>4,813</b>

Source: MSDI 2022, MWRA

Table M-16 summarizes the potential impact of wildfire on critical facilities and lifelines in Pondera 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.

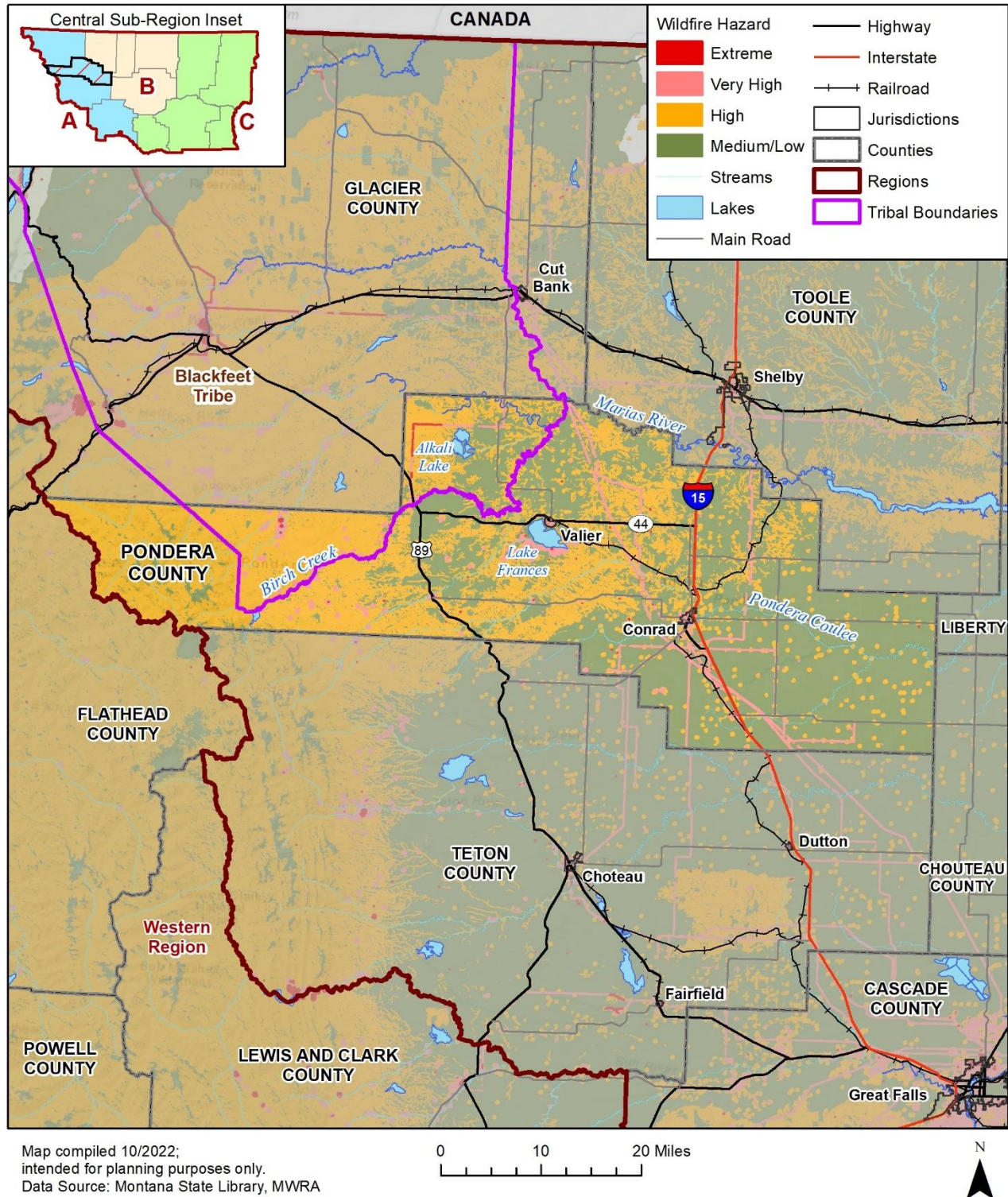
**Table M-16 Pondera County Critical Facilities at Risk to Wildfire Hazards by Jurisdiction, Facility Type, and Risk Rating**

