Contents

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DISTRICT PROFILE

LITTLE BLUE NATURAL RESOURCES DISTRICT

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

Local Planning Team

Table LBN.1: Little Blue NRD Local Planning Team

Name	Title	Jurisdiction
Kyle Hauschild	Former General Manager	Little Blue NRD
Tyler Goeschel	General Manager	Little Blue NRD

Location and Geography

The Little Blue NRD is located in south-central Nebraska and includes parts of Adams, Clay, Fillmore, Jefferson, Nuckolls, Thayer and Webster Counties. The office headquarters are located in Davenport, NE and the NRD is broken down into eight sub-districts. The total area of the Little Blue District is approximately 1,537,280 acres.

The major waterway in the area is the Little Blue River. The Little Blue River Basin begins in the tablelands of Kearney County near Minden. The Basin drainage area totals just under 2,691 square miles or 1,722,200 acres. The principal tributaries of the Little Blue River include the Big Sandy Creek with a drainage area of 638 square miles; Rose Creek, 203 square miles; Spring Creek, 180 square miles; and Pawnee Creek, 126 square miles. The total length of the Little Blue River in Nebraska is approximately 200 miles. The following figure is a map of the Little Blue NRDs jurisdiction area.

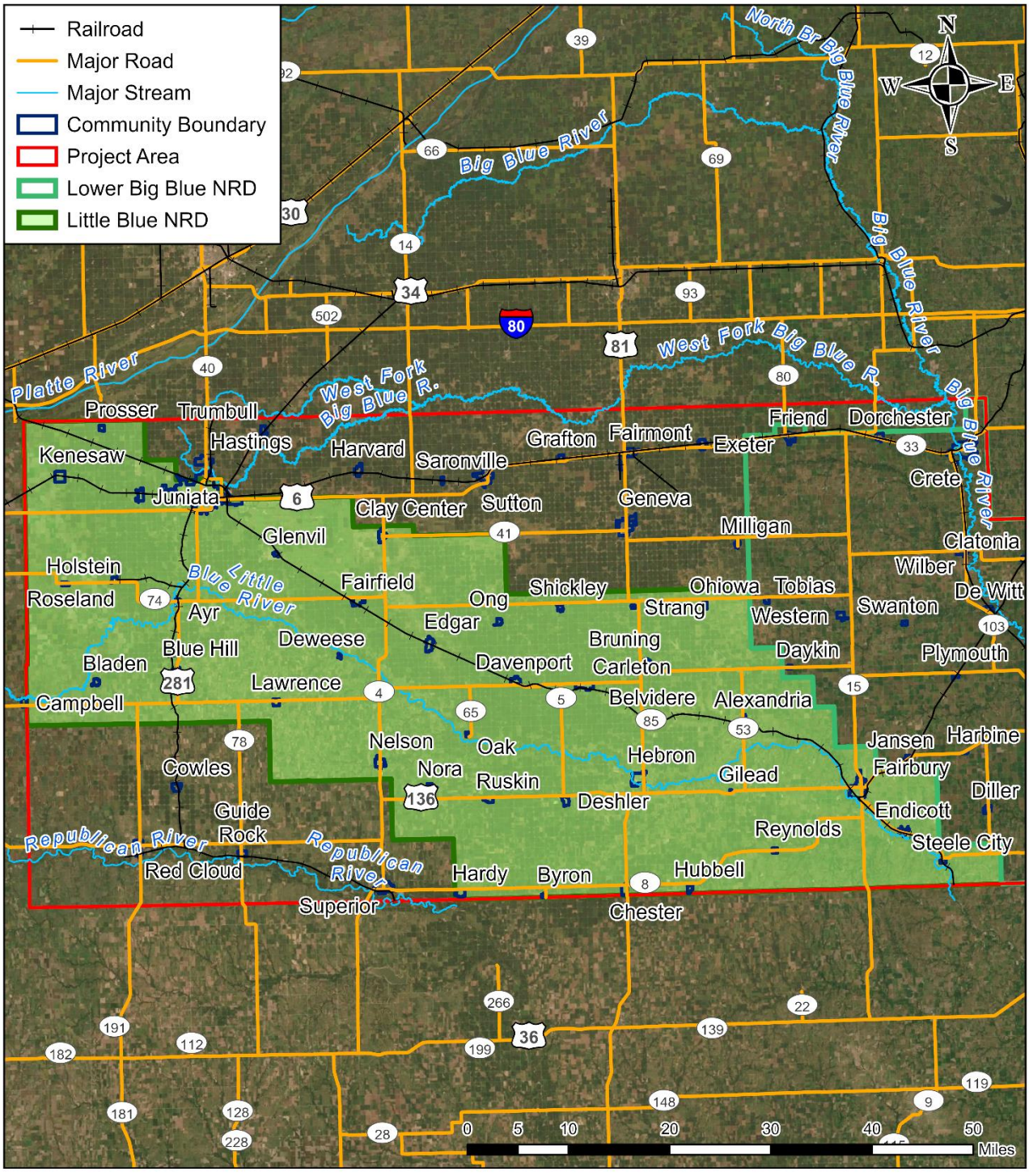
Demographics

It is estimated that the Little Blue NRD serves a population of approximatley 64,000 over 7 counties. However, the NRD does not collect information on age, or other demographics of their population, nor does the U.S. Census Bureau recorgnize the NRD. As a result, there is no additional population data for the NRD boundry. For information regarding population data, please refer the specific jurisdiction community profiles or to *Section Three: Community Profile*.

Table LBN.2: Little Blue NRD Estimated Population

County	2010 Population	2018 Population	Percent Change
Adams	31,364	31,583	0.7%
Clay	6,542	6,232	-5.0%
Fillmore	5,890	5,574	-5.7%
Jefferson	7,547	7,188	-5.0%
Nuckolls	4,500	4,275	-5.3%
Thayer	5,228	5,098	-2.6%
Webster	3,812	3,571	-6.7%
Total	**64,883**	**63,521**	

Figure LBN.1: Little Blue NRD Jurisdictional Boundary



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Little Blue NRD

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

Kansas

Transportation

Transportation routes of highest concerns include State Highway 4, which runs near the main office of the NRD. The NRD's major transportation corridors include US Highways 81 and 281, which run north to south, and US Highway 136 which runs east to west near the Kansas border. Highway 81 provides access to several recreational areas which the NRD maintains. Other major transportation routes in the district include Highway 6, Highway 74, and Highway 15.

Hazardous chemicals are commonly transported throughout the district by rail and highway. The main railroad which runs through the NRD is owned and operated by UPRR and runs northwest-southeast from Hastings to Fairbury, then continuing through Kansas to the south. Transported chemicals include Anhydrous Ammonia, fertilizers, propane, coal, oil, and others. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

Future Development Trends

Over the past five years, there has been no new construction on water projects or NRD facilities, although the NRD did remodel and add on to their main office building in Davenport. Only minor upgrades to recreational areas have occurred. In the next two years, a new water source and additional piping for water projects will be acquired and completed in the Fairbury area.

Parcel Improvements and Valuation

Please refer to the individual Community or County Profiles for information regarding parcel improvements, valuation, and discussion for specific jurisdictions across the planning area.

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

Chemical storage sites and transportation corridors are located throughout the NRD. In Davenport, which is where the NRD main office is located, there is a railroad which has trains running through every 10 minutes. This railroad traffics many chemicals, such as fertilizer and anhydrous ammonia. Further, the CPS company houses and delivers chemicals, which is located three blocks away from the main NRD offices. Any chemical spills that may have occurred have been minor and of no consequence. Complete lists of chemical storage sites in each jurisdiction and descriptions of chemical transportation corridors may be found in their respective community profiles.

