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# COUNTY PROFILE

# SHERMAN COUNTY

**Lower Loup Natural Resources District**
**Hazard Mitigation Plan 2022**

# Local Planning Team

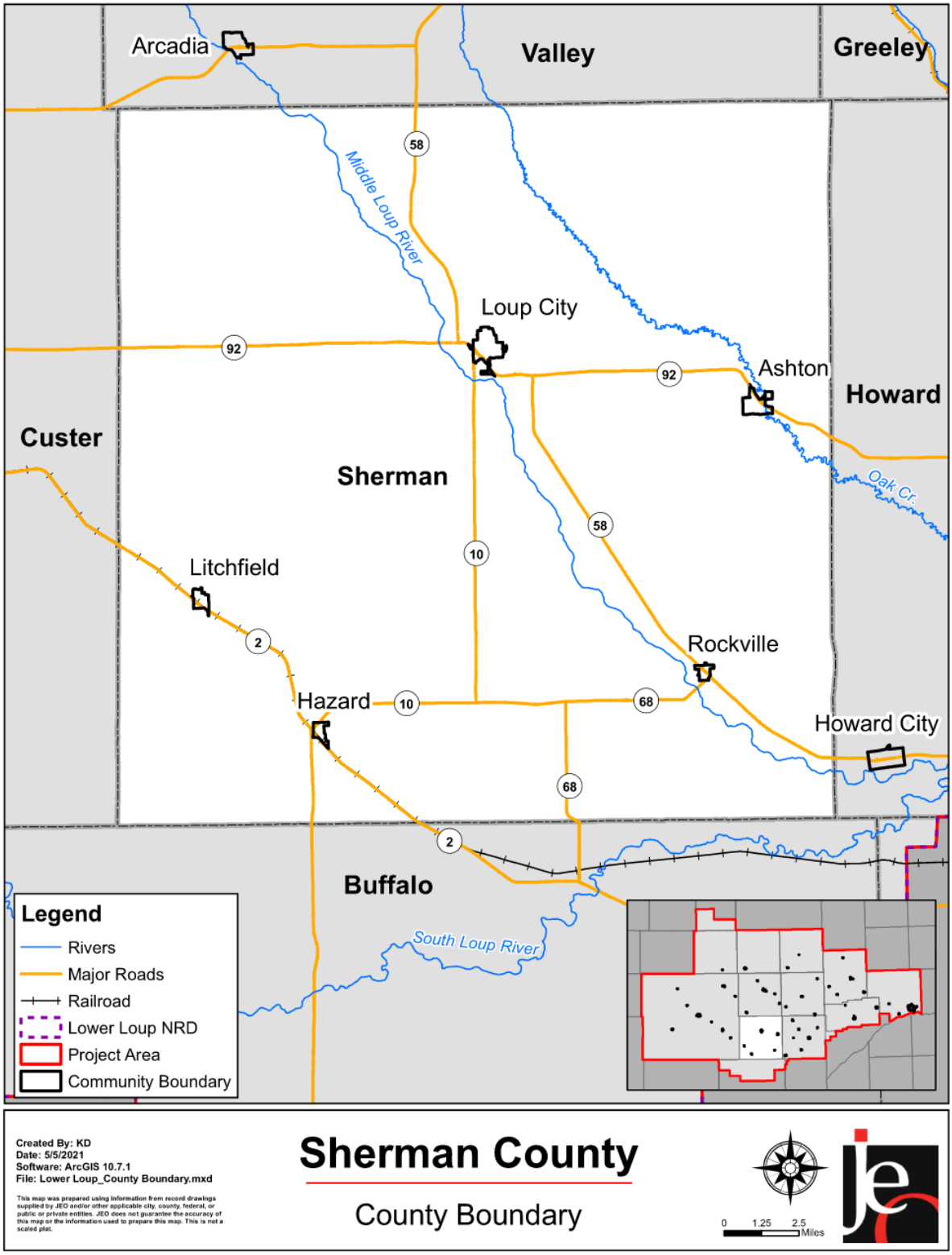
**Table SHE.1: Sherman County Local Planning Team**

| NAME | TITLE | JURISDICTION |
|---|---|---|
| **ALMA BELAND** | Director | Region 26 Emergency Management |
| **MARCY SEKUTERA** | County Clerk | Sherman County |

# Location, Geography, & Climate

Sherman County is located in central Nebraska and is bordered by Howard County, Buffalo County, and Custer County. The total area of Sherman County is 572 square miles. Major waterways within the county include Middle Loup River, and Sherman Reservoir. The county is not heavily forested, nor is it located in a geographic area of the state prone to landslides. Sherman County lies in the dissected plains topographic region, with the vast majority of the county's land characterized by agricultural fields.

**Figure SHE.1: Sherman County Jurisdictional Boundary**



## Climate

The average high temperature in Sherman County for the month of July is 88.2 degrees and the average low temperature for the month of January is 12.4 degrees. On average, Sherman County receives over 26 inches of rain and 30 inches of snowfall per year. The following table compares these climate indicators with those of the entire 11-county planning area and the state. Climate data is helpful in determining if certain events are higher or lower than normal. For example, if the high temperatures in the month of July are running well into the 90s, high heat events may be more likely which could impact vulnerable populations.

**Table SHE.2: Sherman County Climate Normals**

| | SHERMAN COUNTY | PLANNING AREA | STATE OF NEBRASKA |
|---|---|---|---|
| JULY NORMAL HIGH TEMP | 88.2°F | 62.7°F | 87.4°F |
| JANUARY NORMAL LOW TEMP | 12.4°F | 12.1°F | 13.9°F |
| ANNUAL NORMAL PRECIPITATION | 26.5 inches | 26.36 inches | 24.0 inches |
| ANNUAL NORMAL SNOWFALL | 30.7 inches | 28.6 inches | 28.2 inches |

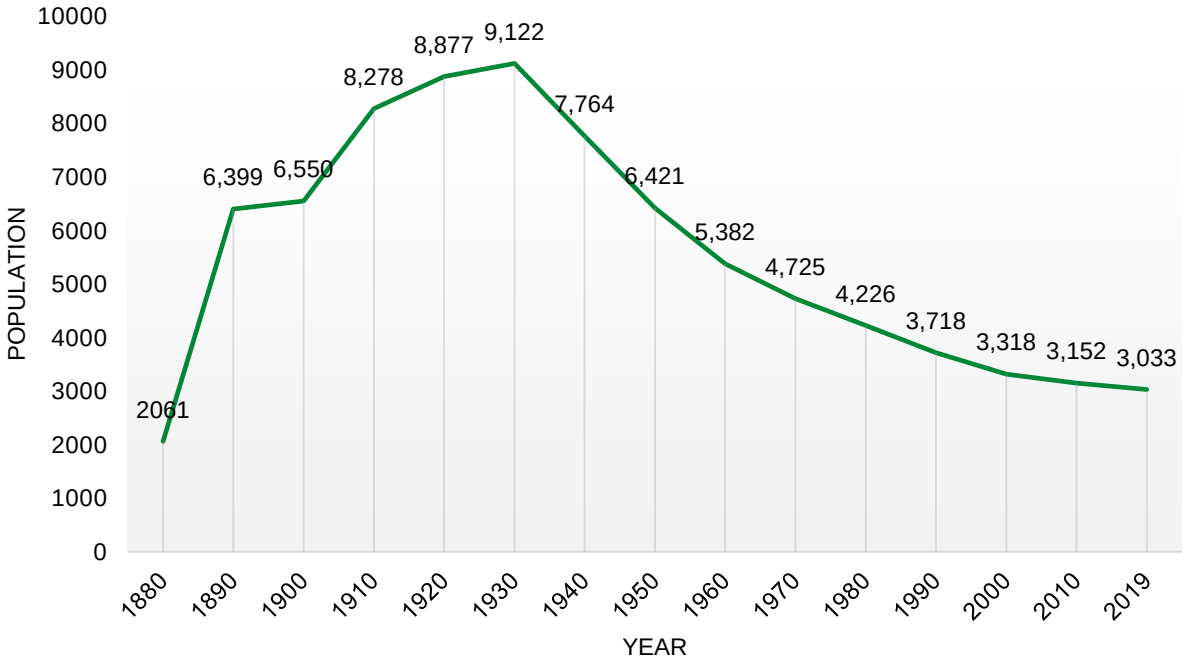
*Source: NCEI 1991-2020 Climate Normals*[1]
*Precipitation includes all rain and melted snow and ice.*

# Demographics

The following figure displays the historical population trend from 1880 to 2019. This figure indicates that the population of Sherman County has been declining since 1930. This is notable for hazard mitigation because communities with declining population may also have a higher level of unoccupied housing that is not being up kept. Furthermore, areas with declining population will be less prone to pursuing residential/commercial development in their areas, which may reduce the number of structures vulnerable to hazards in the future. Decreasing populations can also represent decreasing tax revenue for the county which could make implementation of mitigation actions more fiscally challenging.

1 NOAA National Centers for Environmental Information. May 2021. "Data Tools: 1991-2020 Normals." [datafile]. https://www.ncdc.noaa.gov/cdo-web/datatools/normals.

**Figure SHE.2: Sherman County Population 1880-2019**




*Source: U.S. Census Bureau[2]*

The following table indicates the State of Nebraska has a slightly higher percentage of people under the age of 5 and between the ages of 5 and 64 than Sherman County. Sherman County has a higher median age, and a significantly higher percentage of people over the age of 65. This is relevant to hazard mitigation insofar as the very young and elderly populations may be at greater risk from certain hazards than others. For a more elaborate discussion of this vulnerability, please see *Section Four: Risk Assessment*.

**Table SHE.3: Population by Age**

| AGE | SHERMAN COUNTY | STATE OF NEBRASKA |
|---|---|---|
| **<5** | 5.0% | 6.9% |
| **5-64** | 68.1% | 78.1% |
| **>64** | 26.7% | 15.0% |
| **MEDIAN AGE** | 47.2 | 36.4 |

*Source: U.S. Census Bureau[3]*

The following table indicates that the county's median household income and per capita income are slightly lower than those of the state. Median home values are notably lower, and rent is also lower compared to the state. These economic indicators are relevant to hazard mitigation because they show the relative economic strength compared to the state as a whole. Areas with economic indicators which are relatively low may influence a community's level of resiliency during hazardous events.

2 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]
3 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]

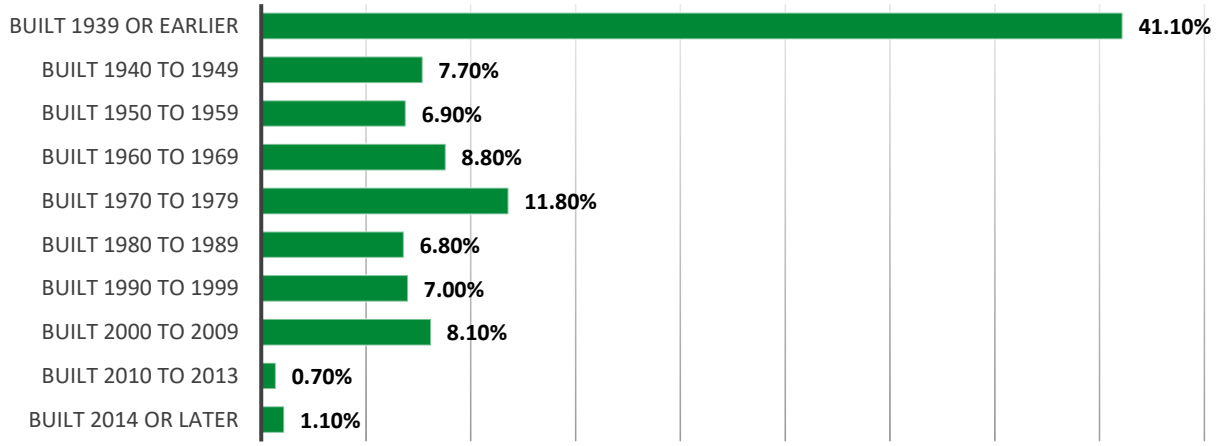
**Table SHE.4: Housing and Income**

| AGE | SHERMAN COUNTY | STATE OF NEBRASKA |
|---|---|---|
| MEDIAN HOUSEHOLD INCOME | $50,781 | $59,116 |
| PER CAPITA INCOME | $28,448 | $31,101 |
| MEDIAN HOME VALUE | $88,700 | $147,800 |
| MEDIAN RENT | $579 | $805 |

*Source: U.S. Census Bureau[4,5]*

The following figure indicates that the majority of the housing in Sherman County was built prior to 1940. According to the United States Census Bureau 2019 ACS 5-year estimates, the county has 1,952 housing units; with 70.1 percent of those units occupied. Approximately 15.3 percent of the county's housing is classified as mobile homes. There is a large proportion of mobile homes located near Sherman Reservoir with over 60 used as year-round households and over 100 used as seasonal residences. Housing age can serve as an indicator or risk as structures built prior to state building codes being developed may be at greater risk. The State of Nebraska first adopted building codes in 1987, with the International Building Code adopted in 2010. The current edition of the IBC was updated in 2018. Finally, communities with a substantial number of mobile homes may have a higher number of residents vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

**Figure SHE.3: Housing Units by Age**




*Source: U.S. Census Bureau[6]*

**Table SHE.5: Housing Units**

| JURISDICTION | TOTAL HOUSING UNITS | | | | | OCCUPIED HOUSING UNITS | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Occupied | | Vacant | | | Owner | | Renter | |
| | Number | Percent | Number | Percent | | Number | Percent | Number | Percent |
| SHERMAN COUNTY | 1,368 | 70.1% | 584 | 29.9% | | 1,056 | 77.2% | 312 | 22.8% |
| NEBRASKA | 754,063 | 90.8% | 76,686 | 9.2% | | 498,567 | 67.1% | 255,496 | 33.9% |

*Source: U.S. Census Bureau[7]*

4 United States Census Bureau. "2019 American Fact Finder: DP04: Selected Housing Characteristics." [database file]
5 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
6 United States Census Bureau. "2019 American Fact Finder: SP04: Selected Housing Characteristics." [database file]
7 United States Census Bureau. "2019 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

# Employment Factors

According to 2018 Business Patterns Census Data, Sherman County had 90 business establishments. The following table presents the number of establishments, number of paid employees, and the annual payroll in thousands of dollars. Communities which have a diverse economic makeup may be more resilient following a hazardous event, especially if certain industries are more impacted than others.

**Table SHE.6: Businesses in Sherman County**

| | TOTAL BUSINESSES | NUMBER OF PAID EMPLOYEES | ANNUAL PAYROLL (IN THOUSANDS) |
|---|---|---|---|
| **TOTAL FOR ALL SECTORS (2014)** | 86 | 541 | $14,201 |
| **TOTAL FOR ALL SECTORS (2016)** | 89 | 561 | $15,654 |
| **TOTAL FOR ALL SECTORS (2018)** | 90 | 644 | $17,338 |

*Source: U.S. Census Bureau[8,9]*

Agriculture is also important to the economic fabric of Sherman County, and the state of Nebraska as a whole. Sherman County's 384 farms cover 310,819 acres of land. Crop and livestock production are the visible parts of the agricultural economy, but many related businesses contribute as well by producing, processing and marketing farm and food products. These businesses generate income, employment and economic activity throughout the region.

**Table SHE.7: Sherman County Agricultural Inventory**

| | 2012 CENSUS | 2017 CENSUS | PERCENT CHANGE |
|---|---|---|---|
| **NUMBER OF FARMS WITH HARVESTED CROPLAND** | 414 | 384 | -7.25% |
| **ACRES OF HARVESTED CROPLAND** | 281,176 | 310,819 | 10.54% |

*Source: USDA Census of Agriculture[10,11]*

# Governance

A community's governance structure impacts its capability to implement mitigation actions. The county is governed by a three-member board of supervisors. The county also has the following offices or departments: assessor, attorney, clerk, county court, district court, emergency management, planning and zoning, economic development, register of deeds, roads, sheriff, treasurer, veterans' office, and weed control.

# Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's

8 2016 County Business Patterns and 2016 Nonemployer Statistics. https://www.census.gov/programs-surveys/cbp/technical-documentation/methodology.html and https://www.census.gov/programs-surveys/nonemployer-statistics/technical-documentation/methodology.html.
9 2018 County Business Patterns and 2018 Nonemployer Statistics. https://www.census.gov/programs-surveys/cbp/technical-documentation/methodology.html and https://www.census.gov/programs-surveys/nonemployer-statistics/technical-documentation/methodology.html.
10 United States Department of Agriculture, National Agricultural Statistics Server. 2014. "2012 Census of Agriculture – County Data."
11 United States Department of Agriculture, National Agricultural Statistics Server. 2019. "2017 Census of Agriculture – County Data."

planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

**Table SHE.13: Capability Assessment**

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| PLANNING & REGULATORY CAPABILITY | Comprehensive Plan | Yes |
| | Capital Improvements Plan | No |
| | Economic Development Plan | Yes |
| | Local Emergency Operational Plan | Yes |
| | Floodplain Ordinance | Yes |
| | Zoning Ordinance | Yes |
| | Subdivision Regulation/Ordinance | Yes |
| | Building Codes | Yes |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | Yes |
| | National Flood Insurance Program | Yes |
| | Community Rating System | No |
| | Other (if any) | |
| ADMINISTRATIVE & TECHNICAL CAPABILITY | Planning Commission | Yes |
| | Floodplain Administration | Yes |
| | GIS Capabilities | No |
| | Chief Building Official | Yes |
| | Civil Engineering | Yes |
| | Local Staff Who Can Assess Community's Vulnerability to Hazards | Yes |
| | Grant Manager | Yes |
| | Mutual Aid Agreement | Yes |
| | Other (if any) | |
| FISCAL CAPABILITY | 1 & 6 Year Plan | Yes |
| | Applied for grants in the past | Yes |
| | Awarded a grant in the past | Yes |
| | Authority to Levy Taxes for Specific Purposes such as Mitigation Projects | Yes |
| | Gas/Electric Service Fees | Yes |
| | Storm Water Service Fees | No |
| | Water/Sewer Service Fees | Yes |
| | Development Impact Fees | No |
| | General Obligation Revenue or Special Tax Bonds | Yes |
| | Other (if any) | |
| EDUCATION AND OUTREACH | Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.<br>Ex. CERT Teams, Red Cross, etc. | Yes |
| | Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | Yes |

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| | Natural Disaster or Safety related school programs | Yes |
| | StormReady Certification | No |
| | Firewise Communities Certification | No |
| | Tree City USA | No |
| | Other (if any) | |

**Table SHE.14: Overall Capability**

| OVERALL CAPABILITY | 2017 PLAN | 2022 PLAN |
|---|---|---|
| FINANCIAL RESOURCES NEEDED TO IMPLEMENT MITIGATION PROJECTS | Moderate | Moderate |
| STAFF/EXPERTISE TO IMPLEMENT PROJECTS | Moderate | Moderate |
| COMMUNITY SUPPORT TO IMPLEMENT PROJECTS | Limited | Limited |
| TIME TO DEVOTE TO HAZARD MITIGATION | Limited | Limited |

# Plan Integration

The County has several planning documents that discuss or relate to hazard mitigation. Each applicable planning mechanism is listed below along with a short description of how it is integrated with the hazard mitigation plan. Participating jurisdictions will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

## Annual Budget

County funds are generally limited to maintaining current facilities and systems but have held relatively stable over the past decade. There are currently no large scale projects with earmarked funds.

## Zoning Ordinance and Floodplain Ordinance

The county's floodplain ordinance and zoning ordinance outline where and how development should occur in the future. These documents discourage development in the floodplain.

## Sherman County Local Emergency Operations Plan

The Sherman County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

## Central Platte Community Wildfire Protection Plan

The Nebraska Forest Service updated the Central Platte Community Wildfire Protection Plan (CWPP), which includes Loup County in October 2019. The purpose of the CWPP is to help effectively manage wildfires and increase collaboration and communication among organizations

who manage fire. The CWPP discusses county specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. This document is updated every five years.

# Future Development Trends

In the last five years, some old buildings have been demolished and new residential and commercial developments have been built throughout the county. A new fire hall was built, and repair work completed on a diversion dam. New communication equipment was also installed around Litchfield. Some new homes were developed around the Sherman Reservoir. According to the census data, Sherman County's population is declining. According to the local planning team, factors contributing to the decline include: lack of housing, an aging population, and residents moving closer to hospitals. There are new housing developments planned throughout the county in the next five years.

# Community Lifelines

## Transportation

Sherman County's major transportation corridors include highways 58, 92 and 2. BNSF has a rail line that runs through the county along Highway 2. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the county, as well as areas more at risk to transportation incidents.

## Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are 14 chemical storage sites throughout Sherman County which house hazardous materials. For a description of chemical sites located in incorporated areas, please see the jurisdiction's participant section.

## Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

**Table SHE.9: Sherman County Critical Facilities**

| CF # | COMMUNITY LIFELINE | NAME | SHELTER (Y/N) | GENERATOR (Y/N) | FLOODPLAIN (Y/N) |
|---|---|---|---|---|---|
| **1** | Safety and Security | Ashton Fire Hall | N | Y | N |
| **2** | Transportation | County Roads Dept | N | N | N |
| **3** | Food, Water, and Shelter | Litchfield High School | Y | N | N |
| **4** | Food, Water, and Shelter | Loup City Elementary | Y | N | N |
| **5** | Safety and Security | Loup City Fire Hall | Y | Y | N |
| **6** | Food, Water, and Shelter | Loup City High School | Y | Y | N |
| **7** | Communications | NPPD Tower | N | N | N |
| **8** | Communications | Region 26 Communications Tower | N | N | N |
| **9** | Safety and Security | Rockville Fire Department | N | Y | N |
| **10** | Safety and Security | Sherman County Courthouse | N | N | N |
| **11** | Safety and Security | Sherman Dam | N | N | Y |

Although not listed in the table above, critical infrastructure also include power substations, cell towers, and alert sirens in the county. These assets are typically owned and maintained by other agencies and are not the responsibility of the jurisdiction.