At Risk Rating	Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health & Medical	Safety & Security	Transportation	Total
At Risk to <b>Extreme</b> Wildfire Hazards	Pondera County	1	-	-	-	1	4	1	<b>7</b>
	<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>7</b>
	City of Conrad	-	1	2	-	1	10	-	<b>14</b>

At Risk Rating	Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health & Medical	Safety & Security	Transportation	Total
At Risk to <b>Very High</b> Wildfire Hazards	City of Valier	-	-	2	-	1	5	-	8
	Pondera County	11	13	1	-	-	6	16	47
	<b>Total</b>	<b>11</b>	<b>14</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>21</b>	<b>16</b>	<b>69</b>
At Risk to <b>High</b> Wildfire Hazards	Pondera County	-	-	-	-	-	-	33	33
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>33</b>
At Risk to <b>Medium/Low</b> Wildfire Hazards	City of Valier	-	-	-	-	-	-	1	1
	Pondera County	2	2	3	-	-	1	47	55
	<b>Total</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>48</b>	<b>56</b>

Source: HIFLD 2022, MT DES, NBI, MWRA

**Figure M-13 Pondera County Wildfire Hazard**



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

The County Planning Team (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.

### M.5.1 Regulatory Mitigation Capabilities

Table M-17 lists planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place within Pondera County and each participating jurisdiction.

**Table M-17 Pondera County and Jurisdictions Regulatory Mitigation Capabilities**

Plans and Regulations	Pondera County	City of Conrad
Building Codes	No	Yes
Building Codes Year	No	Yes, 2021 IRC Building Codes
BCEGS Rating	?	?
Capital Improvements Program (CIP) or Plan	Yes	Yes
Community Rating System (CRS)	No	No
Community Wildfire Protection Plan (CWPP)	Yes	?
Comprehensive, Master, or General Plan	?	?
Economic Development Plan	?	Possibly as part of the Growth Policy
Elevation Certificates	No	Unknown at this time
Emergency Operations Plan (EOP)	Yes	Yes, County EOP
Erosion/Sediment Control Program	?	?
Floodplain Management Plan	?	City ordinance for guiding development activities subject to help limit flood damages
Flood Insurance Study	No	Yes
Floodplain Management Ordinance	?	Yes
National Flood Insurance Program (NFIP) Participant	06/07/97	06/01/86

Plans and Regulations	Pondera County	City of Conrad
Growth Management Ordinance or Policy	?	Subdivision ordinances are in place
Other Hazard-Specific Ordinance or Plan (Steep Slope, Wildfire)	Yes	Yes, with County
Site Plan Review Requirements	Yes	Yes, with County
Stormwater Program, Plan, or Ordinance	Yes	Yes
Zoning Code or Ordinance	Cities yes, County has Sanitarian	Yes

### Discussion on Existing Regulatory Mitigation Capabilities

According to the CPT, FEMA has not measured the County floodplains, so the County relies on historical data for flood mitigation. The County and the City of Conrad each have a floodplain manager through the County DES Coordinator. Additionally, the County and City's Enhanced 911 volunteer coordinator collaborates with the Sheriff and Fire departments, and BNSF and pipeline companies provide valuable support in the area. While the County does not have building codes in place, the City of Conrad operates under the 2018 IRC codes and plans to adopt the 2021 IRC codes by the end of August 2023.

### Discussion on NFIP Participation and Compliance

Pondera County entered the NFIP on June 6, 1997, and has since been in the Emergency Program or initial phase of participation. This initial phase of a community's participation in the program occurs when no flood hazard information is available or when a Flood Hazard Boundary Map (FHBM) is in place, but no Flood Insurance Rate Map (FIRM) exists. Despite these limitations, all residents of Pondera County have access to a limited amount of flood insurance coverage at rates that are lower than actuarial rates. To control future use of its floodplains, the County is required to adopt minimum floodplain management standards. Additionally, the floodplain manager is notified of all new planned subdivisions and new insurance policies, and is then required to write a formal letter stating that the new development is/isn't in a floodplain area.