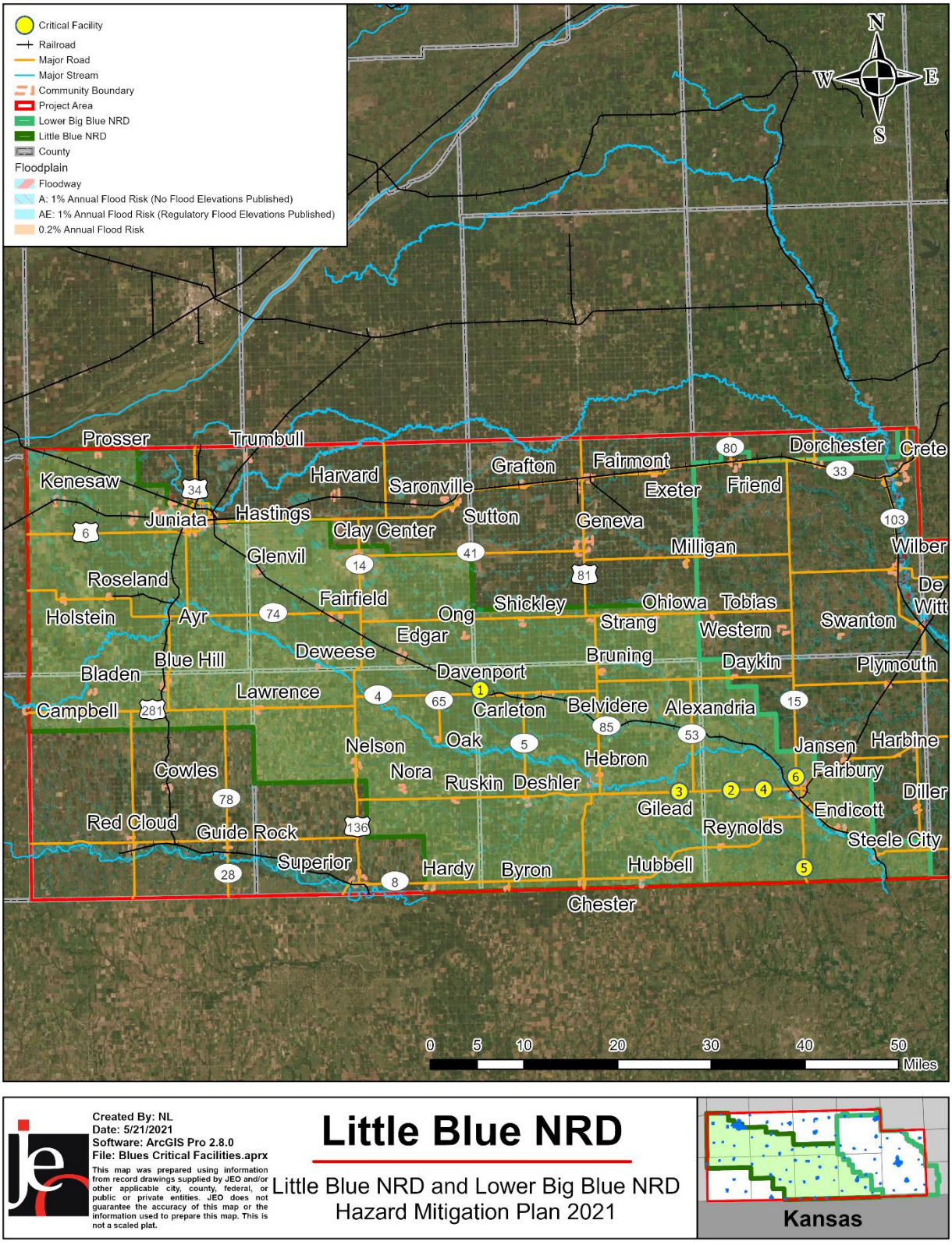
Critical Facilities

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 LBN.3: Little Blue NRD Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	NRD Office	N	N	N
2	Food, Water, Shelter	Gladstone Water Tower	N	N	N
3	Food, Water, Shelter	Gilead Water Tower	N	N	N
4	Food, Water, Shelter	West Pump Stations	N	N	N
5	Food, Water, Shelter	South Pump Station	N	N	N
6	Food, Water, Shelter	North Pump Station	N	N	N

Figure LBN.2: Little Blue NRD Critical Facilities



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Little Blue NRD

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*.

The following hazard risk assessment includes counts, property damages, and crop damages for the entirety of Adams, Clay, Fillmore, Jefferson, Nuckolls, Thayer, and Webster Counties.

Table LBN.4: Hazard Risk Assessment - LBNRD

Hazard		Count	Property Damage	Crop Damage[3]
Agricultural Disease	Animal Disease[2]	89	25,519 animals	N/A
	Plant Disease[3]	182	N/A	$2,027,468
Dam Failure[7]		12	$0	N/A
Drought[8]		493 out of 1,504 months	$70,000,000	$161,373,346
Earthquakes[11]		1	$0	$2,669
Extreme Heat[9]		Avg 6 days/yr	$400,000	$17,109,188
Flooding[1] *1 death*	Flash Flood	73	$20,387,000	$1,497,508
	Flood	53	$9,623,900	
Grass/Wildfire[4] *3 deaths, 10 injuries*		1,280	19,075 acres	$513,381
Hazardous Materials	Chemical Fixed Site Spills[5]	69	$0	N/A
	Chemical Transportation Spills[6]	45	$345,136	N/A
Levee Failure[12]		0	$0	N/A
Public Health Emergency[13]		~6,045 cases; 84 deaths	$0	N/A
Severe Thunderstorms[1] *1 death, 6 injuries*	Hail	1,296	$83,177,000	$89,358,210
	Heavy Rain	187	$1,097,000	$19,860,566
	Lightning	17	$20,215,000	N/A
	Thunderstorm Wind	609	$52,013,700	N/A
Severe Winter Storms[1] *1 injury*	Blizzard	66	$105,000	$9,760,200
	Extreme Cold/Wind Chill	17	$0	
	Heavy Snow	30	$1,500,000	
	Ice Storm	40	$11,964,000	
	Winter Storm	311	$66,889,000	
	Winter Weather	173	$95,000	
Terrorism[10]		2	$0	N/A

Tornadoes and High Winds[1]	High Winds *1 injury*	148	$2,234,580	$9,049,438
	Tornadoes *1 death, 9 injuries*	120	$66,889,000	$153,522
Totals		**4,820**	**$338,271,865**	**$310,705,496**

1 – NCEI, Jan 1996-April 2020
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 28 2021 (COVID only)

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 district's capabilities.

Agricultural Plant and Animal Disease

Agriculture is a major industry in the NRD, particularly with corn and soybean production. Crop diseases affecting this industry would have considerable impacts on the area's economy. Plant and animal diseases are common and occur regularly throughout the district, primarily impacted private producers. Disease outbreaks can significantly impact the economic stability of local communities which support the NRD financially through local taxes. As of 2020, no confirmed cases of the Emerald Ash Borer have occurred in the district; however, the potential for outbreaks exists in the next five years.

Dam Failure

The following table provides a list of high hazard and significant hazard dams located within the Little Blue NRD.

Table LBN.5: High Hazard and Significant Hazard Dams in LBNRD

NIDID	Dam Name	Location	Owner	Classification
NE00703	Big Sandy Creek 20-6-7	2 farmsteads	LBNRD	High
NE01551	Thirty-two Mile Creek H	Deweese	LBNRD	High
NE01576	Hebron Dam	Hebron	Thayer County	High
NE02164	Big Sandy Creek 35-5-2 (Bruning Dam)	Alexandria	LBNRD	Significant

Source: NeDNR

The LBNRD noted the following dams are of concern for the district. A description of each dam is provided below.

NE00703

Big Sandy Creek 20-6-7 Dam is on Big Sandy Creek in Clay County, Nebraska. Construction was completed in 1982. Its normal surface area is 251 acres. It is owned by Little Blue NRD, and the dam is located immediately upstream of the City of Hebron.

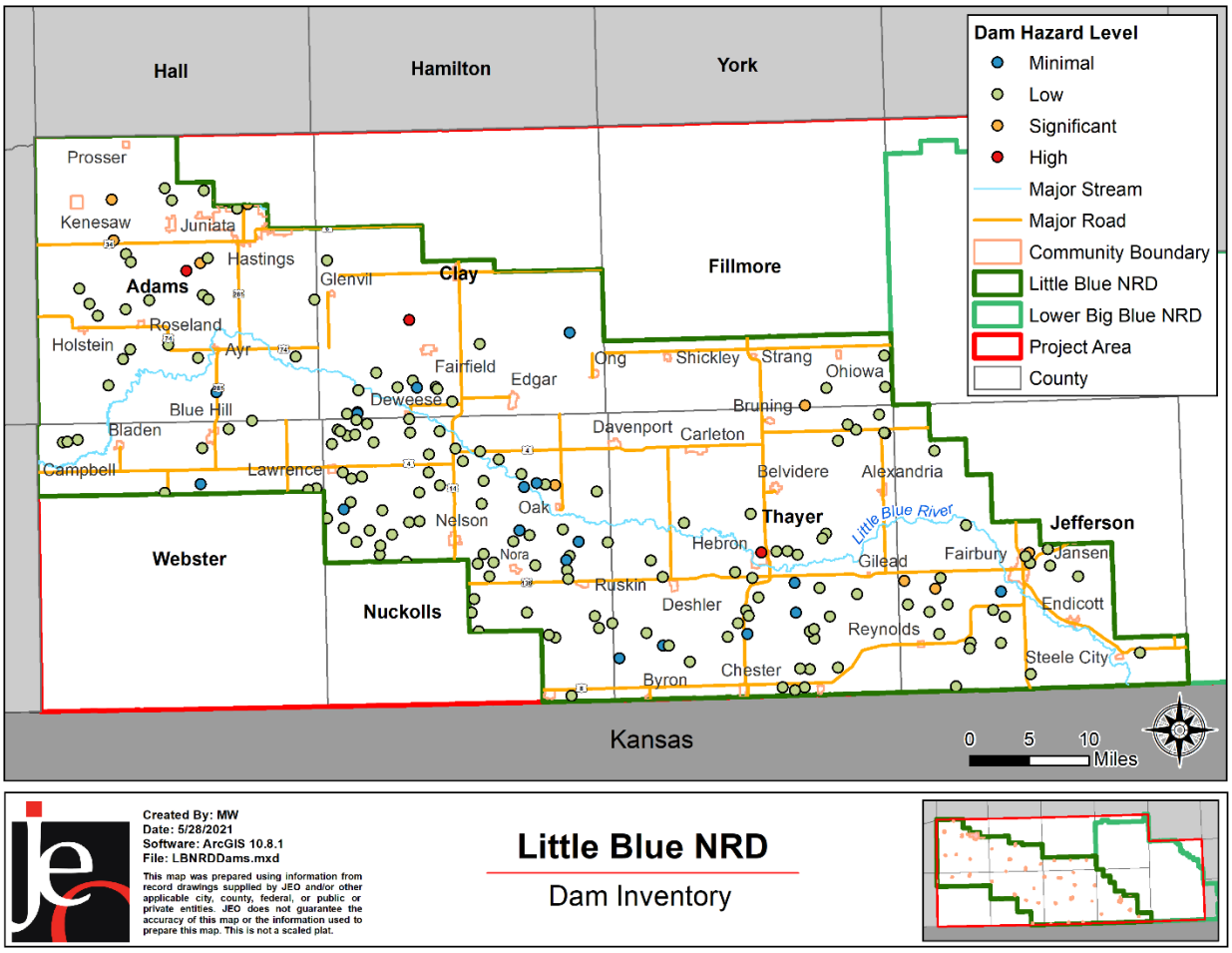
Big Sandy Creek 20-6-7 is of earthen construction. The core is homogeneous, earth. The foundation is soil. Its height is 45 feet with a length of 4,000 feet. Maximum discharge is 9,200 cubic feet per second. Its capacity is 10,700 acre feet. Normal storage is 1,610 acre feet. It drains an area of 42.2 square miles.