## Health and Medical Facilities

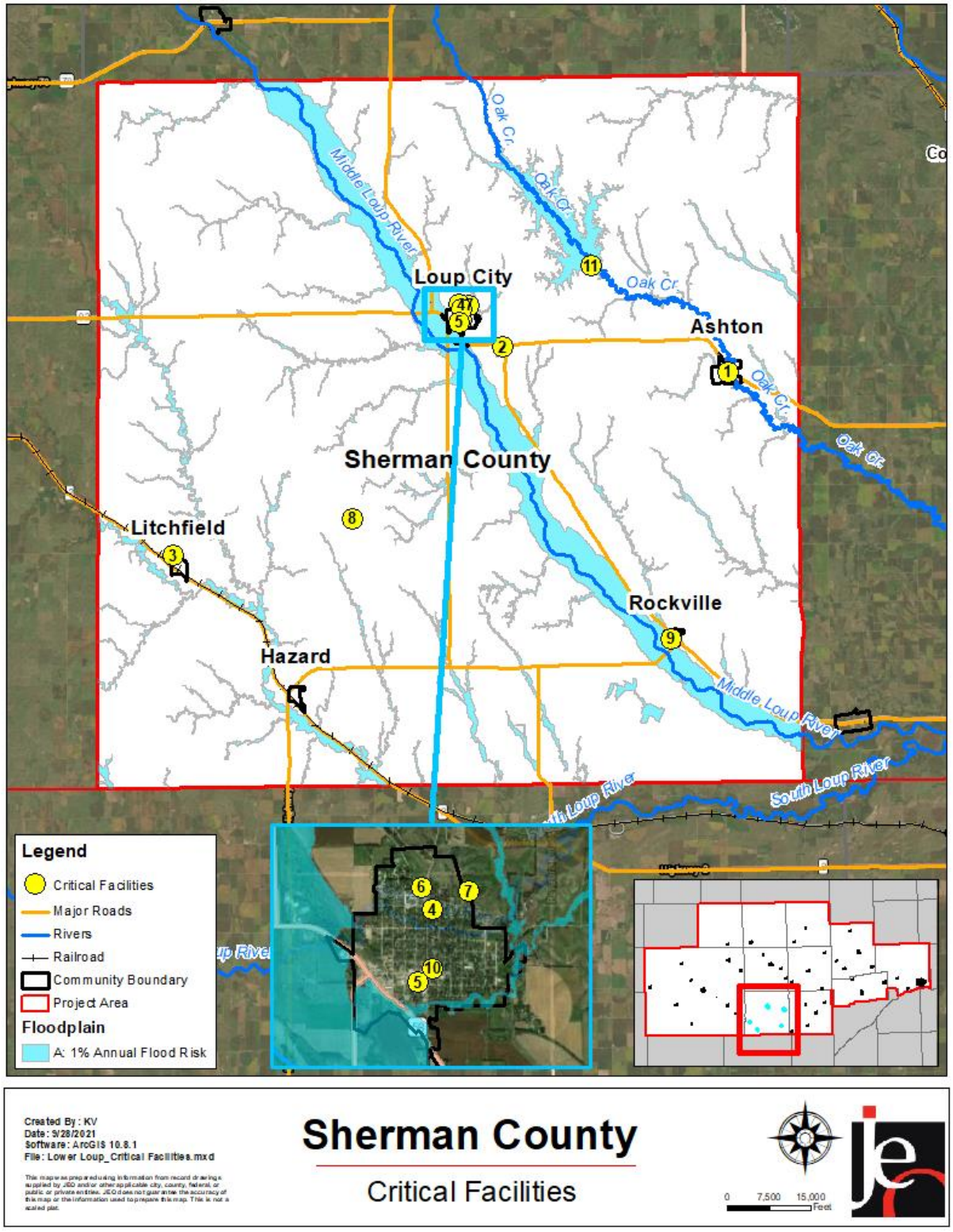
The following medical and health facilities are located within the county.

**Table SHE.4: Sherman County Critical Facilities**

| TYPE OF FACILITY | FACILITY NAME | COMMUNITY | NUMBER OF LICENSED BEDS |
|---|---|---|---|
| Long Term Care | Rose Lane Home | Loup City | 64 |

*Source: DHHS Care Rosters, 2021*

**Figure SHE.4: Sherman County Critical Facilities**



# Parcel Improvements and Valuation

GIS parcel data as of December 2020 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

**Table SHE.12: Sherman County Parcel Valuation**

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|---|---|---|---|---|---|
| 4,189 | 1636 | 134,813,655 | 355 | 32,768,655 | 21.70% |

*Source: County Assessor, GIS Workshop*

**Table SHE.13: Sherman County Flood Map Products**

| Type of Product | Product ID | Effective Date | Details |
|---|---|---|---|
| **LOMA** | 09-07-0985A-310476 | 7/9/2009 | Structure removed from SFHA |
| **LOMA** | 13-07-2486A-310476 | 10/15/2013 | Portion of property removed from SFHA |
| **LOMA** | 18-07-1519A-310476 | 5/30/2018 | Portion of property removed from SFHA |
| **LOMA** | 18-07-2010A-310476 | 8/20/2018 | Portion of property removed from SFHA |
| **LOMA** | 21-07-1367A-310476 | 10/8/2021 | Portion of property removed from SFHA |

*Source: FEMA Flood Map Service Center*

# Historical Occurrences

The following table provides a statistical summary for hazards that have occurred in the planning area. The property damages from the NCEI Storm Events Database (January 1996 – December 2020) should be considered only as broad estimates. Sources include but are not limited to: emergency management; local law enforcement; Skywarn spotters; NWS damage surveys; newspaper clipping services; insurance industry; and the general public. Crop damages reports come from the USDA Risk Management Agency between 2000 and 2020.

For the complete discussion on historical occurrences, please refer to *Section 4: Risk Assessment*.

**Table SHE.10: Hazard Risk Assessment – Sherman County**

| Hazard Type | | Sherman County | | |
|---|---|---|---|---|
| | | Count | Property | Crop |
| Agricultural Disease | Animal Disease[2] | 10 | 151 Animals | N/A |
| | Plant Disease[3] | 9 | N/A | $112,307 |
| Dam Failure[7] | | 1 | $0 | N/A |
| Drought[8] | | 444 out of 1,512 Months | $0 | $20,143,908 |

| Hazard Type | | Sherman County | | |
|---|---|---|---|---|
| | | Count | Property | Crop |
| Earthquakes[11] | | 0 | $0 | $0 |
| Extreme Heat[9] | | Avg 4 Days per Year | $0 | $3,169,606 |
| Flooding[1] | Flash Flood | 7 | $1,290,000 | $170,868 |
| | Flood | 5 | $2,380,000 | |
| Grass/Wildfires[4] | | 84 | 7,743 Acres | $5,450 |
| Hazardous Materials | Chemical Spills (Fixed Site)[5] | 1 | $0 | N/A |
| | Chemical Spills (Transportation)[6] | 0 | $0 | N/A |
| Levee Failure[12] | | N/A | N/A | N/A |
| Public Health Emergency[13] | | ~206 cases, 4 deaths | N/A | N/A |
| Severe Thunderstorms[1] | Hail *Average: 1.19" Range: 0.75"-3.0"* | 132 | $4,785,000 | $15,940,454 |
| | Heavy Rain | 9 | $0 | $2,858,949 |
| | Lightning | 0 | $0 | N/A |
| | Thunderstorm Wind *Average: 57.6mph Range: 52-80mph* | 45 | $1,775,000 | N/A |
| Severe Winter Storms[1] | Blizzard | 10 | $500,000 | $438,923 |
| | Extreme Cold/Wind Chill | 2 | $0 | |
| | Heavy Snow | 4 | $0 | |
| | Ice Storm | 6 | $595,000 | |
| | Winter Storm | 40 | $135,000 | |
| | Winter Weather | 27 | $5,000 | |
| Terrorism[10] | | 0 | $0 | N/A |
| Tornadoes & High Winds[1] | High Winds *Average: 47.1mph Range: 35-61mph* | 17 | $1,089,080 | $2,651,202 |
| | Tornadoes *Average: F0 Range: EF0/F0-F2* | 8 | $200,000 | $3,713 |
| **Totals** | | **417** | **$12,754,080** | **$45,525,380** |

*1 - NCEI, Jan 1996-Dec 2020*
*2 - USDA, 2014-2020*
*3 - USDA RMA, 2000-2020*
*4 - NFS, 2000- April 2020*
*5 - NRC, 1990-2020*
*6 - PHSMA, 1971- Jan 2021*
*7 - NeDNR Dam Safety Division, 2021*
*8 - NOAA, 1895-2020*
*9 - HPRCC & NOAA Regional Climate Center, 1983-2021*
*10 - Global Terrorism Database, 1970-2017*

*11 - USGS, 1900-2021*
*12 - USACE, 2021*
*13 - NE DHHS, May 12, 2021(COVID only)*

The following table provides a summary of hazards that have or have the potential to affect each jurisdiction in the county. Each jurisdiction was evaluated for previous hazard occurrence and the probability of future hazard events on each of the hazards profiled in this plan. The evaluation process was based on data collected and summarized in the previous table; previous impacts or the potential for impacts to infrastructure, critical facilities, people, and the economy; and the proximity to certain hazards such as dams and levees. There are no mapped levees in the county.

**Table SHE.11: Sherman County and Communities Hazard Matrix**

| Jurisdiction | Ag Disease | Dam Failure | Drought & Extreme Heat | Earthquakes | Flooding | Grass/ Wildfire | Hazardous Materials | Levee Failure | Public Health Emergency | Severe Thunderstorms | Severe Winter Storms | Terrorism | Tornadoes & High Winds |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sherman County** | | X | | | X | X | | | | X | X | | X |
| **Ashton** | | | | | X | | | | | X | X | | X |
| **Hazard** | | | | | X | | | | | X | X | | X |
| **Litchfield** | | | | | X | | X | | | X | X | | X |
| **Loup City** | X | | | | X | | | | | X | | | X |
| **Rockville** | | | | | X | | | | | X | X | | X |

# Hazard Prioritization

For additional discussion regarding area wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the county's capabilities.

## Dam Failure

There are six dams in Sherman County. One of these dams, Sherman Dam, has been identified as a high hazard dam. According to the Sherman County LEOP, if Sherman Dam were to fail, approximately three percent of the population of the Sherman County would be affected. It would affect the Middle Loup River as far as St. Paul. In Sherman County, the affected area would be slightly greater than the 100-year flood plain with the greatest effect on Ashton, which would approach 100 percent inundation. According to the local planning team, there is no emergency housing available for affected residents, and failure of the dam would likely cause loss of housing, lives and income. The Sherman Reservoir is managed by the Farwell Irrigation District.

**Table SHE.16: Dams in Sherman County**

| | NUMBER OF DAMS | MINIMAL | LOW | SIGNIFICANT | HIGH |
|---|---|---|---|---|---|
| **SHERMAN COUNTY** | 6 | 0 | 5 | 0 | 1 |
| **PLANNING AREA** | 135 | 5 | 119 | 6 | 5 |

*Source: NeDNR, 2017*

**Table SHE.17: High Hazard Dams**

| NIDID | DAM NAME | LOCATION |
|---|---|---|
| **NE01077** | Sherman Dam | Sherman Reservoir |

*Source: NeDNR, 2017*

## Flooding

Sherman County participates in the NFIP but does not have any policies in-force. There are no repetitive flood loss properties in unincorporated areas of Sherman County. Local concerns regarding this hazard include the loss of housing, lives, and income. Sherman County has been awarded FEMA grant funds in the past for road improvements to mitigate flooding impacts. According to NCEI data, there have been 12 flooding events across the county from 1996 to 2019 that caused over $3 million in property damages. According to the local planning team, the power lines around Sherman County reservoir are all buried.

## Grass/Wildfire

The NFS reported five grass/wildfires in Sherman County from 2000-2012. In December 2016, a fire started in southern Valley County and traveled into Sherman County. Region 26 Emergency Management sent out CodeRed alert messages and residents were evacuated on the north side of the Sherman Reservoir. This fire burned 6,000 acres but did not result in any injuries or damages to structures. The local planning team indicated that response resources are mostly sufficient but some smaller fire departments may not have adequate supplies.

## Severe Thunderstorms

Local concerns include the potential for property damages, power outages, and the risk of secondary hazards such as flooding and wildfires. The high percentage of vacant housing may increase the vulnerability of the County as vacant housing is less likely to be maintained. According to NCEI data, there have been 186 severe thunderstorm events in the county from 1996 to 2019 that have caused over $6 million in property damages.

## Severe Winter Storms

Local concerns focus on power outages, damages to infrastructure, and the hindrance of transportation routes due to severe winter storms. According to the NCEI, severe winter storms have caused $955,000 in property damages from 1996 to 2015. Sherman County has a much higher percentage of elderly people than the Nebraska average. Elderly populations have an increased vulnerability to the impacts of severe winter storms. During a major winter storm in 2018, a Region 26 tower went down and was destroyed. The county handles snow removal and resources are sufficient at this time.

### Tornadoes and High Winds

Local concerns focus on the lack of shelter for residents, potential destruction of structures, and potential loss of life caused by tornadoes. According to the NCEI, there have been eight tornadic events in Sherman County from 1996 to 2015 that have caused a total of $200,000 in property damages. The largest tornadic event in Sherman County occurred in June 2011. This EF2 tornado with an estimated wind speed of 120 miles per hour touched down six miles southwest of Rockville, moving north. The tornadic event destroyed a pole building and damaged a home and trees. The local planning team indicated that Sherman County experienced some high winds in July 2021. The local planning team indicated that there are some shelters built at the Sherman Reservoir.

# Mitigation Strategy

### Continued Mitigation Actions

| OBJECTIVE | BACKUP AND EMERGENCY GENERATORS |
|---|---|
| DESCRIPTION | 1. Identify and evaluate current backup and emergency generators<br>2. Obtain additional generators based on identification and evaluation<br>3. Provide portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $20,000 to $75,000+ per generator |
| POTENTIAL FUNDING | Sherman County General Fund, HMGP, PDM |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Sherman County Emergency Manager |
| STATUS | This project has not yet been started. |

| OBJECTIVE | COMMUNITY EDUCATION AND AWARENESS |
|---|---|
| DESCRIPTION | 1. Establish a community education program to increase awareness related to household level mitigation actions<br>2. Utilize outreach projects and the distribution of maps<br>3. Purchasing equipment such as projectors and laptops to facilitate presentation of information |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $3,000+ |
| POTENTIAL FUNDING | Sherman County General Fund |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Sherman County Emergency Manager |
| STATUS | This project has not yet been started. |

| OBJECTIVE | IMPROVE EMERGENCY COMMUNICATIONS |
|---|---|
| DESCRIPTION | 1. Develop/Improve Emergency Communication Action plan<br>2. Implement Emergency Communication Action Plan<br>3. Establish inner-operable communications<br>4. Obtain/Upgrade Emergency Communication Facilities/Equipment<br>5. Obtain/Upgrade/Distribute Weather Warning Radios |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $5,000+ |
| POTENTIAL FUNDING | Sherman County General Fund, HMGP, PDM |
| TIMELINE | 2-5 Years |
| PRIORITY | Medium |
| LEAD AGENCY | Sherman County Emergency Manager |
| STATUS | This project has not yet been started. |

| OBJECTIVE | IMPROVE WARNING SYSTEMS |
|---|---|
| DESCRIPTION | 1. Evaluate current warning systems<br>2. Improve warning systems/develop new warning system<br>3. Obtain/Upgrade warning system equipment and methods<br>4. Conduct evaluation of existing alert sirens for replacement or placement of new sirens<br>5. Identify location of weather warning radios<br>6. Improve weather radio system<br>7. Obtain/Upgrade weather radios |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | Varies by project |
| POTENTIAL FUNDING | Sherman County General Fund, HMGP, PDM |
| TIMELINE | 2-5 Years |
| PRIORITY | Medium |
| LEAD AGENCY | Sherman County Emergency Manager |
| STATUS | This project has not yet been started. Sherman Reservoir was identified as a location in need of additional sirens. |

| OBJECTIVE | REDUCE STREAM & DRAINAGE BOTTLENECKS/FLOW RESTRICTIONS |
|---|---|
| DESCRIPTION | 1. Evaluate restrictions and measures to prevent or reduce flood damage<br>2. Implement appropriate nonstructural or structural methods on an emergency or permanent basis (monitoring or warning systems, ice jam dusting, excavation or blasting, reshaping channel, tree and debris removal, acquire property and/or construct additional channels or other flow improvements) |
| HAZARD(S) ADDRESSED | Flooding |
| ESTIMATED COST | $10,000 to $50,000 for studies; $10,000+ for more to enlarge ditches, culverts, pipes; unknown for stream channel, crossing structures or bridge improvements |
| POTENTIAL FUNDING | Sherman County General Fund, HMGP, PDM |
| TIMELINE | 5+ Years |
| PRIORITY | Medium |
| LEAD AGENCY | Sherman County Emergency Manager |
| STATUS | The county is currently working on identifying specific areas of concern which need to be improved, specifically after 2019 floods. |

| OBJECTIVE | REDUCE DAMAGES IN FLOODPLAIN |
|---|---|
| DESCRIPTION | 1. Evaluate repetitive loss or potential loss structures located in floodplain<br>2. Acquire and relocate or demolish flood prone property or elevate flood prone property<br>3. Elevate equipment vulnerable to flooding |
| HAZARD(S) ADDRESSED | Flooding |
| ESTIMATED COST | Varies by number and size of structures |
| POTENTIAL FUNDING | Sherman County General Fund, HMGP, PDM, FMA |
| TIMELINE | 5+ Years |
| PRIORITY | Low |
| LEAD AGENCY | Sherman County Emergency Manager |
| STATUS | This project has not yet been started. |

| OBJECTIVE | PUBLIC SAFE ROOMS & POST-DISASTER STORM SHELTERS |
|---|---|
| DESCRIPTION | 1. Identify and evaluate existing safe rooms and/or storm shelters<br>2. Improve and/or construct safe rooms and/or storm shelters<br>3. Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, schools, etc. |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $150/sf for retrofit; $300/sf for new construction |
| POTENTIAL FUNDING | Sherman County General Fund, HMGP, PDM |
| TIMELINE | 2-5 Years |
| PRIORITY | Medium |
| LEAD AGENCY | Sherman County Emergency Manager |
| STATUS | This project has not yet been started. |

# Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The local planning team is responsible for reviewing and updating this profile as changes occur or after a major event. The local planning team will include the County Board of Commissioners, County Emergency Management, Highway Superintendent, and Planning and Zoning. The plan will be reviewed no less than annually and will include the public in the review and revision process by sharing information at local council meetings and on the county website.

# COMMUNITY PROFILE

# VILLAGE OF ASHTON

**Lower Loup Natural Resources District**
**Hazard Mitigation Plan 2022**

# Local Planning Team

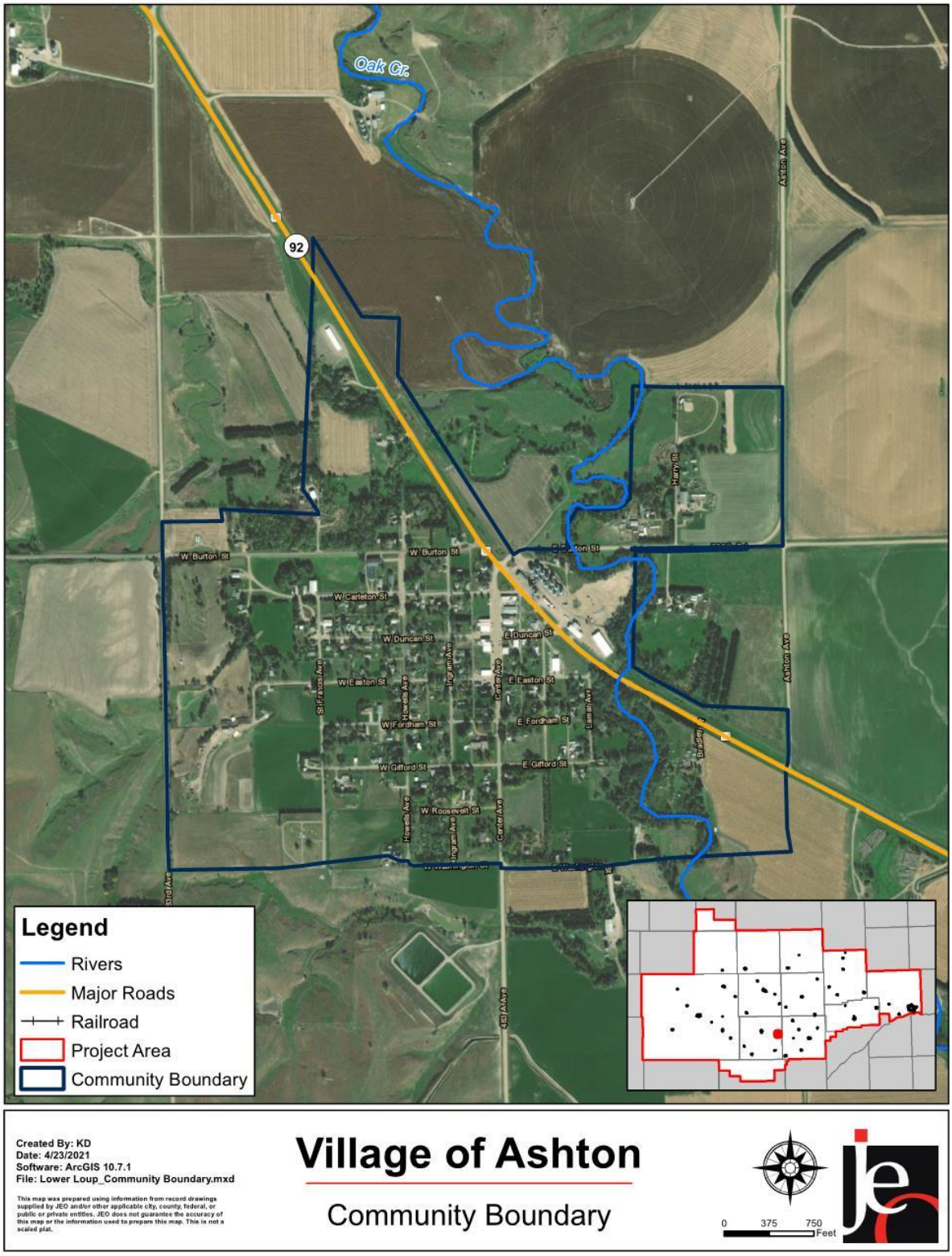
**Table ASH.1: Village of Ashton Local Planning Team**

| NAME | TITLE | JURISDICTION |
|---|---|---|
| **CRAIG KAMLER** | Clerk, Utility Supt., Fire Chief | Village of Ashton |

# Location and Geography

The Village of Ashton is located in the eastern portion of Sherman County. The Village of Ashton covers an area of 0.59 square miles. There are no major water ways near Ashton. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. Most of Ashton lies in the dissected plains topographic region, and is surrounded by agricultural fields.

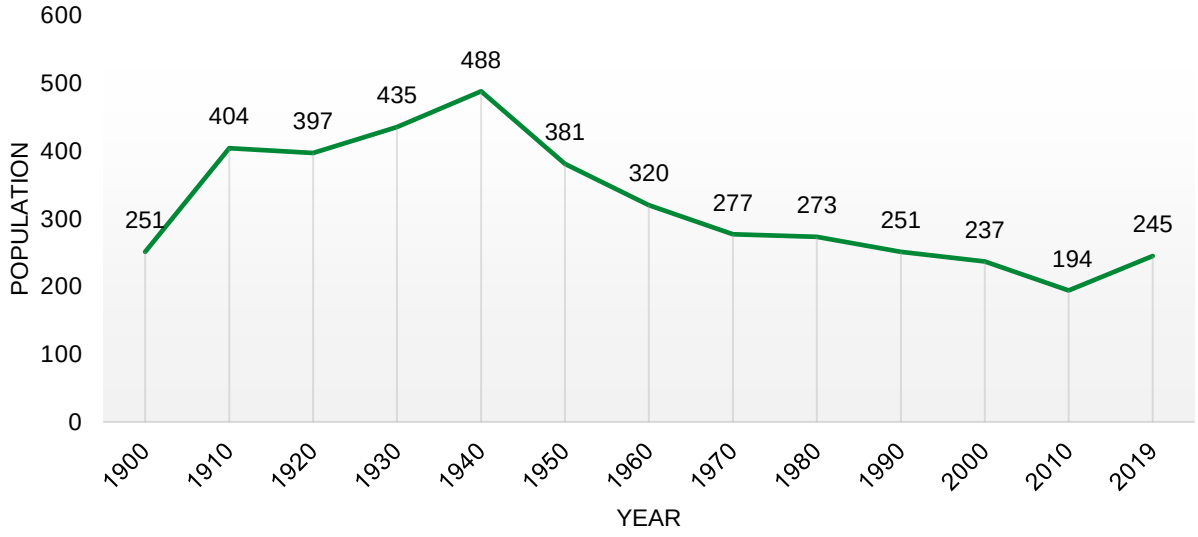
**Figure ASH.1: Village of Ashton Jurisdictional Boundary**



# Demographics

The following figure displays the historical population trend from 1900 to 2019 (estimated). This figure indicates that the population of Ashton experienced a steady decline from 1940 through 2010. Since 2010, however, the population has been increasing. Increasing populations are associated with increased hazard mitigation and emergency planning requirements for development. Increasing populations can also contribute to increasing tax revenues, allowing communities to pursue additional mitigation projects. The Village's population accounted for 8% of Sherman County's Population in 2019.

