

Annex I Lincoln County

I.1 Mitigation Planning and County Planning Team

This County Annex builds on previous versions of the Lincoln County Multi-Hazard Mitigation Plan completed 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 Libby
- City of Troy
- Town of Eureka
- Town of Rexford

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

Lincoln County is located in the northwest corner of Montana and has an area of 3,675 square miles. Lincoln County has two distinct geographic areas and population centers; North and South Lincoln County. South Lincoln County contains Libby, the county seat, Troy, and the Yaak Community along with Bull Lake and the Chain of Lakes communities. North Lincoln County, also known as the Tobacco Valley, includes the Towns of Eureka and Rexford and the unincorporated towns of Trego, Fortine, West Kootenai and Stryker. Libby is the largest community in Lincoln County followed by Eureka and Troy.

The Kootenai River flows south out of Canada into Lincoln County and leaves the state west of Troy. Lake Koocanusa, a reservoir created by the Libby Dam on the Kootenai River has a length of 48 miles within Lincoln County and reaches another 42 miles into British Columbia. Figure I-1 presents a location map of Lincoln County.

Lincoln County consists of intense topographic variations. Large spans of mountainous, coniferous forests dominate the watersheds. Valleys in the northern portion of the county are characterized by significant expanses of grasslands. The elevation in Lincoln County ranges from about 1,820 feet above sea level where the Kootenai River enters Idaho, to over 8,700 feet in the Cabinet Mountain Wilderness.

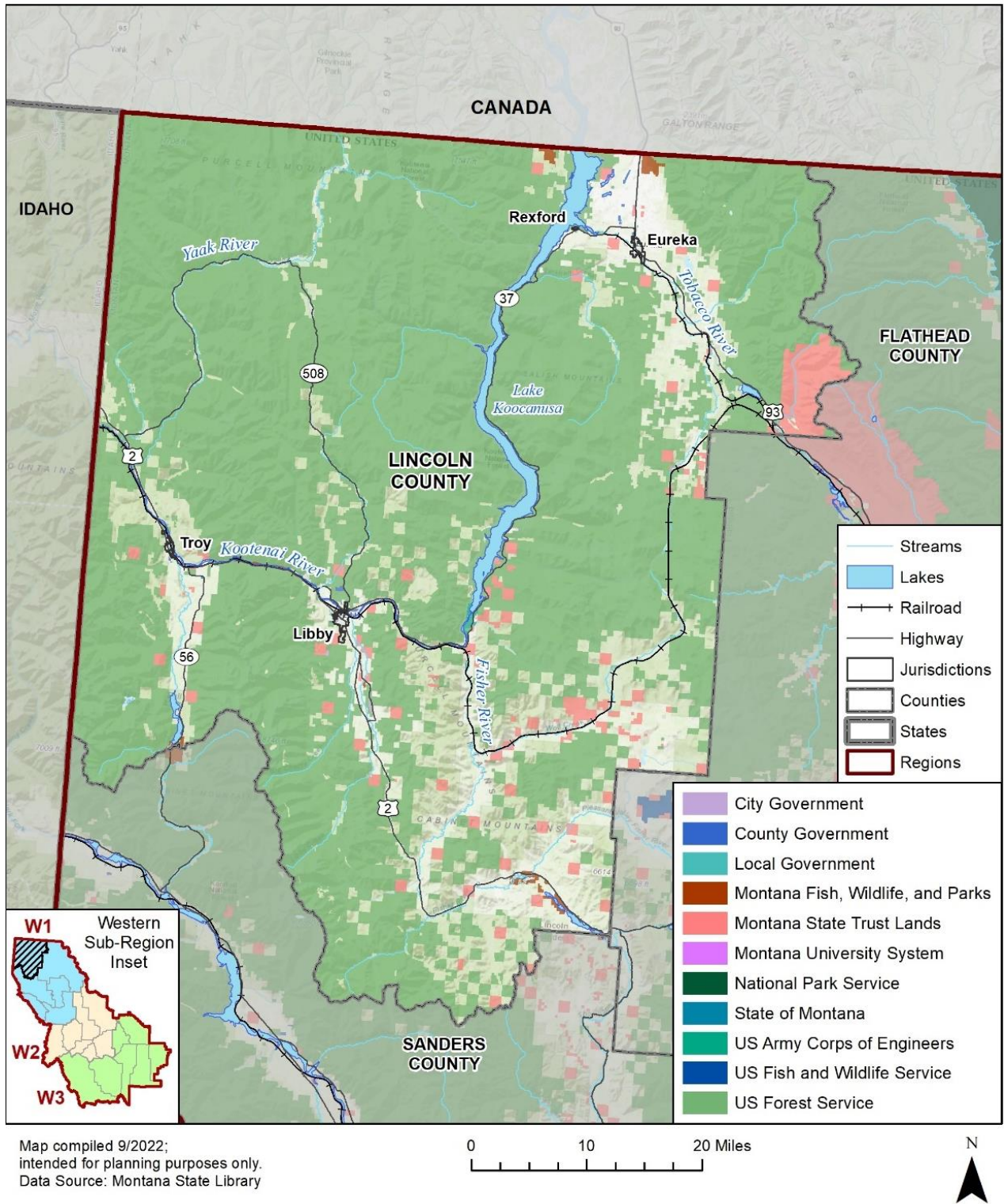
Lincoln County is located within the region generally classified as a modified west coast marine and continental climate. Summers are sometimes hot and dry, and winters are cold. Mean annual precipitation averages approximately 30 inches for the Kootenai River basin, generally increases with increasing altitude, and varies from 14.5 inches/year at Eureka, to an estimated 60 or more inches on some of the higher mountains. Annual snowfall varies from about 40 inches in the lower valleys to an estimated 300 inches in some mountain areas. Most of the snow falls during the November-March period, but heavy snowstorms can occur from mid-September to early May.

Average high and low temperatures in Libby in January are 33° F and 21° F, respectively. Often the coldest temperatures occur at sheltered valley locations when winds are light, but extreme wind chill situations occur almost every winter when windy conditions coincide with very low temperatures. Rapid warm-ups during the winter and early spring or rain on snow events can lead to significant snow melt and flooding of small streams and rivers and/or ice jam flood problems.

Average high and low temperature in July in Libby are 87° F and 49° F, respectively. Both summer and winter temperatures vary considerably with elevation and local topography. Brief spells with temperatures above 100°F can occur. Extended periods with temperatures above 90° F occur every few years. Freezing temperatures can occur during any month of the year but are rare in low elevation from June through August. Summer thunderstorm events with heavy precipitation of up to several inches can occur and may be accompanied by high winds, hail and local flooding. Winter storms with heavy snowstorms can occur from October to April.

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Figure I-1 Lincoln County Base Map and Land Stewardship



I.2.2 Population Trends

According to the 2021 American Community Survey, Lincoln County is the 10th most populous county in Montana with a total population of 19,674. The U.S. Census Bureau reported the County experienced a 0.1% decrease in population since the 2010 census, with the greatest concentration of people residing in the City of Libby and the unincorporated County. Trends show that the population in rural towns is decreasing. Specific demographic variables for the County are provided in Table I-1 below.

Table I-1 Population Trends in Lincoln County 1980-2020

Incorporated Community	1980	1990	1980-1990 Change	2000	1990-2000 Change	2010	2000-2010 Change	2020	2010-2020 Change
City of Libby	2,748	2,532	-7.9%	2,626	3.7%	2,628	0.1%	2,775	5.6%
City of Troy	1,088	953	-12.4%	957	0.4%	938	-2.0%	797	-15.0%
Town of Eureka	1,119	1,043	-6.8%	1,017	-2.5%	1,037	2.0%	1,380	33.1%
Town of Rexford	130	132	1.5%	151	14.4%	105	-30.5%	78	-25.7%
Lincoln County	17,752	17,481	-1.5%	18,837	7.8%	19,687	4.5%	19,677	-0.1%

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

I.2.3 Demographics

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

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

Characteristic	Lincoln County	State of Montana
Percentage of persons below 150% poverty estimate	29.6%	24.1%
Unemployment Rate estimate	8.2%	4.0%
Percentage of housing cost-burdened occupied housing units with annual income less than \$75,000 (30%+ of income spent on housing costs) estimate	31.0%	21.4%
Percentage of persons with no high school diploma (age 25+) estimate	8.5%	7.5%
Percentage uninsured in the total civilian noninstitutionalized population estimate	9.5%	9.6%
Percentage of persons aged 65 and older estimate	28.7%	22.1%
Percentage of persons aged 17 and younger estimate	18.4%	21.3%
Percentage of civilian noninstitutionalized population with a disability estimate	22.9%	15.6%
Percentage of single-parent households with children under 18 estimate	2.9%	3.9%

Characteristic	Lincoln County	State of Montana
Percentage of persons (age 5+) who speak English "less than well" estimate	0.6%	0.3%
Minority (other than white non-Hispanic) estimate	8.3%	14.6%
Percentage of housing in structures with 10 or more units estimate	1.3%	3.3%
Percentage of mobile homes estimate	14.8%	13.1%
Percentage of occupied housing units with more people than rooms estimate	0.9%	2.1%
Percentage of households with no vehicle available estimate	3.6%	4.9%
Percentage of persons in group quarters estimate	1.1%	2.8%
Percentage Female estimate	50.6%	49.7%
Median Age estimate	52.5	40.1
Median Gross Rent estimate	\$729	\$836
Median House Value estimate	\$197,300	\$244,900
Percent Unoccupied Housing Units estimate	25.7%	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 Lincoln County as "Relatively High", with a score of 46. This is higher than 33.9% 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 3. The ACS reports that a significant portion of the population in Lincoln County (around a quarter) is below the 150% poverty level – almost 30%. Additionally, 31% of the population in Lincoln County experiences the housing cost-burden, which is 10% higher than the State of Montana average. Nearly a quarter of the population is aged 17 and younger, indicating that many individuals are still dependent on a caretaker, and 2.9% of families are single-parent households with children under 18, which is nearly 1% lower than the Montana average. Finally, 1.3% of houses are structures with 10 or more units, which is 2% lower than the State of Montana average.

The CPT noted vulnerability concerns in jurisdictions across the County, including low-income rural residents who live in the floodplain, lack of childcare for those residents with children/dependents, and public notification systems that can reach all populations.

I.2.5 Development Trends

As noted in the County's growth policy, Lincoln County's strategy for addressing land use issues needs to be flexible and responsive to changing communities and economies, while at the same time respecting the private property rights of individuals and businesses. The policy direction in land use and development

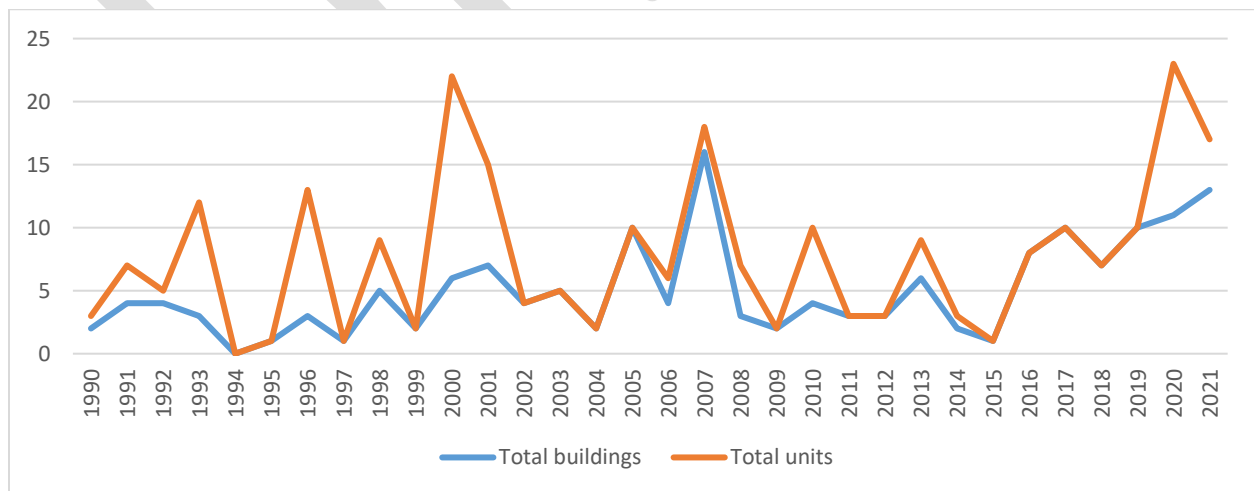
include: 1. encourage a variety of lot sizes within new subdivisions; 2. large lots should be far from services while smaller lots, apartments, and infill should be encouraged where services are closer; 3. encourage area/neighborhood plans.

Despite being the 10th most populous county in the state, Lincoln County is predominantly rural and the population generally spread out rather than concentrated in urban centers. In the southern portion of the County development is constrained by topography and a limited supply of private developable land. Development in this portion of the County is centered around the Cities of Libby and Troy. In this area, development outside of these incorporated cities extends south of Troy along Bull Lake Road and south of Libby along U.S. Highway 2. In the northern portion of the County development is largely concentrated in the Tobacco River Valley primarily around the Town of Eureka. Development patterns near Eureka are more spread out, resulting from fewer topographic development constraints and greater presence of private developable land. The Yaak Valley is also home to a limited amount of rural and remote development as is the Happy's Inn area at the Thompson Chain of Lakes – the only area governed by a neighborhood plan.

- City of Libby:** As noted in the City's 2010 growth policy, in order to preserve and improve the quality of life in Libby, there is a higher expectation about the quality of new development and redevelopment occurring in Libby. With more scrutiny of building design and site layout, there is a need for better definition of design expectations for all projects, and to understand and relate to the surrounding natural and built environment. The goals established in the growth policy regarding land use include:
 1. facilitate redevelopment and encourage development of blighted, vacant or underdeveloped land, including Superfund sites;
 2. encourage neighborhood planning efforts;
 3. improve the appearance of Libby's streetscape.

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 Lincoln County. This data indicates that the County's number of unit authorizations have been fluctuating throughout the last 30 years. The number of total buildings has been increasing recently. An increase in the number of housing unit authorizations in the county could indicate an increase in the total number of buildings exposed to hazard events. However, it is unknown how this development will impact vulnerability to specific hazards, such as wildfire and flooding.

Figure 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-4 below provides a brief overview of economic characters in Lincoln 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 Lincoln County Economic Profile

Economic Characteristics	Lincoln County
Families Below Poverty Level	9.9%
Individuals Below Poverty Level	17.0%
Median Home Value	\$281,400
Median Household Income	\$64,994
Per Capita Income	\$35,384
Population > 16 Years Old in Labor Force	63.4%
Population Employed	59.6%

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

Table I-4 below shows the breakdown of employment in Lincoln 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 17% of the total employment in the County with 1,229 people. This is followed by "Retail Trade" Industry with 1,000 people. A close third is the "Arts, entertainment, and recreation, and accommodation and food services" industry with 890 of the population in Lincoln County employed.