NE01576

Hebron Dam is on a tributary of Little Blue River in Thayer County, Nebraska and is used for flood control purposes. Construction was completed in 1976. Its normal surface area is 14 acres. It is owned by Thayer County.

Hebron Dam is of earthen construction. The core is homogeneous, earth. The foundation is soil. Though originally completed in 1976, the structure was modified in 1992. Its height is 46 feet with a length of 992 feet. Maximum discharge is 3,550 cubic feet per second. Its capacity is 601 acre feet. Normal storage is 79 acre feet. It drains an area of 1.1 square miles.

Figure LBN.3: Dams in Little Blue NRD Boundary



The NRD owns and operates recreational dams and watershed structures throughout the NRD. If dams were to fail, the most likely impacts would be to bridges, fences, roads, and crops. Road dams, such as the one near Hebron, could impact people and property if they were to fail. Primary concerns for dam failure events concern resident safety in inundation areas. No major dam failure events have occurred. The NRD noted dams have experienced high water levels due to heavy rain or snow events but no impacts to the structures or downstream areas have been reported. The NRD continues to inspect and maintain dams as required.

The NRD does provide a cost-share program (up to 60%) for landowners interested in constructing a Water Impoundment Dam to provide storage of surface water runoff. All dams must conform with NRCS technical requirements.

Drought and Extreme Heat

Drought and extreme heat conditions were identified as top concerns for the district. Drought conditions in the LBNRD have caused water concerns in some communities. For example, water demands during extreme hot and dry conditions have caused water shortages for customers of the Little Blue Public Water Projects and have prompted water use restrictions by the City of

Fairbury, the project's supplier. Both the city and water projects have developed plans for water use reductions to address such situations.

During extreme hot and dry conditions the water users in rural areas may overuse the NRD's water supply from Fairbury. The rural water project has come close several times in overuse and rationings. A new water source and additional piping is anticipated to be completed by 2022. Concerning dams, low water levels could affect fisheries and recreational attendance. Drought plays a part in overturning of lakes and fisheries dying. Groundwater level declines and the potential loss of domestic water supplies due to declines, are significant concerns for the NRD. The NRD has the water conservation plan of the Little Blue Public Water Project and an Integrated Management Plan which addresses some drought concerns and actions to take during water shortage periods. The LBNRD does not have a drought monitoring board, drought response plan or water conservation plan currently in place.

Flooding

Flooding can have significant impacts on NRD recreational and watershed structures, shelters, restrooms, playgrounds, and trails. Flash floods are more common throughout the district and flooding overall has caused more than $30 million in property damages in the planning area. The 2015 floods led to one fatality in Jefferson County. According to the NCEI, "*Extremely heavy rainfall of 6 to 10 inches fell across the northern basin of the Little Blue River. This caused the river to swell to record levels around the Fairbury area. The flooding resulted in the mandatory evacuations of areas of the western and southern parts of town, to the west of the Union Pacific Railroad tracks. The flooding of some residents along the river did result in one fatality of an elderly residence in her basement. The river crested at 25.42 feet or 6.92 feet above flood stage.*"

The rural water projects have also been impacted by past high-water events. The rural water line under the Little Blue River ruptured in 1993 and 2015 due to significant flood events. However, there were no impacts to NRD facilities or areas during the March 2019 flood event which significantly impacted most of the eastern side of the state. Primary concerns for flooding from the NRD pertain to resident safety and property damages. Currently the NRD is working to reduce flooding impacts around Kenesaw through a drainage project.

Levee Failure

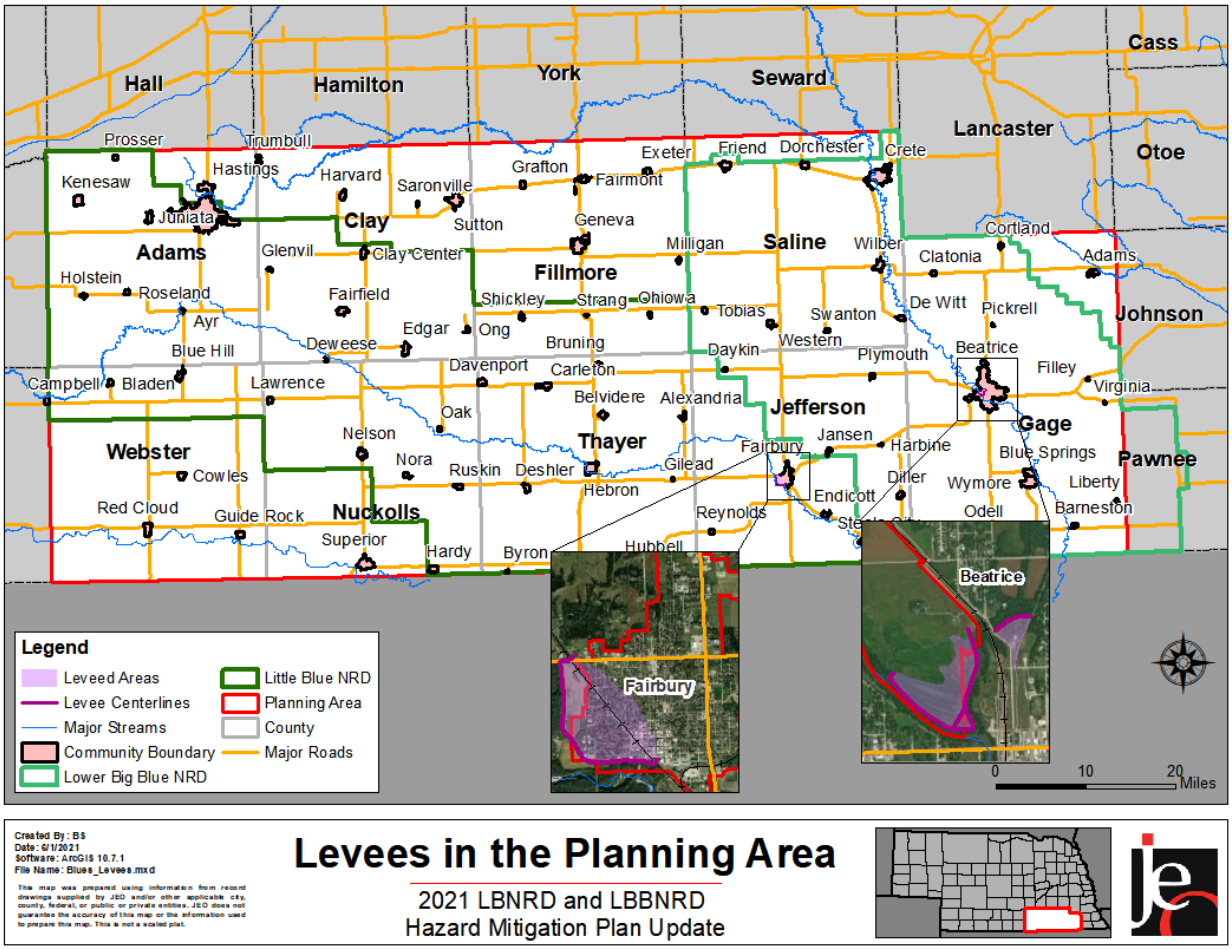
The following table identifies the levees that are located in the NRD.

Table LBN.6: Levees in LBNRD

Name	Location	Length	Population at Risk	Structures at Risk	Property Value at Risk	Sponsor	Construction
Fairbury, NE	Fairbury	1.75 mi	645	581	$90.8M	City of Fairbury	USACE

The Federal levee in Fairbury was built in 1971. The levee runs along the west and south edges of the city. The levee begins at US Highway 136 and ends at second and E streets. The NRD noted that if the levee were to fail, the Fairbury water supply could be harmed, which in turn could hamper the NRD's delivery to rural water customers. The following map provides the location of the leveed area in Fairbury. Areas shaded in blue are land areas that are protected by the levees and are therefore vulnerable if the levees were to fail.

Figure LBN.4: Levees in the Planning Area



During this mitigation plan update, LBNRD included the following mitigation actions to reduce the impacts of this hazard: public awareness and education, installing river flow gages, and levee/floodwall construction/improvements.

Severe Thunderstorms (includes Hail)

Severe thunderstorms include impacts from heavy rain, thunderstorm winds, lightning, and hail. The NRD is primarily concerned about this hazard in regards to potential damage to rural water projects, recreational areas, trees and crops, and the main office building which has seen minor damages in the past. Other severe storms, particularly from wind and hail, have caused damages to NRD structures and agricultural land in the surrounding communities. All computers in the main office use surge protection and have battery backups. Critical records for the NRD are currently not backed up at the Davenport office. The rural water project, which the NRD owns and operates in Jefferson County, has a generator on the south booster station. The NRD has expressed an interest in obtaining a generator for the main office in Davenport.

During this mitigation plan update, LBNRD included the following mitigation actions to reduce the impacts of this hazard: first aid training, public awareness and education, purchasing a backup generator, backing up project records, and installing surge protectors, if needed.

Severe Winter Storms

Severe winter storms include impacts from blizzards, extreme cold, ice storms, heavy snow, and winter storms. The NRD is primarily concerned with this hazard causing power outages to rural water projects and the main office building, resident safety, and livestock mortality. In the past, ice storms and blizzards have caused multiple power outages in the NRD.

During this mitigation plan update, LBNRD included the following mitigation actions to reduce the impacts of this hazard: purchasing a backup generator, public awareness and education, backing up project records, and improving emergency communications.