**Figure ASH.2: Ashton Population 1900-2019**




*Source: U.S. Census Bureau*[12]

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Ashton' population was:

- **Younger.** The median age of Ashton was 39.3 years old in 2019, compared with the County average of 49.7 years. Ashton's population has grown younger since 2010, when the median age was 43.8 years old. Ashton had a larger proportion of people under 20 years old (25.2%) than the County (22.4%).[13]
- **Less ethnically diverse.** In 2010, 0% of Ashton's population was Black or African American, 0% was other races, and 0% were two or more races. By 2019, only 0% of Ashton's population was two or more races. During that time, Sherman County went from 0% to 0% American Indian, 0% to 0.8% other races and 1.8% to 0.9% two or more races from 2010 to 2018 respectively.[14]
- **More likely to be at the federal poverty line.** The poverty rate of all persons in Ashton (10.9%) was higher than the County (9.5%) in 2019.[15]

12 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]
13 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]
14 United States Census Bureau. "2019 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]
15 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

# Employment and Economics

The community's economic base is a mixture of industries. In comparison to Sherman County, Ashton's economy had:

- **Different mix of industries**. Employment sectors accounting for 10% or more of employment in Ashton included Agriculture, Retail, Transportation, and Education. In comparison Sherman County's included Agriculture, Manufacturing, Retail, and Education.[16]
- **Lower household income**. Ashton's median household income in 2019 ($40,000) was about $9,500 lower than the County ($50,781).[17]
- **Fewer long-distance commuters**. About 28.8% percent of workers in Ashton commuted for fewer than 15 minutes, compared with about 42.0% of workers in Sherman County. About 24.3% of workers in Ashton commute 30 minutes or more to work, compared to about 34.8% of the County workers.[18]

## Major Employers

Major employers in the Village of Ashton include Trotter Fertilizer, Ashton State Bank, and White Way Garage. The local planning team noted that approximately sixty percent of residents commute to the surrounding communities of Grand Island, Kearney, Loup City, and St. Paul.

# Housing

In comparison to the Sherman County, Ashton's housing stock was: [19]

- **More owner occupied.** About 79.1% of occupied housing units in Ashton are owner occupied compared with 77.2% of occupied housing in Sherman County in 2019.
- **Larger share of aged housing stock**. Ashton has more houses built prior to 1970 than the county (88.2% compared to 64.5%).
- **Fewer multi-family homes**. The predominant housing type in the Village is single family detached and Ashton contains less multifamily housing with five or more units per structure than the County (0.0% compared to 0.1%). About 96.4% of housing in Ashton was single-family detached, compared with 80.8% of the County's housing. Ashton has a smaller share of mobile and manufactured housing (3.6%) compared to the County (15.3%)

The local planning team noted that there are approximately three mobile homes in the community. This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

16 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
17 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
18 United States Census Bureau. "2019 American Fact Finder: s0802: Means of Transportation to Work by Selected Characteristics." [database file]
19 United States Census Bureau. "2019 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

# Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Ashton has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a five member village board and the following offices: clerk/treasurer, sheriff, utility superintendent, and volunteer fire department.

# Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

**Table ASH.2: Capability Assessment**

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| PLANNING & REGULATORY CAPABILITY | Comprehensive Plan | Yes |
| | Capital Improvements Plan | No |
| | Economic Development Plan | No |
| | Local Emergency Operational Plan | County |
| | Floodplain Ordinance | Yes |
| | Zoning Ordinance | Yes |
| | Subdivision Regulation/Ordinance | Yes |
| | Building Codes | No |
| | Chief Building Official | No |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | Yes |
| | National Flood Insurance Program | Yes |
| | Community Rating System | No |
| | Other (if any) | Yes |
| ADMINISTRATIVE & TECHNICAL CAPABILITY | Planning Commission | Yes |
| | Floodplain Administration | Yes |
| | GIS Capabilities | No |
| | Civil Engineering | No |
| | Local Staff Who Can Assess Community's Vulnerability to Hazards | Yes |
| | Grant Manager | No |
| | Mutual Aid Agreement | yes |
| | Other (if any) | Yes |
| FISCAL CAPABILITY | 1 & 6 Year Plan | Yes |
| | Applied for grants in the past | Yes |
| | Awarded a grant in the past | Yes |
| | Authority to Levy Taxes for Specific Purposes such as Mitigation Projects | Yes |
| | Gas/Electric Service Fees | No |
| | Storm Water Service Fees | No |
| | Water/Sewer Service Fees | Yes |

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| | Development Impact Fees | No |
| | General Obligation Revenue or Special Tax Bonds | No |
| | Other (if any) | |
| EDUCATION AND OUTREACH | Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc. | No |
| | Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | Yes |
| | Natural Disaster or Safety related school programs | No |
| | StormReady Certification | No |
| | Firewise Communities Certification | No |
| | Tree Village USA | No |
| | Other (if any) | |

**Table BAR.3: Overall Capability**

| OVERALL CAPABILITY | 2017 PLAN | 2022 PLAN LIMITED/MODERATE/HIGH |
|---|---|---|
| FINANCIAL RESOURCES NEEDED TO IMPLEMENT MITIGATION PROJECTS | Limited | Limited |
| STAFF/EXPERTISE TO IMPLEMENT PROJECTS | Limited | Limited |
| COMMUNITY SUPPORT TO IMPLEMENT PROJECTS | Limited | Limited |
| TIME TO DEVOTE TO HAZARD MITIGATION | Limited | Limited |

# Plan Integration

Communities have several planning documents that discuss or relate to hazard mitigation. Each applicable planning mechanism is listed below along with a short description of how it is integrated with the hazard mitigation plan. Participating jurisdictions will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

## Grants and Funding

Ashton's municipal funds have remained the same over the last five years and are limited to maintaining current facilities and systems. Municipal funds also are already dedicated to repairing streets. A project identified in the hazard mitigation plan, clearing culverts and ditches, is currently included in the municipal budget. While Ashton has not applied for grants in the past five years, the village has been awarded USDA and Community Development Block Grants in the past for water and sewer improvements.

## Comprehensive Plan

The Village of Ashton plans to update their comprehensive plan and zoning regulations along with the Sherman County Comprehensive Plan update. Currently, the village's comprehensive plan does not address natural hazards, however, the plan and zoning regulations do limit development in the floodplain and wildland urban interface.

## Ordinances and Regulations

The village's zoning regulations will be updated with the comprehensive plan as Sherman County conducts their comprehensive plan update.

## Building Codes

The village does not have its own building codes in effect. The village utilizes county or state zoning and building code regulations as applicable.

### Sherman County Local Emergency Operations Plan (2020)

The Village of Hazard is an annex in the Sherman County Local Emergency Operations Plan (LEOP). The LEOP establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

### Central Platte Community Wildfire Protection Plan (2019)

The Nebraska Forest Service updated the Central Platte Community Wildfire Protection Plan (CWPP), which includes Sherman County in October 2019. The purpose of the CWPP is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. This document is updated every five years.

### Other Plans

Ashton also has a Wellhead Protection Plan that identifies the areas vulnerable to water contamination and includes well setback requirements.

# Future Development Trends

In the past five years, Ashton has demolished three houses and part of a business. Thriftway Lumber closed and no new businesses have opened in the village. In the next five years three new houses may be developed in the central and southeast parts of the community. The local planning team indicated that the census estimates are accurate, and that Ashton's population is declining due to an aging community and lack of employment opportunities.

# Community Lifelines

## Transportation

Ashton's major transportation corridors include Highway 92, which runs east-west, through the northwestern portion of Ashton. N-92 accommodates on average 880 vehicles per day, 100 of which are heavy commercial vehicles. Ashton does not have rail lines. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

## Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are two chemical storage sites throughout Ashton which house hazardous materials. In the event of a chemical spill, the local fire department may be the first to respond to the incident, but response resources are not sufficient.

**Table ASH.4: Chemical Storage Fixed Sites**

| FACILITY NAME | ADDRESS | LOCATED IN FLOODPLAIN? |
|---|---|---|
| **ASHTON FEED & GRAIN** | 100 Highway 92 E | Yes |
| **AURORA CO-OP ELEVATOR COMPANY** | 448 W Burton | Yes |

*Source: Nebraska Department of Environment and Energy*[20]

## Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the previous planning process and updated by the local planning team as a part of this plan update.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

**Table ASH.5: Ashton Critical Facilities**

| CF # | COMMUNITY LIFELINE | NAME | SHELTER (Y/N) | GENERATOR (Y/N) | FLOODPLAIN (Y/N) |
|---|---|---|---|---|---|
| **1** | Food, Water, and Shelter | Well and water tower | N | N | N |
| **2** | Food, Water, and Shelter | Well | N | N | N |
| **3** | Food, Water, and Shelter | Sewer System | N | N | N |
| **4** | Food, Water, and Shelter | Sewage Lagoons | N | Y | N |
| **5** | Food, Water, and Shelter | St. Francis Parish Hall | Y | Y* | N |
| **6** | Energy | Gas Station | N | Y* | N |
| **7** | Safety and Security | Village Hall and Fire Station | N | Y* | N |
| **8** | Food, Water, and Shelter | Community Center | Y | Y* | N |

20 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed August 2020.

| CF # | COMMUNITY LIFELINE | NAME | SHELTER (Y/N) | GENERATOR (Y/N) | FLOODPLAIN (Y/N) |
|---|---|---|---|---|---|
| **9** | Food, Water, and Shelter | Sewer Lift Station | N | Y | N |

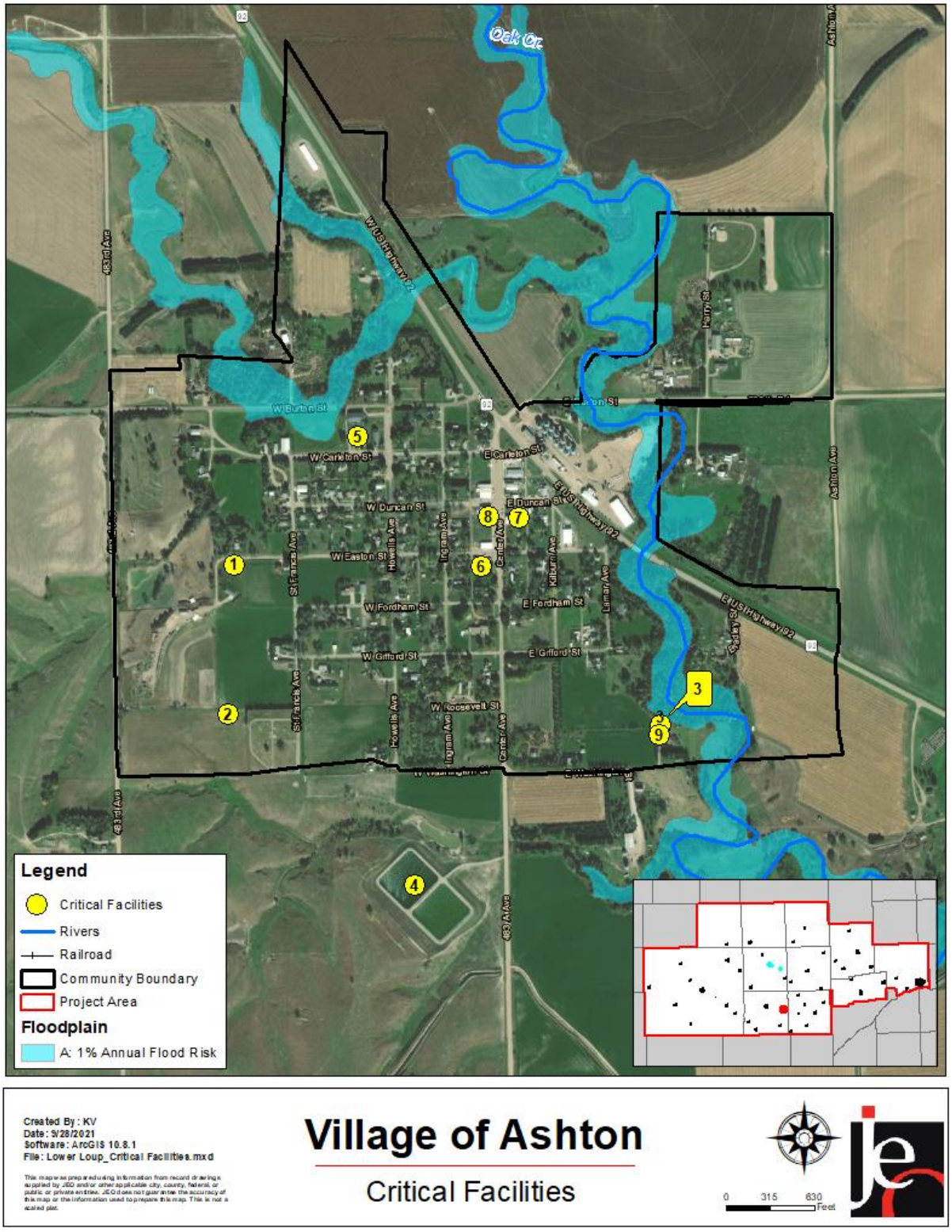
**Served with portable generator*

Although not listed in the table above, critical infrastructure also include power substations, cell towers, and alert sirens in the community. These assets are typically owned and maintained by other agencies and are not the responsibility of the jurisdiction.

### Health and Medical Facilities

No medical and health facilities are located within the village.

**Figure ASH.3: Ashton Critical Facilities**



# Parcel Improvements and Valuation

GIS parcel data as of December 2020 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

**Table ASH.7: Ashton Parcel Valuation**

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Value of Improvements in Floodplain | Percent of Improvements in Floodplain |
|---|---|---|---|---|---|
| 220 | 134 | 6,249,225 | 10 | 718,895 | 7.46% |

*Source: County Assessor, GIS Workshop*

# Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment.* A full list of historical hazard occurrences can be found in the Sherman County jurisdictional profile. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

## Flooding

Ashton participates in the NFIP but does not have any policies in-force. There are no repetitive flood loss properties in the Village of Ashton. Flash flooding was identified as a larger concern to the community than riverine flooding. The southeast and central part of town was identified as having poor stormwater drainage, but some improvements have been made to minimize impacts.

In October 2013, a six-inch rain occurred within approximately an hour. Some property in the southwest part of town didn't have a suitable crop growing, which led to dirt and debris being washed into a residential area. During the major flooding in 2019, water moved downhill and overtopped a ditch, flooding the yard of a home on the southwest side of town. The water broke a basement window and poured water into the basement. During the event no evacuations were necessary. The village plans to keep ditches and culverts clean to mitigate flood impacts in the future.

## Severe Thunderstorms (includes hail)

Critical municipal records are protected with surge protectors on electronic devices. Ashton uses portable generators for critical facilities. The village has made a significant effort to remove hazardous trees in the past five years.

Hail has the potential to cause widespread property damage. Past hail events have caused damages to roofs across town and damage to critical facilities. Some of the community's critical facilities have been fitted with hail resistant building materials. Ashton's critical facilities are

insured for hail damage. The community also has a local tree board that can identify hail damages to trees.

### Severe Winter Storms

In December 2006, an ice storm took out the incoming power to village. Residents were without power for 30 hours. NPPD then installed a generator to supply the town for 4-5 days before the power was restored. The storm also damaged a lot of trees. Only approximately 5% of power lines are buried within the village. Village maintenance is in charge of removing snow in the community. Snow removal resources have been deemed sufficient for local needs according to the local planning team.

### Tornadoes and High Winds

Tornadoes have the potential to cause significant property damages and loss of life. Ashton has warning sirens that were activated manually or automatically from the emergency dispatch center. Depending on the wind direction, some areas cannot always hear the sirens. Ashton has identified safe rooms, however none of them are FEMA certified. Emergency Management offers Code Red warning system. In the event of a disaster, the community has mutual aid agreements with: Loup City, Rockville, Boelus, Farwell, Elba, and North Loup.

Ashton has many trees that are getting older and infested with pests and diseases, making them especially susceptible to high winds. Past high wind events have caused significant tree damages. Large wind storms continue to knock down branches and some whole trees which damage buildings and power lines. The village is working on removing hazardous trees from residential areas in town to mitigate against potential impacts. The village plans to keep up with tree removal and plant new ones in the future.

# Mitigation Strategy

## Continued Mitigation Actions

| OBJECTIVE | IMPROVE FLOOD AND DAM FAILURE WARNING SYSTEM |
|---|---|
| DESCRIPTION | 4. Evaluate current flood/water level alert and dam failure warning alert system<br>5. Implement improved alert measures<br>6. Increase/stricter inspection of dams |
| HAZARD(S) ADDRESSED | Flooding, Dam Failure |
| ESTIMATED COST | $5,000 + |
| POTENTIAL FUNDING | HMGP, Local Tax |
| TIMELINE | 2-5 Years |
| PRIORITY | Low |
| LEAD AGENCY | Village Board |
| STATUS | This project is not yet started. |

| OBJECTIVE | IMPROVE DRAINAGE |
|---|---|
| DESCRIPTION | 1. Improve storm sewers and drainage patterns in and around the community<br>2. Deepen drainage ditches and clean out culverts |
| HAZARD(S) ADDRESSED | Flooding |
| ESTIMATED COST | $5,000 + |
| POTENTIAL FUNDING | Local Tax |
| TIMELINE | 2-5 Years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This project is in the works. The village has cleared some of its creeks, ditches, and culverts. |

| OBJECTIVE | PUBLIC SAFE ROOMS & POST-DISASTER STORM SHELTERS |
|---|---|
| DESCRIPTION | 1. Identify and evaluate existing safe rooms and/or storm shelters<br>2. Improve and/or construct safe rooms and/or storm shelters<br>3. Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, schools, etc. |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $150/sf for retrofit; $300/sf for new construction |
| POTENTIAL FUNDING | HMGP, Local Tax |
| TIMELINE | 1 Year |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This project is in the works. The village has identified some main structures to serve as storm shelters. Village leaders are working to clear those structures out and prepare them for when they are needed. |

| OBJECTIVE | STORM SHELTER IDENTIFICATION |
|---|---|
| DESCRIPTION | 1. Identify any existing private or public storm shelters |
| HAZARD(S) ADDRESSED | High Winds |
| ESTIMATED COST | $0, Staff Time |
| POTENTIAL FUNDING | Local Tax |
| TIMELINE | 1 Years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This project is in the works. The village has identified some main structures to serve as storm shelters. Village leaders are working to clear those structures out and prepare them for when they are needed. |

# Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms. The Village Board will bi-annually review the village profile and advertise the review and its findings in the Board meeting minutes.

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# COMMUNITY PROFILE

# VILLAGE OF HAZARD

**Lower Loup Natural Resources District**
**Hazard Mitigation Plan 2022**

# Local Planning Team

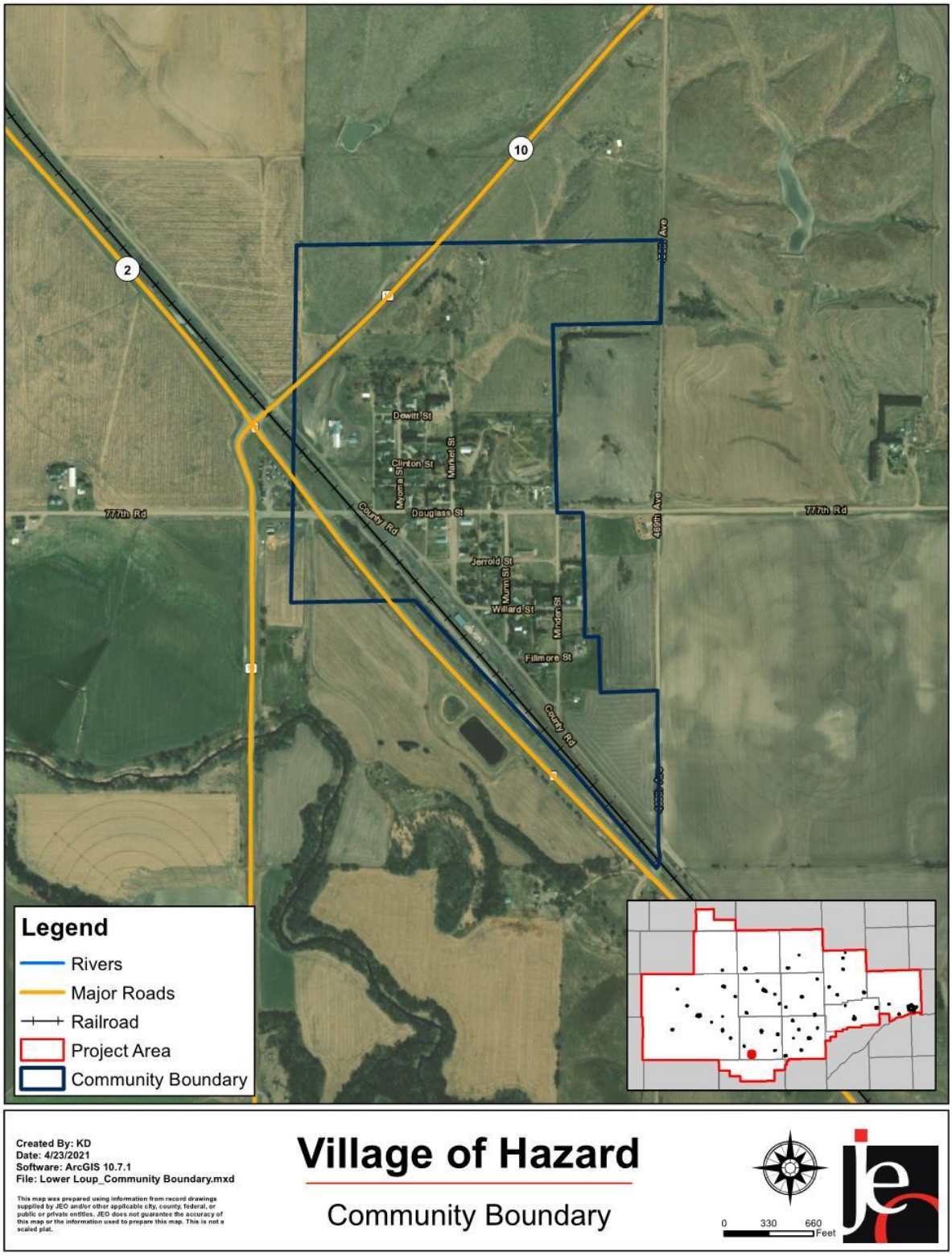
**Table HAZ.1: Village of Hazard Local Planning Team**

| NAME | TITLE | JURISDICTION |
|---|---|---|
| **JUDY HUGHES** | Village Clerk | Village of Hazard |

# Location and Geography

The Village of Hazard is located in the southwestern portion of Sherman County. The Village of Hazard covers an area of 0.26 square miles. Mud Creek runs along the western side of the village. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. Most of Hazard lies in the dissected plains topographic region, and is surrounded by agricultural fields.

