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COUNTY PROFILE

SALINE COUNTY

Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021

Local Planning Team

Table SAL.1: Saline County Local Planning Team

Name	Title	Jurisdiction
John McKee	Emergency Manager	Saline County

Location, Geography, & Climate

Saline County is located in southwest Nebraska and is bordered by Seward County, Lancaster County, Gage County, Jefferson County, and Fillmore County.

The total area of Saline County is 575 square miles. Major waterways within the county include the Big Blue River, Dry Branch Creek, Swan Creek, Johnson Creek, Spring Creek, Swan Creek, Squaw Creek, Turkey Creek, and Walnut Creek. The county is not heavily forested. Saline County has two known historic incidents of landslides; however, the exact location of these events is unknown. Most of Saline County lies in the plains topographic region, with the vast majority of the county's land characterized by agricultural fields.

Climate

The average high temperature in Saline County for the month of July is 88.3 degrees and the average low temperature for the month of January is 15.2 degrees. On average, Saline County gets 29 inches of rain and 23 inches of snowfall per year. The following table compares these climate indicators with those of the entire nine-county planning area. 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 WEB.2: Webster County Climate Normals

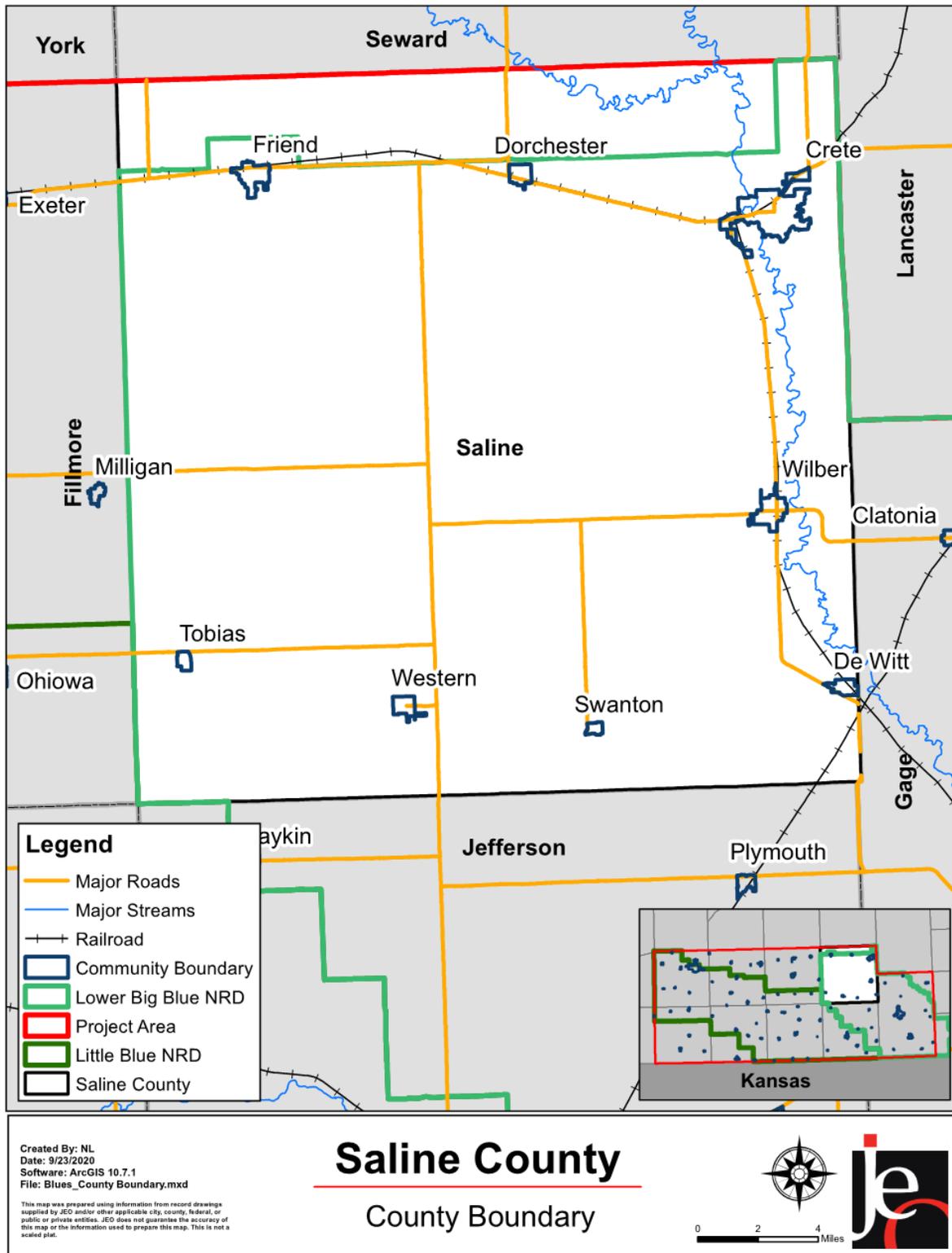
	Saline County	Planning Area Average
July Normal High Temp	88.3°F	88.5°F
January Normal Low Temp	15.2°F	14.2°F
Annual Normal Precipitation	29.46"	29.37"
Annual Normal Snowfall	22.8"	21.63"

Source: NCEI 1981-2010 Climate Normals¹, High Plains Regional Climate Center, 1981-2010²
Precipitation includes all rain and melted snow and ice.

¹ NOAA National Centers for Environmental Information. August 2020. "Data Tools: 1981-2010 Normals." [datafile]. <https://www.ncdc.noaa.gov/cdo-web/datatools/normals>.

² High Plains Regional Climate Center. 2020. "CLIMOD." <http://climod.unl.edu/>.

Figure SAL.1: Saline County Jurisdictional Boundary



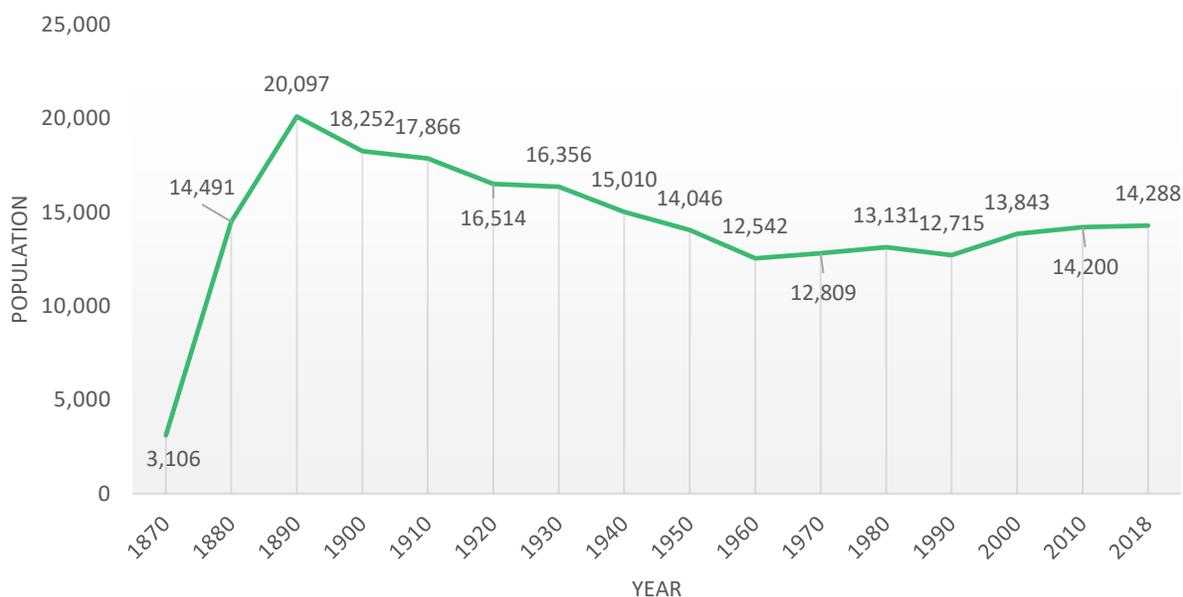
Transportation

Saline County's major transportation corridors include State Highways 33, 41, and 74, which run east-west through the center of the county, State Highway 15 and 103, which run north-south. Highway 6 runs enters Saline County from the west, before turning north and exiting the county near Dorchester. The county also has two railroads, one owned by BNSF and the other by UPRR. The BNSF enters Saline in the northern section of the county from Fillmore County, and passes through Friend and Dorchester, before diverging in Crete. In Crete, one divergence proceeds northeast passing through Berks, and the southeastern divergence proceeds through Wilber and DeWitt before exiting into Gage County. The county also has a number of air landing strips dispersed throughout the county. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

Demographics

The following figure displays the historical population trends from 1870 to 2018 (estimated). This figure indicates that the population of Saline County has generally been stable since 1960. This is notable for hazard mitigation as communities with declining population have a higher probability of unoccupied housing that is not being maintained and may be less prone to pursuing residential/commercial development, which may reduce the number of structures vulnerable to hazards in the future. Increasing populations can represent tax revenue growth for the county which could make implementation of mitigation actions more fiscally available.

Figure SAL.2: Saline County Population 1870-2018



Source: U.S. Census Bureau³

³ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

The following table indicates the State of Nebraska has a slightly higher percentage of people under the age of 5 and over the age of 65 than Saline County. Saline County has a slightly lower median age and a higher percentage of people between 5 and 64. 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 SAL.2: Population by Age

Age	Saline County	State of Nebraska
<5	6.4%	6.9%
5-64	79.5%	78.1%
<64	14.2%	15%
Median Age	35.8	36.2

Source: U.S. Census Bureau⁴

The following table indicates that the county's median household income and per capita income are lower than those of the state. Median home values and median rent are both notably lower. 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.

Table SAL.3: Housing and Income

Age	Saline County	State of Nebraska
Median Household Income	\$51,143	\$59,116
Per Capita Income	\$22,943	\$31,101
Median Home Value	\$98,000	\$147,800
Median Rent	\$703	\$805

Source: U.S. Census Bureau^{5,6}

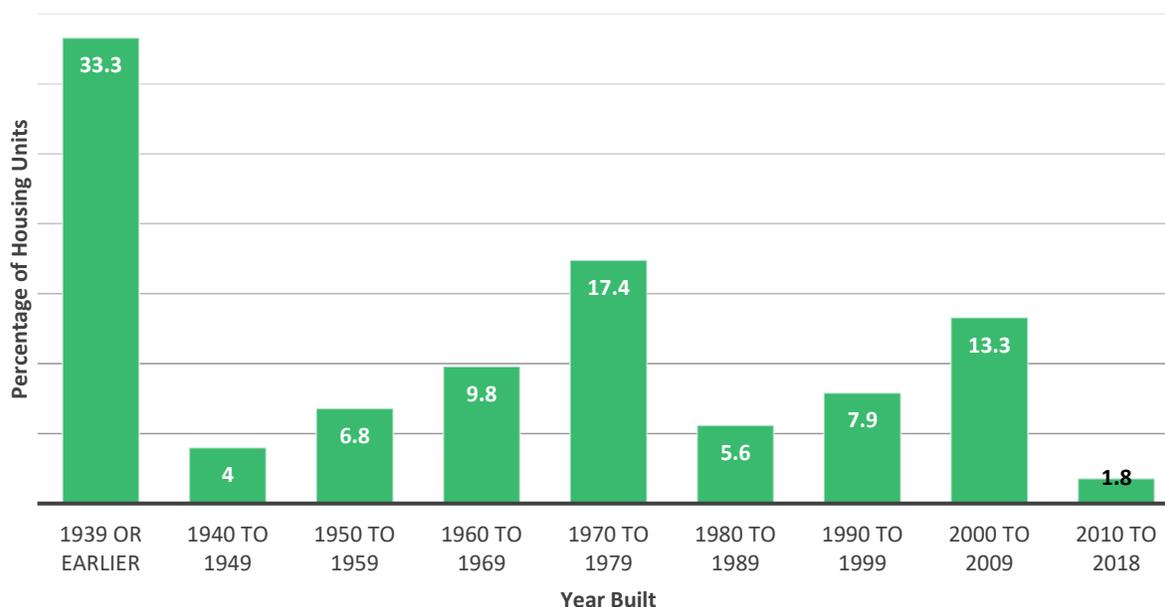
The following figure indicates that the majority of the housing in Saline County was built prior to 1980. According to Census Bureau, the county has 5,826 housing units; with 87.1 percent of those units occupied. Approximately 5.4 percent of the county's housing is classified as mobile homes and 71.3 percent of the county's housing was built before 1980. There are no mobile homes located in unincorporated Saline County. 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, the state currently has adopted the 2018 International Building Code. Finally, communities with a substantial number of mobile homes may have a higher number of residents vulnerable to the impacts of high winds, tornados, and severe winter storms.

⁴ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁵ United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

⁶ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

Figure SAL.3: Housing Units by Age



Source: U.S. Census Bureau⁷

Table SAL.4: Housing Units

Jurisdiction	Total Housing Units				Occupied Housing Units			
	Occupied		Vacant		Owner		Renter	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Saline County	5,073	87.1%	753	12.9%	3,535	69.7%	1,538	30.3%
Nebraska	754,063	90.8%	76,686	9.2%	498,567	66.1%	255,496	33.9%

Source: U.S. Census Bureau⁸

Employment Factors

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 SAL.5: Businesses in Saline County

	Total Businesses	Number of Paid Employees	Annual Payroll (in thousands)
Total for All Sectors (2012)	296	4,791	\$185,945
Total for All Sectors (2016)	303	6,005	\$246,959
Total for All Sectors (2018)	302	5,963	\$256,279

Source: U.S. Census Bureau⁹

7 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

8 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

9 United States Census Bureau. 2020. "2018 County Business Patterns and Nonemployer Statistics Combined Report."

Agriculture is also important to the economic fabric of Saline County, and the state of Nebraska as a whole. Saline County's 583 farms cover 294,084 acres of land. Both the number of farms and acres of harvested cropland have decreased since 2012. 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 SAL.6: Saline County Agricultural Inventory

	2012 Census	2017 Census	Percent Change
Number of Farms with Harvested Cropland	756	583	-29.7%
Acres of Harvested Cropland	361,904 acres	294,084 acres	-23.1%

Source: USDA Census of Agriculture^{10,11}

Future Development Trends

Only minor changes have occurred in Saline County over the past five years. A new housing development was established north of Crete but no major commercial or industrial changes have occurred outside of incorporated communities. There are currently no residential or commercial developments planned for the next five years. The population of Saline County remains relatively stable which the local planning team attributed to its proximity to Lincoln for employment.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 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. Several structures in unincorporated Saline County have been removed from the SFHA via LOMA. A summary of these structures is provided below.

Table SAL.7: Saline 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
11,176	5,658	\$603,581,315	1,525	27%	\$169,499,690

Source: County Assessor, GIS Workshop

Table SAL.8: Saline County Flood Map Products

Type of Product	Product ID	Effective Date	Details
LOMA	11-07-0130A-310472	11/23/2010	Structure (residence) removed from SFHA
LOMA	11-07-3465A-310472	10/27/2011	Structure removed from SFHA
LOMA	12-07-0079A-310472	11/29/2011	Structure (residence) removed from SFHA

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."

Type of Product	Product ID	Effective Date	Details
LOMA	12-07-0895A-310472	2/14/2012	Portion of property removed from SFHA
LOMA	12-07-2544A-310472	7/26/2012	Property removed from SFHA
LOMA	16-07-0774A-310472	3/18/2016	Structure removed from SFHA

Source: FEMA Flood Map Service Center

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

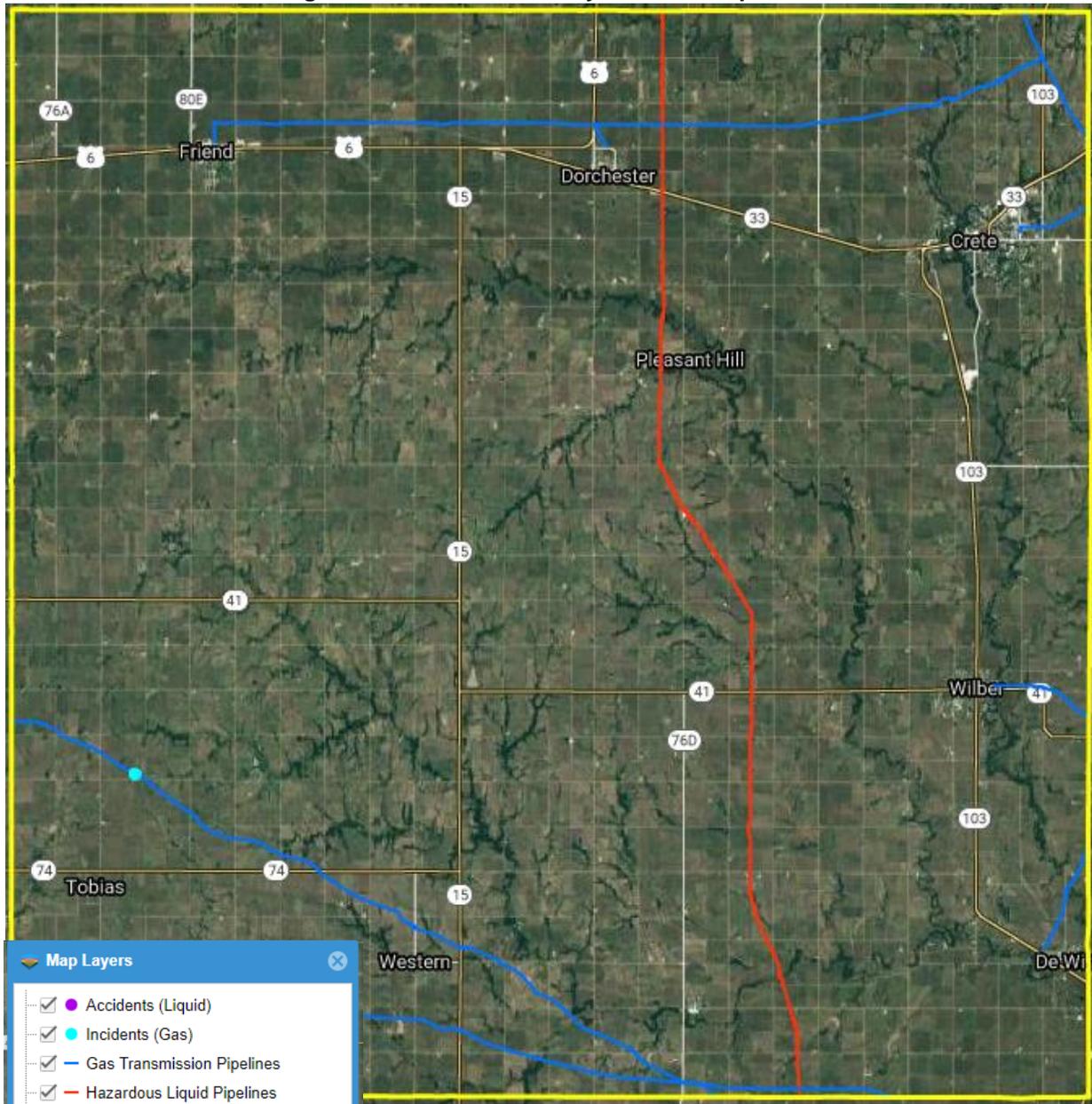
According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy in 2019, there are 26 chemical storage sites throughout Saline County which house hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident. For a description and map of chemical sites located in incorporated areas, please see the jurisdiction's participant section.

Chemical Transportation

Hazardous chemicals, particularly agricultural based chemicals, are commonly transported through the county by a range of transportation methods, including highways, rail, air, and pipeline. The county has two primary railroads, one owned by BNSF and the other by UPRR. The BNSF enters Saline in the northern section of the county from Fillmore County, and passes through Friend and Dorchester, before diverging in Crete. In Crete, one divergence proceeds northeast passing through Berks, and the southeastern divergence proceeds through Wilber and DeWitt before exiting into Gage County.

The local planning team indicated the type and quantities of chemicals transported through the county is unknown. While incident proximity will always occur near or on transportation methods, it is not possible to predict precise locations of possible future events. Proximity of pipelines, rail lines, and highways near critical facilities or vulnerable population centers, including schools, daycares, nursing homes, and/or hospitals, increases overall vulnerability to chemical transportation spills. While minor spill events have taken place in the county, no events caused significant damages or impacts. The largest spill included 950 liquid gallons of phosphoric acid in the City of Crete. Private entities, local emergency response units, and state resources have strict regulatory oversight and emergency action plans in place to respond to significant chemical spills.

Figure SAL.4: Saline County Chemical Pipelines



Critical Facilities

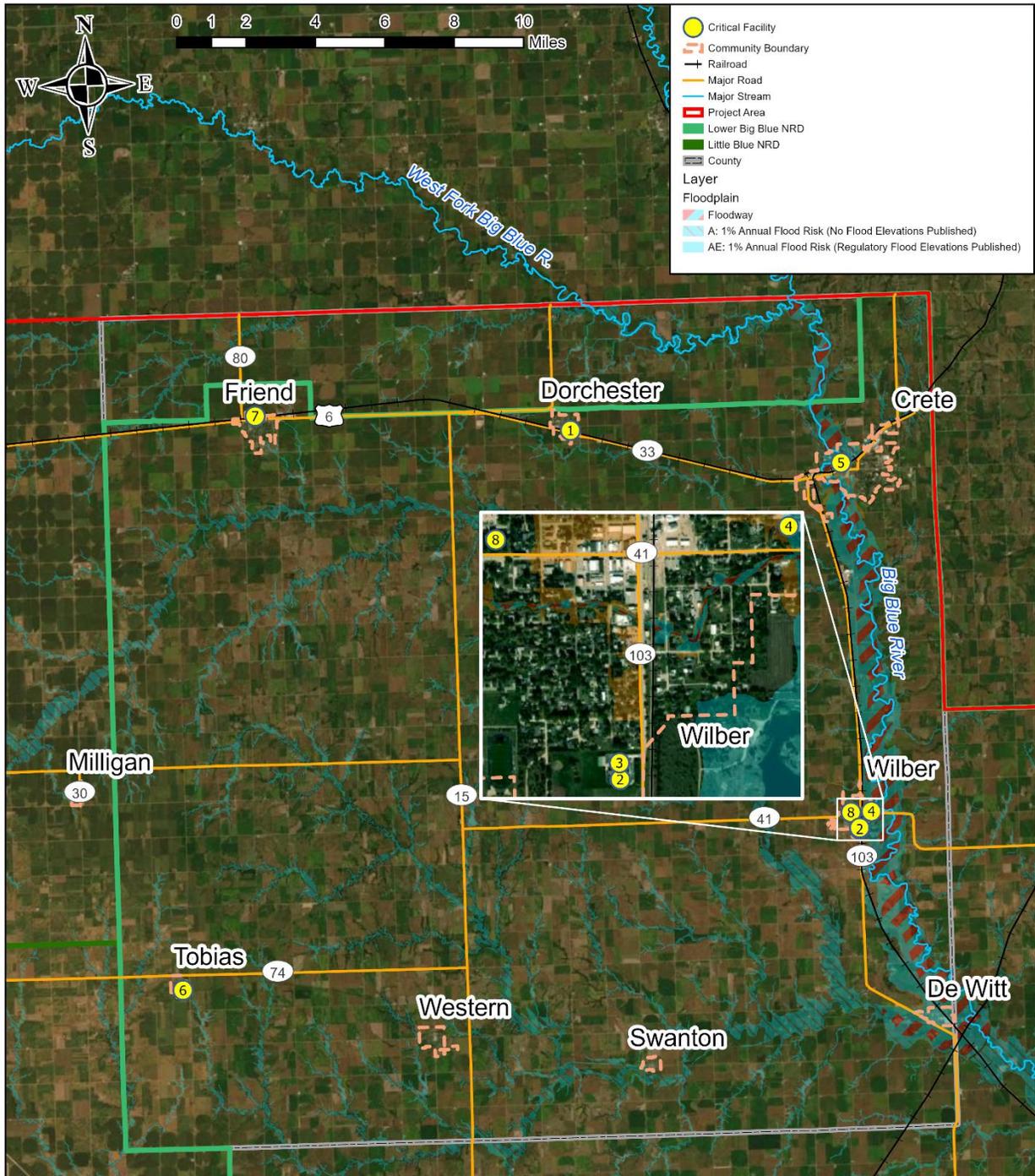
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during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

Critical facilities for Saline County are located primarily in the county's incorporated communities. All critical facilities for Saline County are located outside of the established floodplain. The National Register of Historic Places lists 12 entries for Saline County. These entries are distributed among Dorchester, Friend, Crete, Western, and Wilber. The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table SAL.9: Saline County Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Transportation	County Shop – Dorchester	N	N	N
2	Communications	Saline County Communications Center	N	Y	N
3	Safety and Security	Saline County Sheriff's Office, Corrections Center.	N	Y	N
4	Transportation	County Shop – Wilber	N	N	Y
5	Transportation	County Shop – Crete	N	N	N
6	Transportation	County Shop – Tobias	N	N	N
7	Transportation	County Shop – Friend	N	N	N
8	Safety and Security	Saline County Courthouse	N	Y	N

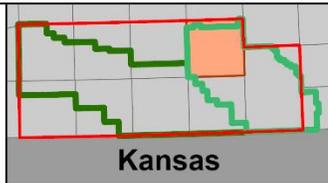
Figure SAL.5: Saline County Critical Facilities



Created By: NL
 Date: 5/24/2021
 Software: ArcGIS Pro 2.8.0
 File: Blues Critical Facilities.aprx
 This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

Saline County

Little Blue NRD and Lower Big Blue NRD
 Hazard Mitigation Plan 2021



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 – April 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 June 2020. For the complete discussion on historical occurrences, please refer to *Section 4: Risk Assessment*.

Table SAL.10: Hazard Risk Assessment – Saline County

Hazard		Count	Property Damage	Crop Damage ³
Agricultural Disease	Animal Disease ²	15	812 animals	N/A
	Plant Disease ³	26	N/A	\$234,711
Dam Failure ⁷		2	\$0	N/A
Drought ⁸		493 out of 1,504 months	\$0	\$33,341,494
Earthquakes ¹¹		0	\$0	\$0
Extreme Heat ⁹		Avg 5 days/yr	\$0	\$2,443,511
Flooding ¹	Flash Flood	20	\$290,000	\$336,977
	Flood	52	\$106,022,000	
Grass/Wildfire ⁴ 3 injuries		243	2,477 acres	\$20,955
Hazardous Materials	Chemical Fixed Site Spills ⁵ 1 injury	26	\$0	N/A
	Chemical Transportation Spills ⁶	2	\$70	N/A
Levee Failure ¹²		0	\$0	N/A
Public Health Emergency ¹³		~2,021 cases, 3 deaths	\$0	N/A
Severe Thunderstorms ¹	Hail	230	\$0	\$5,585,432
	Heavy Rain	4	\$0	\$3,188,110
	Lightning	3	\$77,000	N/A
	Thunderstorm Wind	98	\$1,105,000	N/A
Severe Winter Storms ¹	Blizzard	7	\$0	\$695,615
	Extreme Cold/Wind Chill	4	\$0	
	Heavy Snow	6	\$2,000,000	
	Ice Storm	5	\$0	
	Winter Storm	37	\$2,000	
	Winter Weather	10	\$0	
Terrorism ¹⁰		0	\$0	N/A
Tornadoes and High Winds ¹ 8 injuries	High Winds	19	\$50,000	\$828,112
	Tornadoes	8	\$20,000,000	\$177,840
Totals		817	\$129,546,070	\$46,852,757

1 – NCEI, Jan 1996-April 2020

SECTION SEVEN: SALINE COUNTY COMMUNITY PROFILE

- 2 – *USDA, 2014-June 2020*
- 3 – *USDA RMA, 2000-Aug 2020*
- 4 – *NFS, 2000-2020*
- 5 – *NRC, 1990-2019*
- 6 – *PHSMA, 1971-2020*
- 7 – *NeDNR Dam Safety Division, 2020*
- 8 – *NOAA, 1985-2020*
- 9 – *NOAA Regional Climate Center, 1983-2020*
- 10 – *Global Terrorism Database, 1970-2017*
- 11 – *USGS, 1960-2020*
- 12 – *USACE, 2020*
- 13 – *CDC, April 2021 (COVID only)*

SECTION SEVEN: SALINE COUNTY COMMUNITY PROFILE

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. For example, while there may not been instances of dam failure in the planning area, there exists a possibility for a dam to fail in the future due to the presence of dams.

Table SAL.11: Saline County and Communities Hazard Matrix

Jurisdiction	Agricultural Animal and Plant Disease	Dam Failure	Drought & Ex Heat	Earthquakes	Flooding	Grass/ Wildfire	Hazardous Materials	Levee Failure	Public Health Emergency	Severe Thunderstorms	Severe Winter Storms	Terrorism	Tornadoes and High Winds
Saline County					X		X			X	X		X
Crete					X		X				X		X
DeWitt					X					X	X		X
Dorchester			X				X			X	X		X
Friend					X					X	X		X
Swanton					X		X						X
Tobias					X		X			X	X		X
Western						X	X			X	X		X
Wilber							X		X	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. For more information regarding regional hazards, please see *Section Four: Risk Assessment*.

Flooding

The county is particularly concerned with riverine flooding from the Lower Big Blue River, and Turkey and Swan Creeks. DeWitt, Wilber, and Crete are particularly at risk from flooding, and DeWitt in particular has poor storm water draining. The storms of May 5-7, 2015, and June 7-8, 2015 both produced severe flooding in Saline County, with roads, bridges, and culverts washed out, and cropland experiencing extreme flooding. The Village of DeWitt, in particular, was inundated, with homes and businesses damaged. The March 2019 flood event did not significantly impact the county or its communities.

The entire west and south sides of the Village of DeWitt was flooded in 2015, damaging at least 12 homes – some of which had flooding extending from their basements to their first floors. These areas are known to be the most flood prone areas of town. In addition, bridges crossing the river on the west and south sides of town were flooded. The county is most concerned about damages to county roads during floods and blocked transportation routes for emergency access. Riverine flooding from the Big Blue River is more of a concern locally than flash flooding, and concerns from this hazard also include the proliferation of mosquitos, which can carry disease.

To mitigate this hazard, the county plans to improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment; and update flood warning equipment, insure equipment is in a secure location, and install additional gauges. The county is currently working to fund a river gauge south of DeWitt on Turkey Creek.

Hazardous Materials (Transportation)

Saline County is concerned about the rail transportation of hazardous materials such as fuels and ammonia. A derailment in 1969 of a train transporting anhydrous ammonia resulted in several deaths in Crete and a local evacuation, and there have been other, less serious derailments as well with substance spills. Other chemicals of concern that are transported through the county are crude oil, and chemicals for a cold storage facility. The main route of concern is the Burlington Northern Santa Fe railroad running east to west through Friend, Dorchester, and Crete. The police station, fire department, and hospital in Crete are located close to the railroad.

The county has installed a reverse emergency notification system which can be used to notify residents when spill events occur. To mitigate this hazard, the county plans to improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment.

Severe Thunderstorms

Severe thunderstorms include impacts from heavy rain, lightning, strong winds, and hail. Saline County frequently experiences damaging hailstorms, such as storms on June 3, 2014 that generated hail to tennis ball size in Wilber, causing major damage. On October 3, 2013, Wilber was struck by a storm dropping baseball size hail. There are multiple other incidents of storms producing hail of at least quarter size throughout the county in recent years. Schools in the county have been damaged by hail, mainly window damage.

County schools and the hospital are fitted with hail resistant building materials. County facilities are also insured against hail damage. County residents do not receive information regarding hail resistant building materials but the county has installed a reverse emergency notification system which can be used to notify residents.

Severe Winter Storms

The county is prone to severe winter weather, and the winter of 2010 featured particularly damaging winter storms in Saline. Multiple storms closed roads, knocked out power, closed schools, and impeded fire and rescue services due to hazardous road conditions. The county is especially concerned about its ability to provide emergency services during severe winter storms, loss of power to vulnerable populations, and ensuring adequate propane or fuel supplies to heat homes. No structural facilities in town have recently been damaged by severe winter storms.

The county owns snowplows on motor graders, sand trucks, front-end loaders, and a rotary snow plow, and the county roads department is in charge of snow removal of county roads. The county believes these resources are sufficient for snow removal. The county uses snow fences on county roads. There are designated snow routes in the county, including mail and school routes, and connector roads. None of the power lines in town are buried.

The county has installed a reverse emergency notification system which can be used to notify residents. To mitigate this hazard, the county plans to obtain emergency generators for critical facilities; and improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment.

Tornadoes and High Winds

Saline County, like much of Nebraska, is prone to damaging tornadoes and high winds. Most notably on May 22, 2004, an EF-2 tornado struck Western and Wilber, causing \$20 million of damage and injuring eight people in Saline County. Known as the Hallam Tornado, the tornado eventually reached EF-4 strength when it tracked into Gage County, killing a person in Hallam. Saline County officials fear that a tornado could damage homes, businesses, medical facilities, farms, and crops, and block highways, impeding emergency services. Critical facilities in the county proper have not been damaged by tornadoes or high winds in recent years.

The county does not have a community safe room, so residents must rely on their own or a neighbor's basement or storm shelter for safety. The county backs-up its electronic municipal records via State of Nebraska resources. The county promotes emergency preparedness in the community via a county weather seminar each spring. The county has mutual aid agreements in place.