Tornadoes and High Winds

The NRD concerns include the office building and the shop building. Recreational Facilities, rural water projects, water towers, and other projects could experience significant damages from high winds and tornado events. There has been tree damages due to high winds in recreational areas and an EF2 tornado in 2003 impacted Thayer County causing one fatality and seven injuries.

Governance

The Little Blue NRD is governed locally by a 17 member Board of Directors. The NRD serves both incorporated and unincorporated areas within their jurisdiction and have the capability to financially and administratively assist villages, cities, and counties with mitigation actions, most commonly flood control and drainage improvements.

- General Manager
- Assistant Manager
- Programs Manager
- Project's Manager
- Operations Supervisor
- Office Administrator
- Administrative Assistant
- NRD Technician
- Water Resources Technician
- 5 Field Office Staff
- 2 Rural Water Employees
- Executive Committee
- Projects and Planning Committee
- Groundwater committee
- Research and Education Committee

Capabilities

The capability assessment consisted of a review of existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following paragraphs and table summarize the NRD's overall capability to implement mitigation projects.

The NRD has the authority to levy taxes to fund projects and programs that fulfill its statutory obligations. In addition, the NRD seeks out partnerships and alternative funding opportunities (e.g., grants) to accomplish NRD goals and implement mitigation strategies. The NRD also regularly engages in public education and information programs related to hazard mitigation in the area, and routinely works with other counties, cities, and villages within their jurisdictional boundaries. The Little Blue NRD partners with the Lower Big Blue NRD to produce its hazard mitigation plan.

To date, the NRD has not applied for HMA grants. In the future, the NRD indicates in would like to apply for backup generators and a safe room in Davenport, and alert sirens and possibly safe rooms for recreational areas.

Table LBN.7: Overall Capability

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

Plan Integration

Building safe and smart communities can be accomplished through effective Plan integration. Integrating hazard mitigation principles into other local planning mechanisms, such as plans addressing land use, transportation, climate change, sustainability, natural and cultural resource protection, watershed management, economic development and others can greatly increase an area's level of resiliency. While this HMP planning process involved interdepartmental coordination at the local level, this planning process also sought to analyze how existing planning mechanisms were presently integrated and make suggestions for further integration. The plans listed in the preceding table were analyzed using guidance from FEMA's 2014 Plan Integration Guide. The following paragraph presents a summary of the findings of this analysis.

The NRD has developed multiple plans in the past, which have influenced the mitigation priorities in the NRD. These include the following:

- Master Plan
- Voluntary Integrated Management Plan
- Long Range Implementation Plan
- Groundwater Rules and Regulations

The Master Plan 2019 includes overall goals, objectives, and projects for the NRD, which are consistent with the goals of the HMP. The NRD updates the Master Plan every 10 years, with the next updated scheduled for 2020. Goals in the plan include:

- Goal 1: Maintain and Protect Groundwater Resources and Public Water Supplies for Beneficial Uses,
- Goal 2: Continue Soil Conservation and Soil Health Efforts,

- Goal 3: Stormwater Management to Improve Water Courses and Drainageways to Reduce Flooding and Flood Damages,
- Goal 4: Promote Public Education for Conservation and Natural Resources Awareness,
- Goal 5: Promote Range Management, Vegetation Management, and Noxious/Invasive Weed Management Practices, and
- Goal 6: Enhance Recreation Opportunities, Recreation Areas, and Wildlife Habitat.

The LBNRD's Long Range Implementation Plan was updated in 2021 and covers fiscal years through 2025. The purpose of this plan is to "summarize the district's projects, programs, and activities planned for the next one to five years, and to highlight the financial and human resources required to meet those goals." It also serves as a tool for carrying out the NRD's Master Plan. Many of the projects and programs such as flood control, water quantity and quality, and public education are consistent with the goals and objectives of the HMP and the identified mitigation actions.

The NRD's Voluntary Integrated Management Plan was last updated in 2019. This plan will act as a "road map for jointly managing hydrologically connected groundwater and surface water in the district for the short term and the long term." It enables the NRD and NeDNR to monitor both ground and surface water and implement mitigation actions and controls to help protect water resources.

Groundwater Rules and Regulations were adopted by the NRD Board of Directors in 2014. These rules and regulations promote efficient groundwater use and protect fragile aquifer areas within the district. Requirements include flow meters on all high-capacity wells, certification of irrigated acres, irrigation operator certification, groundwater transfers, high-capacity well setbacks, domestic water well setbacks, and a well moratorium in identified areas.

The NRD implements principles outlined in these plans through the following programs:

Groundwater

The NRD maintains a robust groundwater conservation and management program. The NRD is actively involved with flow meter programs, groundwater quality monitoring, chemigation initiatives, wellhead protection, well head monitoring, irrigation scheduling, well abandonment, well permitting, and a basin water plan initiative.

Conservation

The NRD engages in a number of initiatives related to conservation. These include land treatment, water quality, watershed management, dam programs, community tree projects, flood control projects, urban park projects, and urban conservation.

Regarding watershed management, the Little Blue NRD has completed watershed development plans on several of the regional watersheds over the years with the primary purpose being for flood control. But with the construction of dams, other benefits have been recognized as well. These include grade and erosion control, groundwater recharge, livestock water, irrigation, fisheries and wildlife and private and public recreation opportunities. These multi-benefit projects capture storm water runoff and release it slowly into the streams and river, thus reducing road,

bridge and crop damages, reducing stream bank erosion and downstream sedimentation, and retaining valuable surface water supplies for beneficial uses.

Regarding the dam program, the purpose of this program is to participate in planning, design and financial assistance in the construction or rebuilding of dams located on private property. Dams constructed under this program may involve one or more landowners. Public benefits achieved include: flood control, sediment & erosion control, and water conservation. Other benefits include groundwater recharge, beneficial use of impounded water, fish and wildlife enhancement.

Trees/Wildlife

The NRD maintains a Tree Program, a NE Buffer Strip Program, a Drill Rental Program, and a Wetland Restoration Program.

With the Tree Program, the NRD meets with interested communities to develop comprehensive tree inventory assessments and help communities achieve strong tree maintenance programs. This is done in partnership with the Natural Resources Conservation Service.

The Nebraska Buffer Strip (NBSP) was created by the Nebraska Legislature in 1998. The program encourages landowners to establish buffer strips, specifically filter strips and riparian forest buffers, along vulnerable surface water resources. Buffer strips are an effective means of reducing sediments and other pollutants in runoff. Funding for the program is from a fee assessed on pesticides registered for sale in Nebraska, and is administered by the Nebraska Department of Agriculture (NDA), Nebraska's Natural Resources Districts, and the USDA Natural Resources Conservation Service (NRCS).

With the drill rental program, the Little Blue NRD provides three grass drills available for rent, two twelve foot drills and one 10 foot no-till drill.

With the wetland restoration program, the NRD fills unused or unwanted irrigation reuse pits that lie in priority wetland basin watersheds within the Rainwater Basin of Nebraska. Filling in these old reuse pits restores the watershed’s natural hydrology, allowing snow melt and storm-water runoff to flow unimpeded into the wetland basin, and in so doing, increases the wetland functions and improves wildlife habitat.

Recreation

The Little Blue NRD operates and maintains six Recreation Areas that are open to the public. These areas are at the Lone Star site, Liberty Cove, Crystal Lake, Buckley Creek, Prairie Lake, Roseland Lake, and Bruning Dam. The sites provide a wide array of recreational opportunities to the public, ranging from ice skating to golfing.

Education

The NRD engages in an array of education outreach projects. These include providing scholarships for graduated high school students interested in the natural resources field, hosting an annual, large scale water/earth jamboree (day camp) for 5th and 6th grade students, land/range judging for Future Farmers of America (FFA) events, hosting an education earth festival and Envirothon, assisting with the Nebraska Rainfall Assessment and Information Network (NeRain), and helping schools develop outdoor classrooms and outdoor class activities.

Other education activities include water conferences, and required operator training in water, fertilizer, and conservation.

Rural Water

Poor water quality and availability of water has been a problem in some areas of the NRD. A solution to this problem has been addressed by the construction of two public water supply systems in the southeastern section of the District, termed the Little Blue Public Water Project and the Little Blue Public Water Project South.

Little Blue Public Water Project

The Little Blue Public Water Project serves over 284 domestic, livestock, and business hookups in eastern Thayer County and west and central Jefferson Counties, including the villages of Gilead and Gladstone. Water is purchased from the City of Fairbury and piped through over 120 miles of buried lines to provide quality water service.

Low water availability and poor water quality were serious issues facing the residents of the Little Blue NRD's southeastern region. Area residents had been exposed to poor water quality problems such as high nitrates, sodium, iron and sulfur with extreme hardness and odor present. The need for a quality water source had become a major concern for the area. The Little Blue Public Water Project was completed in 1976 with the objective of supplying continuous, quality water service to residents of the area. The Project is financially self-supporting and operates almost exclusively (96%) on water sales income from the customers.

Little Blue Public Water Project South

The Little Blue Public Water Project South provides water service to over 145 customers, many of who are in the area south of Fairbury, NE as well as just across the border into central Kansas, in Washington County.

Water for this Project is also purchased from the City of Fairbury and distributed to provide quality water to residents of the area.

Construction of the Little Blue Public Water Project South was completed in 1999. Funding for the Project was made available through a grant from USDA Rural Development Water 2000 initiative in the amount of $1,067,900, a loan in the amount of $873,800, $116,550 in user fees, $30,000 from the existing Little Blue NRD Water Project and a Kansas Community Development Block Grant in the amount of $220,000. The project consists of 110 miles of buried pipeline, a 75,000 gallon water tower, and two booster stations.