**Figure HAZ.1: Village of Hazard Jurisdictional Boundary**

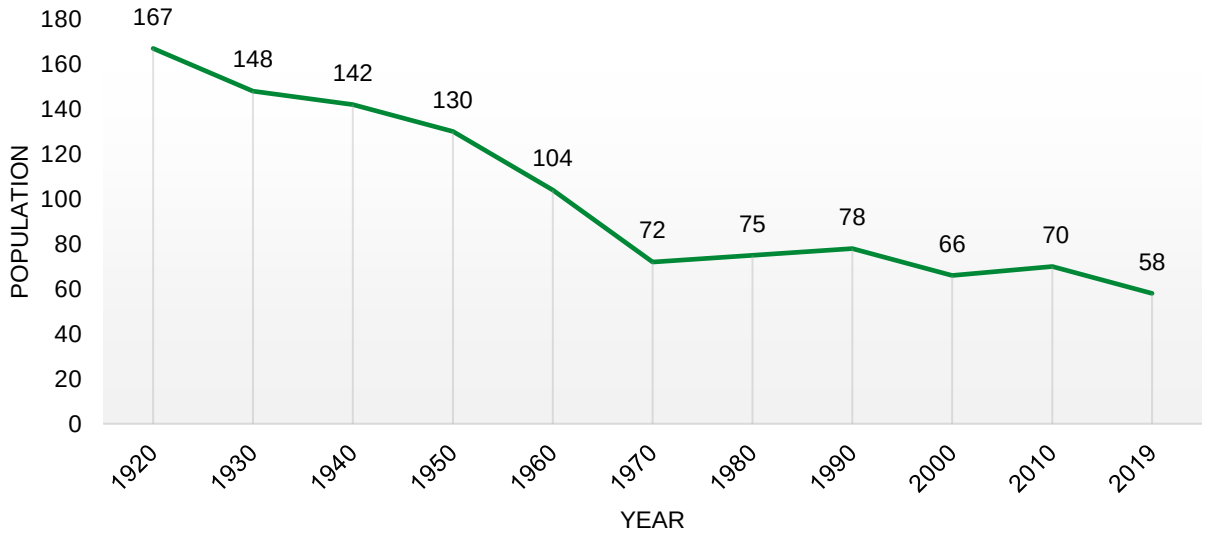


# Demographics

The following figure displays the historical population trend from 1920 to 2019 (estimated). This figure indicates that the population of Hazard experienced a decline from 1920 through 1970. During the 1980s and 1990s the population grew, declined in 2000, and then grew again in 2010. Since 2010, however, the population has been in a steady decline. However, the local planning team noted the population of Hazard is more likely to remain around 70 residents from the 2010 Census. Future updates to this plan should review the 2020 Census for an analysis of population trends.

This is notable for hazard mitigation because communities with declining population may also have a higher level of unoccupied housing that is not being up kept. Furthermore, areas with declining population may be less prone to pursuing residential/commercial development in their areas, which may reduce the number of structures vulnerable to hazards in the future. Decreasing populations can also represent decreasing tax revenue for the community which could make implementation of mitigation actions more fiscally challenging. The Village's population accounted for 2% of Sherman County's Population in 2019.

**Figure HAZ.2: Hazard Population 1920-2019**




Source: U.S. Census Bureau[21]

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Hazard' population was:

- **Younger.** The median age of Hazard was 35.5 years old in 2019, compared with the County average of 49.7 years. Hazard's population has grown younger since 2010, when the median age was 41.6 years old. Hazard had a smaller proportion of people under 20 years old (8.6%) than the County (22.4%).[22]
- **Less ethnically diverse.** In 2010, 0% of Hazard's population was Black or African American, 0% was other races, and 0% were two or more races. By 2019, only 0% of Hazard's population was two or more races. During that time, Sherman County went from

21 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]
22 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]

0% to 0% American Indian, 0% to 0.8% other races and 1.8% to 0.9% two or more races from 2010 to 2019 respectively.[23]

- **Less likely to be at the federal poverty line.** The poverty rate of all persons in Hazard (0%) was lower than the County (9.5%) in 2019.[24]

# Employment and Economics

The community's economic base is a mixture of industries. In comparison to Sherman County, Hazard's economy had:

- **Similar mix of industries**. Employment sectors accounting for 10% or more of employment in Hazard included Agriculture, Manufacturing, and Education. In comparison Sherman County's included Agriculture, Manufacturing, Retail, and Education.[25]
- **Lower household income**. Hazard's median household income in 2019 ($35,625) was about $15,000 lower than the County ($50,781).[26]
- **More long-distance commuters**. About 30.0% percent of workers in Hazard commuted for fewer than 15 minutes, compared with about 42.0% of workers in Sherman County. About 53.4% of workers in Hazard commute 30 minutes or more to work, compared to about 34.8% of the County workers.[27]

## Major Employers

Major employers in the village include Trotter Fertilizer, Brad Rasmussen Construction, Joe's Motor Company, Nilsen Hay Company. Many residents also commute to the surrounding communities for employment including Ravenna and Kearney.

# Housing

In comparison to the Sherman County, Hazard's housing stock was: [28]

- **More owner occupied.** About 82.1% of occupied housing units in Hazard are owner occupied compared with 77.2.0% of occupied housing in Sherman County in 2019.
- **Larger share of aged housing stock**. Hazard has more houses built prior to 1970 than the county (79.5% compared to 64.5%).
- **Fewer multi-family homes**. The predominant housing type in the Village is single family detached and Hazard contains less multifamily housing with five or more units per structure than the County (0.0% compared to 0.1%). About 92.3% of housing in Hazard was single-family detached, compared with 80.8% of the County's housing. Hazard has a smaller share of mobile and manufactured housing (7.7%) compared to the County (15.3%). The local planning team noted there are two anchored trailer homes and one on wheels.

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further,

23 United States Census Bureau. "2019 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]
24 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
25 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
26 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
27 United States Census Bureau. "2019 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]
28 United States Census Bureau. "2019 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

# Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Hazard has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The Village has a five-member village board, a village clerk, and a volunteer fire department.

# Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

**Table HAZ.2: Capability Assessment**

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| **PLANNING & REGULATORY CAPABILITY** | Comprehensive Plan | *Yes* |
| | Capital Improvements Plan | *No* |
| | Economic Development Plan | *No* |
| | Local Emergency Operational Plan | *County* |
| | Floodplain Ordinance | *Yes* |
| | Zoning Ordinance | *Yes* |
| | Subdivision Regulation/Ordinance | *County* |
| | Building Codes | *No* |
| | Chief Building Official | *No* |
| | Floodplain Management Plan | *No* |
| | Storm Water Management Plan | *No* |
| | National Flood Insurance Program | *No* |
| | Community Rating System | *No* |
| | Other (if any) | |
| **ADMINISTRATIVE & TECHNICAL CAPABILITY** | Planning Commission | *No* |
| | Floodplain Administration | *No* |
| | GIS Capabilities | *Yes* |
| | Civil Engineering | *Contractor* |
| | Local Staff Who Can Assess Community's Vulnerability to Hazards | *Yes* |
| | Grant Manager | *No* |
| | Mutual Aid Agreement | *No* |
| | Other (if any) | |
| **FISCAL CAPABILITY** | 1 & 6 Year Plan | *Yes* |
| | Applied for grants in the past | *Yes* |
| | Awarded a grant in the past | *Yes* |
| | Authority to Levy Taxes for Specific Purposes such as Mitigation Projects | *Yes* |

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| | Gas/Electric Service Fees | *No* |
| | Storm Water Service Fees | *No* |
| | Water/Sewer Service Fees | *Yes* |
| | Development Impact Fees | *No* |
| | General Obligation Revenue or Special Tax Bonds | *Yes* |
| | Other (if any) | |
| **EDUCATION AND OUTREACH** | Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.<br>Ex. CERT Teams, Red Cross, etc. | |
| | Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | *No* |
| | Natural Disaster or Safety related school programs | *No* |
| | StormReady Certification | *No* |
| | Firewise Communities Certification | *No* |
| | Tree City USA | *No* |
| | Other (if any) | |

**Table HAZ.3: Overall Capability**

| OVERALL CAPABILITY | LIMITED/MODERATE/HIGH |
|---|---|
| **FINANCIAL RESOURCES NEEDED TO IMPLEMENT MITIGATION PROJECTS** | Limited |
| **STAFF/EXPERTISE TO IMPLEMENT PROJECTS** | Limited |
| **COMMUNITY SUPPORT TO IMPLEMENT PROJECTS** | Moderate |
| **TIME TO DEVOTE TO HAZARD MITIGATION** | Limited/Moderate |

# Plan Integration

Communities have several planning documents that discuss or relate to hazard mitigation. Each applicable planning mechanism is listed below along with a short description of how it is integrated with the hazard mitigation plan. Participating jurisdictions will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

## Annual Municipal Budget

Hazard's annual budget is currently limited to maintaining current facilities and systems. Funds in the village have increased only slightly in recent years; however, these increases are then used to adjust for increased inflation costs. The village currently has a USDA loan from a sewer improvement project in the 1990s. Fuel tax funds have decreased in the past few years due to the COVID-19 pandemic limiting traffic. Street maintenance and repair is currently the largest expenditure for the local budget. In the past the village has been awarded a DED grant to complete a drainage study, an energy grant for improvements to the village hall (insulation,

windows, doors, etc.), COVID relief grant funding used for a community cleanup day, as well as has received ARPA grant funds which is being used to install central air in the village hall and may be used for other projects as well.

### Building Code (2012)

The building code sets standards for constructed buildings and structures. The village follows the 2012 International Building Code as adopted by the State of Nebraska.

### Comprehensive Plan (2009)

Sherman County has assisted in the development of a comprehensive plan for Sherman County and the villages of Rockville, Ashton, Litchfield, and Hazard. The plan is designed to guide the future actions of the village. It limits density in areas adjacent to known hazardous areas and encourages preservation of open space in hazard-prone areas. There are currently no plans to update the document.

### Floodplain Ordinance, Zoning Ordinance, Subdivision Regulations (2009)

The local zoning ordinance was developed alongside the Sherman County Comprehensive Plan with Ashton, Litchfield, Rockville and Hazard. The village does not have or maintain specific floodplain ordinances. These documents are reviewed and amended as needed.

### Sherman County Local Emergency Operations Plan (2020)

The Village of Hazard is an annex in the Sherman County Local Emergency Operations Plan (LEOP). The LEOP establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

### Central Platte Community Wildfire Protection Plan (2019)

The Nebraska Forest Service updated the Central Platte Community Wildfire Protection Plan (CWPP), which includes Sherman County in October 2019. The purpose of the CWPP is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. This document is updated every five years.

# Future Development Trends

In the past five years the village has seen some changes. One new home has been built in town and the restaurant in town has reopened. The population in town is relatively stable which the local planning team attributed to a steady inflow/outflow of residents. While some elderly residents have passed away, homes in town are quickly purchased by new families. At this time there are no new residential or commercial developments planned.

# Community Lifelines

## Transportation

Hazard's major transportation corridors include Highway 2, which runs southeast-northwest, along the western edge of Hazard, and Highway 10, which runs south-north along the northern portion of the village. N-2 accommodates on average 2,800 vehicles per day, 390 of which are heavy commercial vehicles, and N-10 accomodates on average 1,195 vehicles per day, 125 of which are heavy commercial vehicles. Other major routes of concern for Hazard include Douglass Street and County Road. The Burlington Northern Santa Fe has a rail line that runs along Highway 2 on the western side of Hazard. The railroad crossing in town has arms and no major accidents have occurred in town. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

## Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there is one chemical storage sites throughout Hazard which houses hazardous materials. In the case of hazardous materials spills the local fire department would be first to respond. The nearest HAZMAT team is located in Kearney.

**Table HAZ.4: Chemical Storage Fixed Sites**

| FACILITY NAME | ADDRESS | LOCATED IN FLOODPLAIN? |
|---|---|---|
| **TROTTER INC** | Jct Highways 10 & 2 | N |

Source: Nebraska Department of Environment and Energy[29]

## Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the previous planning process and updated by the local planning team as a part of this plan update.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

**Table HAZ.5: Hazard Critical Facilities**

| CF # | COMMUNITY LIFELINE | NAME | SHELTER (Y/N) | GENERATOR (Y/N) | FLOODPLAIN (Y/N) |
|---|---|---|---|---|---|
| **1** | Food, Water, and Shelter | Village Hall | N | N | N |
| **2** | Safety and Security | Fire Hall | N | N | N |
| **3** | Food, Water, and Shelter | Lagoons | N | N | N |
| **4** | Food, Water, and Shelter | Wells | N | N | N |

29 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed August 2020.

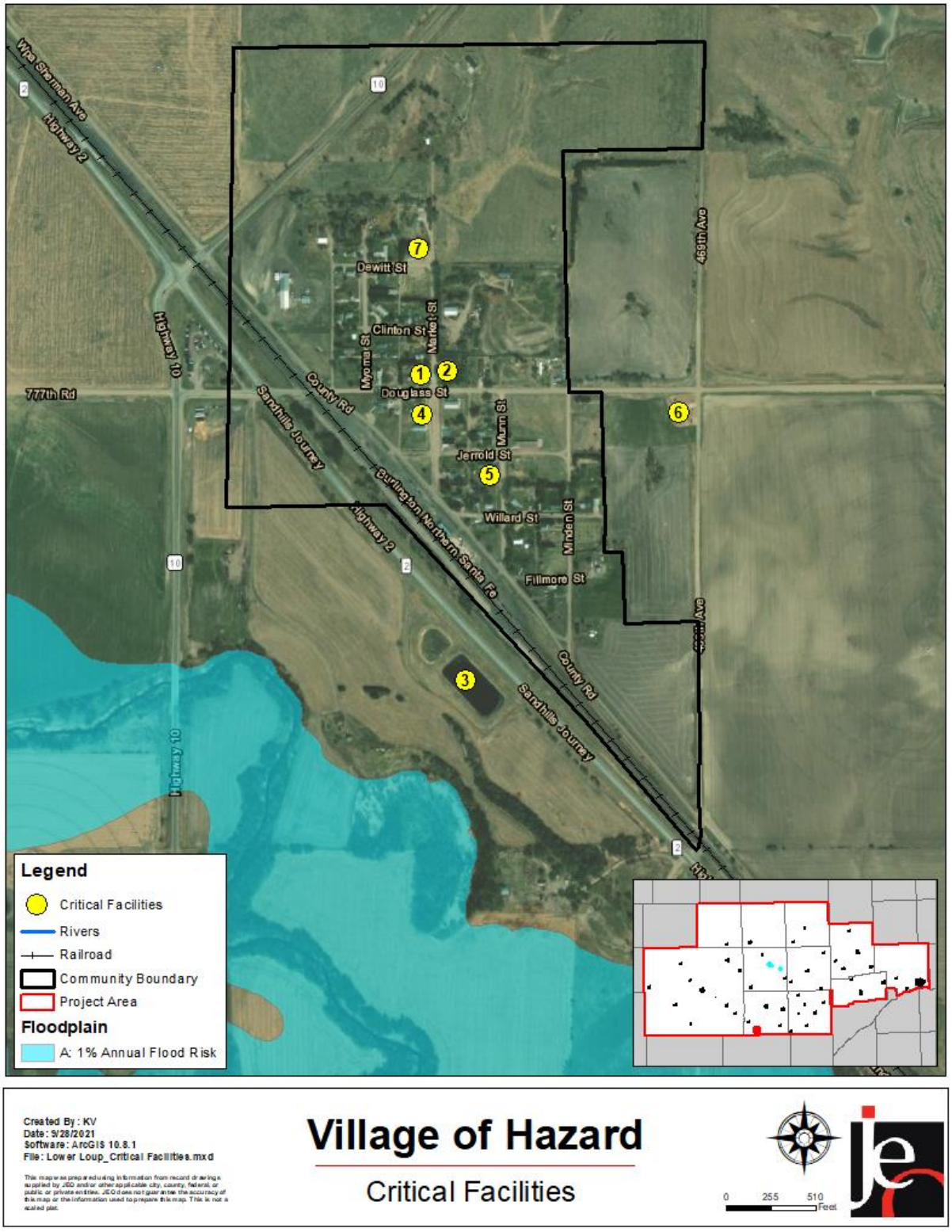
| CF # | COMMUNITY LIFELINE | NAME | SHELTER (Y/N) | GENERATOR (Y/N) | FLOODPLAIN (Y/N) |
|---|---|---|---|---|---|
| **5** | Food, Water, and Shelter | Lutheran Church | Y | N | N |
| **6** | Food, Water, and Shelter | Methodist Church | Y | N | N |
| **7** | Food, Water, and Shelter | Catholic Church | Y | N | N |

Although not listed in the table above, critical infrastructure also include power substations, cell towers, and alert sirens in the community. These assets are typically owned and maintained by other agencies and are not the responsibility of the jurisdiction.

### Health and Medical Facilities

No medical and health facilities are located within the village.

**Figure HAZ.3: Hazard Critical Facilities**



# Parcel Improvements and Valuation

GIS parcel data as of December 2020 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

**Table HAZ.7: Hazard Parcel Valuation**

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|---|---|---|---|---|---|
| 107 | 51 | 3,510,505 | 0 | 0 | 0.00% |

Source: County Assessor, GIS Workshop

# Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment.* A full list of historical hazard occurrences can be found in the Sherman County jurisdictional profile. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

## Severe Thunderstorms

Severe thunderstorms are common across the state and include impacts from heavy rain, lightning, hail, and heavy winds. The NCEI specifically recorded 14 hail and four thunderstorm wind events in Hazard since 1996 which caused $225,000 in property damages. No injuries or fatalities were reported from these events but reports of hail up to baseball size were reported. Property damages from heavy winds, lightning, and hail have occurred throughout town. Specific concerns for the planning area involve poor stormwater drainage through town. County Road was noted as having poor drainage; however, the road is county property and is maintained by Sherman County. Several culverts throughout the village have recently been cleared out and replaced including: one at Millard and Minden, one on Mynoma west of the alley, and one on DeWitt. The village continually monitors the condition of culverts throughout town and replaces them as needed. Currently no culverts have been identified for replacement. Roads throughout the village are gravel and were repaired in 2021.

## Severe Winter Storms

Severe winter storms include impacts from heavy snow, extreme cold, ice accumulation, blizzards, and winter storms. The village contracts snow removal out and noted most roads are cleared in adequate amount of time. However, roads in town are unpaved and may be damaged during heavy snow events or snow removal processes. The village has experienced significant ice storms in the past which have knocked out power. Custer Public Power District services the village and restores power typically within a few hours. All powerlines in town are above ground.

### Tornadoes and High Winds

Tornadoes and high winds have the potential to cause significant property damages and loss of life. The State of Nebraska and planning area are prone to high winds and tornadoes. The majority of homes in Hazard have basements and the local planning team identified each of the three churches in town (Methodist, Lutheran, and Catholic churches) as potential shelter sites or to be used as supply depots after major storm events. There is an alert siren located at the fire hall which is managed by Region 26 Emergency Management Agency. The village does have a manual access to the siren if needed. The village is vulnerable to power outages as there are no generators in town at critical facilities and all powerlines are above ground.

### Flooding

Flooding was not identified as a hazard of top concern for the village. Mud Creek is located to the south/southwest of the village; however, no floodplain areas are located within the village itself. The village does not participate in the NFIP and has no active policies in place.

# Mitigation Strategy

### New Mitigation Actions – 2022 Plan

| OBJECTIVE | BACKUP AND EMERGENCY GENERATORS |
|---|---|
| DESCRIPTION | 1. Purchase new backup generator for critical facilities, specifically for the Fire Hall or Village Hall. |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $15,000 |
| POTENTIAL FUNDING | ARPA grant, General Fund |
| TIMELINE | 5+ years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This is a new mitigation action. |

| OBJECTIVE | DRAINAGE DITCHES AND CULVERT CLEANING |
|---|---|
| DESCRIPTION | 1. Clean out and upgrade culverts and ditches in town to improve stormwater drainage. An assessment is needed in the village to determine which culverts are in need of replacement. |
| HAZARD(S) ADDRESSED | Flooding, Severe Thunderstorms |
| ESTIMATED COST | Varies by need ($1,500 each) |
| POTENTIAL FUNDING | Street Fund, HMA |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This is a new mitigation action. |

# Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the Village Clerk and Village Board members. The local planning team will review the plan bi-annually and will include the public in the review and revision process by sharing information at board meetings open to the public.

# COMMUNITY PROFILE

# VILLAGE OF LITCHFIELD

**Lower Loup Natural Resources District**
**Hazard Mitigation Plan 2022**

# Local Planning Team

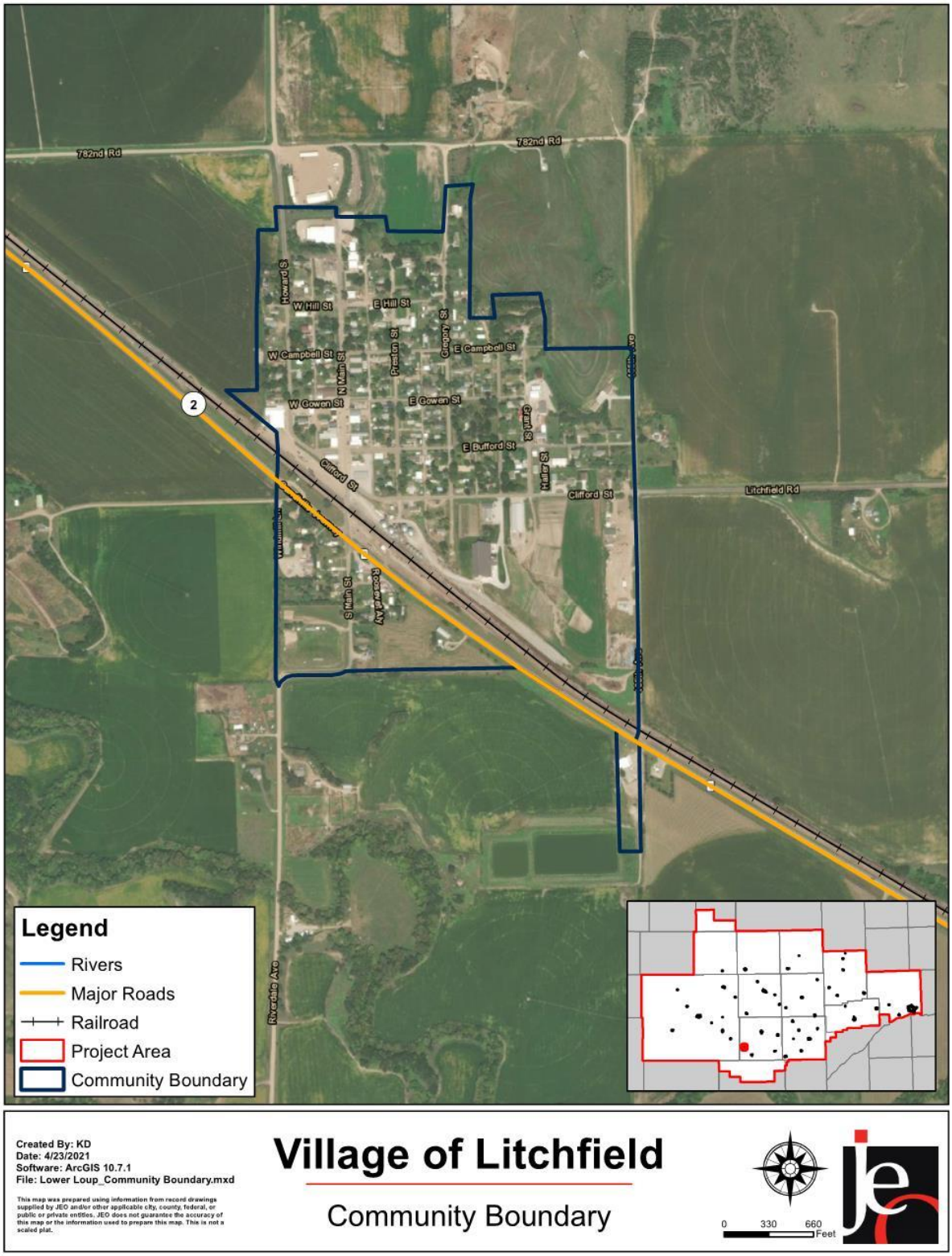
**Table LIT.1: Village of Litchfield Local Planning Team**

| NAME | TITLE | JURISDICTION |
|---|---|---|
| **KENDRA JOHNSON** | Village Clerk | Village of Litchfield |

# Location and Geography

The Village of Litchfield is located in the southwestern portion of Sherman County. The Village of Litchfield covers an area of 0.30 square miles. Mud Creek runs southwest of the corporate limits. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. Most of Litchfield lies in the dissected plains topographic region, and is surrounded by agricultural fields.

