

COMMUNITY PROFILE

VILLAGE OF JACKSON

Papio-Missouri River NRD
Multi-Jurisdictional Hazard Mitigation Plan Update

2021

Local Planning Team

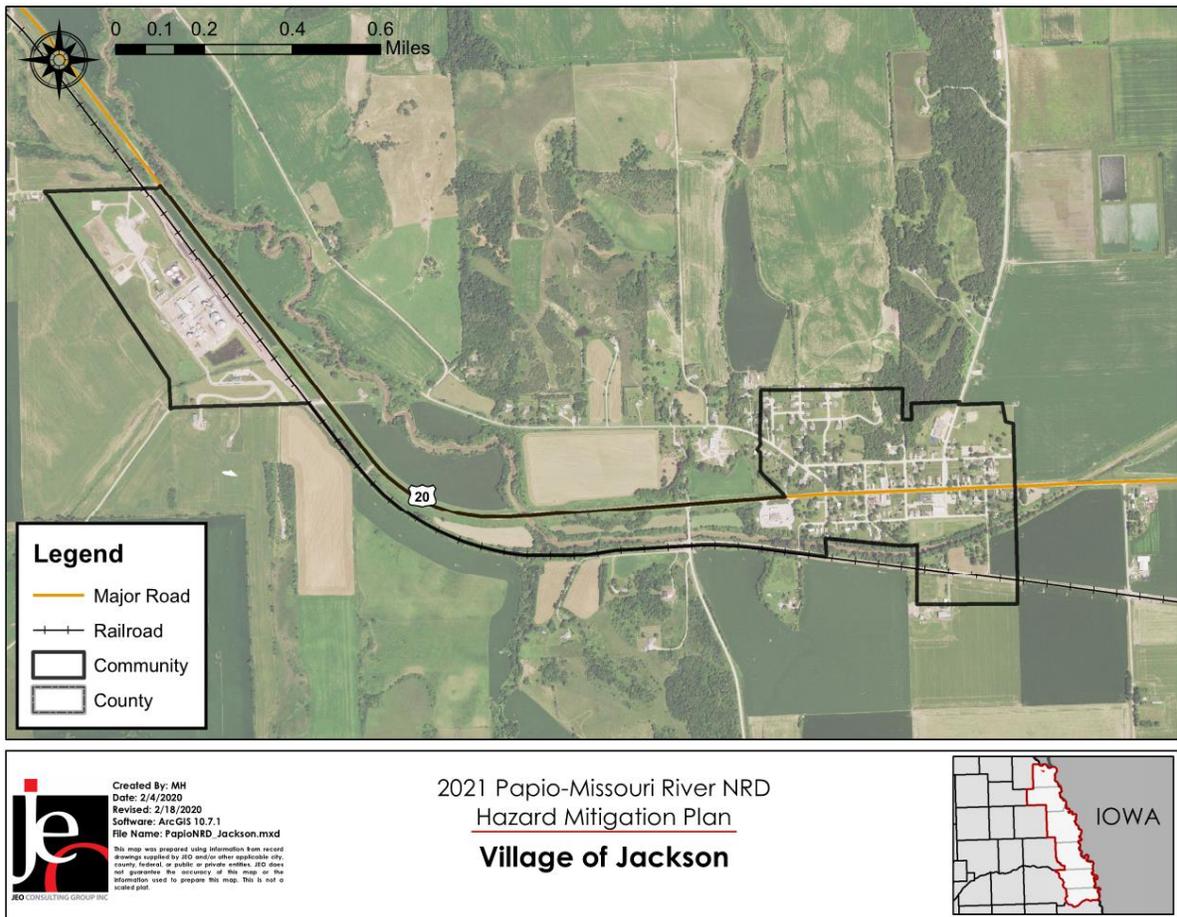
Table JKN.1: Jackson Local Planning Team

NAME	TITLE	JURISDICTION
STEPHANIE HIRSCH	Board Chairman	Village of Jackson
RANDI MORTON	Board Trustee	Village of Jackson
JOE HAYES	Board Trustee	Village of Jackson
COREY KRAMPER	Board Trustee	Village of Jackson
DONNA HIRSCH	Clerk	Village of Jackson

Location and Geography

The Village of Jackson is located in the north-central portion of Dakota County and covers an area of 0.45 square miles. The major waterway in the village is Elk Creek, which flows through the southern portions of the village.