The county has installed a reverse emergency notification system which can be used to notify residents when hazardous conditions exist. To mitigate this hazard, the county plans to obtain warning sirens, and weather radios and emergency generators for critical facilities; and improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment.

Governance

A community's governance structure impacts its capability to implement mitigation actions. The county is governed by a five-member board of supervisors. The county also has the following offices or departments: assessor, attorney, clerk, clerk of district court, ag society and fair board committee, eldercare committee, historical society committee, safety committee, SCAT committee, tourism committee, well committee county court, custodial/maintenance, election commissioner, emergency manager, extension office, highway superintendent, planning and zoning, register of deeds, aging services, adult drug court, sheriff, state probation office, treasurer, veterans services officer, and weed 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 SAL.12: Capability Assessment

Survey Components		Yes/No
Planning Regulatory Capability	Comprehensive Plan	Yes – 2018
	Capital Improvements Plan	No
	Economic Development Plan	No
	Local Emergency Operational Plan	Yes – 2020
	Floodplain Ordinance	Yes – 2007
	Zoning Ordinance	Yes – 2018
	Subdivision Regulation/Ordinance	Yes – 2008
	Building Codes	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	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	Yes
	Local Staff Who Can Assess Community's Vulnerability to Hazards	Yes
	Grant Manager	No
	Mutual Aid Agreement	Yes

Survey Components		Yes/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
	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	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 SAL.13: Overall Capability

Overall Capability	Limited/Moderate/High
Financial Resources Needed to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Community Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate

Plan Integration

Saline County has a Comprehensive Plan, Hazard Mitigation Plan, Local Emergency Operations Plan (LEOP), Floodplain Management Plan, Zoning Ordinance, Subdivision Ordinance, and Floodplain Ordinance.

The county's Comprehensive Plan is geared towards safe growth, encourages infill and clustering of development in hazardous areas. Currently there is not a plan or timeline to update the comprehensive plan. The county does not have adopted building codes but follows all state guidance and requirements.

The county's LEOP, which was updated on October 29, 2020, is an all-hazards plan that provides a clear assignment of responsibility in case of an emergency. It includes, as annexes, LEOPs for the Cities of Crete, Friend, and Wilber, and the Villages of DeWitt, Dorchester, Swanton, Tobias, and Western.

The local planning team noted the annual municipal budget is generally limited to maintaining current facilities. Any new capital projects would require additional bonds or grant funding.

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 Emergency Manager, County Clerk, Planning and Zoning Administrator, County Board, Floodplain Administrator, County Roads Department Supervisor, and the County Attorney if needed. The local planning team will review the plan no less than annually and will include the public in the review and revision process by: updating the county website, social media posts, local media outlets, and sharing information at council meetings open to the public.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	BACKUP GENERATOR
DESCRIPTION	Obtain two emergency generators for critical facilities (infrastructure, command posts, response areas) and one emergency generator for county courthouse
HAZARD(S)	All hazards
STATUS	The county has purchased additional backup generators for necessary shops.

MITIGATION ACTION	SWAN LAKE OUTDOOR WARNING SIREN
DESCRIPTION	Obtain an outdoor warning siren for Swan Lake
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
STATUS	This siren has been updated through local funds.

SECTION SEVEN: SALINE COUNTY COMMUNITY PROFILE

MITIGATION ACTION	TRI-COUNTY EMERGENCY REVERSE NOTIFICATION SYSTEM
DESCRIPTION	Install a Tri-County Emergency Reverse Notification System
HAZARD(S)	All hazards
STATUS	This project has been completed through county funds. Notification system is in place for entire county.

Continued Mitigation Actions

MITIGATION ACTION	ALERT SIRENS
DESCRIPTION	Install an alert siren by the Blue River Lodge in Crete, NE
HAZARD(S)	Severe Thunderstorms, Tornadoes and High Winds
ESTIMATED COST	\$122,000
FUNDING	County EMA funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Saline County EMA
STATUS	The county is currently exploring funding opportunities.

MITIGATION ACTION	CIVIL SERVICE IMPROVEMENTS
DESCRIPTION	Improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment
HAZARD(S)	All hazards
ESTIMATED COST	\$105,000
FUNDING	Local fire department funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Saline County EMA
STATUS	This project has not yet been started.

MITIGATION ACTION	FLOODPLAIN EARLY ALERT SYSTEM
DESCRIPTION	Update flood warning equipment, insure equipment is in a secure location, and install additional gauges
HAZARD(S)	Flooding
ESTIMATED COST	Varies by scale
FUNDING	Saline County and municipal general funds, HMGP, BRIC, FMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Saline County, Municipal Governments
STATUS	This project has not yet been started.

MITIGATION ACTION	WEATHER RADIOS
DESCRIPTION	Conduct an inventory of weather radios at schools and other critical facilities, and provide new radios as needed
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	\$2,000
FUNDING	County EMA funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Saline County EMA
STATUS	This project has not yet been started.

Removed Mitigation Actions

MITIGATION ACTION	NFIP CONTINUATION AND ENFORCEMENT
DESCRIPTION	Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs).
REASON FOR REMOVAL	While the county will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA. Enforcement of floodplain policies is required as part of ongoing codes.

COMMUNITY PROFILE

CITY OF CRETE

Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021

Local Planning Team

Table CRE.1: City of Crete Local Planning Team

Name	Title	Jurisdiction
Tom Ourada	City Administrator	City of Crete
Steve Hensel	Chief of Police	City of Crete
Tod Allen	Fire Chief	City of Crete
Brad Bailey	Building Inspector	City of Crete
Kyle Manley	City Attorney	City of Crete
Judy Meyer	City Clerk	City of Crete

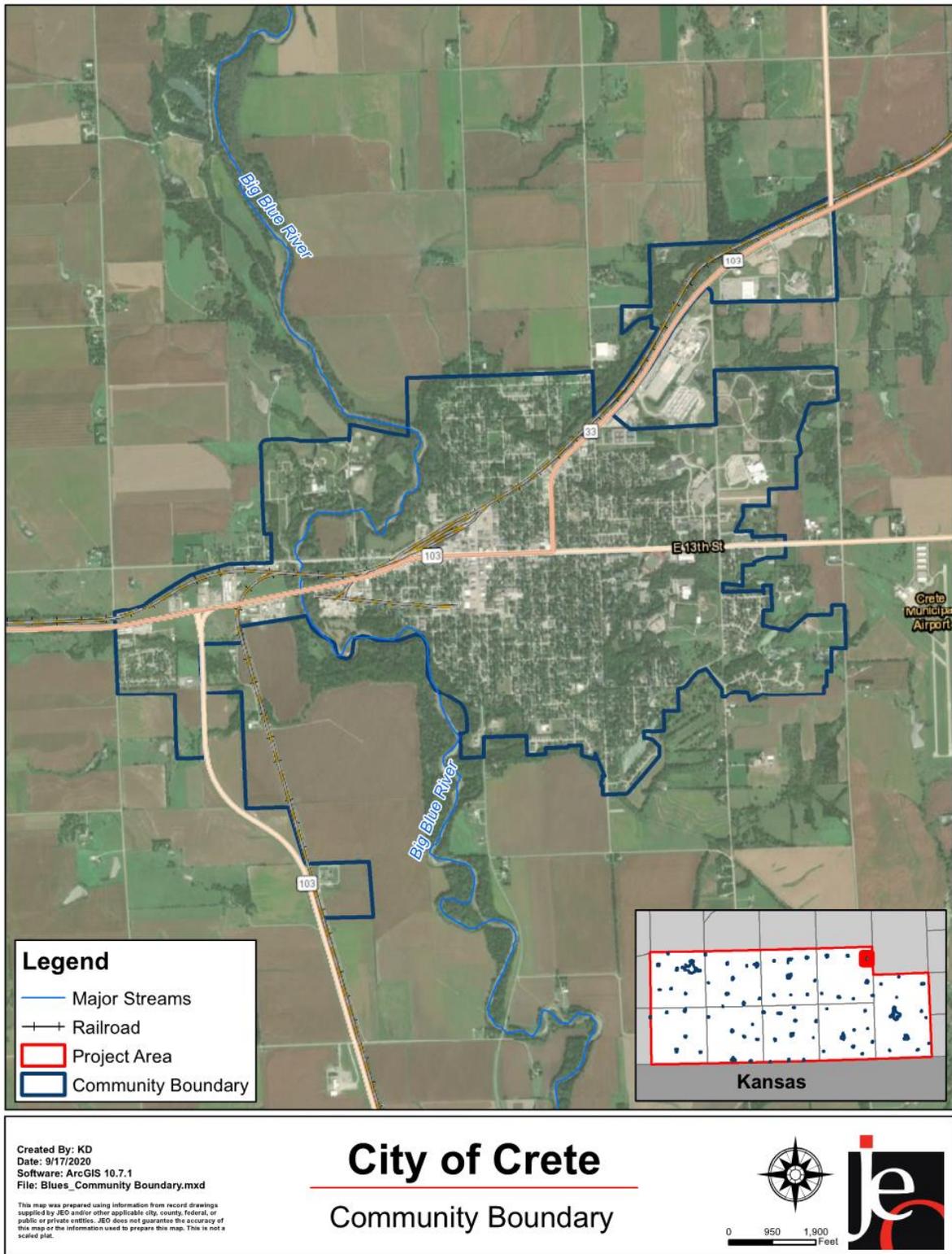
Location and Geography

The City of Crete is located in the north eastern portion of Saline County and covers an area of 2.97 square miles. Major waterways within the area include the Big Blue River, which runs north to south through the western portion of the community. There is one small lake located just south of municipal boundaries. There are two small lakes located just east of municipal boundaries. Also, Doane Lake is located on the Doane College Campus, located in the center portion of Crete. The area is not heavily forested. The city lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Crete's major transportation corridors include Nebraska Highway 33, which runs east-west through Crete, and Highway 103 which runs north-south. Highway 33 accommodates on average 5,990 vehicles per day, 535 of which are heavy commercial vehicles. Highway 103 runs through the center of Crete and accommodates on average 3,005 vehicles per day, 355 of which are heavy commercial vehicles. Crete has two rail lines, Burlington Northern Santa Fe line and Amtrak, which run on the same line. At Crete, the BNSF runs east-west headed into Lincoln and west to Hastings. Hazardous chemicals are commonly transport through the city via rail and highway. The local planning team identified the police department and city hall as critical facilities located along main transportation routes which may be at risk during major events. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

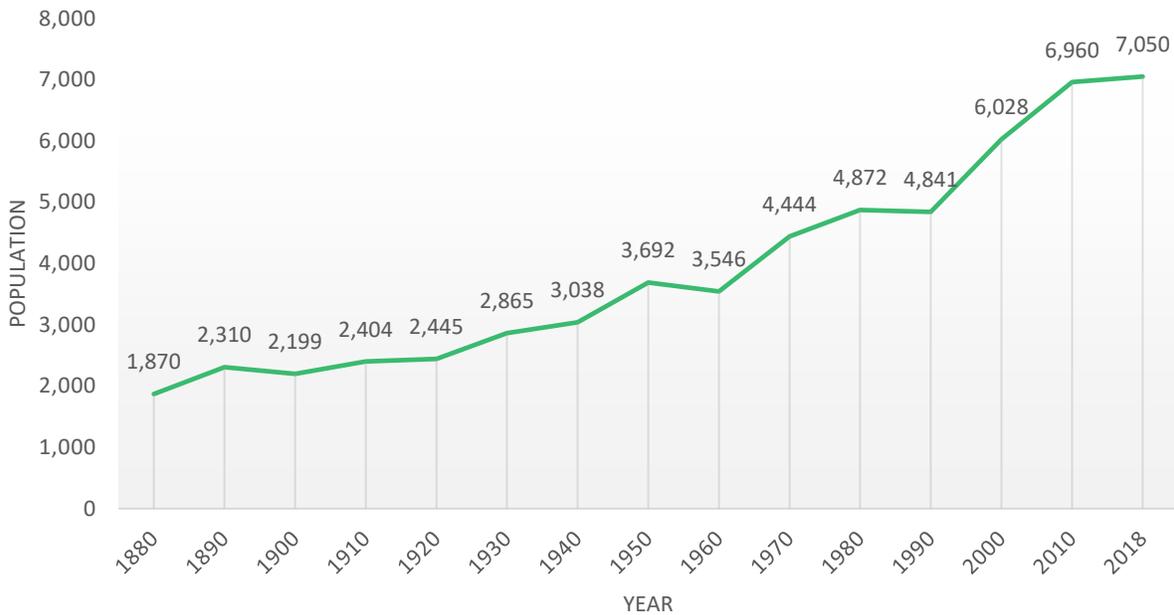
Figure CRE.1: City of Crete Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1880 to 2018 (estimated). This figure indicates that the population of Crete has increased steadily since the late 1800s. This is notable for hazard mitigation because communities with growing population may develop into hazardous areas. Additionally, growing populations may indicate communities have additional tax revenue opportunities to pursue mitigation activities. The city's population accounted for 49% of Saline County's population in 2018.

Figure CRE.2: Crete Population 1880-2018



Source: U.S. Census Bureau¹²

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

- **Younger.** The median age of Crete was 27.1 years old in 2018, compared with the county average of 35.8 years. Crete's population has grown younger since 2010, when the median age was 28.4 years old. Crete had a smaller proportion of people under 20 years old (34.0%) than the county (29.9%).¹³
- **More ethnically diverse.** In 2010, about 1% of Crete's population was Black, 3% was Asian, 23% was other races, and 2% was two or more races. By 2018, 1% of Crete's population was Black, 6% was Asian, 9% was other races, and 4% was two or more races. During that time, Saline County had 1% Black, 2% to 3% Asian, 13% to 5% other races, and 2% to 3% 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 Crete (22.4%) was greater than the county (13.5%) in 2018.¹⁵

¹² United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

¹³ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

¹⁴ United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

¹⁵ United States Census Bureau. "2018 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 Saline County, Crete's economy had:

- **Similar mix of industries.** Employment sectors accounting for 10% or more of employment in Crete included Manufacturing, Transportation, and Education. While industries in Saline County included Manufacturing, Retail, and Education.¹⁶
- **Lower household income.** Crete's median household income in 2018 (\$44,469) was about \$7,000 less than the county (\$51,143).¹⁷
- **Fewer long-distance commuters.** About 55.7% percent of workers in Crete commuted for fewer than 15 minutes, compared with about 51.5% of workers in Saline County. About 27.9% of workers in Crete commute 30 minutes or more to work, compared to about 28.5% of the county workers.¹⁸

Major Employers

Major employers in the city are listed in the table below. Additionally, many residents who live in Crete travel to surrounding communities for employment including Lincoln and Omaha. The complexion of the city's population changes with the workday. This daily shift was recorded in 2019 when 1,132 local employees reported living in Crete, while 1,476 commuted to another community. Crete's 2019 Housing Study also found that 2,792 people came into Crete to work.

Table CRE.2: City of Crete Major Employers

Company Name	Industry	Number of Employees (2019)
Smithfield Foods	Processing	2,046
Nestle Purina	Manufacturing	507
Crete Public Schools	Education	320
Doane University	Education	275
Americold (merged with Smithfield in July 2019)	Cold Storage/Logistics	179
Crete Core Ingredients	Cold Storage/Render	161
Crete Area Medical Center	Health Care	159
Walmart	Retail	150
Bunge Milling	Processing	89
City of Crete	Government	71

¹⁶ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

¹⁷ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

¹⁸ United States Census Bureau. "2018 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]

Figure CRE.3: Crete Employment and Commuting Rates

INFLOW: WORK IN CRETE			OUTFLOW: LIVE IN CRETE		
Home Destination	Number	Share	Work Destination	Number	Share
Crete	692	40.6%	Crete	692	21.2%
OUTSIDE CRETE			OUTSIDE CRETE		
Lincoln	413	18.0%	Lincoln	702	21.5%
Wilber	69	3.0%	Omaha	161	4.9%
Omaha	60	2.6%	Grand Island	43	1.3%
Beatrice	53	2.3%	Wilber	39	1.2%
Friend	38	1.7%	Beatrice	34	1.0%
Seward	35	1.5%	Seward	30	0.9%
Dorchester village, NE	29	1.3%	York	25	0.8%
Grand Island	26	1.1%	Waverly	22	0.7%
Nebraska City	23	1.0%	Fremont	21	0.6%
All Other Locations	853	37.2%	All Other Locations	1,500	45.9%
TOTAL	1,599	69.8%	TOTAL	2,577	78.8%

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (2015)

Housing

In comparison to the Saline County, Crete's housing stock was:¹⁹

- **Less owner occupied.** About 59.5% of occupied housing units in Crete are owner occupied compared with 69.7% of occupied housing in Saline County in 2018.
- **Smaller share of aged housing stock.** Crete has fewer houses built prior to 1970 than the county (42.9% compared to 53.9%).
- **More multi-family homes.** The predominant housing type in the city is single family detached and Crete contains more multifamily housing with five or more units per structure than the county (15.5% compared to 7.1%). About 67.1% of housing in Crete was single-family detached, compared with 80.8% of the county's housing. Crete has a larger share of mobile and manufactured housing (6.5%) compared to the county (5.4%). Crete's mobile and manufactured homes are primarily located north of Highway 33 between Kingwood and Boswell (zoned R-4).

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.

¹⁹ United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

The population in Crete has steadily increased which the local planning team attributed to available economic opportunities from growing businesses, good schools, and available housing. Crete has historically developed to the south and east; however, the west portions of Crete are now seeing development as well. Figure CRE.4 shows the future land use map for the city.

Residential

Accommodating continued growth, several new residential developments are under construction or in various stages of planning. The Fairway development is 75% complete as of 2020 with 26 new single-family lots. The Belohlavy Estates is in Phase 1 and will have 17 new single-family homes and the Pine Ridge Development Phase 1 will include 16 new lots and Phase 2 will add eight new single-family lots.

Commercial

Tabitha Health constructed a new assisted living center on the east side of the City and returned the original property to the City. A new Scooters Coffee will be opening on Highway 33. Orscheln Farm and Home constructed a new store which tripled the size of the original structure. Fairfield Inn and Suites constructed a new 72-room hotel on east Highway 33. The City's Downtown Redevelopment Project is also progressing.

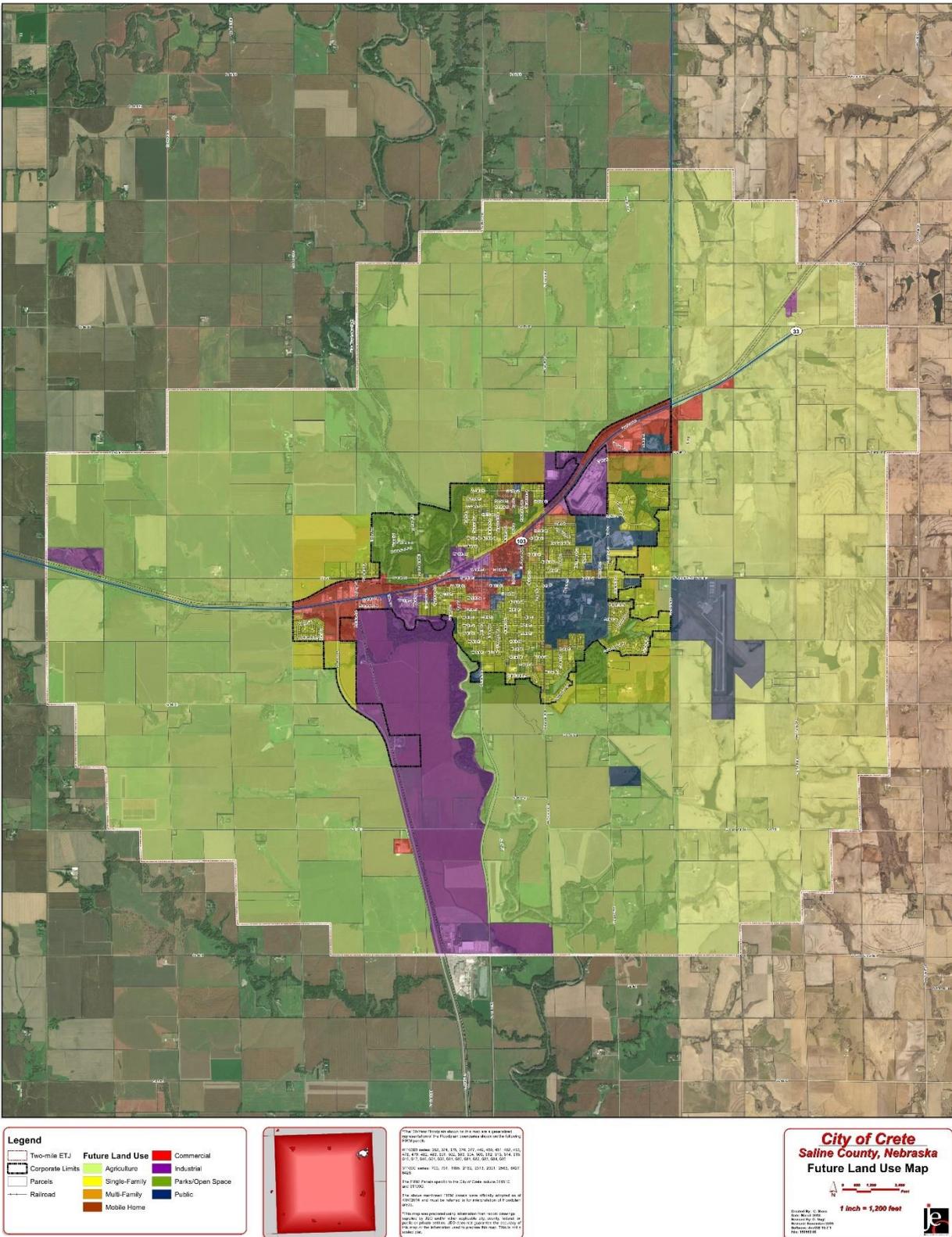
Industrial

Smithfield Foods, Saline County's largest employer, which is located just south of Crete, continues expansion projects. Nestlé Purina, on the east side of the City, is about to undertake a major expansion project.

Infrastructure

The city demolished the old Tabitha assisted living center and constructed a new library/tornado shelter and park. In cooperation with the State of Nebraska, the second of two new bridges is being constructed over the Big Blue River; the first was on West 13th Street and second is on Tuxedo Road into the historic Tuxedo Park. The city has invested in Nestlé Purina's expansion by increasing the capacity of the adjacent electrical substation. The city has also completed construction of one new lift station near the Big Blue River and Highway 33.

Figure CRE.4: Future Land Use Map



Parcel Improvements and Valuation

GIS parcel data as of December 2019 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. Numerous structures in the City of Crete have been removed from the floodplain via LOMA. A summary of LOMAs is provided in the table below.

Table CRE.3: Crete 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
2,245	2,010	\$204,572,140	\$91,123	664	\$57,073,615

Source: County Assessor, GIS Workshop

Table CRE.4: Crete Flood Map Products

Type of Product	Product ID	Effective Date	Details
LOMA	10-07-2315A-310186	11/09/2010	Structure removed from SFHA
LOMA	11-07-0551A-310186	12/09/2010	Property removed from SFHA
LOMA	11-07-0552A-310186	12/07/2010	Portion of property removed from SFHA
LOMA	11-07-0749A-310186	02/15/2011	Property removed from SFHA
LOMA	11-07-0772A-310186	12/23/2010	Property removed from SFHA
LOMA	11-07-0789A-310186	02/10/2011	Structure removed from SFHA
LOMA	11-07-1487A-310186	03/22/2011	Property removed from SFHA
LOMA	11-07-1503A-310186	05/03/2011	Structure removed from SFHA
LOMA	11-07-1665A-310186	05/17/2011	Property removed from SFHA
LOMA	11-07-2180A-310186	07/15/2011	Property removed from SFHA
LOMA	11-07-2638A-310186	09/27/2011	Structure removed from SFHA
LOMA	12-07-0014A-310186	11/10/2011	Structure removed from SFHA
LOMA	12-07-0062A-310186	12/06/2011	Structure removed from SFHA
LOMA	12-07-2652A-310186	07/10/2012	Property removed from SFHA
LOMA	12-07-2848A-310186	08/02/2012	Property removed from SFHA
LOMA	12-07-3052A-310186	09/13/2012	Property removed from SFHA
LOMA	12-07-3086A-310186	9/11/2012	Structure removed from SFHA
LOMA	13-07-0461A-310186	01/08/2013	Property removed from SFHA
LOMA	13-07-0784A-310186	02/28/2013	Structure removed from SFHA
LOMA	13-07-0806A-310186	03/07/2013	Property removed from SFHA
LOMA	13-07-1249A-310186	06/25/2013	Property removed from SFHA
LOMA	13-07-2027A-310186	08/01/2013	Property removed from SFHA
LOMA	13-07-2134A-310186	09/05/2013	Structure removed from SFHA
LOMA	14-07-1545A-310186	06/19/2014	Structure removed from SFHA
LOMA	14-07-1696A-310186	06/10/2014	Property removed from SFHA
LOMA	15-07-0553A-310186	01/27/2015	Property removed from SFHA
LOMA	15-07-0727A-310186	02/10/2015	Structure removed from SFHA
LOMA	15-07-0799A-310186	03/10/2015	Property removed from SFHA
LOMA	15-07-0930A-310186	03/25/2015	Structure (residence) removed from SFHA

Type of Product	Product ID	Effective Date	Details
LOMA	15-07-1610A-310186	07/08/2015	Property removed from SFHA
LOMA	16-07-1229A-310186	04/26/2016	Structure (residence) removed from SFHA
LOMA	16-07-1477A-310186	06/29/2016	Property removed from SFHA
LOMA	17-07-0530A-310186	01/13/2017	Structure (residence) removed from SFHA
LOMA	17-07-1258A-310186	07/18/2017	Structure (residence) removed from SFHA
LOMA	17-07-2003A-310186	08/11/2017	Structure removed from SFHA
LOMA	18-07-0669A-310186	12/28/2017	Structure removed from SFHA
LOMA	18-07-1962A-310186	09/04/2018	Structure (residence) removed from SFHA
LOMA	19-07-0994A-310186	03/21/2019	Structure removed from SFHA
LOMA	19-07-1729A-310186	10/29/2019	Structure (residence) removed from SFHA
LOMA	19-07-1731A-310186	09/26/2019	Structure removed from SFHA
LOMA	20-07-1517A-310186	10/21/2020	Structure (residence) removed from SFHA
LOMA	21-07-0547A-31086	4/13/2021	Structure (residence) removed from SFHA

Source: County Assessor, GIS Workshop

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are five chemical storage sites throughout Crete 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.

Table CRE.5: Chemical Storage Fixed Sites

Facility Name	Address	Located in Floodplain?
Bunge Milling Inc	1405 Norman Ave	N
Smithfield Fresh Meats Corp	2223 Industrial Rd	N
Crete Ready Mix Co	1320 W 11th Ave	N
Nestle Purina PetCare Company	2305 E Highway 33	N
Akrs Equipment	2185 County Road H	N

Source: Nebraska Department of Environment and Energy²⁰

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.

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

Table CRE.6: Crete Critical Facilities

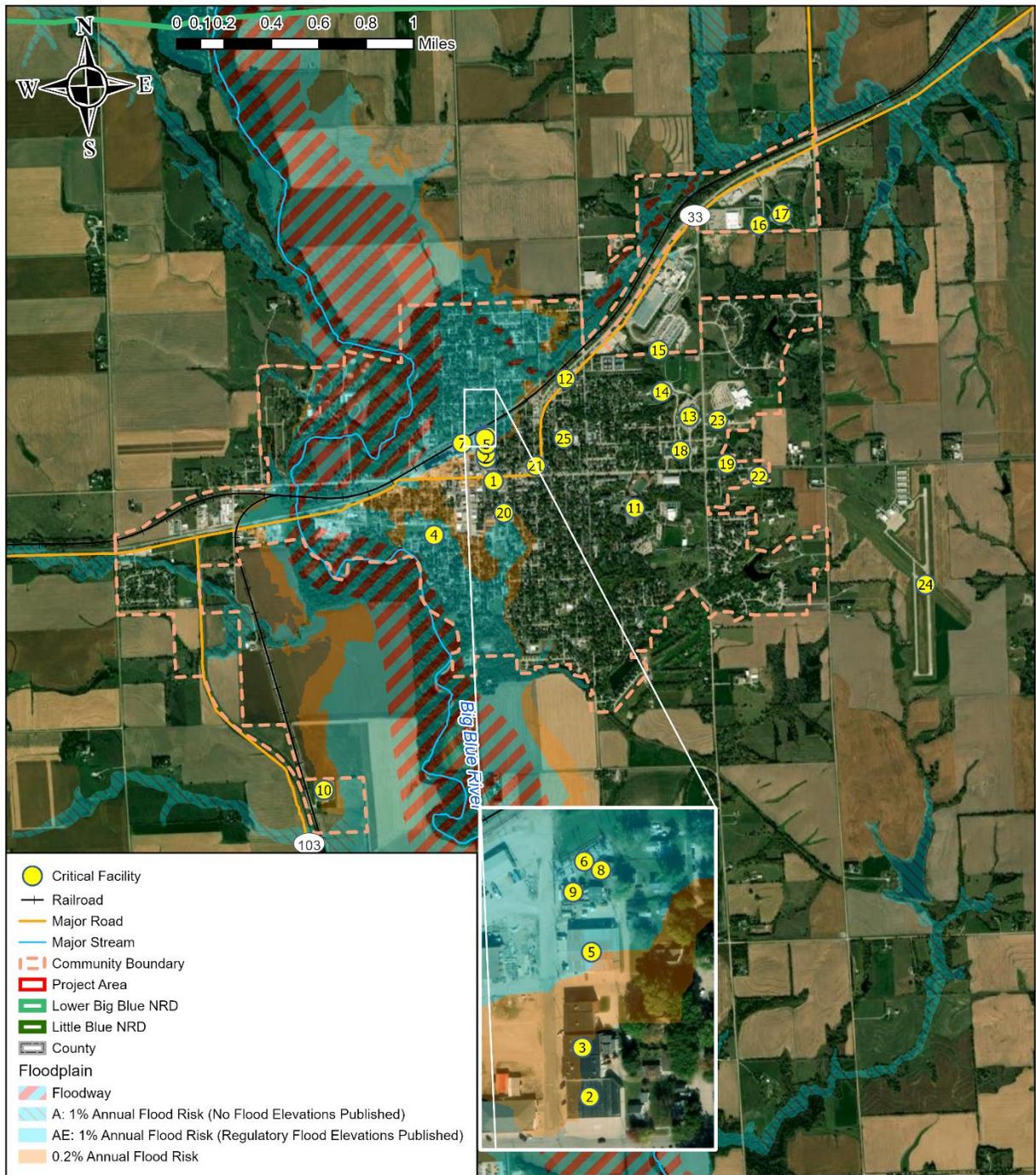
CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	City Hall	N	Y (on-site)	N
2	Safety and Security	Fire Station	N	Y (on-site)	Y
3	Energy	Power Plant	N	Y (on-site)	Y
4	Safety and Security	Utility Service Center	N	Y (on-site)	Y
5	Transportation	Streets Department	N	Y (on-site)	Y
6	Energy	Electric Substation	N	Y (circuit)	Y
7	Energy	Electric Substation	N	Y (circuit)	Y
8	Food, Water, and Shelter	Water Treatment Plant	N	N	Y
9	Hazardous Materials	Fuel Storage	N	Y (circuit)	Y
10	Food, Water, and Shelter	Wastewater Plant	N	Y (on-site)	Y
11	Other	Doane College	Y	Y (circuit)	N
12	Safety and Security	Police Station	N	Y (on-site)	N
13	Food, Water, and Shelter	Crete Middle School	Y	Y (on-site)	N
14	Food, Water, and Shelter	Crete Intermediate School	Y	N	N
15	Energy	Electric Sub Station	N	Y (circuit)	N
16	Food, Water, and Shelter	Water Tower	N	Y (on-site)	N
17	Health and Medical	Crete Area Medical Center	N	Y (circuit)	N
18	Health and Medical	Tabitha Assisted Living	N	Y (circuit)	N
19	Health and Medical	Tabitha Assisted Living	N	Y (circuit)	N
20	Food, Water, and Shelter	Crete Elementary School	Y	Y (on-site)	N
21	Food, Water, and Shelter	St. James School	Y	N	N
22	Health and Medical	Water Treatment Plant & Reservoir	N	Y (circuit)	N
23	Food, Water, and Shelter	Crete High School	Y	Y (on-site)	N
24	Transportation	Crete Municipal Airport	N	N	N
25	Food, Water, and Shelter	Library/Tornado Shelter	Y	Y (circuit)	N
26	Communications	Radio towers - various locations (not mapped)	N	Y (all)	N

The City of Crete Power Plant operates a 6,000 KW generator which is normally connected to a regional power grid. The City Electric Department is capable of redirecting power into portions of the city (“circuit”).

The City of Crete has installed uninterruptable power supplies (UPS) on critical need devices and locations as described below:

- City Hall Server Room – hosts the city and SCADA network servers and phone systems. All devices are powered with large UPS units. Server Room also has an auto start emergency generator with an automatic load transfer switch.
- Police Station – has UPS units on all computers and network communication devices. The station also has an automatic emergency generator.
- Fire Station – has an automatic emergency generator.
- Water Tower – houses the city radio and emergency communications equipment and is protected by UPS units and backup generators.
- Public Works Service Center – hosts electric and water and sewer staff and equipment. Facility has a backup generator.
- Wastewater Plant – has UPS units installed on all critical equipment and has a backup generator.
- Power Plant – hosts the city’s one large (6 MW) generator and the city’s offsite computer network backup serves. All equipment has UPS’ installed and have automatic start emergency generators.
- SCADA System – runs and monitors all city utilities has UPS units on all critical devices.