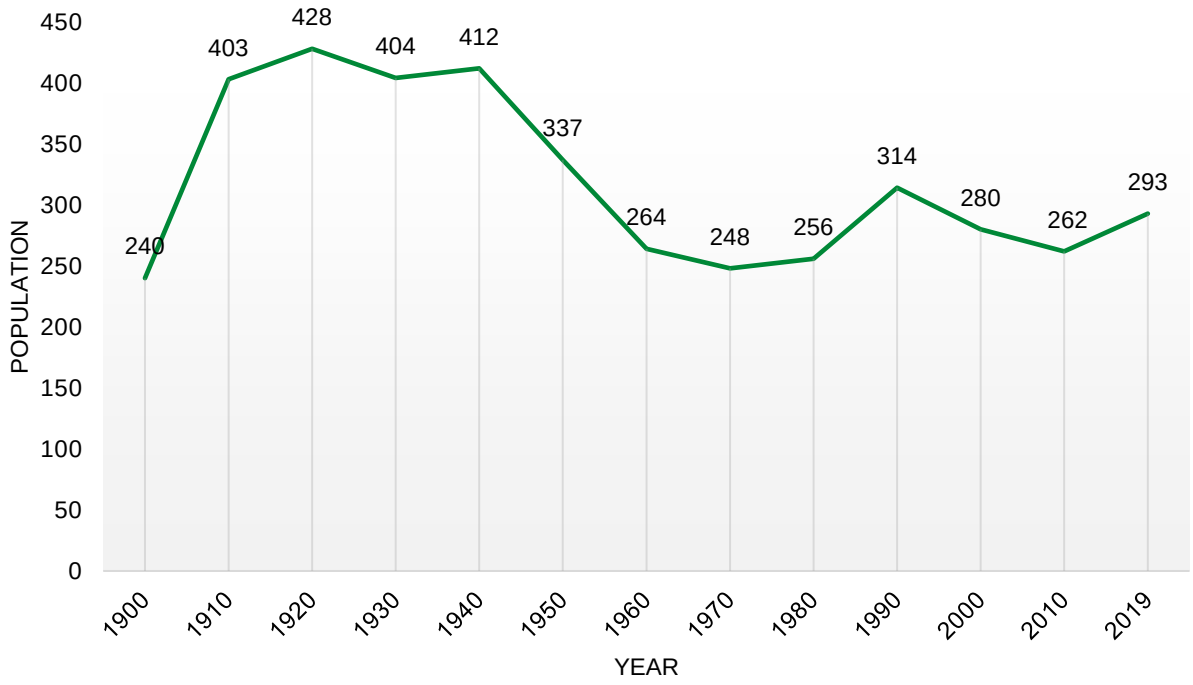
**Figure LIT.1: Village of Litchfield Jurisdictional Boundary**



# Demographics

The following figure displays the historical population trend from 1900 to 2019 (estimated). This figure indicates that the population of Litchfield experienced a decline from 1940 through 1970. During the 1980s and 1990s the population grew, then declined again until 2010. Since 2010, the population has been increasing. Increasing populations are associated with increased hazard mitigation and emergency planning requirements for development. Increasing populations can also contribute to increasing tax revenues, allowing communities to pursue additional mitigation projects. The Village's population accounted for 10% of Sherman County's Population in 2019.

**Figure LIT.2: Litchfield Population 1900-2019**




Source: U.S. Census Bureau[30]

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Litchfield' population was:

- **Younger.** The median age of Litchfield was 42 years old in 2019, compared with the County average of 49.7 years. Litchfield's population has grown younger since 2010, when the median age was 44.5 years old. Litchfield had a larger proportion of people under 20 years old (23.7%) than the County (22.4%).[31]
- **Less ethnically diverse.** In 2010, 0% of Litchfield's population was Black or African American, 0% was other races, and 0% were two or more races. By 2019, only 0% of Litchfield's population was two or more races. During that time, Sherman County went from 0% to 0% American Indian, 0% to 0.8% other races and 1.8% to 0.9% two or more races from 2010 to 2019 respectively.[32]

30 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]
31 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]
32 United States Census Bureau. "2019 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

- **Slightly more likely to be at the federal poverty line.** The poverty rate of all persons in Litchfield (9.8%) was higher than the County (9.5%) in 2019.[33]

# Employment and Economics

The community's economic base is a mixture of industries. In comparison to Sherman County, Litchfield's economy had:

- **Similar mix of industries**. Employment sectors accounting for 10% or more of employment in Litchfield included Agriculture, Manufacturing, Education, and Entertainment. In comparison Sherman County's included Agriculture, Manufacturing, Retail, and Education.[34]
- **Higher household income**. Litchfield's median household income in 2019 ($54,643) was about $3,800 higher than the County ($50,781).[35]
- **More long-distance commuters**. About 39.5% percent of workers in Litchfield commuted for fewer than 15 minutes, compared with about 42.0% of workers in Sherman County. About 46.7% of workers in Litchfield commute 30 minutes or more to work, compared to about 34.8% of the County workers.[36]

## Major Employers

Major employers in the village include Howard's Hay and Trucking, Trotter Fertilizer, and Litchfield Public Schools. The local planning team noted many residents commute to Kearney for employment.

# Housing

In comparison to the Sherman County, Litchfield's housing stock was: [37]

- **More owner occupied.** About 81.6% of occupied housing units in Litchfield are owner occupied compared with 77.2% of occupied housing in Sherman County in 2019.
- **Smaller share of aged housing stock**. Litchfield has fewer houses built prior to 1970 than the county (60.2% compared to 64.5%).
- **Fewer multi-family homes**. The predominant housing type in the Village is single family detached and Litchfield contains more multifamily housing with five or more units per structure than the County (0.0% compared to 0.1%). About 84.2% of housing in Litchfield was single-family detached, compared with 80.8% of the County's housing. Litchfield has a smaller share of mobile and manufactured housing (11.1%) compared to the County (15.3%). The local planning team noted there are approximately four or five mobile homes located in Litchfield.

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally,

33 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
34 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
35 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
36 United States Census Bureau. "2019 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]
37 United States Census Bureau. "2019 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

# Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Litchfield has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a five member village board and the following offices: clerk/treasurer, utility superintendent, and volunteer fire department.

# Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

**Table LIT.2: Capability Assessment**

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| **PLANNING & REGULATORY CAPABILITY** | Comprehensive Plan | *No* |
| | Capital Improvements Plan | *Yes* |
| | Economic Development Plan | *No* |
| | Local Emergency Operational Plan | *County* |
| | Floodplain Ordinance | *Yes* |
| | Zoning Ordinance | *County* |
| | Subdivision Regulation/Ordinance | *County* |
| | Building Codes | *County* |
| | Chief Building Official | *No* |
| | Floodplain Management Plan | *No* |
| | Storm Water Management Plan | *No* |
| | National Flood Insurance Program | *Yes* |
| | Community Rating System | *No* |
| | Other (if any) | |
| **ADMINISTRATIVE & TECHNICAL CAPABILITY** | Planning Commission | *Yes* |
| | Floodplain Administration | *No* |
| | GIS Capabilities | *No* |
| | Civil Engineering | *Yes* |
| | Local Staff Who Can Assess Community's Vulnerability to Hazards | *Yes* |
| | Grant Manager | *No* |
| | Mutual Aid Agreement | *Yes* |
| | Other (if any) | |
| **FISCAL CAPABILITY** | 1 & 6 Year Plan | *No* |
| | Applied for grants in the past | *No* |
| | Awarded a grant in the past | *No* |

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| | Authority to Levy Taxes for Specific Purposes such as Mitigation Projects | *No* |
| | Gas/Electric Service Fees | *No* |
| | Storm Water Service Fees | *No* |
| | Water/Sewer Service Fees | *No* |
| | Development Impact Fees | *No* |
| | General Obligation Revenue or Special Tax Bonds | *No* |
| | Other (if any) | |
| **EDUCATION AND OUTREACH** | Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.<br>Ex. CERT Teams, Red Cross, etc. | *No* |
| | Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | *No* |
| | Natural Disaster or Safety related school programs | *No* |
| | StormReady Certification | *No* |
| | Firewise Communities Certification | *No* |
| | Tree City USA | *No* |
| | Other (if any) | |

**Table LIT.3: Overall Capability**

| OVERALL CAPABILITY | 2017 PLAN | 2022 PLAN LIMITED/MODERATE/HIGH |
|---|---|---|
| **FINANCIAL RESOURCES NEEDED TO IMPLEMENT MITIGATION PROJECTS** | Limited | Limited |
| **STAFF/EXPERTISE TO IMPLEMENT PROJECTS** | Limited | Limited |
| **COMMUNITY SUPPORT TO IMPLEMENT PROJECTS** | Moderate | Moderate |
| **TIME TO DEVOTE TO HAZARD MITIGATION** | Limited | Limited |

# Plan Integration

Communities have several planning documents that discuss or relate to hazard mitigation. Each applicable planning mechanism is listed below along with a short description of how it is integrated with the hazard mitigation plan. Participating jurisdictions will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

## Grants and Funding

The Village of Litchfield's municipal funds have remained steady over recent years, but are limited to maintaining current facilities and systems. A large portion of these funds are dedicated to street

maintenance. No projects identified in the hazard mitigation plan are already part of the village's budget. The village has not applied for any grants.

### Ordinances and Regulations

There are not plans at this point to update the village's ordinances and regulation. In future updates, however, the village will limit development in the floodplain, wildland urban interface, and ETJ.

### Building Codes

Litchfield has adopted the 2018 International Building Codes. The code integrates hazard mitigation in the following ways: requires elevation of structures in the floodplain, requires mechanical systems to be elevated for structures in the floodplain, requires onsite storm water detention for commercial structures, encourages the use of permeable surfaces, and requires a safe room in multiple dwelling units.

### Sherman County Local Emergency Operations Plan (2020)

The Village of Litchfield is an annex in the Sherman County Local Emergency Operations Plan (LEOP). The LEOP establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

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The Nebraska Forest Service updated the Central Platte Community Wildfire Protection Plan (CWPP), which includes Sherman County in October 2019. The purpose of the CWPP is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. This document is updated every five years.

## Future Development Trends

The village has seen little development over the past five years. In 2014 a new fertilizer plant was built which helped bring some additional employment opportunities to the village. In the past five years a new greenhouse was built, the restaurant in town closed and several other commercial properties in downtown were available for sale. The local planning team noted there is a lack of available housing for residents but the population in Litchfield has remained relatively stable. The village is currently exploring development opportunities for additional housing on land northeast of town.

# Community Lifelines

## Transportation

Litchfield's major transportation corridors include Highway 2, which runs southeast-northwest past the southwestern portion of the city. Highway 2 accommodates on average 2,625 vehicles per day, 400 of which are heavy commercial vehicles. The Burlington Northern Santa Fe has a rail line that runs along Highway 2. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

## Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are three chemical storage sites throughout Litchfield which house hazardous materials. The local fire department would be first to respond to chemical spills or events. The nearest HAZMAT is located in Kearney.

**Table LIT.4: Chemical Storage Fixed Sites**

| FACILITY NAME | ADDRESS | LOCATED IN FLOODPLAIN? |
|---|---|---|
| TROTTER FERTILIZER INC | 216 Haller St | N |
| V C HOWARD HAY CO OFFICE | 219 Howard St | N |
| V C HOWARD HAY CO | 46504 782nd Rd | N |

Source: Nebraska Department of Environment and Energy[38]

## Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the previous planning process and updated by the local planning team as a part of this plan update.

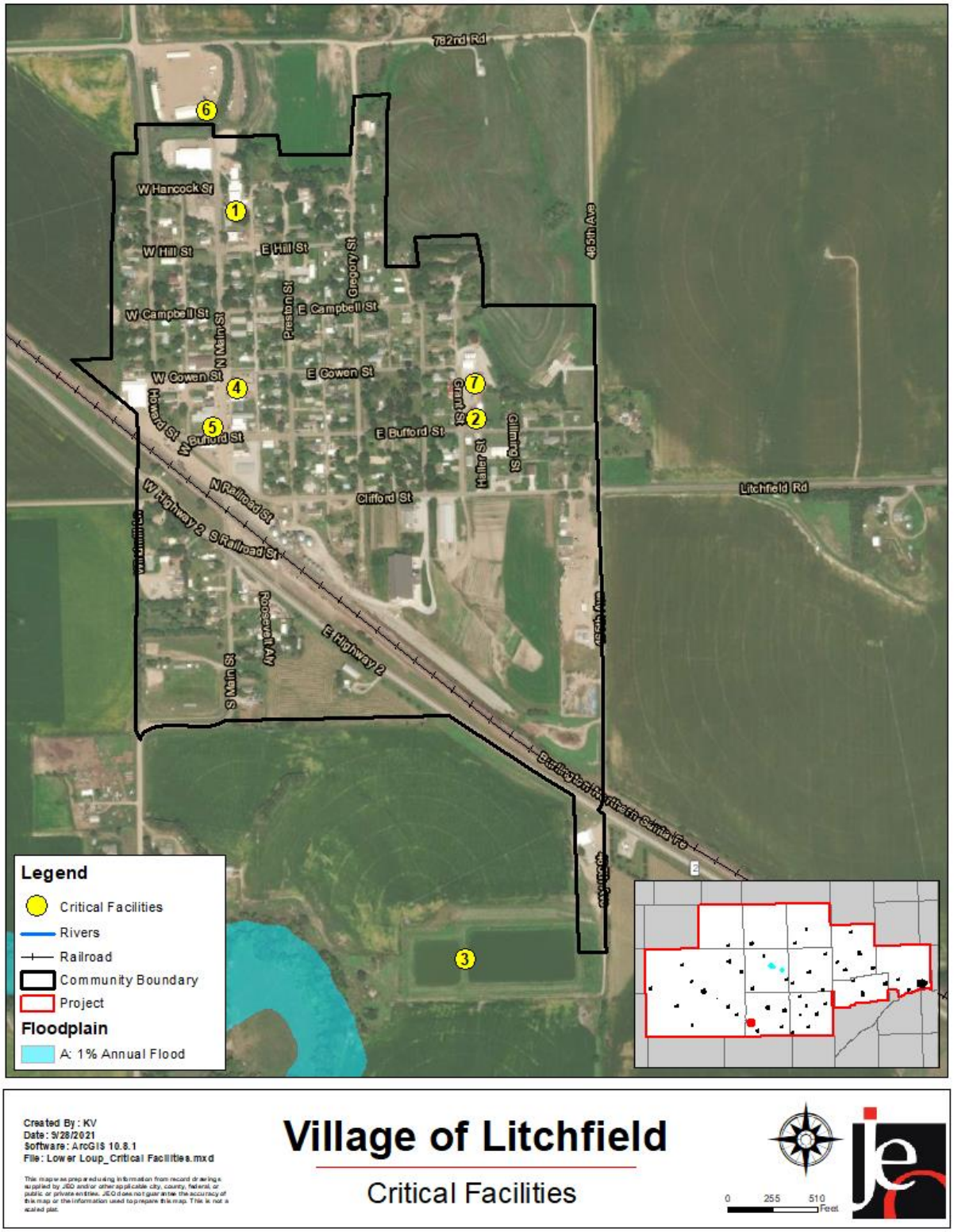
The following table and figure provide a summary of the critical facilities for the jurisdiction.

**Table LIT.5: Litchfield Critical Facilities**

| CF # | COMMUNITY LIFELINE | NAME | SHELTER (Y/N) | GENERATOR (Y/N) | FLOODPLAIN (Y/N) |
|---|---|---|---|---|---|
| 1 | Food, Water, and Shelter | Litchfield Public Schools | Y | N | N |
| 2 | Hazardous Materials | Trotter Fertilizer | N | N | N |
| 3 | Food, Water, and Shelter | Sewage Lagoon | N | N | N |
| 4 | Safety and Security | Village Hall/Fire Department | Y | N | N |
| 5 | Food, Water, and Shelter | Community Center | Y | N | N |
| 6 | Food, Water, and Shelter | Water Tower | N | Y | N |
| 7 | | Maintenance Yard | N | N | N |

38 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed August 2020.

**Figure LIT.3: Litchfield Critical Facilities**



Although not listed in the table above, critical infrastructure also include power substations, cell towers, and alert sirens in the community. These assets are typically owned and maintained by other agencies and are not the responsibility of the jurisdiction.

### Health and Medical Facilities

No medical and health facilities are located within the village.

# Parcel Improvements and Valuation

GIS parcel data as of December 2020 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

**Table LIT.7: Litchfield Parcel Valuation**

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Value of Improvements in Floodplain | Percent of Improvements in Floodplain |
|---|---|---|---|---|---|
| 248 | 160 | 14,916,125 | 0 | 0 | 0.00% |

Source: County Assessor, GIS Workshop

# Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment.* A full list of historical hazard occurrences can be found in the Sherman County jurisdictional profile. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

### Flooding

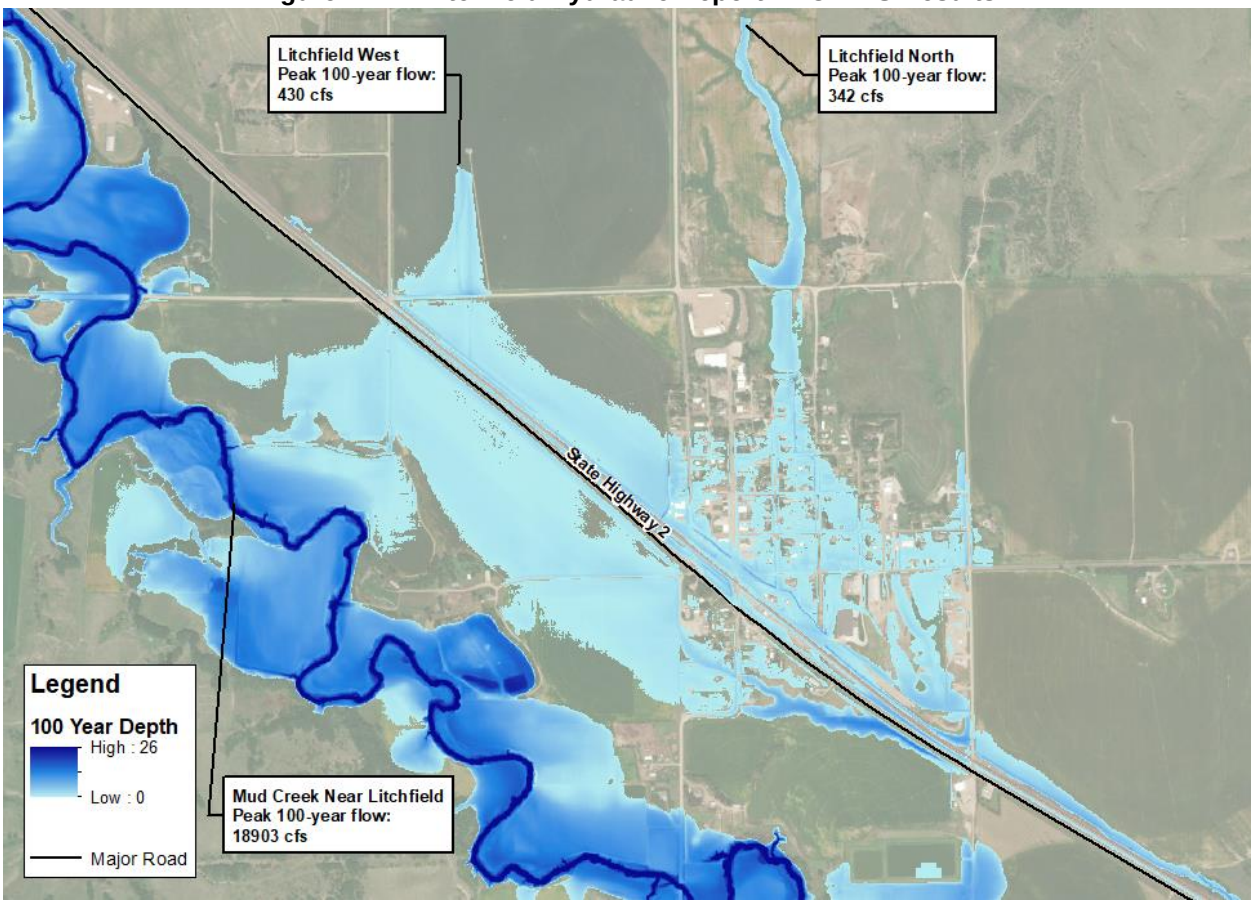
Flooding was identified as a hazard of minor concern for the village. Zone A floodplain is located to the south of town. The village participates in the NFIP but does not have any active policies as of August 2021.

A hydraulic analysis for the Mud Creek Watershed, which includes the Village of Litchfield, was under development as of January 2022. Some major findings pertaining to the village from this report included:

- Structural flooding from Mud Creek itself does not appear to be a major concern within the vicinity of Litchfield on the south side of the highway. Though some flows appear to escape the main channel and run along the highway until eventually discharging southeast of town, these flows do not cause any structural impacts.
- Currently a small berm exists on the west side of Litchfield to direct flow through two culvert crossings under the railroad and Highway 2. Peak flows for the 100-year event at this location are approximately 430 cfs, and this berm appears to get overtopped causing flooding along the south and west side of Litchfield.

- In addition to the berm overtopping, a smaller tributary flow through the north side of Litchfield. During high flow events, County Road 782 overtops, and larger peak flows spread throughout the central part of Litchfield.

**Figure LIT.4: Litchfield Hydraulic Report HEC-RAS Results**




While no evacuations were required during the devastating floods of 2019, the village felt its impacts. The village park and surrounding structures are prone to flooding and were flooded during the 2019 event. Additionally, Bufford Street and its culverts were washed out.

## Hazardous Materials

The local planning team indicates that agricultural chemicals are regularly transported along local routes. The commercial fertilizer operation within Litchfield, BNSF rail line, and proximity to Highway 2 add to the risk of chemical spills within the community. More than ten years ago, there was an anhydrous ammonia leak in Litchfield. That incident lead to first responders taken to the hospital. No other major spills have been reported in the Village. The local planning team noted that the railroad crossing at Main Street has arms, but the crossing at 465th Avenue does not. The local volunteer fire department would be first to respond to spill events. The department has approximately 20 active members. The nearest HAZMAT team is located in Kearney.