The City of Conrad's FHBM was identified on June 7, 1974, and their FIRM was identified on June 1, 1986, allowing for their entry into the program on June 1, 1986. Under this program, the City is subject to comprehensive floodplain management requirements, and higher amounts of flood insurance coverage are provided. Lands to which the floodplain ordinance applies, as well as permit procedures and provisions for flood hazard reductions, can be found in City of Conrad 1975 Code §4-5-1-1.

## M.5.2 Administrative and Technical Mitigation Capabilities

Table M-18 identifies the County and participating jurisdictions personnel responsible for activities related to mitigation and loss prevention in Pondera County.

**Table M-18 Pondera County Jurisdictions Administrative/Technical Mitigation Capabilities**

Administrative and Technical	Pondera County	City of Conrad
Emergency Manager	?	County DES Coordinator
Floodplain Administrator/Position/ Department	?	County DES Coordinator
Community Planning:	-	-
- Planner/Engineer (Land Development)	?	Yes

Administrative and Technical	Pondera County	City of Conrad
- Planner/Engineer/Scientist (Natural Hazards)	?	No
- Engineer/Professional (Construction)	?	Yes
- Resiliency Planner	?	No
- Transportation Planner	?	No
Full-Time Building Official	No	Yes
GIS Specialist and Capability	Yes	Yes
Grant Manager, Writer, or Specialist	Yes	No, DES coordinator or Port Authority help with grant writing
Housing Authority	?	No
Warning Systems: (list the hazards each system is used for)	-	-
- Sirens	Yes	Yes
- Reverse 911	Yes	Yes
- IPAWS/Wireless Emergency Alerts (WEA)	No	No
- Opt-In Notifications (CodeRed, Everbridge, etc.)	Yes, Code Red	Yes, Code Red

### M.5.3 Financial Capabilities

Table M-19 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 M-19 Pondera County Jurisdictions Financial Capabilities**

Financial Capabilities	Pondera County	City of Conrad
Ability to fund projects through Capital Improvements funding	Yes	Yes
Ability to incur debt through general obligation bonds	Yes	Yes
Ability to incur debt through private activities	?	Yes
Ability to incur debt through special tax bonds	Yes	Yes
Authority to levy taxes for a specific purpose with voter approval	Yes	Yes
Authority to withhold spending in hazard prone areas	?	?
Community Development Block Grants	?	Possibly, would work with Port Authority
FEMA Hazard Mitigation Assistance grants	Yes	Yes
FEMA Public Assistance funds	?	Would defer to County
Stormwater Service Fees	?	Yes
System Development Fee	?	Yes

Financial Capabilities	Pondera County	City of Conrad
Utility fees (water, sewer, gas, electric, etc.)	Yes	Yes
Gas Tax/BaRSAA (Roads and Streets)	?	Yes
Montana Coal Endowment Program (MCEP)	?	Yes
State Revolving Fund	?	Yes
Department of Natural Resources & Conservation	?	Yes

Several ongoing projects are aimed at reducing disaster losses in the region. The County has been implementing several measures such as upgrading bridges and culverts as well as managing the roads to help mitigate flooding in vulnerable areas. In addition, backup generators have been installed at key locations such as Logan Health, the health department, and County buildings to ensure that essential services remain functional during emergencies. The City of Conrad has been working on stormwater and lift station updates to improve its preparedness for potential disasters.

### 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)
  - Pre-Disaster Mitigation (PDM).
  - Flood Mitigation Assistance Program (FMA).
  - Hazard Mitigation Grant Program (HMGP).
  - Notice of funding availability typically released in June with applications due in October/November of each year.
  - HMGP is dependent on federally declared disasters within the State and funding amount is based on a percentage of disaster relief costs.
- 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. Pondera County and its jurisdictions have participated in some these hazard mitigation assistance projects, summarized in the table below.

**Table M-20 Pondera County Hazard Mitigation Assistance-Funded Projects**

Program	Date Approved	Project Type	Status	Subrecipient
HMGP	05/13/2015	Elevation of Public Structures - Riverine	Closed	City of Valier
PDM	02/11/2016	Local Multi-hazard Mitigation Plan	Closed	Pondera County DES
PDM	09/15/2010	Local Multi-hazard Mitigation Plan	Closed	Pondera County DES

Source: FEMA Opendata

### M.5.4 Education and Outreach Capabilities

Table M-21 below summarizes the existing education and outreach capabilities available to Pondera County and its jurisdictions.