Figure CRE.5: Crete Critical Facilities





Created By: NL
Date: 5/20/2021
Software: ArcGIS Pro 2.8.0
File: Blues Critical Facilities.aprx
This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

City of Crete

Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021



Kansas

Historical Occurrences

See the Saline County community profile for historical hazard events.

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 community's capabilities. For more information regarding regional hazards, please see *Section Four: Risk Assessment*.

Flooding

Per the National Climatic Data Center, Crete has experienced 20 damaging flood events and six flash flood events since 1996. Some of the most notable flood events included:

- June 25, 2000 a flash flood occurred when three inches of rain in one hour precipitated flash flooding that caused multiple businesses to flood and caused \$100,000 in damage.
- May 6, 2007 Crete measured 5.9 inches of rain. Due to flooding from the Big Blue River and Turkey Creek, 20 county roads were closed with 100 washouts reported. Agricultural bottomlands were also flooded. Besides washing out newly planted crops, some farm outbuildings and irrigation equipment were damaged by flood waters. The Big Blue River crested at 21.3 feet.
- May 7, 2015 widespread flooding across the state caused significant damage to local infrastructure. The Big Blue River crested at 24.21 feet or 3.21 feet above flood stage. This event caused a reported \$4,500,000 in damages.
- March 13, 2019 Flooding occurred countywide during this event. The river gage at Crete, operated by the USGS, peaked at 30.68 feet at 6 pm on March 15th, making it the highest on record. A disaster declaration was instituted for this event. Major flood stage is 29 feet. One home was confirmed impacted by the flooding. Several homes in the 20th and Main Street area had water in basements due to storm drains backing up. The event impacted some roads and residences as well as damage to the Tuxedo Park bridge. Crete reported over \$78K in property damages and the city reported nearly \$29K in indirect costs, not including the cost of the bridge damage. The local planning team noted 14 homes and one business were categorized as minorly damaged. Swan Creek was out of its banks and inundated numerous roads across southern Saline county. Property loss amounts for the entire county estimated \$325,000 in damages.

The wastewater plant was moved in 2016 outside the floodplain. The City is also in the process of buying out some properties which are in the floodplain. Crete completed a new flood study and remapped its floodplain, which is with FEMA for review as of winter 2020. The city expects 90% of housing and business areas currently in the floodplain to be removed or mitigated in the future. The large-scale flood mitigation project to create a lake north of town has been identified as a low priority as other projects have worked to remove Crete properties from the floodplain. The city has received HMGP grants to mitigate flood prone properties by constructing a new bridge on 22nd Street.

As a significant portion of western Crete is located in the floodplain, Crete participates in the NFIP and has 92 policies in-force for \$8,008,700 (as of November 2020). According to NeDNR as of February 2020, there is one undefined repetitive loss property in the City.

Hazardous Materials

While no significant chemical spills have occurred in recent years, the risk is concerning to the City of Crete, given its history. A derailment in 1969 of a train transporting anhydrous ammonia resulted in several deaths and a local evacuation; and there have been other, less serious derailments as well, and substance spills. Several rail crossings pass near town, carrying hazardous chemicals; and several roadways are conduits for these chemicals. There is also a Purina plant near town. Critical facilities along or near these routes include a hospital, fire and police departments, and City Hall.

Crete has a volunteer fire department with 38 personnel, who are trained in hazardous material awareness – as are local police. Nearby Lincoln and Beatrice have hazardous material teams. For notifications, Beatrice operates a reverse 911 system that services Crete.

Severe Winter Storms

Saline County, including Crete, is prone to severe winter weather, which can include heavy snow, ice accumulation, extreme cold, blizzards, and winter storms. The city's main concern from winter weather is power outages.

For snow removal, the city owns three graders, three dump trucks, pickup trucks, two loaders, and several skid loaders, and is responsible for snow removal in town. The city deems its snow removal resources to be sufficient. There are snow routes in town, along which cars are towed if blocking plows. The city has implemented a brine storage and application program to treat roadways. This includes pretreating priority road surfaces (identified in the City's Snow Plan) with a brine solution. Currently, the city stores 4,800 gallons of premixed brine storage. A 23.3% solution drops the freeze point to -6 degrees. This aids in preventing frost from forming and snow and ice from bonding to pavement, this also helps save time on removal. The city has reassessed emergency snow routes and replaced worn snow route signs. The Street Superintendent uses "Clear Roads, Best Management Practices for Winter Maintenance", as a guideline in the decision making during the wintertime.

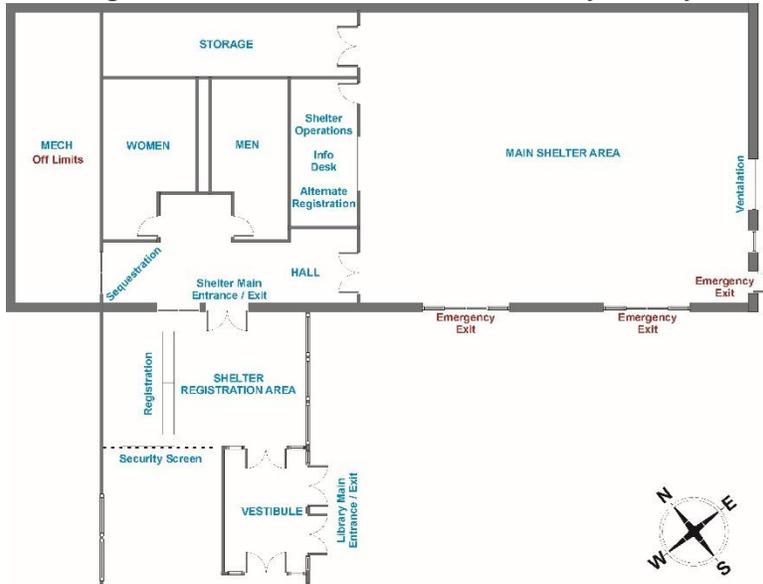
Tornadoes and High Winds

Saline County is prone to high winds and tornadoes, though touchdowns in recent years have avoided the City of Crete itself. The closest approach to the city since 2000 is an F-1 touchdown five miles west-southwest of Crete on April 27, 2002. This twister destroyed a barn, uprooted trees, and damaged irrigation infrastructure. Still, the risk of a damaging winds or a tornado cannot be ruled out for the city.

The City of Crete has built a community safe room at the new city library. Most residents also have basements or neighbors with basements for additional safety. It is designed to accommodate a maximum of 465 persons. Although the shelter is not intended for long-term lodging, it will offer limited protection from tornados for that limited period of time when tornadic storms pose the greatest threat. Each school in Crete does have a shelter for students and staff

if tornado events occur. Residents are able to receive emergency alerts through AlertSense. There are seven severe weather sirens in Crete.

Figure CRE.6: Crete Storm Shelter at City Library



Governance

A community’s governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Crete has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The city has a six-member council and the following offices: city administrator, attorney, public works director, clerk/treasurer, chief of police, fire chief, building inspector, GIS technician, and an appointed private engineering firm.

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 CRE.7: 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	No
	Building Codes	Yes
	Floodplain Management Plan	No

SECTION SEVEN: CITY OF CRETE COMMUNITY PROFILE

Survey Components		Yes/No
	Storm Water Management Plan	No
	National Flood Insurance Program	Yes
	Community Rating System	No
	Other (if any)	
Administrative & Technical Capability	Planning Commission	No
	Floodplain Administration	Yes
	GIS Capabilities	Yes
	Chief Building Official	No
	Civil Engineering	No
	Local Staff Who Can Assess Community's Vulnerability to Hazards	Yes
	Grant Manager	No
	Mutual Aid Agreement	Yes – County
	Other (if any)	
Fiscal Capability	1 & 6 Year Plan	No
	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	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 Outreach and	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	Yes
	Other (if any)	

Table CRE.8: Overall Capability

Overall Capability	Limited/Moderate/High
Financial Resources Needed to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Community Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate

Plan Integration

Crete's comprehensive plan was last renewed in 2014. This plan includes information about vacant lots in the floodplain and building restrictions for these areas. The plan also discusses the idea of creating a lake that functions as both a flood control device and a recreational hub that would incite commercial, residential, and possibly light industrial development. The plan also highlights that Crete has historically developed south and east. Anticipated development identifies proposed growth areas to the northeast, east, southeast, and southwest of the city. Highlights of anticipated development include low-density residential development along the eastern, western, and southern periphery, a new southeastern city park, and an abundance of flex-space near the airport and along Highway 33. This document will be updated in June 2021.

Crete's zoning regulations were updated in 2014 with an update in 2016. The zoning regulations have extensive restrictions for development and the floodplain, with articles for both 1) flood fringe and floodway overlay districts, and 2) flood fringe and floodways. There are also restrictions regarding the siting of chemical facilities, include well setback requirements, restrict the subdivision of land within the floodplain, include the ability to implement water restrictions, and prohibit the filling of wetlands.

The city has adopted the 2018 International Building Codes which require all new residential developments to be built to a higher standard to withstand severe weather events. In addition, the building code follows the 2018 State Energy Code.

Crete's Emergency Operations Plan (EOP), which was last updated in 2021, is an annex of Saline County's EOP. The city plan fully supports the county's all-hazard Plan and provides clear assignment of duties and responsibilities for multiple specific natural and man-made disasters. These, and other hazards, are identified in the various annexes of the Saline County EOP.

The city's Capital Improvement Plan is submitted and updated every budget year. The current 2021 plan includes projects for: regular maintenance of drainage structures and the storm sewer system, bridge improvements, installing new municipal wells, upsizing water pipes, updating electrical distribution system, burying powerlines, installing backup generators, improving the fire hall and police headquarters, constructing a new community center, constructing a new water treatment facility, constructing a new electric substation, and replacing a sanitary lift station.

In the past several years the city has devoted considerable local funds, and other resources, to mitigation projects. Past mitigation projects and the time necessary to manage them (e.g., new wastewater treatment plant, new lift station, electrical substation expansion, new library/tornado shelter, matching funds for the buyout of properties which experienced flooding in 2019) all

demonstrate Crete’s commitment to the protection of life and property as well as a deep investment into the community’s future.

Despite the city’s continued focus on mitigation and the development of city services, tax revenues do not permit the city to do major projects in the near-term. The costs of several of the above projects are currently paid through rate increases and bonds. Even more, county and school levies for major construction projects continue to be paid by Crete residents. At present, there is little opportunity to press the community for more debt; therefore, while the city anticipates receiving an additional grant to assist with flood acquisition projects, it must focus on operational actions to prepare for future hazards. Should external funding, such as HMGP grants, continue to be made available, the city will continue to invest the energies required to manage them.

In 2018, The City of Crete’s valuation was \$272,208,949 and the city received \$1,310,935 in taxes. In 2019, The City of Crete’s valuation was \$282,297,618 and the city received \$1,378,357 in taxes. In 2020, The City of Crete’s valuation was \$293,778,066 and the city has budgeted \$1,400,000 in taxes.

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, attorney, clerk/treasurer, building inspector, fire chief, and police chief.

The local planning team will include the public in the review and revision process by including citizen representation to the team, updating the city website and social media posts, and by sharing information at city council meetings which are open to the public. The city intends to review/revise the Community Profile no less than once every two years.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	DESIGNATED SNOW ROUTES
DESCRIPTION	Designate snow routes
HAZARD(S)	Severe Winter Storms
STATUS	The city has designated snow routes and reviews these annually. In 2020, the city replaced worn existing signs to ensure adequate visibility.

SECTION SEVEN: CITY OF CRETE COMMUNITY PROFILE

MITIGATION ACTION		FLOOD PROOFING CITY ASSETS
DESCRIPTION	Conduct flood proofing of municipal assets such as electrical substations, municipal power plants, City Hall, Public Works Service Center, and Wastewater Treatment Plant	
HAZARD(S)	Flooding	
STATUS	The wastewater treatment facility has been successfully relocated. The Blue Acres Lift Station has been raised one (1) foot above base flood elevation.	

MITIGATION ACTION		HAZARDOUS TREE REMOVAL PROGRAM
DESCRIPTION	Develop a program to remove hazardous trees	
HAZARD(S)	Drought and Extreme Heat, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds	
STATUS	The city participates in Tree City USA. The City annually inspects trees located in city right-of-way. Property owners are notified of required remedial action(s) such as trimming or removal if the tree poses a safety risk.	

MITIGATION ACTION		IMPROVE AND REVISE SNOW/ICE REMOVAL PROGRAM
DESCRIPTION	During winter events, the community will have designated snow routes for the community to use.	
HAZARD(S)	Severe Winter Storms	
STATUS	The City has designated snow routes and reviews these annually. In 2020, the City replaced worn existing signs to ensure adequate visibility.	

MITIGATION ACTION		STORM SHELTERS OR SAFE ROOMS
DESCRIPTION	Construct two storm shelters and safe rooms	
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds	
STATUS	The city constructed a new large tornado shelter (max capacity 465) as part of the new library project.	

MITIGATION ACTION		TREE CITY USA
DESCRIPTION	Continue enrollment in the program	
HAZARD(S)	All hazards	
STATUS	The city will continue to be a Tree City USA member.	

Continued Mitigation Actions

MITIGATION ACTION	ALERT SIRENS
DESCRIPTION	Perform an evaluation of existing alert sirens in order to determine sirens which should be replaced or the placement of new sirens
HAZARD(S)	Severe Thunderstorms, Tornadoes and High Winds
ESTIMATED COST	\$15,000+
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	City Council
STATUS	The city has seven tornado warning sirens. Two were purchased within the last fifteen years. Public works will evaluate the older five to determine if repair or replacement is warranted.

MITIGATION ACTION	CONTINUITY PLANNING
DESCRIPTION	Develop continuity plans for critical community services. Encourage businesses to do the same.
HAZARD(S)	All hazards
ESTIMATED COST	\$5,000+, Staff time
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	City Council
STATUS	The city will develop internal continuity plans for all city departments and connect community partners. Continuity plans will include major employers and list their critical facilities as well. Integrate with major employers comprising listed critical facilities.

MITIGATION ACTION	CREATE/UPDATE COMMUNITY WIDE MASTER PLAN TO PRIORITIZE ALL FLOOD RELATED PROJECTS
DESCRIPTION	Identify potential flooding sources and flood-vulnerable areas. Explore solutions and prioritize.
HAZARD(S)	Flooding
ESTIMATED COST	\$10,000
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	City Council
STATUS	The city, in concert with State and Federal agencies, recently conducted a comprehensive study of the flood zones in and around the community at a cost of >\$42,000. The flood of 2019 precisely confirmed the engineering estimates of potential areas of flooding. This effort resulted in the submission of changes to the Federal Emergency Management Agency. The city awaits official approval.

MITIGATION ACTION	DRAINAGE AND STORMWATER IMPROVEMENTS
DESCRIPTION	Improve storm sewers and drainage patterns in and around the community
HAZARD(S)	Flooding
ESTIMATED COST	Varies by need
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	City Council
STATUS	New floodplain maps have been developed and are currently under review. Future actions will be determined post approval.

MITIGATION ACTION	DRAINAGE STUDY / STORMWATER MASTER PLAN
DESCRIPTION	Preliminary drainage studies and assessments can be conducted to identify and prioritize design improvements to address site specific localized flooding/drainage issues to reduce and/or alleviate flooding. Stormwater master plans can be developed to help identify stormwater problem areas and potential drainage improvements.
HAZARD(S)	Flooding
ESTIMATED COST	\$15,000
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	City Council
STATUS	The city has submitted new floodplain maps to FEMA for review and approval.

MITIGATION ACTION	EMERGENCY EXERCISE: HAZARDOUS SPILL
DESCRIPTION	Conduct a tabletop exercise to prepare for potential explosions or hazardous spills. Ensure that nearby businesses and residents have appropriate plans in place.
HAZARD(S)	Hazardous Materials
ESTIMATED COST	\$5,000+
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	City Council
STATUS	The City Emergency Management Liaison Officer has contacted the Saline County Emergency Management to facilitate the pending exercise.

SECTION SEVEN: CITY OF CRETE COMMUNITY PROFILE

MITIGATION ACTION	FLOODPLAIN MANAGEMENT
DESCRIPTION	Preserve natural and beneficial functions of floodplain land through measures such as: retaining natural vegetation, restoring streambeds, and preserving open space in the floodplain.
HAZARD(S)	Flooding
ESTIMATED COST	Varies by need
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	Low
LEAD AGENCY	City Council
STATUS	The city holds considerable greenspace and is working to expand such spaces through purchases and removal of several residential structures within the flood plain. The city is also placing new emphasis on the acquisition of properties impacted by recent flooding and/or are within the floodplain, removing flood-prone structures, and creating open space.

MITIGATION ACTION	IMPROVE WATER SUPPLY RESOURCES
DESCRIPTION	Evaluate and locate new sources of groundwater to ensure adequate supplies to support the existing community and any additional growth which may occur.
HAZARD(S)	Drought and Extreme Heat
ESTIMATED COST	\$25,000
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	City Council
STATUS	Portions have been completed with the wellhead protection study; however, a full plan has not yet been developed.

MITIGATION ACTION	MAP/RELOCATE CRITICAL INFRASTRUCTURE
DESCRIPTION	Acquire Geographic Information System (GIS) to relocate municipal infrastructure (water and sewer lines). Prohibit the construction of critical facilities within the immediate radius of chemical storage facilities.
HAZARD(S)	Hazardous Materials
ESTIMATED COST	\$1,500
FUNDING	General Funds
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	City Council, Zoning
STATUS	The city has hired a full-time in-house GIS technician and related software products for use. The city is expanding GIS capacity by also purchasing compatible survey equipment. All actions far exceed the limited vision of the past and its estimated costs. No new critical facilities have been built near chemical storage fixed sites. To date, local codes have not specifically been adopted which prohibit or limit development near chemical sites; however, this will change with the 2022 comprehensive plan.

MITIGATION ACTION	PROVIDE BACKUP POWER SYSTEMS AND REDUNDANCIES
DESCRIPTION	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.
HAZARD(S)	All hazards
ESTIMATED COST	\$2.7M
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	City Council
STATUS	The city completed electrical line work in 2016-17 to provide redundancy (3 separate lines) to the area around the local hospital at a cost of ±\$200K. Future efforts will include the design and construction of a new substation for additional redundancy at a cost of >\$2.7 million.

MITIGATION ACTION	PUBLIC EDUCATION AND OUTREACH
DESCRIPTION	Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as portable LED projectors and laptops, printing materials in multiple languages, and leveraging the use of skill interpreters as needed.
HAZARD(S)	All hazards
ESTIMATED COST	\$3,000+
FUNDING	General Funds, Staff Time
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	City Council
STATUS	The city is working to expand awareness and use of AlertSense by residents for hazard notifications.

SECTION SEVEN: CITY OF CRETE COMMUNITY PROFILE

MITIGATION ACTION	REMOVE FLOW CONSTRICTIONS
DESCRIPTION	Conduct a preliminary drainage assessment and/or design bridge improvements to reduce and/or alleviate flooding. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacing or modifying of bridges and other flow restrictions may be necessary to eliminate flooding threats and damages.
HAZARD(S)	Flooding
ESTIMATED COST	Varies by need
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	City Council
STATUS	The Tuxedo Park Bridge across the Big Blue River has been demolished and a new and superior bridge is in the process of being erected.

MITIGATION ACTION	SURGE PROTECTORS
DESCRIPTION	Purchase and install surge protectors on sensitive equipment in critical facilities.
HAZARD(S)	Severe Thunderstorms
ESTIMATED COST	\$25 per unit
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	City Council
STATUS	Installation of surge protectors on all critical facilities is currently underway.

Removed Mitigation Actions

MITIGATION ACTION	DEVELOP AND DISTRIBUTE EDUCATION MATERIALS
DESCRIPTION	Work to develop and distribute educational materials related to drought and drought impacts. Topics addressed may include, but are not limited to: xeroscaping, low-flow fixtures, smart irrigation systems, water collection devices/rain barrels, permeable surfaces, rain gardens, etc.
HAZARD(S)	Drought and Extreme Heat
REASON FOR REMOVAL	This action was identified as no longer a priority for the city.

MITIGATION ACTION	DEVELOP A DROUGHT MANAGEMENT PLAN
DESCRIPTION	Work with relevant stakeholders to develop a drought management plan. The drought management plan would identify water monitoring protocols, outline drought responses, identify opportunities to reduce water consumption, and establish the jurisdictional management procedures.
HAZARD(S)	Drought and Extreme Heat
REASON FOR REMOVAL	This project was identified as no longer a priority for the city.

SECTION SEVEN: CITY OF CRETE COMMUNITY PROFILE

MITIGATION ACTION	FLOOD CONTROL
DESCRIPTION	Develop a large flood control structure north east of town.
HAZARD(S)	Flooding
REASON FOR REMOVAL	This project was identified as no longer needed for the city.

MITIGATION ACTION	FLOOD CONTROL FEASIBILITY STUDY
DESCRIPTION	Conduct a feasibility study for developing a large flood control structure north east of town.
HAZARD(S)	Flooding
REASON FOR REMOVAL	This project was identified as no longer needed for the city.

MITIGATION ACTION	NFIP CONTINUATION AND ENFORCEMENT
DESCRIPTION	Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs).
HAZARD(S)	Flooding
REASON FOR REMOVAL	While the city will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA.

COMMUNITY PROFILE

VILLAGE OF DEWITT

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table DEW.1: Village of DeWitt Local Planning Team

Name	Title	Jurisdiction
Randall Badman	Board Member	Village of DeWitt
Moria Holly	Clerk	Village of DeWitt

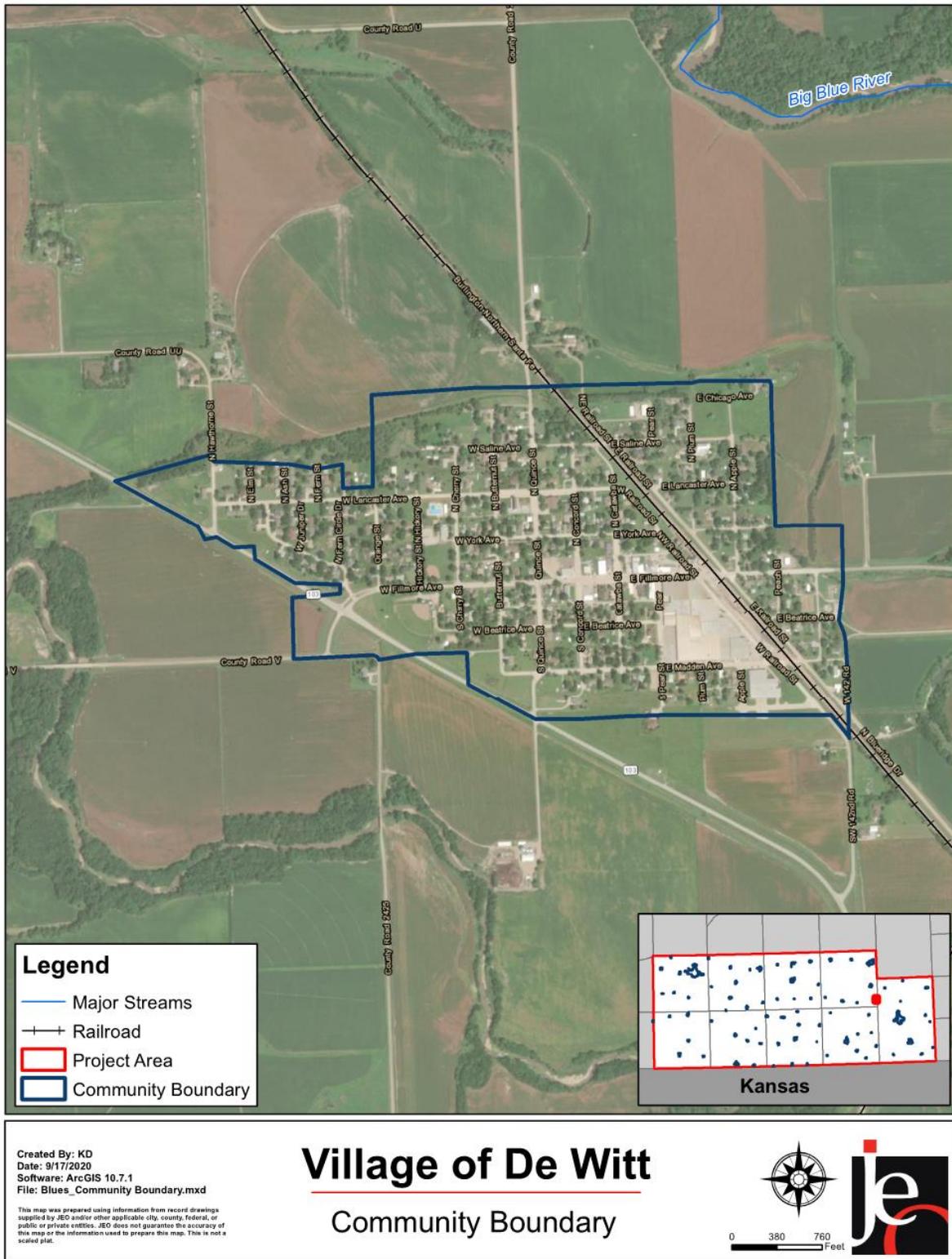
Location and Geography

The Village of DeWitt is located in the south eastern portion of Saline County. The Village of DeWitt covers an area of 0.42 square miles. Major waterways within the area include Swan Creek, which runs west to east and is located southwest of the village, the Big Blue River, which runs east west and is located just east of the village, and Turkey Creek located south of town which rounds west to east. Clatonia Creek is located approximately 2000 ft east of the city boundaries. The area is not heavily forested. Most of DeWitt lies in the plains topographic region, and is surrounded by agricultural fields.

Transportation

DeWitt's major transportation corridors include State Highway 103 which runs southeast to northwest, and accommodates on average 1,260 vehicles per day, 115 of which are heavy commercial vehicles. Other major transportation routes include N Quince Street which runs north-south through the village. DeWitt has two rail lines, the Burlington Northern Santa Fe lines, and Union Pacific Rail Road. At DeWitt, the Burlington Northern line travels from south-west to north east, and connects Sheldon, NE to Fairbury, NE. The Union Pacific line travels south-east. Critical facilities including the wastewater treatment plant and fire hall are located along major transportation routes and are at risk during transportation incidents. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

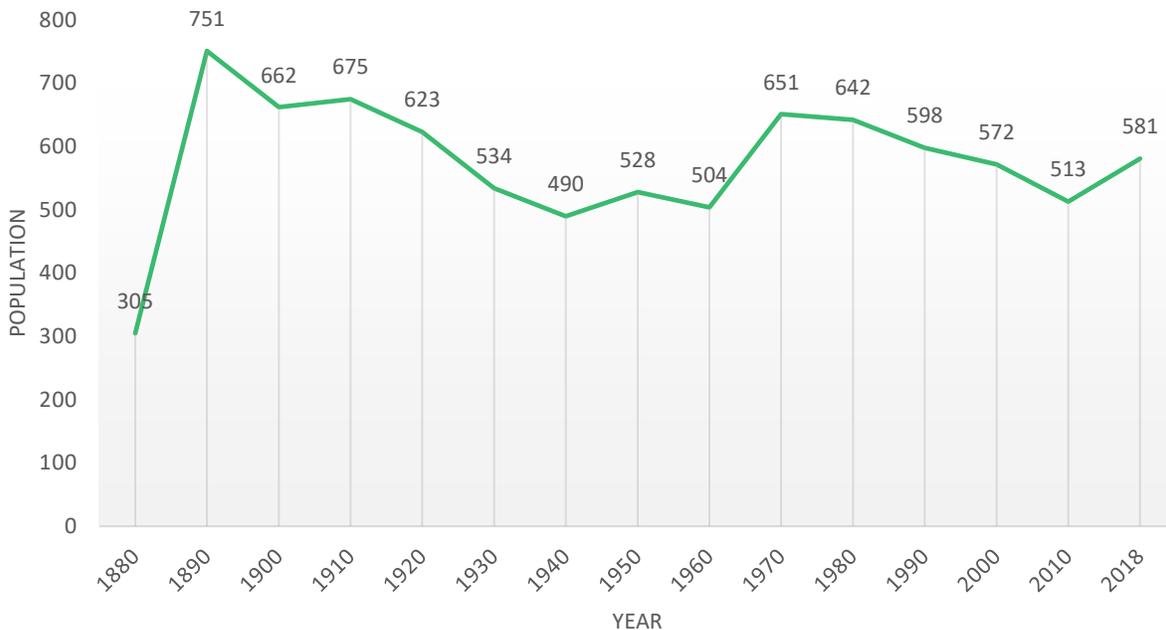
Figure DEW.1: Village of DeWitt Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1880 to 2018 (estimated). This figure indicates that the population of DeWitt has maintained a relatively steady trend since with a slight decline pattern. 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 4% of Saline County's Population in 2018.

Figure DEW.2: DeWitt Population 1880-2018



Source: U.S. Census Bureau²¹

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

- **Older.** The median age of DeWitt was 39.1 years old in 2018, compared with the County average of 35.8 years. DeWitt's population has grown younger since 2010, when the median age was 42.6 years old. DeWitt had a smaller proportion of people under 20 years old (26.8%) than the County (29.9%).²²
- **Less ethnically diverse.** In 2010, about 1% of DeWitt's population was Black, 1% American Indian, 1% was other races, and 1% two or more races. By 2018, only about 1% of DeWitt's population was other races. During that time, Saline County had 1% Black, 2% to 3% Asian, 13% to 5% other races, and 2% to 3% two or more races from 2010 to 2018 respectively.²³

²¹ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

²² United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

²³ United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

- **Less likely to be at the federal poverty line.** The poverty rate of all persons in DeWitt (6.6%) was lower than the County (13.5%) in 2018.²⁴

Employment and Economics

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

- **Same mix of industries.** Employment sectors accounting for 10% or more of employment in DeWitt and Saline County included Manufacturing, Retail, and Education.²⁵
- **Higher household income.** DeWitt's median household income in 2018 (\$59,375) was about \$8,000 greater than the County (\$51,143).²⁶
- **More long-distance commuters.** About 41.7% percent of workers in DeWitt commuted for fewer than 15 minutes, compared with about 51.5% of workers in Saline County. About 37.1% of workers in DeWitt commute 30 minutes or more to work, compared to about 28.5% of the County workers.²⁷

Major Employers

Malco Tools is the major employer in DeWitt while approximately 50% of residents commute to either Lincoln, Crete, or Beatrice for employment.

Housing

In comparison to the Saline County, DeWitt's housing stock was:²⁸

- **Less owner occupied.** About 65.3% of occupied housing units in DeWitt are owner occupied compared with 69.7% of occupied housing in Saline County in 2018.
- **Larger share of aged housing stock.** DeWitt has more houses built prior to 1970 than the county (62.7% compared to 53.9%).
- **Fewer multi-family homes.** The predominant housing type in the Village is single family detached and DeWitt contains fewer multifamily housing with five or more units per structure than the County (0.0% compared to 7.1%). About 93.3% of housing in DeWitt was single-family detached, compared with 80.8% of the County's housing. DeWitt has a smaller share of mobile and manufactured housing (2.5%) compared to the County (5.4%). Mobile and manufactured housing is primarily located on Saline and Madden Streets.

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.

24 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

25 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

26 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

27 United States Census Bureau. "2018 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]

28 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

In the past five years the village has demolished two dilapidated residential homes (one on the west side and one on the east side of town). One new large metal shed was also constructed along Highway 103 on the south side of town. The population in DeWitt has declined sharply since the major employer ViseGrip (factory) closed. This facility has since been purchased by Malco Tools which may influence future growth in the village. At this time there are no future residential or commercial developments planned.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 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. One property in DeWitt has been removed from the SFHA via LOMA.

Table DEW.2: DeWitt 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
390	281	\$17,962,645	281	100%	\$17,962,645

Source: County Assessor, GIS Workshop

Table DEW.3: DeWitt Flood Map Products

Type of Product	Product ID	Effective Date	Details
LOMA	17-07-2204A-310187	11/07/2017	Structure (grain bin) removed from SFHA

Source: FEMA Flood Map Service Center

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are four chemical storage sites throughout DeWitt 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. The fire hall is located across the street from Malco Tools factory and residential homes surround the Farmers Co-Op and Malco factory.