Figure JKN.1: Village of Jackson



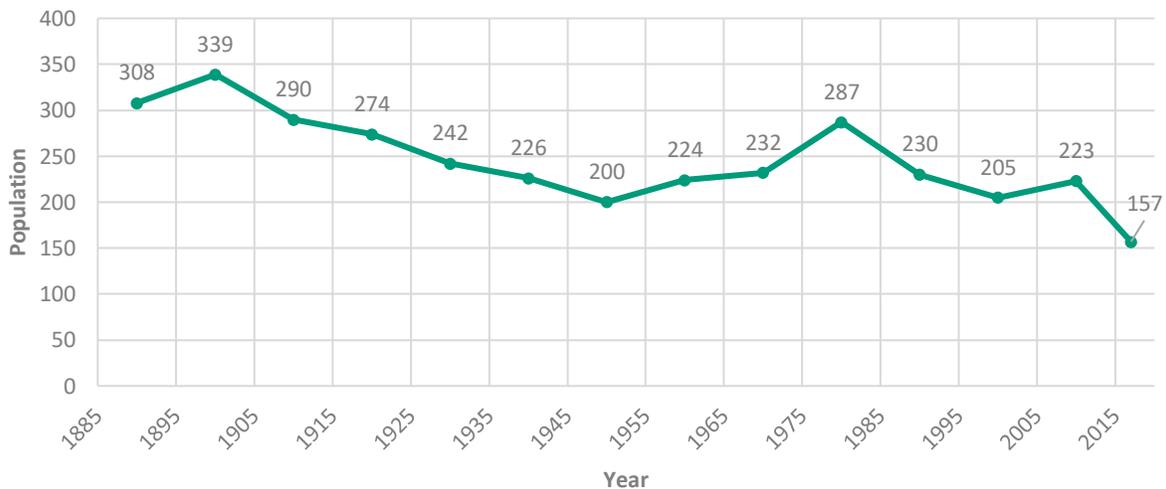
Transportation

Jackson's major transportation corridors include U.S. Highway 20. The average number of vehicles on this highway per day is 6,410 with 1,345 of those being heavy commercial vehicles. The Nebraska Northeastern Railway Company has a rail line which travels through the village. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents. The village is concerned with ethanol transported from the Siouxland Ethanol Plant by rail on the west side of the village and also fuel tankers transported on Highway 20. Critical facilities located near these transported routes include the school, which is located two blocks north off Highway 20, and the Fire Hall, which is located one block south of Highway 20.

Demographics

Jackson's population has declined slowly over the past few decades. The current estimated population in 2017 was 157. A declining population can lead to more unoccupied housing that is not being maintained and is then at risk to high winds and other hazards. Furthermore, with fewer residents, there is decreasing tax revenue for the community, which could make implementation of mitigation projects more fiscally challenging. Jackson's population accounted for less than 1% of Dakota County's population in 2017.¹

Figure JKN.2: Estimated Population 1890 – 2017



Source: U.S. Census Bureau²

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

- **Older.** The median age of Jackson was 52.4 years old in 2017, compared with the county average of 33.8 years. Jackson's population has grown older since 2010, when the median age was 44.3 years old. Jackson had a smaller proportion of people under 20 years old (14.7%) than the county (31.2%)³
- **Less ethnically diverse.** Since 2010, Jackson grew less ethnically diverse. In 2010, 3.2% of Jackson's population was other races and 0% was two or more races. By 2017, 2% of Jackson's population was two or more races and 0% was other races. During that time,

¹ United States Census Bureau. "2017 American Fact Finder: S0101: Age and Sex." [database file]. <https://factfinder.census.gov/>.

² United States Census Bureau. "2017 American Fact Finder: S0101: Age and Sex." [database file]. <https://factfinder.census.gov/>.

³ United States Census Bureau. "2017 American Fact Finder: S0101: Age and Sex." [database file]. <https://factfinder.census.gov/>.

Dakota County went from 2% to 4% (Black or African American), 3% (Asian), and declined 17% to 16% (other races) from 2010 to 2017 respectively.⁴

- **Less likely to be at the federal poverty line.** The poverty rate in Jackson (3.8% of all persons living below the federal poverty line) is much lower than the county's poverty rate (16.8%) in 2017.⁵

Employment and Economics

The village's economic base is a mixture of industries. In comparison to Dakota County, Jackson's economy had:

- **Similar mix of industries.** Employment sectors accounting for 10% or more of employment in Jackson included Manufacturing, Retail Trade, and Educational Services in 2017. In comparison Dakota County's included Manufacturing, Educational Services, and Arts and Entertainment.⁶
- **Greater household income.** Jackson's median household income in 2017 (\$57,917) was about \$5,500 higher than the county (\$52,401).⁷
- **More long-distance commuters.** About 29.3% percent of workers in Jackson commuted for fewer than 15 minutes, compared with about 50.7% of workers in Dakota County. About 19.2% of workers in Jackson commute 30 minutes or more to work, compared to about 9.0% of the county workers.⁸

Major Employers

Major employers include Siouxland Ethanol, Ponca Public School District, Gill Construction, Gill Hauling, Northeast Nebraska Telephone Company, Bank of Dixon County, Bosselman-Pump & Pantry, and Gomez Pallets. A large percentage of Jackson residents commute to South Sioux City, Sioux City, IA, and the greater Siouxland area.