**Table M-21 Pondera County Education and Outreach Capabilities**

Education & Outreach Programs	Pondera County	City of Conrad
Ongoing public education programs (fire safety, responsible water use, household preparedness, etc.)	Yes	Yes, with County DES coordinator and City Fire Chief
Local citizen groups that communicate hazard risks	Yes	Yes, with County DES coordinator and City Fire Chief
Firewise or other fire mitigation program	?	No, would defer to County DES Coordinator
National Weather Service StormReady	Yes	Yes, with County DES coordinator

Opportunities to expand or enhance existing mitigation capabilities in the County have been limited due to various challenges. One such challenge is the small population of the County, which has a significant number of elderly and few young members. Moreover, the County's DES Coordinator is currently stretched thin and relatively new to the job, limiting their capacity to take on additional responsibilities. In addition, the City of Conrad, has relatively new government employees, including the Mayor and Clerk, who are still adapting to their roles.

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

Table M-22 shows the local chapters partnered with the County and participating jurisdictions.

**Table M-22 Pondera County Non-Governmental Organizations (NGOs)**

Non-Governmental Organizations (NGOs)	Pondera County	City of Conrad
American Red Cross	Yes	Yes
Chamber of Commerce	Yes	Yes
Community Organizations (Lions, Kiwanis, etc.)	Yes: Lions, 4H, Rubicon	Yes: Lions, 4H, Rubicon
Environmental Groups	Yes	Yes
Homeowner Associations	?	No
Neighborhood Associations	Yes	Yes
Salvation Army	Yes: Hud	Yes
Veterans Groups	Yes	Yes

### M.5.6 Opportunities for Enhancement

Based on the capabilities assessment, Pondera County has several existing mechanisms in place to 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 MT DES. 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 Pondera 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:

- **Pondera County**
  - Consider updating County CWPP.
  - Have a formal FHBM or FIRM created to gain full advantage of the NFIP benefits.
  - Adopt County-wide building codes to maintain building standards against reoccurring local hazards such as severe storms and flooding.
  - Consider adopting IPAWS to receive emergency notifications directly from FEMA.
  - Develop a floodplain management ordinance.
- **City of Conrad**
  - Draft a City CWPP.
  - Consider joining the CRS to ensure improved public safety and a positive economic impact through lower insurance premiums and increased property values.
  - Consider applying for a BCEGS rating which would facilitate a roadmap to greater resilience and a possible decrease in insurance premiums.
  - Create a city-specific Emergency Operations Plan (EOP)

## M.6 Mitigation Strategy

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

### M.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.

### M.6.2 Progress on Previous Actions

During the 2023 planning process, the Pondera County Planning Team reviewed all the mitigation actions from the 2018 plan. Of their 107 mitigation actions from 2018, 3 were noted as ongoing, and 14 were marked for deletion, see Table M-23. 75 actions that had been listed individually by jurisdiction were combined into 15 distinct multi-jurisdictional mitigation actions.