Table DEW.4: Chemical Storage Fixed Sites

Facility Name	Address	Located in Floodplain?
Malco Products Inc	108 S Pear St	Y – 0.2%
Farmers Cooperative	2336 County Road UU	N
Farmers Cooperative	601 E Madden Ave	Y – 0.2%
Windstream Communications	203 E Fillmore St	Y – 0.1%

Source: Nebraska Department of Environment and Energy²⁹

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

Critical Facilities

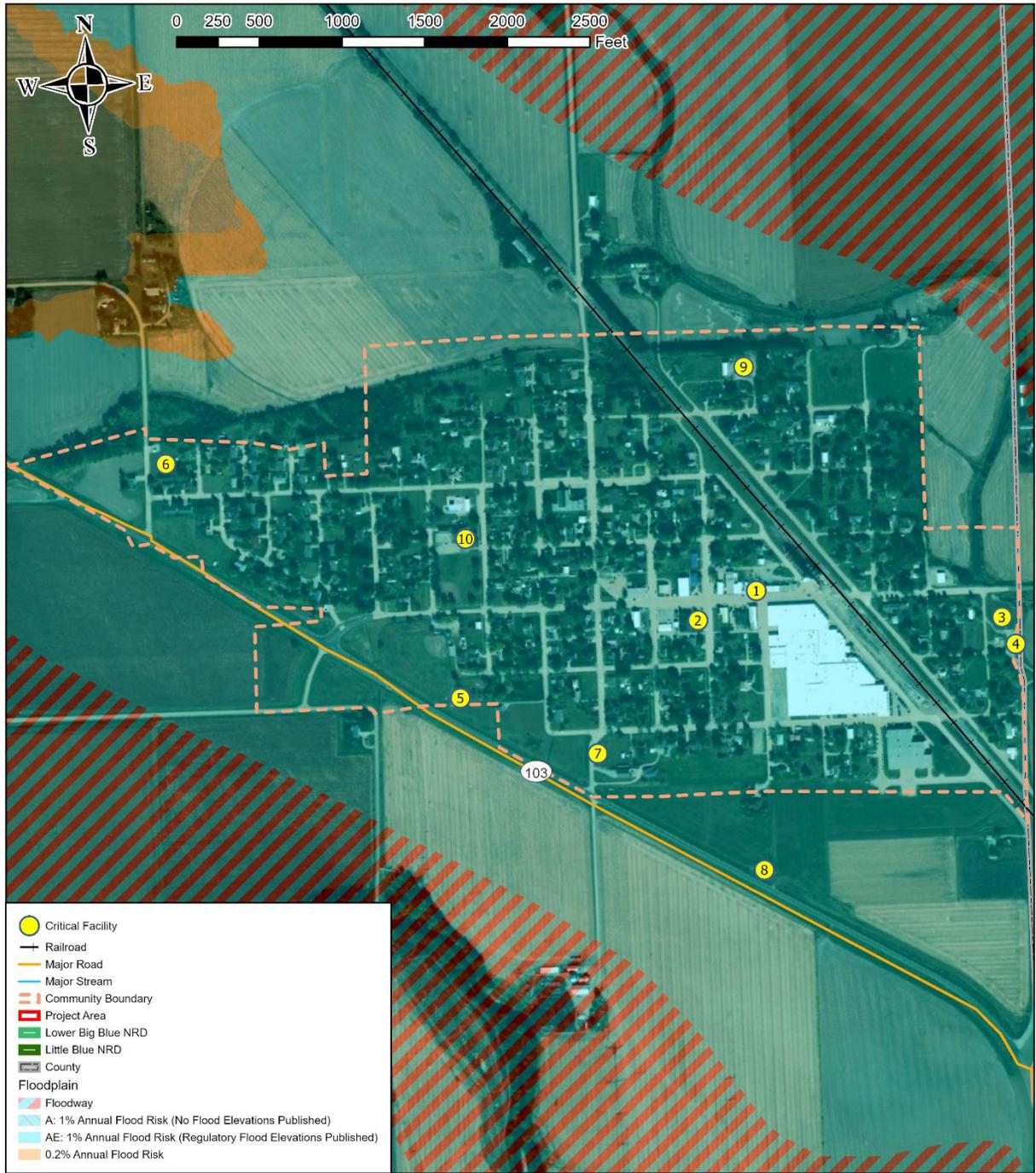
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during 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 DEW.5: DeWitt Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	Fire Hall	Y	Y	Y
2	Safety and Security	Village Office	N	N	Y
3	Food, Water, and Shelter	Wastewater Treatment Plant	N	Y	Y
4	Energy	Substation	N	Y	Y
5	Food, Water, and Shelter	Water Tower	N	N	Y
6	Food, Water, and Shelter	Well 1	N	Y	Y
7	Food Water and Shelter	Well 2	N	N	Y
8	Food, Water, and Shelter	Well 3	N	Y	Y
9	Safety and Security	Village Shop	Y	Y	Y
10	Food, Water, and Shelter	Community Center	Y	N	Y

Figure DEW.3: DeWitt Critical Facilities





Created By: NL
Date: 5/20/2021
Software: ArcGIS Pro 2.8.0
File: Blues Critical Facilities.aprx

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

Village of DeWitt

Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021



Kansas

Historical Occurrences

See the Saline County community profile for historical hazard events.

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 community's capabilities. For more information regarding regional hazards, please see *Section Four: Risk Assessment*.

Flooding

Flooding is the top hazard of concern for DeWitt and the majority of the village is located within the floodplain. Numerous past major flood events have impacted the village. Brief summaries of these events are described below:

- **March 2019:** Flooding from Big Blue River damaged crops, culverts, ditches, drainage channels and gravel roads in and around DeWitt. No personal property damages were reported, but one culvert collapsed. The Big Blue River gage south of Crete and north of DeWitt reported a new historic crest of 30.64 ft during this flood event. Flood stage is 21ft.
- **May 2015:** Severe flooding impacted DeWitt. Every street of the village was flooded during this event. Voluntary evacuations were also issued during this event. The NCEI reported: "This was the second significant flood of June along Turkey Creek, and the third of the year. The river crested over 4 feet above flood stage, and although briefly fell below flood stage on the 13th, additional heavy rain on the 14th allowed the creek to stay above flood stage until the 18th. Significant flooding of row crops in the flood plain was observed from Wilbur downstream to De Witt where some structures near town were again flooded." The local planning team reported approximately \$45,000 in total damages from the 2015 flood event.
- **May 2007:** 4-5 inches of rain fell across the Big Blue River watershed between May 4th and 6th. Flooding impacts were mainly concentrated to agricultural lands.
- **1984:** Village inundated by storm event. Localized flooding along major roads in DeWitt.

Flash flooding and riverine flooding are equal concerns in DeWitt, with riverine flooding occurring more often. The Big Blue River is a nearby body of water of concern and the western end of town is especially prone to flooding from Turkey and Swan Creeks. The sewer plant, which is on the east end of town, and the lift station on the west end of town are also particularly prone to flooding. The north part of town, and several intersections throughout town have poor storm water drainage. The village identified three main priorities for flood mitigation efforts: installing additional flood gauges north of the village on the Big Blue River; elevating a section of Highway 103; and elevating/raising dirt roads on the north side of town.

DeWitt's initial Flood Insurance Study was done in April 1982 and the current effective FIS Report (31151CV000A) is from November 2010. The effective floodplain map (31151C0293D) is also effective November 2010. A new floodplain mapping effort was scheduled to begin in summer 2015; however, flooding events in May 2015 delayed that process. As of 2020 a new floodplain mapping process has not been done.

In 2018 a report titled “Nonstructural flood risk resiliency assessments for DeWitt, Deshler, and Hebron NE: Nebraska Silver Jackets Interagency project” was released (available here: <https://usace.contentdm.oclc.org/digital/collection/p266001coll1/id/6440/>). The report notes: *The Village of DeWitt, NE is located in between the Big Blue River and Turkey Creek in Saline County. The entire community is located within the 1% annual chance floodplain. Actual risk to existing structures varies across the Village. Many structures were built before the implementation of the National Flood Insurance Program (NFIP) and are Pre-FIRM. Several structures have been flooded repeatedly in the past and are considered repetitive loss structures. In 2015, two flood events forced the Village to evacuate. DeWitt has previously applied for a FEMA Flood Mitigation Assistance grant to construct a series of flapgates along Highway 103, which has helped reduce flooding from more frequent flood events. During flooding in May 2015, the flapgates did not work properly because of debris buildup. In the June 2015 flooding, after the Village cleaned the flapgates out, the community had many more hours of warning time. DeWitt fully understands the flood risk posed by its precarious location and seeks technical assistance from NeDNR on a regular basis.* The report also noted that as of 2018 there were a total of 309 structures in the Village of DeWitt in the floodplain. According to NeDNR as of February 2020, there were four undefined repetitive loss properties in town. No changes to these structures have been made according to the local planning team. The village incurs damages beginning at approximately a 10-percent/10-year event due to the close proximity of structures to both Turkey Creek and the Big Blue River. Where flooding occurs at this event, water depths average approximately 0.77 feet and primarily affect residential structures.

DeWitt participates in the NFIP and as of December 2020, had 55 policies in place with a total coverage of \$4,365,700. The village is currently working with the county and National Weather Service to install additional river gauges north of the village on the Big Blue River to provide adequate warning. Gauges are needed on the rivers north of DeWitt and the village also identified the need to raise a section of Highway 103 to reduce flow restrictions; however, this project would require additional assistance from NDOT. While the village is registered with the Community Rating System program, as of November 2020 the village was listed as a Class 10 and receives no reduction in flood insurance premiums. Limited local capabilities, staffing, and available funds limit the village’s ability to pursue additional CRS credits.

Severe Thunderstorms

Severe Thunderstorms are common across the planning area and include effects from heavy rain, lightning, hail, and strong winds. DeWitt periodically experiences winds in excess of 60 mph from severe thunderstorms. Lightning is also a threat from these storms. In 2013, lightning struck a transformer in town and required it to be replaced. The village is concerned about the risk of power outages, damage to infrastructure, tree damage, and harm to residents from these storms.

Critical electronic municipal records are protected with surge protectors. The fire department, water wells, and sewer plant have portable generators. The village would like to have an automatic start generator for the fire hall. About 20 percent of the power lines in the village are buried. A contractor trims hazardous trees in the village. Critical facilities have weather radios.

Severe Winter Storms

DeWitt is at risk for crippling winter storms, such as a 2012 Christmas Eve storm that knocked out power and blocked highways. The village is concerned that winter storms could cause power outages, destroy infrastructure, damage trees, block transportation routes and threaten public safety.

The village owns a front-end loader, motor grader, tractor snow blowers, and a dump truck, and the utility superintendent is in charge of snow removal. The village believes these resources are sufficient for snow removal. The village does not utilize snow fences. There are no designated snow routes in town. About 20 percent of the power lines in town are buried.

Tornadoes and High Winds

The village is concerned about the public safety, power outages, destroy infrastructure, structural damage and threaten public safety from tornadoes and high winds. About 20 years ago, high winds damaged a village storage facility. Multiple tornados in DeWitt on July 24, 1993 destroyed 20 grain silos and damaged homes, and was followed by flooding in town from Turkey and Swan Creeks.

The city does not have a community safe room, so residents must rely on their own or a neighbor’s basement or storm shelter for safety. The village backs-up its electronic municipal records. Saline County does not offer text alerts for severe weather. The village does not promote emergency preparedness in the community. The village has mutual aid agreements in place with Gage, Jefferson, and Saline Counties, and with Hallam in Lancaster County.

Governance

A community’s governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. DeWitt has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The Village has a five member council and the following offices: clerk/treasurer, attorney, utility superintendent, fire chief, and sewage plant operators. Saline County Emergency Management and Sheriff’s Department may also assist DeWitt with hazard mitigation efforts.

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 DEW.6: 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

SECTION SEVEN: VILLAGE OF DEWITT COMMUNITY PROFILE

Survey Components		Yes/No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	No
	Building Codes	No
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	National Flood Insurance Program	Yes
	Community Rating System	Yes – Class 10 (inactive)
Other (if any)		
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administration	Yes
	GIS Capabilities	No
	Chief Building Official	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	No
	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	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	
Education Outreach and	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 Village USA	No
	Other (if any)	

Table DEW.7: Overall Capability

Overall Capability	Limited/Moderate/High
Financial Resources Needed to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Limited
Community Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited

Plan Integration

The village's Comprehensive Plan was last updated in 2015; but does not address specific hazards. The plan does encourage safe growth practices for future growth, encourages infill development, and clustering of development in sensitive areas. At this time there are no plans to update the Comprehensive Plan.

The village has adopted the 2012 International Building Codes. In the future the village will consider adopting the 2018 edition of the IBC. The village's Zoning Ordinance was last updated in 2015 and the Subdivision Regulations were last updated in 2005. The ordinances include specific requirements for development in the floodplain. All development requires a permit for development and the Utilities Superintendent is tasked with overseeing safe development practices.

The Local Emergency Operations Plan (LEOP) for DeWitt, which was last updated in 2018, is an annex of Saline County's Local EOP. It is an all-hazards plan that does not address specific natural and man-made disasters. It provides a clear assignment of responsibility in case of an emergency.

The local planning team noted the annual municipal budget's funds are limited to maintaining current systems and facilities. The amount of funding has increased slightly in recent years and if this trend continues, may allow the village to pursue additional mitigation efforts.

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 Village Clerk. The local planning team will review the plan no less than annually and will include the public in the review and revision process by: social media posts, newspaper notices, letters to residents, posted notices and information on utility billing memos.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	FLOODPLAIN MANAGEMENT
DESCRIPTION	Preserve natural and beneficial functions of floodplain land through measures such as: retaining natural vegetation, restoring streambeds, and preserving open space in the floodplain.
HAZARD(S)	Flooding
STATUS	The village has ordinances in place to protect areas along the river and additional development in the floodplain must pass stringent permitting process.

MITIGATION ACTION	HAZARDOUS TREE REMOVAL
DESCRIPTION	Identify and remove hazardous limbs and/or trees.
HAZARD(S)	All hazards
STATUS	The village has hired a contractor to trim hazardous trees on an as needed basis.

MITIGATION ACTION	SURGE PROTECTORS
DESCRIPTION	Purchase and install surge protectors on sensitive equipment in critical facilities.
HAZARD(S)	Severe Thunderstorms
STATUS	Surge protectors have been installed for critical electronic municipal records.

MITIGATION ACTION	TREE CARE ORDINANCE
DESCRIPTION	Pass and enforce a tree care ordinance to improve tree health and remove dangerous trees and limbs.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
STATUS	The Municipal Code has been updated to include regulations regarding obstructions, overhanging branches, and other dangerous trees.

Continued Non-Flood Related Mitigation Actions

MITIGATION ACTION	BACK-UP GENERATOR
DESCRIPTION	Provide a portable or stationary source of backup power to redundant power supplies, village office and fire hall.
HAZARD(S)	All hazards
ESTIMATED COST	\$3,500+ depending on site requirements
FUNDING	Village Funds, HMGP
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	Generators are installed at the fire department, water wells, and sewer plant; however, an automatic start on the generator is needed for the fire hall.

SECTION SEVEN: VILLAGE OF DEWITT COMMUNITY PROFILE

MITIGATION ACTION	BURY POWER AND SERVICE LINES
DESCRIPTION	Work with local Public Power Districts or electric department to identify vulnerable transmission and distribution lines and plan to bury lines undergrounds or retrofit existing structures to be less vulnerable to storm events. Electrical utilities should be required to use underground construction methods where possible for future installation of power lines.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	\$2M per mile
FUNDING	Village Funds, HMGP
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Utilities Superintendent
STATUS	This project has not yet been started. Approximately 20% of power lines in town are buried.

MITIGATION ACTION	CIVIL SERVICE IMPROVEMENTS
DESCRIPTION	Improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment. This can include fire trucks, ATV's, water tanks/trucks, snow removal equipment, etc. This would also include developing backup systems for emergency vehicles and identifying and training additional personnel for emergency response.
HAZARD(S)	All hazards
ESTIMATED COST	Varies by need
FUNDING	General Funds, HMGP
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	The fire department recently purchased a truck to convert into a grass rig. Additional equipment will be purchased as needed.

MITIGATION ACTION	CLEANUP OF HAZARDOUS WASTE
DESCRIPTION	Cleanup of deteriorating or abandoned buildings that contain hazardous materials (asbestos)
HAZARD(S)	Hazardous Materials
ESTIMATED COST	\$50,000
FUNDING	Village Funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	Approximately four homes in DeWitt have been demolished. One additional home is scheduled to be demolished in 2021. Three homes are pending village ownership.

SECTION SEVEN: VILLAGE OF DEWITT COMMUNITY PROFILE

MITIGATION ACTION	EMERGENCY COMMUNICATION
DESCRIPTION	Establish an action plan to improve communication between agencies to better assist residents and businesses during and following emergencies. Establish inner-operable communications.
HAZARD(S)	All hazards
ESTIMATED COST	\$1,000+, Staff Time
FUNDING	General Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Office
STATUS	This project has not yet been started.

MITIGATION ACTION	IMPROVE AND REVISE SNOW/ICE REMOVAL PROGRAM OR RESOURCES
DESCRIPTION	Improve capabilities to rescue those stranded in blizzards and increase the capacity to which snow can be removed from roadways after an event. As needed, continue to revise and improve the snow and ice removal program for streets. Revisions should address situations such as plowing snow, ice removal, parking during snow and ice removal, and removal of associated storm debris. This would include equipment that is needed and paving routes.
HAZARD(S)	Severe Winter Storms
ESTIMATED COST	Snow Blower: \$800+ Truck mounted plow: \$2,000+ ATV Plow: \$1,500+
FUNDING	Village Funds, HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	MAP/RELOCATE CRITICAL INFRASTRUCTURE
DESCRIPTION	Acquire Geographic Information System (GIS) to relocate municipal infrastructure (water and sewer lines)
HAZARD(S)	All hazards
ESTIMATED COST	\$1,500, Single user & Staff Time
FUNDING	General Funds
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

SECTION SEVEN: VILLAGE OF DEWITT COMMUNITY PROFILE

MITIGATION ACTION	PUBLIC EDUCATION AND OUTREACH
DESCRIPTION	Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops.
HAZARD(S)	All hazards
ESTIMATED COST	\$3,000+
FUNDING	Village Funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	SAFE ROOMS/STORM SHELTERS
DESCRIPTION	Design and construct storm shelters and safe rooms at the fire hall.
HAZARD(S)	Severe Thunderstorms, Tornadoes and High Winds
ESTIMATED COST	\$200-\$250 per sq ft
FUNDING	Village Funds, HMGP
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	TREE CITY USA
DESCRIPTION	Work to become a Tree City USA 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. The four main requirements include: 1) establishing a tree board; 2) enacting a tree care ordinance; 3) establishing a forestry care program; 4) enacting an Arbor Day observance and proclamation.
HAZARD(S)	All hazards
ESTIMATED COST	\$2 per capita
FUNDING	Village Funds, HMGP
TIMELINE	2-5 years
PRIORITY	Low
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	TREE INVENTORY AND PLANTING GUIDANCE
DESCRIPTION	Develop city tree planting and maintenance guidelines.
HAZARD(S)	All hazards
ESTIMATED COST	\$500, Staff Time
FUNDING	Village Funds, HMGP
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

Continued Flooding Mitigation Actions

MITIGATION ACTION	BANK STABILIZATION
DESCRIPTION	Stabilize banks along streams and rivers. This may include, but is not limited to: reducing bank slope, addition of riprap, installation of erosion control materials/fabrics.
HAZARD(S)	Flooding
ESTIMATED COST	\$10,000+, Varies by scope
FUNDING	Village Funds, HMGP
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board, NeDNR
STATUS	This project has not yet been started. Areas along the Big Blue River, Swan Creek, and Turkey Creek should be inspected for stability.

MITIGATION ACTION	CREATE/UPDATE COMMUNITY WIDE MASTER PLAN TO PRIORITIZE ALL FLOOD RELATED PROJECTS
DESCRIPTION	Preliminary drainage studies and assessments can be conducted to identify and prioritize design improvements to address site specific localized flooding/drainage issues to reduce and/or alleviate flooding. Stormwater master plans can be developed to help identify stormwater problem areas and potential drainage improvements.
HAZARD(S)	Flooding
ESTIMATED COST	\$15,000+
FUNDING	General Funds, HMGP
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

SECTION SEVEN: VILLAGE OF DEWITT COMMUNITY PROFILE

MITIGATION ACTION	DAM/LEVEE/FLOODWALL CONSTRUCTION AND IMPROVEMENTS
DESCRIPTION	Levees and floodwalls serve to provide flood protection to businesses and residents during large storm events. Improvements to existing levees and floodwalls will increase flood protection. A study should be conducted to determine the feasibility and cost for levee/floodwall construction
HAZARD(S)	Flooding
ESTIMATED COST	\$60,000+
FUNDING	Village funds, HMGP
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board, USACE
STATUS	This project has not yet been started.

MITIGATION ACTION	ELEVATE PAD MOUNTED TRANSFORMERS AND SWITCH GEAR
DESCRIPTION	Elevate pad mounted transformers and switch gear above base flood elevation to eliminate damages from flooding.
HAZARD(S)	Flooding
ESTIMATED COST	Varies
FUNDING	General Funds, HMGP
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	FLOOD MITIGATION STUDY AND/OR PARCEL LEVEL FLOOD MITIGATION PLAN
DESCRIPTION	Develop a comprehensive flood mitigation study and plan to identify specific flood reduction projects.
HAZARD(S)	Flood
ESTIMATED COST	\$50,000
FUNDING	General Funds, FMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Utility Department
STATUS	The village began plan evaluation prior to the COVID-19 pandemic; additional steps were put on hold due to the pandemic.

SECTION SEVEN: VILLAGE OF DEWITT COMMUNITY PROFILE

MITIGATION ACTION	FLOODPLAIN EARLY ALERT SYSTEM
DESCRIPTION	Update equipment, ensure equipment is in a secure location, and install additional gauges on waterways north of town to provide sufficient notice of flood events.
HAZARD(S)	Flooding
ESTIMATED COST	\$5,000+
FUNDING	Village funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	This project is currently being discussed. Additional flood gauges are needed on Turkey Creek and Swan Creek. This would be a joint effort with NRD.

MITIGATION ACTION	FLOODPLAIN MAPPING/REMAPPING
DESCRIPTION	Conduct floodplain mapping/remapping for the village
HAZARD(S)	Flooding
ESTIMATED COST	\$100,000
FUNDING	NRD, HMGP, NeDNR
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Village Clerk, NRD, NeDNR
STATUS	This project has been delayed. Remapping efforts were scheduled to begin summer of 2015 but were delayed due to flooding. No additional efforts have yet been made. The floodplain in DeWitt should be re-evaluated.

MITIGATION ACTION	GRADE CONTROL STRUCTURES
DESCRIPTION	Stream bed degradation occurs along many river and creeks. Grade control structures including sheet-pile weirs, rock weirs, ponds, road dams, etc. can be implemented to maintain the channel bed.
HAZARD(S)	Flooding
ESTIMATED COST	\$10,000+
FUNDING	Village Funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

SECTION SEVEN: VILLAGE OF DEWITT COMMUNITY PROFILE

MITIGATION ACTION	IMPROVE OR ACQUIRE PROPERTY AT HIGH RISK TO FLOODING
DESCRIPTION	Voluntary acquisition and demolition of repetitive loss properties will reduce the general threat of flooding for communities. Additionally, this can provide flood insurance benefits to those communities within the NFIP and CRS program.
HAZARD(S)	Flooding
ESTIMATED COST	Varies
FUNDING	General Funds, HMGP, FMA
TIMELINE	2-5 years
PRIORITY	Low
LEAD AGENCY	Village Board
STATUS	As of February 2020, there were four repetitive loss properties in town. No changes to these structures have been made.

MITIGATION ACTION	INFRASTRUCTURE PROTECTION
DESCRIPTION	Develop flood control devices to protect critical infrastructure during flood events.
HAZARD(S)	Flooding
ESTIMATED COST	\$10,000+
FUNDING	Village funds, HMGP
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	INTERIOR DITCHES AND CULVERT IMPROVEMENTS
DESCRIPTION	Conduct an evaluation of current drainage ditches and culverts to identify problem areas. Deepen drainage ditches and clean out culverts to address identified problem areas. Improve overall stormwater drainage system to reduce impediments and improve conveyance.
HAZARD(S)	Flooding
ESTIMATED COST	\$5,000+
FUNDING	General Funds
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	Several drainage ditches were cleaned out after the March 2019 flood event. Additional channels are currently being evaluated for additional clearing actions.

MITIGATION ACTION	MUTUAL AID
DESCRIPTION	Establish mutual aid agreements through Water/Wastewater Agency Response Network (WARN) Program.
HAZARD(S)	Flooding
ESTIMATED COST	N/A
FUNDING	N/A
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	PROTECT AND IMPROVE ROADS AND BRIDGES
DESCRIPTION	Implement channel, bridge, and highway improvements to increase channel conveyance, decrease the base flood elevations, and reduce flood risk. This includes elevating portions of Highway 103 and dirt roads on the north side of town.
HAZARD(S)	Flooding
ESTIMATED COST	\$10,000+, Varies
FUNDING	Village Funds, HMGP
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board, NDOT
STATUS	This project has not yet been started. Improvements and elevations to Highway 103 would include the assistance of NDOT.

MITIGATION ACTION	STORMWATER SYSTEM AND DRAINAGE IMPROVEMENTS
DESCRIPTION	Upgrade combined sewer system to improve storm water management.
HAZARD(S)	Flooding
ESTIMATED COST	\$80,000+
FUNDING	General Fund, HMGP, FMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	The village's lift station is currently sufficient for local needs but additional improvements are being evaluated.

Removed Mitigation Actions

MITIGATION ACTION	COMMUNITY RATING SYSTEM: CONTINUATION
DESCRIPTION	Maintain status as a Community Ratings System (CRS) community to reduce flood insurance premiums
HAZARD(S)	Flooding
REASON FOR REMOVAL	While the village will continue to participate in the CRS, continuation in the program is not considered a mitigation action by FEMA.

SECTION SEVEN: VILLAGE OF DEWITT COMMUNITY PROFILE

MITIGATION ACTION	CREATE A COMMUNITY WIDE MASTER PLAN TO PRIORITIZE ALL FLOOD RELATED PROJECTS
DESCRIPTION	Identify potential flooding sources and flood-vulnerable areas. Explore solutions and prioritize.
HAZARD(S)	Flooding
REASON FOR REMOVAL	This action was identified as redundant. Flood mitigation actions are prioritized and listed in the HMP.

MITIGATION ACTION	DEVELOP FLOOD ASSISTANCE STRATEGIES
DESCRIPTION	Develop strategies to provide necessary services in the event of flooding.
HAZARD(S)	Flooding
REASON FOR REMOVAL	Relevant information pertaining to necessary services are outlined in the Saline and/or Gage County LEOPs.

MITIGATION ACTION	FLOODPLAIN REGULATION ENFORCEMENTS/UPDATES
DESCRIPTION	Continue to enforce local floodplain regulations for structures located in the 1-percent floodplain. Strict enforcement of the type of development and elevations of structures should be considered through issuance of building permits by any community or county. Continue education of building inspectors or Certified Floodplain Managers.
HAZARD(S)	Flooding
REASON FOR REMOVAL	This is an ongoing maintenance activity that the village continually pursues. Floodplain ordinances are already established.

MITIGATION ACTION	FLOW CONSTRICTIONS
DESCRIPTION	Cleaning out ditches and impedances to water drainage
HAZARD(S)	Flooding
REASON FOR REMOVAL	This activity was identified as redundant and is covered under “Drainage Ditches and Culverts” activity.

MITIGATION ACTION	IMPROVE DRAINAGE
DESCRIPTION	Improve storm sewers and drainage patterns in and around the community
HAZARD(S)	Flooding
REASON FOR REMOVAL	This activity was identified as redundant and is covered under “Drainage Ditches and Culverts” activity.

MITIGATION ACTION	LOW IMPACT DEVELOPMENT
DESCRIPTION	Utilize low impact development practices and green infrastructure to reduce flood risk.
HAZARD(S)	Flooding
REASON FOR REMOVAL	This action was identified to no longer be applicable for the village. Current codes and ordinances require all development in the floodplain to undergo permitting processes.

SECTION SEVEN: VILLAGE OF DEWITT COMMUNITY PROFILE

MITIGATION ACTION	NFIP CONTINUATION AND ENFORCEMENT
DESCRIPTION	Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs).
HAZARD(S)	Flooding
REASON FOR REMOVAL	While the village will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA.

MITIGATION ACTION	PROMOTE INFILTRATION
DESCRIPTION	Convert concrete-lined channels to natural channels to promote infiltration.
HAZARD(S)	Flooding
REASON FOR REMOVAL	No currently channels are planned to be converted. Only currently lined drainage ways have no plans to change culverts to natural. Most ditches/waterways in town are already naturally lined.

MITIGATION ACTION	RELOCATION OF HAZARDOUS STORAGE
DESCRIPTION	Explore a plan and funding for relocation of tanks and hazardous storage located in the floodplain or flood prone areas.
HAZARD(S)	Flooding
REASON FOR REMOVAL	At this time all hazardous materials are privately owned and required to elevated or mitigated to state requirements. Two chemical fixed sites are elevated to BFE out of the floodplain.

MITIGATION ACTION	REMOVE FLOW RESTRICTIONS
DESCRIPTION	Conduct a preliminary drainage assessment and/or design bridge improvements to reduce and/or alleviate flooding. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacing or modifying of bridges and other flow restrictions may be necessary to eliminate flooding threats and damages.
HAZARD(S)	Flooding
REASON FOR REMOVAL	This activity was identified as redundant and is covered under “Drainage Ditches and Culverts” activity.

MITIGATION ACTION	SNOWPLOW
DESCRIPTION	Purchase additional snowplow
HAZARD(S)	Severe Winter Storms
REASON FOR REMOVAL	This project was identified as redundant and covered under the “Rescue/Snow Removal” action.

SECTION SEVEN: VILLAGE OF DEWITT COMMUNITY PROFILE

MITIGATION ACTION	STORMWATER SYSTEM AND DRAINAGE IMPROVEMENTS
DESCRIPTION	Smaller communities may utilize stormwater systems comprising of ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding.
HAZARD(S)	Flooding
REASON FOR REMOVAL	This activity was identified as redundant and is covered under “Drainage Ditches and Culverts” activity.

COMMUNITY PROFILE

VILLAGE OF DORCHESTER

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table DOR.1: Village of Dorchester Local Planning Team

Name	Title	Jurisdiction
Gloria Riley	Village Clerk	Village of Dorchester
Andrea Pacheil	Village Chairperson	Village of Dorchester
Jen Kasl	Village Deputy Clerk	Village of Dorchester

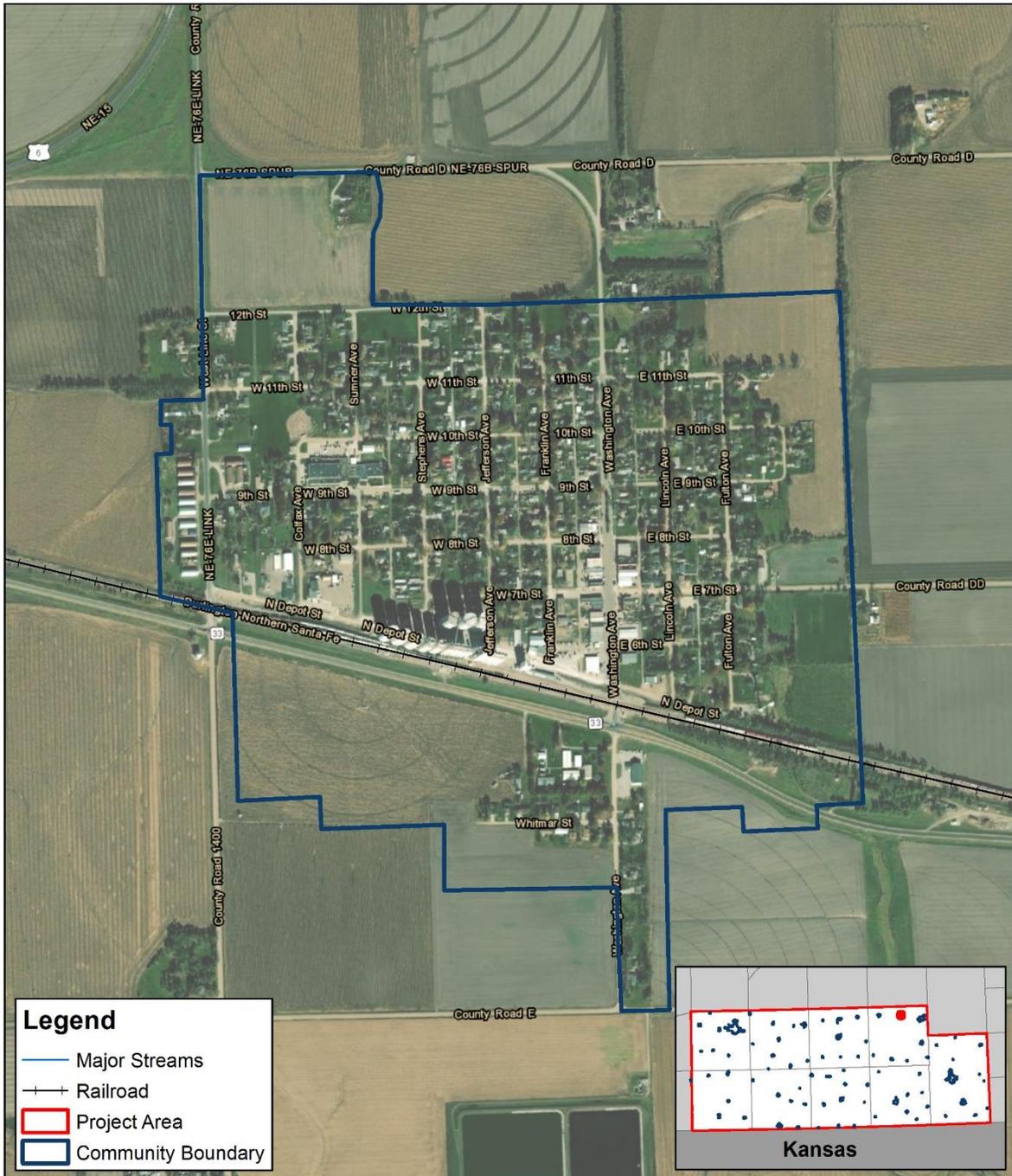
Location and Geography

The Village of Dorchester is located in the north central portion of Saline County. The Village of Dorchester covers an area of 0.48 square miles. There are no major waterways within the area. The area is not heavily forested. Most of Dorchester lies in the plains topographic region, and is surrounded by agricultural fields.