Table I-4 Lincoln County Occupation by Industry Profile

Industry	Population Employed	Percent of Labor Force
Agriculture, forestry, fishing and hunting, and mining	647	9.14%
Construction	636	8.98%
Manufacturing	336	4.75%
Wholesale trade	56	0.79%
Retail trade	1,000	14.12%
Transportation and warehousing, and utilities	597	8.43%
Information	224	3.16%
Finance and insurance, and real estate and rental and leasing	284	4.01%
Professional, scientific, and management, and administrative and waste management services	533	7.53%
Educational services, and health care and social assistance	1,229	17.36%
Arts, entertainment, and recreation, and accommodation and food services	890	12.57%
Other services, except public administration	331	4.67%
Public administration	318	4.49%

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. Several changes were made from the 2018 Lincoln County Hazard Mitigation Plan to be consistent with the 2023 Montana Western Region Hazard Mitigation Plan. The 2018 Lincoln County Hazard Mitigation Plan profiled the following hazards:

- Wildfire
- Severe Weather
- Hazmat Incidents & Transportation Accidents
- Disease
- Flooding
- Workplace Violence/Active Shooter
- Landslide
- Terrorism, Civil Unrest & Cyber Security
- Dam Failure

Each of these hazards is still profiled, however some changes in the naming and organization of them have been done. Severe Weather is now profiled as Severe Summer Weather and Severe Winter Weather. Terrorism, Civil Unrest & Cyber Security were combined with Workplace Violence/Active Shooter and are now referred to as Human Conflict, while Cyber Security is profiled as Cyber-Attack. Hazmat Incidents & Transportation Accidents are now profiled as separate chapters. Additionally in this plan update, Avalanche, Drought, Earthquake, Tornadoes & High Wind, and Volcanic Ash were added.

Table I-5 provides a summary of the overall hazard significance for the hazards evaluated in this plan, showing variability by jurisdiction. More details on hazards can be found in Chapter 4 of the base plan.

Table I-5 Lincoln County Overall Hazard Significance by Hazard and Jurisdiction*

Hazard	Lincoln County	City of Libby	City of Troy	Town of Eureka	Town of Rexford
Avalanche	Low	Low	Low	Low	Low
Communicable Disease	Medium	Medium	Medium	Medium	Medium
Cyber-Attack	Medium	Medium	Medium	Medium	Medium
Dam Failure	Medium	Medium	Medium	Medium	Medium
Drought	Medium	Medium	Medium	Medium	Medium
Earthquake	Low	Low	Low	Medium	Medium
Flooding	High	High	High	High	High
Hazardous Materials Incident	Low	Low	Low	Low	Low
Landslide	Low	Low	Low	Low	Low
Severe Summer Weather	Medium	Medium	Medium	Medium	Medium
Severe Winter Weather	Medium	Medium	Medium	Medium	Medium

Hazard	Lincoln County	City of Libby	City of Troy	Town of Eureka	Town of Rexford
Human Conflict	Medium	Medium	Medium	Medium	Medium
Tornadoes & Windstorms	Medium	Medium	Medium	Medium	Medium
Transportation Accidents	Low	Low	Low	Low	Low
Volcanic Ash	Low	Low	Low	Low	Low
Wildfire	High	High	High	High	High

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

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

People, property, critical facilities/infrastructure, and other important assets in Lincoln 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 Lincoln County Building Inventory and Value by Jurisdiction

Jurisdiction	Improved Parcels	Improved Value	Content Value	Total Value
Eureka	639	\$81,540,422	\$46,624,794	\$128,165,216
Libby	1,275	\$224,180,226	\$140,591,871	\$364,772,097
Rexford	58	\$7,260,176	\$4,182,753	\$11,442,929
Troy	420	\$47,954,184	\$26,878,118	\$74,832,302
Lincoln County	8,551	\$1,425,536,334	\$792,682,546	\$2,218,218,880
Total	10,943	\$1,786,471,342	\$1,010,960,082	\$2,797,431,424

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

Total building exposure with contents within Lincoln County based on an analysis of improved parcels is nearly \$2.8 billion, with nearly \$1.8 billion in improved value properties and over \$1.01 billion of contents. Of the nearly \$2.8 billion of total building exposure in Lincoln County, the unincorporated County accounts for over \$2.2 billion of this total number. Residential properties represent the greatest portion of structures in the County, accounting for over \$2.3 billion of the nearly \$2.8 billion improved property value. This is shown in Table I-7 below.

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

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value
Eureka	Commercial	1	\$548,440	\$548,440	\$1,096,880
	Exempt	29	\$10,341,725	\$10,341,725	\$20,683,450
	Industrial	1	\$409,430	\$614,145	\$1,023,575
	Residential	607	\$70,240,687	\$35,120,344	\$105,361,031
	Vacant	1	\$140	\$140	\$280
	Total	639	\$81,540,422	\$46,624,794	\$128,165,216
Libby	Commercial	2	\$2,148,130	\$2,148,130	\$4,296,260
	Exempt	53	\$53,566,766	\$53,566,766	\$107,133,532
	Industrial	3	\$644,310	\$966,465	\$1,610,775
	Residential	1,217	\$167,821,020	\$83,910,510	\$251,731,530
	Total	1,275	\$224,180,226	\$140,591,871	\$364,772,097
Rexford	Commercial	2	\$243,750	\$243,750	\$487,500
	Exempt	1	\$861,580	\$861,580	\$1,723,160
	Residential	55	\$6,154,846	\$3,077,423	\$9,232,269

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value
	Total	58	\$7,260,176	\$4,182,753	\$11,442,929
Troy	Commercial	1	\$146,280	\$146,280	\$292,560
	Exempt	18	\$5,582,428	\$5,582,428	\$11,164,856
	Residential	400	\$42,152,132	\$21,076,066	\$63,228,198
	Vacant	1	\$73,344	\$73,344	\$146,688
	Total	420	\$47,954,184	\$26,878,118	\$74,832,302
Lincoln County	Agricultural	563	\$109,538,880	\$109,538,880	\$219,077,760
	Commercial	21	\$15,840,573	\$15,840,573	\$31,681,146
	Exempt	63	\$23,709,597	\$23,709,597	\$47,419,194
	Industrial	6	\$4,183,820	\$6,275,730	\$10,459,550
	Residential	7,857	\$1,269,891,396	\$634,945,698	\$1,904,837,094
	Vacant	41	\$2,372,068	\$2,372,068	\$4,744,136
	Total	8,551	\$1,425,536,334	\$792,682,546	\$2,218,218,880
	Grand Total	10,943	\$1,786,471,342	\$1,010,960,082	\$2,797,431,424

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

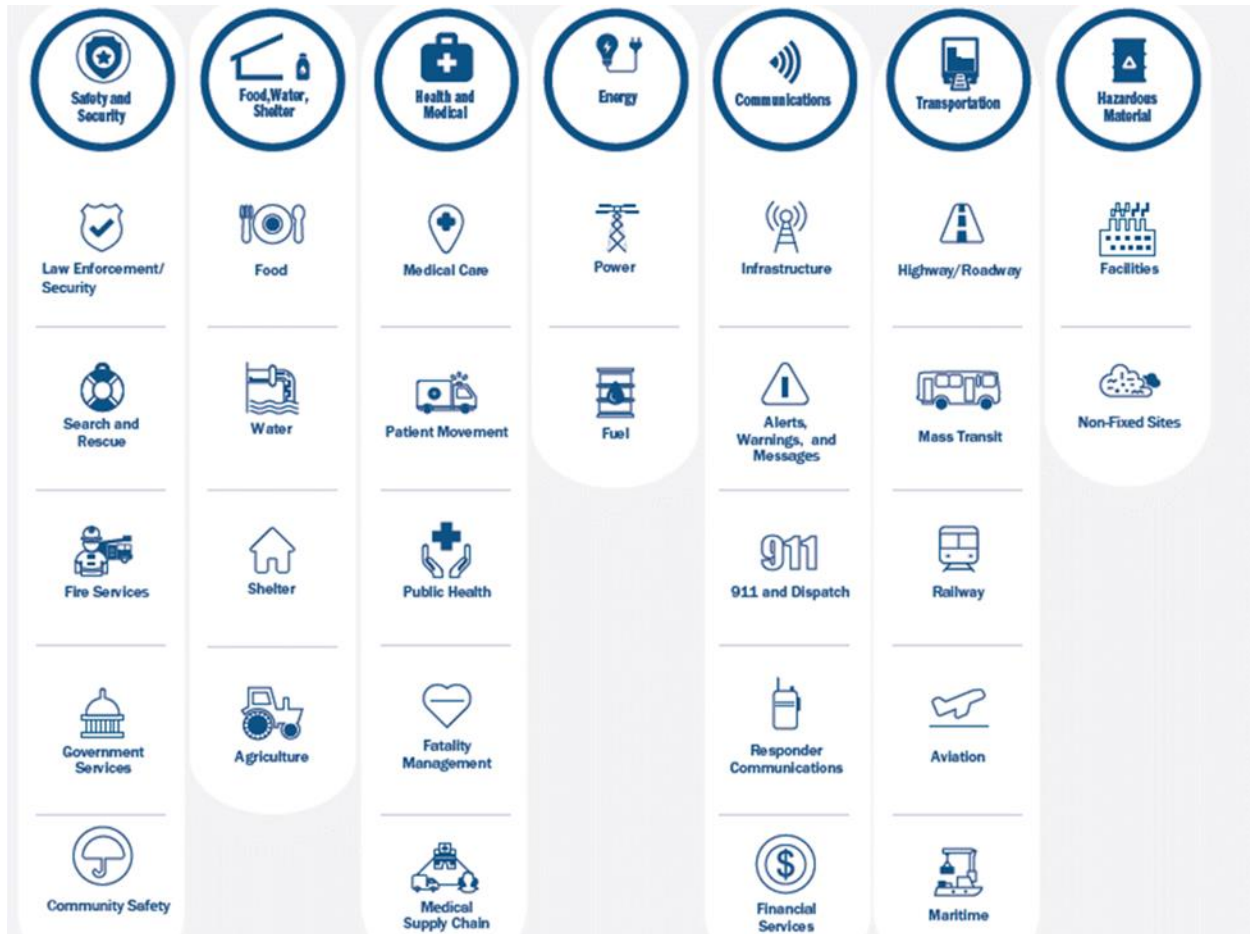
Critical Facilities, Infrastructure, and Other Important Community Assets

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-7 display the location of critical facilities by FEMA Lifeline in Lincoln County, the City of Libby, the City of Troy, and the Town of Eureka.

Table I-8 Lincoln County Critical Facilities by Jurisdiction

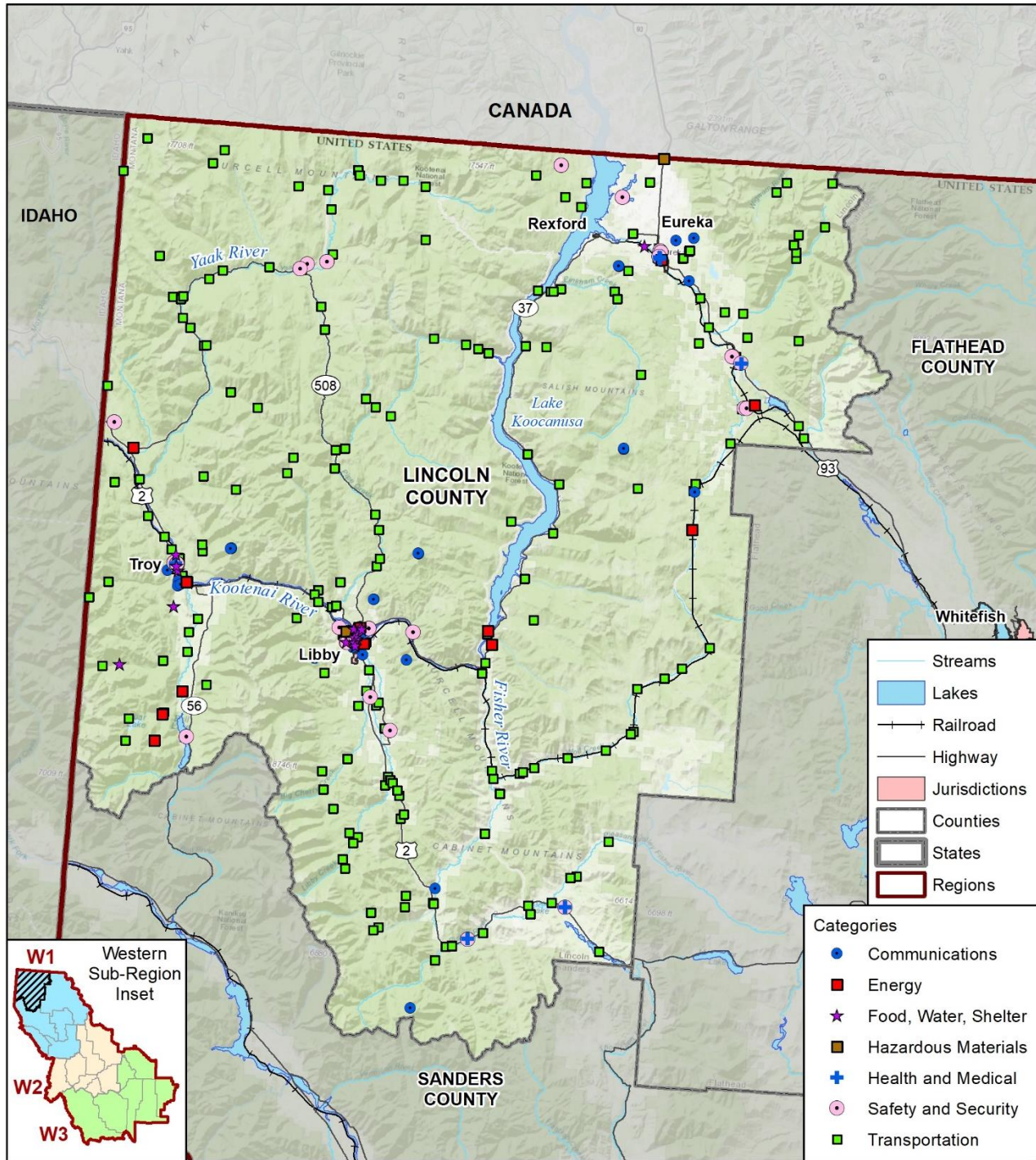
Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health and Medical	Safety and Security	Transportation	Total
Eureka	2	-	-	-	2	5	1	10
Libby	7	-	6	-	1	13	4	31
Troy	1	-	3	-	1	6	2	13
Lincoln County	31	16	7	2	3	25	191	275

Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health and Medical	Safety and Security	Transportation	Total
Total	41	16	16	2	7	49	198	329

Source: HIFLD 2022, Montana DES, National Bridge Inventory

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Figure I-4 Lincoln County Critical Facilities