**Table M-23 Completed and Deleted Actions**

2018 ID	Action Name & Description	Hazard(s) Mitigated	Jurisdiction	Notes
22	Undergoing much need structural repair and retrofit will bring them back into compliance as well as strengthening them against future threats	Dam Failure	Conrad	Delete
23	Undergoing much need structural repair and retrofit will bring them back into compliance as well as strengthening them against future threats	Dam Failure	Valler	Delete
24	Undergoing much need structural repair and retrofit will bring them back into compliance as well as strengthening them against future threats	Dam Failure	Conrad Public Schools	Delete
25	Undergoing much need structural repair and retrofit will bring them back into compliance as well as strengthening them against future threats	Dam Failure	Valler Public Schools	Delete
37	Structures located within identified flood zones can be elevated above base flood elevation or predicted other predicted flood inundation levels.	Flooding	Conrad	Delete; No structures identified in Conrad
47	Upgrading a facility's windows, windows frames, roofing, and insulation will allow it to better maintain a desired warm or cool temperature during prolonged extreme heat or winter storms. Additionally, it decreases the energy load necessary to do so, decreasing the burden on the local energy grid.	Severe Weather	Conrad	Delete; Not a concern in Conrad
67	Some structures may be able to be relocated from identified floodplains or dam inundation zones. Removing them from identified hazard area will eliminate their risk.	Dam Failure	Conrad	Delete
68	Some structures may be able to be relocated from identified floodplains or dam inundation zones. Removing them from identified hazard area will eliminate their risk.	Dam Failure	Valler	Delete
69	Some structures may be able to be relocated from identified floodplains or dam inundation zones. Removing them from identified hazard area will eliminate their risk.	Dam Failure	Conrad Public Schools	Delete
70	Some structures may be able to be relocated from identified floodplains or dam inundation zones. Removing them from identified hazard area will eliminate their risk.	Dam Failure	Valler Public Schools	Delete
82, 83, 84, 85	Dam failure is often preventable, but due to the structural nature of their construction and limited inspection resources, inspections happen too infrequently. Installing a series of seismic monitoring instruments at strategic locations along a dam can detect small, often unnoticed or detected, shifts in the dams substructure that are the primary cause in premature collapse or failure. These instruments serve not only as early warning devices, but as the means to ensuring a dam's maintenance and repair schedule is kept.	Dam Failure	Conrad, Valler, Conrad Public Schools, Valler Public Schools	Delete

### M.6.3 NFIP Continued Compliance

Continued compliance with the NFIP is important to reducing losses to future development. 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.

### M.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 Pondera County and its jurisdictions. The process used to identify, develop, and prioritize these actions is described in Chapter 5 of the base plan. Two new mitigation actions were added to the 24 actions carried over from the 2018 HMP.

Table M-24 represents Pondera 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
- Annual Implementation: 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 M-24 below lists the mitigation actions for each participating jurisdiction in Pondera County. All jurisdictions have developed mitigation actions for each identified hazard in the HMP.

**Table M-24 Pondera County Mitigation Action Plan**

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency & Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
1	The jurisdictions will continue to improve their alert, broadcast, and warning systems to give information and instructions in the face of an impending hazard impact to prevent injury and property damage. These systems will allow citizens to better protect themselves in the event of an impending or potentially impending hazard. Additionally, hazard or weather specific information and training can be delivered to assist in achieving the previously stated goal.	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	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments, School Boards	Moderate	HMGP, PDM, Local Budget	Ongoing	High	Proposed
2	The NWS' Storm Ready Community Program helps arm America's Communities with communication and safety skills needed to save lives and property before and during an event. StormReady helps community leaders and emergency managers strengthen local safety programs from severe weather through advanced planning, education, and awareness.	Multi: Dam Failure, Drought, Flooding, Summer Weather, Winter Weather, Tornado/Wind, Volcanic Ash, Wildfire	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES	Moderate	N/A	Proposed	Medium	
3	Backup generators provide critical facilities with electricity in the event a community's	Multi: Cyber-Attack, Dam Failure, Earthquake, Flooding, Summer Weather,	Pondera County, City of Conrad,	Pondera County DES, Municipal	Moderate	HMGP, PDM, Local Budgets	Ongoing	Medium	Proposed

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency & Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
	electrical transmission grid is either damaged by earthquakes, severe storms, tornadoes, or winter storms, or overloaded by excessive use during an extreme heat or a winter storm.	Winter Weather, Human Conflict, Tornado/Wind, Volcanic Ash, Wildfire	City of Valler, Conrad Public Schools, Valler Public Schools	Governments, School Boards					
4	Transferring existing utilities lines, pipes, and chemical storage tanks from above ground to below ground will significantly reduce the amount of property damage incurred from wind, ice, and snow related events.	Summer Weather, Winter Weather, Tornado/Wind	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments, School Boards	Very High	HMGP, PDM, Local Budgets	Ongoing	Medium	Proposed
5	Dam repair and retrofit: much need structural repair and retrofit will bring them back into compliance as well as strengthening them against future threats	Dam Failure	Pondera County	Pondera County DES	Very High	HMGP, PDM, Local Budgets	Proposed	Low	
6	This project includes the physical removal of debris and clearing quick-to-burn vegetation. Reducing the amount of debris and natural fuels in a community will deprive wildfires of the material it requires to spread and prevent high winds from launching deadly and damaging debris around during a severe storm or tornado. This project will be implemented in high risk areas as identified in this plan's	Wildfires, Tornado/Wind	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments	High	FP&S, HMGP, PDM, Local Budgets	Proposed	Low	