Transportation

Dorchester's major transportation corridors include County Road 33, which runs southeast to northwest, and accommodates on average 3,070 vehicles per day, 350 of which are heavy commercial vehicles, and Highway 15 located northwest of town and runs south towards Fairbury. Davenport has two rail lines, Burlington Northern Santa Fe line, and Amtrak, which runs on the same line. At Davenport, the BNSF runs east-west headed into Lincoln and west to Hastings. Hazardous chemicals are commonly transported through town via both highway and rail, however, no major events have impacted Dorchester. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

Figure DOR.1: Village of Dorchester Jurisdictional Boundary



Created By: KD, MW
 Date: 5/17/2021
 Software: ArcGIS 10.8.1
 File: Blues_Community Boundary.mxd

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

Village of Dorchester

Community Boundary

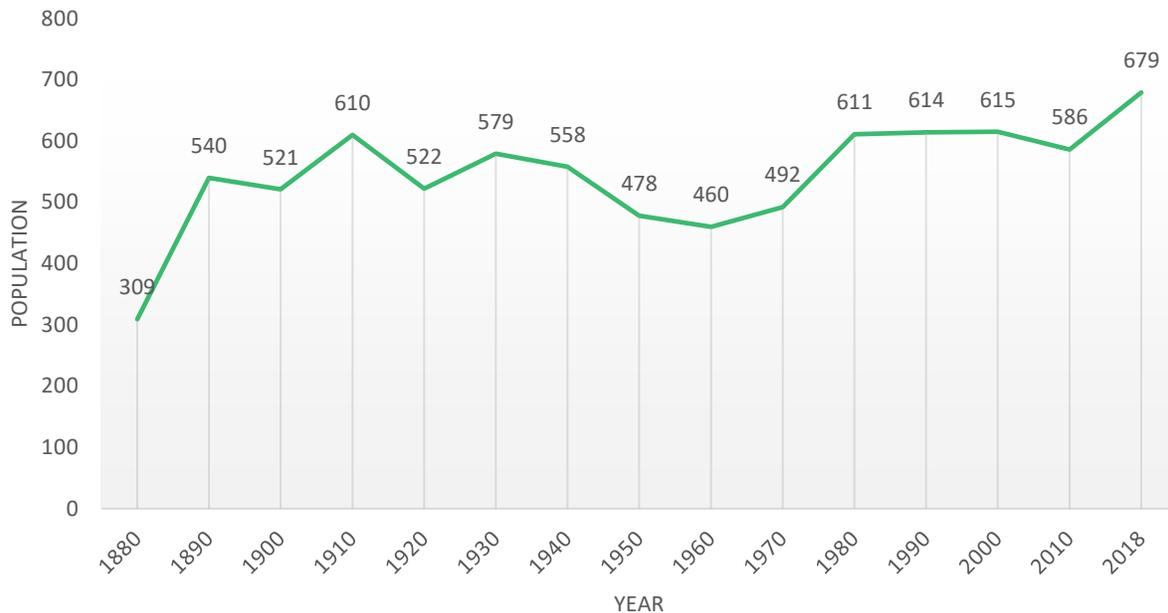


0 500 1,000 Feet

Demographics

The following figure displays the historical population trend from 1880 to 2018 (estimated). This figure indicates that the population of Dorchester has maintained a relatively steady trend with an estimated increase since 2010. This is relevant to hazard mitigation because communities with a growing population may be more prone to developing additional land and building new structures. Net population growth may increase the number of people and properties vulnerable to hazards. The Village's population accounted for 5% of Saline County's Population in 2018.

Figure DOR.2: Dorchester Population 1880-2018



Source: U.S. Census Bureau³⁰

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

- **Older.** The median age of Dorchester was 40.4 years old in 2018, compared with the County average of 35.8 years. Dorchester's population has grown younger since 2010, when the median age was 44.3 years old. Dorchester had a smaller proportion of people under 20 years old (26.0%) than the County (29.9%).³¹
- **Less ethnically diverse.** In 2010, about 1% of Dorchester's population was Black, 7% other races, and 1% two or more races. By 2018, 100% of Dorchester's population was White, non-Hispanic. During that time, Saline County had 1% Black, 2% to 3% Asian, 13% to 5% other races, and 2% to 3% two or more races from 2010 to 2018 respectively.³²
- **Less likely to be at the federal poverty line.** The poverty rate of all persons in Dorchester (2.4%) was lower than the County (13.5%) in 2018.³³

30 United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

31 United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

32 United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

33 United States Census Bureau. "2018 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 Saline County, Dorchester's economy had:

- **Similar mix of industries.** Employment sectors accounting for 10% or more of employment in Dorchester included Manufacturing, Retail, Education, and Arts. While industries in Saline County included Manufacturing, Retail, and Education.³⁴
- **Higher household income.** Dorchester's median household income in 2018 (\$55,500) was about \$4,000 greater than the County (\$51,143).³⁵
- **More long-distance commuters.** About 39.4% percent of workers in Dorchester commuted for fewer than 15 minutes, compared with about 51.5% of workers in Saline County. About 41.1% of workers in Dorchester commute 30 minutes or more to work, compared to about 28.5% of the County workers.³⁶

Major Employers

Major employers in Dorchester include the Farmers Co-op and Dorchester Public Schools; however, the local planning team noted more than half of residents commute to either Lincoln, Seward, or Crete for employment.

Housing

In comparison to the Saline County, Dorchester's housing stock was:³⁷

- **More owner occupied.** About 77.1% of occupied housing units in Dorchester are owner occupied compared with 69.7% of occupied housing in Saline County in 2018.
- **Larger share of aged housing stock.** Dorchester has more houses built prior to 1970 than the county (63.3% compared to 53.9%).
- **Fewer multi-family homes.** The predominant housing type in the Village is single family detached and Dorchester contains fewer multifamily housing with five or more units per structure than the County (0.0% compared to 7.1%). About 92.2% of housing in Dorchester was single-family detached, compared with 80.8% of the County's housing. Dorchester has a smaller share of mobile and manufactured housing (4.0%) compared to the County (5.4%). Mobile homes are located west of the intersection of 7th and Stephens Street.

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.

34 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

35 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

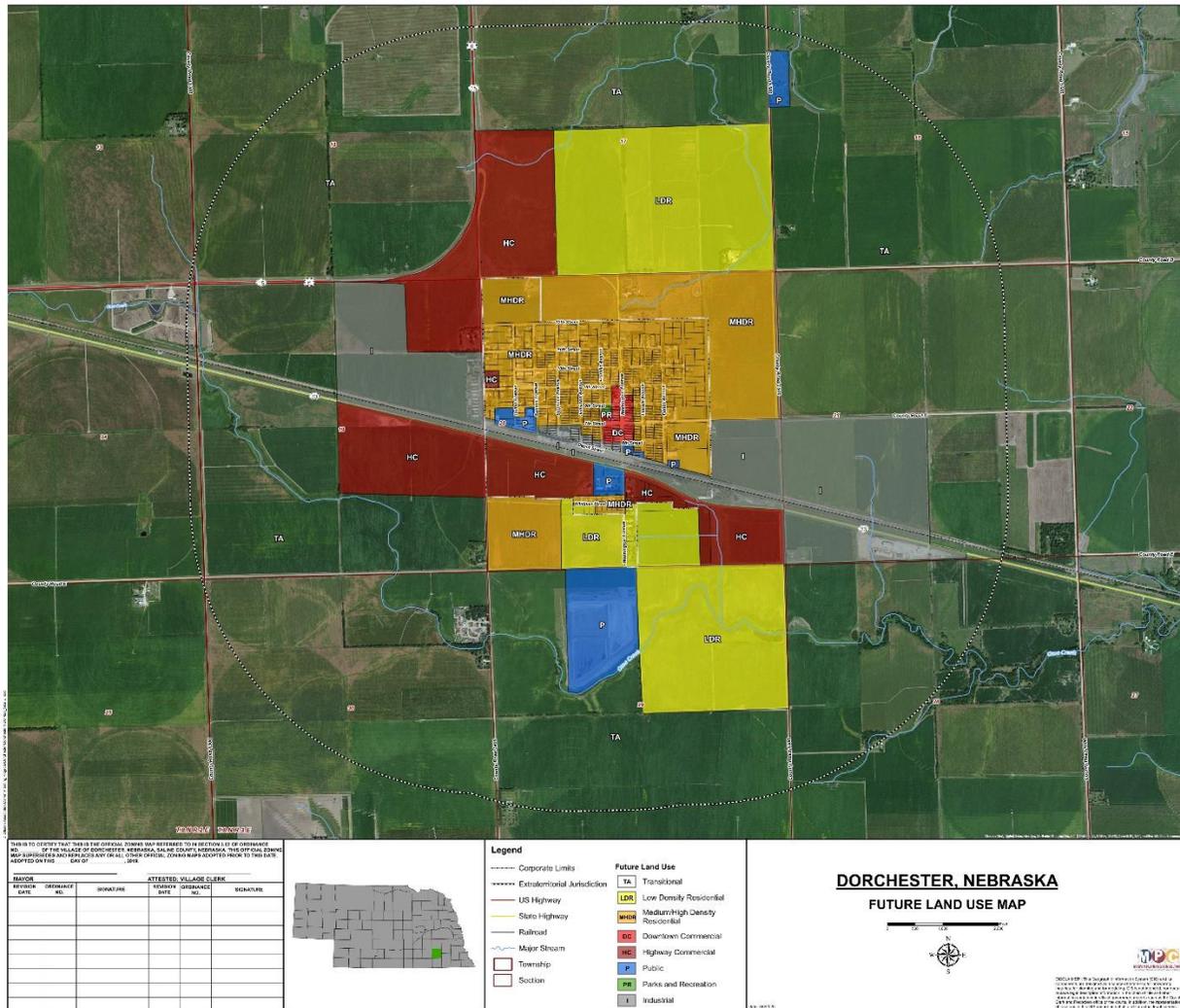
36 United States Census Bureau. "2018 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]

37 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

Over the past five years the village has seen several changes. A new housing development was built on the north side of town and Jackson Street and 9th Street have each been extended one block on the east side of town. In the coming years the village anticipates additional growth. The Farmers Cooperative is currently expanding office space and bin capacity and additional residential development will likely occur in the North View Estates north of town. The population in Dorchester is growing which the local planning team attributes to the village's proximity to Lincoln and a good school district.

Figure DOR.3: Dorchester Future Land Use Map



Parcel Improvements and Valuation

GIS parcel data as of December 2019 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. No LOMAs were identified in the Village of Dorchester.

Table DOR.2: Dorchester 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
368	2287	27687245	0	0%	\$0

Source: County Assessor, GIS Workshop

Community Lifelines

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 Dorchester 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. The fire station is located across the street from the Farmers Cooperative.

Table DOR.3: Chemical Storage Fixed Sites

Facility Name	Address	Located in Floodplain?
NDOT Dorchester Yard	508 W Depot St	N
Farmers Cooperative	1529 State Highway 33	N
Farmers Cooperative	507 Washington St	N

Source: Nebraska Department of Environment and Energy³⁸

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

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 DOR.4: Dorchester Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	Fire Hall	N	Y	N
2	Safety and Security	Village Office	N	N	N
3	Food, Water, and Shelter	Water Tower	N	N	N
4	Food, Water, and Shelter	Well House	N	N	N
5	Food, Water, and Shelter	Dorchester Public School	Y	N	N
6	Health and Medical	Lagoons	N	Y	Y
7	Food, Water, and Shelter	Well House	N	N	N
8	Health and Medical	Lift Station	N	N	N

Figure DOR.4: Dorchester Critical Facilities



	<p>Created By: NL Date: 5/21/2021 Software: ArcGIS Pro 2.8.0 File: Blues Critical Facilities.aprx</p> <p><small>This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.</small></p>	<h2>Village of Dorchester</h2> <hr/> <h3>Little Blue NRD and Lower Big Blue NRD</h3> <h3>Hazard Mitigation Plan 2021</h3>	<p style="text-align: center;">Kansas</p>
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Historical Occurrences

See the Saline County community profile for historical hazard events.

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 community's capabilities. For more information regarding regional hazards, please see *Section Four: Risk Assessment*.

Drought and Extreme Heat

According to the National Climatic Data Center, many parts of Saline County have experienced drought conditions in recent years. Dorchester is primarily concerned about the economic effects this would have on the community, as 95% of its economy is agriculture-based. In 2010/2011 the village issued and enforced water restrictions to manage impacts from the drought. The planning team indicated that they have not had to implement water restrictions since that event, but they are prepared to do so if needed in the future. The village installed a new well and sewer system five years ago.

To mitigate this hazard, the village plans to join Tree City USA to promote greener infrastructure and conduct public hazard awareness outreach. The village also plans to educate citizens on water conservation.

Hazardous Materials (Transportation)

The village is concerned about the risks of a chemical spill or release due to a transportation accident. There is a highly trafficked rail line that carries chemicals. Train derailment is a safety concern, as the train has to change tracks in town. Also, the community has a very large grain elevator which has trucks visit it regularly. The Farmers Coop is 1.5 miles east of town and is used for chemical storage. The Coop used to be in town 20 years ago but moved outside of village limits for safety concerns. The elevator and station are still located in village limits, however. Diesel, Oil, and gasoline are a few of the hazardous materials stored at these locations. The local planning team indicated that these facilities remain a concern due to their close proximity to critical infrastructure.

To mitigate this hazard, the village plans to consider modifying zoning ordinance to promote future development occur in non-hazardous areas and conduct public hazard awareness outreach. Currently, there is also new development occurring on the opposite side of town. The village is also looking into building a fire station in a new location that is farther away from the hazardous material storage areas.

Severe Thunderstorms

Dorchester has experienced multiple incidents in recent years of severe thunderstorm winds in excess of 60 mph. Most notably, a storm on May 23, 2006 generated 69 mph winds in the village and tore down three trees, flipped a hot tub, and shattered the window of a downtown building.

The village has two blocks of buried power lines and the power company oversees taking care of hazardous trees that may impact power lines. Crete provides electricity to Dorchester.

To mitigate this hazard, the village plans to upgrade its outdoor warning device, bury any new power lines underground, and conduct public hazard awareness outreach. The village is also being proactive and removing hazardous trees. The community is looking to build a new fire station and community center/library and there have been discussions about including a safe room to one of the buildings. Currently a backup generator is in use at the fire hall and would be utilized at a new facility as well.

Severe Winter Storms

Saline County has experienced many severe winter storms in recent years, including in Dorchester. These storms have included heavy snow, ice, and even blizzard conditions. The city has the following snow removal equipment: a maintainer, a road grader, a tractor and loaders. Community members/ farmers may help in severe events. The village has contracted with Iron Scrap metal business to remove snow with loaders in the past.

Tornadoes and High Winds

Dorchester is prone to tornados. While the village has been spared in recent years, a June 16, 1992 tornado impacted the village and surrounding area. Rated F-3, it was on the ground for 21 miles, and caused \$1.5 million in damage in the area, and several thousands of dollars in crop damage. Dorchester recently installed two new sirens, one near the school and another near the fire department.

The village has weather radios at the fire department and at the city shop but has indicated it would like them at the village hall and the school as well. The community uses the school gym and locker rooms as storm shelters. The village has expressed interest in converting/buildings a new shop to serve as a FEMA safe room. The village has 8 mobile homes in the southwest/south central part of town.

Flooding

While flooding was not identified as a hazard of top concern, floodplain areas exist south of Highway 33. The village does not participate in the NFIP.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Dorchester has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The Village has a five member council and the following offices: clerk/treasurer, attorney, utility superintendent, chief of police, fire chief, sewage plant operator, sewer/water commissioner, and street commissioner.

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

SECTION SEVEN: VILLAGE OF DORCHESTER COMMUNITY PROFILE

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

Table DOR.5: Capability Assessment

Survey Components		Yes/No	
Planning Regulatory Capability	&	Comprehensive Plan	Yes
		Capital Improvements Plan	No
		Economic Development Plan	Yes
		Local Emergency Operational Plan	County
		Floodplain Ordinance	No
		Zoning Ordinance	Yes
		Subdivision Regulation/Ordinance	Yes
		Building Codes	No
		Floodplain Management Plan	No
		Storm Water Management Plan	Yes
		National Flood Insurance Program	No
		Community Rating System	No
		Other (if any)	
Administrative Technical Capability	&	Planning Commission	Yes
		Floodplain Administration	No
		GIS Capabilities	Yes
		Chief Building Official	No
		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 Outreach	and	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

Survey Components		Yes/No
	Natural Disaster or Safety related school programs	Yes
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree Village USA	Yes
	Other (if any)	

Table DOR.6: Overall Capability

Overall Capability	Limited/Moderate/High
Financial Resources Needed to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Community Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate

Plan Integration

The Comprehensive Plan was last updated in 2014. While the comprehensive plan does not address natural hazards, it does encourage the community to limit development in sensitive areas and identifies areas in need of shelters. The village follows the 2018 International Building Codes. The village's zoning and floodplain ordinances were last updated in 2014 and is revised on an as needed basis.

The village has applied for and received several grants including CCFF, SRG water loans, NIFA for housing studies, and USDA grants. The local planning team noted the annual municipal budget's funds are limited to maintaining current systems and facilities. The amount of funding has decreased in recent years and if this trend continues additional grants or loans will be needed for mitigation efforts.

The Local Emergency Operations Plan (LEOP) for Dorchester, which was last updated in 2019, is an annex of Saline County's LEOP. It is an all-hazards plan that does not address specific natural and man-made disasters. It provides a clear assignment of responsibility in case of an emergency.

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, Utilities Superintendent, and Saline County Emergency Management. The local planning team

will review the plan no less than annually and will include the public in the review and revision process by sharing information at board meetings open to the public.

Mitigation Strategy

Continued Mitigation Actions

MITIGATION ACTION	ALERT SIRENS
DESCRIPTION	Conduct an upgrade of the outdoor warning device
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	\$16,000
FUNDING	General Funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	BACKUP GENERATOR
DESCRIPTION	Purchase a generator for village offices
HAZARD(S)	All hazards
ESTIMATED COST	\$3,500+, depends on site requirements
FUNDING	Keno Funds, General Funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Clerk
STATUS	This project has not yet been started.

MITIGATION ACTION	BURY POWER AND SERVICE LINES
DESCRIPTION	Bury power lines underground
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	\$2,500+
FUNDING	Community Betterment Fund, HMGP, BRIC
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

SECTION SEVEN: VILLAGE OF DORCHESTER COMMUNITY PROFILE

MITIGATION ACTION	PUBLIC EDUCATION AND OUTREACH
DESCRIPTION	Conduct activities related to hazard awareness and outreach, especially for chemical spill concerns (including use of flyers, website, better NIMS trainings, utility bill inserts).
HAZARD(S)	All hazards
ESTIMATED COST	\$1,000+
FUNDING	Local funds, HMGP, BRIC
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Village Clerk, Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	SAFE ROOM/STORM SHELTERS
DESCRIPTION	Construct a storm shelter or safe room
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	\$250,000
FUNDING	Village Funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	TREE CITY USA
DESCRIPTION	Join Tree City USA
HAZARD(S)	Drought and Extreme Heat, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	\$2 per capita
FUNDING	Village Funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	Low
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	ZONING ORDINANCE UPDATES
DESCRIPTION	Consider modifying zoning ordinance to promote future development occur in non-hazardous areas
HAZARD(S)	All hazards
ESTIMATED COST	Staff Time
FUNDING	General Funds
TIMELINE	2-5 years
PRIORITY	Low
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

COMMUNITY PROFILE

CITY OF FRIEND

Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021

Local Planning Team

Table FRI.1: City of Friend Local Planning Team

Name	Title	Jurisdiction
Billy Baugh	Public Works Supervisor	City of Friend
Kim Goosen	City Clerk	City of Friend

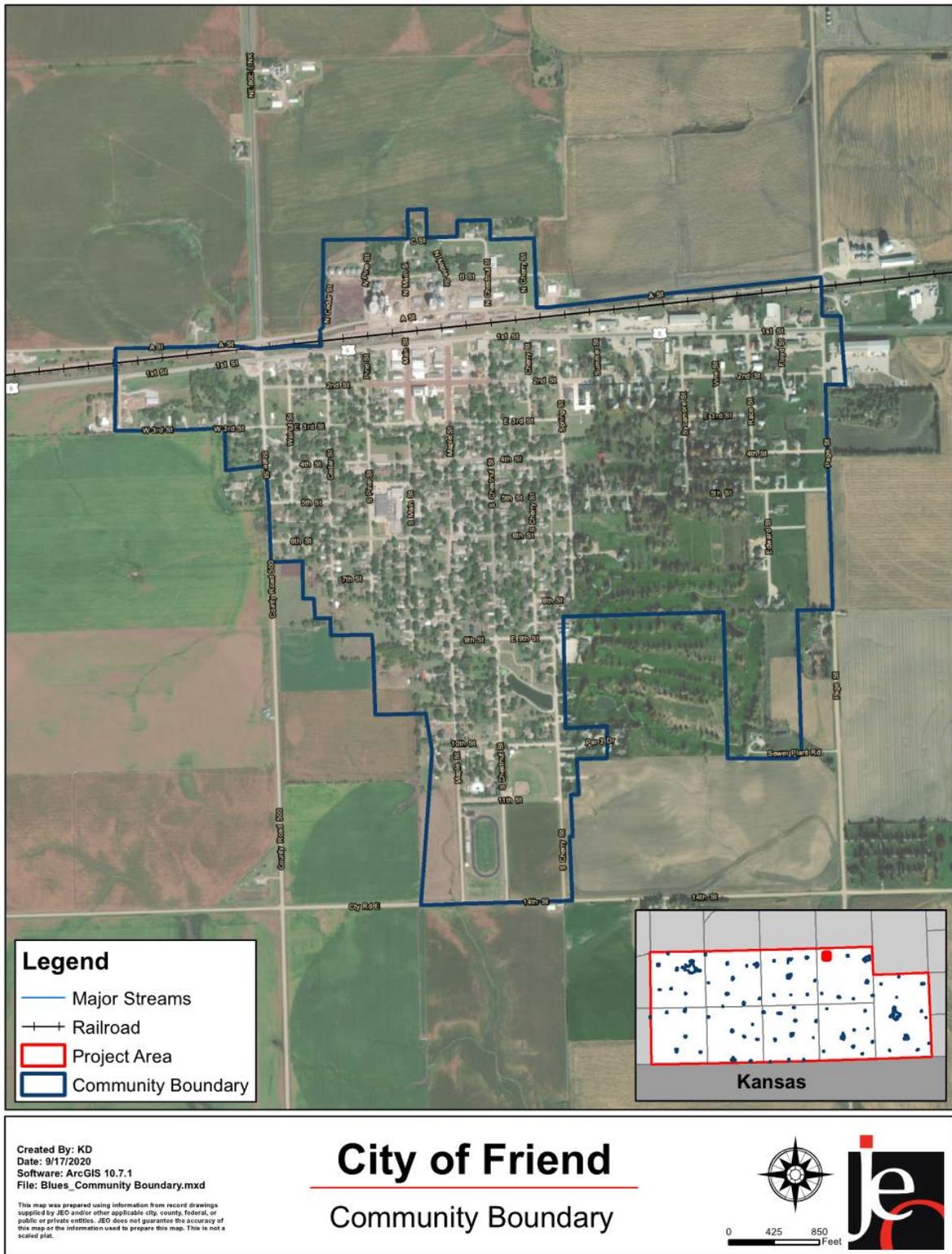
Location and Geography

The City of Friend is located in the north western portion of Saline County and covers an area of 0.83 square miles. There are no major waterways within the area, although there is a small lake in the center of the community near Friend Park. The area is not heavily forested. The village lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Friend's major transportation corridors include State Highway 6, which runs east-west to the north of Friend. NE-6 accommodates on average 2,925 vehicles per day, 430 of which are heavy commercial vehicles. Friend has two rail lines, Burlington Northern Santa Fe line, and Amtrak, which runs on the same line. At Friend, the BNSF runs east-west headed into Lincoln and west to Hastings. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

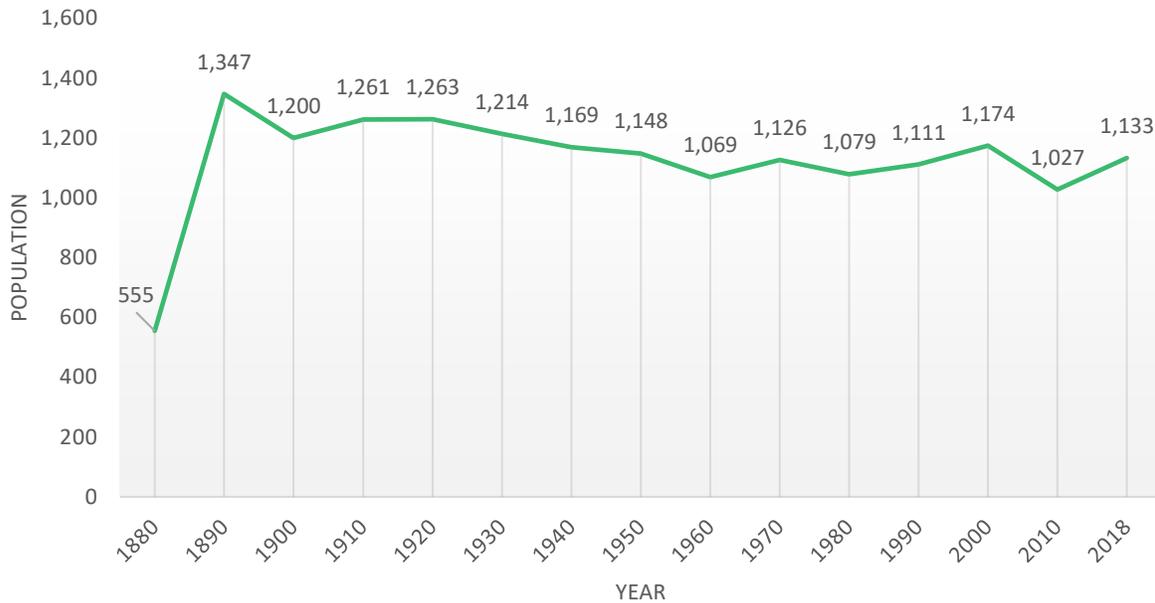
Figure FRI.1: City of Friend Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1880 to 2018 (estimated). This figure indicates that the population of Friend has been relatively stable over the past century. This is relevant to hazard mitigation because communities with a growing population may be more prone to developing additional land and building new structures, while communities with declining populations may have larger shares of unoccupied housing or decreasing tax revenues. The city's population accounted for 8% of Saline County's population in 2018.

Figure FRI.2: Friend Population 1880-2018



Source: U.S. Census Bureau³⁹

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

- Older.** The median age of Friend was 38 years old in 2018, compared with the county average of 35.8 years. Friend's population has grown younger since 2010, when the median age was 45.3 years old. Friend had a smaller proportion of people under 20 years old (26.4%) than the county (29.9%).⁴⁰
- Less ethnically diverse.** In 2010, about 1% of Friend's population was two or more races. By 2018, 4% of Friend's population was Black, 1% was American Indian, 1% was Asian, and 3% was two or more races. During that time, Saline County had 1% Black, 2% to 3% Asian, 13% to 5% other races, and 2% to 3% two or more races from 2010 to 2018 respectively.⁴¹
- Less likely to be at the federal poverty line.** The poverty rate of all persons in Friend (6.7%) was lower than the county (13.5%) in 2018.⁴²

³⁹ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁴⁰ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁴¹ United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

⁴² United States Census Bureau. "2018 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 Saline County, Friend's economy had:

- **Similar mix of industries.** Employment sectors accounting for 10% or more of employment in Friend included Agriculture, Retail, and Education. While industries in Saline County included Manufacturing, Retail, and Education.⁴³
- **Greater household income.** Friend's median household income in 2018 (\$61,705) was about \$10,562 higher than the county (\$51,143).⁴⁴
- **Fewer long-distance commuters.** About 60.5% percent of workers in Friend commuted for fewer than 15 minutes, compared with about 51.5% of workers in Saline County. About 17.8% of workers in Friend commute 30 minutes or more to work, compared to about 28.5% of the county workers.⁴⁵

Major Employers

Major employers in the city include Tuttle Inc., the Co-Op, Brothers Equipment, the local school district, and the hospital. The local planning team noted approximately 45% of resident commute to the neighboring communities of Crete, Lincoln, Seward, York, and Geneva for work.

Housing

In comparison to the Saline County, Friend's housing stock was:⁴⁶

- **More owner occupied.** About 84.1% of occupied housing units in Friend are owner occupied compared with 69.7% of occupied housing in Saline County in 2018.
- **Greater share of aged housing stock.** Friend has more houses built prior to 1970 than the county (64% compared to 53.9%).
- **Fewer multi-family homes.** The predominant housing type in the city is single family detached and Friend contains fewer multifamily housing with five or more units per structure than the county (5.3% compared to 7.1%). About 87.3% of housing in Friend was single-family detached, compared with 80.8% of the county's housing. Friend has a smaller share of mobile and manufactured housing (0%) compared to the county (5.4%).

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.

43 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

44 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

45 United States Census Bureau. "2018 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]

46 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

In the past five years the city has seen the development of a new Quick Shop gas station, a six-unit housing development, and the city is currently working on development of a new pool in the city. The city's population is growing which the local planning team attributed to having a good school district and available hospital. In the coming five years the city will be looking to add residential development west of town. There are currently no plans for future businesses in the city.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 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. No LOMAs were identified for the City of Friend.

Table FRI.2: Friend 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
759	549	53288025	2	0%	\$146,365

Source: County Assessor, GIS Workshop

Community Lifelines

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 Friend 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.

Table FRI.3: Chemical Storage Fixed Sites

Facility Name	Address	Located in Floodplain?
Farmers Union Cooperative Co	650 US Highway 6	No
Farmers Cooperative Anhydrous	455 County Road D	No
Tuttle Inc	110 Page St	No

Source: Nebraska Department of Environment and Energy⁴⁷

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

Critical Facilities

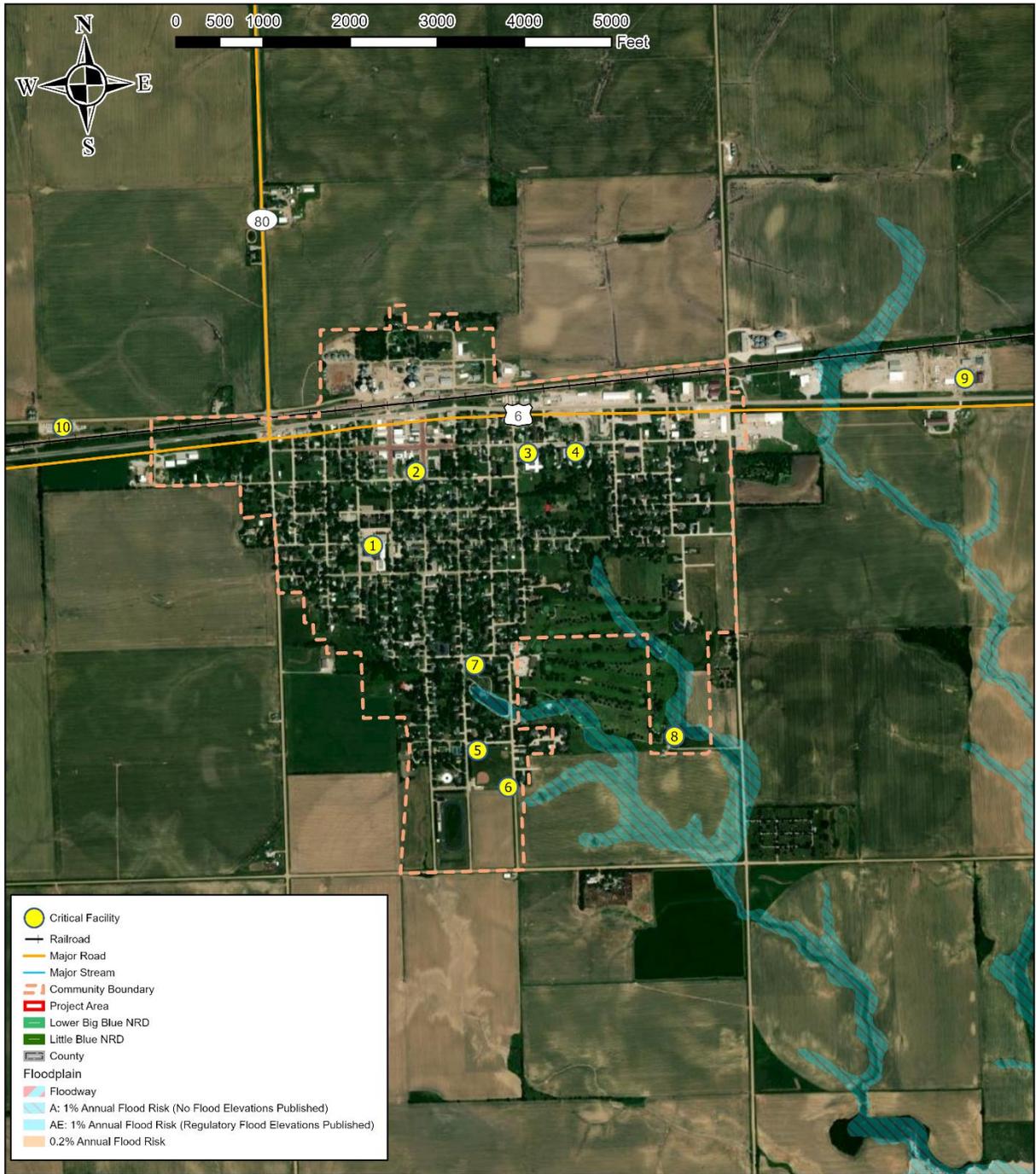
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during 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 FRI.4: Friend Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Food, Water, and Shelter	Public School K-12	Y	Y	N
2	Safety and Security	City Hall/Fire Hall/Police Dept	Y	Y	N
3	Health & Medical	Hospital & Nursing Home	N	Y	N
4	Food, Water, and Shelter	Friendship Terrace - Retirement Community	N	N	N
5	Food, Water, and Shelter	Water Tower	N	Y	N
6	Food, Water, and Shelter	South Well	N	N	N
7	Food, Water, and Shelter	North Well	N	N	N
8	Health and Medical	Wastewater Treatment Plant	N	Y	Y
9	Hazardous Materials	Anhydrous Ammonia Plant	N	N	N
10	Hazardous Materials	Anhydrous and Fuel Storage	N	N	N

Figure FRI.3: Friend Critical Facilities



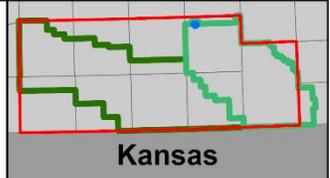
	Critical Facility
	Railroad
	Major Road
	Major Stream
	Community Boundary
	Project Area
	Lower Big Blue NRD
	Little Blue NRD
	County
Floodplain	
	Floodway
	A: 1% Annual Flood Risk (No Flood Elevations Published)
	AE: 1% Annual Flood Risk (Regulatory Flood Elevations Published)
	0.2% Annual Flood Risk



Created By: NL
 Date: 5/21/2021
 Software: ArcGIS Pro 2.8.0
 File: Blues Critical Facilities.aprx
 This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

City of Friend

Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021



Historical Occurrences

See the Saline County community profile for historical hazard events.