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 general manager, assistant general manager, and the NRD Board. 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 social media, website updates, board meetings, and letters.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	SURGE PROTECTORS
DESCRIPTION	Purchase surge protectors, as needed. Presently, the Rural Water Projects have battery backup on surge protectors. Also all computers at the LBNRD office are surge protected.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
STATUS	Surge protectors were inspected and are up to date as of 2020. Systems are evaluated on an as needed basis.

Continued Mitigation Actions

MITIGATION ACTION	BACK-UP GENERATOR
DESCRIPTION	Purchase a mobile generator for Rural Water Projects
HAZARD(S)	All hazards
ESTIMATED COST	$30,000
FUNDING	Water Project Funds, HMGP, BRIC, FMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	LBNRD Board
STATUS	This project has not yet been started. All three pump stations need a backup generator.

MITIGATION ACTION	BACK-UP MUNICIPAL AND PROJECT RECORDS
DESCRIPTION	The lady that does our books lives in Fairbury, we would like to have the capability to back up every day to the NRD office.
HAZARD(S)	All hazards
ESTIMATED COST	$5,000
FUNDING	Water Project Fund, General Fund
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	LBNRD Board
STATUS	The district has a server at the Davenport office and are currently transitioning the system to be cloud based. The bookkeeper in Fairbury works solely on water projects. Documents can be scanned and uploaded to the cloud system once established.

MITIGATION ACTION	DAM/LEVEE/FLOODWALL CONSTRUCTION AND IMPROVEMENTS
DESCRIPTION	Work with Kenesaw with the new floodplain mapping, and alternatives to reduce flood impacts.
HAZARD(S)	Levee Failure, Flooding
ESTIMATED COST	$500,000-$700,000
FUNDING	General Funds, HMGP, PDM, FMA
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	LBNRD Board
STATUS	This project is currently in the planning stages.

MITIGATION ACTION	EMERGENCY COMMUNICATIONS
DESCRIPTION	Water Project Database for phone systems, notification system, to report conservation of water, water line breakdowns etc.
HAZARD(S)	All hazards
ESTIMATED COST	$15,000
FUNDING	Water Project Fund, HMGP, PDM, FMA
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	LBNRD Board
STATUS	An automated calling/notification system is needed. Currently the district shares information via radio, social media, phone calls, or door-to-door.

MITIGATION ACTION	FIRST AID TRAINING
DESCRIPTION	This would ensure that every five years the NRD staff becomes trained in first aid training.
HAZARD(S)	All hazards
ESTIMATED COST	$500
FUNDING	General Funds, Public Health Department
TIMELINE	1 year (pending COVID-19 restrictions)
PRIORITY	Medium
LEAD AGENCY	LBNRD Board
STATUS	The district is starting a new program to train NRD staff for first aid/safety/CPR.

MITIGATION ACTION	FLOODPLAIN MAPPING/REMAPPING
DESCRIPTION	Provide floodplain mapping for communities throughout the NRD. Conduct
HAZARD(S)	Flooding
ESTIMATED COST	$750,000
FUNDING	General Funds, HMGP, PDM, FMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	LBNRD Board
STATUS	The NRD shares information about the DNR interactive floodplain map with communities. The NRD is currently working with NeDNR to update floodplain maps in the district.

MITIGATION ACTION	FLOODPLAIN EARLY ALERT SYSTEM
DESCRIPTION	Install river flow gages to monitor flood issues
HAZARD(S)	Flooding
ESTIMATED COST	$50,000
FUNDING	General Funds, HMGP, PDM, FMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	LBNRD Board
STATUS	New flood gages have been installed on the Little Blue River at Deshler, Deweese, and Fairbury and on the Big Sandy Creek at Alexandria. Additional gages are needed on other major waterways in the district.

MITIGATION ACTION	SAFE ROOM/STORM SHELTERS
DESCRIPTION	Install a bunker type facility under the garage in the rear of the building.
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$50,000
FUNDING	General Funds, HMGP, PDM
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	NRD funding Manager
STATUS	The NRD will evaluate a safe room to include in a future office remodel.

MITIGATION ACTION	WATER CONSERVATION AWARENESS PROGRAMS
DESCRIPTION	Develop, update, and implement the water conservation awareness programs
HAZARD(S)	Drought and Extreme Heat
ESTIMATED COST	$1,000+
FUNDING	General Funds, USDA, HMGP, PDM
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	LBNRD Board
STATUS	This project has not yet been started.

Removed Mitigation Actions

MITIGATION ACTION	PUBLIC AWARENESS/EDUCATION
DESCRIPTION	The LBNRD provides a consumer confidence report every year to all project users. They also survey all customers with this campaign.
HAZARD(S)	All hazards
REASON FOR REMOVAL	This program has been discontinued.

MITIGATION ACTION	PUMP STATION FOR THE EMERGENCY ELECTRICAL POWER DISCONNECT (NORTH STATION)
DESCRIPTION	Install a pump station to reduce the failure of the emergency electrical power disconnect at the north station.
HAZARD(S)	All hazards
REASON FOR REMOVAL	This project is no longer needed as updates are being made to the Rural Water project.

MITIGATION ACTION	DEVELOP A DROUGHT MANAGEMENT PLAN
DESCRIPTION	Currently, the rural water projects are developing a 3 stage plan based on water pumps.
HAZARD(S)	Drought and Extreme Heat
REASON FOR REMOVAL	This project was identified as no longer a priority for the district has planned water system improvements will address local needs.

DISTRICT PROFILE

LOWER BIG BLUE NATURAL RESOURCES DISTRICT

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

Local Planning Team

Table LBB.1: Lower Big Blue NRD Local Planning Team

Name	Title	Jurisdiction
Dave Clabaugh	General Manager	Lower Big Blue NRD
J. Scott Sobotka	Assistant General Manager	Lower Big Blue NRD

Location and Geography

The Lower Big Blue NRD is located in southeast Nebraska and includes parts of Saline, Jefferson, Gage, and Pawnee counties. The office headquarters are located in Beatrice, NE and the NRD is broken down into six sub-districts. The total area of the Lower Big Blue NRD is approximately 1,052,160 acres. The major waterway in the area is the Big Blue River, which contains numerous tributaries throughout the planning area. Important tributaries include Bear, Big Indian, Cedar, Clatonia, Cub, Little Indian, Mission, Mud, Pierce, Plum, Swan, Turkey, Walnut, Wilber, and Wolf-Wildcat Creeks.

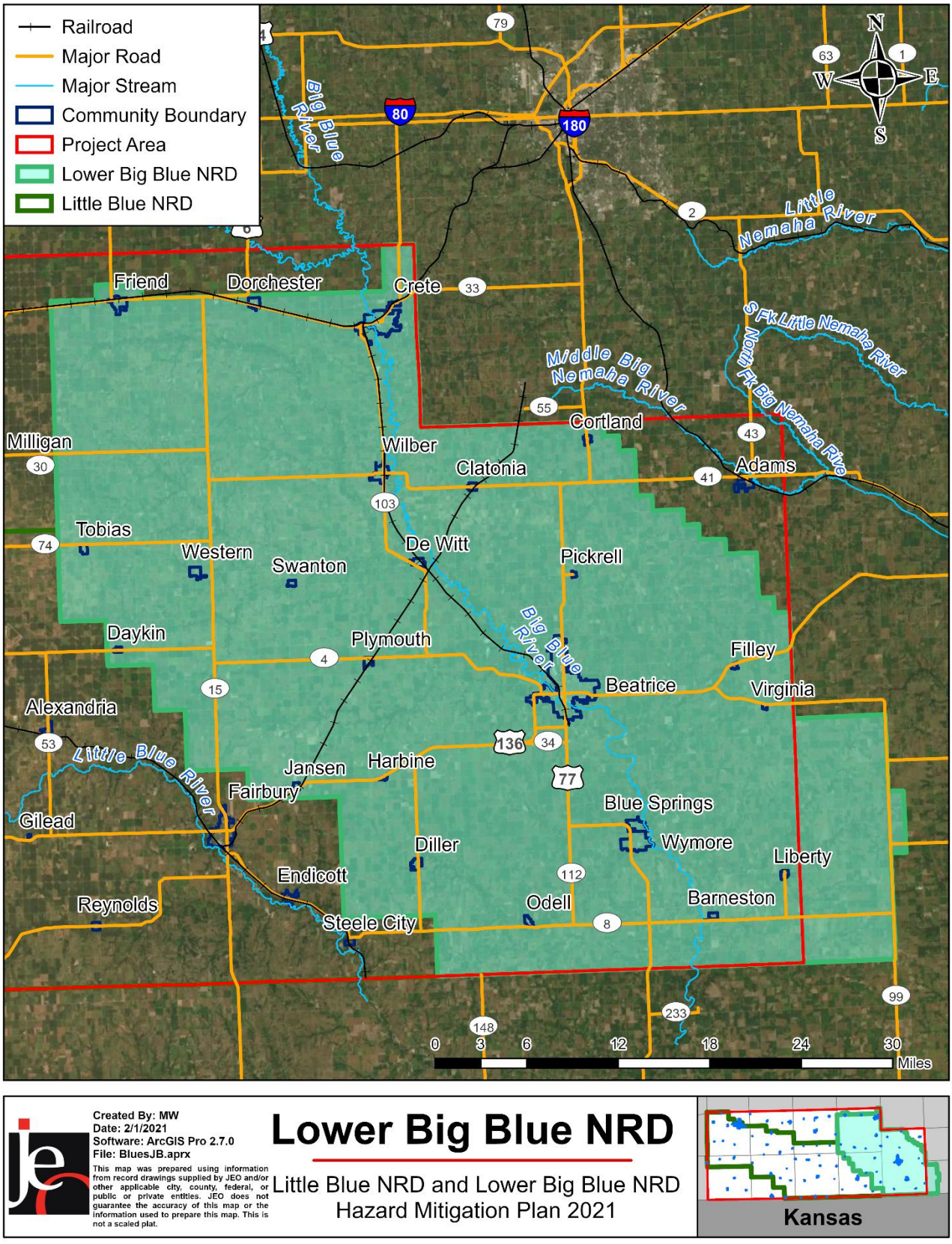
Demographics

It is estimated that the Lower Big Blue NRD serves a population of approximately 38,000 over four counties. However, the NRD does not collect information on age, or other demographics of their population, nor does the U.S. Census Bureau recorgnize the NRD. As a result, there is no additional population data for the NRD boundry. For information regarding population data, please refer the specific jurisdiction community profiles or to *Section Three: Community Profile*.