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency & Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
	WUI maps and well known to burn areas as determined by the participating jurisdictions and appropriate local agencies.								
7	Creating defensible spaces and buffer zones void of vegetative fuel and covered with gravel or rock helps prevent the spread of wildfire as well as creating an area in which local emergency response serviced can safely operate. This 2-pronged approach directly mitigates damage to property and protects lives, but also indirectly mitigates the threat to life and property in the area at large. This project will be implemented in high risk areas as identified in this plan’s WUI maps and well-known to burn areas as determined by the participating jurisdictions and appropriate local agencies.	Wildfires	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments	Moderate	FP&S, HMGP, PDM, Local Budgets	Proposed	Medium	
8	Structures located within identified flood zones can be elevated above base flood elevation or predicted other predicted flood inundation levels.	Flooding	Pondera County, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments, School Boards	High	FEMA, HMGP, Local Budgets, PDM	Proposed	Low	
9	FEMA Code 361 regulations ensure a structure is capable of	Tornado/Wind	Pondera County, City	Pondera County DES, Municipal	High	HMGP, PDM, Local Budgets		High	

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency & Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
	withstanding wind speeds greater than 200 miles per hour. Additionally, these anti-tornado regulations also ensure the structure is protected against hail, lightning, high and strong winds. This project can be implemented as a retrofit of a current structure or the construction of a new facility. Any critical facility is a potential target for this, but realistically location will be determined by which participating jurisdictions have the want and resources to accomplish this project.		of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Governments, School Boards					
10	Upgrading a facility's windows, windows frames, roofing, and insulation will allow it to better maintain a desired warm or cool temperature during prolonged extreme heat or winter storms. Additionally, it decreases the energy load necessary to do so, decreasing the burden on the local energy grid.	Summer Weather, Winter Weather, Tornado/Wind	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments, School Boards	High	HMGP, PDM, Local Budgets		Low	
11	Linear power grids have single points of failure that are vulnerable to a number of hazards. Looped power grids operate in parallel and are thus significantly more resistant to	Multi: Cyber-Attack, Dam Failure, Earthquake, Flooding, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Volcanic Ash, Wildfire	Pondera County, City of Valler, Conrad Public Schools,	Pondera County DES, Municipal Governments, School Boards	Moderate	HMGP, PDM, Local Budgets	Proposed	Medium	

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency & Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
	damage allowing the utilities to maintain power after an event.		Valler Public Schools						
12	To decrease water usage before, during, and after a drought, communities can install low water flow utilities throughout its critical facilities and infrastructure. This will not only decrease water usage, but also decrease water demands. The planning area should implement this project in conjunction with their school districts and critical facilities standard maintenance cycles.	Drought	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments, School Boards	Moderate	HMGP, PDM, Local Budgets	Proposed	Low	
13	A campaign will inform and educate the public on hazard risks, allowing them to better protect their property through preparation and their lives through appropriate evacuation and survival procedures.	Multi: Dam Failure, Drought, Flooding, Summer Weather, Winter Weather, Tornado/Wind, Volcanic Ash, Wildfire	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments, School Boards	Low	HMGP, PDM, Local Budgets	Proposed	Medium	
14	Some structures may be able to be relocated from identified floodplains or dam inundation zones. Removing them from identified hazard area will eliminate their risk.	Dam Failure	Pondera County	Pondera County DES	High	FMA, HMGP, PDM, Local Budgets	Proposed	Low	
15	Snow fences force drifting snow to accumulate in a desired place	Winter Weather	Pondera County, City	Pondera County DES, Municipal	Low	HMGP, PDM, Local Budgets	Proposed	Low	