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 community's capabilities. For more information regarding regional hazards, please see *Section Four: Risk Assessment*.

Flooding

Flash flooding in the city is of concern due to poor stormwater drainage throughout the city. Friend had been flooded in the past when heavy rain caused Turkey Creek (to the south) to overflow. This 2007 flood event caused approximately \$100,000 in damages. Flooding from both Turkey Creek and the Big Blue River caused over 100 county road washouts, limited potential emergency access transportation corridors. The city has identified the need to improve stormwater drainage by upgrading culverts and cleaning out ditches and drainage ways. The village participates in the NFIP but has no active policies in force as of November 2020.

Severe Thunderstorms

The City of Friend has experienced several severe thunderstorms with winds in excess of 60 and significant hail. Past storms have produced golf ball and even egg size hail. A hail storm in 1995 caused residential roofing damage and vehicle damages. In 1997 lightning struck several buildings causing damage and in 2001 two separate storms caused over \$900,000 in damages with wind gusts up to 81 mph. Strong winds have the potential to down power lines and damage trees throughout the city. Heavy rain events also lead to flash flooding in the city as there is insufficient stormwater drainage. Storm sewers drain into two creeks, but these can get overwhelmed due to small culverts. Friends has identified a need to renovate or replace box culverts and improve drainage and drainage ditches to address this issue. The city has also identified the need for a backup generator at the city shop in case of power outages.

Severe Winter Storms

Saline County has experienced many severe winter storms in recent years which include impacts from heavy snow, ice accumulation, extreme cold, blizzards, and winter storms. A major snow storm in 2015 dropped seven inches of snow in Friend and blocked transportation routes. The city is responsible for clearing snow and equipment is fairly sufficient. In the past, farmers have been asked to help with assistance. Friend identified projects to purchase an additional alert siren and a generator for the city shop.

Tornadoes and High Winds

High winds and tornadoes have the potential to cause significant property damage, damage trees, down powerlines, and put residents at risk. In approximately 2000, high winds caused a lot of tree damages, power line damages, and power outages. Two tornadoes have been reported in Friend

in June 2018, one EF0 and one EF1. These events caused no injuries but did damage a local barn and roof shingles. The city has several outdoor alert sirens and recently updated one to include a new antennae to improve emergency communication. The local planning team noted an additional siren is needed to accommodate growth in the city. Residents can seek shelter in the fire hall or city offices, but there are no designated safe rooms in the community. Friend has discussed building a different fire hall in the future, which would include a storm shelter. About 90% of homes have basements, which are used as shelter. There are no mobile home parks in the city, they are not allowed in town.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Friend has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The city has a mayor, four-member city council, clerk/treasurer, attorney, utility superintendent, chief of police, fire chief, sewage plant operator, park & recreation, planning commissioner, and purchasing officer. Saline County Emergency Management could also assist the city with hazard mitigation 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 FRI.5: 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	Yes
	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	Yes
	GIS Capabilities	No
	Chief Building Official	No
	Civil Engineering	No
	Local Staff Who Can Assess Community's Vulnerability to Hazards	Yes
	Grant Manager	No

Survey Components		Yes/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	Unknown
	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 Outreach and	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	Yes
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	Yes
	Other (if any)	

Table FRI.6: Overall Capability

Overall Capability	Limited/Moderate/High
Financial Resources Needed to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Limited
Community Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited

Plan Integration

The City of Friend has a Comprehensive Plan which was last updated in 2013 and includes specific hazards including fire, flooding, and tornadoes. The plan encourages safe growth practices for future growth, encourages infill development, and clustering of development in sensitive areas. At this time there are no plans to update the Comprehensive Plan.

The City has adopted the 2018 International Building Codes. The Zoning Ordinance was last updated in 2013 alongside the Comprehensive Plan. The ordinances include specific

requirements for development in the floodplain. All development in the floodplain requires a permit for development and requires buildings to be built to three feet above base flood elevation.

The local planning team noted the annual municipal budget's funds have remained relatively stable over the past few years, but any new capital projects would require additional bonds or grant funding. The city reviews and updates the Capital Improvements Plan annually which also identifies specific infrastructure and equipment upgrades for the city. Currently installing water meters, burying powerlines, and purchasing backup generators are identified in the CIP.

The Local Emergency Operations Plan (EOP) for Friend, which was last updated in 2018, is an annex of Saline County's Local EOP. It is an all-hazards plan that does not address specific natural and man-made disasters. It provides a clear assignment of responsibility in case of an emergency.

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 Council, Mayor, Building Inspector, Planning Commission, and Public Works Supervisor. The profile was last updated in October 2019 during grant funding cycles. The local planning team will review the plan no less than annually and will include the public in the review and revision process by: updating the city website, social media posts, and sharing information at city council meetings open to the public.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	EMERGENCY COMMUNICATION
DESCRIPTION	Establish an action plan to improve communication between agencies to better assist residents and businesses during and following emergencies. Establish inter-operable communications.
HAZARD(S)	All hazards
STATUS	A new antenna was purchased and installed on siren to allow all responders to share communication lines and channels.

SECTION SEVEN: CITY OF FRIEND COMMUNITY PROFILE

MITIGATION ACTION	EMERGENCY GENERATOR FOR WASTEWATER TREATMENT PLANT
DESCRIPTION	Obtain a back-up power generator for wastewater treatment plant
HAZARD(S)	All hazards
STATUS	A new generator has been purchased and installed at the wastewater treatment plant.

Continued Mitigation Actions

MITIGATION ACTION	ALERT SIRENS
DESCRIPTION	Obtain an outdoor warning device
HAZARD(S)	All hazards
ESTIMATED COST	\$25,000
FUNDING	City General Fund, HMA
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	City Administration
STATUS	The city has three sirens but has expressed interest in a fourth. This would be for a tornado siren.

MITIGATION ACTION	INTERIOR DITCHES AND CULVERT IMPROVEMENTS
DESCRIPTION	Deepen drainage ditches and clean out culverts to improve storm sewers and drainage patterns in and around the community
HAZARD(S)	Flooding
ESTIMATED COST	\$50,000+
FUNDING	City General Fund, HMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	City Administration
STATUS	This project has not yet been started.

MITIGATION ACTION	SAFE ROOM/STORM SHELTERS
DESCRIPTION	Obtain a back-up power generator for wastewater treatment plant
HAZARD(S)	All hazards
ESTIMATED COST	\$30,000
FUNDING	City General Fund, HMA
TIMELINE	1 year
PRIORITY	Medium
LEAD AGENCY	City Administration
STATUS	This project has not yet been started.

MITIGATION ACTION	STORMWATER SYSTEM AND DRAINAGE IMPROVEMENTS
DESCRIPTION	Install storm sewer flood control structures to improve stormwater management and drainage in town and/or upgrade combined sewer system to improve storm water management. This may include one to seven control structure sites near road crossings.
HAZARD(S)	Flooding
ESTIMATED COST	\$200,000
FUNDING	City General Fund, HMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Utility Superintendent, City Administrator
STATUS	The city is currently exploring funding options.

Removed Mitigation Actions

MITIGATION ACTION	NFIP CONTINUATION AND ENFORCEMENT
DESCRIPTION	Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs).
REASON FOR REMOVAL	While the city will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA.

MITIGATION ACTION	REMOVE FLOW RESTRICTIONS
DESCRIPTION	Conduct a preliminary drainage assessment and/or design bridge improvements to reduce and/or alleviate flooding. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacing or modifying of bridges and other flow restrictions may be necessary to eliminate flooding threats and damages.
HAZARD(S)	Flooding
REASON FOR REMOVAL	This action does not address specific flooding concerns in the city and is no longer a priority.

COMMUNITY PROFILE

VILLAGE OF SWANTON

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table SWA.1: Village of Swanton Local Planning Team

Name	Title	Jurisdiction
Tom Bass	Trustee	Village of Swanton
Charlie Runty	Chairman	Village of Swanton
Lynn Strouf	Treasurer	Village of Swanton

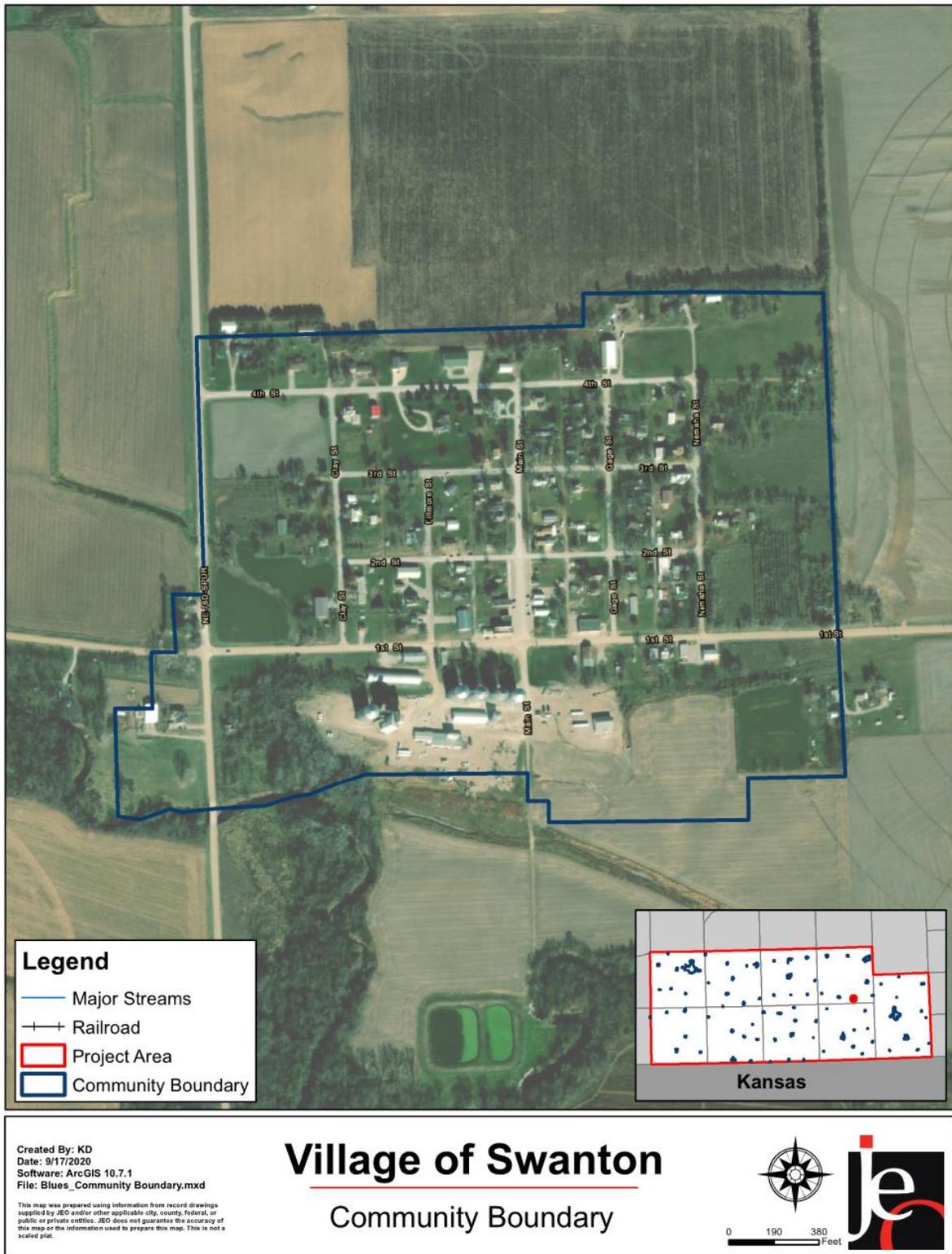
Location and Geography

The Village of Swanton is located in the south-central portion of Saline County and covers an area of 0.2 square miles. Major waterways within the area include Swan Creek, which runs through the southwestern part of the village. The area is not heavily forested. The village lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

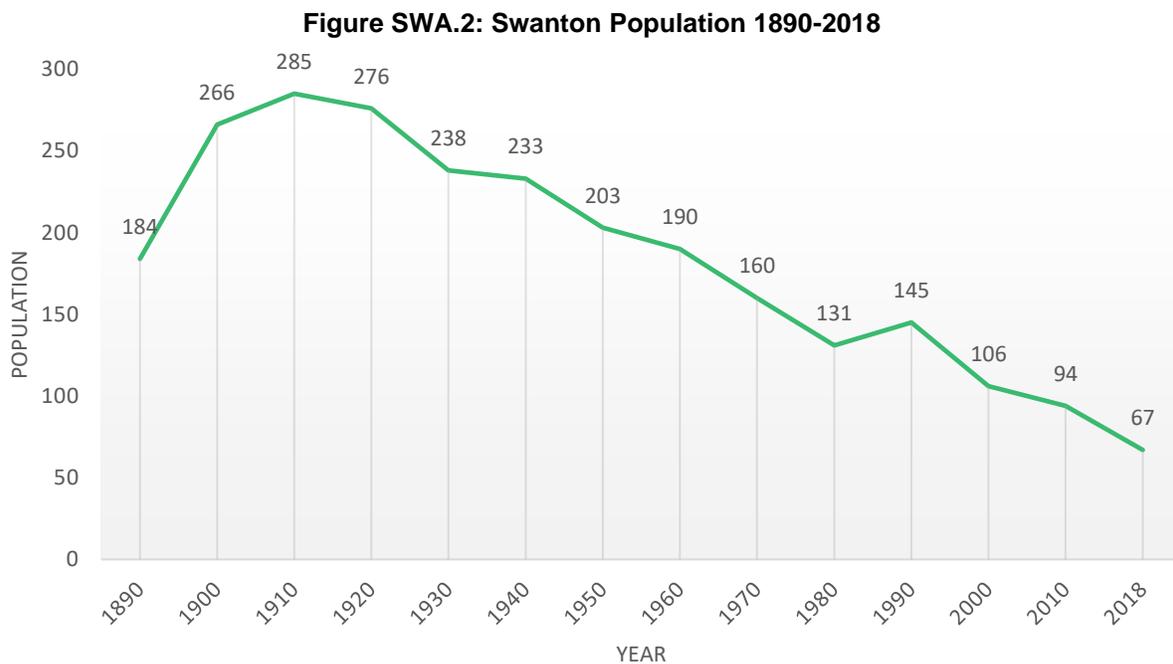
Swanton's major transportation corridors include Nebraska Highway Spur 76D, which runs north-south, and connects Swanton to Highway 41. Spur 76D accommodates on average 225 vehicles per day, 25 of which are heavy commercial vehicles. Swanton does not have any rail lines; however, hazardous materials are commonly transported via Highway and Spur 76D. No major chemical transportation spills have impacted the community. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

Figure SWA.1: Village of Swanton Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1890 to 2018 (estimated). This figure indicates that the population of Swanton has maintained a relatively steady trend with an estimated increase since 2010. 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 less than 1% of Saline County's population in 2018.



Source: U.S. Census Bureau⁴⁸

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

- Older.** The median age of Swanton was 50.1 years old in 2018, compared with the county average of 35.8 years. Swanton's population has grown older since 2010, when the median age was 29.3 years old. However, the local planning team noted no major changes in the population have occurred and thus this shift in median age may not be accurate. Swanton had a smaller proportion of people under 20 years old (22.4%) than the county (29.9%).⁴⁹
- Less ethnically diverse.** In 2010, about 4% of Swanton's population was two or more races. By 2018, 100% of Swanton's population was White, non-Hispanic. During that time,

⁴⁸ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁴⁹ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

Saline County had 1% Black, 2% to 3% Asian, 13% to 5% other races, and 2% to 3% two or more races from 2010 to 2018 respectively.⁵⁰

- **Equally likely to be at the federal poverty line.** The poverty rate of all persons in Swanton (13.4%) was similar to the county (13.5%) in 2018.⁵¹

Employment and Economics

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

- **Varied mix of industries.** Employment sectors accounting for 10% or more of employment in Swanton included Agriculture, Manufacturing, Finance, and Education. While industries in Saline County included Manufacturing, Retail, and Education.⁵²
- **Higher household income.** Swanton's median household income in 2018 (\$56,875) was about \$5,000 greater than the county (\$51,143).⁵³
- **More long-distance commuters.** About 14.3% percent of workers in Swanton commuted for fewer than 15 minutes, compared with about 51.5% of workers in Saline County. About 52.9% of workers in Swanton commute 30 minutes or more to work, compared to about 28.5% of the county workers.⁵⁴

Major Employers

Major employers in Swanton include the Farmers Co-op Elevator and First Tri-County Bank. A small percentage of residents commute to other communities for work including Fairbury, Beatrice, or Crete.

Housing

In comparison to the Saline County, Swanton's housing stock was:⁵⁵

- **More owner occupied.** About 93.5% of occupied housing units in Swanton are owner occupied compared with 69.7% of occupied housing in Saline County in 2018.
- **Larger share of aged housing stock.** Swanton has more houses built prior to 1970 than the county (72.0% compared to 53.9%).
- **Fewer multi-family homes.** The predominant housing type in the village is single family detached and Swanton contains fewer multifamily housing with five or more units per structure than the county (0.0% compared to 7.1%). About 100% of housing in Swanton was single-family detached, compared with 80.8% of the county's housing. Swanton has a smaller share of mobile and manufactured housing (0.0%) compared to the county (5.4%). Mobile homes are primarily located at 3rd and Main Street.

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.

50 United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

51 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

52 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

53 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

54 United States Census Bureau. "2018 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]

55 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

In the past five years seven dilapidated homes or structures in the village have been demolished. No new development have been developed in the village; however, eight structures were built prior to 2016, including grain bins, storage buildings, and a county maintenance building. These structures have been built in the south, southwest, and west parts of town. None of the structures were built in a floodplain or other hazardous areas. The population in Swanton has decreased in recent years which the local planning team attributed to an aging population and lack of available jobs. In the next five years the village anticipates one additional home to be constructed.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 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. One structure in Swanton has been removed from the floodplain via LOMA. A summary of LOMAs is provided in the table below.

Table SWA.2: Swanton 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
133	79	3,646,685	8	10%	\$1,147,795

Source: County Assessor, GIS Workshop

Table SWA.3: Swanton Flood Map Products

Type of Product	Product ID	Effective Date	Details
LOMA	12-07-0868A-310188	2/7/2012	Property removed from SFHA

Source: FEMA Flood Map Service Center

Community Lifelines

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 site throughout Swanton which houses 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.

Table SWA.4: Chemical Storage Fixed Sites

Facility Name	Address	Located in Floodplain?
Farmers Cooperative	101 S Fillmore	N

Source: Nebraska Department of Environment and Energy⁵⁶

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

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 SWA.5: Swanton Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	Fire/ Village Hall	Y	Y	N
2	Food, Water, and Shelter	East Well	N	N	N
3	Food, Water, and Shelter	Water Tower	N	Y	N
4	Food, Water, and Shelter	Community Hall	Y	N	N
5	Health and Medical	Lift Station	N	N	N
6	Transportation	County Shop	N	N	N
7	Communications	Post Office	N	N	N

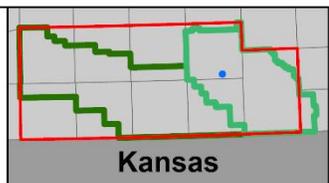
Figure SWA.3: Swanton Critical Facilities



Created By: NL
 Date: 5/24/2021
 Software: ArcGIS Pro 2.8.0
 File: Blues Critical Facilities.aprx
 This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

Village of Swanton

Little Blue NRD and Lower Big Blue NRD
 Hazard Mitigation Plan 2021



Historical Occurrences

See the Saline County community profile for historical hazard events.

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 community's capabilities. For more information regarding regional hazards, please see *Section Four: Risk Assessment*.

Flooding

Flooding is a particular worry in Swanton, with damaging events impacting the southwest side of town on May 6, 2015, and June 5, 2015. The city is concerned both about riverine and flash flooding, and the west side of town along Highway 76D, and the south side of town south of 1st Street, are especially prone to flooding. Swan Creek is of particular concern for flooding in the village, and there are areas in the village with poor storm water draining. The well house has been damaged in the past by flooding. The village is also concerned about potential flooding impacted the Co-Op and leading to chemical contamination. As of November 2020 the village does not participate in the NFIP.

Hazardous Materials (Fixed Site)

No chemical spills at fixed sites have occurred in the village in recent years, but there is an anhydrous ammonia storage facility and portable tanks storage on the south side of town. Critical facilities, such as the fire department and village hall, are located to the north of these facilities.

There are no vulnerable populations located near these sites, and residents who do live near the sites are not educated about the threat and necessary response to any spill. Additionally, the population in Swanton is aging and may require additional assistance to evacuate if major spills were to occur. The village fire department is trained to respond to a spill and has protective gear for this purpose.

Tornadoes and High Winds

On May 11, 2014, an EF-1 tornado tracked within three miles of Swanton. While the village has not been directly struck in recent years, southern Nebraska is prone to high winds and tornadoes. The main concern for tornadoes in the village is public safety, as not all residents have a safe place or basements to seek shelter. Critical facilities in the village have not reported damages from past winds or tornadoes.

The city does not have a community safe room, so residents must rely on their own or a neighbor's basement or storm shelter for safety. The village hopes to place a safe room on Main Street, close to the center of town. The village does not backup its electronic municipal records. Saline County does offer text alerts for severe weather. The village promotes emergency preparedness in the community. The village has mutual aid agreements with Saline County and 3 & 33.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Swanton has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a five-member council and the following offices: clerk, treasurer, attorney, fire chief, water operator, and sewage plant operator.

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 SWA.6: Capability Assessment

Survey Components		Yes/No
Planning Regulatory Capability	Comprehensive Plan	No
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Local Emergency Operational Plan	County
	Floodplain Ordinance	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Building Codes	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	Yes
	GIS Capabilities	No
	Chief Building Official	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	Yes
	Awarded a grant in the past	Yes
	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

Survey Components		Yes/No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	
Education Outreach and	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	No
	Other (if any)	

Table SWA.7: Overall Capability

Overall Capability	Limited/Moderate/High
Financial Resources Needed to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	High
Community Support to Implement Projects	High
Time to Devote to Hazard Mitigation	High

Plan Integration

The village has applied for grants to update the well, wellhouse, and include a generator. The local planning team noted the annual municipal budget's funds are sufficient for current projects and may have some additional room for new projects.

The Local Emergency Operations Plan (EOP) for Swanton, which was last updated in 2018, is an annex of Saline County's LEOP. It is an all-hazards plan that does not address specific natural and man-made disasters. It provides a clear assignment of responsibility in case of an emergency.

No other planning mechanisms were identified in the village which incorporate hazard mitigation goals and objectives.

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 Chairman, Village Treasurer, Village Clerk, and 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 sharing information at board meeting, community posted notices, and letters to all residents.

Mitigation Strategy

Continued Mitigation Actions

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Obtain generators for the well, fire hall, and lift station
HAZARD(S)	All hazards
ESTIMATED COST	\$30,000
FUNDING	Village Fire Department, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Fire Department
STATUS	A backup generator has been purchased for the well. Fire hall and lift stations still need generators.

MITIGATION ACTION	HAZARDOUS MATERIAL CLEANUP AND RELOCATION
DESCRIPTION	Move anhydrous ammonia tanks out of community
HAZARD(S)	Hazardous Materials
ESTIMATED COST	\$200,000
FUNDING	Farmers Co-Op, Elevator Company, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village of Swanton, Farmers Co-Op
STATUS	This project has not yet been started.

MITIGATION ACTION	SAFE ROOM/STORM SHELTERS
DESCRIPTION	Build a safe room next to fire hall
HAZARD(S)	Severe Thunderstorms, Tornadoes and High Winds
ESTIMATED COST	\$200-\$250/sq ft
FUNDING	Village Funds, Fire Funds, HMGP
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

Removed Mitigation Actions

MITIGATION ACTION	NFIP CONTINUATION AND ENFORCEMENT
DESCRIPTION	Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs).
HAZARD(S)	Flooding
REASON FOR REMOVAL	While the village will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA.

COMMUNITY PROFILE

VILLAGE OF TOBIAS

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table TOB.1: Village of Tobias Local Planning Team

Name	Title	Jurisdiction
Donna Rut	Village Clerk	Village of Tobias
Gary Dick	Village Board Member	Village of Tobias
Ralph Baxa	Village Board President	Village of Tobias

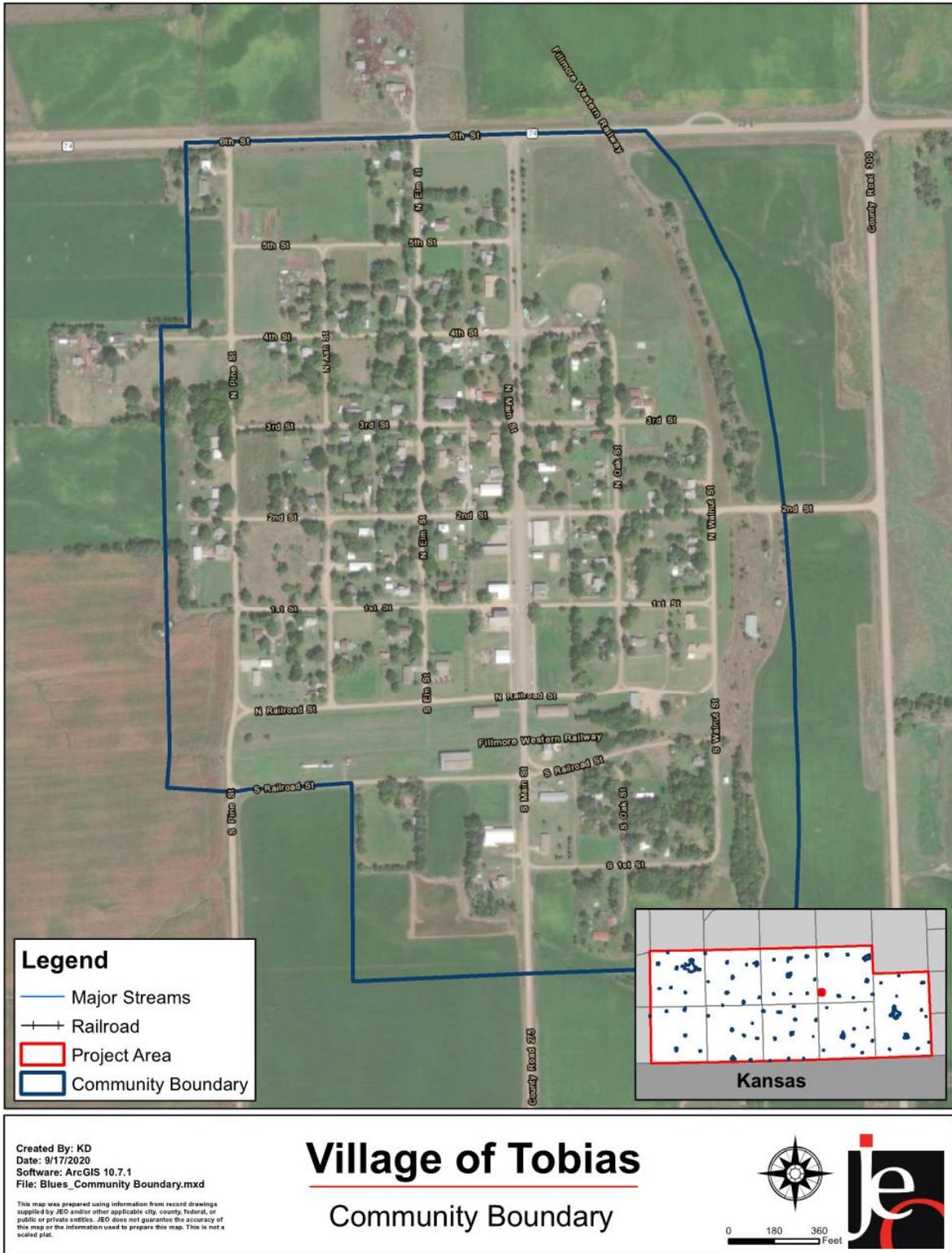
Location and Geography

The Village of Tobias is located in the south western portion of Saline County. The Village of Tobias covers an area of 0.26 square miles. There are no major waterways within the area. The area is not heavily forested. Most of Tobias lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Tobias's major transportation corridors include State Highway 74 runs east-west, runs just north of Tobias. CR-74 accommodates on average 350 vehicles per day, 50 of which are heavy commercial vehicles. Tobias does not have any rail lines. Although there have been no reported chemical spills, the local planning team indicated that agricultural chemicals are regularly transported close to the village on State Highway 74 and Road 300. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

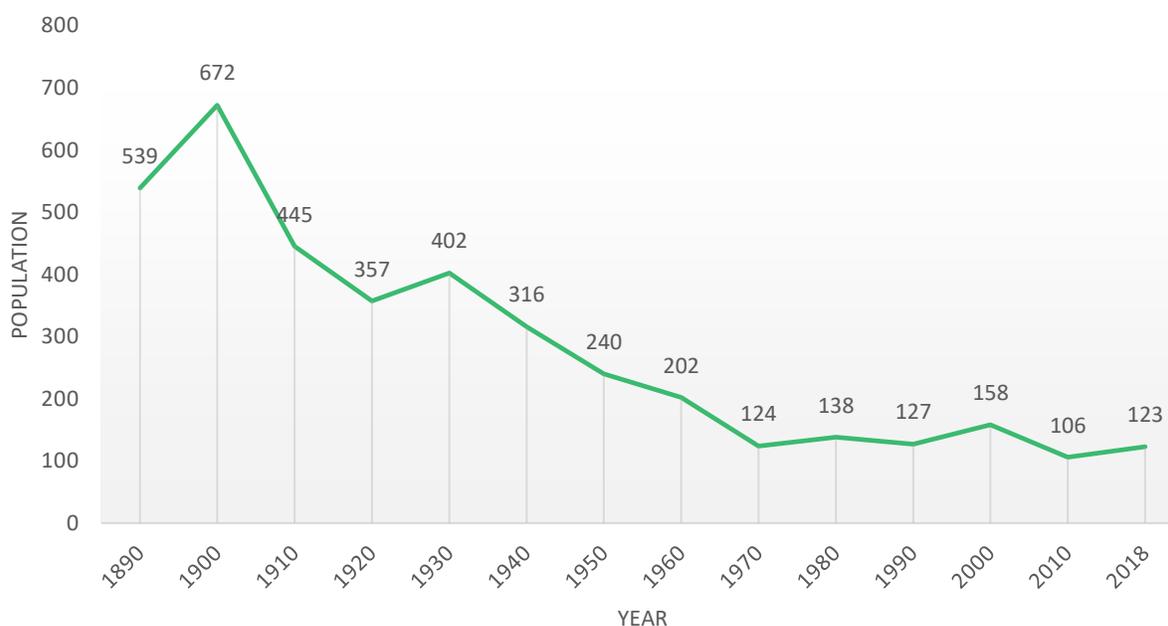
Figure TOB.1: Village of Tobias Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1890 to 2018 (estimated). This figure indicates that the population of Tobias has declined since the 1930s. 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 less than 1% of Saline County's Population in 2018.