Table LBB.2: Lower Big Blue NRD Estimated Population

County	2010 Population	2018 Population	Percent Change
Gage	22,591	21,595	-4.6%
Jefferson	7,708	7,188	-7.2%
Pawnee	2,767	2,676	-3.4%
Saline	14,098	14,288	1.3%
Total	**47,164**	**45,747**	

Figure LBB.1: Lower Big Blue NRD Jurisdictional Boundary



Transportation

The NRD's major transportation corridors include US Highway 77 and State Highways 15, 99,103, and 112 which run north to south, and US Highway 136 and State Highways 4, 6, 8, 33, 41, and 74 which run east to west. The main railroads which run through the NRD are owned and operated by UPPR and BNSF. The UPPR line enters the NRD from the northwest before reaching Fairbury. At Fairbury the line diverges, with one route continuing to Kansas via Steele City, with the other route continuing northwest towards Lincoln. The BNSF Line runs northwest-southeast from Beatrice to Crete. At Crete, the line diverges westward towards Hastings, and northwestward toward Lincoln.

The planning team listed State Highway 6, 33, 74, 99, 103, and 112 as other transportation routes with high traffic in the district. Farm chemicals are regularly transported on US Highway 77 and 136. There are two production plants in the area that anhydrous ammonia is frequently transported to via truck on southwest 89th Road, west Juniper Road, west Hickory Road, and State Highway 4. The local planning team indicated that there have been no large crashes or chemical spills on any local transportation routes. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

Future Development Trends

In the past five years, the NRD has constructed six Lower Turkey Creek Flood Control Sites (4, 8, 15, 11, 9, 3, and 2A) in Saline and Fillmore Counties. The NRD has also constructed a rural water project facility in southern Gage County. Turkey Creek site 9 was dedicated as Green Top WMA in 2019. In the next five years, the NRD indicated that its main focus will be on the maintenance and rehabilitation of existing structures. Maintenance includes rehabilitation projects, slip lining of existing tubes which have begun to fail and recreational development where applicable. The NRD has also secured funding for a watershed improvement study for the Little Indian watershed in Northern Gage County. The rehabilitation of Little Indian 15-A and Wilber Dam was completed in 2020. The rehabilitation of Cub Creek 12-A is a joint project with the City of Wilber and will be completed in 2021. The project will rehab the existing high hazard structure and provide a public use area for residents. Additionally, the districts monitoring well program is in its fourth year and has 45 dedicated wells.

Parcel Improvements and Valuation

Please refer to the individual Community or County Profiles for information regarding parcel improvements, valuation, and discussion for specific jurisdictions across the planning area.

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

Chemical storage sites and transportation corridors are located throughout the NRD. Any chemical spills that may have occurred have been minor and of no consequence. Complete lists of chemical storage sites in each jurisdiction and descriptions of chemical transportation corridors may be found in their respective community profiles.

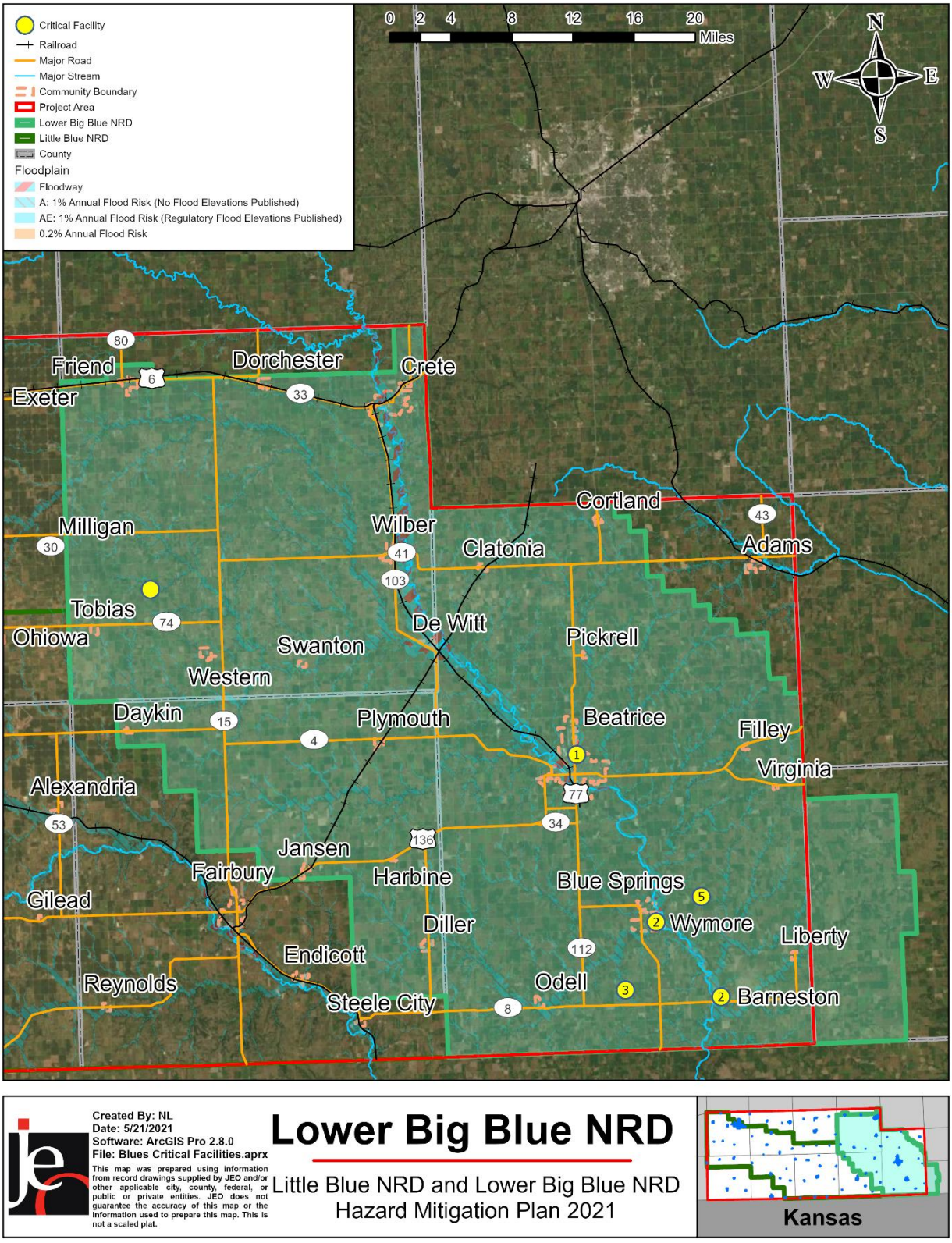
Critical Facilities

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 LBB.3: Lower Big Blue NRD Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	NRD Office	N	N	N
2	Food, Water, and Shelter	Pump House	Y	Y	N
3	Food, Water, and Shelter	Tornado Shelter – Big Indian	Y	N	N
4	Food, Water, and Shelter	Tornado Shelter - Willerd/Meyer	Y	N	N
5	Food, Water, and Shelter	Water Tower	Y	Y	N

Figure LBB.2: Lower Big Blue NRD Critical Facilities



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*.

The following hazard risk assessment includes counts, property damages, and crop damages for the entirety of Saline, Jefferson, and Gage Counties. The NRD boundary extends into Pawnee County and includes the Village of Burchard. Discreet events (non-zonal) are also included in the following hazard risk assessment.

Table LBB.4: Hazard Risk Assessment - LBBNRD

Hazard		Count	Property Damage	Crop Damage[3]
Agricultural Disease	Animal Disease[2]	61	26,520 animals	N/A
	Plant Disease[3]	115	N/A	$1,374,355
Dam Failure[7]		9	$0	N/A
Drought[8]		493 out of 1,504 months	$0	$114,758,232
Earthquakes[11]		2	$0	$3,657
Extreme Heat[9]		Avg 6 days/yr	$0	$6,188,251
Flooding[1] *1 death*	Flash Flood	61	$1,536,000	$1,278,153
	Flood	87	$112,795,900	
Grass/Wildfire[4] *5 injuries*		1,014	25,715 acres	$134,047
Hazardous Materials	Chemical Fixed Site Spills[5]	302	$0	N/A
	Chemical Transportation Spills[6]	35	$1,379,433	N/A
Levee Failure[12]		0	$0	N/A
Public Health Emergency[13]		~4,861 cases; 23 deaths	$0	N/A
Severe Thunderstorms[1] *1 death, 4 injuries*	Hail	650	$471,000	$16,642,222
	Heavy Rain	10	$0	$11,862,607
	Lightning	11	$124,000	N/A
	Thunderstorm Wind	307	$3,498,200	N/A
Severe Winter Storms[1]	Blizzard	18	$0	$3,520,349
	Extreme Cold/Wind Chill	12	$0	
	Heavy Snow	18	$5,500,000	
	Ice Storm	17	$500,000	
	Winter Storm	98	$2,000	

	Winter Weather	26	$0	
Terrorism[10]		0	$0	N/A
Tornadoes and High Winds[1]	High Winds *1 injury*	51	$50,000	$1,873,755
	Tornadoes *26 injuries*	44	$61,135,000	$252,383
Totals		**2,948**	**$186,991,533**	**$157,888,011**

1 – NCEI, Jan 1996-April 2020
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 28 2021 (COVID only)

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 district's capabilities.