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency & Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
	minimizing the amount of snowdrift on roads and railways. Controlling snow accumulation decreases the danger to a jurisdiction's citizens traveling during and after a winter storm. This project should be implemented along major transportation routes throughout the planning area.		of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Governments, School Boards					
16	Significant flood damage in developed communities can be prevented by upgrading their storm water drainage system. This mitigation measure will allow flood waters to drain quicker and prevent excess accumulation. This project should be implemented in older drainage systems and any expanding areas throughout the planning area.	Flooding	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments, School Boards	Moderate	FMA, HMGP, PDM, Local Budgets		Low	
17	Dam failure is often preventable, but due to the structural nature of their construction and limited inspection resources, inspections happen too infrequently. Installing a series of seismic monitoring instruments at strategic locations along a dam can detect small, often unnoticed or detected, shifts in the dams substructure that are the primary	Dam Failure	Pondera County	Pondera County DES	Moderate	HMGP, PDM, Local Budgets	Proposed	Low	

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency & Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
	cause in premature collapse or failure. These instruments serve not only as early warning devices, but as the means to ensuring a dam's maintenance and repair schedule is kept.								
18	Securing trees with wire harnesses will prevent wind related events from blowing them over and potentially onto the jurisdiction's facilities and infrastructure. This project should be implemented in areas of heavy vegetation and high population density.	Summer Weather, Winter Weather, Tornado/Wind	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments, School Boards	Low	HMGP, PDM, Local Budgets	Proposed	Medium	
19	Insulating a facility's water pipes helps prevent them from freezing and bursting due to sudden and prolonged low temperatures during winter storms. The planning area should implement this project in conjunction with their school districts and critical facilities standard maintenance cycles.	Winter Weather	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments, School Boards	Moderate	HMGP, PDM, Local Budgets	Proposed	Low	
20	Retrofitting structures with screened vent enclosures, double paned glass, and spark arrestors will reduce the chances of a structure igniting from a wildfire as well as a wildfire's chance of spreading	Wildfires	Pondera County, City of Conrad, City of Valler, Conrad Public Schools,	Pondera County DES, Municipal Governments	High	FP&S, HMGP, PDM, Local Budget	Proposed	Medium	

ID	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency & Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
			Valler Public Schools						
21	Xeriscaping is a specific method of landscaping and gardening designed to reduce and eliminate the need for supplemental water. By practicing xeriscaping on jurisdiction owned properties the net system wide water necessary for a community to maintain itself is substantially reduced.	Drought	Pondera County, City of Conrad, City of Valler, Conrad Public Schools, Valler Public Schools	Pondera County DES, Municipal Governments		HMGP, PDM, Local Budgets	Proposed	Low	
22	Community awareness for Natural Disasters. Specific to elderly and individuals not "connected"	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	City of Conrad	Pondera County, City of Conrad, PD and Sheriff, Ems	Low	Local budgets, FEMA, state			New in 2023
23	Identify and planning for potential electrical and heat loss. Such as locations where public can go in severe situations.	Severe Winter Weather	City of Conrad	Pondera County, City of Conrad, PD and Sheriff, Ems	Low	Local budgets, FEMA, state			New in 2023
24	Develop an emergency operations plan (EOP) for hazardous materials incidents along train/interstate intersections.	Transportation Accidents, Hazardous Materials Incident	Pondera County, City of Conrad	Pondera County EOM, PD and Sheriff, EMS, Montana DoT	Low	Local budgets, FEMA HMA	Short Term	Medium	New in 2023

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## M.7 Plan Implementation and Maintenance

Moving forward the Pondera 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.

### M.7.1 Incorporation into Existing Planning Mechanisms

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

#### Pondera County

- Pondera County CWPP (2007)
- Pondera Regional Port Authority County Growth Policy (2011)
- NRCS Pondera County Long Range Plan (2020-2025)
- Pondera County Emergency Operations Plan
- Pondera County Capital Improvements Program/Plan
- Pondera Comprehensive Plan?

#### City of Conrad

- City of Conrad Growth Policy (in development)
- Pondera Regional Port Authority Conrad Growth Policy
- City of Conrad Capital Improvements Program/Plan
- City of Conrad Emergency Operations Plan

The process for incorporation of the Regional Hazard Mitigation Plan into other planning mechanisms can be as simple as cross-referencing the Hazard Mitigation Plan where applicable. Integrated planning is a key to building community resiliency.

### M.7.2 Monitoring, Evaluation and Updating the Plan

Pondera 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 Pondera 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.