Figure TOB.2: Tobias Population 1890-2018



Source: U.S. Census Bureau⁵⁷

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

- **Older.** The median age of Tobias was 47.5 years old in 2018, compared with the County average of 35.8 years. Tobias's population has grown younger since 2010, when the median age was 49 years old. Tobias had a smaller proportion of people under 20 years old (24.4%) than the County (29.9%).⁵⁸
- **More ethnically diverse.** In 2010, about 4% of Tobias's population was other races. By 2018, 8% of Tobias's population was Asian, 2% was other races, and 7% was two or more races. During that time, Saline County had 1% Black, 2% to 3% Asian, 13% to 5% other races, and 2% to 3% two or more races from 2010 to 2018 respectively.⁵⁹

⁵⁷ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁵⁸ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁵⁹ United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

- **Less likely to be at the federal poverty line.** The poverty rate of all persons in Tobias (3.3%) was smaller than the County (13.5%) in 2018.⁶⁰

Employment and Economics

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

- **Varied mix of industries.** Employment sectors accounting for 10% or more of employment in Tobias included Manufacturing, Education, and other services. While industries in Saline County included Manufacturing, Retail, and Education.⁶¹
- **Higher household income.** Tobias's median household income in 2018 (\$57,000) was about \$6,000 greater than the County (\$51,143).⁶²
- **More long-distance commuters.** About 24.3% percent of workers in Tobias commuted for fewer than 15 minutes, compared with about 51.5% of workers in Saline County. About 29.0% of workers in Tobias commute 30 minutes or more to work, compared to about 28.5% of the County workers.⁶³

Major Employers

The local planning team indicated that there are no major employers in the community, with most residents self-employed. A large percentage of residents commute for work, primarily to Geneva or Wilber or further to Beatrice or Lincoln.

Housing

In comparison to the Saline County, Tobias's housing stock was:⁶⁴

- **More owner occupied.** About 98.1% of occupied housing units in Tobias are owner occupied compared with 69.7% of occupied housing in Saline County in 2018.
- **Larger share of aged housing stock.** Tobias has more houses built prior to 1970 than the county (73.4% compared to 53.9%).
- **Fewer multi-family homes.** The predominant housing type in the Village is single family detached and Tobias contains fewer multifamily housing with five or more units per structure than the County (0.0% compared to 7.1%). About 91.1% of housing in Tobias was single-family detached, compared with 80.8% of the County's housing. Tobias has a larger share of mobile and manufactured housing (7.9%) compared to the County (5.4%).

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. Mobile homes and manufactured homes are located in various parts of Tobias.

60 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

61 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

62 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

63 United States Census Bureau. "2018 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]

64 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

Over the past five years, multiple structures in the village were demolished, but the local planning team noted there are no future plans for residential or commercial development in the coming five years. The population in Tobias is declining, which has been attributed to a lack of jobs and services in the community.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 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. No LOMAs were identified for the Village of Tobias.

Table TOB.2: Tobias 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
202	104	\$1,969,630	0	0%	\$0

Source: County Assessor, GIS Workshop

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are no chemical storage site throughout Tobias which houses hazardous materials.⁶⁵ In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident. No major spills have occurred in or around the village.

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.

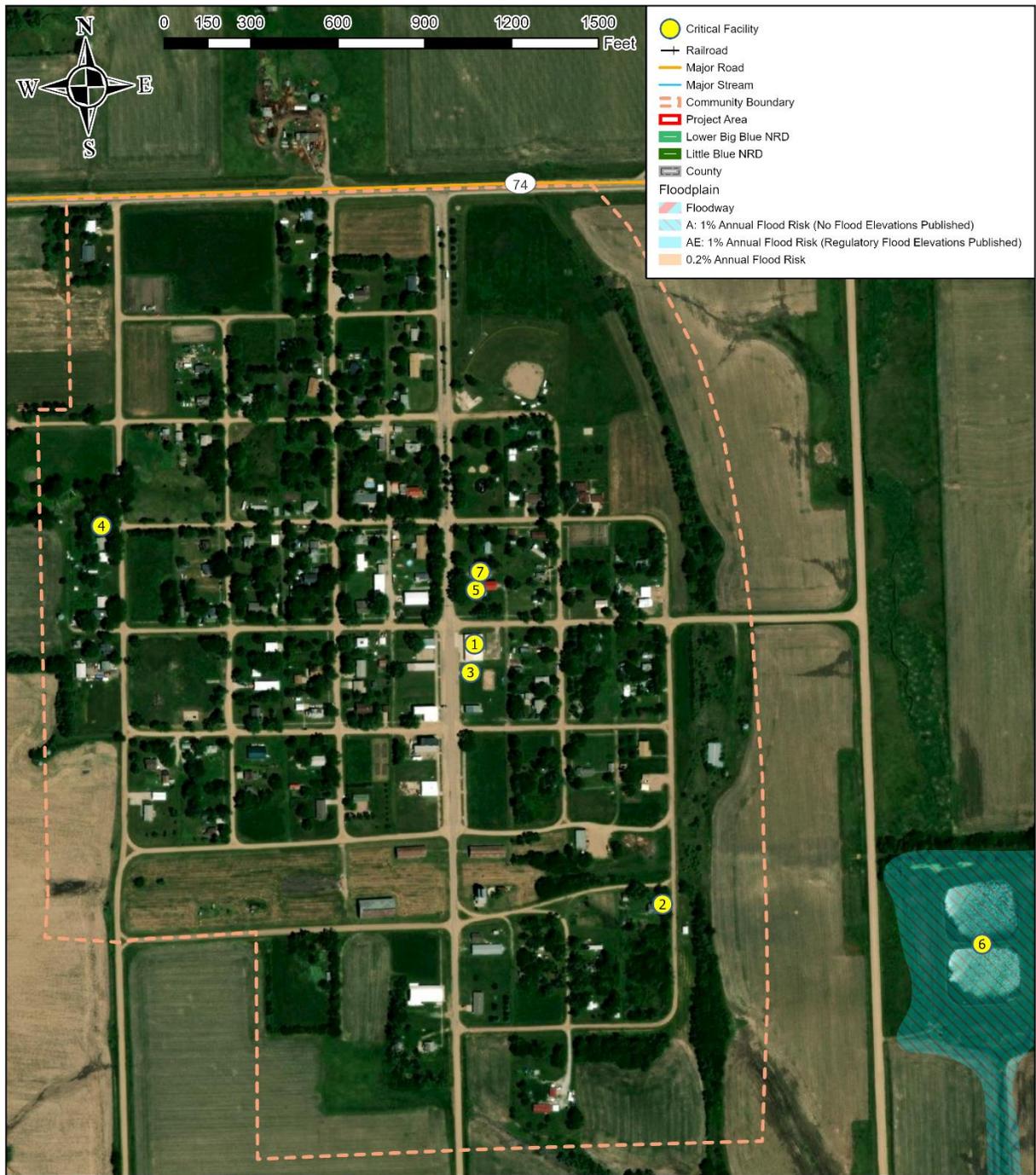
The following table and figure provide a summary of the critical facilities for the jurisdiction.

⁶⁵ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

Table TOB.3: Tobias Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	Fire Hall	N	Y	N
2	Food, Water, and Shelter	North Well	N	N	N
3	Safety and Security	Village Hall	N	N	N
4	Health and Medical	Lift Station	N	N	N
5	Food, Water, and Shelter	Water Tower	N	N	N
6	Health and Medical	Sewage Lagoons	N	N	Y
7	Transportation	Village Shop	N	N	N

Figure TOB.3: Tobias Critical Facilities





Created By: NL
Date: 5/24/2021
Software: ArcGIS Pro 2.8.0
File: Blues Critical Facilities.aprx

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

Village of Tobias

Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021



Kansas

Historical Occurrences

See the Saline County community profile for historical hazard events.

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 community's capabilities. For more information regarding regional hazards, please see *Section Four: Risk Assessment*.

Flooding

Flooding is a particular worry in Tobias, with a damaging event occurring on May 7, 2015. The event caused damage to the sewer system. Flash flooding is the main flooding concern in the village, as there is no body of water close enough to pose a fear of riverine flooding. Because there is no SFHA located within the municipal boundaries, nor is there much interest reported from residents, the village has opted to not participate in the NFIP to date.

While no critical facilities been damaged recently by flooding; the two main blocks in the downtown area experience poor stormwater drainage. The village has deepened drainage ditches and continues to work on the village drainage system. Additionally, the village plans to obtain backup generators for critical facilities and develop protocols to backup critical municipal records.

Hazardous Materials

While no significant chemical spills have occurred in recent years, the village is particularly concerned about ammonia spills. There are no critical facilities near a chemical storage site in the village, and therefore no vulnerable populations near one. Residents don't live near these sites, and therefore are not educated as to a possible threat or appropriate response. The volunteer fire department is in charge of response and has protective gear and training to deal with this risk. To mitigate this hazard, the village plans to conduct public hazard awareness campaigns.

Severe Thunderstorms

Severe thunderstorms are frequent in Saline County, sometimes with wind gusts in excess of 70 mph. Sometimes these storms bring extremely heavy rain, including up to six inches on June 5, 2015, and up to nine inches on May 7, 2015. Past events have downed trees due to high winds but caused minimal damage. According to NCEI data, a severe thunderstorm event on October 4, 2016 produced 1.25-inch hail but didn't cause any damages. Critical electronic municipal records are not protected with surge protectors. Critical facilities, including the fire hall and well house, have portable generators. About 10 percent of the power lines in the village are buried. There are no hazardous trees that need to be removed. It is unclear whether there are weather radios in critical facilities. To mitigate this hazard, the village plans to obtain an additional outdoor warning siren and backup generators for critical facilities, build a community storm shelter, conduct public hazard awareness campaigns, and develop protocols to backup critical municipal records.

Severe Winter Storms

Severe winter weather is common in Saline County, including in Tobias, which has experienced blizzards. The main concern for this hazard is keeping roads clear. No structural damage to facilities has occurred in recent years from winter storms. The village owns a tractor with a blade, and two individuals are responsible for clearing the roads in the village. The village believes these resources are sufficient for snow removal. The village does not utilize snow fences. There are no designated snow routes in town. About 10 percent of the power lines in town are buried. To mitigate this hazard, the village plans to obtain backup generators for critical facilities, conduct public hazard awareness campaigns, and develop protocols to backup critical municipal records.

Tornadoes and High Winds

Tornadoes and high winds are common across the planning area. Severe and possibly tornadic storms affected the area in May 2007 and June 2009. Critical facilities have not been damaged by tornados, but the local planning team remains concerned about physical damage to property during a tornado or high wind event. The city does not have a community safe room, so residents must rely on their own or a neighbor's basement or storm shelter for safety. The village does not backup its electronic municipal records. Saline County does offer text alerts for severe weather. The village does not promote emergency preparedness in the community. The village has mutual aid agreements in place with Saline County. To mitigate this hazard, the village plans to obtain an additional backup generators for critical facilities, build a community storm shelter, conduct public hazard awareness campaigns, and develop protocols to backup critical municipal records.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Tobias has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The Village has a five member council and the following offices: clerk, treasurer, attorney, fire chief, and water commissioner.

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 TOB.4: Capability Assessment

Survey Components		Yes/No
Planning Regulatory Capability &	Comprehensive Plan	No
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Local Emergency Operational Plan	County
	Floodplain Ordinance	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Building Codes	No
	Floodplain Management Plan	No

SECTION SEVEN: VILLAGE OF TOBIAS COMMUNITY PROFILE

Survey Components		Yes/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	No
	Chief Building Official	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	No
	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	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	
Education Outreach and	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 Village USA	No
	Other (if any)	

Table TOB.5: Overall Capability

Overall Capability	Limited/Moderate/High
Financial Resources Needed to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Community Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate

Plan Integration

The Local Emergency Operations Plan (LEOP) for Tobias, which was last updated in 2018, is an annex of Saline County's LEOP. It is an all-hazards plan that does not address specific natural and man-made disasters. It provides a clear assignment of responsibility in case of an emergency.

The local planning team noted that current municipal funds are limited to maintaining current facilities. The village has not applied for any grants in the past five years. The village follows all county or state requirements for zoning and building codes. No other planning mechanisms were identified for the Village of Tobias which incorporated hazard mitigation goals and objectives.

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 clerk. The local planning team will review the plan no less than annually and will include the public in the review and revision process by sending letters to residents and sharing information at village board meetings.

Mitigation Strategy

Continued Mitigation Actions

MITIGATION ACTION	BACKUP GENERATOR
DESCRIPTION	Obtain a backup power generator
HAZARD(S)	All hazards
ESTIMATED COST	\$10,000
FUNDING	General Funds
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	Backup generators are needed for community wells.

MITIGATION ACTION	BACKUP MUNICIPAL AND PROJECT RECORDS
DESCRIPTION	Develop protocols for backing up municipal records
HAZARD(S)	All hazards
ESTIMATED COST	\$100/ external hard drive
FUNDING	General Funds
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Fire Department
STATUS	This project has not yet been started.

MITIGATION ACTION	INTERIOR DITCHES AND CULVERT IMPROVEMENTS
DESCRIPTION	Deepen drainage ditches and clean out culverts
HAZARD(S)	Flooding, Severe Thunderstorms
ESTIMATED COST	\$5,000+
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Maintenance
STATUS	Areas along Main Street needs to be improved. The village has worked to clear drainage ditches in town.

MITIGATION ACTION	PUBLIC EDUCATION AND OUTREACH
DESCRIPTION	Through activities such as outreach projects, distribution of maps, and environmental education, increase public awareness of hazards
HAZARD(S)	All hazards
ESTIMATED COST	\$3,000+
FUNDING	General Funds, HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Fire Department
STATUS	This project has not yet been started.

SECTION SEVEN: VILLAGE OF TOBIAS COMMUNITY PROFILE

MITIGATION ACTION	SAFE ROOM/STORM SHELTER
DESCRIPTION	Design and construct a community storm shelter for residents without adequate shelter
HAZARD(S)	Severe Thunderstorms, Tornadoes and High Winds
ESTIMATED COST	\$200-\$250/sq ft
FUNDING	General Funds, Fire Dept., HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board, Fire Dept.
STATUS	This project has not yet been started.

COMMUNITY PROFILE

VILLAGE OF WESTERN

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table WES.1: Village of Western Local Planning Team

Name	Title	Jurisdiction
Frank Myers	Board Chairman	Village of Western

Location and Geography

The Village of Western is located in the south central portion of Saline County. The Village of Western covers an area of 0.49 square miles. There are no major waterways within the area. The area is not heavily forested. The village lies in the plains topographic region and is surrounded by agricultural fields.

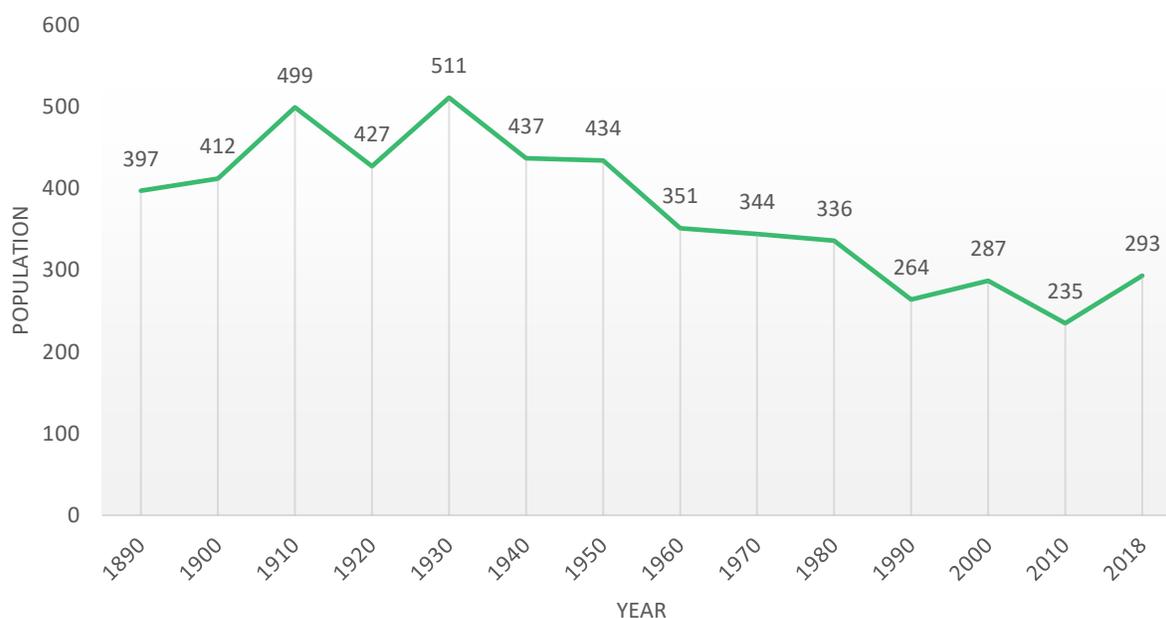
Transportation

Western's major transportation corridors include spur 76C runs east-west, to connect Western to County Road 15. S76C accommodates on average 500 vehicles per day, 45 of which are heavy commercial vehicles. Western does not have any rail lines; however, hazardous materials are commonly transported via highway. These include anhydrous ammonia, 2-4D, and other fertilizers or pesticides. Critical facilities, such as the wells and village office, are located on main transportation routes. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

Demographics

The following figure displays the historical population trend from 1890 to 2018 (estimated). This figure indicates that the population of Western s been relatively stable over the past century with a slight decline starting in the 1950s. 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 Saline County's Population in 2018.

Figure WES.2: Western Population 1890-2018



Source: U.S. Census Bureau⁶⁶

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

- **Older.** The median age of Western was 45.9 years old in 2018, compared with the County average of 35.8 years. Western's population has grown younger since 2010, when the median age was 47.4 years old. Western had a smaller proportion of people under 20 years old (23.5%) than the County (29.9%).⁶⁷
- **More ethnically diverse.** In 2010, about 1% of Western's population was Asian and 4% was other races. By 2018, only 2% of Western's population was two or more races. During that time, Saline County had 1% Black, 2% to 3% Asian, 13% to 5% other races, and 2% to 3% two or more races from 2010 to 2018 respectively.⁶⁸

⁶⁶ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁶⁷ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁶⁸ United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

- **Less likely to be at the federal poverty line.** The poverty rate of all persons in Western (6.5%) was smaller than the County (13.5%) in 2018.⁶⁹

Employment and Economics

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

- **Varied mix of industries.** Employment sectors accounting for 10% or more of employment in Western included Manufacturing, Retail, Transportation, Education, and other services. While industries in Saline County included Manufacturing, Retail, and Education.⁷⁰
- **Lower household income.** Western's median household income in 2018 (\$46,500) was about \$4,600 less than the County (\$51,143).⁷¹
- **Fewer long-distance commuters.** About 43.7% percent of workers in Western commuted for fewer than 15 minutes, compared with about 51.5% of workers in Saline County. About 24.2% of workers in Western commute 30 minutes or more to work, compared to about 28.5% of the County workers.⁷²

Major Employers

There are no major employers in the village and the majority of residents commute to Fairbury, Crete, Wilber, Beatrice, or Geneva for work.

Housing

In comparison to the Saline County, Western's housing stock was:⁷³

- **More owner occupied.** About 81.0% of occupied housing units in Western are owner occupied compared with 69.7% of occupied housing in Saline County in 2018.
- **Larger share of aged housing stock.** Western has more houses built prior to 1970 than the county (71.2% compared to 53.9%).
- **Fewer multi-family homes.** The predominant housing type in the village is single family detached and Western contains fewer multifamily housing with five or more units per structure than the County (0.0% compared to 7.1%). About 97.3% of housing in Western was single-family detached, compared with 80.8% of the County's housing. Western has a smaller share of mobile and manufactured housing (2.7%) compared to the County (5.4%). Mobile homes are located along Main Street.

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.

69 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

70 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

71 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

72 United States Census Bureau. "2018 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]

73 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

Over the past several years five structures have been built in Western: a fire hall, a body shop, an office/garage, and construction business, a garage/shop, and a new sewer lagoon west of town. None of these structures were built in a floodplain or other hazardous area. The population in Western has declined over the past few decades which the local planning team attributes to lack of available jobs in town. There are no new residential or commercial developments planned for the next five years.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 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. No LOMAs were identified for the Village of Western.

Table WES.2: Western 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
260	186	\$7,125,025	3	2%	\$131,850

Source: County Assessor, GIS Workshop

Community Lifelines

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 site throughout Western which houses 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.

Table WES.3: Chemical Storage Fixed Sites

Facility Name	Address	Located in Floodplain?
Farmers Cooperative South NH3	2234 State Highway 15	N

Source: Nebraska Department of Environment and Energy⁷⁴

⁷⁴ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

Critical Facilities

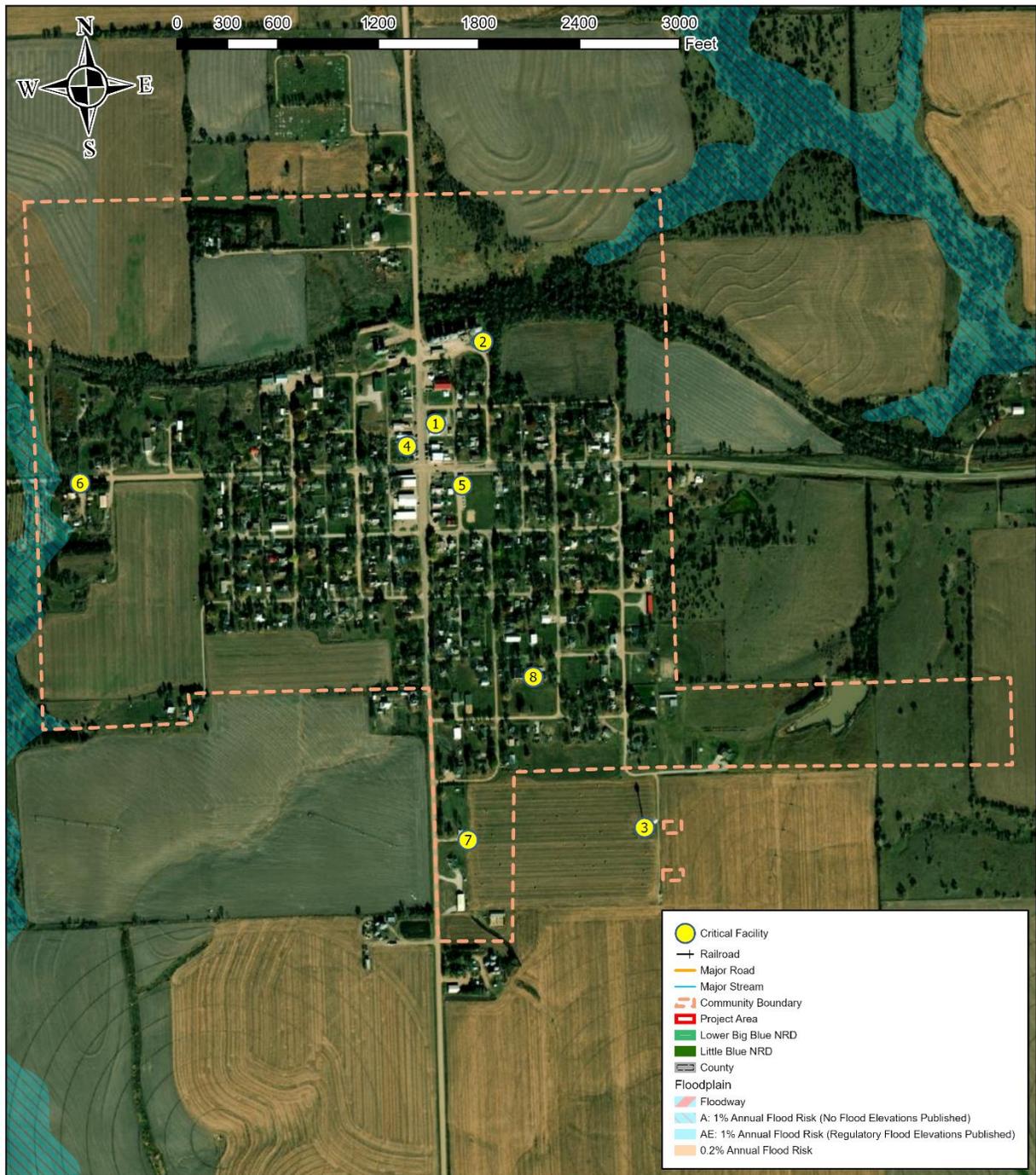
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during 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 WES.4: Western Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	Fire Hall	N	Y	N
2	Health and medical	Wastewater Treatment Plant	N	N	N
3	Food, Water, and Shelter	Water Tower	N	N	N
4	Safety and Security	Old Fire Hall Storage	N	N	N
5	Safety and Security	City Maintenance	N	N	N
6	Health and Medical	Lift Station	N	Y	N
7	Health and Medical	Lift Station	N	N	N
8	Food, Water, and Shelter	Old School Gym	Y	N	N

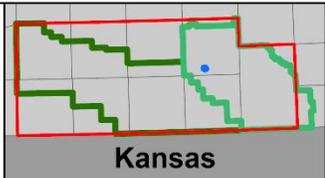
Figure WES.3: Western Critical Facilities




 Created By: NL
 Date: 5/24/2021
 Software: ArcGIS Pro 2.8.0
 File: Blues Critical Facilities.aprx
 This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

Village of Western

Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021



Historical Occurrences

See the Saline County community profile for historical hazard events.

Hazard Prioritization

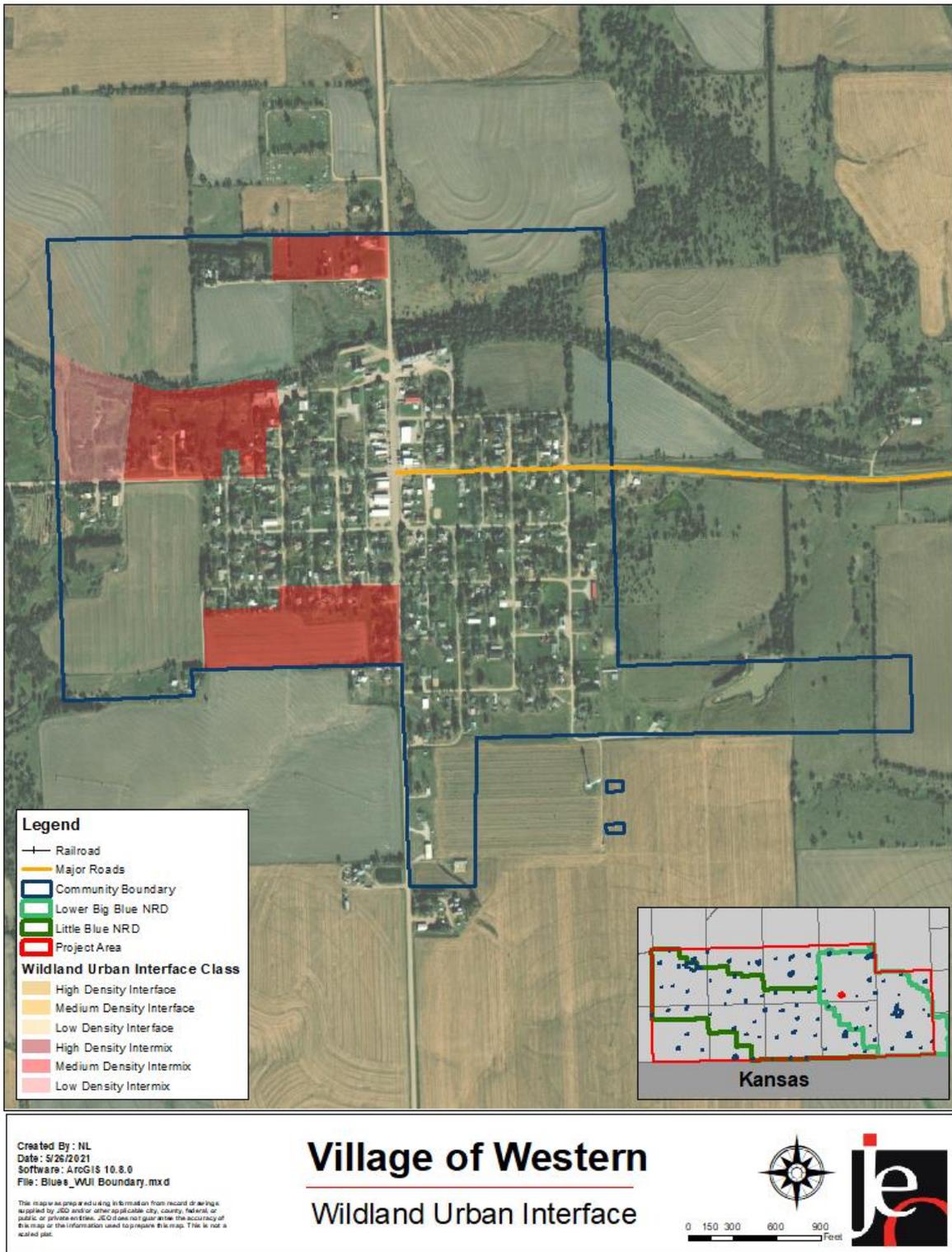
For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local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

Grass/Wildfire

State Conservation Resource Program (CRP) ground is located near the village, which poses a fire concern. The fire department may not be able to respond to a grassfire soon enough to prevent a major fire, and in that the resources available may not be enough to control the fire. No significant grassfire events have been reported in recent years. The fire department is currently exploring funding options for a new main pumper and new grass rig.

The fire department has 25 volunteers, five of which are EMTs. The community does not have a Wildland Urban Interface Code, and property owners are not required to have defensible space around structures. There are no incentive programs for landowners to use ignition-resistant construction materials. Additionally, many of the residents in the area are elderly or have transportation problems. These residents would require additional time or resources in order to evacuate or relocate away from fire events. The village relies primarily on mutual aid assistance when the local volunteer fire department staff or equipment is insufficient.

Figure WES.4: Western WUI



Hazardous Materials

Hazardous materials are of concern for the village due to the proximity of several chemical fixed sites and main transportation routes. There is a natural gas line north and south of town, anhydrous ammonia plants one mile east and one mile south of town, and a gas station in town. The fire hall and sewer plant are located within one block of the gas station. There are vulnerable populations located near these fixed sites. No significant chemical spills have occurred locally in recent years. Additionally, there are numerous buildings in town which are dilapidated and should be demolished and removed. Local concerns also exist for potential chemicals stored in these old buildings. The local planning team noted financial assistance is needed to help demolish the buildings and remediate the areas.

It is unknown whether residents near these sites are educated about the threat of a spill, and the appropriate response in case of a spill. Western Fire and Rescue, and Saline County Emergency Management are the local response resources, and they have protective gear and training.

Severe Thunderstorms (includes Hail)

Severe thunderstorms include impacts from lightning, hail, strong winds, and heavy rains. In particular, Western is prone to hailstorms and has experienced several hailstorms with at least quarter-inch hail in the past several years. The village's main concerns from this hazard are power outages, lack of equipment for debris cleanup, and the ability to make temporary repairs, as there is no nearby lumber yard. A severe thunderstorm in 2004 produced hail up to 2.75 inches in diameter.

The fire department is constructed with hail resistant building materials, and municipal facilities are insured against hail damage. The town does not have a tree board. It is not known whether residents receive information regarding hail resistant building materials.

Severe Winter Storms

Saline County has experienced many severe winter storms in recent years, including in Western. A storm on December 19, 2012 closed streets and required the city to enlist the help of farmers with snow removal. The main concerns for this hazard in Western are power failures, disruptions to utilities, impedances to travel and emergency services, and inadequate snow removal equipment. No structural damage to facilities has occurred in recent years from winter storms.

The village owns a small maintainer, and another vehicle with a bucket and blade, and the village maintenance department is in charge of snow removal. These resources are sometimes not sufficient for snow removal. The village does utilize snow fences, on the south well. There are no designated snow routes in town. None of the power lines in town are buried. The fire hall is the only facility with a backup generator in town.

Tornadoes and High Winds

Western has a history of experiencing damaging tornadoes in recent years. Most notable is the May 22, 2004, long-tracked F-4 southern Nebraska tornado, which did \$160 million in damage, killed one person and injured 30 in Hallam, and injured 8 more people as it struck near Western at F-2 strength. \$20 million of the damage total was done near Western. The village's main concerns about tornadoes and high winds are public safety, emergency response, and damage to utilities. Critical facilities in the town itself have not recently experienced damage.

The city does not have a community safe room, so residents must rely on their own or a neighbor's basement or storm shelter for safety. The village does not backup its electronic municipal records and the fire hall is the only facility with a generator. Saline County does offer text alerts for severe weather. The village does not promote emergency preparedness in the community. The village has mutual aid agreements in place with several other local towns, including Tobias, Swanton, Wilber, Daykin, and Fairbury. The village has identified the need for a community storm shelter or safe room.

Flooding

The Village of Western has floodplain areas to the east and west of the village; however, no portions of the village is located within the floodplain. The village does not participate in the NFIP.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Western has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a five member council and the following offices: clerk/treasurer, attorney, utility superintendent, chief of police, fire chief, sewage plant operator, and street/water commissioner.