### Severe Thunderstorms

Severe thunderstorms are common across the state and include impacts from heavy rain, lightning, hail, and strong winds. Specific concerns for the village pertain to flash flooding from heavy rain events due to poor stormwater drainage. In 2013, a severe thunderstorm caused damage to trees and hail damage to property throughout Litchfield. Past thunderstorms have caused short power outages within the village. The water tower has redundant power but no other critical facilities have backup generators. The village reported no areas with hazardous trees. While the village does not have specific riverine flood risk, poor stormwater drainage contributes to flood damages during heavy rain events. Gregory Street and Main Street were identified as primary areas with poor drainage. During the March 2019 flood events these streets and Highway 2 were impassable due to floodwaters. The local planning team noted these routes were blocked for two days before draining. The village is currently in the process of clearing all ditches and culverts in the village with an anticipated completion date of 2022.

### Severe Winter Storms

Severe winter storms were identified as a concern by the local planning team due to the potential for power outages, damages to infrastructure, and blocked transportation routes. These storms can include impacts from heavy snow, ice accumulation, blizzards, extreme cold, and winter storms. In the case of emergency events the fire department would be first to respond to residents and has roughly 20 active volunteers. In the winter of 2007, a severe winter storm caused a prolonged power outage within Litchfield. Power to Litchfield is provided by Custer Public Power District. Snow removal is done by the village and Main Street has been identified as an emergency snow route. The village has sufficient snow removal resources for current needs. No critical facilities have backup generators in case of power outages.

### Tornadoes and High Winds

While tornado and high winds are common across the state, Litchfield has reported one tornado event since 1996. In 2012 an EF0 tornado caused $60,000 in property damages. According to NCEI, "*This tornado affected a one-half mile path approximately 2 miles northwest of Litchfield, and crossed Highway 2. Damage from this tornado was primarily confined to a metal building at a farmstead near Highway 2. The maximum wind speed was estimated at 80 mph."* Litchfield has paper and electronic backups for municipal records. The village's alert siren is located at the fire hall and was refurbished in 2020. Warning sirens are activated manually or remotely by Region 26 Emergency Management. There are no publicly available safe rooms within the village; however, most residents have basements in town. The fire hall, Litchfield Schools, and community center would be used as shelters or supply depots if needed. In the event of a disaster, Litchfield has mutual aid agreements with surrounding communities.

# Mitigation Strategy

## Continued Mitigation Actions

| OBJECTIVE | BACKUP AND EMERGENCY GENERATORS |
|---|---|
| DESCRIPTION | 1. Identify and evaluate current backup and emergency generators<br>2. Obtain additional generators based on identification and evaluation<br>3. Provide portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $20,000 to $75,000+ per generator |
| POTENTIAL FUNDING | Village General Fund |
| TIMELINE | 5+ Years |
| PRIORITY | Low |
| LEAD AGENCY | Village Board |
| STATUS | This project is in the works. The village needs to order the generators. |

| OBJECTIVE | COMMUNITY EDUCATION AND AWARENESS |
|---|---|
| DESCRIPTION | 1. Establish a community education program to increase awareness related to household level mitigation actions<br>2. Utilize outreach projects and the distribution of maps<br>3. Purchasing equipment such as projectors and laptops to facilitate presentation of information |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $3,000+ |
| POTENTIAL FUNDING | Village General Fund |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board, Emergency Management |
| STATUS | This project has not yet been started. |

| OBJECTIVE | FACILITY FLOOD PROOFING |
|---|---|
| DESCRIPTION | 1. Explore possibility of flood proofing facilities which fall within HAZUS 1% flood inundation areas<br>2. Conduct flood proofing feasibility study for structures and implement identified measures |
| HAZARD(S) ADDRESSED | Flooding |
| ESTIMATED COST | Varies by structure |
| POTENTIAL FUNDING | HMGP, Village General Fund |
| TIMELINE | 5+ Years |
| PRIORITY | Low |
| LEAD AGENCY | Emergency Management, County Highway Superintendent, Village Board |
| STATUS | This project has not yet been started. |

| OBJECTIVE | IMPROVE EMERGENCY COMMUNICATIONS |
|---|---|
| DESCRIPTION | 1. Develop/Improve Emergency Communication Action plan<br>2. Implement Emergency Communication Action Plan<br>3. Establish inner-operable communications<br>4. Obtain/Upgrade Emergency Communication Facilities/Equipment<br>5. Obtain/Upgrade/Distribute Weather Warning Radios |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $5,000+ |
| POTENTIAL FUNDING | HMGP, PDM, Village General Fund |
| TIMELINE | 5+ Years |
| PRIORITY | Low |
| LEAD AGENCY | Emergency Management, Volunteer Fire Department |
| STATUS | This project has not yet been started. |

| OBJECTIVE | INSTALL VEHICLE BARRIERS |
|---|---|
| DESCRIPTION | 1. Install vehicular barriers to protect critical facilities and key infrastructure where possible |
| HAZARD(S) ADDRESSED | Hazardous Materials – Transportation |
| ESTIMATED COST | $500 per concreate barrier. $20 per linear foot of chain linked fence. |
| POTENTIAL FUNDING | Village General Fund |
| TIMELINE | 2-5 Years |
| PRIORITY | Medium |
| LEAD AGENCY | Emergency Management, Village Board |
| STATUS | This project has not yet been started. |

| OBJECTIVE | PUBLIC SAFE ROOMS & POST-DISASTER STORM SHELTERS |
|---|---|
| DESCRIPTION | 1. Identify and evaluate existing safe rooms and/or storm shelters<br>2. Improve and/or construct safe rooms and/or storm shelters<br>3. Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, schools, etc. |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $150/sf for retrofit; $300/sf for new construction |
| POTENTIAL FUNDING | HMGP, PDM, Village General Fund |
| TIMELINE | 5+ Years |
| PRIORITY | Low |
| LEAD AGENCY | Village Board |
| STATUS | This project has not yet been started. The Village Hall and Fire Hall have been identified as potential shelter locations. |

| OBJECTIVE | REDUCE TREE DAMAGE & DAMAGE FROM TREES |
|---|---|
| DESCRIPTION | 1. Conduct tree inventory<br>2. Develop tree maintenance/trimming program<br>3. Implement tree maintenance/trimming program<br>4. Remove hazardous limbs and/or trees |
| HAZARD(S) ADDRESSED | Hail, Severe Thunderstorms, Severe Winter Storms |
| ESTIMATED COST | $50 pre tree |
| POTENTIAL FUNDING | Village General Fund |
| TIMELINE | 2-5 Years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This project has not yet been started. |

| OBJECTIVE | SHELTER IN PLACE |
|---|---|
| DESCRIPTION | 1. Provide shelter in place training to facilities housing vulnerable populations (nursing homes, childcare facilities, schools, etc.) |
| HAZARD(S) ADDRESSED | Hazardous Materials – Transportation |
| ESTIMATED COST | $100 per person (staff time) |
| POTENTIAL FUNDING | Village General Fund |
| TIMELINE | 1 Year |
| PRIORITY | High |
| LEAD AGENCY | Lead Agency Village Board, Fire Department, Region 44 Emergency Management |
| STATUS | This project has not yet been started. |

| OBJECTIVE | STORM SHELTER IDENTIFICATION |
|---|---|
| DESCRIPTION | 1. Identify any existing private or public storm shelters |
| HAZARD(S) ADDRESSED | Severe Thunderstorms, Tornadoes and High Winds |
| ESTIMATED COST | $0, Staff time |
| POTENTIAL FUNDING | Village General Fund |
| TIMELINE | 1 Year |
| PRIORITY | High |
| LEAD AGENCY | Village Board, Emergency Management |
| STATUS | This project has not yet been started. |

| OBJECTIVE | SURGE PROTECTORS |
|---|---|
| DESCRIPTION | 1. Purchase and install surge protectors on sensitive equipment in critical facilities |
| HAZARD(S) ADDRESSED | Severe Thunderstorms, Severe Winter Storms |
| ESTIMATED COST | $25 per unit |
| POTENTIAL FUNDING | Village General Fund |
| TIMELINE | 1 Year |
| PRIORITY | High |
| LEAD AGENCY | Village Board, Emergency Management |
| STATUS | This project has not yet been started. |

### New Mitigation Actions – 2022 Plan

| OBJECTIVE | PROJECT SCOPING AS A RESULT OF THE WFPO PROGRAM |
|---|---|
| DESCRIPTION | 1. Evaluate potential flood risk reduction alternatives as identified through the Watershed and Flood Prevention Operations Program including project scoping and implementation |
| HAZARD(S) ADDRESSED | Flooding |
| ESTIMATED COST | Varies by project |
| POTENTIAL FUNDING | General Fund, WFPO, HMA |
| TIMELINE | 2-5 Years |
| PRIORITY | High |
| LEAD AGENCY | Village Board, LLNRD, JEO Consulting Group |
| STATUS | Mira Creek WFPO is currently under development. No formal alternatives have yet been determined however several alternatives are under further review. |

# Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms. The Village Board Chairmen will review the village's profile every six months. They will notify and involve the public by announcing the review in the Board minutes and in the Sherman County Times.

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# COMMUNITY PROFILE

# CITY OF LOUP CITY

**Lower Loup Natural Resources District**
**Hazard Mitigation Plan 2022**

# Local Planning Team

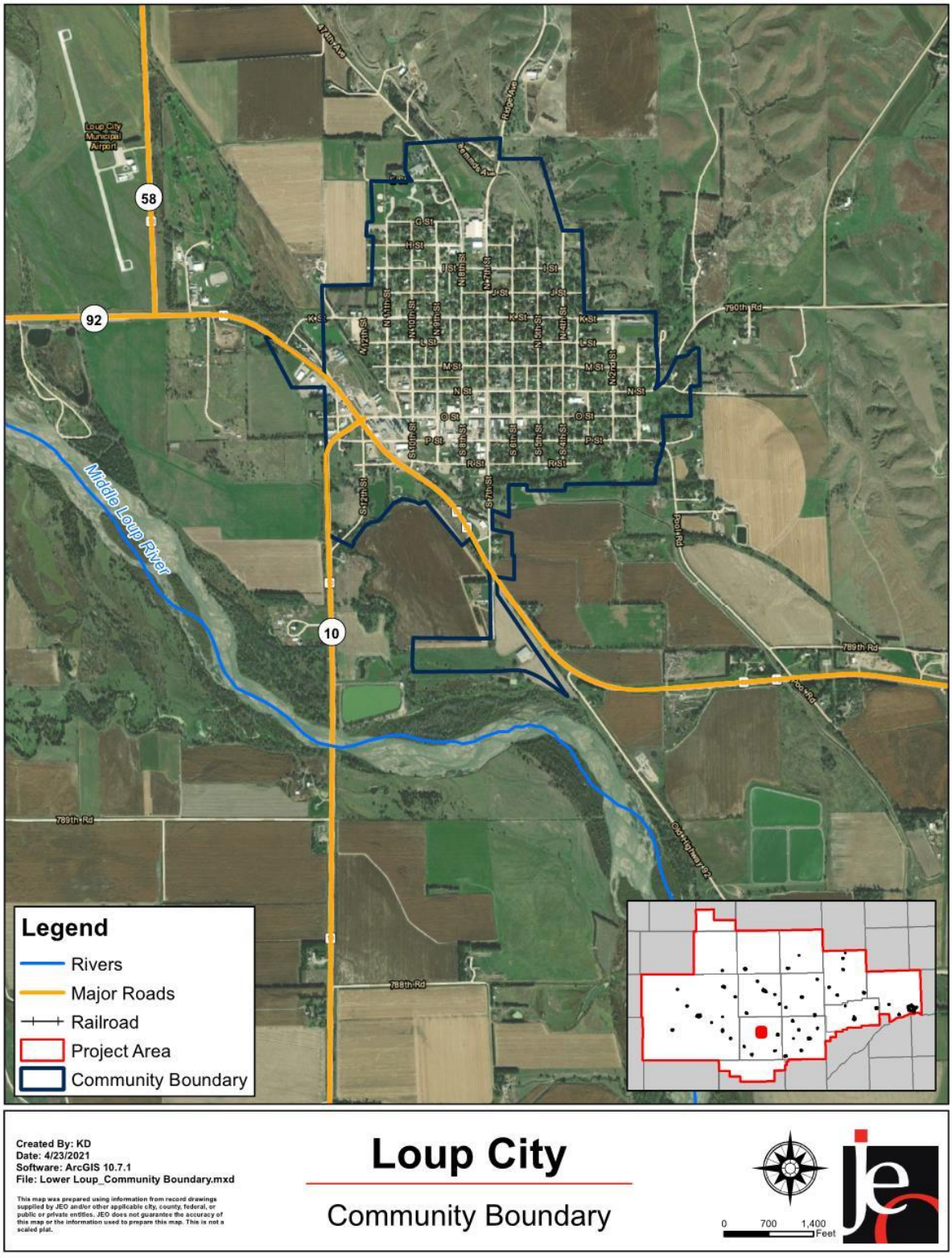
**Table LOC.1: City of Loup City Local Planning Team**

| NAME | TITLE | JURISDICTION |
|---|---|---|
| **ALEXANDERS A BAILLIE** | Mayor | City of Loup City |
| **KEVIN HOLCOMB** | Public Works Director | City of Loup City |

# Location and Geography

The City of Loup City is located in the northern portion of Sherman County. The City of Loup City covers an area of 0.94 square miles. The Middle Loup River is located west and south of the city limits. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. Most of Loup City lies in the dissected plains topographic region, and is surrounded by agricultural fields.

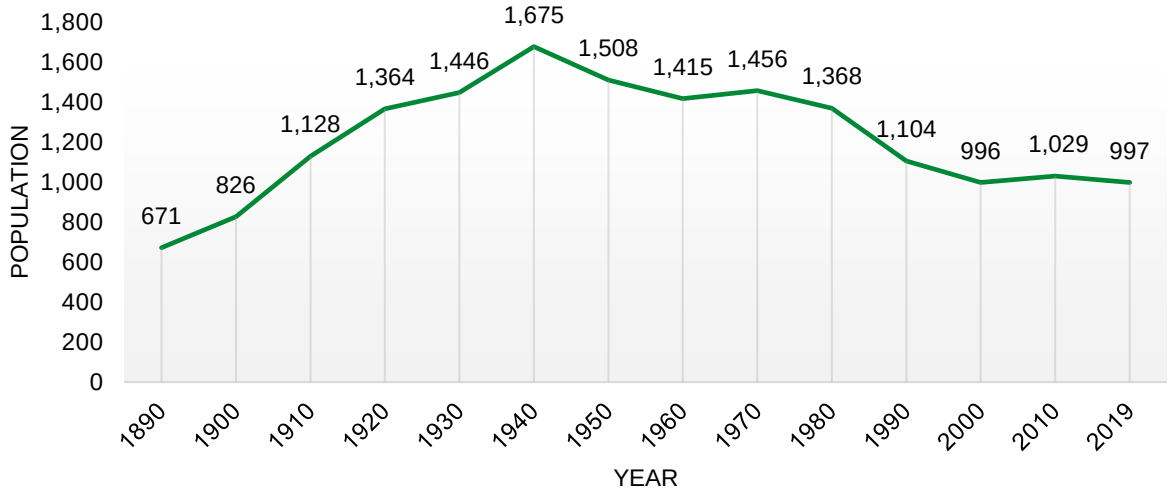
**Figure LOC.1: City of Loup City Jurisdictional Boundary**



# Demographics

The following figure displays the historical population trend from 1890 to 2019 (estimated). This figure indicates that the population of Loup City experienced a decline from 1940 through 1960. During the 1960s and 1970s the population grew, however, since 1970 the population has been in a steady decline. This is notable for hazard mitigation because communities with declining population may also have a higher level of unoccupied housing that is not being up kept. Furthermore, areas with declining population may be less prone to pursuing residential/commercial development in their areas, which may reduce the number of structures vulnerable to hazards in the future. Decreasing populations can also represent decreasing tax revenue for the community which could make implementation of mitigation actions more fiscally challenging. The city's population accounted for 33% of Sherman County's Population in 2019.

**Figure LOC.2: Loup City Population 1900-2018**




Source: U.S. Census Bureau[39]

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Loup City' population was:

- **Older.** The median age of Loup City was 58.1 years old in 2019, compared with the County average of 49.7 years. Loup City's population has grown older since 2010, when the median age was 49.3 years old. Loup City had a smaller proportion of people under 20 years old (14.8%) than the County (22.4%).[40]
- **Less ethnically diverse.** In 2010, 0% of Loup City's population was Black or African American, 0% was other races, and 5.1% were two or more races. By 2019, only about 0.2% of Loup City's population was two or more races. During that time, Sherman County went from 0% to 0% American Indian, 0% to 0.8% other races and 1.8% to 0.9% two or more races from 2010 to 2019 respectively.[41]
- **Slightly less likely to be at the federal poverty line.** The poverty rate of all persons in Loup City (9.1%) was slightly lower than the County (9.5%) in 2019.[42]

39 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]
40 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]
41 United States Census Bureau. "2019 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]
42 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

# Employment and Economics

The community's economic base is a mixture of industries. In comparison to Sherman County, Loup City's economy had:

- **Similar mix of industries**. Employment sectors accounting for 10% or more of employment in Loup City included Retail and Education. In comparison Sherman County's included Agriculture, Manufacturing, Retail, and Education.[43]
- **Lower household income**. Loup City's median household income in 2019 ($34,777) was about $16,000 lower than the County ($50,781).[44]
- **Fewer long-distance commuters**. About 57.4% percent of workers in Loup City commuted for fewer than 15 minutes, compared with about 42.0% of workers in Sherman County. About 32.7% of workers in Loup City commute 30 minutes or more to work, compared to about 34.8% of the County workers.[45]

## Major Employers

Major employers identified in Loup City include Roselane Nursing Home. Loup City Schools, Central Nebraska Community Action Partnership, Bullet Weights, Inc., Sherman County, and Trotter, Inc. Approximately 20% of residents commute to Kearney for work, and another 20% commute to Grand Island.

# Housing

In comparison to the Sherman County, Loup City's housing stock was: [46]

- **Less owner occupied.** About 67.5% of occupied housing units in Loup City are owner occupied compared with 77.2% of occupied housing in Sherman County in 2019.
- **Larger share of aged housing stock**. Loup City has more houses built prior to 1970 than the county (83.8% compared to 64.5%).
- **Fewer multi-family homes**. The predominant housing type in the city is single family detached and Loup City contains slightly more multifamily housing with five or more units per structure than the County (0.2% compared to 0.1%). About 87.9% of housing in Loup City was single-family detached, compared with 80.8% of the County's housing. Loup City has a smaller share of mobile and manufactured housing (0.3%) compared to the County (15.3%)

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms. Approximately five mobile homes are located in Loup City.

43 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
44 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
45 United States Census Bureau. "2019 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]
46 United States Census Bureau. "2019 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

# Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Loup City has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The city has a four-member city council and the following offices: clerk/treasurer, public works commissioner, volunteer fire department, and mayor. Loup City Rescue, Loup City Public Schools, and the Central Nebraska Community Action Partnership are all additional entities that will likely assist with hazard mitigation related activities.

# Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

**Table LOC.2: Capability Assessment**

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| **PLANNING & REGULATORY CAPABILITY** | Comprehensive Plan | Yes |
| | Capital Improvements Plan | Yes |
| | Economic Development Plan | Yes |
| | Local Emergency Operational Plan | County |
| | Floodplain Ordinance | Yes |
| | Zoning Ordinance | Yes |
| | Subdivision Regulation/Ordinance | Yes |
| | Building Codes | Yes |
| | Chief Building Official | Yes |
| | Floodplain Management Plan | Yes |
| | Storm Water Management Plan | Yes |
| | National Flood Insurance Program | Yes |
| | Community Rating System | No |
| | Other (if any) | |
| **ADMINISTRATIVE & TECHNICAL CAPABILITY** | Planning Commission | Yes |
| | Floodplain Administration | Yes |
| | GIS Capabilities | Yes |
| | Civil Engineering | Yes |
| | Local Staff Who Can Assess Community's Vulnerability to Hazards | Yes |
| | Grant Manager | Yes |
| | Mutual Aid Agreement | Yes |
| | Other (if any) | |
| **FISCAL CAPABILITY** | 1 & 6 Year Plan | Yes |
| | Applied for grants in the past | Yes |
| | Awarded a grant in the past | Yes |
| | Authority to Levy Taxes for Specific Purposes such as Mitigation Projects | Yes |
| | Gas/Electric Service Fees | Yes |

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| | Storm Water Service Fees | No |
| | Water/Sewer Service Fees | Yes |
| | Development Impact Fees | No |
| | General Obligation Revenue or Special Tax Bonds | Yes |
| | Other (if any) | |
| EDUCATION AND OUTREACH | Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc. | Yes |
| | Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | Yes |
| | Natural Disaster or Safety related school programs | Yes |
| | StormReady Certification | No |
| | Firewise Communities Certification | No |
| | Tree City USA | No |
| | Other (if any) | |

**Table LOC.3: Overall Capability**

| OVERALL CAPABILITY | 2017 PLAN | 2022 PLAN |
|---|---|---|
| FINANCIAL RESOURCES NEEDED TO IMPLEMENT MITIGATION PROJECTS | Moderate | Moderate |
| STAFF/EXPERTISE TO IMPLEMENT PROJECTS | Moderate | Moderate |
| COMMUNITY SUPPORT TO IMPLEMENT PROJECTS | Limited | Moderate |
| TIME TO DEVOTE TO HAZARD MITIGATION | Limited | Limited |

# Plan Integration

Communities have several planning documents that discuss or relate to hazard mitigation. Each applicable planning mechanism is listed below along with a short description of how it is integrated with the hazard mitigation plan. Participating jurisdictions will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

## Grants and Funding

Loup City's municipal funds have increased slightly over the last several years due to property valuation increases and additional sales tax revenue for the city's fire and rescue facility. With their municipal funds, the city is planning a few capital improvement projects like constructing a new fire and rescue facility, as well as renovating City Hall and adding a new maintenance building. None of the projects identified in the hazard mitigation plan are already included in the city's budget. The city has applied for numerous grants in the past five years, including a grant for

a lift station upgrade, a Department of Environment and Energy Security grant, a downtown revitalization grant, a Certified Leadership Community grant, and a CDBG for Street Projects. They were awarded all of the above except the downtown revitalization grant.

### Comprehensive Plan

Last updated in 2016, the City of Loup City's Comprehensive Plan limits development in the floodplain and in areas adjacent to known hazardous areas. During the next update, the plan will incorporate the hazard mitigation plan principles and mitigation activities into the plan as well as the city permitting process.

### Ordinances and Regulations

The City of Loup City last updated their zoning ordinances in 2021. They limit development in the floodplain and the ETJ. The city adopted the State of Nebraska requirements which stipulate structures in the floodplain must be at least one foot above base flood elevation.

### Building Codes

Loup City has adopted the 2018 International Building Codes. The code integrates hazard mitigation in the following ways: requires elevation of structures in the floodplain, requires mechanical systems to be elevated for structures in the floodplain, requires onsite storm water detention for commercial structures, encourages the use of permeable surfaces, and requires a safe room in multiple dwelling units.

### Other Plans

The City of Loup City drafted and adopted a wellhead protection plan, last updated in 2014, as well as a drought management plan, last updated in 2020.