Housing

In comparison to Dakota County, Jackson's housing stock was:

- **More owner occupied.** About 87.3% of occupied housing units in Jackson are owner occupied compared with 65.9% of occupied housing in Dakota County in 2017.⁹
- **Smaller share of aged housing stock.** Jackson has a smaller share of housing built prior to 1970 than the county (35.6% compared to 43.7%).¹⁰
- **More single-family homes.** The predominant housing type in the village is single family detached and Jackson contains fewer multifamily housing with five or more units per structure than the county (4.6% compared to 16.1%). About 81.6% of housing in Jackson was single-family detached, compared with 66.9% of the county's housing. Jackson has a smaller share of mobile and manufactured housing (6.9%) compared to the county (9.7%).¹¹ The local planning team noted there are four mobile homes on the southwest side of the village and one on the north side of Highway 20 near Monona Boulevard.

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,

⁴ United States Census Bureau. "2017 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]. <https://factfinder.census.gov/>.

⁵ United States Census Bureau. "2017 American Fact Finder: DP03: Selected Economic Characteristics." [database file]. <https://factfinder.census.gov/>.

⁶ United States Census Bureau. "2017 American Fact Finder: DP03: Selected Economic Characteristics." [database file]. <https://factfinder.census.gov/>.

⁷ United States Census Bureau. "2017 American Fact Finder: DP03: Selected Economic Characteristics." [database file]. <https://factfinder.census.gov/>.

⁸ United States Census Bureau. "2017 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]. <https://factfinder.census.gov/>.

⁹ United States Census Bureau. "2017 American Fact Finder: DP04: Selected Housing Characteristics." [database file]. <https://factfinder.census.gov/>.

¹⁰ United States Census Bureau. "2017 American Fact Finder: DP04: Selected Housing Characteristics." [database file]. <https://factfinder.census.gov/>.

¹¹ United States Census Bureau. "2017 American Fact Finder: DP04: Selected Housing Characteristics." [database file]. <https://factfinder.census.gov/>.

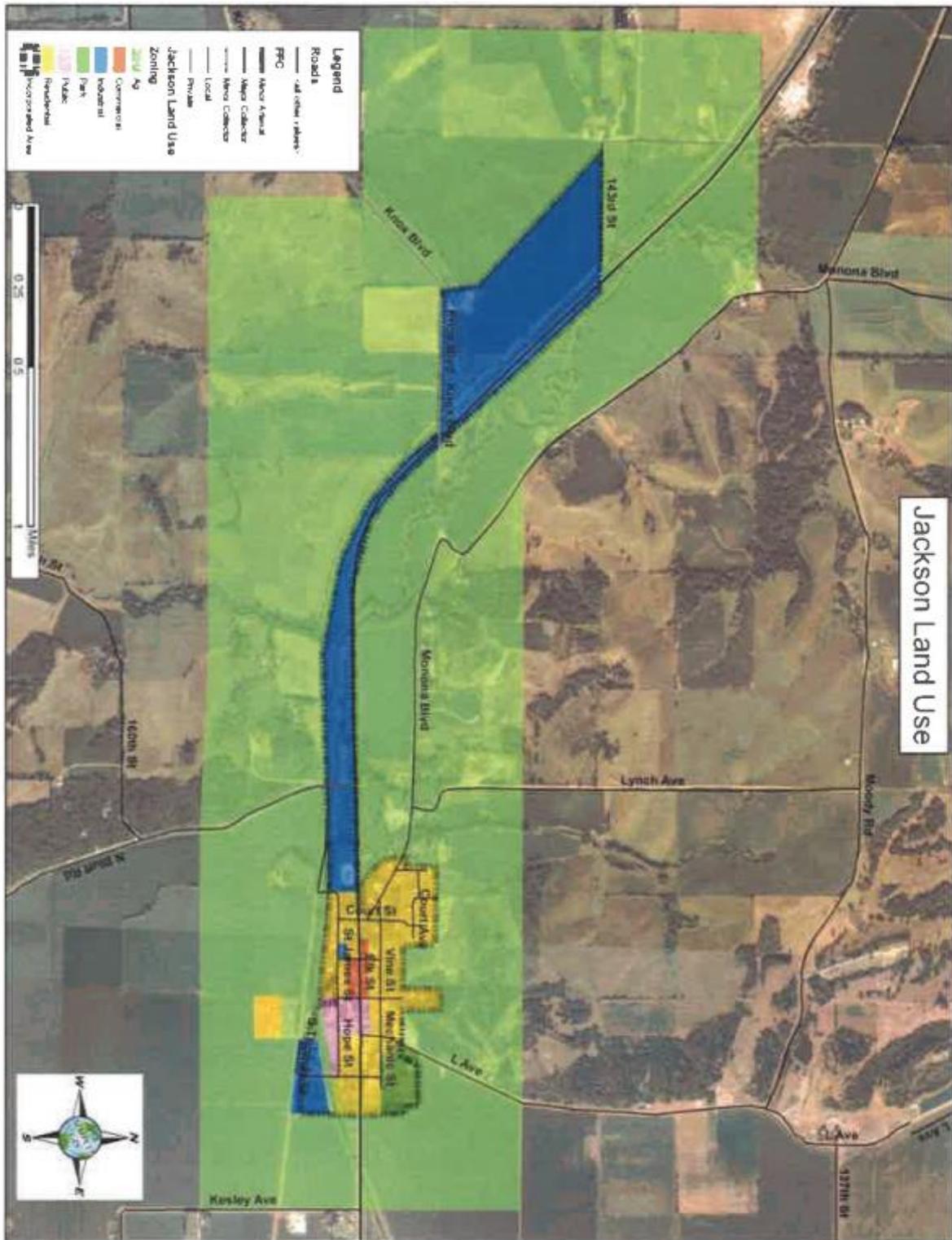
unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

Future Development Trends

There has been some new residential development over the past five years. Three houses were built in the Jackson Bluff Addition, one house built off South Thomas Street and one built off Hubbard Road. According to census data estimates, Jackson's population has been declining over the last decade. However, the planning team stated that there may actually be an increase based on the number of houses built over the last ten years. The team did indicate that a possible decline could be the result of younger residents moving away. Those that have moved to Jackson in recent years have generally been older couples and individuals. Two houses are currently vacant and two lots remain empty from demolished homes.

There are no new residential developments planned for the next five years, but there has been some discussion about potential development on the east end of Mechanic Street. The planning team noted that this area is located within the floodplain. There is also some discussion about the need for a daycare in the village, but no plans are currently in place.

Figure JKN.2: Future Land Use Map



Structural Inventory and Valuation

The planning team requested GIS parcel data from the County Assessor as of December 2019. This data allowed the planning team to analyze 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. Several structures in Jackson have been removed from the floodplain via LOMA. A summary of LOMAs identified for Jackson can be found in the table below.

Table JKN.2: Jackson 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
194	97	\$33,179,030	77	\$29,911,630	79%

Source: County Assessor

Table JKN.3: Jackson Flood Map Products

TYPE OF PRODUCT	PRODUCT ID	EFFECTIVE DATE	DETAILS
LOMA	12-07-1177A-310292	1/24/2012	Property removed from SFHA
LOMA	12-07-1624A-310292	3/20/2012	Portion of property removed from SFHA
LOMA	12-07-3331A-310292	10/1/2012	Structure removed from SFHA
LOMA	13-07-0333A-310292	12/13/2012	Structure (barn) removed from SFHA
LOMA	14-07-0030A-310292	10/15/2013	Property removed from SFHA
LOMA	14-07-0490A-310292	1/14/2014	Portion of property removed from SFHA
LOMA	14-07-2024A-310292	7/15/2014	Property removed from SFHA
LOMA			Structure (residence) removed from SFHA
	16-07-0015A-310292	11/6/2015	
LOMA	16-07-1228A-310292	5/27/2016	Structure removed from SFHA
LOMA	16-07-1767A-310292	7/27/2016	Structure removed from SFHA
LOMA			Structure (maintenance building) removed from SFHA
	17-07-0360A-310292	12/12/2016	
LOMA			Structure (office building) removed from SFHA
	17-07-0363A-310292	12/22/2016	
LOMA	18-07-0884A-310292	3/15/2018	Structure removed from SFHA
LOMA	18-07-1510A-10292	7/11/2018	Property removed from SFHA

Source: FEMA Flood Map Service Center

Critical Infrastructure/Key Resources

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 in Jackson that contain hazardous chemicals.

Table JKN.4: Chemical Storage Fixed Sites

FACILITY NAME	ADDRESS	LOCATED IN FLOODPLAIN?
SIouxLAND ETHANOL LLC	1501 Knox Blvd	Facility - No (some parking lot 0.2%)

Source: Nebraska Department of Environment and Energy¹²

The main concerns indicated by the planning team are chemical spills and fires. Facilities at risk if spills occurred include: Siouxland Ethanol, Bosselman Pump & Pantry, and LP Gill Landfill. The landfill currently provides methane gas to Siouxland Ethanol. As the main thoroughfare in the

¹² Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed February 2020. <https://deg-iis.ne.gov/tier2/search.faces>.

SECTION SEVEN: VILLAGE OF JACKSON COMMUNITY PROFILE

village, Highway 20 is at risk from chemical spill events. There have been no reported chemical spills at fixed storage sites in Jackson.

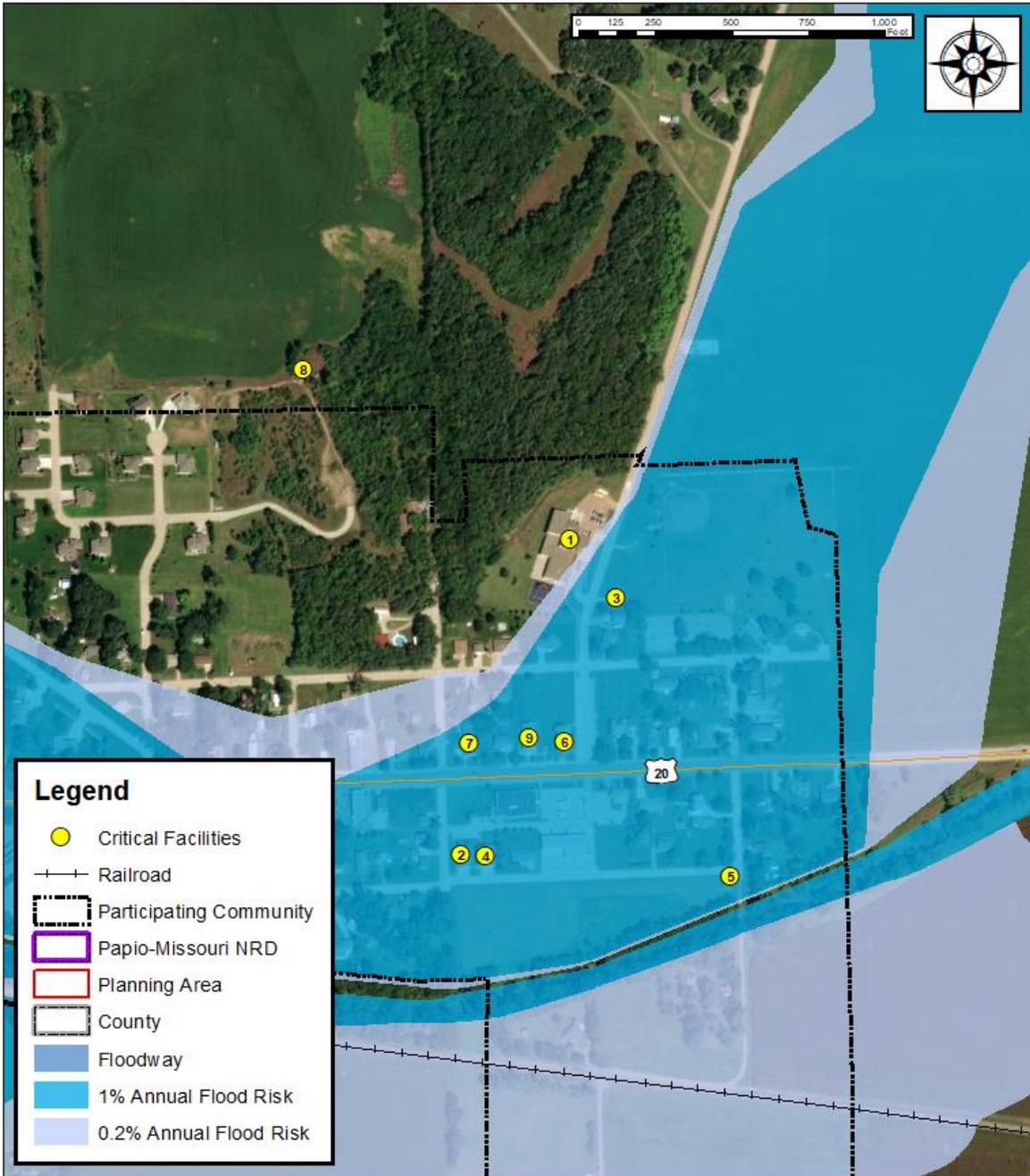
Critical Facilities

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. 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 JKN.5: Critical Facilities

CF NUMBER	TYPE	NAME	ADDRESS	SHORT-TERM SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	School	Jackson Elementary	223 N. John St	Y	N	N
2	Municipal Building	Jackson Village Hall	116 South Catherine	Y	N	Y
3	Water Facility	Water Treatment Plant	221 N. John St	N	Y	Y
4	Fire Station	Dakota-Covington Fire Department	232 Hope St	Y	N	Y
5	Lift Station	Lift Station	S. Thomas and Hope St	N	Y	Y
6	Church	St. Patrick’s Church	115 W. Elk	Y	N	Y
7	Community Facility	American Legion	103 W. Elk	Y	N	Y
8	Water Facility	Back-up Well	Frontage road off Gill Ave	N/A	N	N
9	Community Facility	Providence Hall	109 E Elk	Y	N	Y

Figure JKN.4: Critical Facilities





Created By: MB
Date: 8/20/2020
Revised: 8/20/2020
Software: ArcGIS 10.7.1
File Name: PapioNRD_CountyCF.mxd

This map was prepared using information from various drawings supplied by EOC and/or other applicable city, county, federal or public or private entities. JKO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

2021 Papio-Missouri River NRD
Hazard Mitigation Plan
Village of Jackson
Critical Facilities



Historical Occurrences

See the Dakota County community profile for historical hazard events.

Hazard Prioritization

For an in-depth discussion regarding area wide hazards, please see Section Four: Risk Assessment. The hazards discussed in detail below were either identified in the previous HMP and determined to still be of top concern or were added by the local planning team based on the identification of hazards of greatest concern, hazard history, and the jurisdiction's capabilities.

Chemical Spills (Fixed Sites and Transportation)

Chemical spills was identified as a top concern for the community; the local planning team expressed concern regarding the ethanol plant and its proximity to the community as well as the transportation of ethanol from the plant. A gas station, Bosselman Pump & Pantry, is also located within the community that could pose a danger to residents. The community is concerned with the chance of fire and spills as it pertains to these chemical fixed site locations and transportation. The local response resources are limited as the local fire department is a volunteer service located in a rural area; however, the planning team stated that the nearby Ponca Volunteer Fire Department has a plan for extinguishing an ethanol fire.

No known spills have occurred from the two fixed locations, according to the U.S. Coast Guard National Response Center. However, the Pipeline and Hazardous Materials Safety Administration reports that one transportation-related spill has occurred in the village. The spill happened when a train derailed, and two train cars tipped over near the ethanol plant on March 17, 2011. The tankers were carrying ethanol and about 50 gallons were spilled. Highway 20 was closed and rerouted for a short time to reduce the chance of a spark igniting the ethanol. There were no injuries, no evacuations, and no damages were reported.

Residents are most likely not educated about how to respond in the event of a spill. In the event of a hazardous event that would lead to the closure of the ethanol plant, it could have considerable economic impacts on the community as it does employ many members of the community. The planning team indicated a need for developing a plan with a notification process and evacuation measures in the case of a chemical spill.

Flooding

Flooding was identified as a concern for the village due to the potential for property damages from flash flooding events and because a large portion of the Village is located in the Elk Creek floodplain. According to NCEI data, there has been only been one flood event reported in Jackson. Heavy rain of six to ten inches caused a flash flood in July 1996 and impacted not only creeks and lowlands, but also roads and cropland, resulting in \$1,000,000 in local losses.

The planning team indicated that major flooding in 2019 caused the stormwater drainage system to fail, which resulted in water backing up onto the streets. The intersection of South Catherine and Vine streets was particularly affected by flooding. There were no reported damages to homes or other structures. As of November 2020, the Village of Jackson has 9 NFIP policies in-force for \$998,200 and there are no repetitive flood loss properties. Dakota County has a Flood Insurance Study dated January 6, 2012 which includes Dakota City, Homer, Hubbard, Jackson, and South Sioux City. Principal flood problems identified in the FIS include variability in the Missouri River and severe erosion in the adjacent valley. The construction of six dams on the Missouri River in the Dakotas and Montana have addressed this variability to produce a relatively uniform discharge

throughout the year. Other sources of flooding include from Elk Creek and Pigeon Creek. Crystal Lake flooding is attributed to local surface drainage into the lake storage, or from rare-event Missouri River floods. Flood protection measures in place include the six dams and reservoirs, streambank stabilization on the Missouri River, and levees on portions of Pigeon and Elk Creeks in the bottomlands (however these levees generally do not meet Federal levee standards). Specifically, Elk Creek above Jackson also has a deep, sinuous channel in a floodplain which is, in some areas, up to 2,000 feet wide. Flooding is caused by intense rain storms as described above, although the intensity of a storm which covers the basin is lower than on Pigeon Creek due to the greater size of the Elk Creek basin. Elk Creeks enters the Missouri River bottomlands in the vicinity of Jackson and is confined by levees until close to the Missouri River.