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 WES.5: Capability Assessment

Survey Components		Yes/No
Planning Regulatory Capability	Comprehensive Plan	No
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Local Emergency Operational Plan	County
	Floodplain Ordinance	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Building Codes	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	No
	Chief Building Official	No
	Civil Engineering	No

Survey Components		Yes/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	No
	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	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 Outreach and	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	No
	Other (if any)	

Table WES.6: Overall Capability

Overall Capability	Limited/Moderate/High
Financial Resources Needed to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Community Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate

Plan Integration

In the past the village has applied for grants with Norris Public Power District. The local planning team noted the annual municipal budget's funds are limited to maintaining current operations and any new capital projects would require additional bonds or grant funding.

The Local Emergency Operations Plan (LEOP) for Western, which was last updated in 2018, is an annex of Saline County’s LEOP. It is an all-hazards plan that does not address specific natural and man-made disasters. It provides a clear assignment of responsibility in case of an emergency. The village follows county and state guidance for zoning and building codes and ordinances. No other planning mechanisms were identified for the village which integrate hazard mitigation principles.

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 members. The local planning team will review the plan no less than annually and will include the public in the review and revision process by sharing information in the board meeting minutes.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	WELL IMPROVEMENTS
DESCRIPTION	Improve community well system
HAZARD(S)	Grass/Wildfire
STATUS	This project was completed for \$1.3 million in 2020.

Continued Mitigation Actions

MITIGATION ACTION	ALERT SIRENS
DESCRIPTION	Obtain an additional outdoor warning siren at 108 E. Sumer, and possibly a second location
HAZARD(S)	All hazards
ESTIMATED COST	\$10,000
FUNDING	Tax Revenue, Western Fire & Rescue, HMGP
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board, Fire and Rescue
STATUS	This project has not yet been started.

SECTION SEVEN: VILLAGE OF WESTERN COMMUNITY PROFILE

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Provide backup generators for the municipal well and fire department. Obtain an additional portable backup power generator, to be based at a location to be decided
HAZARD(S)	All hazards
ESTIMATED COST	\$40,000
FUNDING	General Funds, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	This project has not yet been started. The village office needs a generator.

MITIGATION ACTION	CIVIL SERVICE IMPROVEMENTS
DESCRIPTION	Improve emergency rescue and response equipment and facilities by providing additional, or updating, existing emergency response equipment
HAZARD(S)	All hazards
ESTIMATED COST	\$200,000
FUNDING	General Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	This project has not yet been started. All village equipment needs updated and a new main pumper and grass rig are being explored for the fire department.

MITIGATION ACTION	CLEANUP OF HAZARDOUS WASTE
DESCRIPTION	Cleanup of deteriorating buildings that contain hazardous materials
HAZARD(S)	Hazardous Materials
ESTIMATED COST	\$200,000
FUNDING	General Fund, HMGP
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Village Board
STATUS	There are eight properties in town in need of clean up. The village is currently working on this process.

MITIGATION ACTION	SAFE ROOM/STORM SHELTERS
DESCRIPTION	Construct a storm shelter or safe room for 10-20 people at 110 NE Avenue, in the new fire hall
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	\$175,000
FUNDING	Tax Revenue, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Western Fire & Rescue, Saline County EMS, SCEMA
STATUS	This project has not yet been started.

SECTION SEVEN: VILLAGE OF WESTERN COMMUNITY PROFILE

MITIGATION ACTION	TREE INVENTORY AND PLANTING GUIDANCE
DESCRIPTION	Educate public on appropriate tree planting, and establish an annual tree-trimming program
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	\$3,000
FUNDING	General Fund, HMA
TIMELINE	2-5 years
PRIORITY	Low
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

MITIGATION ACTION	WATER SYSTEM IMPROVEMENTS
DESCRIPTION	Make water system improvements to include additional fire hydrants, and increase supply and pressure
HAZARD(S)	Grass/Wildfire
ESTIMATED COST	\$10,000
FUNDING	General Fund, HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Village Board
STATUS	This project has not yet been started.

COMMUNITY PROFILE

CITY OF WILBER

Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021

Local Planning Team

Table WIL.1: City of Wilber Local Planning Team

Name	Title	Jurisdiction
Allen Brozovsky	City Council	City of Wilber
John McKee	Saline Co. Emergency Man.	Saline/Jefferson Co.
Roger Chrans	Mayor	City of Wilber

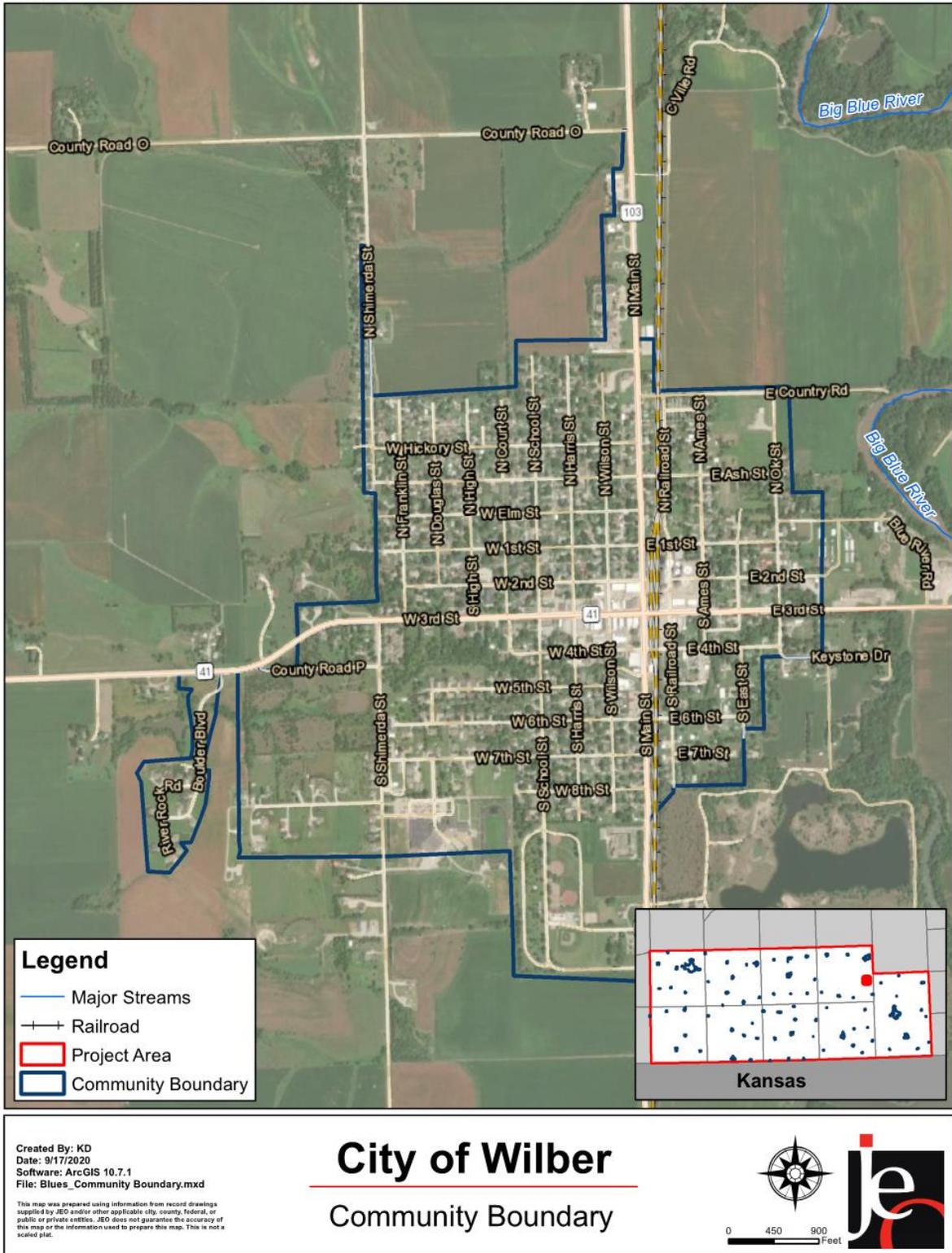
Location and Geography

The City of Wilber is located in the east central portion of Saline County and covers an area of 0.9 square miles. Major waterways within the area include the Big Blue River, which runs north to south along the city's western edges. There are also four lakes located just south of the city. The area is not heavily forested. The city lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Wilber's major transportation corridors includes Highway 103, which runs north-south through the center of Wilber. Highway 103 accommodates on average 2,910 vehicles per day, 310 of which are heavy commercial vehicles. Highway 41 runs east-west through the center of Wilber. Highway 41 accommodates on average 1,135 vehicles per day, 130 of which are heavy commercial vehicles. Wilber has one railroad, the Burlington Northern Santa Fe line. The BNSF runs north-south passing Crete on the way to Lincoln. At Crete, the rail runs east-west and ultimately connects Wilber to Lincoln and Omaha. The local planning team indicated that anhydrous ammonia is regularly transported along Highways 103 and 41. In 1975, an anhydrous ammonia lead occurred in the area and caused injuries and evacuations in the immediate area. The planning team remains concerned about critical facilities along major transportation routes. A housing community, the County Courthouse, Library, Post Office and City Office are all located along Highway 4. The Fire Station, City Electrical Plant, a care center, City Pool, and Sheriff's Office/County Jail are all located near Highway 103 and the BNSF rail line. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

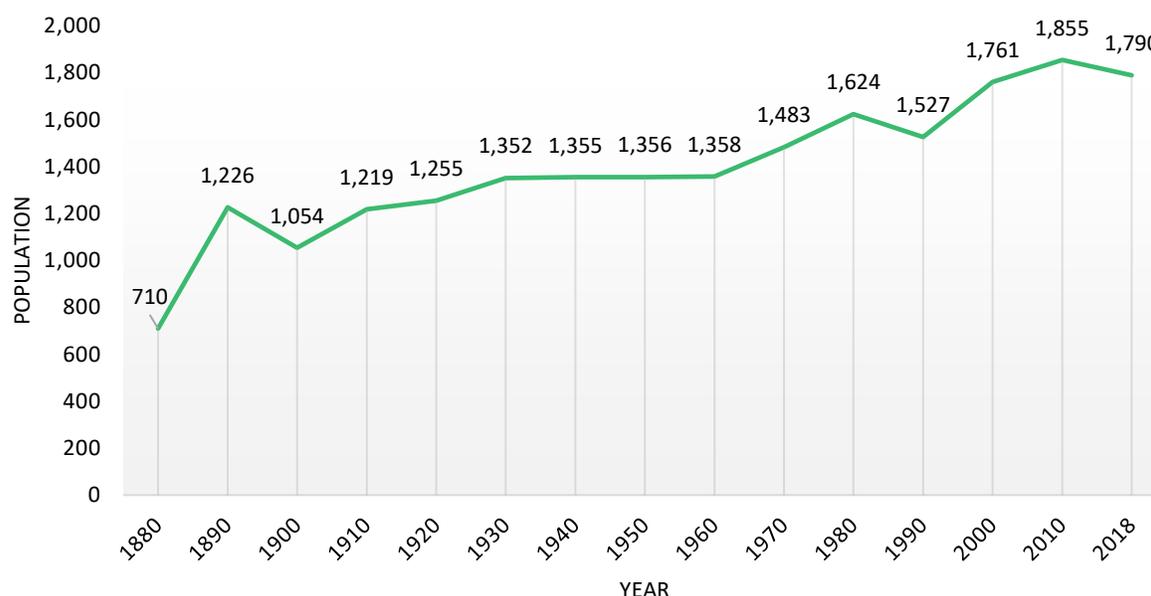
Figure WIL.1: City of Wilber Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1880 to 2018 (estimated). This figure indicates that the population of Wilber has been relatively stable during the first part of the century until a slight decline in the 1980s. However, the population has steadily increased since 1990. This is relevant to hazard mitigation because communities with a growing population may be more prone to developing additional land and building new structures. Net population growth may increase the number of people and properties vulnerable to hazards. The city's population accounted for 12.5% of Saline County's population in 2018.

Figure WIL.2: Wilber Population 1880-2018



Source: U.S. Census Bureau⁷⁵

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

- **Older.** The median age of Wilber was 41.2 years old in 2018, compared with the county average of 35.8 years. Wilber's population has grown older since 2010, when the median age was 33.9 years old. Wilber had a smaller proportion of people under 20 years old (27.8%) than the county (29.9%).⁷⁶
- **Less ethnically diverse.** In 2010, about 2% of Wilber's population was Black, 1% was American Indian, 2% was Asian, 4% was some other race alone, and 1% was two or more races. By 2018, it was estimate that 1% of Wilber's population was Asian, 1% was some other race alone, and 1% was two or more races. During that time, Saline County had 1% Black, 2% to 3% Asian, 13% to 5% other races, and 2% to 3% two or more races from 2010 to 2018 respectively.⁷⁷
- **Less likely to be at the federal poverty line.** The poverty rate of all persons in Wilber (7.6%) was lower than the county (13.5%) in 2018.⁷⁸

⁷⁵ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁷⁶ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁷⁷ United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

⁷⁸ United States Census Bureau. "2018 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 Saline County, Wilber's economy had:

- **Similar mix of industries.** Employment sectors accounting for 10% or more of employment in Wilber included Manufacturing, Retail, and Education. Industries in Saline County also included Manufacturing, Retail, and Education.⁷⁹
- **Greater household income.** Wilber's median household income in 2018 (\$51,908) was about \$765 higher than the county (\$51,143).⁸⁰
- **Fewer long-distance commuters.** About 28.9% of workers in Wilber commuted for fewer than 15 minutes, compared with about 51.5% of workers in Saline County. About 23.5% of workers in Wilber commute 30 minutes or more to work, compared to about 28.5% of the county workers.⁸¹

Major Employers

Major employers in the community include Wilber Care Center, Wilber-Clatonia Public Schools District #82, Saline County Court House, and the Saline County Sheriff's Office/County Jail. The planning team noted that a large percentage of residents commute to the surrounding communities of Crete, Beatrice, DeWitt, Lincoln, and Dorchester for employment.

Housing

In comparison to Saline County, Wilber's housing stock was:⁸²

- **Less owner occupied.** About 65.5% of occupied housing units in Wilber are owner occupied compared with 69.7% of occupied housing in Saline County in 2018.
- **Greater share of aged housing stock.** Wilber has more houses built prior to 1970 than the county (66.2% compared to 53.9%).
- **Fewer multi-family homes.** The predominant housing type in the city is single family detached and Wilber contains fewer multifamily housing with five or more units per structure than the county (1.4% compared to 7.1%). About 90.3% of housing in Wilber was single-family detached, compared with 80.8% of the county's housing. Wilber has a smaller share of mobile and manufactured housing (0.4%) compared to the county (5.4%).

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. There is one mobile home part located in the northeast part of Wilber, one block from Highway 103.

79 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

80 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

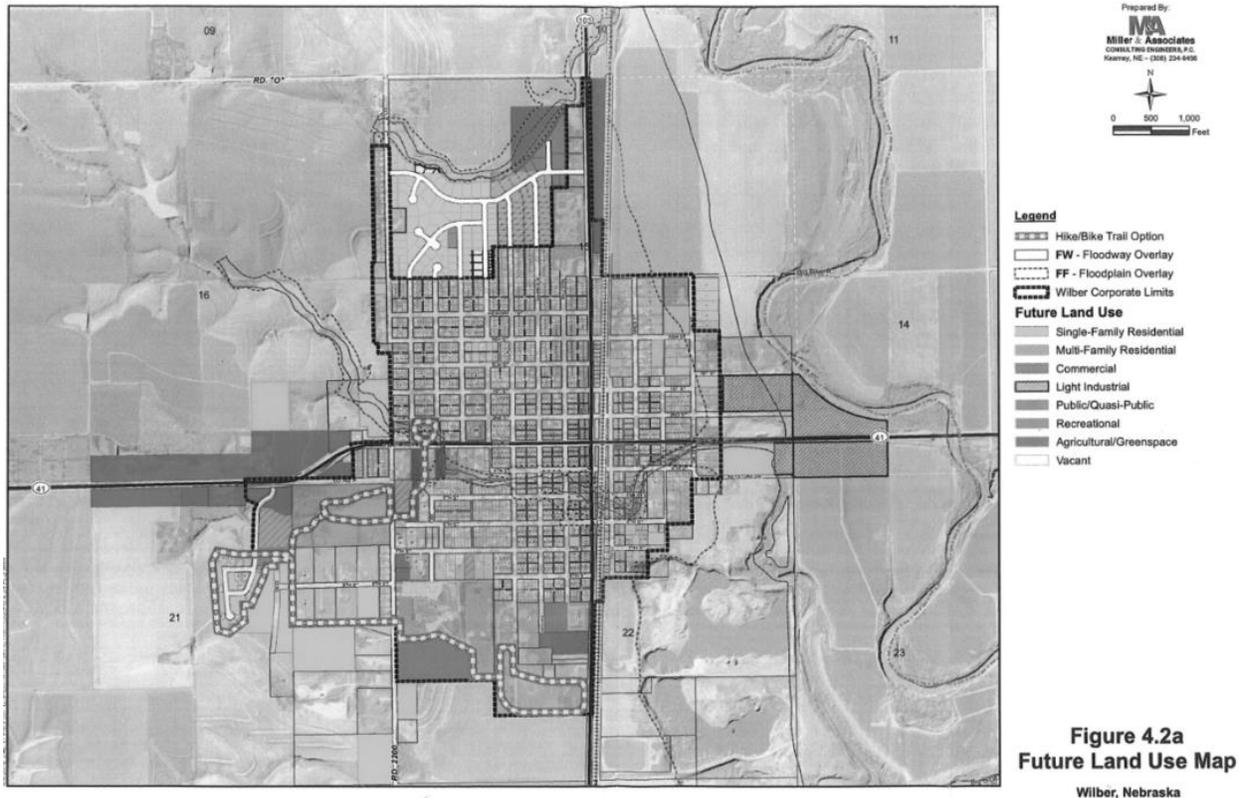
81 United States Census Bureau. "2018 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]

82 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

Over the past five years, there have been 12 new houses built, five new businesses, two houses demolished, and the development of a 5-acre park in the city. The population in Wilber has increased in recent years which the local planning team attributed to numerous services available in the city, the school district, and the community’s geographical location. There are new housing developments planned for the west side of the city.

Figure WIL.3: City of Wilber Future Land Use Map



Parcel Improvements and Valuation

GIS parcel data as of December 2019 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. Several structures in Wilber have been removed from the floodplain via LOMA. A summary of LOMAs identified for Wilber can be found in the table below.

Table WIL.2: Wilber 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
968	796	\$75,310,290	66	8%	\$6,097,705

Source: County Assessor, GIS Workshop

Table WIL.3: Wilber Flood Map Products

Type of Product	Product ID	Effective Date	Details
LOMA	12-07-2544A-310189	7/26/2012	Property removed from SFHA
LOMA	13-07-1939A-310189	7/11/2013	Structure removed from SFHA
LOMA	14-07-1322A-310189	4/22/2014	Structure (Residence) removed from SFHA
LOMA	15-07-0022A-310189	11/20/2014	Structure removed from SFHA
loma	18-07-0832A-310189	2/20/2018	Structure removed from SFHA

Source: FEMA Flood Map Service Center

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are four chemical storage sites throughout Wilber 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. The local planning team indicated its concern for structures along Highway 41 and the eastern residential part of the city.

Table WIL.4: Chemical Storage Fixed Sites

Facility Name	Address	Located in Floodplain?
Farmers Cooperative	232 S Railroad	No
Farmers Cooperative	2312 State Highway 41	Yes
Windstream Communications	114 W 2nd St	No
NDOT Wilber Yard	2308 State Highway 41	Yes

Source: Nebraska Department of Environment and Energy⁸³

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 WIL.5: Wilber Critical Facilities

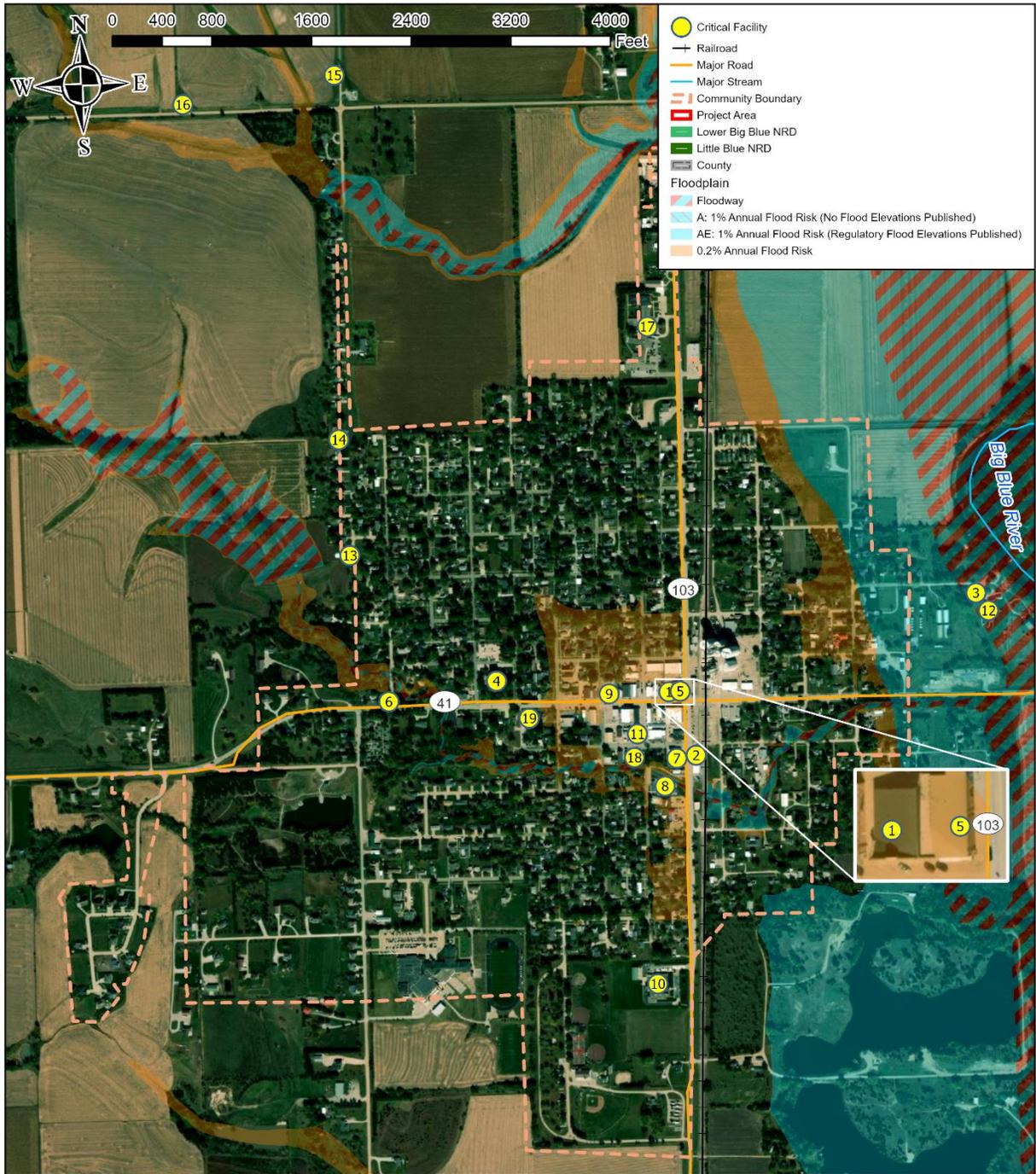
CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	City Hall	N	N	Y – 0.2%
2	Safety and Security	City Power Plant	N	Y	Y – 0.2%
3	Energy	City Shop-Utility	N	N	Y
4	Shelter	County Court House	Y	Y	N
5	Food, Water, and Shelter	Cultural Center	N	N	Y – 0.2%

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

SECTION SEVEN: CITY OF WILBER COMMUNITY PROFILE

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
6	Food, Water, and Shelter	District #82 Schools	Y	N	N
7	Safety and Security	Fire Station	N	Y	N
8	Other	Pool	N	N	N
9	Communications	Post Office	N	N	Y – 0.2%
10	Safety and Security	Sheriff Office and Jail	N	Y	N
11	Food, Water, and Shelter	Sokol Hall / Evacuation Center	Y	N	Y – 0.2%
12	Health and Medical	Wastewater Plant	N	Y	N
13	Food, Water, and Shelter	Water Tower -Well #3	N	N	N
14	Food, Water, and Shelter	Well #4	N	N	N
15	Food, Water, and Shelter	Well #5	N	N	N
16	Food, Water, and Shelter	Well #6	N	N	N
17	Health and Medical	Wilber Care Center	N	Y	N
18	Health and Medical	Wilber Clinic	N	N	Y
19	Food, Water, and Shelter	Wilber Library	Y	N	N

Figure WIL.3: Wilber Critical Facilities




 Created By: NL
 Date: 5/24/2021
 Software: ArcGIS Pro 2.8.0
 File: Blues Critical Facilities.aprx
 This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

City of Wilber

 Little Blue NRD and Lower Big Blue NRD
 Hazard Mitigation Plan 2021



Historical Occurrences

See the Saline County community profile for historical hazard events.

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 community's capabilities. For more information regarding regional hazards, please see *Section Four: Risk Assessment*.

Hazardous Materials (Transportation)

While no significant chemical spills via transport have occurred in recent years, in 1975, leakage from an anhydrous ammonia tank resulted in injuries and an evacuation of the vicinity. The local planning team remains concerned about this hazard as chemicals are regularly transported via two highways and rail line that all cross through the community. Highways 41 and 103, and the BNSF Railroad are the main routes of concern. Numerous chemicals are transported via this route. There are multiple critical facilities along these routes, including the police department, city hall, post office, fire hall, and sheriff's office. To mitigate against this hazard, the Wilber Fire and Rescue has updated its planning and practice. In the future, the planning team indicates a need for increased Federal and State Emergency Situational Response training involving local governments and their local department response abilities.

Public Health Emergency

The local planning team remains concerned about the currently ongoing Covid-19 pandemic as of December 13, 2020. The pandemic had an approximate beginning date in the community/area in late March 2020. Total impact on the City of Wilber is yet to be determined or even measurable.

Severe Thunderstorms

Wilber has a history of experiencing extreme hail from thunderstorms in recent years. According to NCEI data, a storm on October 3, 2013 dropped baseball size hail on the city, and a June 3, 2014 storm produced tennis ball size hail that damaged windows and punched holes into the siding of homes throughout the entire city. Critical facilities in town have been damaged by hail in recent years. The main concerns for this hazard in the city are downed power lines, roof and window damage, and blocked streets due to debris.

Currently, critical facilities in the village are not fitted with hail resistant building materials. However, municipal facilities are insured against hail damage. The town does not have a tree board. Residents do not receive information regarding hail resistant building materials. Since the last plan update, the city has updated its weather notification sirens.

Severe Winter Storms

Saline County has experienced many severe winter storms in recent years, including Wilber. In recent years, of particular note, a blizzard in 2003 closed streets and caused power outages. The

main concerns for this hazard are power outages, hindrances to the provision of emergency services, and the safety of the care center population. No structural damage to facilities has occurred in recent years from winter storms.

The city is in charge of snow removal and owns two front end loaders and two dump trucks. It can contract for extra help if needed. The city believes these resources are sufficient for snow removal. The village does not utilize snow fences. There are designated snow routes in town. About two percent of the power lines in town are buried.

Terrorism

Wilber has never experienced an act of terror, nor has it experienced an active shooter situation in recent years, but it is concerned for the safety of the 35,000 to 45,000 people who attend the annual Czech Days festival in the city in August. There are no known local terrorist cells.

Tornadoes and High Winds

Tornadoes and high winds are common across the planning area and can impact the city, particularly during the summer months. A major high wind event in 2004 impacted southern Wilber and caused widespread wind and hail damage. Saline County is prone to these storms and the city's main concerns about tornadoes in Wilber are public safety, structural damage, impedance of emergency services, and damaged utilities. Critical facilities have not recently been damaged by high winds or tornadoes.

The city has three community safe rooms, in the city library, county courthouse, and in the school. There is another shelter at Sokol Hall. The city does backup its electronic municipal records. Saline County offers text alerts for severe weather. The city promotes emergency preparedness in the community, via tornado drills in schools, and alarm testing. The city has mutual aid agreements in place with Crete, Swanton, DeWitt, and Western.

To mitigate this hazard, the city plans to obtain backup generators for critical facilities, construct a safe room or storm shelter, update the city's electrical system, and bury power lines. Since the last plan update, the city has updated its weather notification sirens.

Flooding

Flooding was not identified as a hazard of top concern for the city; however, floodplain areas are identified along the entire east side of the town and throughout the center of the city. Wilber participates in the NFIP and as of November 2020 had 12 policies in force for \$1,319,000. NeDNR reported no repetitive loss properties in the city.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Wilber has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The city has a four-member city council, clerk, treasurer, attorney, utility superintendent, chief of police, fire chief, sewage plant operator, streets commissioner, water commissioner, park & recreation, personnel director, purchasing officer, and a critical incident response team.

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 WIL.5: Capability Assessment

Survey Components		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Local Emergency Operational Plan	County
	Floodplain Ordinance	Yes
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Building Codes	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	No
	Floodplain Administration	Yes
	GIS Capabilities	No
	Chief Building Official	Yes
	Civil Engineering	No
	Local Staff Who Can Assess Community’s Vulnerability to Hazards	Yes
	Grant Manager	No
	Mutual Aid Agreement	County
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	Yes
	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

Survey Components		Yes/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	Yes
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Table WIL.6: Overall Capability

Overall Capability	Limited/Moderate/High
Financial Resources Needed to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Limited
Community Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate

Plan Integration

The city has a Comprehensive Plan which was last updated in 2016 but does not address natural hazards. The plan is aimed at safe growth practices, limits density in hazardous areas and encourages infill development. The plan is scheduled to be updated in 2026 and should include hazard mitigation goals and objectives. The city has adopted the 1985 Unified Building Code and should consider updated the most recent edition of the International Building Code.

The city's Zoning Ordinance was last updated in 2016. The ordinance is updated on an as needed basis but the city anticipates a full update to be completed in 2026. The ordinance limits development in the floodplain, includes well setback requirements, and outlines water restrictions in case of drought.

In the past five years, municipal funds have increased but are limited to maintaining current facilities and systems. The city has not applied for any grants in the last five years. The city has a Capital Improvements Plan which is updated every ten years (2016 and 2026). Currently the CIP outlines projects including drainage system maintenance, upsizing water drainage pipes, installing water meters, and updating the electrical distribution.

The Local Emergency Operations Plan (LEOP) for Wilber, which was last updated in 2018, is an annex of Saline County's LEOP. It is an all-hazards plan that provides a clear assignment of responsibility in case of an emergency.

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 community profile was last reviewed by the local planning team on March 1, 2020. The planning team identified a lack of pandemic response and planning as needing revision since the last plan. The City Mayor, Emergency Management Coordinator, Chief Law Enforcement Official, and City staff are responsible for reviewing and updating this district profile as changes occur or after a major event. The plan will be reviewed no less than bi-annually and will include the public in the review and revision process by: City Council meetings, City website notifications, Utility Billing Notations, and potentially the Wilber Public Schools Mass Notification System.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	WASTEWATER PLANT RENOVATIONS
DESCRIPTION	Installing a screen and a grinder, improving intakes
HAZARD(S)	Flooding
STATUS	Improvements have been completed.

Continued Mitigation Actions

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Obtain three emergency backup power generators for critical facilities and wells
HAZARD(S)	All hazards
ESTIMATED COST	\$2,000,000
FUNDING	City Wastewater Fund, City Electric Fund, HMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	City Council
STATUS	City is currently evaluating funding needs and opportunities. The city should purchase two new main generators to cover city needs.

MITIGATION ACTION	BURY POWER AND SERVICE LINES
DESCRIPTION	Bury power lines
HAZARD(S)	All hazards
ESTIMATED COST	\$50,000+
FUNDING	City General Fund, HMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	City Maintenance Department
STATUS	In Progress. Still under consideration by the city.

MITIGATION ACTION	PROVIDE BACKUP POWER SYSTEMS AND REDUNDANCIES
DESCRIPTION	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.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	\$35,000
FUNDING	General Fund, City Electric Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	City Electrical Department
STATUS	This project is currently in progress. The city is reconstructing main power lines in spring 2021.

MITIGATION ACTION	SAFE ROOM/STORM SHELTERS
DESCRIPTION	Construct a storm shelter or safe room for 200 people
HAZARD(S)	All hazards
ESTIMATED COST	\$350,000
FUNDING	City General Fund, HMA
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	City Council
STATUS	This project has not yet been started.

MITIGATION ACTION	STORMWATER SYSTEM AND DRAINAGE IMPROVEMENTS
DESCRIPTION	Conduct storm sewer updates
HAZARD(S)	Flooding
ESTIMATED COST	\$100,000
FUNDING	City Street Fund, HMA
TIMELINE	1 year
PRIORITY	Medium
LEAD AGENCY	City Water Department
STATUS	Updates partially completed with newly purchased equipment.

Removed Mitigation Actions

MITIGATION ACTION	NFIP CONTINUATION AND ENFORCEMENT
DESCRIPTION	Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs).
HAZARD(S)	Flooding
REASON FOR REMOVAL	While the city will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA.