Annex I Judith Basin County

I.1 Mitigation Planning and County Planning Team

This County Annex builds on previous versions of the Judith Basin County Hazard Mitigation Plan completed in 2013. 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:

- Town of Hobson
- Town of Stanford

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.

I.2 Community Profile

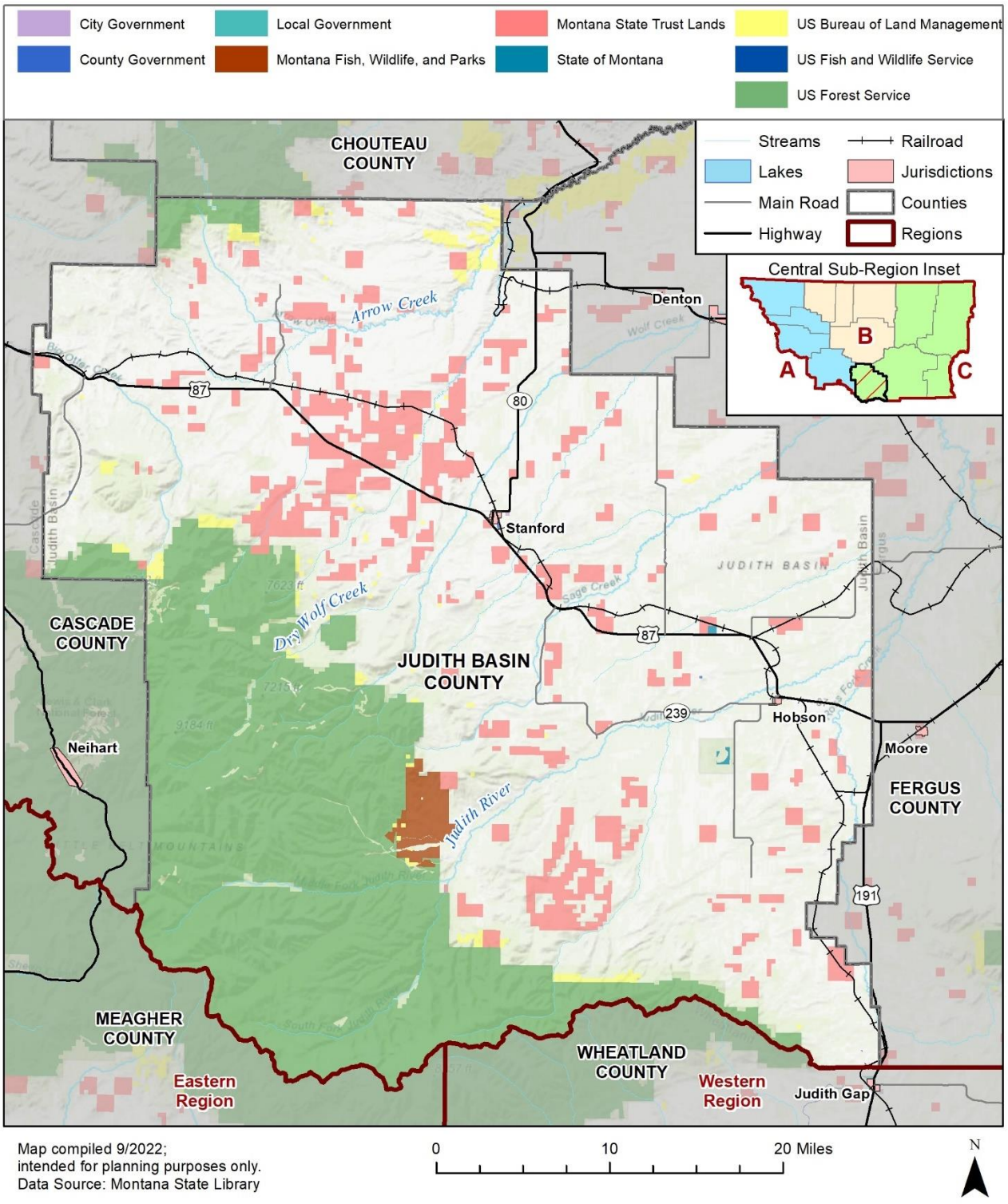
I.2.1 Geography and Climate

Judith Basin County is situated along the southern edge of the Central Region, comprising almost the exact center of the State of Montana. The county is approximately 50 miles north to south and 40 miles east to west, covering a land area of approximately 1,871 square miles. Incorporated communities include the towns of Stanford and Hobson. Unincorporated communities include Geyser, Moccasin, Raynesford, Sapphire Ridge, Surprise Creek Colony, Utica, and Windham. Figure I-1 displays a map of the County.

The topography of the Judith Basin County is characterized by mountains and plains. Peaks of the Highwood Mountains rise in the northwest corner of the county, and along the southwest boundary is the Little Belt Mountain Range. Elevations in the county range from 9,000 feet above mean sea level in the southwestern areas of the county, to lower than 4,000 feet above sea level. The county seat of Stanford is located at an elevation of approximately 4,284 feet. Most streams and rivers in the county flow northwest toward the Missouri River, and all streams and rivers in the county are tributaries of the Missouri River.

Judith Basin County's climate is generally classified as dry continental or Steppe with four well-defined seasons. According to the Western Regional Climate Center (WRCC), Stanford experiences a summertime average high temperature of 78 °F and wintertime average high of 37 °F. The county does not have the extreme variable pattern common to the more mountainous western portions of Montana, with large day to day temperature variations particularly from the fall to spring. Precipitation averages 16.5 inches of rain annually and 67 inches of snowfall a year, but averages vary significantly across the County. Due to the location of Judith Basin County lying within the Chinook zone, high wind speeds upwards of 100 mph have been documented in the County.

Figure I-1 Judith Basin County Base Map and Land Stewardship



I.2.2 Population Trends

According to the 2020 U.S. Census, Judith Basin County is the 44th most populous county in Montana with a total population of 2,017. The U.S. Census Bureau reported the County experienced a 3.5% increase in population since the 2010 census. The population of Judith Basin County has been steadily declining since 1960. Out-migration, smaller families, improved farming technology that requires a smaller labor force, and regional population stagnation have all contributed to the population trends. Table I-1 below shows the population trends for Judith Basin County and it's incorporated communities over the last 40 years.

Table I-1 Population Trends in Judith Basin County 1980-2020

Incorporated Community	1980	1990	1980-1990 Change	2000	1990-2000 Change	2010	2000-2010 Change	2020	2010-2020 Change
City of Hobson	261	226	-13.4%	244	7.96%	215	-11.89%	179	-16.7%
Town of Stanford	595	528	-11.3%	454	-14%	401	-11.7%	403	0.5%
Judith Basin County	2,646	2,282	-13.8%	2,329	2.1%	2,071	-11.1%	2,017	-2.6%

Source: US Census 1980-2020

I.2.3 Demographics

The 2016-2020 American Community Survey (ACS) reports demographic estimates for Judith Basin County, summarized in the table below.

Table I-2 Demographic Estimates for Judith Basin County (2016-2020 ACS)

Characteristic	Judith Basin County	State of Montana
Percentage of persons below 150% poverty estimate	22.4%	24.1%
Unemployment Rate estimate	2.3%	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	21.7%	21.4%
Percentage of persons with no high school diploma (age 25+) estimate	4.1%	7.5%
Percentage uninsured in the total civilian noninstitutionalized population estimate	6.8%	9.6%
Percentage of persons aged 65 and older estimate	22.8%	22.1%
Percentage of persons aged 17 and younger estimate	21%	21.3%
Percentage of civilian noninstitutionalized population with a disability estimate	13.5%	15.6%
Percentage of single-parent households with children under 18 estimate	3.8%	3.9%
Percentage of persons (age 5+) who speak English "less than well" estimate	0%	0.3%

Characteristic	Judith Basin County	State of Montana
Minority (other than white non-Hispanic) estimate	6.6%	14.6%
Percentage of housing in structures with 10 or more units estimate	1.4%	3.3%
Percentage of mobile homes estimate	13.4%	13.1%
Percentage of occupied housing units with more people than rooms estimate	0%	2.1%
Percentage of households with no vehicle available estimate	2.6%	4.9%
Percentage of persons in group quarters estimate	0%	2.8%
Percentage Female estimate	45.3%	49.7%
Median Age estimate	53.9	40.1
Median Gross Rent estimate	$547	$836
Median House Value estimate	$154,200	$244,900
Percent Unoccupied Housing Units estimate	33.2%	15.3%

Source: ACS 2016-2020

I.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 Judith Basin County as "Very Low", with a score of 2.67. Only one other county in the Central Region has a lower social vulnerability rating. Refer to HIRA for more information on social vulnerability. Demographic factors that can influence the social vulnerability rating are displayed in Table I-2. The ACS reports that a significant portion of the population in Judith Basin County (just under a quarter) is below the 150% poverty level. Despite this, the county ranks around the same or better in each social vulnerability indicator as the state of Montana as whole.

The CPT noted vulnerability concerns across the County related to their rural nature and small population, specifically noting that there are no nursing homes or medical facilities in the county and that residents must travel out of county to access these services.

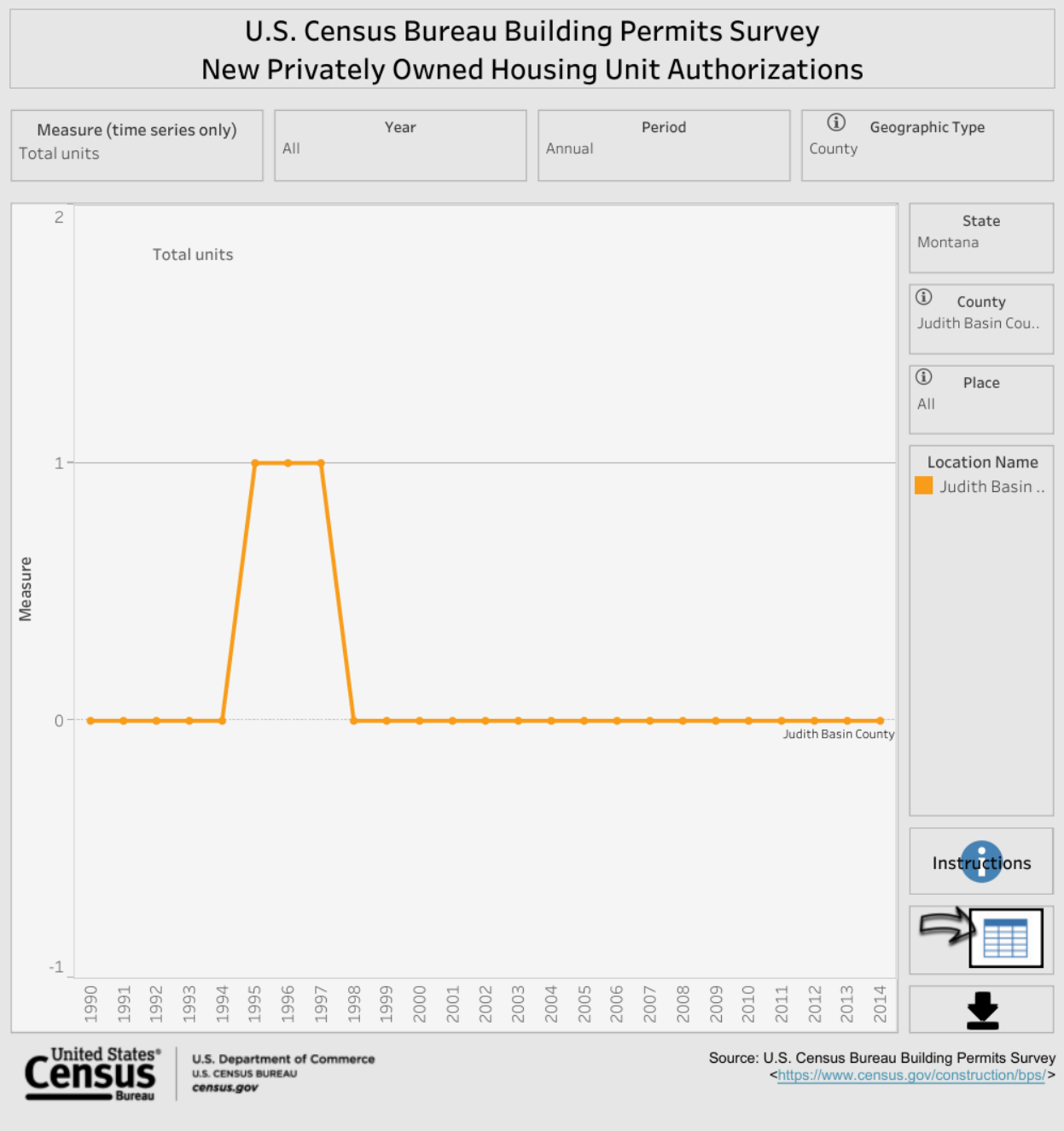
I.2.5 Development Trends

Judith Basin County has not experienced any recent commercial or residential development, and no significant future development is expected. The county's population has been steadily declining overall since the 1960s, with trends of out migration and an aging population. As shown in Table I-2 above, the county has a median age 13 years higher than the state of Montana as a whole, as well as a housing vacancy rate more than double that of the statewide vacancy rate.