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

Figure I-5 City of Libby Critical Facilities

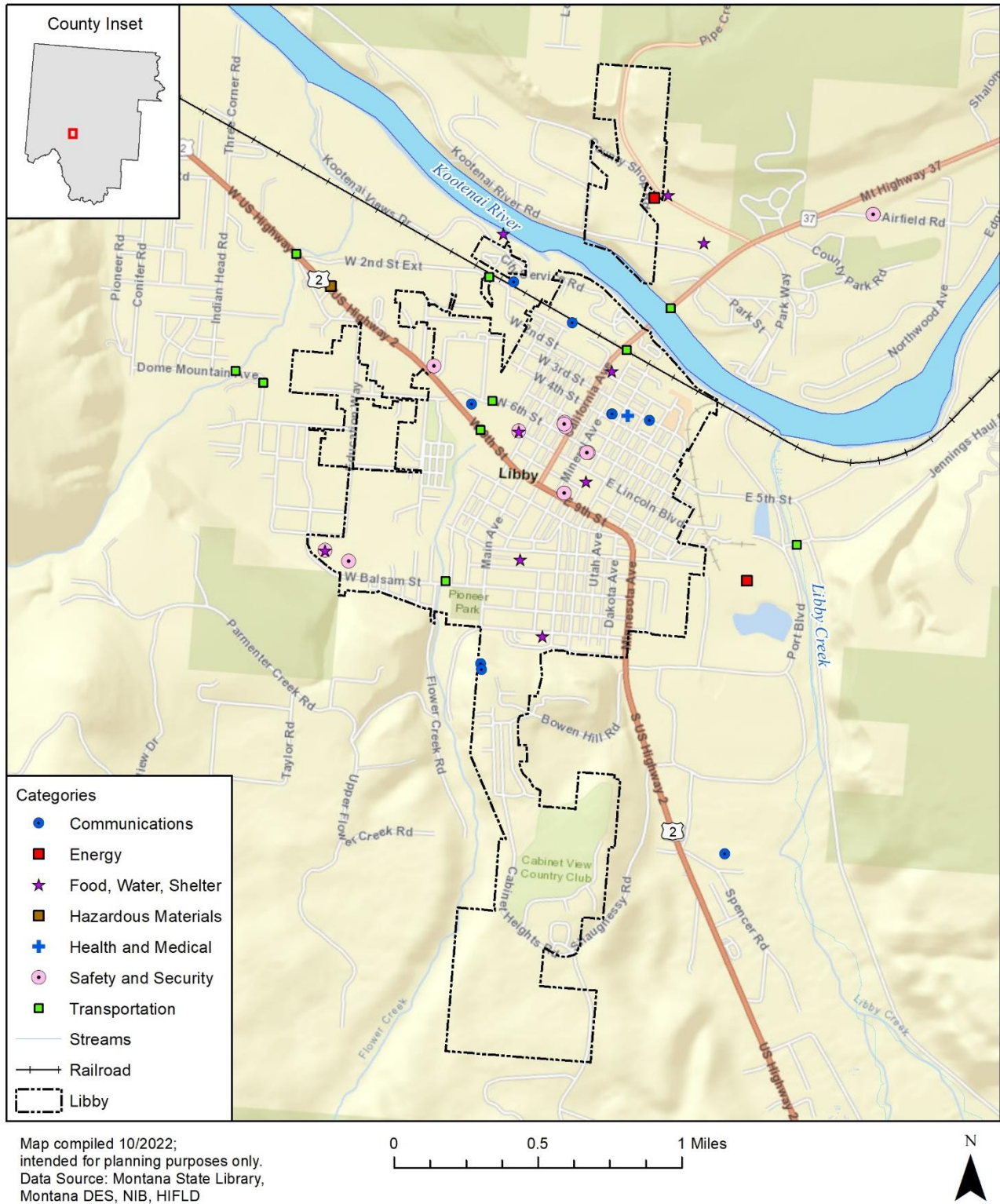


Figure City of Troy Critical Facilities

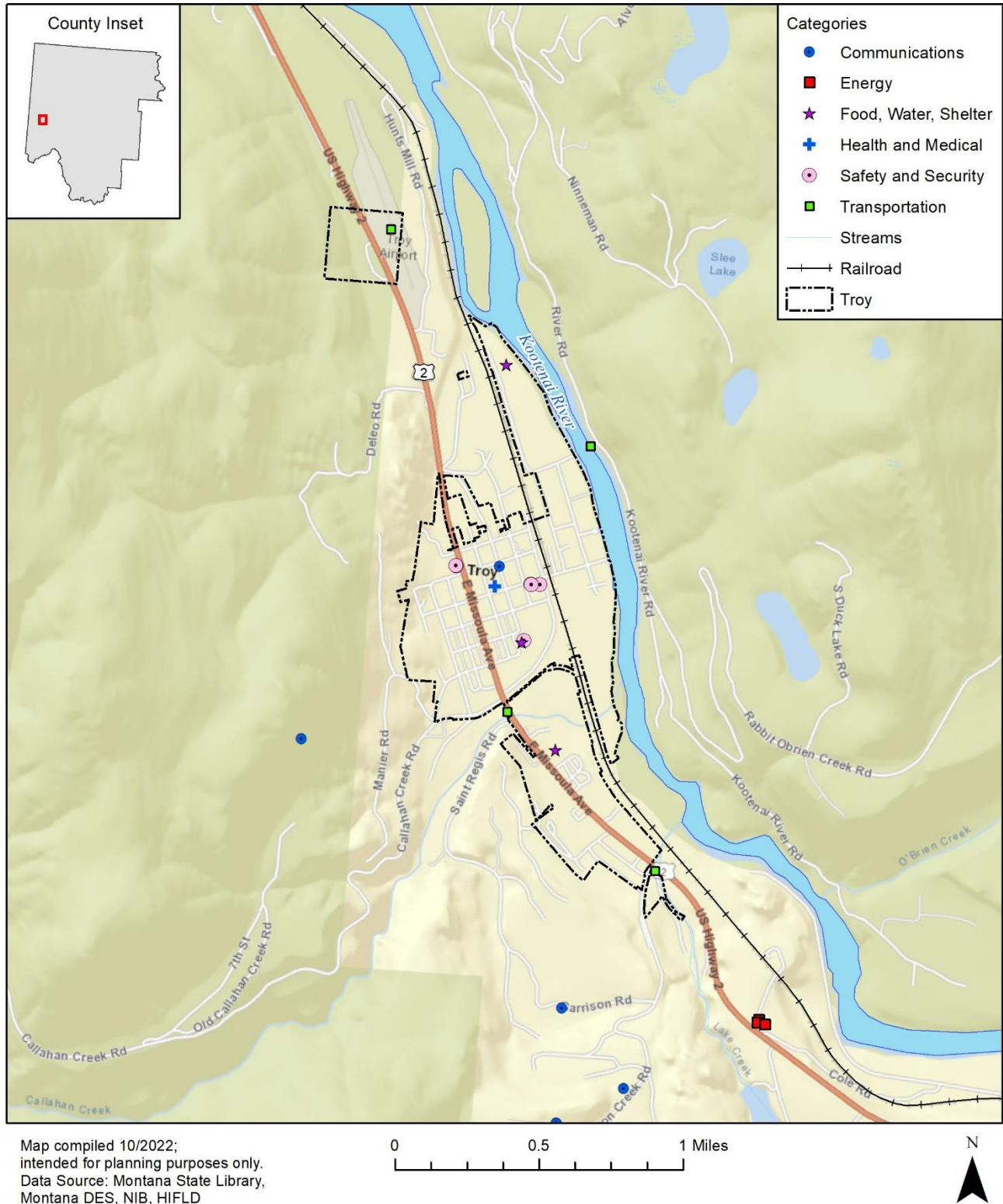
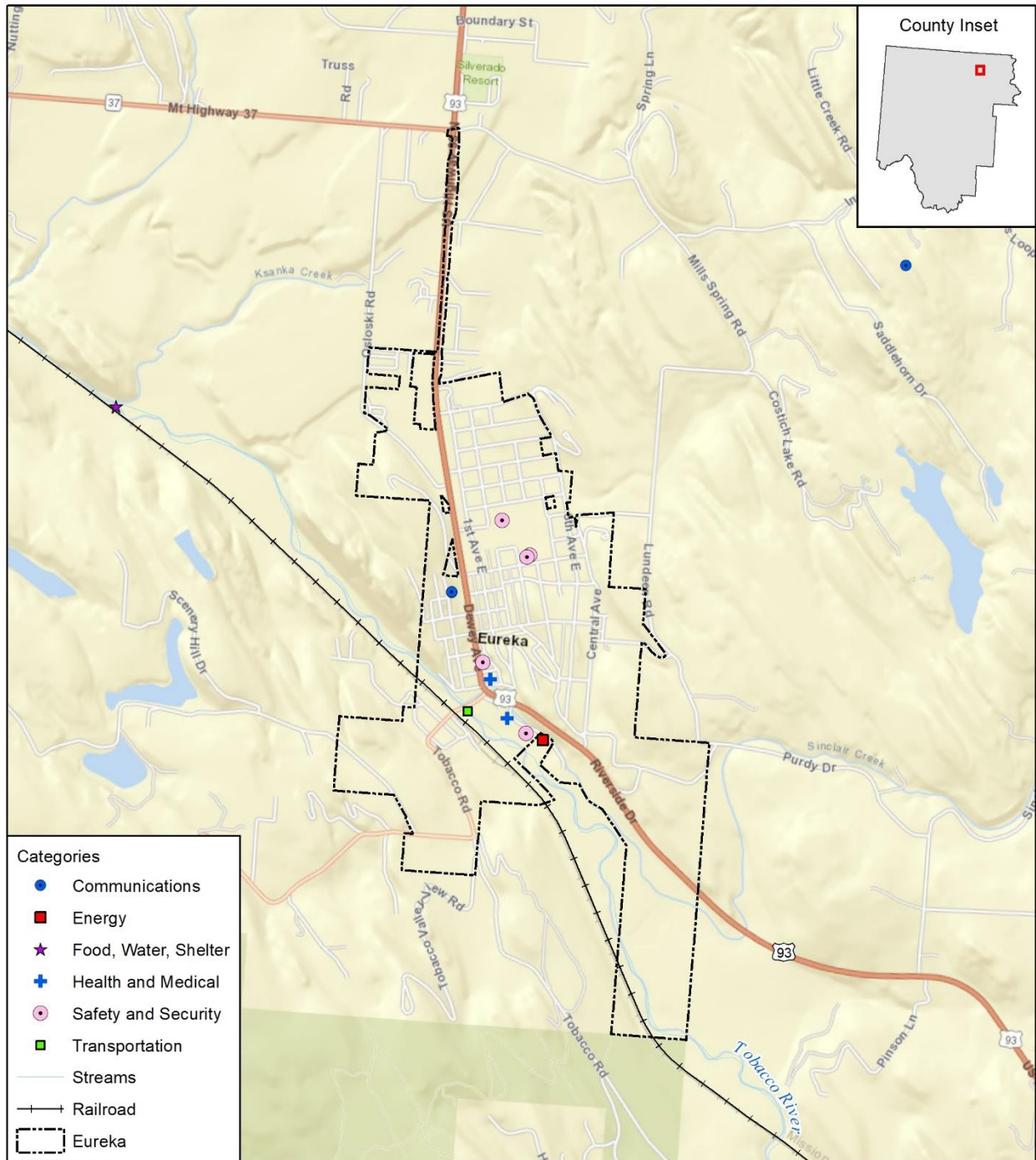


Figure I-6 Town of Eureka Critical Facilities



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

Figure I-7 Town of Rexford Critical Facilities



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

Natural, Historic, and Cultural Assets

Assessing the vulnerability of Lincoln 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 Lincoln 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
Archeological Site 24-LN-1036	City unavailable	Address unavailable	Date unavailable
Archeological Site 24-LN-1037	City unavailable	Address unavailable	Date unavailable
Archeological Site 24-LN-1130	City unavailable	Address unavailable	Date unavailable
Archeological Site 24-LN-1131	City unavailable	Address unavailable	Date unavailable
Dahlberg Residence (24LN749)	City unavailable	Located SW of Kootenai National Forest on US 93	Date unavailable
Site 24-LN-115	City unavailable	Address unavailable	Date unavailable
Site 24-LN-122	City unavailable	Address unavailable	Date unavailable
Site 24-LN-125	City unavailable	Address Restricted	Date unavailable
Site 24-LN-127	City unavailable	Address unavailable	Date unavailable
Site 24-LN-258	City unavailable	Address unavailable	Date unavailable
Site 24-LN-263	City unavailable	Address unavailable	Date unavailable
Site 24-LN-264	City unavailable	Address unavailable	Date unavailable
Site 24-LN-265	City unavailable	Address unavailable	Date unavailable
Site 24-LN-728	City unavailable	Address Restricted	Date unavailable

Property Name	City/Town	Location	Date Listed
Eureka Community Hall	Eureka	Cliff St.	10/18/85
Farmers and Merchants State Bank	Eureka	223 Dewey Ave.	8/31/95
4-LN-745-EADY	Fortine	Located about 15 meters from & facing US Hwy. 93	Date unavailable
Ant Flat Ranger Station	Fortine	Forest Service Rd. 36, 2 mi S of Fortine, Kootenai NF	12/30/96
Sutphin Homestead 24-LN-744	Fortine	Located NE of Kootenai National Forest	Date unavailable
Coram Hotel, The	Libby	302 California Ave.	9/4/12
Heritage Museum, The	Libby	34067 US 2	3/27/20
Libby High School	Libby	SW. corner of Mineral Ave. and E. Lincoln Blvd.	8/20/08
Swamp Creek	Libby	Multiple Addresses	Date unavailable
Swamp Creek	Libby	US 2, 12 mi. SE of Libby	Date unavailable
Kootenai Falls	Lincoln	Address unavailable	Date unavailable
Kootenai Falls District	Lincoln	Address unavailable	Date unavailable
Libby-Jennings Archeological District	Lincoln	Address unavailable	Date unavailable
Libby-Troy Highway 24-LN-237	Lincoln	Address unavailable	Date unavailable
Theodore Roosevelt Memorial Bridge	Troy	Crossing the Kootenai R at Riverside Dr.	12/27/06
Troy Bridge	Troy	Local rd. across the Kootenai River on the outskirts of the town of Troy	Date unavailable
Troy Jail	Troy	316 E. Yaak Ave.	12/27/06

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. Lincoln County encompasses a few rivers and creeks including Tobacco River, Yaak River, and Fisher River. There are also several reservoirs in Lincoln County, including Lake Kooanusua.

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.

- Avalanche
- 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 Avalanche

Avalanche is a low significance hazard for Lincoln County. The FEMA NRI annualized frequency of avalanche events in the County is .05, with three avalanches recorded in the SHELDTUS database between January 1960 and December 2019. The Risk Index Rating for avalanches in the County, which accounts for expected annual loss, social vulnerability, and community resilience, is considered "relatively moderate" with a score of 36.7. Due to the remote nature of avalanche events, risk is highest in the unincorporated County and lower in incorporated jurisdictions.

Refer to Chapter 4 for a discussion of the avalanche risk relative to Lincoln County and the Western Region.

I.4.2 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 Libby, 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 Lincoln County and other counties in the Western Region and there were no noted differences in ranking of communicable disease by jurisdiction in Lincoln County.

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

I.4.3 Cyber-Attack

All servers, networks, and users are vulnerable to cyber-attacks in Western Montana. Lincoln County is ranked as medium, along with most other counties in the Region. There have been no recorded cyber-attack events occurring in the county or its jurisdictions, however, minor cyber-attacks such as phishing emails often go unreported. While all networks and servers are equally vulnerable to cyber, the City of Libby has a greater population and therefore more people exposed to a cyber-attack event.

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

I.4.4 Dam Failure

Dam failure in Lincoln County is ranked as medium. There are six high hazard dams (1 being Federally Owned) and four significant hazard dams located in Lincoln County. Table I-10 below identifies the dams and the nearest downstream cities which could potentially be impacted in a dam failure or incident.

Dam condition assessments conducted by the Montana Bureau of Mines & Geology between 2015 and 2022 determined that two high hazard dams with the potential to impact Lincoln County are in poor condition. The Kootenai Development Impoundment Dam, with a maximum storage capacity of 1302 acre-feet, poses a potential risk to the City of Libby, while the Glen Lake Dam, with a maximum storage capacity of 3580 acre-feet, poses a potential risk to the Town of Eureka.

Refer to Chapter 4 for a discussion of the dam failure risk relative to Lincoln County and the Western Region.

Table I-10 Dams in Lincoln County

Hazard Class	Dam Name	Owner	River	Nearest Downstream City	Distance to Nearest Downstream City (Miles)	Emergency Action Plans (EAP)
High	Lake Creek	Northern Lights, Inc.	Lake Creek, Kootenai River	Troy	2	Yes
High	Glen Lake	Glen Lake Irrigation District	Lick Creek	Eureka	8	Yes
High	Costich Dam	Glen Lake Irrigation District	Tr-Tobacco River Offstream	Eureka	3	Yes
High	Flower Creek Dam	City Of Libby	Tr-Tobacco River Offstream	Libby	3	Yes
High	Kootenai Development Impoundment Dam	Kootenai Development Co.	Rainy Creek	Libby	6	Yes
High	Libby Dam	USACE - Seattle District	Kootenai River	Libby	17	Yes
Significant	Eureka Holding Pond Dike	Town Of Eureka	Tr-Tobacco River	Eureka	1	Not Required
Significant	Double N Ranch	Albert Levinson	Tr-Tobacco River	Libby	13	Not Required
Significant	McGilla Gorilla #50	Gerald Neils	McGinnis Creek	Libby	39	Not Required
Significant	Miller Dam	Roderick Hubbard	East Fisher Creek		0	Not Required

Source: National Inventory of Dams (NID)

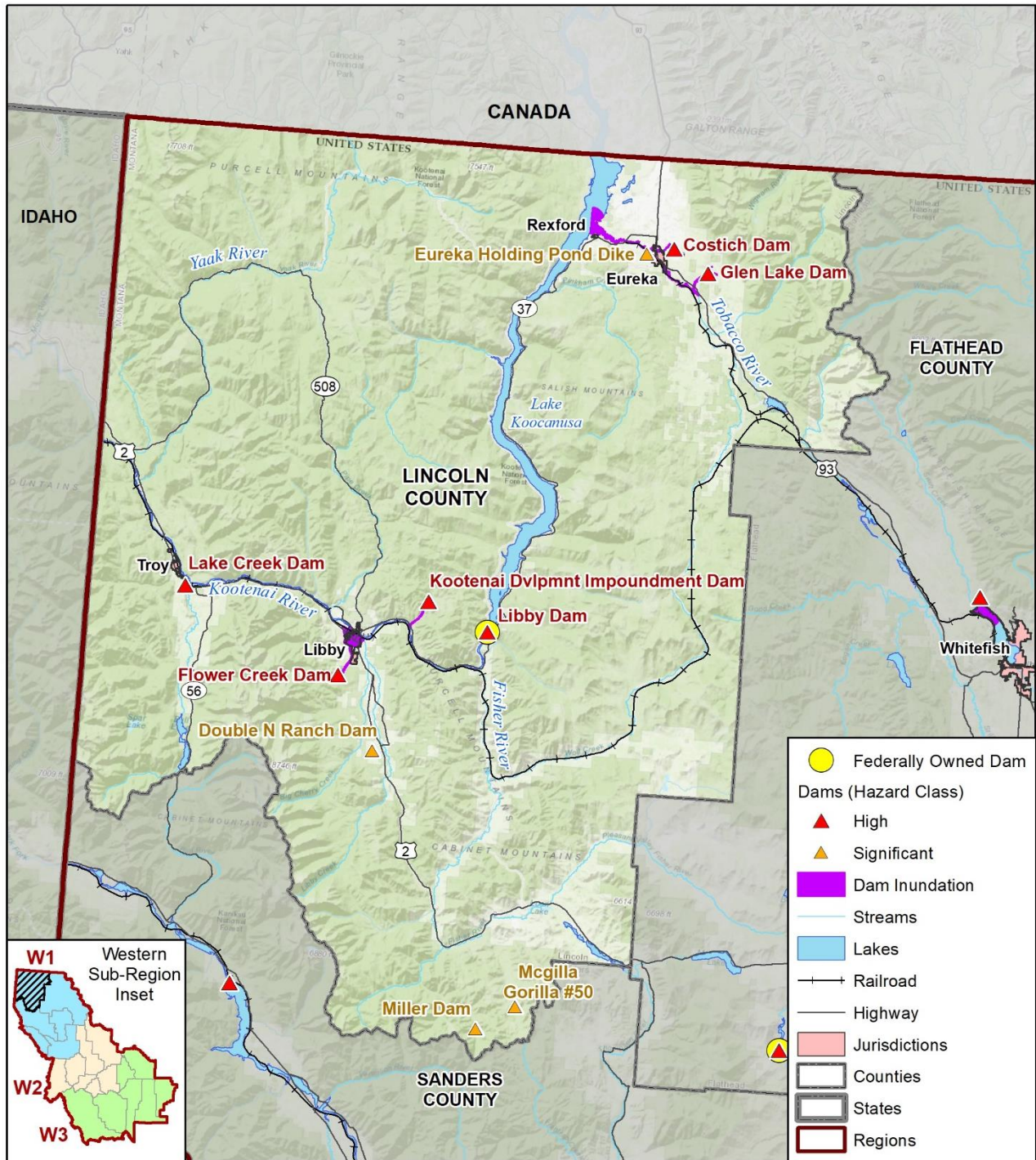
Figure I-8 displays the location of dams in Lincoln County. Table I-11 summarizes the estimated number of improved parcels, building values, and people within inundation zones (limited to high hazard dams that are not federally owned) in Lincoln County by property type. Lincoln County has \$272.7 million in total property value located within the mapped inundation zones in Lincoln County, with approximately 85% of this total exposure located in the City of Libby. Residential property types represent the greatest total number of improved parcels and most property value, with approximately \$233.3 million in total property value at risk.

Table I-11 Lincoln County Parcels at Risk to Dam Inundation by Property Type

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Population
Eureka	Exempt	2	\$970,430	\$970,430	\$1,940,860	
	Residential	43	\$4,751,280	\$2,375,640	\$7,126,920	98
Libby	Exempt	39	\$17,812,376	\$17,812,376	\$35,624,752	
	Residential	1,031	\$131,120,690	\$65,560,345	\$196,681,035	2,351
Lincoln County	Agricultural	1	\$171,140	\$171,140	\$342,280	
	Commercial	1	\$368,720	\$368,720	\$737,440	
	Exempt	2	\$271,908	\$271,908	\$543,816	
	Residential	148	\$19,678,213	\$9,839,107	\$29,517,320	337
	Vacant	1	\$87,274	\$87,274	\$174,548	
	Total	1,268	\$175,232,031	\$97,456,940	\$272,688,971	2,786

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

Figure I-8 Lincoln County Dam Inundation



Map compiled 6/2023;
intended for planning purposes only.
Data Source: Montana State Library,
NID, MT DNRC Dam Safety Program

0 10 20 Miles



Lincoln County has a total of 31 critical facilities at risk to dam failure. 13 are Safety and Security lifelines, six are Food, Water and Shelter facilities, six are transportation facilities, five are communication facilities and one are health and medical facilities. This is shown in Table I-12 below.

Table I-12 Lincoln County Critical Facilities at Risk to Dam Inundation by Property Type

Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health and Medical	Safety and Security	Transportation	Total
Eureka	-	-	-	-	-	-	1	1
Libby	4	-	5	-	1	13	4	27
Lincoln County	1	-	1	-	-	-	1	3
Total	5	0	6	0	1	13	6	31

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

I.4.5 Drought

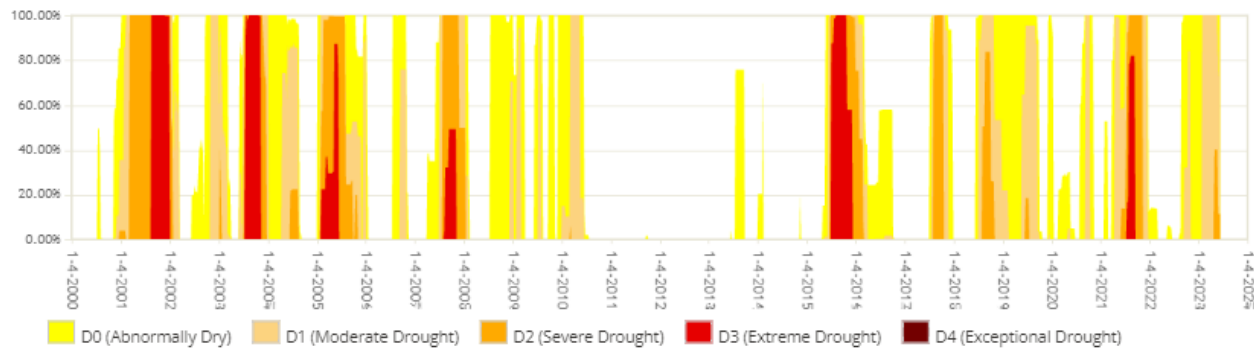
Drought was rated as a hazard of medium concern in Lincoln County. Lincoln County has experienced 13 USDA drought declarations from 2012-2021, which is equal to the county average in the Western Region. These drought declarations occurred in 2015, 2017, 2018, and 2021.

The Drought Impact Reporter recorded 10 drought impact reports in Lincoln County between 2000-2023. These impacts were primarily categorized as fire impacts or relief, response, and restrictions impacts. Fire impacts included active fires, enacting or increasing fire restrictions, limiting public access to timberlands to prevent an inadvertent fire start, and banning fireworks. Relief, response, and restrictions impacts also included enacting or increasing fire or firework restrictions and limiting access to timberlands, as well as the meeting of the Governor's Drought and Water Supply Advisory Committee and drought disaster declarations.

The U.S. Drought Monitor (USDM) is a national data set released weekly, showing the severity of drought in locations across the nation. Figure I-9 displays a time series showing the severity of drought in Lincoln County between 2000 and 2023. The figure indicates that the county has not experienced significant drought (D4), but experienced extreme drought (D3) in the years 2001, 2003, 2005, 2007, 2015, and 2021.

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

Figure I-9 Lincoln County Percent Area in U.S. Drought Monitor Categories



Source: USDM; www.drought.gov

I.4.6 Earthquake

There are several known fault systems throughout the State of Montana, mostly concentrated in the Western Region. The potential severity of shaking and impacts to casualties and damage is not uniform across the Western Region and is likely to have a greater impact to counties in the northern portion of the region. The earthquake hazard in Lincoln County is therefore ranked as low overall significance.

According to a Hazus probabilistic loss analysis conducted for a scenario with 2% in 50 years recurrence, Lincoln County has low to moderate economic losses when compared to the rest of the counties in the Western Region, with an estimated \$89,057,000 in total economic losses (2.0% of total losses in the region). The probabilistic scenario predicted greatest losses in the Towns of Rexford and the Town of Eureka, therefore, these jurisdictions are ranked as medium risk to earthquakes. Additionally, these jurisdictions have not adopted building codes, increasing the chance of damages to infrastructure in the case of an earthquake event. Older and historic buildings will be more vulnerable to earthquake shaking.

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

I.4.7 Flooding

Table K-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. Lincoln County only has partial NFHL data, therefore Hazus was used to supplement within the areas where NFHL data was not available.

Table K-13 indicates the estimated flood losses in each applicable jurisdiction in Lincoln County. Lincoln County's unincorporated areas have the greatest numbers of properties at risk and highest estimated losses. The Unincorporated Lincoln County residential parcels have a total value of \$116.1 million and an estimated \$29 million in losses if subjected to the 1% annual chance of flooding. Overall residential properties in Lincoln County have a total value of \$128.5 million and \$32.1 million in estimated losses due to a 1% annual chance flooding event. Overall, each property type's risk to flooding is shown in Table K-13 below.

Table K-13 Lincoln County Parcels at Risk to 1% Flood Hazard by Jurisdiction

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Estimated Loss	Population
Eureka	Exempt	2	\$1,208,500	\$1,208,500	\$2,417,000	\$604,250	
	Residential	4	\$463,159	\$231,580	\$694,739	\$173,685	9

Jurisdiction	Property Type	Improved Parcels	Improved Value	Content Value	Total Value	Estimated Loss	Population
Libby	Exempt	1	\$646,180	\$646,180	\$1,292,360	\$323,090	
	Residential	51	\$6,975,557	\$3,487,779	\$10,463,336	\$2,615,834	116
Troy	Residential	10	\$811,686	\$405,843	\$1,217,529	\$304,382	23
Lincoln County	Agricultural	23	\$5,362,620	\$5,362,620	\$10,725,240	\$2,681,310	
	Commercial	2	\$2,894,560	\$2,894,560	\$5,789,120	\$1,447,280	
	Exempt	2	\$1,353,340	\$1,353,340	\$2,706,680	\$676,670	
	Residential	538	\$77,462,011	\$38,731,006	\$116,193,017	\$29,048,254	1,227
	Vacant	5	\$371,815	\$371,815	\$743,630	\$185,908	
	Total	638	\$97,549,428	\$54,693,222	\$152,242,650	\$38,060,662	1,375

Sources: DNRC, Hazus, FEMA NFHL

Lincoln County has a total of 71 critical facilities located in the 1% annual chance floodplain. 66 are transportation lifelines, three are food, water and shelter facilities, one is a health and medical facility and one is a safety and security facility. This is shown in Table I-14 below.

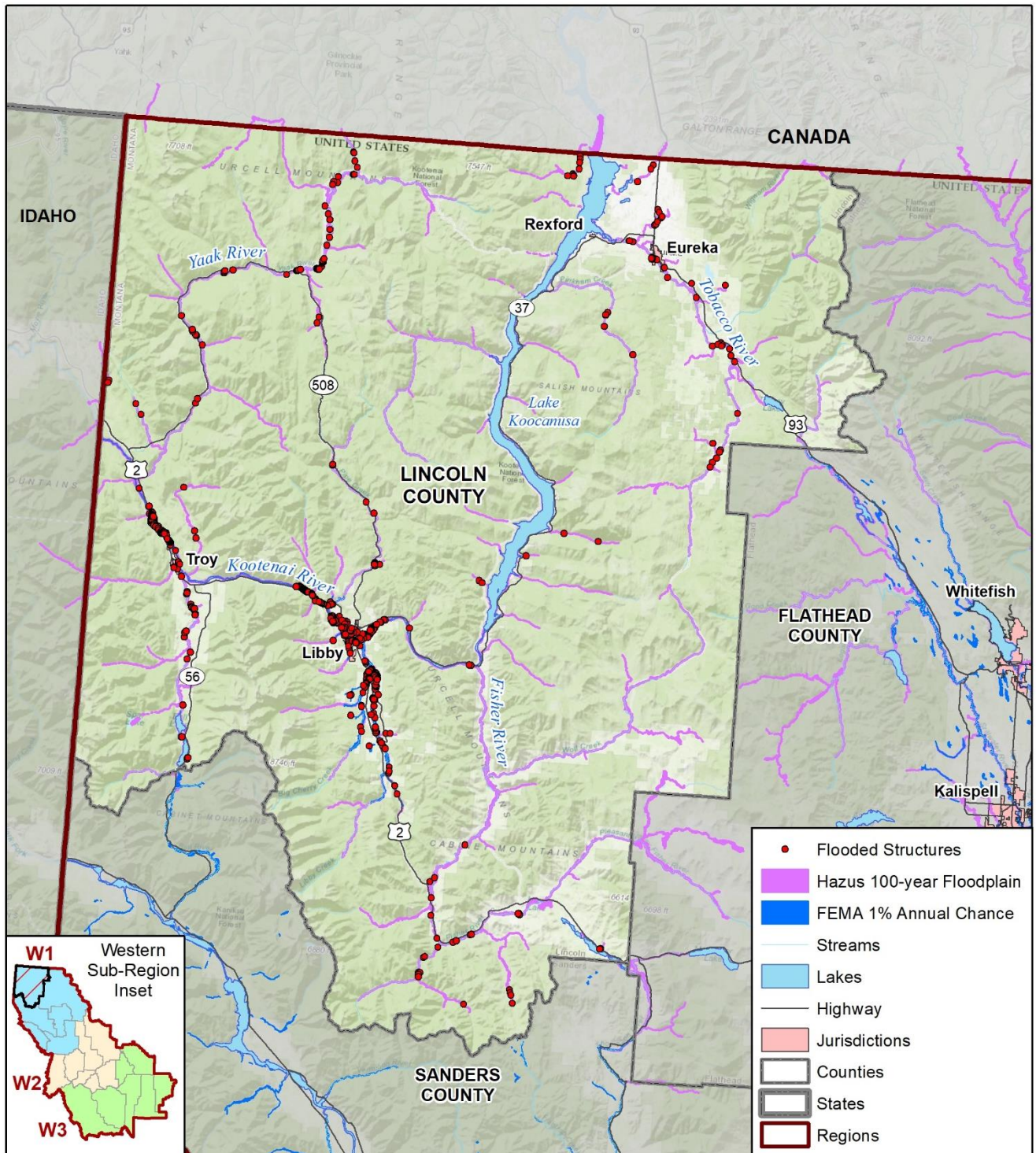
Table I-14 Lincoln County Critical Facilities at Risk to 1% Annual Chance Flood Hazards by FEMA Lifeline

Jurisdiction	Communications	Energy	Food, Water, Shelter	Hazardous Materials	Health and Medical	Safety and Security	Transportation	Total
Eureka	-	-	-	-	1	1	1	3
Libby	-	-	-	-	-	-	3	3
Troy	-	-	-	-	-	-	1	1
Lincoln County	-	-	3	-	-	-	61	64
Total	0	0	3	0	1	1	66	71

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

All participating jurisdictions in Lincoln County other than Rexford contain structures located in the floodplain, as seen in Figure I-10 through Figure I-14 below.

Figure I-10 Lincoln County Flood Hazard and Structures

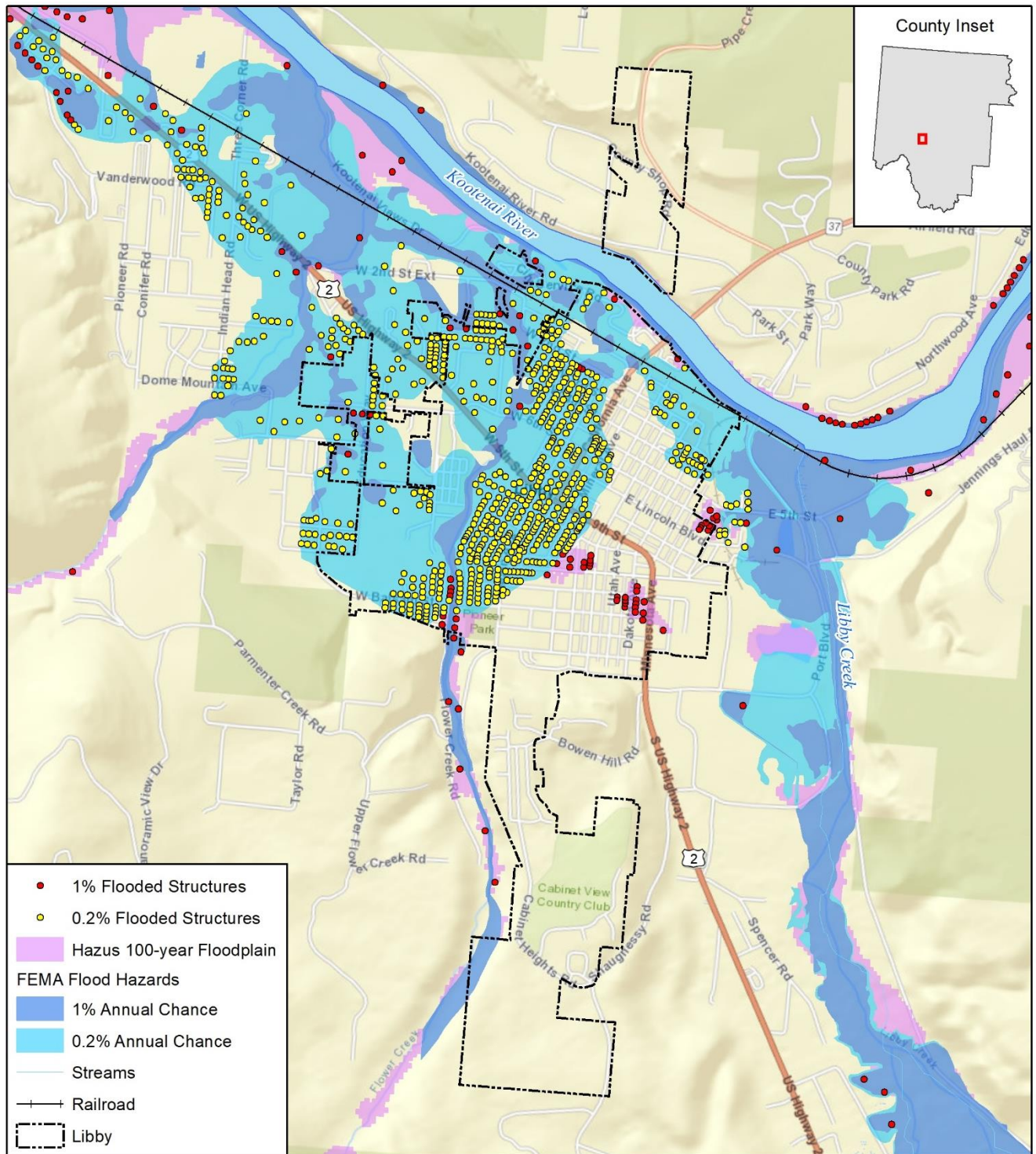


Map compiled 9/2022;
intended for planning purposes only.
Data Source: Montana State Library,
DNRC, FEMA, Hazus

0 10 20 Miles



Figure I-11 City of Libby 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 I-12 City of Troy Flood Hazard and Structures

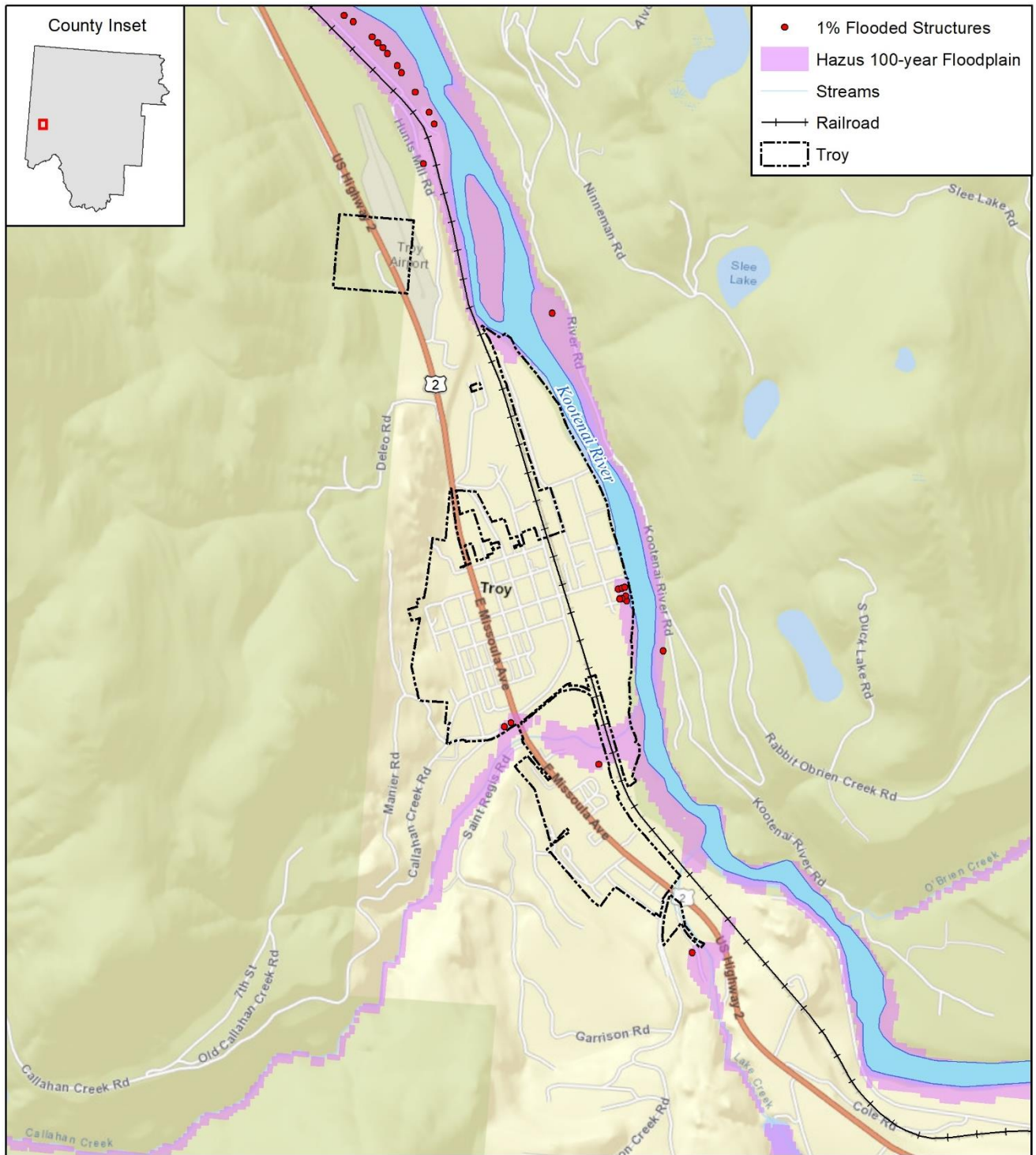
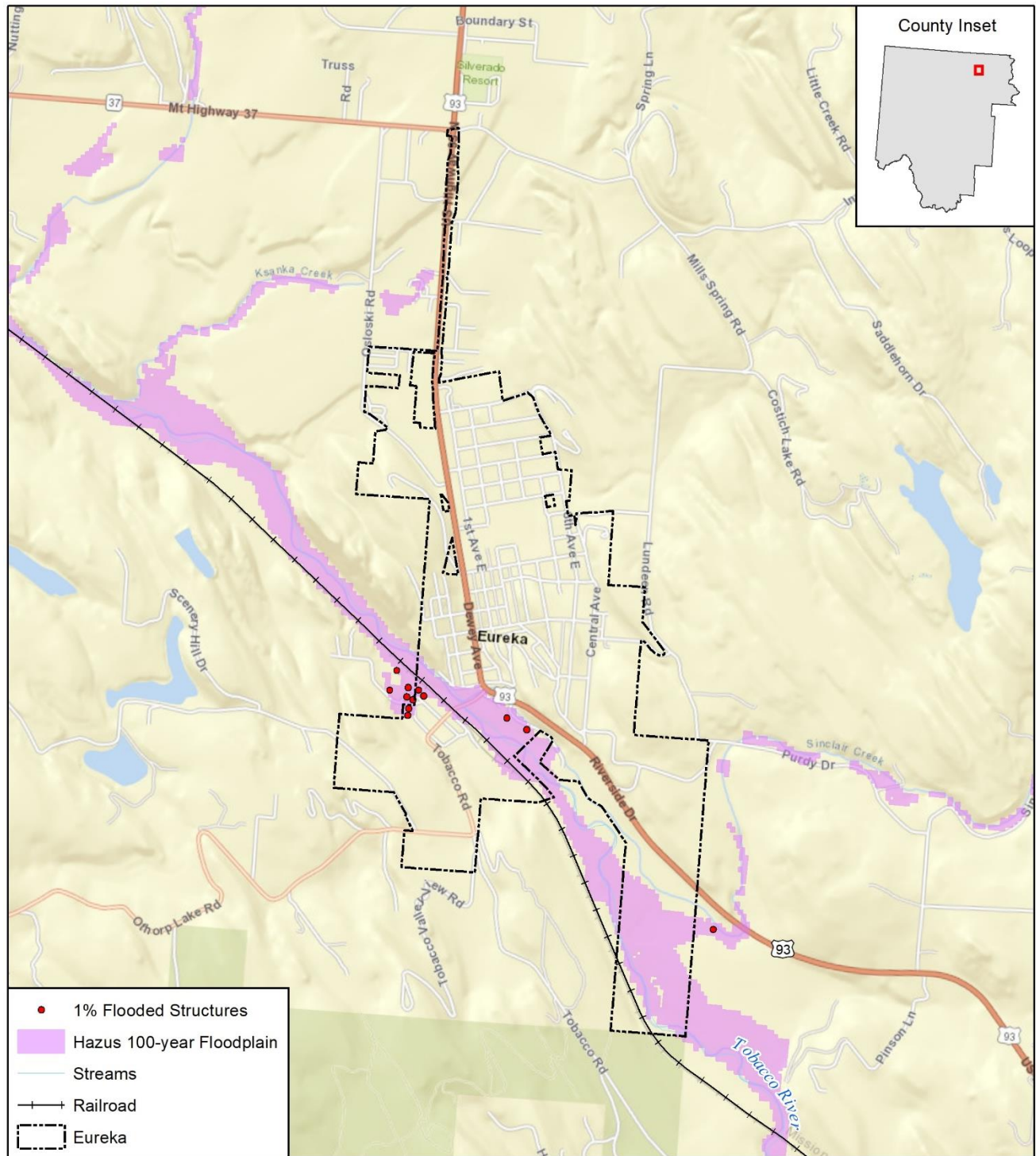


Figure I-13 Town of Eureka Flood Hazard and Structures

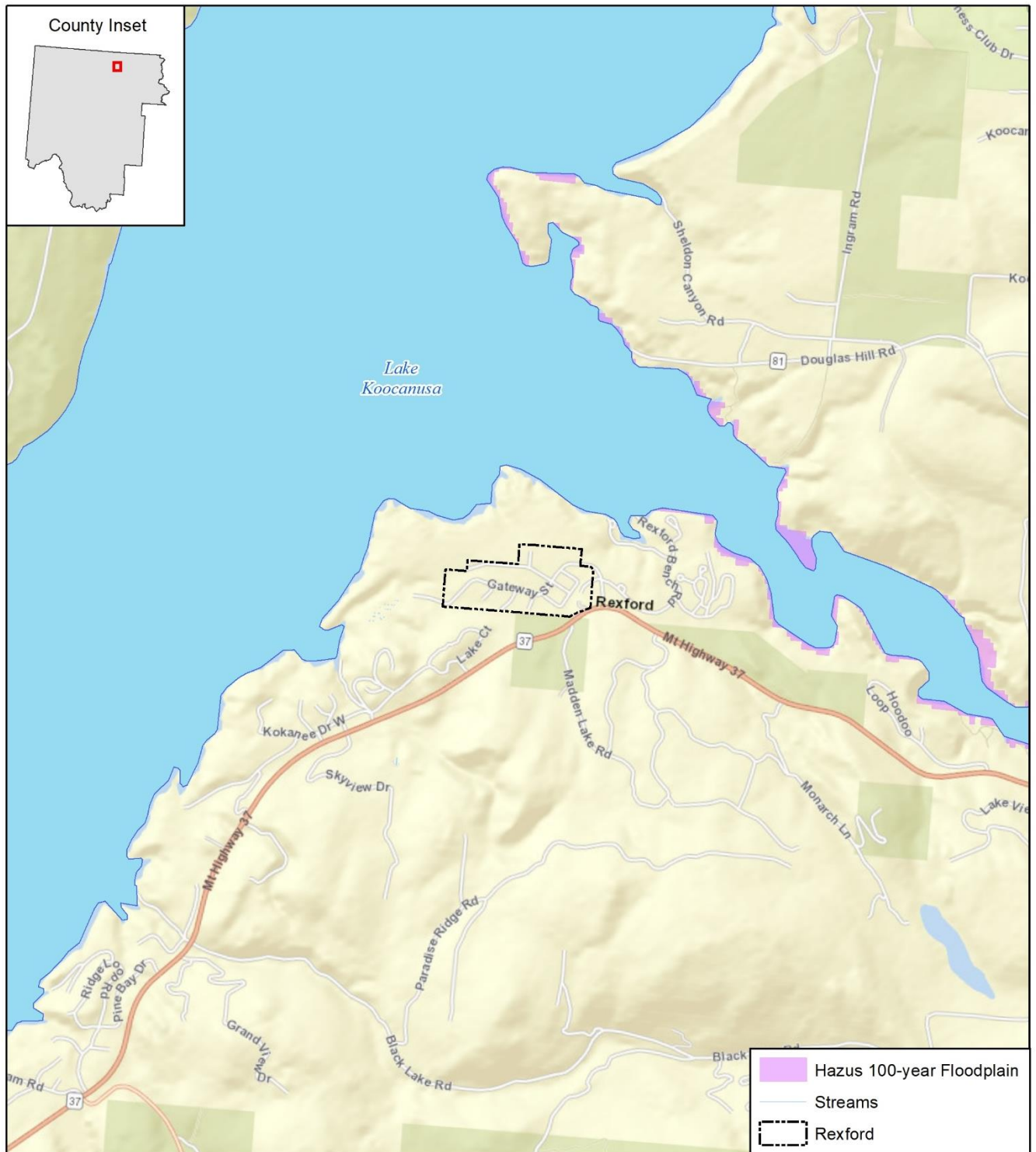


Map compiled 10/2022;
intended for planning purposes only.
Data Source: Montana State Library,
DNRC, FEMA, Hazus

0 0.5 1 Miles



Figure I-14 Town of Rexford Flood Hazard and Structures



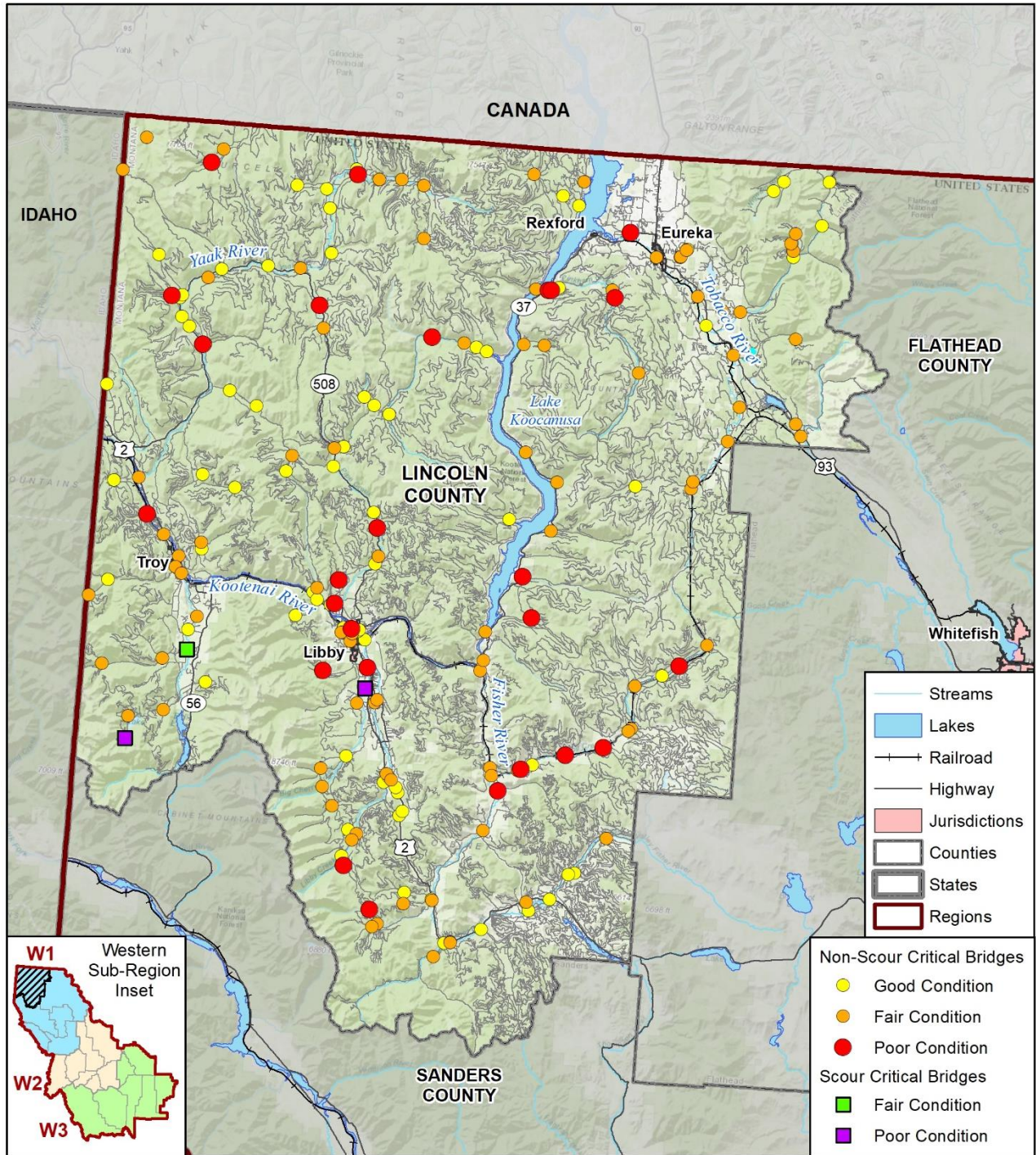
Map compiled 10/2022;
intended for planning purposes only.
Data Source: Montana State Library,
DNRC, FEMA, Hazus

0 0.5 1 Miles

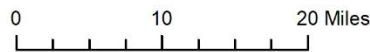


Figure I-15 below displays the location of bridges in Lincoln County and their condition. Refer to Chapter 4 for a discussion of the flood risk relative to Lincoln County and the Western Region.

Figure I-15 Lincoln County Bridges



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



I.4.8 Hazardous Materials Incident

Lincoln County has rated hazardous materials incidents as a low significance hazard. Lincoln County has no Risk Management Program (RMP) facilities or hazardous materials pipelines within the county. Additionally, 54 hazardous material incidents have occurred in Lincoln County since 1990 according to the NRC. Highway 2 traverses the county and passes through the towns of Troy and Libby, presenting a potential risk for hazmat incidents in transit.

Refer to Chapter 4 for a discussion of the hazardous materials incident risk relative to Lincoln County and the Western Region.

I.4.9 Landslide

Landslides are ranked as a low overall significance hazard in Lincoln County. Lincoln County has a very rugged and mountainous terrain, and geologic data indicates a high confidence in history of past landslides in the county. There have been at least 3 known landslides according to the USGS, and Lincoln County was included in a federal disaster declaration involving landslides in the County in 1974. Lincoln County has an annualized landslide frequency of 0.03-0.06. Lincoln County is also one of two counties in the Western Region that has relatively high risk index rating according to the NRI. The county also has a relatively high expected annual loss rating. For more information, refer to Chapter 4 for a discussion of the landslide risk relative to Lincoln County and the Western Region.

I.4.10 Severe Summer Weather

Lincoln County ranked severe summer weather as a medium overall significance hazard. Lincoln County experienced the second lowest number of total severe summer weather events in Western Region, including 14 hail events and 7 heavy rain events. There was no recorded lightning events or excessive heat events in the county that resulted in losses, however, lightning events still occur in the county. Property losses from severe summer weather in Lincoln County totaled to \$32,500 from 1996 to 2023 (1.1% of total losses in the Western Region), mainly due to one heavy rain event that happened on March 17, 2017. Lincoln County experienced \$1,500 total crop losses from severe summer weather (1.1% of total losses in the Western Region). While all property and people are equally vulnerable to severe summer weather events in the County, greatest property losses are likely to occur in the City of Libby, where people and infrastructure are concentrated.

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

I.4.11 Severe Winter Weather

Lincoln County ranked severe winter weather as a Medium overall significance hazard. The Kootenai/Cabinet Region (Zone) experienced the second greatest number of recorded severe winter weather events in the Western Region while the NRI rated Lincoln County as “very low” risk index rating for winter weather. All people and property in the county are equally vulnerable to future losses from severe winter weather events. (Source: [NPMS Public Viewer \(dot.gov\)](#))

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

I.4.12 Human Conflict

Human conflict is ranked as an overall medium significance for Lincoln County, along with nearly all other counties in the Western Region. In total, three terrorist attacks occurred between 1970-2020, 221 civil unrest/protest events between January 2017 and January 2021, and no active shooter events occurred in the Montana Western Region. While none of the terrorist attacks that occurred in the Western Region were

recorded in Lincoln County, 4 (1.8%) of the 221 civil unrest/protest events were recorded in the Town of Libby and 1 (0.5%) was recorded in the Town of Eureka. 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 Lincoln County and the Western Region.

I.4.13 Tornadoes & Windstorms

Lincoln County ranked tornadoes and windstorms as a medium overall significance hazard. The Kootenai/Cabinet Region (Zone) experienced the 14th greatest number of high wind and strong wind events in the Western Region, with 36 total events. Additionally, Lincoln County experienced the seventh greatest total number of thunderstorm wind events with no tornado events recorded. All people and property are vulnerable to tornado and windstorms in Lincoln County.

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

I.4.14 Transportation Accidents

Lincoln County ranked transportation accidents as an overall low significance. Lincoln County has seen 1,412 roadway crashes during the four-year period from 2016-2020, an average of 353 per year. While transportation accidents can occur along any type of transportation route in the county and region, a greater frequency of accidents occur along heavily traveled roadways, such as US Highway 2 which runs through the county.

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

I.4.15 Volcanic Ash

All counties in the Western Region and all jurisdictions within Lincoln 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 Lincoln County and the Western Region.

I.4.16 Wildfire

Lincoln County ranked Wildfire as a high significance hazard, and the county as a whole has the second highest burn probability in the region. Lincoln County has the fifth greatest number of individuals in the Western Region in wildfire risk areas, with virtually the entire population residing in areas of elevated wildfire risk. Figure I-16 below displays the wildfire risk in Lincoln County. While the map indicates large swaths of the county do not have wildfire risk, much of the available data shows that areas of very high and extreme wildfire risk are heavily concentrated in the populated and developed areas of the county, which are relatively concentrated around Highways 2, 93, 56, and 508. According to the vulnerability analysis, 97% of Lincoln County's building inventory is exposed to high, very high, or extreme wildfire risk, which is the highest ratio of all counties in the region.

Lincoln County has experienced four federal disaster declarations involving wildfire. Two of these occurred in the summer of 2000 and two in the summer of 2017. As detailed in the regional base plan, trends indicate the wildfires are becoming larger, more frequent, and more numerous in Montana. Given this, coupled with the extensive amount of Lincoln County's population, buildings, assets, and infrastructure potentially exposed to this hazard, wildfires in coming years may pose a very significant threat to the county and its

municipalities. Since wildfires typically result in a total building loss including contents and 97% of the county's inventory is exposed, as mentioned above, a large future wildfire presents a potentially devastating scenario for the entire county. Table I-15 below summarizes the estimated exposed value of improvements in each wildfire risk category. As shown, approximately 10,633 buildings totaling \$2.7 billion in value are exposed to high, very high, or extreme wildfire risk. See Chapter 4 in the base plan for details on the methodology of this analysis.

Table I-15 Lincoln 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	Eureka	630	\$78,189,358	\$44,473,895	\$122,663,253	1,368
	Libby	1,165	\$188,698,866	\$118,612,662	\$307,311,528	2,556
	Rexford	49	\$5,659,536	\$2,951,643	\$8,611,179	107
	Troy	400	\$45,380,649	\$25,166,386	\$70,547,035	873
	Lincoln County	3,104	\$467,282,364	\$244,743,200	\$712,025,564	6,924
	Total	5,348	\$785,210,773	\$435,947,785	\$1,221,158,558	11,829
At Risk to Very High Wildfire Hazards	Eureka	3	\$316,522	\$158,261	\$474,783	7
	Libby	71	\$20,241,322	\$13,828,935	\$34,070,257	139
	Rexford	2	\$1,660	\$830	\$2,490	5
	Troy	14	\$2,015,864	\$1,387,537	\$3,403,401	27
	Lincoln County	4,972	\$855,473,453	\$481,835,378	\$1,337,308,831	10,178
	Total	5,062	\$878,048,821	\$497,210,940	\$1,375,259,761	10,356
At Risk to High Wildfire Hazards	Lincoln County	223	\$47,301,937	\$27,967,464	\$75,269,401	394
Total	223	\$47,301,937	\$27,967,464	\$75,269,401	394	

Source: MSDI 2022, MWRA

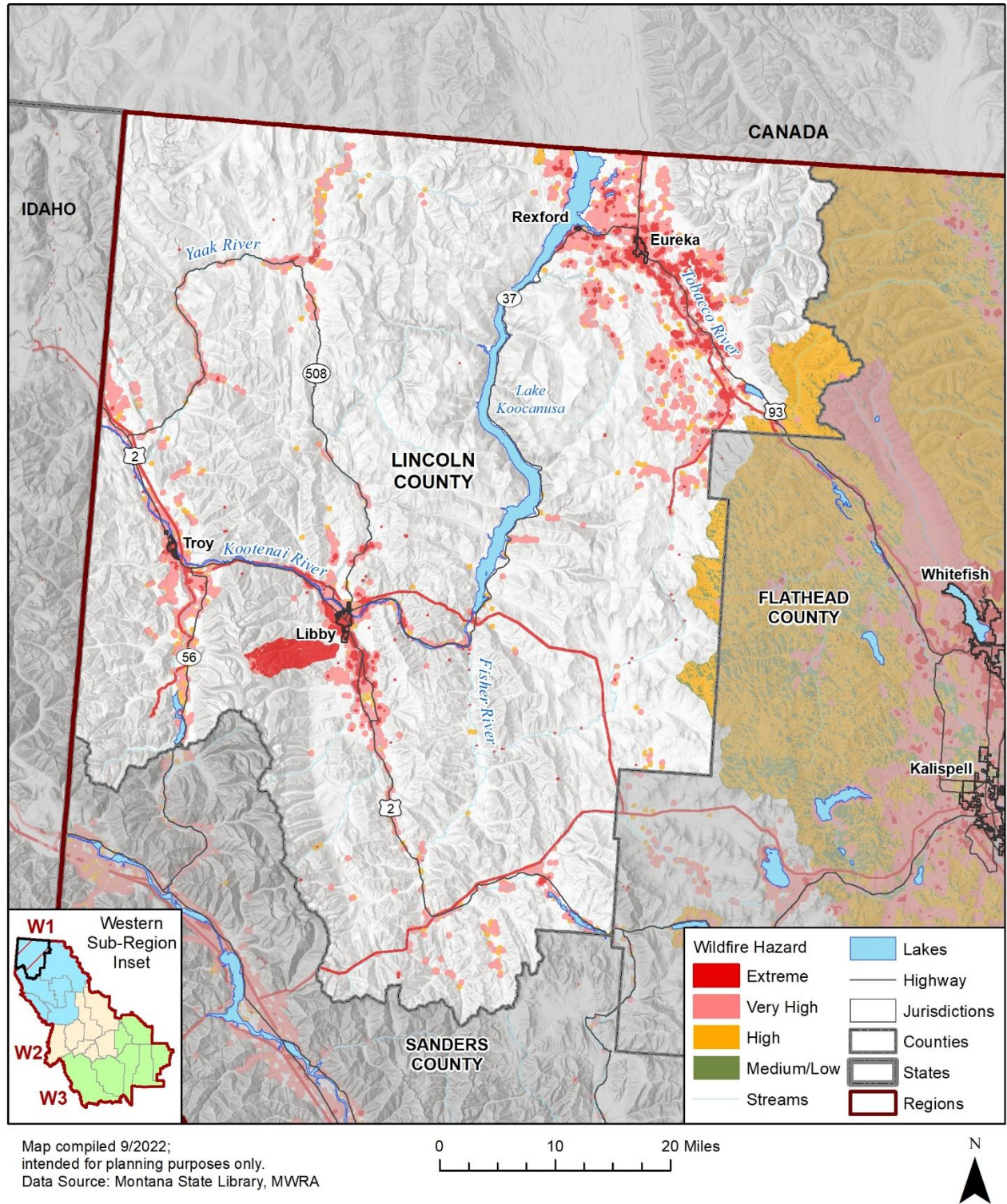
Table I-16 summarizes the potential impact of wildfire on critical facilities and lifelines in Lincoln County and its associated jurisdictions. The table highlights the type and number of facilities in each jurisdiction in the County in Wildfire risk areas. See Chapter 4 for the methodology of the critical facilities at risk analysis.

Table I-16 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	Eureka	2	-	-	-	2	3	1	8
	Libby	7	-	4	-	1	12	1	25
	Troy	1	-	2	-	1	6	1	11
	Lincoln County	28	13	1	1	1	13	15	72
	Total	38	13	7	1	5	34	18	116
At Risk to Very High Wildfire Hazards	Libby	-	-	1	-	-	-	3	4
	Troy	-	-	-	-	-	-	1	1
	Lincoln County	3	1	2	1	2	12	47	68
	Total	3	1	3	1	2	12	51	73
At Risk to High Wildfire Hazards	Lincoln County	-	-	-	-	-	-	15	15
	Total	0	0	0	0	0	0	15	15

Source: HIFLD 2022, Montana DES, NBI, MWRA

Figure I-16 Lincoln 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 the Western Region and each participating jurisdiction.

Table I-17 Lincoln County and Jurisdictions Regulatory Mitigation Capabilities

Plans and Regulations	Lincoln County	City of Libby	City of Troy	Town of Eureka	Town of Rexford
Building Codes	No	No	Yes	No	No
Building Codes Year	N/A	N/A	Yes	N/A	N/A
BCEGS Rating	No	No	No	No	No
Capital Improvements Program (CIP) or Plan	No	No	No	No	No
Community Rating System (CRS)	No	No	No	No	No
Community Wildfire Protection Plan (CWPP)	Yes	No	No	No	No
Comprehensive, Master, or General Plan	No	No	No	No	No
Economic Development Plan	No	No	No	No	No
Elevation Certificates	No	No	Yes	No	No
Emergency Operations Plan	Yes	Yes	Yes	No	No
Erosion/Sediment Control Program	No	No	No	No	No
Floodplain Management Plan	No	No	No	No	No
Flood Insurance Study	Yes	Yes	No	Yes	Yes
Growth Management Ordinance	Yes	Yes	No	No	No
Hazard-Specific Ordinance or Plan (Floodplain, Steep Slope, Wildfire)	No	No	Flood Control Ordinance	No	No
National Flood Insurance Program (NFIP)	Yes (08/01/80)	Yes (07/02/79)	Yes (12/16/80)	Yes (07/02/79)	Yes (08/01/80)

Plans and Regulations	Lincoln County	City of Libby	City of Troy	Town of Eureka	Town of Rexford
Site Plan Review Requirements	No	Yes	No	No	No
Stormwater Program, Plan, or Ordinance	No	No	No	No	No
Zoning Code or Ordinance	No	Yes	No	No	No
Other?	N/A	N/A	N/A		N/A

Discussion on Existing Regulatory Mitigation Capabilities

The County and all the jurisdictions do not have up-to-date comprehensive plans or master plans in place. The County and all the jurisdictions participate in the NFIP. The County and the City of Libby both have effective growth management ordinances in place.

Discussion on NFIP Participation and Compliance

Lincoln County is a participant of the National Flood Insurance Program. The Lincoln County Planning Department oversees floodplain activities and where the Floodplain Administrator operates from. Lincoln County follows the Floodplain Hazard Regulations created in 2014. The county and municipalities have floodplain administrators, and floodplain regulations are actively enforced. Floodplain permits are granted on a case-by-case basis. Developments are sternly advised against in the floodplain areas of the county. All jurisdictions with Lincoln County participate in the NFIP.

Floodplain administration for the Lincoln County, the Cities of Libby and Troy, and the Towns of Eureka and Rexford, is carried out by a Floodplain Administrator appointed by the Lincoln County Board of Commissioners. The 2022 Floodplain Hazard Management Regulations aim to reduce flood losses by restricting or prohibiting hazardous land uses during floods, ensuring development in flood-prone areas meets minimum standards, regulating alterations to natural floodplains, and implementing measures to prevent or control activities that could increase flood damage, with an emphasis on balancing public benefits and minimizing private harm.

Per said regulations, the Floodplain Administrator must conduct a cursory survey of structures within the regulated flood hazard area using street view assessments following a flood event. Following this survey, the administrator is responsible for notifying structure owners about the potential necessity for a permit, required for alterations or substantial improvements before beginning the repair or reconstruction of damaged structures. Property owners are informed that structures experiencing substantial damage or undergoing significant improvements must go through the floodplain application and permit process. Additionally, these structures must be upgraded during the repair or reconstruction process to meet the minimum building standards outlined in the regulations. This approach ensures compliance with floodplain management measures, enhancing the overall safety and resilience of the affected structures.

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 Lincoln County.

Table I-18 Lincoln County Jurisdictions Administrative/Technical Mitigation Capabilities

Administrative and Technical	Lincoln County	City of Libby	City of Troy	Town of Eureka	Town of Rexford
Emergency Manager	Yes	Yes	No	Yes	No

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

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 Lincoln County Jurisdictions Financial Capabilities

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

FEMA and Other Grant Funding Leveraged for Hazard Mitigation

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

- FEMA Hazard Mitigation Assistance Grants including:
 - Building Resilient Infrastructure and Communities (BRIC)
 - Flood Mitigation Assistance Program (FMA).
 - Hazard Mitigation Grant Program (HMGP).
- US Army Corp of Engineers funding
- USDA Environmental Quality Incentive Program.
- USDA Conservation Reserve and Conservation Reserve Enhancement Program.
- USDA Small Watersheds (NRCS).

There are many more potential funding opportunities available to the municipalities and county. Funding research will be done during the scoping process for each project. New funding mechanisms may be present that were not before. Lincoln County and its jurisdictions have participated in several of these hazard mitigation assistance projects, summarized in the Table I-20 below.

Table I-20 Lincoln County Hazard Mitigation Assistance Projects

Program	Date Approved	Project Type	Status	Location
HMGP	2013-03-07	601.1: Generators	Closed	Lincoln County
HMGP	2009-03-24	300.4: Vegetation Management - Non-Coastal Shoreline Stabilization	Closed	Lincoln County
HMGP	2012-12-14	601.1: Generators	Closed	Lincoln County
FMA	1998-09-24	201.1: Relocation of Private Structures - Riverine	Closed	City of Libby
PDM	2018-06-15	91.3: Local Multihazard Mitigation Plan - UPDATE	Obligated	Lincoln County
FMA	1997-08-11	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	Closed	City of Libby
FMA	1999-08-19	201.1: Relocation of Private Structures - Riverine	Closed	City of Libby
FMA		FMA Plan	Closed	City of Libby
FMA	1999-08-19	106.2: Other Non Construction	Closed	City of Libby
HMGP	1998-09-14	600.1: Warning Systems (as a Component of a Planned, Adopted, and Exercised Risk Reduction Plan)	Closed	Lincoln County
FMA	1999-06-11	201.1: Relocation of Private Structures - Riverine	Closed	City of Libby
PDM	2010-09-15	91.1: Local Multihazard Mitigation Plan	Closed	Lincoln County

Source: FEMA Opendata

I.5.4 Education and Outreach Capabilities

Table I-21 identifies the education and outreach programs in place at the County and participating jurisdictions are or could be used to help promote mitigation activities.

Table I-21 Lincoln County Education and Outreach Capabilities

Education & Outreach Programs	Lincoln County	City of Libby	City of Troy	Town of Eureka	Town of Rexford
Ongoing public education programs (fire safety, responsible water use, household preparedness, etc)	No	No	No	No	No
Local citizen groups that communicate hazard risks	No	No	No	No	No
Firewise or other fire mitigation program	No	Yes	No	No	No
National Weather Service StormReady	No	Yes	No	No	No

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

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

Table I-22 Lincoln County Non-Governmental Organizations (NGOs)

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

I.5.6 Opportunities for Enhancement

Based on the capabilities assessment, Lincoln 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 Lincoln 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:

- Lincoln County:
 - Consider adopting building codes.
 - Update the CWPP
 - Consider the preparation of an up-to-date comprehensive, master, or general plan
 - Consider adopting building codes to improve structure resilience to hazards
 - Consider joining CRS to lower the cost of flood insurance through enhanced floodplain management and flood loss reduction activities
 - Additional partnerships with area agencies to further develop hazard mitigation programs.
- City of Libby:

- Consider adopting building codes.
- Consider adopting building codes to improve structure resilience to hazards
- Consider joining CRS to lower the cost of flood insurance through enhanced floodplain management and flood loss reduction activities
- Consider the preparation of a CWPP
- Consider the preparation of an up-to-date comprehensive, master, or general plan
- City of Troy:
 - Consider joining CRS to lower the cost of flood insurance through enhanced floodplain management and flood loss reduction activities
 - Consider the preparation of a CWPP
 - Consider the preparation of an up-to-date comprehensive, master, or general plan
 - Consider the preparation of a growth management ordinance
- Town of Eureka
 - Consider adopting building codes
 - Consider adopting building codes to improve structure resilience to hazards
 - Consider joining CRS to lower the cost of flood insurance through enhanced floodplain management and flood loss reduction activities
 - Consider the preparation of an up-to-date comprehensive, master, or general plan
 - Consider the preparation of a growth management ordinance
- Town of Rexford
 - Consider adopting building codes
 - Consider adopting building codes to improve structure resilience to hazards
 - Consider joining CRS to lower the cost of flood insurance through enhanced floodplain management and flood loss reduction activities
 - Consider the preparation of an up-to-date comprehensive, master, or general plan
 - Consider the preparation of a growth management ordinance

I.6 Mitigation Strategy

This section describes the mitigation strategy and mitigation action plan for Lincoln 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 Western 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.

The 2018 Lincoln County Hazard Mitigation Plan outlined the following goals:

- Goal 1: Reduce Impacts from Wildfire
- Goal 2: Reduce Impacts from Haz-Mat Incidents & Transportation Accidents
- Goal 3: Reduce Impacts from Flooding
- Goal 4: Reduce Impacts from Disease
- Goal 5: Reduce Impacts from Workplace Violence/Active Shooter Incidents
- Goal 6: Reduce Impacts from Severe Weather
- Goal 7: Reduce Impacts from Terrorism, Civil Unrest & Cyber Security
- Goal 8: Reduce Impacts from Dam Failure
- Goal 9: Reduce Impacts from All Hazards

I.6.2 Progress on Previous Actions

During the 2023 planning process, the Lincoln County Planning Team reviewed all the mitigation actions from the 2018 plan. As shown in Table I-23, of 60 actions in the previous plan, 12 have been completed, and three have been deleted.

Table I-23 Completed and Deleted Actions

2018 ID	Action Name & Description	Hazard(s) Mitigated	Jurisdiction	Status
1.3.7	Identify boundaries of OU3 through signs, monuments, or other permanent markers.	Wildfire	Lincoln County	Completed
2.1.1	Ensure local emergency responders have adequate training to respond to hazardous material events consistent with local capabilities.	Haz-Mat & Transportation Accidents	Lincoln County, Libby, Troy, Eureka, Rexford	Completed
3.1.2	Conduct an engineering study to make recommendations for bank stabilization and rerouting of Libby Creek that threatens critical infrastructure along Farm to Market Road.	Flooding	Lincoln County	Completed
3.2.3	Maintain and expand Libby storm drainage system, as needed.	Flooding	Libby	Completed
3.2.4	Improve roads and road drainage to withstand flood flows in selected areas.	Flooding	Lincoln County, Libby, Troy, Eureka	Completed
3.2.6	Build and maintain levees to prevent water from overflowing banks of streams along Libby and Flower Creeks.	Flooding	Lincoln County, Libby	Completed
3.3.2	Work towards getting Lincoln County into the National Flood Insurance Program Community Rating System.	Flooding	Lincoln County	Completed
3.3.3	Obtain and disseminate revised floodplain mapping to increase knowledge of flood prone areas.	Flooding	Lincoln County, Libby, Troy, Eureka	Completed

2018 ID	Action Name & Description	Hazard(s) Mitigated	Jurisdiction	Status
3.5.1	Update floodplain regulations to meet minimum standards established by FEMA and State.	Flooding	Lincoln County, Libby, Troy, Eureka	Completed
4.1.1	Continue to provide Public Health surveillance, disease investigations, and vaccination clinics.	Disease	Lincoln County, Libby, Troy, Eureka, Rexford	Deleted
5.1.1	Implement national campaigns throughout communities on active shooter awareness and preparedness.	Workplace Violence/Active Shooter Incidents	Lincoln County, Libby, Troy, Eureka, Rexford	Completed
6.1.2	Consider becoming an ambassador to the NWS Weather Ready Nation initiative.	Severe Weather	Lincoln County, Libby, Troy, Eureka, Rexford	Deleted
8.1.1	Continue to exercise high-hazard dams.	Dam Failure	Lincoln County, Libby, Troy, Eureka	Completed
9.1.4	Obtain generators for critical facilities including fire departments and shelters.	All Hazards	Lincoln County, Libby, Troy, Eureka, Rexford	Completed
9.3.1	Enhance GIS data to better assist with mitigation.	All Hazards	Lincoln County, Libby, Troy, Eureka, Rexford	Deleted

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 Lincoln County and its jurisdictions. The process used to identify, develop, and prioritize these actions is described in Chapter 5 of the base plan. Lincoln County has 45 uncompleted mitigation actions carried over from the previous plan, and has added an additional 1 new actions.

Table I-24 lists the 2023 Mitigation Action Plan for Lincoln County and its participating jurisdictions. 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. 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.

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

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

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

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

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

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

Table I-24 below lists the mitigation actions for each participating jurisdiction in Lincoln County. All jurisdictions have developed mitigation actions for each identified hazard in the HMP.

Table I-24 Mitigation Actions by Hazard and Jurisdiction Summary

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdiction	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
1	Promote fuel mitigation projects in OU3 and Modified Fire Response Zone.	Wildfire	Lincoln County, Libby	USFS, W.R. Grace	Moderate	USFS, W.R. Grace	Ongoing	High	Annual Implementation
2	Encourage Lincoln County to identify specific communities within the county to become FireWise communities.	Wildfire	Lincoln County, Troy, Eureka	Lincoln County FireSafe Council	Low	County Resources, Grants	Ongoing	Medium	Continue - In Progress.
3	Ensure that water supply requirements in County Subdivision Regulations are met.	Wildfire	Lincoln County	Planning Dept., Commissioners	High	County Resources	Short-Term	High	Continue - Not Started.
4	Encourage fuel reduction and control activities, such as thinning and fire breaks, particularly in WUI and municipal watersheds.	Wildfire	Lincoln County, Libby, Troy, Eureka	Lincoln County FireSafe Council	Moderate	USFS, DNRC, County Resources	Ongoing	High	Continue - Not Started.
5	Complete fuel mitigation along evacuation routes.	Wildfire	Lincoln County	Lincoln County FireSafe Council	Moderate	USFS, State, County Resources	Ongoing	High	Continue - In Progress.
6	Improve fire agency infrastructure (training facility, additional fire suppression equipment and storage, enhanced communications systems).	Wildfire	Lincoln County, Libby, Troy, Eureka, Rexford	USFS, W.R. Grace	High	USFS, DNRC, County Resources	Ongoing	High	Continue - Not Started.
7	Develop shared database between fire suppression agencies on road closures, water sources, fuel ratings, district boundaries, and ignition hazards.	Wildfire	Lincoln County, Libby, Troy, Eureka, Rexford	Lincoln Co. Fire Co-op, EMA	High	County Resources	Ongoing	Medium	Continue - Not Started.
8	Develop water storage capacity and water supply sites to enhance firefighting capability.	Wildfire	Lincoln County, Libby, Troy, Eureka, Rexford	Lincoln Co. Fire Co-op, USFS, DNRC, County Forester, MDT	High	USFS, DNRC, FEMA, Private Developers	Ongoing	Medium	Continue - Not Started.

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdiction	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
9	Acquire specialized equipment for firefighting in OU3 and Modified Fire Response Zone.	Wildfire	Lincoln County, Libby	Lincoln Co. Fire Co-op	High	USFS, DNRC, Grants	Ongoing	High	Annual Implementation
10	Provide training for firefighters and emergency service personnel on wildfire response in OU3 and Modified Fire Response Zone.	Wildfire	Lincoln County, Libby	Lincoln Co. Fire Co-op, USFS, W.R. Grace	Moderate	USFS, DNRC, Grants	Ongoing	High	Continue - Not Started.
11	Educate landowners about alternatives to burning slash (i.e. chipping, community landfill, etc.).	Wildfire	Lincoln County, Libby, Troy, Eureka, Rexford	Lincoln FireSafe Council, County Health Dept.	Low	County Resources	Ongoing	Medium	Continue - In Progress.
12	Promote FireWise education efforts in communities and schools.	Wildfire	Lincoln County, Libby, Troy, Eureka, Rexford	County Forester, Lincoln FireSafe Council	Low	County Resources	Ongoing	High	Annual Implementation
13	Educate public on the hazard and how to protect their health if larger wildfire occurs in OU3.	Wildfire	Lincoln County, Libby	Lincoln Co. Health Dept., EMA	Low	County Resources	Ongoing	High	Annual Implementation
14	Develop a database of property assessments and completed fuel mitigation projects.	Wildfire	Lincoln County	Lincoln County FireSafe Council	Low	County Resources, Grants	Ongoing	Medium	Continue - In Progress.
15	Review and update evacuation plans.	Wildfire	Lincoln County	County Sheriff, EMA	Moderate	County Resources	Mid-Term	High	Continue - Not Started.
16	Risk rate the fire hazard for all WUI areas in the County.	Wildfire	Lincoln County, Troy, Rexford	USFS, DNRC, County	Moderate	USFS, DNRC, County	Ongoing	High	Continue - In Progress.
17	Obtain supply of Class B foam for hazmat response.	Haz-Mat & Transportation Accidents	Lincoln County, Libby, Troy	Libby Rural Fire	High	County Resources	Short-Term	High	Continue - Not Started.
18	Educate student transportation drivers on basic hazmat info and what to do in a situation.	Haz-Mat & Transportation Accidents	Lincoln County, Libby, Troy, Eureka, Rexford	EMA, School District	Moderate	County Resources, Transportation Companies	Ongoing	High	Continue - Not Started.

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdiction	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
19	Encourage medical and care facilities to develop, review and/or update their hazmat plans and conduct drills to exercise their response protocol.	Haz-Mat & Transportation Accidents	Lincoln County, Libby, Troy, Eureka	EMA, Health Dept., Hospital, Care Center	High	County Resources, Medical and Care Facilities	Ongoing	High	Continue - In Progress.
20	Conduct response pre-planning by identifying access roads and staging areas to get to railroad including a map with mile markers.	Haz-Mat & Transportation Accidents	Lincoln County, Libby, Troy	EMA, Libby Rural Fire	High	County Resources	Short-Term	High	Continue - In Progress.
21	Reduce stream bed load in Flower Creek.	Flooding	Libby	EMA, DNRC, FEMA, FWP, DEQ, Private Contractors	High	FEMA Grants, County and City of Libby Resources	Long-Term	High	Continue - In Progress.
22	Replace culverts with bridges to mitigate impacts of runoff.	Flooding	Lincoln County, Libby, Troy, Eureka	County, Cities, Towns, USFS, DNRC	Very High	FEMA Grants, County, City, Town Resources	Ongoing	High	Continue - Not Started.
23	Resize and upgrade culverts as needed throughout the county.	Flooding	Lincoln County, Libby, Troy, Eureka	County, Cities, Towns, USFS, DNRC	High	FEMA Grants, County, City, Town Resources, USFS	Ongoing	High	Continue - Not Started.
24	Replace the Balsam Bridge over Flower Creek (bridge is bottle neck for ice causing creek to overflow and flood Libby).	Flooding	Libby	County, City of Libby, EMA, DNRC, USACE, FWP, DEQ	Very High	FEMA, Grants, City of Libby Resources	Long-Term	Low	Continue - Not Started.
25	Expand storm drainage system in Eureka.	Flooding	Eureka	Eureka Public Works	Very High	Town Resources, Grants	Long-Term	Medium	Continue - Not Started.

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdiction	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
26	Educate homeowners on the advantages of purchasing flood insurance through the National Flood Insurance Program.	Flooding	Lincoln County, Libby, Troy, Eureka	Planning Depts., Floodplain Administrators, DNRC	High	County, City and Town Resources	Ongoing	Medium	Annual Implementation
27	Promote public awareness on protecting private property from flooding.	Flooding	Lincoln County, Libby, Troy, Eureka	EMA, Floodplain Administrator	Low	County Resources	Ongoing	High	Annual Implementation
28	Improve floodplain mapping throughout Lincoln County.	Flooding	Lincoln County, Eureka	EMA, Floodplain Administrator	Moderate	DNRC, FEMA	Long-Term	High	Continue - Not Started.
29	Continue Public Health education on disease prevention, sanitation and healthy living.	Disease	Lincoln County, Libby, Troy, Eureka, Rexford	County Health Dept.	Low	County Resources	Ongoing	High	Annual Implementation
30	Collaborate with community partners to train and exercise public health emergency response plans.	Disease	Lincoln County, Libby, Troy, Eureka, Rexford	County Health Dept., EMA	Low	County Resources	Ongoing	High	Annual Implementation
31	Collaborate and coordinate with community partners to review and update public health emergency response plans annually.	Disease	Lincoln County, Libby, Troy, Eureka, Rexford	County Health Dept.	Moderate	County Resources	Ongoing	High	Annual Implementation
32	Ensure that all law enforcement, first responders, and school staff within the County have active shooter training.	Workplace Violence/Active Shooter Incidents	Lincoln County, Libby, Troy, Eureka, Rexford	EMA, Sheriff's Office	Moderate	County Resources, Schools, DHS	Ongoing	High	Continue - Not Started.
33	Perform vulnerability assessments at critical facilities to determine ways for physical hardening.	Workplace Violence/Active Shooter Incidents	Lincoln County, Libby, Troy, Eureka, Rexford	Law Enforcement	Moderate	County Resources, DHS, Grants	Ongoing	High	Continue - Not Started.

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdiction	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
34	Promote community outreach on winter weather survival.	Severe Weather	Lincoln County, Libby, Troy, Eureka, Rexford	EMA, MDT, NWS	Moderate	County, FEMA	Ongoing	High	Annual Implementation
35	Procure equipment and train to reduce impacts from terrorism, civil unrest, and cyber security.	Terrorism, Civil Unrest & Cyber Security	Lincoln County, Libby, Troy, Eureka, Rexford	Law Enforcement, Fire Depts., EMS	Low	County, Cities, Town Resources, Grants	Ongoing	High	Continue - Not Started.
36	Continue orientation with new employees and ongoing training with existing staff on cyber security.	Terrorism, Civil Unrest & Cyber Security	Lincoln County, Libby, Troy, Eureka	County IT Dept., Individual IT Depts.	Low	County Resources	Ongoing	High	Continue - In Progress.
37	Keep apprised of regional scams and organization hacking, conduct local threat assessment, and communicate, as appropriate.	Terrorism, Civil Unrest & Cyber Security	Lincoln County, Libby, Troy, Eureka	Sheriff's Dept., County IT Dept.	Low	County Resources	Ongoing	High	Continue - In Progress.
38	Continue assessments of critical cyber infrastructure including fire walls and networks.	Terrorism, Civil Unrest & Cyber Security	Lincoln County	County IT Dept., Private Industry	Moderate	County Resources	Ongoing	High	Continue - In Progress.
39	Continue to perform vulnerability assessments on critical facilities.	Terrorism, Civil Unrest & Cyber Security	Lincoln County, Libby, Troy, Eureka	EMA, Public Works Depts., Private industry	Moderate	County, Cities, Town Resources	Ongoing	High	Continue - Not Started.
40	Obtain additional repeaters for County to improve emergency communications.	All Hazards	Lincoln County, Libby, Troy, Eureka, Rexford	EMA, Sheriff's Office	Moderate	County Resources	Ongoing	High	Continue - In Progress.
41	Coordinate and cooperate on getting First Net in place in Lincoln County to enhance first responder communications.	All Hazards	Lincoln County, Libby, Troy, Eureka, Rexford	EMA, Bull Lake VFD	Moderate	State and County Resources	Ongoing	High	Continue - Not Started.

ID	Action Name & Description	Hazard(s) Mitigated	Jurisdiction	Lead Agency and Partners	Cost Estimate	Potential Funding	Timeline	Priority	Status/ Implementation Notes
42	Identify and upgrade emergency shelters.	All Hazards	Lincoln County, Libby, Troy, Eureka, Rexford	EMA, American Red Cross, Ministerial Entities	High	County, Cities, Towns Resource, American Red Cross	Ongoing	High	Continue - In Progress.
43	Provide outreach on community notification system.	All Hazards	Lincoln County, Libby, Troy, Eureka, Rexford	EMA, Sheriff's Office	Moderate	County Resources	Ongoing	High	Continue - Not Started.
44	Promote preparation of household and facility Disaster Plans considering access and functional needs.	All Hazards	Lincoln County, Libby, Troy, Eureka, Rexford	EMA, Sheriff's Office	Moderate	County Resources	Ongoing	High	Continue - In Progress.
45	Encourage Eureka to complete a Growth Policy that considers all hazards.	All Hazards	Eureka		Moderate	Town of Eureka, CDBG	Mid-Term	Medium	Continue - Not Started.
46	Extend Emergency Notification county wide with a stand alone system. Provide indoor notification systems to critical facilities and infrastructure improve telecom infrastructure	Multi: Dam Failure, Drought, Flooding, Summer Weather, Winter Weather, Tornado/Wind, Volcanic Ash, Wildfire	Lincoln County	Lincoln County EMA	Moderate	FEMA Grants	Short-Term	High	New in 2023
	The city's need actions for Flooding and Wildfire. Each jurisdiction will need at least one new mitigation action for every High significance hazard								

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I.7 Plan Implementation and Maintenance

Moving forward the Lincoln 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

Integrated planning is key to building community resiliency. 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:

Lincoln County:

- Lincoln County Emergency Operations Plan
- Lincoln County Growth Policy, 2019
- Lincoln County Community Wildfire Protection Plan, 2023
- Lincoln County Flood Insurance Study, 2006
- Dam Emergency Action Plans

City of Libby

- City of Libby Emergency Operations Plan
- City of Libby Growth Policy, 2010
- City of Libby Flood Insurance Study, 2006
- City of Libby Zoning Code,
- City of Libby Floodplain Ordinance

City of Troy:

- City of Troy Emergency Operations Plan
- City of Troy Floodplain Control Ordinance

Town of Eureka

- Town of Eureka Flood Insurance Study, 1979

Town of Rexford

- Lincoln County Flood Insurance Study, 2006

The jurisdictions did not meaningfully integrate the 2018 Lincoln County HMP into other planning mechanisms, which has been noted as an area of improvement for the next five years. The CPT has noted that this plan will be useful for future planning and grant opportunities for future development of county assets. When the opportunity arises, each jurisdiction will follow the process outlined in Section 6.3.3 of the base plan to integrate information from the HMP into these mechanisms. This integration may encompass cross-referencing the HMP where applicable, or it may involve including data, goals, or actions from the HMP. The CPT will coordinate with the staff responsible for the above plans or programs.

I.7.2 Monitoring, Evaluation and Updating the Plan

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

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.

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