Dam Failure

The NRD maintains approximately 270 dams, the majority of which are agricultural and protect small areas of agricultural land. There are many NRD owned dams that are at or nearing their design lifespan and will need to be addressed in the near future. Most of this will involve dam rehabilitation. The NRD has prioritized dams outside of the Swan and Turkey Creek areas that need rehabilitation. The NRD's goal is to inspect 100% of these dams in order to prioritize which need to be rehabilitated. The NRD has indicated the inserting liners, replacing rusted out tubes at the dams, and the ongoing application of rip rap to protect against erosion, are high concerns and priorities. Further, the NRD also identified mitigation projects during this plan update to develop a dam failure emergency action and evacuation plan, and to conduct dam failure exercises.

There are 8 high hazard dams within NRD boundaries. The following table provides a list of the dams located in Lower Big Blue NRD.

Table LBB.5: High Hazard and Significant Hazard Dams in LBBNRD

NIDID	Dam Name	Location	Owner	Classification
NE00489	Little Indian Creek 15-A	US Hwy 77 (4-lane divided)	LBBNRD	High
NE00775	Plum Creek 4-F	Pawnee Rod & Gun Club	LBBNRD	High
NE01000	Mud Creek 2-A	Farmstead/us hwy 136 (2-lane)	LBBNRD	High

NIDID	Dam Name	Location	Owner	Classification
NE01210	Big Indian Creek 14-B	Farmstead	LBBNRD	High
NE01519	Wilber Dam 1	Wilber	City of Wilber	High
NE02248	Swan Creek 20	Farmstead	LBBNRD	High
NE04779	Flowing Springs Dam	Beatrice	Flowing Springs Dev. LLC	High
NE07975	Wilber Watershed Dam	Wilber	LBBNRD	High
NE00126	Buckley Creek 3-C	Endicott	LBNRD	Significant
NE00132	Cub Creek 12-A	Beatrice	LBBNRD	Significant
NE00922	Indian Creek 1-E	Pickrell	LBBNRD	Significant
NE00933	Indian Creek 3-C	Pickrell	LBBNRD	Significant
NE00935	Indian Creek 3-D	Pickrell	LBBNRD	Significant
NE00937	Mud Creek 4-E	Blue springs	LBBNRD	Significant
NE00950	Big Indian Creek 12-A	Wymore	LBBNRD	Significant
NE00970	Big Indian Creek 15-B	Odell	LBBNRD	Significant
NE00979	Mud Creek 4-J	Blue springs	LBBNRD	Significant
NE00981	Plum Creek 2-E	Oketo KS	LBBNRD	Significant
NE01001	Bear - Pierce - Cedar 9-D	Blue springs	LBBNRD	Significant
NE01005	Mud Creek 4-8	Blue springs	LBBNRD	Significant
NE01156	Indian Creek 3-18	Pickrell	LBBNRD	Significant
NE01174	Cub Creek 17-A	Beatrice	LBBNRD	Significant
NE01175	Cub Creek 17-B	Beatrice	LBBNRD	Significant
NE01501	Lothrop Dam	Crete	Lothrop family trust	Significant
NE01525	Big Indian Creek 16-C	Odell	LBBNRD	Significant
NE01539	Bear - Pierce - Cedar 5-A	Beatrice	LBBNRD	Significant
NE01563	Clatonia Creek 3-A	Clatonia	LBBNRD	Significant
NE01774	Walnut Creek 1	Crete	LBBNRD	Significant
NE01775	Walnut Creek 2	Crete	LBBNRD	Significant
NE02383	Swan Creek 72	Swanton	LBBNRD	Significant
NE02420	Swan Creek 68	Swanton	LBBNRD	Significant
NE02450	Swan Creek 31	Dewitt	LBBNRD	Significant
NE02498	Swan Creek 9	Swanton	LBBNRD	Significant
NE02851	Parde Dam	Beatrice	Carol J & Larry Vetrovsky	Significant
NE03072	Turkey Creek 4	Pleasant hill	LBBNRD	Significant
NE03307	Turkey Creek 15	Dewitt	LBBNRD	Significant
NE05079	Turkey Creek 2-A	None	LBBNRD	Significant
NE09558	Lineweber Dam	Beatrice	Wayne Lineweber	Significant
NE09970	Turkey Creek 11	Pleasant hill	LBBNRD	Significant

Source: NeDNR

The LBBNRD noted the following dams are of concern for the district. A description of each dam is provided below.

NE02248

Swan Creek 20 Dam is on South Fork Swan Creek in Saline County, Nebraska and is used for flood control purposes. Construction was completed in 1987. At normal levels it has a surface area of 54 acres. It is owned by Lower Big Blue NRD.

Swan Creek 20 is of earthen construction. The core is homogeneous, earth. The foundation is soil. Its height is 55 feet with a length of 1,760 feet. Maximum discharge is 18,800 cubic feet per second. Its capacity is 3,978 acre feet. Normal storage is 341 acre feet. It drains an area of 7.7 square miles.

NE01519

Wilber Dam No 1 Dam is on a tributary of Big Blue River in Saline County, Nebraska and is used for flood control purposes. Construction was completed in 1975. It has a normal surface area of 5 acres.

Wilber Dam No 1 is of earthen construction. The core is homogeneous, earth. The foundation is soil. Its height is 22 feet with a length of 542 feet. Maximum discharge is 875 cubic feet per second. Its capacity is 127 acre feet. Normal storage is 14 acre feet. It drains an area of 0.4 square miles. The local planning team indicated that maintenance of Wilber Dam No 1 is the responsibility of the City of Wilber, who leases the property for a public park.

NE00489

Indian Creek 15-A Dam is on Possum Creek in Gage County, Nebraska and is used for flood control purposes. Construction was completed in 1959. Its normal surface area is 12 acres. It is owned by Lower Big Blue NRD.

Indian Creek 15-A is of earthen construction. The core is assumed to be homogeneous, earth. The foundation is assumed to be soil. Its height is 30 feet with a length of 1,030 feet. Maximum discharge is 500 cubic feet per second. Its capacity is 511 acre feet. Normal storage is 18 acre feet. It drains an area of 1.5 square miles.

NE00775

Plum Creek 4-F Dam is on a tributary of Plum Creek in Pawnee County, Nebraska and is used for flood control purposes. Construction was completed in 1968. Its normal surface area is 55 acres. It is owned by Lower Big Blue NRD.

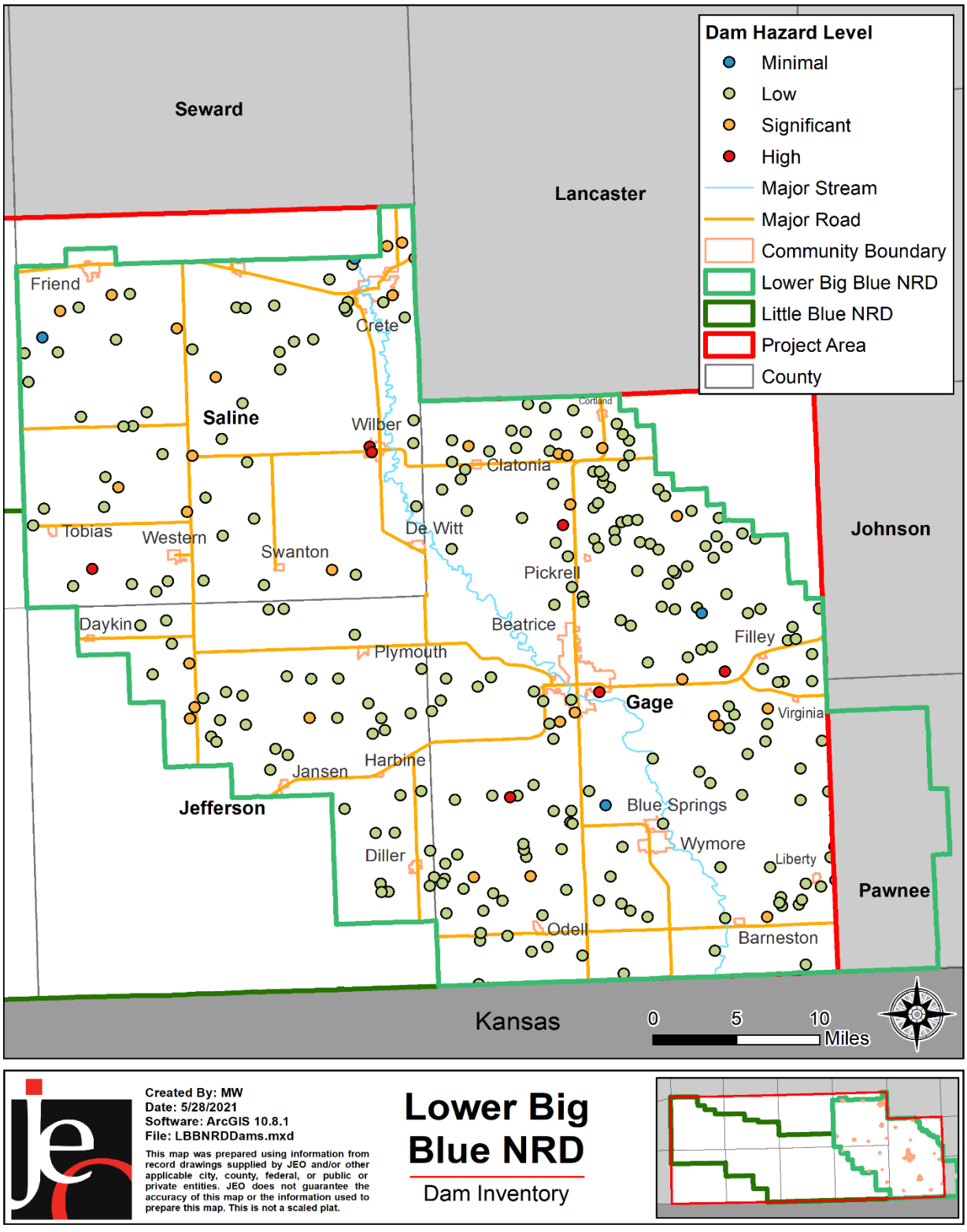
Plum Creek 4-F is of earthen construction. The core is homogeneous, earth. The foundation is soil. Its height is 50 feet with a length of 1,030 feet. Maximum discharge is 1,675 cubic feet per second. Its capacity is 2,185 acre feet. Normal storage is 457 acre feet. It drains an area of 6.1 square miles.