The Nebraska Department of Transportation recently completed a construction project on Highway 20 in Jackson which was said to reduce drainage issues along the route. New concrete, curbing, and additional drainage capacity was added. While it is not clear if this project will fully address the drainage issues, the planning team stated that the village's stormwater capacity has improved.

The village has also worked with Papio-Missouri River NRD to remove dead, fallen trees in and along Elk Creek. The NRD had funding in August 2015 to remove a large dead tree that had fallen across the creek bank. Although one tree was removed, the village is concerned with the large number of dead trees that still need to be removed.

High Winds and Tornadoes

The Village of Jackson has experienced tornadoes that impacted the community in the past and has been identified as a top concern along with high winds. According to NCEI data, there have been 20 high wind events in Dakota County from 1996 to November 2019. During that time there have been two tornadoes to hit Jackson. An F0 tornado in July 1996 resulted in \$50,000 in property damages to farm buildings. An F2 tornado in August 2001 caused significant damage, destroying least ten houses, the elementary school, a church, and the telephone company building. Moreover, three injuries were reported during the F2 tornado and property damage was estimated at \$3 million. There is concern with the ability to warn citizens if the power is cut to the warning siren during a tornado or high wind event. Following the 2001 tornado, the school was rebuilt and a tornado shelter was included for staff and students. A new tornado siren was installed in 2016 that allows for activation with or without electrical power.

Severe Thunderstorms

Severe Thunderstorms are identified as a significant concern to the community due to the previous occurrences and reported property damage. Severe thunderstorms are part of regular climate in the region, including the Village of Jackson, and can include high winds, hail, heavy rain, and lightning. Severe thunderstorms combined with heavy rain can produce flash flooding and power outages along with groundwater in basements. The NCEI recorded 125 severe thunderstorm events in Dakota County from 1996 to November 2019, with \$4,965,000 in damages to property and \$26,800,000 in crop damage. There are no reports of damage to critical facilities from severe thunderstorms.

Social Media Engagement

The Papio-Missouri River NRD launched a "Would You Rather" themed social media campaign during the 2021 HMP update to garner local input on hazard priorities, residential capabilities, and action items residents would like to see the community take in the future to reduce potential impacts from hazard events.

The Village of Jackson had no reported respondents in the campaign (based upon general zip code analysis).

Governance

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

- Village Clerk
- Dakota-Covington Fire Department
- Jackson Community Club
- Hartley-McNally American Legion
- St. Patrick's Parish Council
- Ponca Community School Board

Capability Assessment

The capability assessment consisted of a Capability Assessment Survey completed by the jurisdiction and a review of local existing policies, regulations, plans, and the programs. The survey is used to gather information regarding the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; and educational and outreach capability.

Table JKN.6: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		Yes/No
PLANNING & REGULATORY CAPABILITY	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Emergency Operational Plan	Yes (County)
	Floodplain Management Plan	Yes
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No
	Other (if any)	
ADMINISTRATIVE & TECHNICAL CAPABILITY	Planning Commission	Yes
	Floodplain Administration	No
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	Yes
	Local Staff Who Can Assess Community's Vulnerability to Hazards	Yes
	Grant Manager	No

SURVEY COMPONENTS/SUBCOMPONENTS		Yes/No
	Mutual Aid Agreement	Yes
	Other (if any)	
FISCAL CAPABILITY	Capital Improvement Plan/ 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
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
EDUCATION & OUTREACH CAPABILITY	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)	No
	Natural Disaster or Safety related school programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	
	Other (if any)	

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

Plan Integration

The Dakota County LEOP, last updated in 2016, includes the Village of Jackson and will be updated in 2021. The plan incorporates mitigation by identifying: hazards of greatest concern; specific responsibilities of individual communities; scenarios that would require evacuation; routes vulnerable to flooding; and sheltering locations. The plan clearly assigns responsibility during an emergency.

Jackson’s Comprehensive Plan was last updated in 2011. The future land use section does not discourage development away or out of the floodplain. It is recommended in future updates that the one percent annual chance floodplain be considered when assessing future land use for the community. The zoning ordinances were updated in 2007. The floodplain ordinance requires all new construction or substantial improvements of residential structures have the lowest floor elevated to or above one foot above the base flood elevation. Development of residential structures in the floodway are prohibited.

The local planning team stated that no community plans currently incorporate hazards and mitigation, but they will be considered with any new planning.

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 board of trustees. The local planning team will review the plan no less than annually and will include the public in the review and revision process by inviting comments on plan revisions at board meetings.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION		ALERT/WARNING SIRENS
DESCRIPTION	Perform an evaluation of existing alert sirens in order to determine sirens which should be replaced or upgraded. Install new sirens where lacking and remote activation.	
HAZARD(S)	All hazards	
STATUS	A new tornado siren was installed in 2016 that operates with or without electrical power.	

MITIGATION ACTION		EMERGENCY POWER GENERATION FOR CRITICAL FACILITIES
DESCRIPTION	Obtain emergency power generation for critical facilities	
HAZARD(S)	All	
STATUS	Generators are in place at the water treatment plant and at the sewage lift station. An automated callout system is currently in place for the water treatment facility in case of failure.	

New Mitigation Actions

MITIGATION ACTION		CHANNEL MAINTENANCE AND BANK STABILIZATION
DESCRIPTION	Channel stabilization can protect structures, increase conveyance and provide flooding benefits. Drainage improvement projects such as ditch upsizing, ditch cleanout, and culvert improvements.	
HAZARD(S)	Flooding	
ESTIMATED COST	\$100,000+	
FUNDING	General Fund, FMA, BRIC	
TIMELINE	5+ Years	
PRIORITY	Medium	
LEAD AGENCY	Village Board	
STATUS	Village will work with the NRD to identify opportunities to improve drainage along Elk Creek to minimize flood risk. Although initial conversations have been had with the NRD, funding is not available for this effort at this time.	

MITIGATION ACTION		INSTALL NEW WELL
DESCRIPTION	Install a new well to improve water supply for the community.	
HAZARD(S)	All Hazards	
ESTIMATED COST	\$400,000	
FUNDING	General Fund	
TIMELINE	5+ Years	
PRIORITY	Low	
LEAD AGENCY	Village Board	
STATUS	Village has had some issues with magnesium in the past. The installation of a new well would assist with water quality and quantity issues during hazard events.	

Continued Mitigation Actions

MITIGATION ACTION		HAZARDOUS TREE REMOVAL
DESCRIPTION	Identify and remove hazardous limbs and/or trees.	
HAZARD(S)	Severe Thunderstorms, High Winds, Tornadoes, Flooding	
ESTIMATED COST	\$5,000	
FUNDING	General Fund, Arbor Day Foundation	
TIMELINE	5+ years	
PRIORITY	High	
LEAD AGENCY	Village Board	
STATUS	The village continues to work with the Papio-Missouri River NRD in identifying and removing trees, limbs, and debris in Elk Creek that may pose a higher risk of flooding.	

MITIGATION ACTION		PUBLIC AWARENESS AND EDUCATION
DESCRIPTION	Activities include outreach projects, distribution of maps, evacuation plans, environmental education outreach, etc. These increase public awareness of natural hazards to both public and private property owners. Equipment may need to be purchased such as overhead projectors and laptops.	
HAZARD(S)	All hazards	
ESTIMATED COST	\$1,000+	
FUNDING	General Fund	
TIMELINE	2-5 years	
PRIORITY	Medium	
LEAD AGENCY	Village Clerk	
STATUS	The village continues to educate residents as resources allow.	

MITIGATION ACTION		TREE CITY USA
DESCRIPTION	Work to become a Tree City USA member through the National Arbor Day Foundation in order to receive direction, technical assistance, and public education on how to establish a hazardous tree identification and removal program in order to limit potential tree damage and damages caused by trees in a community when a storm event occurs.	
HAZARD(S)	Severe Thunderstorms, High Winds, Tornadoes	
ESTIMATED COST	Staff Time	
FUNDING	General Fund	
TIMELINE	1-2 years	
PRIORITY	High	
LEAD AGENCY	Village Board	
STATUS	Trees are planted throughout the community as resources allow. The village has received several grants to help populate its parks with trees.	

Removed Mitigation Actions

MITIGATION ACTION		MAINTAIN GOOD STANDING IN THE NFIP
DESCRIPTION	Maintain good standing with National Flood Insurance Program (NFIP) including floodplain management practices/ requirements and regulation enforcements and updates.	
HAZARD(S)	Flooding	
REASON FOR REMOVAL	While the community will continue to participate in the NFIP, this project can be removed as it is considered an ongoing effort.	