The U.S. Census Bureau Building Permit Survey provides information and local statistics on new privately-owned residential construction. Figure I-2 below displays the new privately owned housing unit authorizations by year in Judith Basin County, and as this data shows there hasn't been a single building

permit issued in the county since 1997. Between 1995 and 1997 one building permit per year was issued in the county.

Figure I-2 New Privately Owned Housing Unit Authorizations



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

I.2.6 Economy

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

Table I-3 Judith Basin County Economic Profile

Economic Characteristics	Judith Basin County
Families Below Poverty Level	8.0%
Individuals Below Poverty Level	17.0%
Median Home Value	$154,200
Median Household Income	$50,329
Per Capita Income	$33,720
Population > 16 Years Old in Labor Force	60.5%
Population Employed	59.1%

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

Table I-4 below shows the breakdown of employment in Judith Basin County by the industry sector. According to the ACS, the leading employment sector by far in the County is "Agriculture, forestry, fishing and hunting, and mining", employing approximately 41% of the county's workforce. "Educational services, and health care and social assistance" follows with 17.8% of the workforce, and then "arts, entertainment, and recreation, and accommodation and food services" with 8.3%.

Table I-4 Judith Basin County Occupation by Industry Profile

Industry	Population Employed	Percent of Labor Force
Agriculture, forestry, fishing and hunting, and mining	392	41.00%
Construction	62	6.50%
Manufacturing	10	1.00%
Wholesale trade	11	1.10%
Retail trade	69	7.20%
Transportation and warehousing, and utilities	54	5.60%
Information	2	0.20%
Finance and insurance, and real estate and rental and leasing	48	5.00%
Professional, scientific, and management, and administrative and waste management services	17	1.80%
Educational services, and health care and social assistance	170	17.80%
Arts, entertainment, and recreation, and accommodation and food services	79	8.30%
Other services, except public administration	13	1.40%
Public administration	30	3.10%

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

I.3 Hazard Identification and Risk Assessment

I.3.1 Identified Hazards

The CPT reviewed significant hazards for inclusion in the hazard mitigation plan. The 2013 Judith Basin County plan identified the following hazards:

- Drought
- Wildfire
- Flooding
- Severe Summer Weather
- Severe Winter Weather
- Communicable Disease (Agriculture)
- Transportation-related Hazardous Materials Incidents

Several changes were made from the 2013 Judith Basin County Hazard Mitigation Plan to be consistent with the 2023 Montana Central Region Hazard Mitigation Plan. Drought, Flooding, Wildfire, and Severe Summer and Winter Weather are still profiled in individual hazard assessments. Communicable Disease has been altered to focus more on human disease. Transportation incidents has been broken into two hazard assessments, to evaluate the risks of Transportation Accidents and Hazardous Materials Incidents as individual hazards. In addition to these, numerous new hazard profiles have been added, including Cyber-Attack, Dam Failure, Earthquake, Landslide, Human Conflict, Tornadoes & Windstorms and Volcanic Ash.

Judith Basin 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 I-5 below. More details on hazards can be found in Chapter 4 of the base plan.

Table I-5 Judith Basin County Overall Hazard Significance by Hazard and Jurisdiction

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

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

Geographic Extent Negligible: Less than 10 percent of planning area or isolated single-point occurrences Limited: 10 to 25 percent of the planning area or limited single-point occurrences Significant: 25 to 75 percent of planning area or frequent single-point occurrences Extensive: 75 to 100 percent of planning area or consistent single-point occurrences **Potential Magnitude/Severity** Negligible: 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. Limited: 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. Critical: 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. Catastrophic: 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.	**Probability of Future Occurrences** Unlikely: Less than 1 percent probability of occurrence in the next year or has a recurrence interval of greater than every 100 years. Occasional: Between a 1 and 10 percent probability of occurrence in the next year or has a recurrence interval of 11 to 100 years. Likely: Between 10 and 90 percent probability of occurrence in the next year, or has a recurrence interval of 1 to 10 years Highly Likely: Between 90 and 100 percent probability of occurrence in the next year or has a recurrence interval of less than 1 year. **Overall Significance** Low: 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. Medium: 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. High: 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.

I.3.2 Building Inventory and Assets

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

Jurisdiction	Improved Parcels	Improved Value	Content Value	Total Value
Hobson	138	$10,429,998	$5,315,294	$15,745,292
Stanford	299	$24,827,887	$13,464,914	$38,292,801
Judith Basin County	1,250	$148,726,196	$126,328,278	$275,054,474
Total	**1,687**	**$183,984,081**	**$145,108,486**	**$329,092,567**

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

Total building exposure within Judith Basin County based on an analysis of improved parcels is nearly $330 million, with over $180 million in improved value properties and $145 million of contents at-risk. Of the nearly $330 million of total building exposure in Judith Basin County, the majority is located in unincorporated areas of the county (83.6%). Agricultural properties represent the greatest portion of total property value in the County, accounting for $155.7 million of total value.

Table I-7 Judith Basin County Total Exposure by Jurisdiction and Property Type

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value
Hobson	Exempt	4	$200,590	$200,590	$401,180
	Residential	134	$10,229,408	$5,114,704	$15,344,112
	Total	**138**	**$10,429,998**	**$5,315,294**	**$15,745,292**
Stanford	Exempt	13	$1,996,910	$1,996,910	$3,993,820
	Residential	281	$22,725,947	$11,362,974	$34,088,921
	Vacant	5	$105,030	$105,030	$210,060
	Total	**299**	**$24,827,887**	**$13,464,914**	**$38,292,801**
Judith Basin County	Agricultural	641	$77,837,340	$77,837,340	$155,674,680
	Exempt	10	$5,002,820	$5,002,820	$10,005,640
	Industrial	2	$10,282,840	$15,424,260	$25,707,100
	Mining	2	$26,210	$26,210	$52,420
	Residential	577	$55,078,676	$27,539,338	$82,618,014
	Vacant	18	$498,310	$498,310	$996,620
	Total	**1,250**	**$148,726,196**	**$126,328,278**	**$275,054,474**
	Grand Total	**1,687**	**$183,984,081**	**$145,108,486**	**$329,092,567**

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

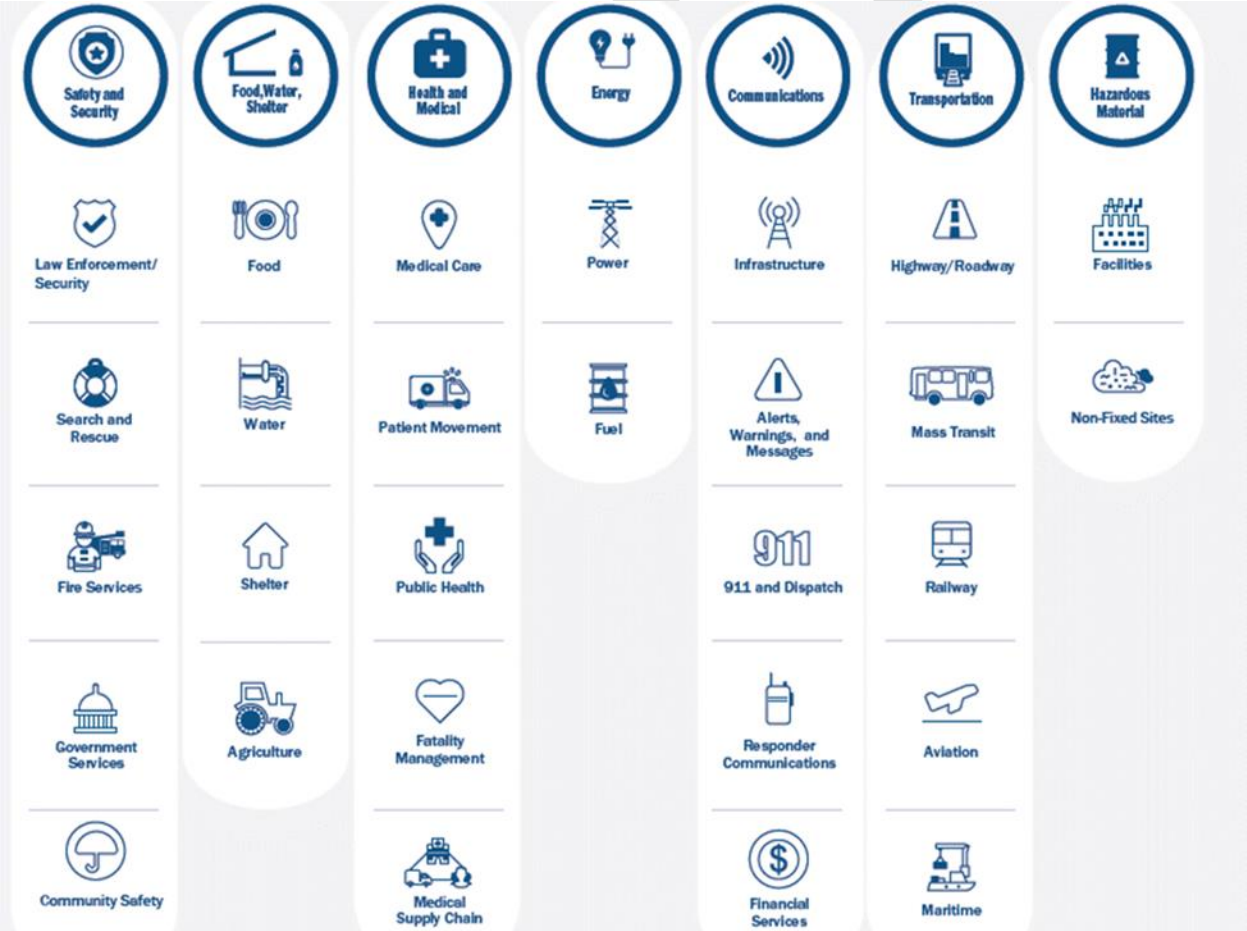
Critical Facilities, Infrastructure, and Other Important Community Assets

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 failure, flood, and wildfire.

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

Figure I-3 FEMA Lifeline Categories



Source: FEMA

Table I-8 below summarizes the number of critical facilities by jurisdiction. Figure I-4 through Figure I-6 displays the location of critical facilities by FEMA Lifeline in Judith Basin County and the towns of Hobson and Stanford.

Table I-8 Judith Basin County Critical Facilities by Jurisdiction

Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Material	Health and Medical	Safety and Security	Transportation	Total
Hobson	-	-	-	-	1	4	-	5
Stanford	-	1	-	-	1	6	-	8
Judith Basin County	11	27	2	-	-	7	47	94
Total	**11**	**28**	**2**	**0**	**2**	**17**	**47**	**107**

Source: HIFLD 2022, MT DES, National Bridge Inventory

Figure I-4 Judith Basin County Critical Facilities

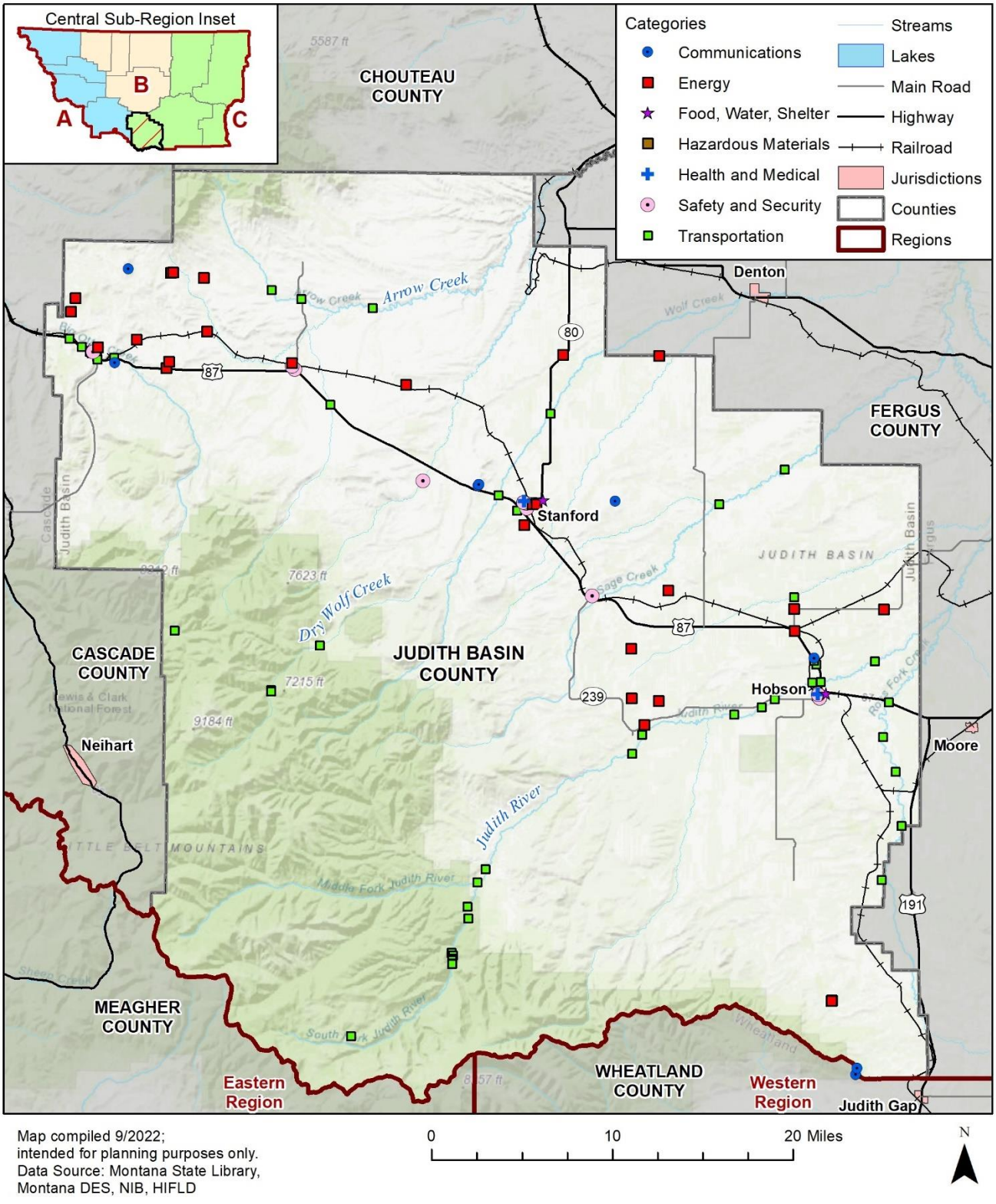


Figure I-5 Hobson Critical Facilities

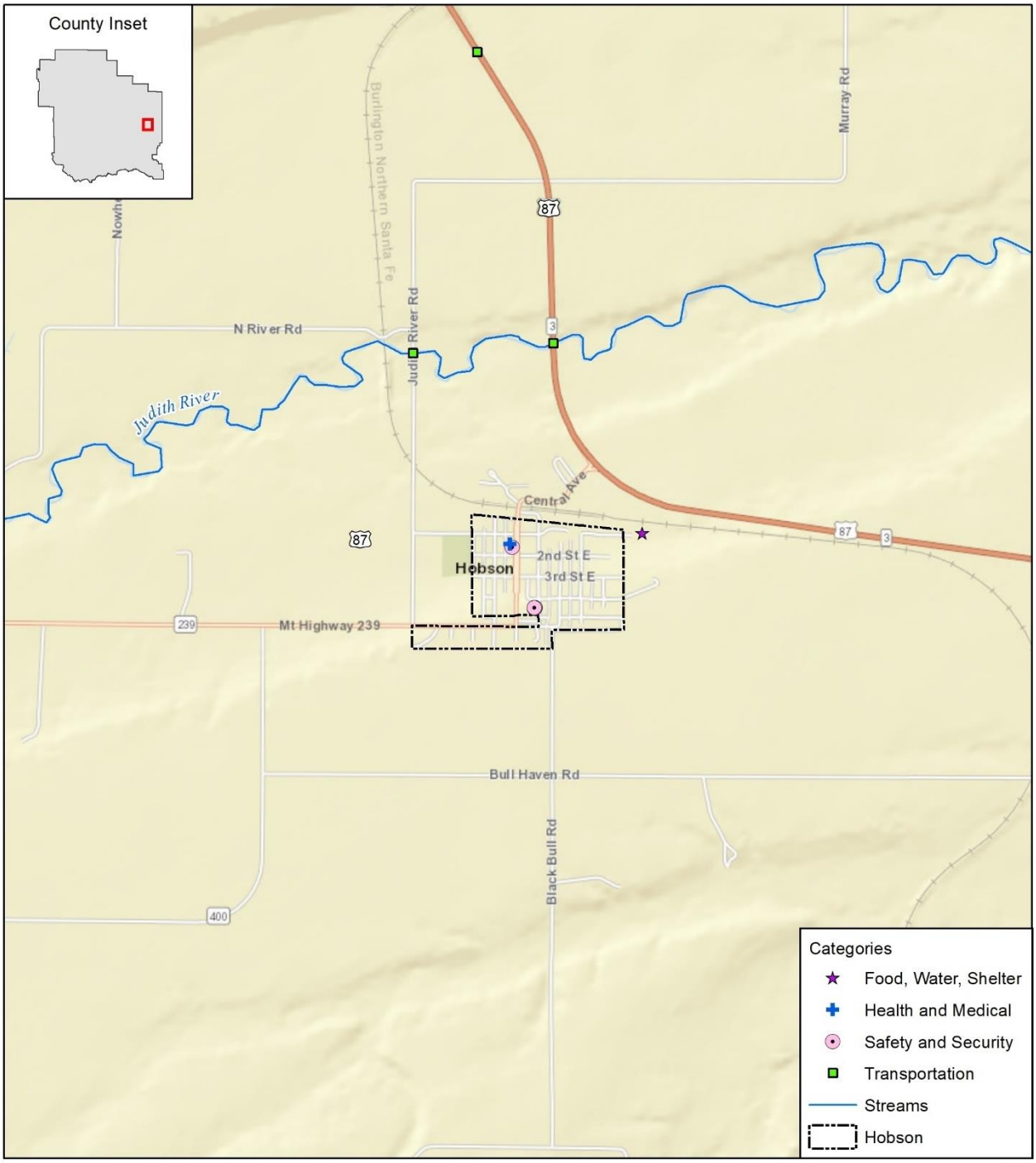
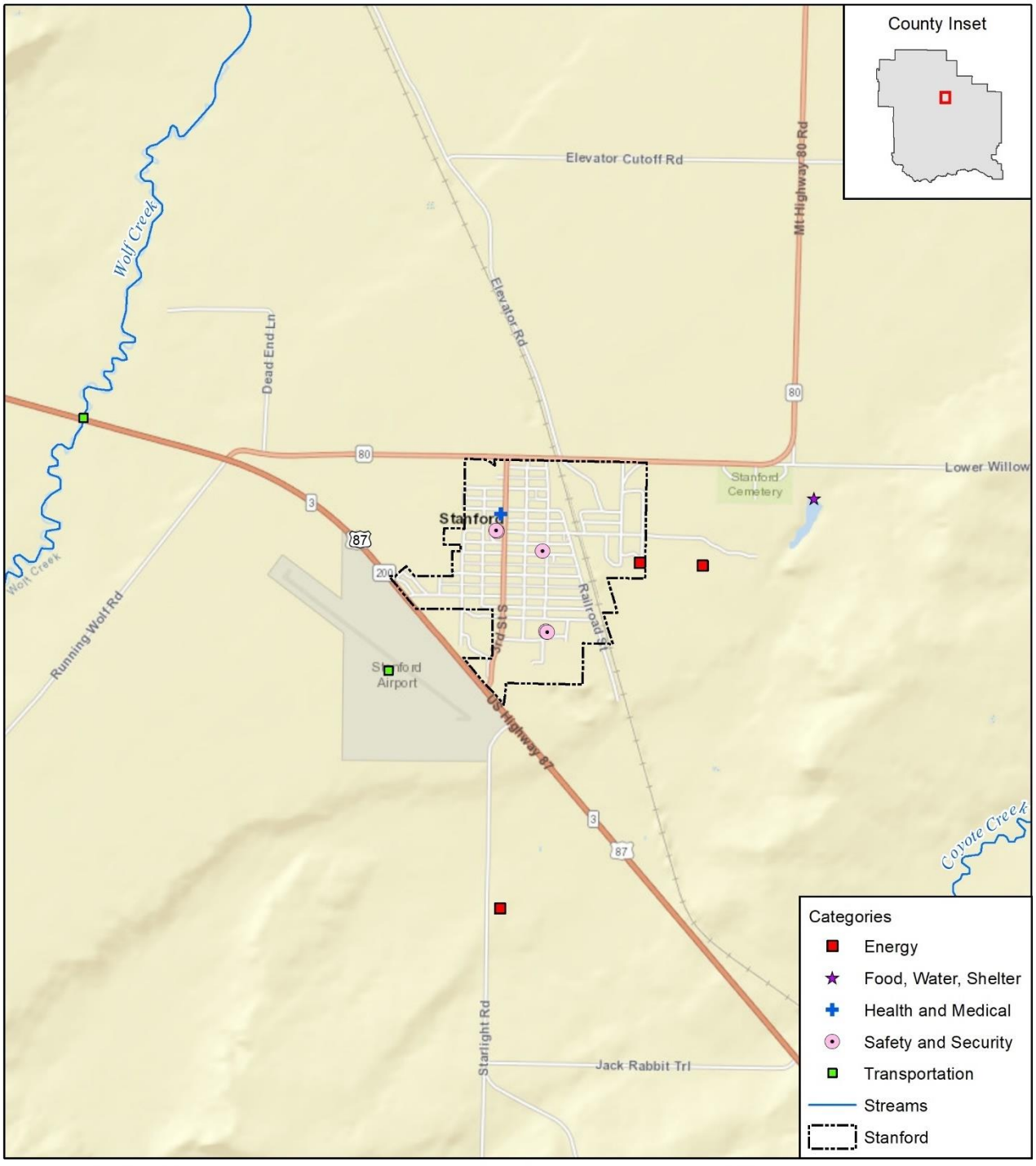


Figure I-6 Stanford Critical Facilities



Natural, Historic, and Cultural Assets

Assessing the vulnerability of Judith Basin 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 I-9 below lists the properties that are identified as having cultural and historic significance in Judith Basin County as recorded by the National Register of Historic Places.

Table I-9 Historic Properties and Districts on National Registers

Property Name	City/Town	Location	Date Listed
Prehistoric Site 24-JT-104	N/A		
Meadowbrook Stock Farm	Hobson	US 87	1/13/92
Wood Lawn Farm	Hobson	5 mi. W of Hobson on Utica Rd. No. 239	1/27/93
Judith River Ranger Station	Utica	Along the Middle Fork, Judith R., SW of Utica in Lewis & Clark NF	4/10/92

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. Judith Basin County contains several creeks and rivers draining the county, such as Arrow Creek, Dry Wolf Creek, and Judith River, all of which eventually flow into the Missouri River. The Missouri River is the most significant river that runs through the Central Region and is an important ecological resource for the entire region and state.

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.

I.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

I.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 Town of Stanford, are likely to experience a greater number of cases due to a larger population, these larger towns and 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 Judith Basin County.

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

I.4.2 Cyber-Attack

All servers, networks, and users are vulnerable to cyber-attacks in Central Montana. Judith Basin County is ranked as medium, along with most other counties in the Region. While the County is relatively small in population and there are no recorded cyber-attacks in the county, all networks and servers are exposed to cyber-attacks. Risk is equal across the jurisdictions in the county due to comparable populations and overall exposure.

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

I.4.3 Dam Failure

Dam failure in Judith Basin County is ranked as medium. There are two high hazard dams and one significant hazard dam located in Judith Basin County. The table below identifies the dams and whether there are downstream communities which could be impacted in the event of a dam failure or incident. Neither Hobson nor Stanford are downstream of any of these dams, however there are communities outside Judith Basin County which could be impacted by a dam in the county. Refer to Chapter 4 for a discussion of the dam failure risk relative to Judith Basin County and the Central Region. There are no federally owned dams within Judith Basin County.

Table I-10 Dams in Judith Basin County

Hazard Class	Dam Name	Owner	River	Nearest Downstream City	Distance to Nearest Downstream City (Miles)	Emergency Action Plans (EAP)
High	Ackley Lake Dam	State Water Projects	Tr-Hauck Coulee	None	0	Yes
High	Wilson (Judith Basin)	Surprise Creek Colony Ranch	Surprise Creek	None	0	Yes
Significant	Wendall Willkie	Saima K. Myllymaki	Tr-Meadow Creek	Denton	17	N/A

Source: National Inventory of Dams (NID)

While there are high and significant hazard dams located in Judith Basin County, they do not pose a significant threat to the county's population centers. However, dam failure flooding could still result in property losses and loss to human life. Table I-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 Judith Basin County by property type. Judith Basin County has an estimated $1.7 million in vulnerable property value, which is the fourth lowest in the region. Table I-12 summarizes the critical facilities located in Judith Basin County which are at risk to dam inundation.

Table I-11 Judith Basin County Parcels at Risk to Overall Dam Inundation by Jurisdiction

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Population
Judith Basin County	Agricultural	2	$616,150	$616,150	$1,232,300	
	Residential	2	$297,920	$148,960	$446,880	4
	Total	**4**	**$914,070**	**$765,110**	**$1,679,180**	**4**

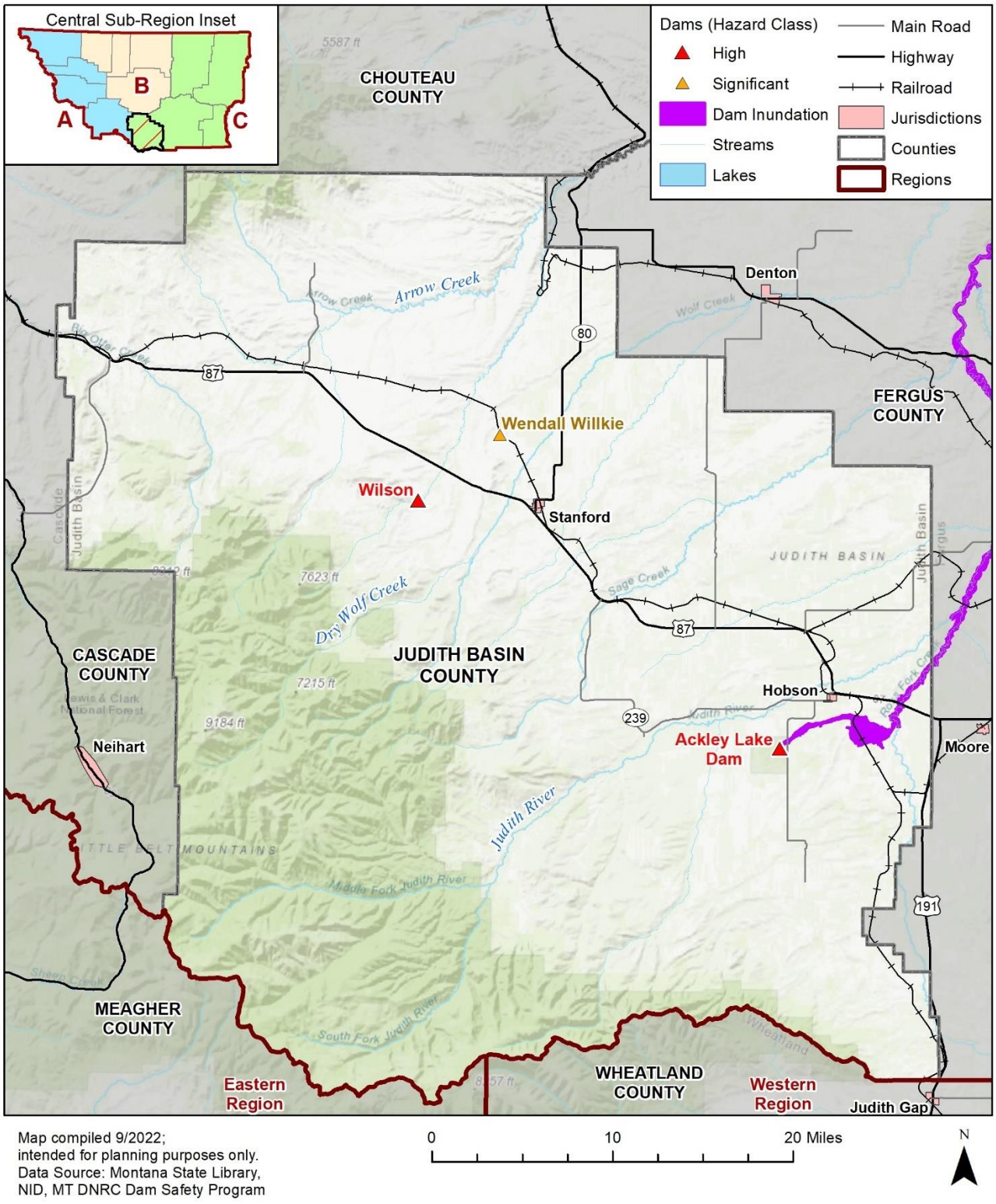
Source: County Assessor data, NID, MT DNRC, WSP GIS Analysis

Table I-12 Judith Basin 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
Judith Basin County	-	-	-	-	-	-	1	**1**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**

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

Figure I-7 Judith Basin County Dam Inundation



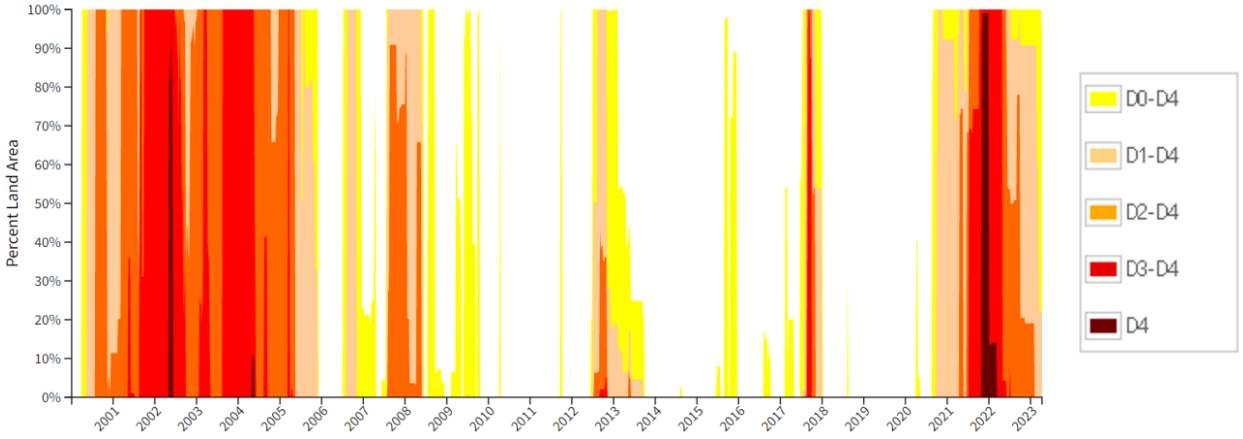
I.4.4 Drought

Drought was rated as a hazard of high concern in Judith Basin County. Between 2012 and 2021, Judith Basin County experienced 11 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 Judith Basin County had 22 drought impacts, most to agriculture and relief/response/restrictions from 2000-2021.

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 Judith Basin County between 2000 and 2023 (since the USDM came into being) is shown below. Judith Basin experienced significant periods of drought (D4) in 2002, 2004, and 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 Judith Basin County and the Central Region.

Figure I-8 USDM Drought Timeseries for Judith Basin County



Source: USDM; www.drought.gov

I.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 more than counties in the interior of the region. Earthquake hazards in Judith Basin 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, Judith Basin County has one of the lowest expected direct economic losses in the Central Region, with an estimated $845,000 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 Judith Basin County and the Central Region.

I.4.6 Flooding

Table I-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. Judith Basin County has no mapped FEMA floodplain data currently. Therefore Hazus floodplain data was used as a substitute to perform the analysis. The majority of the structures at risk are residential.

Figure I-9 through Figure I-12 illustrate the extent of the floodplain and vulnerable structures throughout the county and its jurisdictions. Figure I-13 below displays the location of bridges in Judith Basin County and their condition. Refer to Chapter 4 for a discussion of the flood risk relative to Judith Basin County and the Central Region.

Table I-13 Judith Basin County Parcels at Risk to 1% Flood Hazard by Jurisdiction

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Estimated Loss	Population
Judith Basin County	Agricultural	20	$2,231,140	$2,231,140	$4,462,280	$1,115,570	
	Residential	12	$1,516,570	$758,285	$2,274,855	$568,714	26
	Total	**32**	**$3,747,710**	**$2,989,425**	**$6,737,135**	**$1,684,284**	**26**

Sources: DNRC, Hazus, FEMA NFHL

Judith Basin County has a total of 29 critical facilities located in the 1% annual chance floodplain. 28 are transportation lifelines and one is a Food, Water and Shelter lifeline. This is shown in Table I-14 below.

Table I-14 Judith Basin County Critical Facilities at Risk to 1% Annual Chance Flood Hazards by FEMA Lifeline

Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health and Medical	Safety and Security	Transportation	Total
Judith Basin County	-	-	1	-	-	-	28	**29**
Total	**0**	**0**	**1**	**0**	**0**	**0**	**28**	**29**

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

Figure I-9 Judith Basin County Flood Hazard

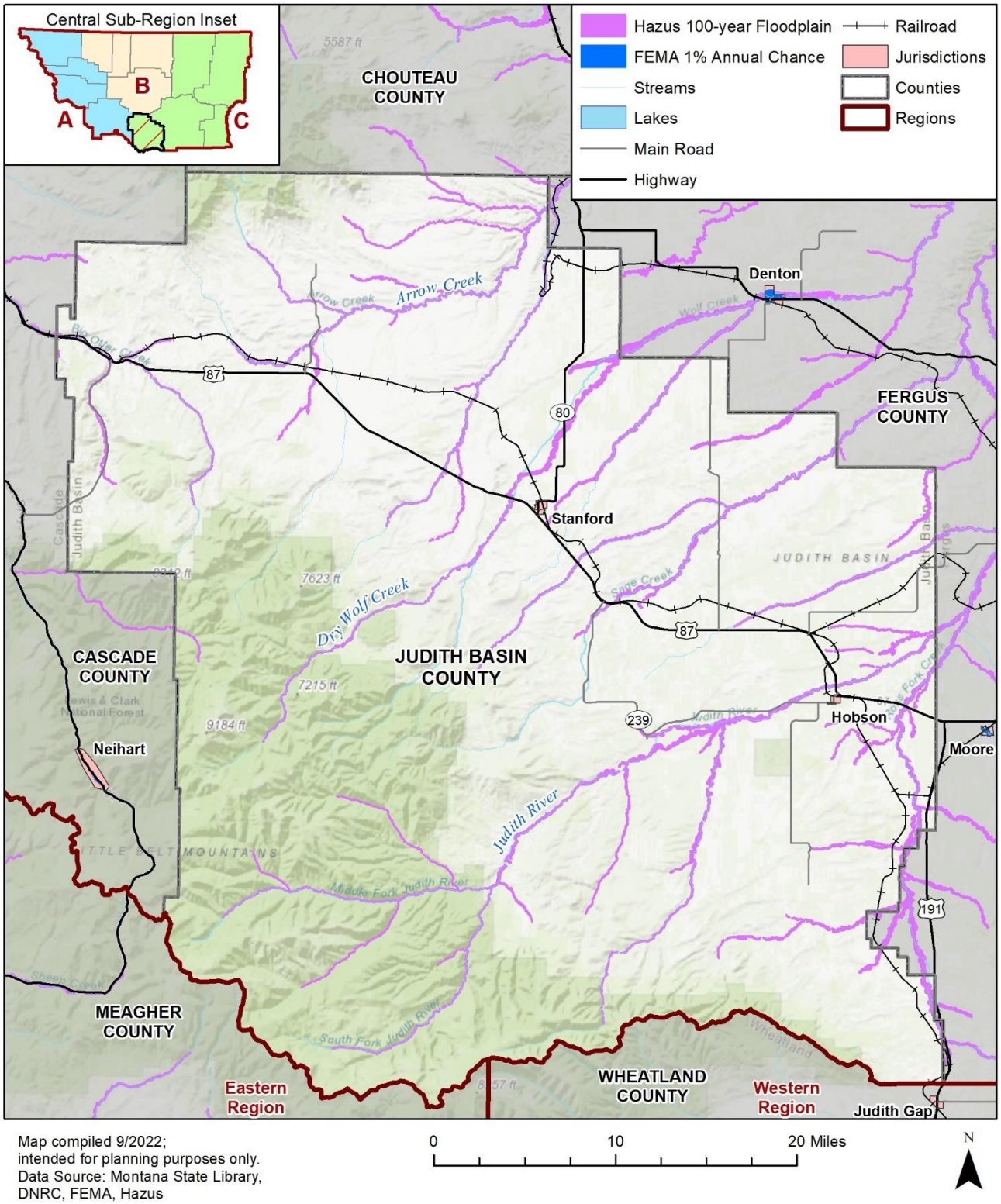


Figure I-10 Judith Basin County Flood Hazard and Structures

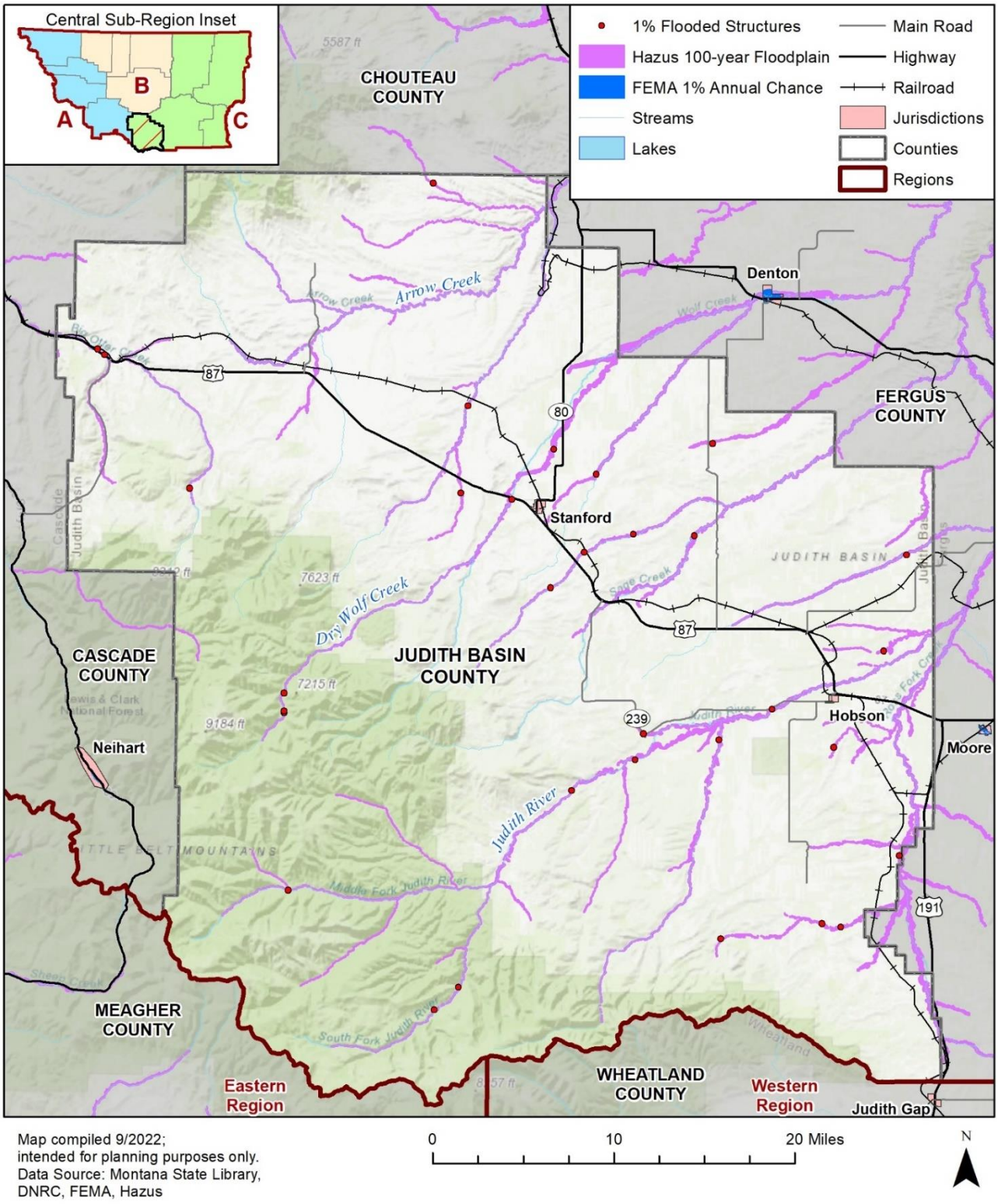


Figure I-11 Town Hobson Flood Hazard and Structures

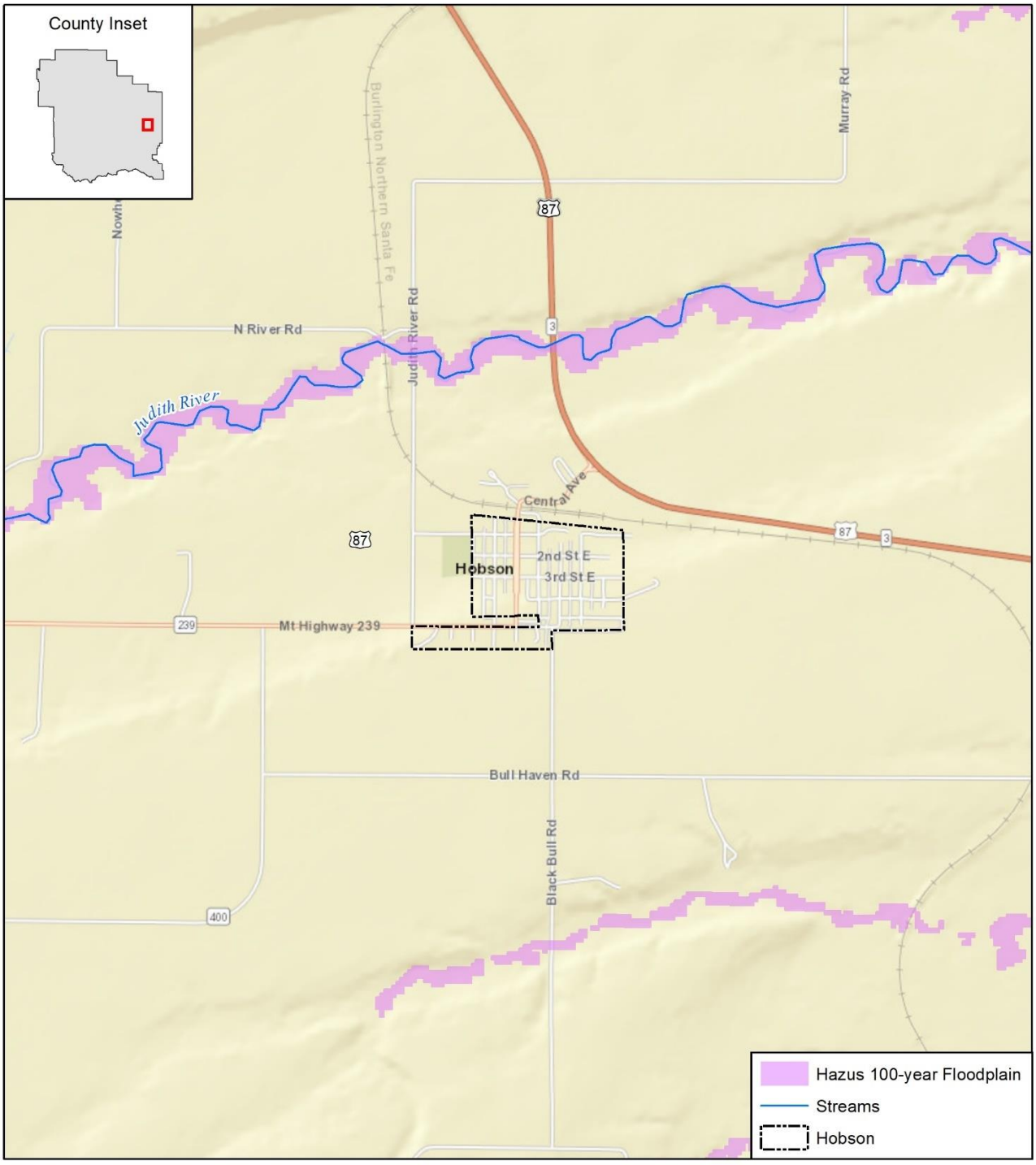


Figure I-12 Town of Sanford Flood Hazard and Structures

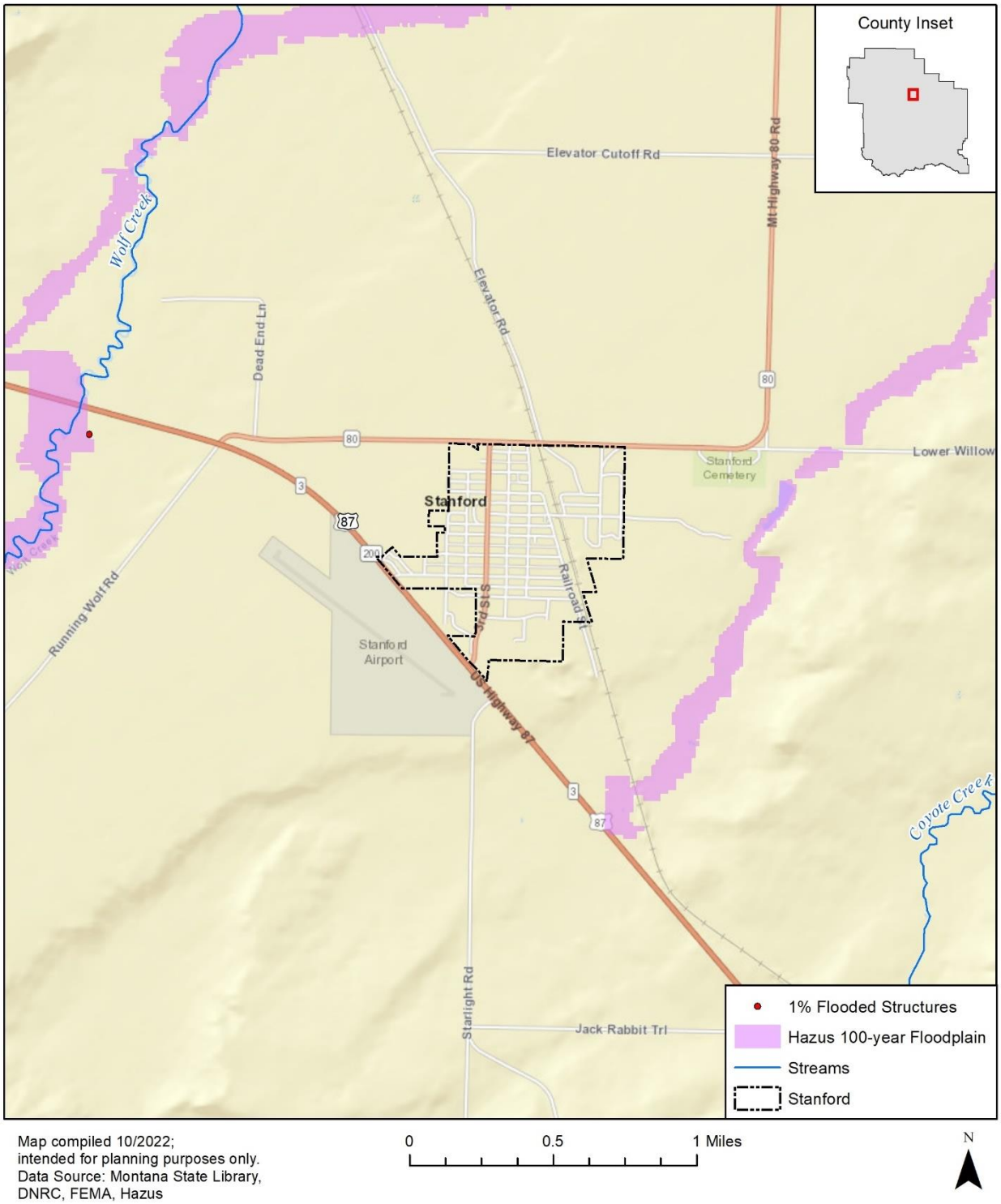
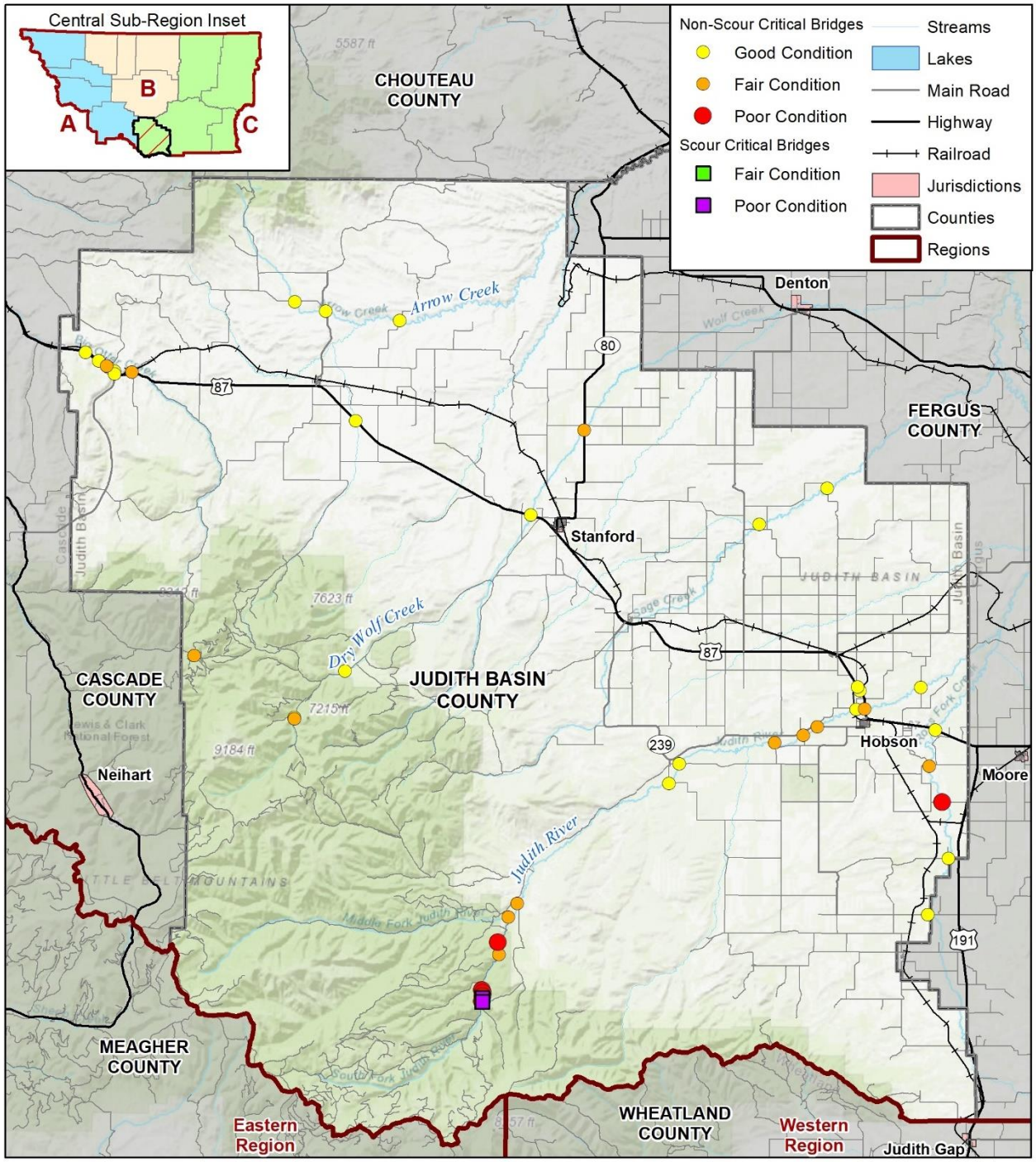


Figure I-13 below displays the location of bridges in Judith Basin County and their condition. Refer to Chapter 4 for a discussion of the flood risk relative to Judith Basin County and the Central Region.

Figure I-13 Judith Basin County Bridges



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

0 10 20 Miles

N

I.4.7 Hazardous Materials Incident

Judith Basin County has had 11 hazardous material incidents reported to the National Response Center since 1990. There are no current RMP facilities with the county.

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

I.4.8 Landslide

Landslides are ranked as a low overall significance hazard in Judith Basin County. There has only been no recorded instance of landslides in the County, therefore, annualized losses were found to be relatively low. There were no documented differences in landslide vulnerability between jurisdictions in Judith Basin County. Refer to Chapter 4 for a discussion of the landslide risk relative to Judith Basin County and the Central Region.

I.4.9 Severe Summer Weather

Judith Basin County ranked severe summer weather as a medium overall significance hazard. Judith Basin County experienced the fifth greatest number of total severe summer weather events in the Central Region, most of which were recorded hail events. Property losses from severe summer weather in Judith Basin County totaled to $5,000 from 1955 to 2022 (less than 1% of total losses in the Central Region), and no crop losses. While all property and people are equally vulnerable to severe summer weather events in the County, greatest property losses, particularly from hail events, are likely to occur in the City of Havre, where people and infrastructure are concentrated.

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

I.4.10 Severe Winter Weather

Judith Basin County ranked severe winter weather as a high overall significance hazard. The Judith Basin Zone experienced 143 total winter weather events from 1996 to March 2022, which was the fifth greatest in the Central Region. All exposed people and infrastructure are equally vulnerable to severe winter weather, and due to the regional nature of severe winter weather, both jurisdictions in the county are ranked as high.

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

I.4.11 Human Conflict

Human conflict is ranked as an overall low significance for Judith Basin County, along with most other counties in the Central Region. There have been no recorded human conflict events in the county. While all cities and towns are vulnerable to human conflict events, the populations of both jurisdictions in the county are small and comparable and are therefore ranked as low.

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

I.4.12 Tornadoes & Windstorms

Judith Basin County ranked tornadoes and windstorms as a high overall significance hazard. The Judith Basin Zone experienced 149 high/strong wind events from 1996-2022. Additionally, Judith Basin County experienced 46 thunderstorm wind events from 1995-2022 and 15 tornado events from 1950-2022. Mobile homes are particularly vulnerable to tornado and windstorm events, with damages likely to occur to the homes. In Judith Basin, 13.4% of homes are mobile homes, which is slightly more than the Montana average.

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

I.4.13 Transportation Accidents

Judith Basin County ranked transportation accidents as an overall medium significance. Judith Basin County had 340 roadway crashes from 2016-2020 as recorded by the Montana DOT. While transportation accidents can occur along any type of transportation route in the county and region, accidents are more likely to occur along heavily trafficked areas such as the Central Montana Rail and US Highway 87. Due to comparable population across jurisdictions in the county, both jurisdictions are ranked as medium risk rating.

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

I.4.14 Volcanic Ash

All counties in the Central Region and all jurisdictions within Judith Basin 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. Due to the disproportionate economic reliance on agriculture in Judith Basin County, it is possible that a significant ashfall event in the county could damage or destroy crops and hinder the growing season, which could indicate that Judith Basin has more economic vulnerability to this hazard than other counties in the region.

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

I.4.15 Wildfire

Judith Basin County ranked wildfire as a high significance hazard based on a combination of information from the vulnerability assessment and input from the CPT. Figure I-14 below displays the wildfire risk in Judith Basin County. While most of the County is at medium/low risk of wildfire, there are significant pockets of very high to extreme wildfire risk throughout the few populated areas of the county, including Stanford and Hobson.

The CPT also noted that the county has experienced numerous fires in the last 5 years, ranging in scale from large timber fires to agriculture related fires. Future occurrences like these are likely and have the potential to be devastating to the community.

Table I-15 below summarizes the estimated exposed value of improvements in each wildfire risk category. Of the 236 properties at risk, 85% are residential and 11% are agricultural. Wildfires typically result in a total building loss, including contents. Judith Basin County has approximately 1,957 residents living in areas of high, very high, or extreme wildfire risk, which is approximately 97% of the total population. This gives the county one of the highest proportions of wildfire vulnerable residents in the region. See Chapter 4 in the base plan for details on the methodology of this analysis.

Table I-15 Judith Basin 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 Hazards	Stanford	127	$10,047,319	$5,434,600	$15,481,919	**254**
	Total	**127**	**$10,047,319**	**$5,434,600**	**$15,481,919**	**254**

At Risk Rating	Jurisdiction	Improved Parcels	Improved Value	Content Value	Total Value	Population
At Risk to **Very High** Wildfire Hazards	Hobson	132	$10,192,508	$5,196,549	$15,389,057	**275**
	Stanford	171	$14,740,168	$8,010,114	$22,750,282	**348**
	Judith Basin County	403	$30,144,407	$18,153,984	$48,298,391	**787**
	Total	**706**	**$55,077,083**	**$31,360,647**	**$86,437,730**	**1,410**
At Risk to **High** Wildfire Hazards	Hobson	2	$150,410	$75,205	$225,615	**4**
	Judith Basin County	234	$48,035,106	$43,171,093	$91,206,199	**288**
	Total	**236**	**$48,185,516**	**$43,246,298**	**$91,431,814**	**292**

Source: MSDI 2022, MWRA

Table I-16 summarizes the potential impact of wildfire on critical facilities and lifelines in Judith Basin 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.

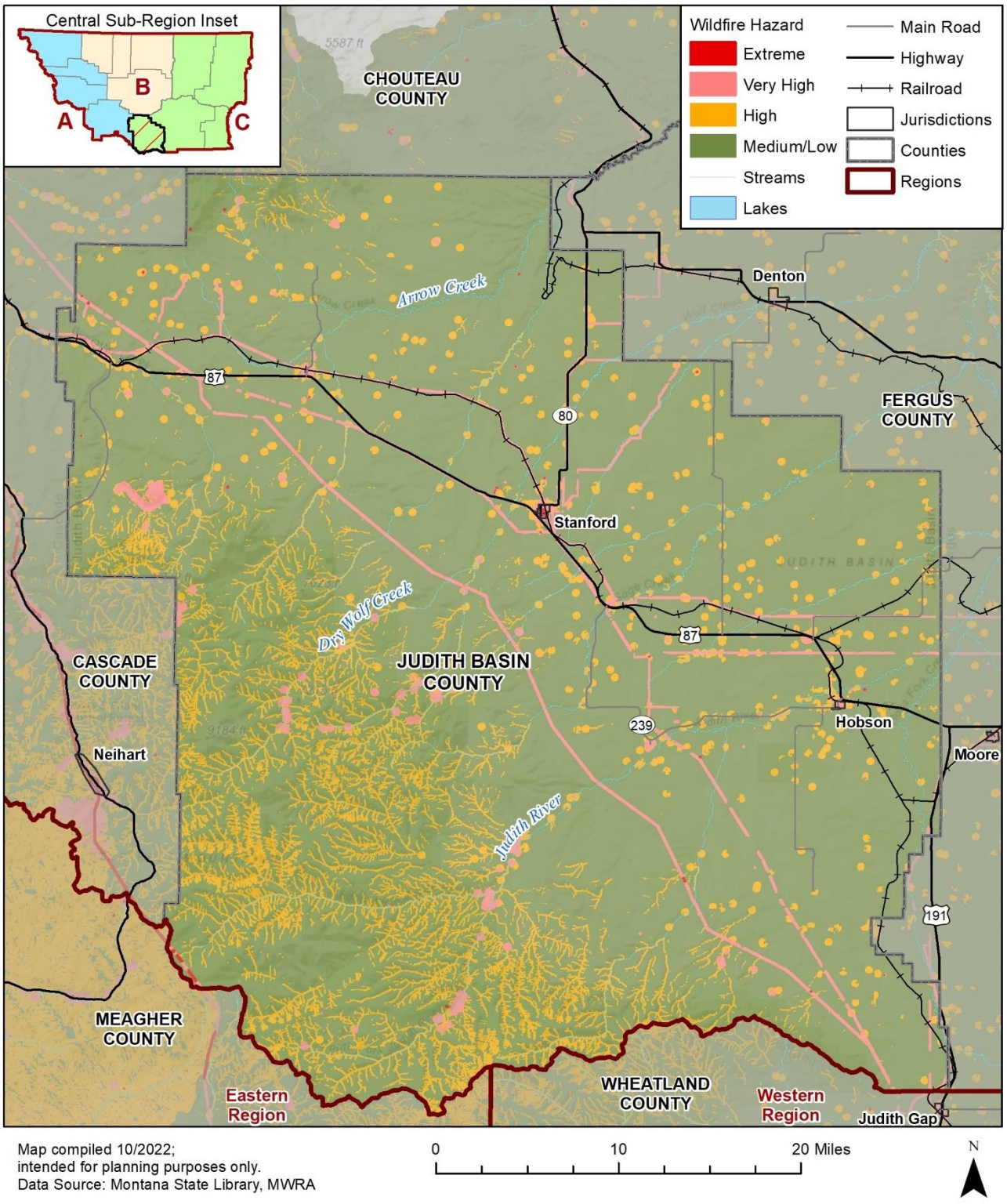
Table I-16 Judith Basin County Critical Facilities at Risk to Wildfire Hazards by Jurisdiction, Facility Type, and Risk Rating

At Risk Rating	Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health & Medical	Safety & Security	Transportation	Total
At Risk to **Extreme** Wildfire Hazards	Stanford	-	-	-	-	-	1	-	**1**
	Judith Basin County	2	2	-	-	-	-	-	**4**
	Total	**2**	**2**	**0**	**0**	**0**	**1**	**0**	**5**
At Risk to **Very High** Wildfire Hazards	Hobson	-	-	-	-	1	4	-	**5**
	Stanford	-	1	-	-	1	2	-	**4**
	Judith Basin County	5	22	-	-	-	6	5	**38**
	Total	**5**	**23**	**0**	**0**	**2**	**12**	**5**	**47**
At Risk to **High** Wildfire Hazards	Judith Basin County	1	-	-	-	-	1	15	**17**
	Total	**1**	**0**	**0**	**0**	**0**	**1**	**15**	**17**
	Stanford	-	-	-	-	-	3	-	**3**

At Risk Rating	Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health & Medical	Safety & Security	Transportation	Total
At Risk to **Medium/Low** Wildfire Hazards	Judith Basin County	3	3	2	-	-	-	27	**35**
	Total	**3**	**3**	**2**	**0**	**0**	**3**	**27**	**38**

Source: HIFLD 2022, MT DES, NBI, MWRA

Figure I-14 Judith Basin County Wildfire Hazard



I.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.

I.5.1 Regulatory Mitigation Capabilities

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

Table I-17 Judith Basin County and Jurisdictions Regulatory Mitigation Capabilities

Plans and Regulations	Judith Basin County	Town of Hobson	Town of Stanford
Building Codes	No	No	No
Building Codes Year	N/A	N/A	N/A
BCEGS Rating	N/A	N/A	N/A
Capital Improvements Program (CIP) or Plan	Yes	Yes	Yes
Community Rating System (CRS)	No	No	No
Community Wildfire Protection Plan (CWPP)	Yes, Judith Basin County CWPP 2004	Yes, Judith Basin County CWPP 2004	Yes, Judith Basin County CWPP 2004
Comprehensive, Master, or General Plan	No	No	No
Economic Development Plan	No	No	No
Elevation Certificates	Yes	Yes	Yes
Emergency Operations Plan (EOP)	Yes	Yes, County Plan	Yes, County Plan
Erosion/ Sediment Control Program	No	No	No
Floodplain Management Plan	Yes	Yes	Yes
Flood Insurance Study	Yes	Yes	Yes
Floodplain Management Ordinance	No	No	No
National Flood Insurance Program (NFIP) Participant	No	No	No
Growth Management Ordinance or Policy	No	No	No
Other Hazard-Specific Ordinance or Plan (Steep Slope, Wildfire)	Yes	No	No
Site Plan Review Requirements	No	No	No
Stormwater Program, Plan, or Ordinance	No	No	No
Zoning Code or Ordinance	No	No	No

Discussion on Existing Regulatory Mitigation Capabilities

Judith Basin County has an existing Community Wildfire Protection Plan (CWPP) adopted in 2004. The vision of this plan is to "Institutionalize and promote a countywide wildfire hazard mitigation ethic through leadership, professionalism, and excellence, leading the way to a safe, sustainable Judith Basin County". This is a mitigation capability that helps reduce risk from one of the counties highest significance hazards. As this existing plan is nearing 20 years since its adoption, this is also an excellent opportunity for enhancement that the county could pursue by drafting an updated CWPP.

Discussion on NFIP Participation and Compliance

Neither Judith Basin County, nor its incorporated communities of Hobson and Stanford, are participants in the National Flood Insurance Program. Due to the fact that the county has comparatively minimal flood risk and are not facing development pressures in flood hazard areas, the jurisdictions are not actively pursuing participating in the NFIP at this time.