### Sherman County Local Emergency Operations Plan (2020)

The City of Loup City is an annex in the Sherman County Local Emergency Operations Plan (LEOP). The LEOP establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

### Central Platte Community Wildfire Protection Plan (2019)

The Nebraska Forest Service updated the Central Platte Community Wildfire Protection Plan (CWPP), which includes Sherman County in October 2019. The purpose of the CWPP is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. This document is updated every five years.

# Future Development Trends

In the past five years, some old buildings were demolished including the Woznick Building on the 600 Block on the south side of O Street. Residential development has occurred in Sunset

Cottages (55+ housing) and John's subdivision which has lots available. New businesses were established, like Tina Treffer Design and Platte Valley Outdoors. According to the census data, Loup City's population is slightly increasing. Several new buildings were constructed in known hazardous areas, including an airport hangar at the Loup City Municipal Airport and a home constructed in the ETJ south of Loup City on the east side of Highway 10 near Middle Loup Bridge. In the next five years, Sunset Cottages plans to construct some new structures and lots in John's subdivision will likely be developed. Additionally, an annexation is possible for new development on the northwest side of Loup City.

# Community Lifelines

## Transportation

Loup City's major transportation corridors include Highway 10, which runs north to the sotuhwestern edge of the city, and Highway 58/92, which runs east-west through the southern portion of the city. N-10 accommodates on average 1,145 vehicles per day, 120 of which are heavy commercial vehicles, and N-58 accommodates 2,190 vehicles per day, 215 of which are heavy commercial vehicles. The city is also concerned about the county road which offers limited access into and out of the city from the north. Loup City does not have rail lines. While no significant transportation events have occurred locally, this information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

## Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are seven chemical storage sites throughout Loup City which house hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident. No chemical spills have occurred locally.

**Table LOC.4: Chemical Storage Fixed Sites**

| FACILITY NAME | ADDRESS | LOCATED IN FLOODPLAIN? |
|---|---|---|
| TROTTER SERVICE | 1201 Highway 92 | N |
| TROTTER GRAIN & FERTILIZER CO | 1122 O St | N |
| LOUP CITY PROPANE INC | 130 N Highway 92 | N |
| BULLET WEIGHT SALES INC | 330 O St | N |
| NDOT LOUP CITY YARD | 47561 Highway 92 | N |
| CENTURYLINK | 188 N 8th St | N |
| BUFFALO AIR SERVICES INC | 79049 Highway 58 | Y |

Source: Nebraska Department of Environment and Energy[47]

## Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the previous planning process and updated by the local planning team as a part of this plan update.

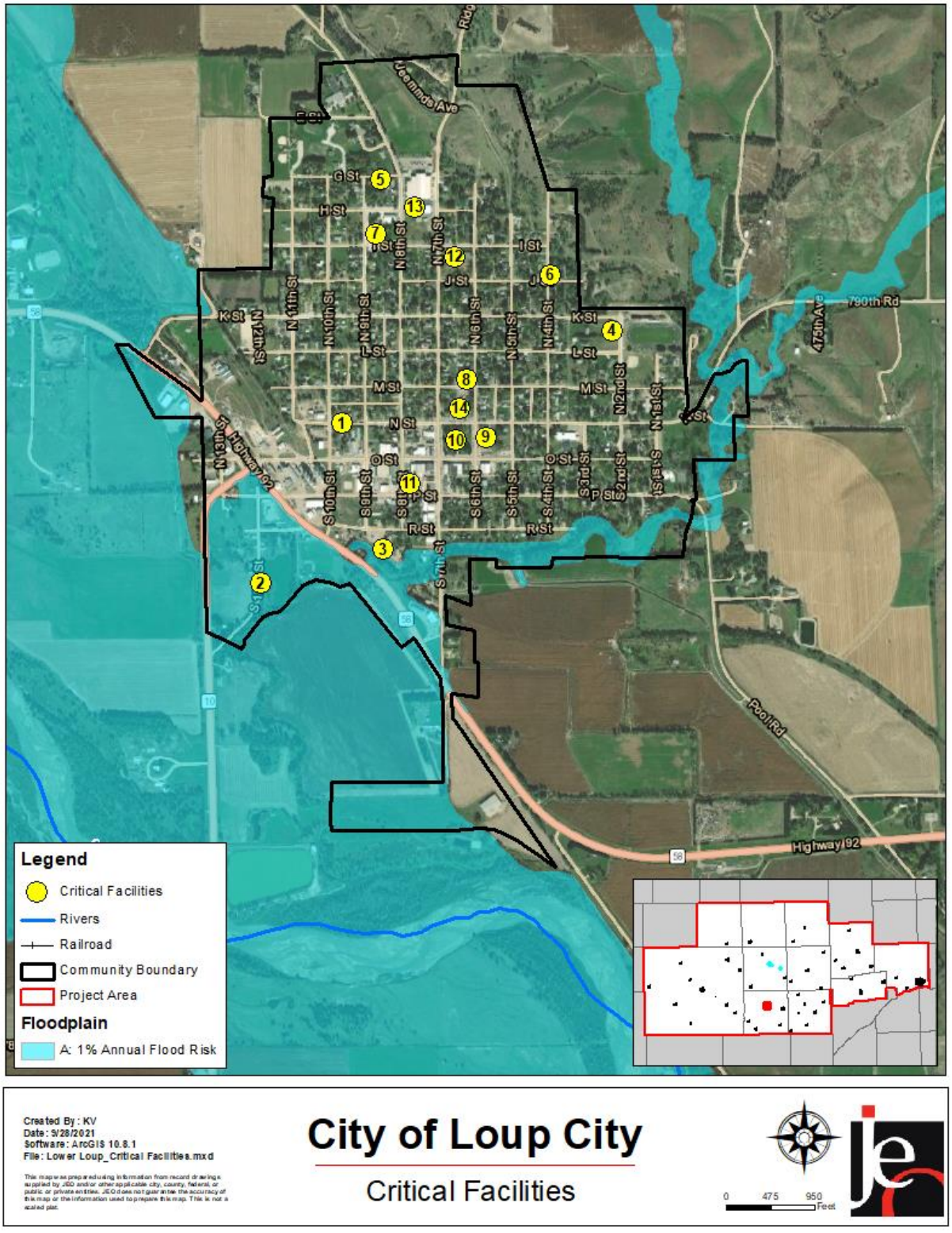
47 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed August 2020.

The American Red Cross has agreements with the City of Loup City and Loup Schools to serve as mass care facilities during disaster events. The following table and figure provide a summary of the critical facilities for the jurisdiction.

**Table LOC.5: Loup City Critical Facilities**

| CF # | COMMUNITY LIFELINE | NAME | SHELTER (Y/N) | GENERATOR (Y/N) | FLOODPLAIN (Y/N) |
|---|---|---|---|---|---|
| **1** | Safety and Security | City Shop | N | N | N |
| **2** | Food, Water, and Shelter | Lift Station | N | Y | Y |
| **3** | Food, Water, and Shelter | Lift Station | N | Y | N |
| **4** | Food, Water, and Shelter | Water Tower | N | N | N |
| **5** | Food, Water, and Shelter | Well | N | Y | N |
| **6** | Food, Water, and Shelter | Well | N | Y | N |
| **7** | Food, Water, and Shelter | Catholic Church | Y | N | N |
| **8** | Food, Water, and Shelter | Baptist Church | Y | N | N |
| **9** | Other | Central Nebraska Community Action Partnership | N | N | N |
| **10** | Safety and Security | Courthouse | N | N | N |
| **11** | Safety and Security | Fire and Rescue Facility | N | Y | N |
| **12** | Food, Water, and Shelter | Elementary School | Y | N | N |
| **13** | Food, Water, and Shelter | High School and Middle School | Y | N | N |
| **14** | Food, Water, and Shelter | LC Community Center | N | Y | N |
| **16** | Safety and Security | City Hall | N | N | N |

**Figure LOC.3: Loup City Critical Facilities**



Although not listed in the table above, critical infrastructure also includes power substations, cell towers, and alert sirens in the community. These assets are typically owned and maintained by other agencies and are not the responsibility of the jurisdiction.

### Health and Medical Facilities

The following medical and health facilities are located within the community.

**Table LOC.6: Loup City Critical Facilities**

| NAME OF FACILITY | TYPE OF FACILITY | ADDRESS | NUMBER OF LICENSED BEDS |
|---|---|---|---|
| **HOWARD COUNTY MEDICAL CENTER** | Rural Health Clinic | 130 N 6th St #2, Loup City, NE 68853 | N/A |
| **ROSE LANE HOME** | Assisted Living Facility/Long Term Care Facility | 8216, 1005 N 8th St, Loup City, NE 68853 | 76 |
| **VCHS MEDICAL CLINIC** | Rural Health Clinic | 130 N 6th St, Suite B, Loup City, NE 68853 | N/A |

# Parcel Improvements and Valuation

GIS parcel data as of December 2020 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

**Table LOC.7: Loup City Parcel Valuation**

| NUMBER OF PARCELS | NUMBER OF IMPROVEMENTS | TOTAL IMPROVEMENT VALUE | NUMBER OF IMPROVEMENTS IN FLOODPLAIN | VALUE OF IMPROVEMENTS IN FLOODPLAIN | PERCENT OF IMPROVEMENTS IN FLOODPLAIN |
|---|---|---|---|---|---|
| 787 | 596 | 46,750,200 | 35 | 2,710,860 | 5.87% |

Source: County Assessor, GIS Workshop

**Table LOC.8: Loup City Flood Map Products**

| TYPE OF PRODUCT | PRODUCT ID | EFFECTIVE DATE | DETAILS |
|---|---|---|---|
| **LOMA** | 17-07-2532A-310215 | 10/11/2017 | Structure removed from SFHA |
| **LOMA** | 20-07-1158A-310215 | 07/28/2020 | Structure (cabin) removed from SFHA |

Source: FEMA Flood Map Service Center

# Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment.* A full list of historical hazard occurrences can be found in the Sherman County jurisdictional profile. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

### Agricultural Animal Disease

Agricultural animal disease was selected as a significant concern to the local planning team because the local economy, much like the rest of the planning area, is reliant on the agriculture sector. An outbreak of animal disease would cause public health concerns and negatively impact the local economy.

### Flooding

Loup City has one NFIP policy in-force for $65,000. There are no repetitive flood loss properties in Loup City. The areas most prone to flooding include the city's ETJ along the river and along Deadhorse Creek. Local concerns regarding this hazard include the potential for loss of housing, lives, and income. The NCEI recorded one flooding event in Loup City from 1996 to 2015. In 2008, water was rushing across Highway 92, west of Loup City that caused $10,000 in property damages. The bomb cyclone of 2019 caused significant damage in Loup City, killing cattle and downing fences. After these flood events, the city is currently planning to enact floodplain permitting to reduce future risk.

### Severe Thunderstorms (includes hail)

Local concerns regarding severe thunderstorms focus on the potential for power outages, damage to infrastructure, and the risk of secondary hazards such as flooding and wildfires. According to the NCEI, thunderstorm wind events have caused $795,000 in property damages since 1996. The community center, fire and rescue facility, lift stations, and wells all have backup generators. City hall and the city shop still need generators. While only approximately 5% of the city's powerlines are buried, the city's downtown revitalization efforts plan to bury all downtown street light wiring. The city identified burying more of its powerlines as a future priority.

Hail was identified as a concern by the local planning team because of its potential for widespread damages to property and infrastructure. According to the NCEI, there have been 37 hail events reported in Loup City from 1996 to 2015. These hail events caused a total of $1,491,000 in property damages. The most significant hail event occurred in July of 2014. During this hail event, Loup City was hit with hail ranging in size from quarters to golf balls, covering the ground in some locations. None of the city's critical facilities are fitted with hail-resistant materials, but the city has identified hail-resistant building material as a future priority.

### Tornadoes and High Winds

Local concerns regarding tornadoes focus on the potential loss of life, destruction of structures, and lack of shelter available for residents. The NCEI reported two tornadic events in Loup City since 1996. These tornadoes occurred on the same day in April 2003. The F0 tornadoes were located south of corporate limits and did not result in any damages. The city has warning sirens remotely activated by Region 26. The sirens reach all areas of the city. Two outdoor FEMA-approved saferooms were installed during the summer of 2021 for Westside. Hazardous trees are located within Loup City, however, NPPD trims trees near powerlines, the city maintains hazardous trees as necessary, and property owners are cited for hazardous trees.

# Mitigation Strategy

## Completed Mitigation Actions

| OBJECTIVE | IMPROVE WARNING SYSTEMS |
|---|---|
| DESCRIPTION | 7. Evaluate current warning systems<br>8. Improve warning systems/develop new warning system<br>9. Obtain/Upgrade warning system equipment and methods<br>10. Conduct evaluation of existing alert sirens for replacement or placement of new sirens<br>11. Identify location of weather warning radios<br>12. Improve weather radio system<br>13. Obtain/Upgrade weather radios |
| HAZARD(S) ADDRESSED | All Hazards |
| STATUS | All sirens in town have been evaluated and updated as needed. |

| OBJECTIVE | DEVELOP EMERGENCY SNOW/EVACUATION ROUTES |
|---|---|
| DESCRIPTION | 1. Develop/Improve snow/evacuation route and program to include parking, snow/ice and debris removal, etc.<br>2. Obtain and install snow emergency route/evacuation signs<br>3. Provide information on emergency routes to public |
| HAZARD(S) ADDRESSED | Tornadoes, Severe Winter Storms, Severe Thunderstorms, Flooding, Dam Failure |
| STATUS | Emergency Snow routes have been determined and posted throughout the city. |

| OBJECTIVE | REDUCE TREE DAMAGE AND DAMAGE FROM TREES |
|---|---|
| DESCRIPTION | 1. Conduct tree inventory<br>2. Develop tree maintenance/trimming program<br>3. Implement tree maintenance/trimming program<br>4. Remove hazardous limbs and/or trees |
| HAZARD(S) ADDRESSED | Hail, Severe Thunderstorms, Severe Winter Storms |
| STATUS | A tree assessment has been completed and concerns are addressed on an as-needed basis. |

| OBJECTIVE | REDUCE WATER DEMAND/IMPROVE DROUGHT EDUCATION |
|---|---|
| DESCRIPTION | 1. Conduct water use study to evaluate/implement methods to conserve water/reduce consumption<br>2. Evaluate/implement water use restriction ordinance<br>3. Identify/evaluate current/additional potable water sources<br>4. Develop or obtain drought education materials to conduct multi-faceted public education and awareness program |
| HAZARD(S) ADDRESSED | Drought |
| STATUS | Completed. If annexation occurs, plans will be updated as needed. |

| OBJECTIVE | DEVELOP/IMPLEMENT HAZARD/EMERGENCY OPERATIONS/ACTION/RESPONSE PLAN |
|---|---|
| DESCRIPTION | 1. Identify and evaluate current hazards, response plan and procedures<br>2. Develop/Update multi-hazard emergency plan and procedures<br>3. Obtain additional response equipment and material<br>4. Train additional team members/maintain high training level for all team members |
| HAZARD(S) ADDRESSED | All Hazards |
| STATUS | Completed and updated every three years. |

## Continued Mitigation Actions

| OBJECTIVE | PUBLIC SAFE ROOMS & POST-DISASTER STORM SHELTERS |
|---|---|
| DESCRIPTION | 1. Identify and evaluate existing safe rooms and/or storm shelters<br>2. Improve and/or construct safe rooms and/or storm shelters<br>3. Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, schools, etc. |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $150/sf for retrofit; $300/sf for new construction |
| POTENTIAL FUNDING | Loup City General Fund, HMGP, PDM |
| TIMELINE | 2-5 Years |
| PRIORITY | Medium |
| LEAD AGENCY | City Council |
| STATUS | This project is in the works. |

| OBJECTIVE | BACKUP AND EMERGENCY GENERATORS |
|---|---|
| DESCRIPTION | 1. Identify and evaluate current backup and emergency generators<br>2. Obtain additional generators based on identification and evaluation<br>4. Provide portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $20,000 to $75,000+ per generator |
| POTENTIAL FUNDING | Sherman County General Fund, HMGP, PDM |
| TIMELINE | 2-5 Years |
| PRIORITY | Medium |
| LEAD AGENCY | City Council, Sherman County EMA |
| STATUS | This project is in the works. The city has a five-year plan to acquire generators for city hall and city yards. |

| OBJECTIVE | IMPROVE EMERGENCY COMMUNICATIONS |
|---|---|
| DESCRIPTION | 1. Develop/Improve Emergency Communication Action plan<br>2. Implement Emergency Communication Action Plan<br>3. Establish inner-operable communications<br>4. Obtain/Upgrade Emergency Communication Facilities/Equipment<br>5. Obtain/Upgrade/Distribute Weather Warning Radios |
| HAZARD(S) ADDRESSED | All Hazards |
| ESTIMATED COST | $5,000+ |
| POTENTIAL FUNDING | Loup City General Fund, HMGP, PDM |
| TIMELINE | 2-5 Years |
| PRIORITY | Medium |
| LEAD AGENCY | Sherman County Emergency Management |
| STATUS | This project is in the works and will be furthered with the update of the county LEPC. |

| OBJECTIVE | IMPROVE ELECTRICAL SERVICE |
|---|---|
| DESCRIPTION | 1. Evaluate hardening, retrofitting, looping and/or burying of power lines and related infrastructure and/or comparable protection measures<br>2. Provide looped distribution service and other redundancies in the electrical system as a backup power supply in the event the primary system is destroyed or fails<br>3. Implement measures to improve electrical service<br>4. Bury power lines for future construction |
| HAZARD(S) ADDRESSED | Tornadoes, High Winds, Severe Winter Storms, Severe Thunderstorms |
| ESTIMATED COST | Unknown |
| POTENTIAL FUNDING | Loup City General Fund, Utility Rates |
| TIMELINE | 2-5 Years |
| PRIORITY | Medium |
| LEAD AGENCY | Public Works Department |
| STATUS | This project is in the works. Downtown revitalization efforts plan to bury all electrical lines to the downtown streetlights. |

| OBJECTIVE | REDUCE STREAM & DRAINAGE BOTTLENECKS/FLOW RESTRICTIONS |
|---|---|
| DESCRIPTION | 1. Evaluate restrictions and measures to prevent or reduce flood damage<br>2. Implement appropriate nonstructural or structural methods on an emergency or permanent basis (monitoring or warning systems, ice jam dusting, excavation or blasting, reshaping channel, tree and debris removal, acquire property and/or construct additional channels or other flow improvements) |
| HAZARD(S) ADDRESSED | Flooding |
| ESTIMATED COST | $10,000 to $50,000 for studies; $10,000+ for more to enlarge ditches, culverts, pipes; unknown for stream channel, crossing structures or bridge improvements |
| POTENTIAL FUNDING | Loup City General Fund, HMGP, PDM, FMA |
| TIMELINE | 5+ Years |
| PRIORITY | Medium |
| LEAD AGENCY | Public Works Department, Sherman County Emergency Manager |
| STATUS | This project has not yet been started. |

| OBJECTIVE | REDUCE WILDFIRE DAMAGE |
|---|---|
| DESCRIPTION | 1. Identify vulnerable areas and combustion sources<br>2. Evaluate fire resistant roofing<br>3. Develop plan to reduce wildfire impact and reduce combustion materials<br>4. Reduce combustion material by removal or other methods<br>5. Enact building codes/ordinances for fire resistant roofing |
| HAZARD(S) ADDRESSED | Grass/Wildfire |
| ESTIMATED COST | $500 to $5,000 |
| POTENTIAL FUNDING | Loup City General Fund |
| TIMELINE | 5+ Years |
| PRIORITY | Low |
| LEAD AGENCY | Public Works Department, Fire Department, Clerk |
| STATUS | This project has not yet been started. |

| OBJECTIVE | IMPROVE STREAM BED/BANK STABILIZATION |
|---|---|
| DESCRIPTION | 1. Evaluate current stream bed and bank stabilization needs<br>2. Implement stream bed and bank stabilization improvements including grade control structures, rock rip rap, vegetative cover, etc. |
| HAZARD(S) ADDRESSED | Flooding |
| ESTIMATED COST | $25,000 to $500,000+ |
| POTENTIAL FUNDING | Loup City General Fund, Bond, HMGP, PDM, FMA |
| TIMELINE | 5+ Years |
| PRIORITY | Medium |
| LEAD AGENCY | Public Works, Sherman County EMA, LLNRD |
| STATUS | This project is not yet started. |

| OBJECTIVE | IMPROVE CONSTRUCTION STANDARDS AND BUILDING SURVIVABILITY |
|---|---|
| DESCRIPTION | 1. Evaluate building standards/codes/requirements<br>2. Implement new or improved building standards/codes/requirements<br>3. Promote use of higher codes and standards, such as fortified for Safer Living Standard, in order to provide greater protection for any new construction or building retrofits |
| HAZARD(S) ADDRESSED | Tornadoes, Severe Winter Storms, Severe Thunderstorms, Grass/Wildfire, Flooding |
| ESTIMATED COST | Staff Time |
| POTENTIAL FUNDING | Loup City General Fund |
| TIMELINE | 5+ Years |
| PRIORITY | Low |
| LEAD AGENCY | City Council, Clerk |
| STATUS | This project is not yet started. |

| OBJECTIVE | INCREASE SOIL & WATER CONSERVATION |
|---|---|
| DESCRIPTION | 1. Develop/improve public awareness program<br>2. Develop or obtain materials and conduct multi-faceted public education |
| HAZARD(S) ADDRESSED | Drought, Severe Thunderstorms |
| ESTIMATED COST | $1,000+ |
| POTENTIAL FUNDING | Loup City General Fund |
| TIMELINE | 5+ Years |
| PRIORITY | Low |
| LEAD AGENCY | Public Works, Sherman County Emergency Manager, LLNRD |
| STATUS | This project is not yet started. |

# Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the City Administrator, Public Works Director, City Council, and County Emergency Manager. The plan will be reviewed no less than annually and will include the public in the review and revision process by sharing information via social media, the local website, and on community bulletin boards.

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# COMMUNITY PROFILE

# VILLAGE OF ROCKVILLE

**Lower Loup Natural Resources District**
**Hazard Mitigation Plan 2022**

# Local Planning Team

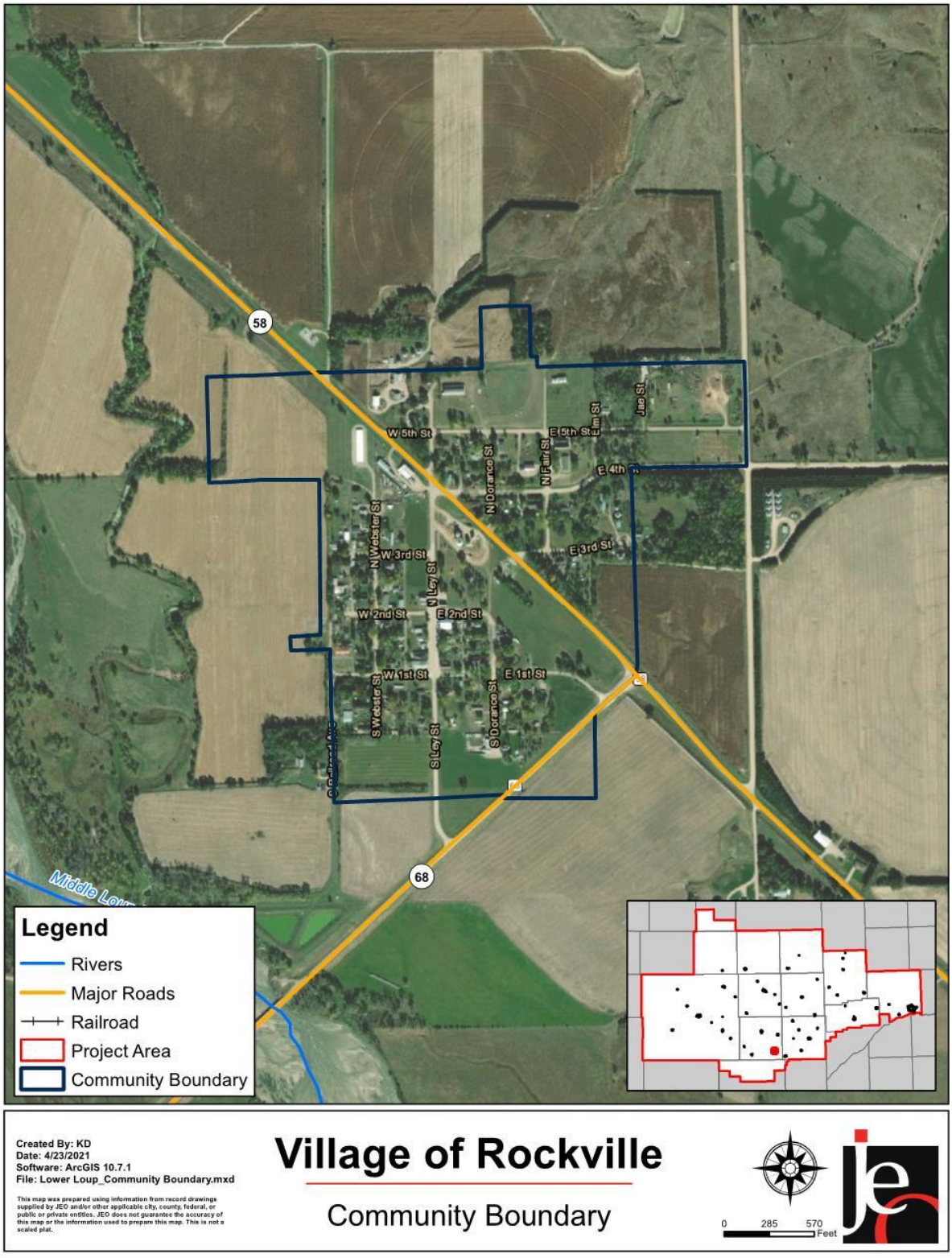
**Table ROC.1: Village of Rockville Local Planning Team**

| NAME | TITLE | JURISDICTION |
|---|---|---|
| **TIM KUSEK** | Fire Chief | Rockville Village |

# Location and Geography

The Village of Rockville is located in the southeastern portion of Sherman County. The Village of Rockville covers an area of 0.22 square miles. The Middle Loup River flows west of the corporate limits. The area is not heavily forested. Sherman County has experienced at least two landslides historically, however, it is unknown if these landslides occurred in or in the vicinity of Rockville. Most of Rockville lies in the sandhills and valleys topographic region, and is surrounded by agricultural fields.

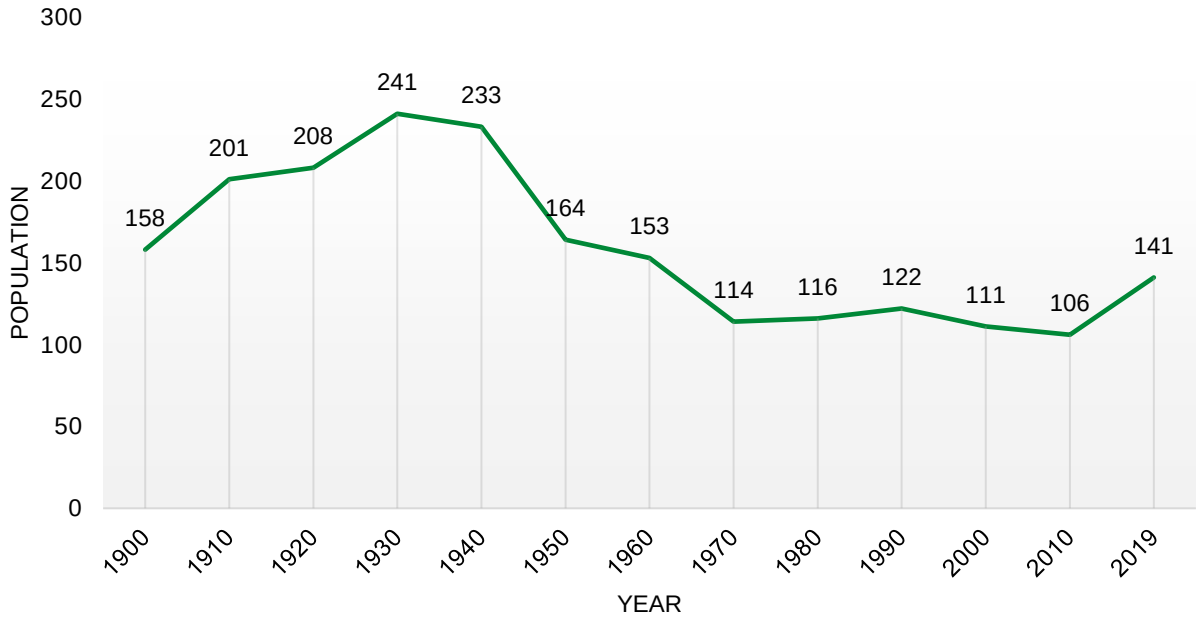
**Figure ROC.1: Village of Rockville Jurisdictional Boundary**



# Demographics

The following figure displays the historical population trend from 1900 to 2019 (estimated). This figure indicates that the population of Rockville experienced a decline from 1930 through 1970. During the 1970s through the 1990s the population grew, but then declined again until 2010. Since 2010, however, the population has had a steady increase. Increasing populations are associated with increased hazard mitigation and emergency planning requirements for development. Increasing populations can also contribute to increasing tax revenues, allowing communities to pursue additional mitigation projects. The Village's population accounted for 5% of Sherman County's Population in 2019.

**Figure ROC.2: Rockville Population 1900-2019**




Source: U.S. Census Bureau[48]

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Rockville' population was:

- **Older.** The median age of Rockville was 30.4 years old in 2019, compared with the County average of 49.7 years. Rockville's population has grown older since 2010, when the median age was 28.4 years old. Rockville had a smaller proportion of people under 20 years old (35.7%) than the County (49.7%).[49]
- **Less ethnically diverse.** In 2010, 0% of Rockville's population was Black or African American, 0% was other races, and 0% were two or more races. By 2019, 0% of Rockville's population was two or more races. During that time, Sherman County went from 0% to 0% American Indian, 0% to 0.8% other races and 1.8% to 0.9% two or more races from 2010 to 2019 respectively.[50]

48 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]
49 United States Census Bureau. "2019 American Fact Finder: S0101: Age and Sex." [database file]
50 United States Census Bureau. "2019 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

- **More likely to be at the federal poverty line.** The poverty rate of all persons in Rockville (14.7%) was higher than the County (9.5%) in 2019.[51]

# Employment and Economics

The community's economic base is a mixture of industries. In comparison to Sherman County, Rockville's economy had:

- **Different mix of industries**. Employment sectors accounting for 10% or more of employment in Rockville included Construction, Manufacturing, and Entertainment. Comparison Sherman County's included Agriculture, Manufacturing, Retail, and Education.[52]
- **Higher household income**. Rockville's median household income in 2019 ($53,500) was about $3,000 higher than the County ($50,781).[53]
- **Fewer long-distance commuters**. About 30.5% percent of workers in Rockville commuted for fewer than 15 minutes, compared with about 42.0% of workers in Sherman County. About 34.0% of workers in Rockville commute 30 minutes or more to work, compared to about 34.8% of the County workers.[54]

## Major Employers

There are no major employers in the Village of Rockville and over ninety-five percent of residents commute to surrounding communities.

# Housing

In comparison to the Sherman County, Rockville's housing stock was: [55]

- **More owner occupied.** About 84.6% of occupied housing units in Rockville are owner occupied compared with 77.2% of occupied housing in Sherman County in 2019.
- **Larger share of aged housing stock**. Rockville has more houses built prior to 1970 than the county (76.9% compared to 64.5%).
- **Fewer multi-family homes**. The predominant housing type in the Village is single family detached and Rockville contains a similar amount of multifamily housing with five or more units per structure than the County (0.0% compared to 0.1%). About 89.2% of housing in Rockville was single-family detached, compared with 80.8% of the County's housing. Rockville has a smaller share of mobile and manufactured housing (10.8%) compared to the County (15.3%)

The local planning team noted that there are only seven mobile homes in the community. This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

51 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
52 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
53 United States Census Bureau. "2019 American Fact Finder: DP03: Selected Economic Characteristics." [database file]
54 United States Census Bureau. "2019 American Fact Finder: s0802: Means of Transportation to Work by Selected Characteristics." [database file]
55 United States Census Bureau. "2019 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

# Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Rockville has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The Village has a five member village board and the following offices: clerk/treasurer, volunteer fire department, sewer/water commissioner, and street superintendent.

# Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

**Table ROC.2: Capability Assessment**

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| PLANNING & REGULATORY CAPABILITY | Comprehensive Plan | No |
| | Capital Improvements Plan | No |
| | Economic Development Plan | No |
| | Local Emergency Operational Plan | County |
| | Floodplain Ordinance | Yes |
| | Zoning Ordinance | Yes, County |
| | Subdivision Regulation/Ordinance | No |
| | Building Codes | No |
| | Chief Building Official | No |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | No |
| | National Flood Insurance Program | Yes |
| | Community Rating System | No |
| | Other (if any) | |
| ADMINISTRATIVE & TECHNICAL CAPABILITY | Planning Commission | Yes, County |
| | Floodplain Administration | No |
| | GIS Capabilities | No |
| | Civil Engineering | No |
| | Local Staff Who Can Assess Community's Vulnerability to Hazards | Yes |
| | Grant Manager | No |
| | Mutual Aid Agreement | Yes |
| | Other (if any) | |
| FISCAL CAPABILITY | 1 & 6 Year Plan | Yes |
| | Applied for grants in the past | No |
| | Awarded a grant in the past | No |
| | Authority to Levy Taxes for Specific Purposes such as Mitigation Projects | No |
| | Gas/Electric Service Fees | No |
| | Storm Water Service Fees | No |
| | Water/Sewer Service Fees | Yes |

| SURVEY COMPONENTS | | YES/NO |
|---|---|---|
| | Development Impact Fees | No |
| | General Obligation Revenue or Special Tax Bonds | No |
| | Other (if any) | |
| EDUCATION AND OUTREACH | Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.<br>Ex. CERT Teams, Red Cross, etc. | No |
| | Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No |
| | Natural Disaster or Safety related school programs | No |
| | StormReady Certification | No |
| | Firewise Communities Certification | No |
| | Tree City USA | No |
| | Other (if any) | |

**Table BAR.3: Overall Capability**

| OVERALL CAPABILITY | 2017 PLAN | 2022 PLAN LIMITED/MODERATE/HIGH |
|---|---|---|
| FINANCIAL RESOURCES NEEDED TO IMPLEMENT MITIGATION PROJECTS | Limited | Limited |
| STAFF/EXPERTISE TO IMPLEMENT PROJECTS | Limited | Limited |
| COMMUNITY SUPPORT TO IMPLEMENT PROJECTS | High | Moderate |
| TIME TO DEVOTE TO HAZARD MITIGATION | Moderate | Limited |

# Plan Integration

Communities have several planning documents that discuss or relate to hazard mitigation. Each applicable planning mechanism is listed below along with a short description of how it is integrated with the hazard mitigation plan. Participating jurisdictions will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

## Annual Municipal Budget

Rockville's annual budget is currently limited to maintaining current facilities and systems. Funds in the village have remained relatively stable over the past decade and the majority of funds are dedicated to maintaining current infrastructure. The village has not applied for or received grants in the past for other projects.

### Floodplain Ordinance, Zoning Ordinance, Subdivision Regulations (2009)

The local zoning ordinance was developed alongside the Sherman County Comprehensive Plan with Ashton, Litchfield, Rockville and Hazard. The village has requirements which limit development in the floodplain. These documents are reviewed and amended as needed.

### Sherman County Local Emergency Operations Plan (2020)

The Village of Hazard is an annex in the Sherman County Local Emergency Operations Plan (LEOP). The LEOP establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

### Central Platte Community Wildfire Protection Plan (2019)

The Nebraska Forest Service updated the Central Platte Community Wildfire Protection Plan (CWPP), which includes Sherman County in October 2019. The purpose of the CWPP is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. This document is updated every five years.

# Future Development Trends

In the past five years, the village has had three houses become unlivable and two houses with major renovations made to them. No new commercial or residential structures were developed in the community, and none are planned for the next five years. The local planning team indicated that the census estimates are accurate, and that Rockville's population is increasing due to a lower cost of living and younger families moving in to be closer to their parents.

# Community Lifelines

## Transportation

Rockville's major transportation corridors include Highway 58, which runs northwest-southeast, through the center of Rockville and Highway 68, which runs through the southern portion of the village. Highway 58 accommodates on average 655 vehicles per day, 65 of which are heavy commercial vehicles. Highway 68 accommodates on average 375 vehicles per day, 30 of which are heavy commercial vehicles. Rockville does not have rail lines. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

## Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there is one chemical storage sites throughout Rockville which houses hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond, but they may also need to call the Grand Island hazmat to assist.

**Table ROC.4: Chemical Storage Fixed Sites**

| FACILITY NAME | ADDRESS | LOCATED IN FLOODPLAIN? |
|---|---|---|
| NEBRASKA CENTRAL TELEPHONE CO | 106 W 2nd St | N |

Source: Nebraska Department of Environment and Energy[56]

## Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the previous planning process and updated by the local planning team as a part of this plan update.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

**Table ROC.5: Rockville Critical Facilities**

| CF # | COMMUNITY LIFELINE | NAME | SHELTER (Y/N) | GENERATOR (Y/N) | FLOODPLAIN (Y/N) |
|---|---|---|---|---|---|
| 1 | Food, Water, and Shelter | Well House | N | N | N |
| 2 | Safety and Security | Village Office/Fire Hall | N | N | N |
| 3 | Food, Water, and Shelter | Sewage Lagoon | N | N | Y |
| 4 | Food, Water, and Shelter | Second Well Submersible | N | N | N |
| 5 | Food, Water, and Shelter | Gymnasium Emergency Shelter | N | N | N |

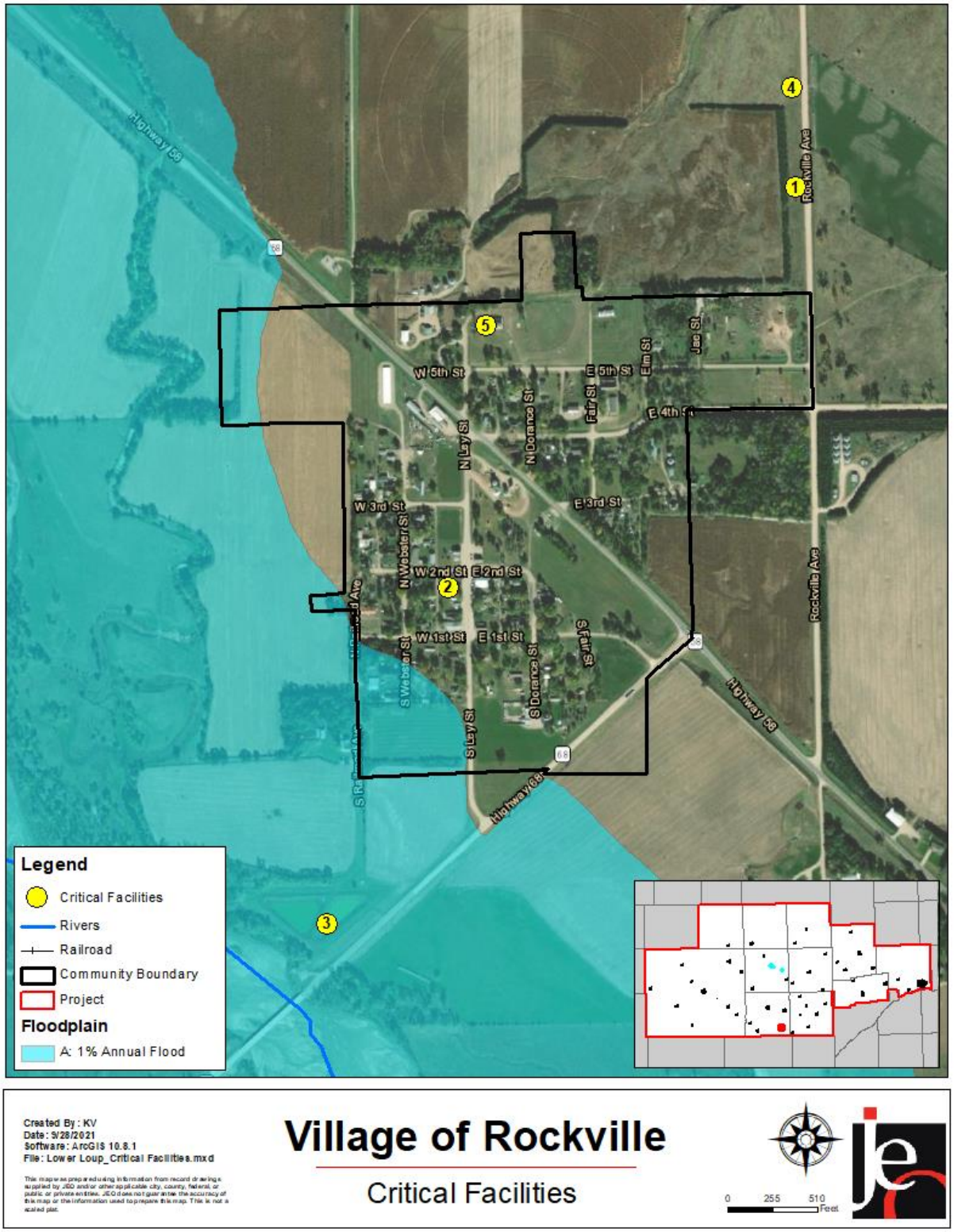
Although not listed in the table above, critical infrastructure also include power substations, cell towers, and alert sirens in the community. These assets are typically owned and maintained by other agencies and are not the responsibility of the jurisdiction.

### Health and Medical Facilities

No medical and health facilities are located within the community.

56 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed August 2020.

**Figure ROC.3: Rockville Critical Facilities**



# Parcel Improvements and Valuation

GIS parcel data as of December 2020 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

**Table ROC.7: Rockville Parcel Valuation**

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Value of Improvements in Floodplain | Percent of Improvements in Floodplain |
|---|---|---|---|---|---|
| **135** | 69 | 1,897,730 | 3 | 31,530 | 4.35% |

Source: County Assessor, GIS Workshop

# Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment.* A full list of historical hazard occurrences can be found in the Sherman County jurisdictional profile. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

## Flooding

Rockville participates in the NFIP but does not have any policies in-force. There are no repetitive flood loss properties in the Village of Rockville. Flooding is not a significant concern for Rockville. Small, localized flooding may occur during periods of high precipitation. The community has been working on improving drainage issues. During the major flooding in 2019, the community did not experience many impacts from flood waters. The Middle Loup River water levels did get high with ice jams and nearly breached the village's lagoon system north of the river.

## Severe Thunderstorms (includes hail)

Local concerns regarding severe thunderstorms focus on the potential for property damages from lightning, hail, and high winds. Rockville has a number of large, old trees that could cause damages and injuries from falling branches. The community has exceptional stormwater drainage, so localized flooding is not a concern. Critical municipal records are protected with surge protectors on electronic devices. The village has the ability to provide backup power to municipal facilities with access to some portable generators. The village has weather radios in critical facilities. Critical municipal records have data backup systems.

Local concerns regarding hail events focus on the potential for widespread property damages. According to the NCEI, 16 hail events have caused $390,000 in property damages in Rockville since 1996. In 2013, a large hailstorm caused widespread property damage throughout Rockville. The damage from that storm caused all roofs in Rockville to be replaced. Municipal facilities are insured for hail damage.

### Severe Winter Storms

Severe winter storms can include blowing snow and ice, damaging power lines and affecting transportation routes. Snow removal in Rockville include help from private citizens, the village, and the county. Snow removal resources were determined to be sufficient for current needs.

### Tornadoes and High Winds

Major concerns regarding this hazard in Rockville is the potential for widespread property damage, downed trees, and loss of life. There are no public safe rooms or shelters within Rockville. Some residents have their own safe rooms as well as basements that they can utilize for shelter. Rockville has a warning siren that can be activated manually or by emergency dispatch. There are also text alerts that can warn residents of an impending tornadic event. There are many hazardous trees located in the community park and the village has been removing dead trees when possible.

# Mitigation Strategy

## Continued Mitigation Actions

| OBJECTIVE | BACKUP AND EMERGENCY GENERATORS |
|---|---|
| DESCRIPTION | 14. Identify and evaluate current backup and emergency generators<br>15. Obtain additional generators based on identification and evaluation<br>16. Provide portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters |
| HAZARD(S) ADDRESSED | Tornadoes, High Winds, Severe Winter Storms, Severe Thunderstorms, Flooding |
| ESTIMATED COST | $20,000 to $75,000+ per generator |
| POTENTIAL FUNDING | Village General Fund, HMGP, PDM |
| TIMELINE | 5+ years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board, Emergency Management |
| STATUS | This project has not yet been started. |

| OBJECTIVE | PUBLIC SAFE ROOMS & POST-DISASTER STORM SHELTERS |
|---|---|
| DESCRIPTION | 1. Identify and evaluate existing safe rooms and/or storm shelters<br>2. Improve and/or construct safe rooms and/or storm shelters<br>3. Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, schools, etc. |
| HAZARD(S) ADDRESSED | Tornadoes, high winds, Severe Thunderstorms |
| ESTIMATED COST | $150/sf for retrofit; $300/sf for new construction |
| POTENTIAL FUNDING | HMGP, PDM, Village General Fund |
| TIMELINE | 5+ years |
| PRIORITY | Medium |
| LEAD AGENCY | Emergency Management, Village Board |
| STATUS | This project has not yet been started. |

### Removed Mitigation Actions

| OBJECTIVE | IMPROVE WARNING SYSTEMS |
|---|---|
| DESCRIPTION | 1. Evaluate current warning systems<br>2. Improve warning systems/develop new warning system<br>3. Obtain/Upgrade warning system equipment and methods<br>4. Conduct evaluation of existing alert sirens for replacement or placement of new sirens<br>5. Identify location of weather warning radios<br>6. Improve weather radio system<br>7. Obtain/Upgrade weather radios |
| HAZARD(S) ADDRESSED | All Hazards |
| REASON FOR REMOVAL | Sirens and alerts in town are managed by County and Regional Emergency Management. This action was identified as not the responsibility of the village. |

| OBJECTIVE | REDUCE DAMAGES IN FLOODPLAIN |
|---|---|
| DESCRIPTION | 1. Evaluate repetitive loss or potential loss structures located in floodplain<br>2. Acquire and relocate or demolish flood prone property or elevate flood prone property<br>3. Elevate equipment vulnerable to flooding |
| HAZARD(S) ADDRESSED | Flooding |
| REASON FOR REMOVAL | This project was identified as not a priority for the village at this time as there are limited properties in the floodplain. |

# Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the Village Board and Public Works. The plan will be reviewed no less than annually and will include the public in the review and revision process by sharing information at local board meetings which are open to the public.