I.5.2 Administrative and Technical Mitigation Capabilities

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

Table I-18 Judith Basin County Jurisdictions Administrative/Technical Mitigation Capabilities

Administrative and Technical	Judith Basin County	Town of Hobson	Town of Stanford
Emergency Manager	Yes	Yes, County	Yes, County
Floodplain Administrator/Position/ Department	Yes, DNRC	No	No
Community Planning:	Yes	Yes	Yes
- Planner/Engineer (Land Development)	Yes, County, Stanford, and Hobson	Yes, County, Stanford, and Hobson	Yes, County, Stanford, and Hobson
- Planner/Engineer/Scientist (Natural Hazards)	No	No	No
- Engineer/Professional (Construction)	Yes, County, Stanford, and Hobson	Yes, County, Stanford, and Hobson	Yes, County, Stanford, and Hobson
- Resiliency Planner	N/A	N/A	N/A
- Transportation Planner	No	No	No
Full-Time Building Official	No	No	No
GIS Specialist and Capability	Yes, DES	No	No
Grant Manager, Writer, or Specialist	Yes, DES	No	No
Housing Authority	No	No	No
Warning Systems: (list the hazards each system is used for)	Yes	Yes	Yes
- Sirens	Yes	Yes	Yes
- Reverse 911	Yes	Yes	Yes
- IPAWS/Wireless Emergency Alerts (WEA)	Yes, IPAWS	Yes	Yes
- Opt-In Notifications (CodeRed, Everbridge, etc.)	Yes, Omnilert	Yes	Yes

I.5.3 Financial Capabilities

Table I-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 I-19 Judith Basin County Jurisdictions Financial Capabilities

Financial Capabilities	Judith Basin County	Town of Hobson	Town of Stanford
Ability to fund projects through Capital Improvements funding	Yes	Yes	Yes
Ability to incur debt through general obligation bonds	Yes	Yes	Yes
Ability to incur debt through private activities	Yes	Yes	Yes
Ability to incur debt through special tax bonds	Yes	Yes	Yes
Authority to levy taxes for a specific purpose with voter approval	Yes	Yes	Yes
Authority to withhold spending in hazard prone areas	N/A	N/A	N/A
Community Development Block Grants	Yes	Yes	Yes
FEMA Hazard Mitigation Assistance grants	Yes	Yes	Yes
FEMA Public Assistance funds	No	No	No
Stormwater Service Fees	No	No	No
System Development Fee	No	No	No
Utility fees (water, sewer, gas, electric, etc.)	Yes	No	Yes
Gas Tax/BaRSAA (Roads and Streets)	Yes	No	Yes
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)
  - 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).

Judith Basin County and its jurisdictions have not received funding through these programs in the past based on FEMA OpenData information, but they are potential options for funding resources in the future. 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.

I.5.4 Education and Outreach Capabilities

Table I-20 below summarizes the existing education and outreach capabilities available to Judith Basin County and its jurisdictions.

Table I-20 Judith Basin County Education and Outreach Capabilities

Education & Outreach Programs	Judith Basin County	Town of Hobson	Town of Stanford
Ongoing public education programs (fire safety, responsible water use, household preparedness, etc.)	Yes, MSU Extension	No	No
Local citizen groups that communicate hazard risks	No	No	No
Firewise or other fire mitigation program	Yes	Yes	Yes
National Weather Service StormReady	No	No	No
Other	Yes, DNRC	No	No

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

Table I-21 shows the local chapters partnered with the County and participating jurisdictions.

Table I-21 Judith Basin County Non-Governmental Organizations (NGOs)

Non-Governmental Organizations (NGOs)	Judith Basin County	Town of Hobson	Town of Stanford
American Red Cross	Yes	Yes	Yes
Chamber of Commerce	Yes	Yes	Yes
Community Organizations (Lions, Kiwanis, etc.)	Yes, CMR Stampede Club	No	No
Environmental Groups	No	No	No
Homeowner Associations	No	No	No
Neighborhood Associations	No	No	No
Salvation Army	Yes, The City of Great Falls	Yes, The City of Great Falls	Yes, The City of Great Falls
Veterans Groups	Yes, American Legion	Yes	Yes

I.5.6 Opportunities for Enhancement

Based on the capabilities assessment, Judith Basin 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. 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 Judith Basin 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:

- Judith Basin County:
  - Consider joining the NFIP.
  - Consider adopting building codes.
  - Update the 2004 CWPP
  - Consider adopting building codes to improve structure resilience to hazards.
  - Additional partnerships with area agencies to further develop hazard mitigation programs.
- Town of Hobson:
  - Consider constructing a community storm shelter at a prominent location in the town.
  - Consider adopting a Wildland Urban Interface Code (see recommendation in 2022 CWPP)
- Town of Stanford:
  - Consider adopting a Wildland Urban Interface Code
  - Consider constructing a community storm shelter at a prominent location in the town.
  - Consider adopting building codes.
  - Formally adopt a zoning code to protect communities and businesses from unregulated growth.

I.6 Mitigation Strategy

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

I.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.

I.6.2 Progress on Previous Actions

During the 2023 planning process, the Judith Basin County Planning Team reviewed all the mitigation actions from the 2013 plan. As shown in Table I-22, of their 26 mitigation actions from 2013 six have been completed, 18 are in progress or are implemented annually, demonstrating ongoing progress and building the community's resiliency to disasters. Two additional actions were noted as being not started and are being carried forward as well in the 2023 mitigation strategy.

Table I-22 Completed and Deleted Actions

2013 ID	Mitigation Action	Hazards Mitigated	Jurisdiction	Notes
3.1.1	Resize culverts and/or replace culverts with bridges as needed to reduce flood losses.	Flooding	County	Complete
4.1.1	Implement NWS Weather Spotter Training for Responders and the public	Severe Weather	County, Hobson, Stanford	Complete
4.1.2	Encourage Community involvement in becoming a Storm Ready Community.	Severe Weather	County, Hobson, Stanford	Complete
4.2.1	Develop a resource library to inform the public of severe summer weather related materials and building options.	Severe Weather	County, Hobson, Stanford	Complete
5.1.1	Obtain stationary generator for Judith Basin County Courthouse	Severe Weather	County	Complete
5.1.3	Obtain snow removal equipment for City of Stanford.	Severe Weather	Stanford	Complete

I.6.3 NFIP Continued Compliance

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

I.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 Judith Basin County and its jurisdictions. The process used to identify, develop, and prioritize these actions is described in Chapter 5 of the base plan. A total of three new mitigation actions were added to the 20 actions carried over from the 2017 HMP.

Table I-23 represents Judith Basin 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 I-23 below lists the mitigation actions for each participating jurisdiction in Toole County. All jurisdictions have developed mitigation actions for each identified hazard in the HMP.

Table I-23 Judith Basin County Mitigation Action Plan

#	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
1	Continue water conservation practices/restrictions to manage drought.	Drought	County, Stanford	Stanford, County	Low	County	Annual Implementation	Medium	In Progress
2	Support drought programs implemented through the Conservation District, FS, and MSU extension.	Drought	County	Judith Basin Extension	Low	County, MSU extension	Annual Implementation	Medium	In Progress
3	Increase the educational emphasis given to forest and range management practices for the minimization of drought impacts.	Drought	County	Judith Basin Extension	Low	Conservation district, MSU extension	Annual Implementation	Medium	In Progress
4	Encourage WUI home site treatments throughout the county including grant programs to create defensible space.	Wildfire	County	DES, SMDC	Moderate	SMDC, BLM, NRCS, DNRC, National Fire Plan	Annual Implementation	High	Annual
5	Support fuel reduction programs to mitigate wildland fire risk on public and private lands.	Wildfire	County	County, BLM, USFS, DNRC	High	County, BLM, USFS, DNRC	Annual Implementation	High	In Progress
6	Map and create inventory of existing dry hydrants and develop plan for future expansion.	Wildfire	County	Fire, DES	Moderate	County	Short Term	High	In Progress
7	Develop a FireSafe Montana working group in Judith Basin County to Promote public awareness of wildfire risk and issues.	Wildfire	County	Fire, DES	Low	County, Firesafe Montana	Short Term	High	Annual
8	Ensure that future development complies with State subdivision regulations which require fuel reduction, water supply, and ingress/egress.	Wildfire	County, Hobson, Stanford	County	Moderate	County	Short Term	Medium	Annual
9	Conduct public outreach to prepare for and recover from floods by distributing information on mold abatement, safe drinking water, and flood mitigation.	Flooding	County	DES, Judith Basin Extension	Low	County, FEMA, DEQ	Short Term	High	Annual
10	Obtain mobile generator for city of Hobson	Multi: Cyber-Attack, Dam Failure, Earthquake, Flooding, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Volcanic Ash, Wildfire	Hobson	Hobson	Moderate	DHS, Hobson, HMGP	Short Term	Medium	In Progress

#	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
11	Obtain mobile generator for Stanford Water System	Multi: Cyber-Attack, Dam Failure, Earthquake, Flooding, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Volcanic Ash, Wildfire	Stanford	Stanford	Moderate	DHS, Stanford, HMGP	Short Term	Medium	In Progress
12	Collaborate with local MSU Extension, State & Federal agencies to provide the public & emergency responders with resources and education.	Communicable Disease	County	Judith Basin Extension, DES	Low	MSU Extension, MT Dept Agriculture, MT Dept Livestock	Short Term	Medium	Annual
13	Establish an Ag Emergency Response Team to respond to Ag related incidents	Communicable Disease	County	Judith Basin Extension, DES	Low	County, MSU Extension, MT Dept agriculture, MT dept Livestock	Short Term	Medium	In Progress
14	Encourage BNSF Railroad to install railroad crossing arms and lights at Moccasin and Windham.	Transportation Accidents	County	Sheriff, DES	Low	Railroad	Short Term	Medium	Annual
15	Exercise a hazmat railroad derailment.	Transportation Accidents	County, Hobson, Stanford	DES	Low	County, Railroad	Medium Term	High	Not started
16	Equip critical facilities with NOAA Radios.	Multi: Dam Failure, Drought, Flooding, Summer Weather, Winter Weather, Tornado/Wind, Volcanic Ash, Wildfire	County, Hobson, Stanford	DES	Low	MT DES, NWS, HMGP	Short Term	Medium	Not started
17	Obtain portable radios for emergency responders.	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	County, Hobson, Stanford	Fire, Sheriff	Low	County, DHS	Annual Implementation	Medium	In Progress
18	Conduct emergency response training and exercises within all communities.	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	County, Hobson, Stanford	DES	Low	County, DHS	Short Term	Medium	Annual

#	Action Name & Description	Hazards Mitigated	Jurisdictions	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status & Implementation Notes
19	Increase involvement of LEPC within county and towns	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	County, Hobson, Stanford	DES	Little to no cost	County	Annual Implementation	Medium	Annual
20	Create social media sites to provide the public with hazard reduction and emergency information.	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	County	DES	Little to no cost	County	Short Term	Medium	Annual
21	Stanford Generator Project. Generator for the Stanford water tower to ensure water supply can be provided to the town in times of emergency and power outages.	Multi: Cyber-Attack, Dam Failure, Earthquake, Flooding, Summer Weather, Winter Weather, Human Conflict, Tornado/Wind, Volcanic Ash, Wildfire	Town of Stanford	City of Stanford, Judith Basin County	Moderate	Strand Foundation	Short Term	High	New in 2023
22	Fuel Mitigation Project for a development on the South Fork called the Trask Ranch.	Wildfire	County	County DES, Fire Department, Trask Ranch	Moderate	FEMA HMA Grant	Long Term	Medium	New in 2023
23	Water Project. Town does not have its own water well and they are traveling to Ackley Lake to get water for suppression.	Wildfire	Town of Hobson	Town of Hobson Rural Volunteer Fire Dept	Low	FEMA HMA Grant	Long Term	Medium	New in 2023

I.7 Plan Implementation and Maintenance

Moving forward the Judith Basin 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.

I.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:

Judith Basin County:

- Judith Basin County Capital Improvements Program
- Judith Basin County CWPP (2004)
- Judith Basin County Emergency Operations Plan (2022)
- Judith Basin County Floodplain Management Plan
- Judith Basin County Flood Insurance Study,

Town of Hobson

- Town of Hobson Capital Improvements Plan
- Floodplain Management Plan

Town of Stanford

- Town of Stanford Capital Improvements Plan
- Floodplain Management 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.

The CPT noted that they have used the Judith Basin County Multi-Hazard Mitigation Plan 2013 to plan and help mitigate for wildfire protection of some vulnerable unincorporated towns and cabins in areas of the county with high fuel loads.

I.7.2 Monitoring, Evaluation and Updating the Plan

Judith Basin 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 Judith Basin 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.