The NRD did express concern about terrorism as it related to dam safety. The NRD is currently putting up fences around its rural water equipment to prevent tampering as well. Locks and security cameras will also be installed. The NRD also presently has a backup generator to maintain water distribution to certain locations if needed.

Significant flooding in 2015 caused millions in property damage in the jurisdiction. The Village of DeWitt was inundated with flooding from Turkey Creek and the Big Blue River. During the March 2019 flooding event, heavy rains led to large runoff events and increased maintenance needs. The NRD will continue maintenance and rehabilitation of aging flood control structures in addition to the Little Indian Watershed Flood and Prevention Feasibility study to improve their response to

this hazard. In the future, the NRD plans to use watershed real-time stream gauges and cameras and aerial video from drones.

Figure LBB.3: Dams in Lower Big Blue NRD



Drought and Extreme Heat

Drought and extreme heat conditions were identified as top concerns for the district. The NRD indicated some concern about dropping groundwater levels throughout the NRD boundaries. The NRD is primarily concerned about these impacts on farmers and the agricultural sector. Groundwater irrigators and domestic well water use caused many water over use problems during the 2011-2012 drought in the planning area. During the 2012 drought water levels dropped and increased pressure on water reserves in the aquifer. Additionally, urban, domestic and agricultural supplies in some marginal areas were limited.

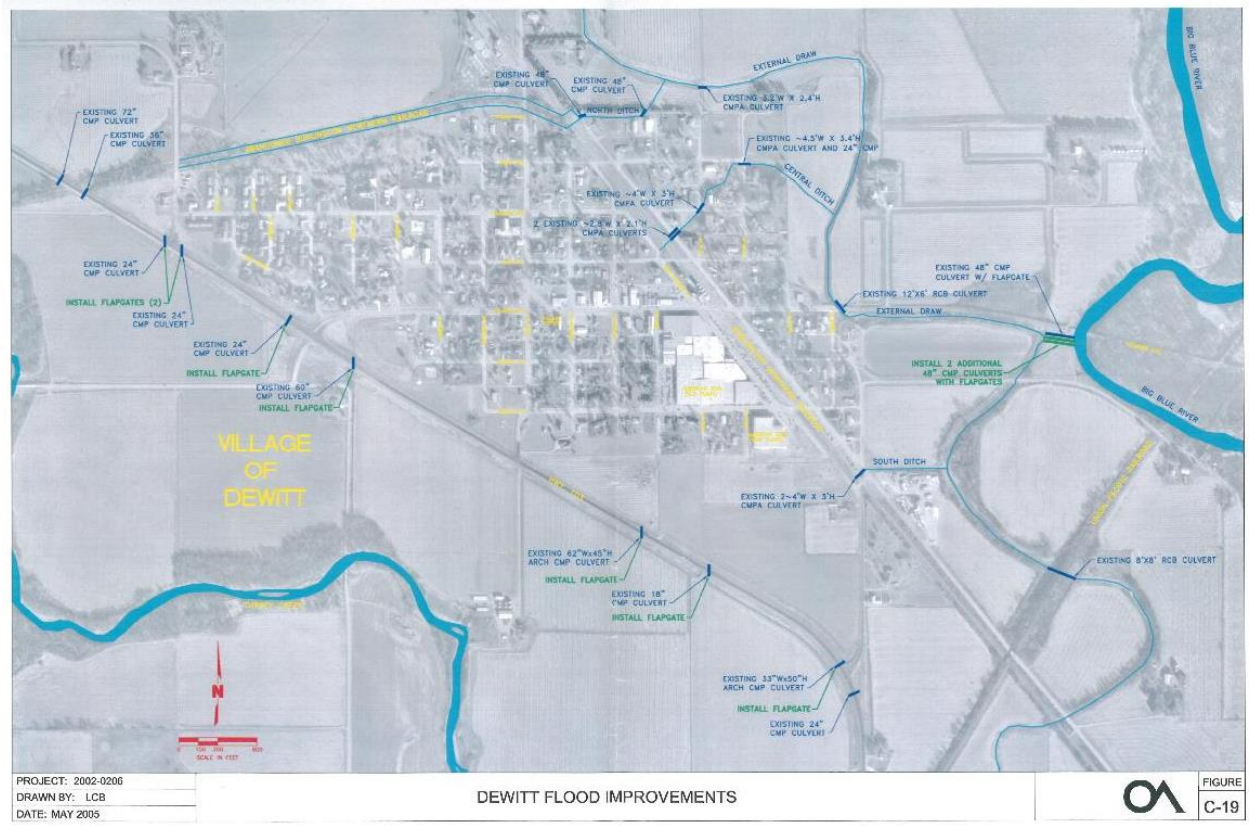
The NRD is proactively addressing this issue now. The NRD has redeveloped their groundwater regulations during 2012 to address drought concerns. Other actions undertaken by the NRD to address drought concerns include establishing a scoring system for which new wells would be constructed, developing well spacing requirements, clarifying rules and regulations for restricted water use, developing a moratorium on new irrigation well digging, and permit regulations for new wells.

The NRD has begun work on a Voluntary Integrated Management Plan (VIMP) which helps address drought concerns across the district. Other planned projects include Watershed and Flood Prevention Operations (WFPO), real time monitoring of wells, National Water Quality Initiative (NWQI), and an agricultural flow meter cost share. In the future, the NRD will continue to develop the districts monitoring well network and increase use of flow meters.

Flooding

Flooding has caused significant damage across communities in the NRD historically, however none of the NRD facilities have sustained notable damage. The NRD is actively looking at flood control projects, and has indicated it will likely start a small dam project in the next five years and a flood mitigation project in DeWitt. Other identified mitigation actions to address flooding include installing river flow gages, bank stabilization, stream augmentation, and various public education and awareness initiatives. Significant flooding in 2015 caused millions in property damage in the jurisdiction. The Village of DeWitt was inundated with flooding from Turkey Creek and the Big Blue River. During the March 2019 flooding event, heavy rains led to large runoff events and increased maintenance needs. Since the last plan, the NRD has worked on a VIMP and WFPO and assisted in several flood reduction projects in DeWitt. New flap gates on highway culverts and upgraded 48” culverts east of town.

Figure LBB.4: DeWitt Flood Improvement Projects



Severe Thunderstorms

The NRD's main concern is excessive rainfall stemming from severe thunderstorm events. Past storms have caused lightning to strike the water tower, interrupting communication between the water tower and the pump house. In the past, rainfall has washed out trenches and caused safety concerns at the NRD's ten recreation areas. The only sheltering options at these facilities are the NRD's concrete bathroom units. Since the last plan update, storm shelters have been constructed at Big Indian, Swan 5, and Willerd/Meyer recreation areas. The construction of more concrete restrooms and storm shelters are planned for existing public use areas.

Governance

The Lower Big Blue NRD is governed locally by a 13 member Board of Directors. The NRD serves both incorporated and unincorporated areas within their jurisdiction and have the capability to financially and administratively assist villages, cities, and counties with mitigation actions, most commonly flood control and drainage improvements.

- Manager
- Assistant Manager
- Operations Supervisor
- Water Resources Specialist
- Water Resources Technician
- Technical Specialist
- Administrative Secretary

- Administrative Assistant
- Saline County NRCS Clerk
- Gage County NRCS Clerk

Capabilities

The capability assessment consisted of a review of existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following paragraphs and table summarize the NRD's overall capability to implement mitigation projects.

The NRD has the authority to levy taxes to fund projects and programs that fulfill its statutory obligations. In addition, the NRD seeks out partnerships and alternative funding opportunities (e.g., grants) to accomplish NRD goals and implement mitigation strategies. The NRD also regularly engages in public education and information programs related to hazard mitigation in the area, and routinely works with other counties, cities, and villages within their jurisdictional boundaries. The Lower Big Blue NRD partners with the Little Blue NRD to produce its hazard mitigation plan.

Table LBB.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	Limited

Plan Integration

Building safe and smart communities can be accomplished through effective Plan integration. Integrating hazard mitigation principles into other local planning mechanisms, such as plans addressing land use, transportation, climate change, sustainability, natural and cultural resource protection, watershed management, economic development and others can greatly increase an area's level of resiliency. While this HMP planning process involved interdepartmental coordination at the local level, this planning process also sought to analyze how existing planning mechanisms were presently integrated and make suggestions for further integration. The NRD engages in a number of initiatives related to hazard mitigation, including the following:

- Recreation and Wildlife
  - The NRD maintains 10 recreation areas and promotes responsible wildlife management. The NRD did express interest in improving safety and sheltering options at these locations.
- Water Programs
  - The NRD has a variety of well permitting programs and water monitoring programs. The NRD actively engages in drought mitigation through these mechanisms.
- Groundwater Managements Areas
  - The NRD has established a groundwater management area. The purpose of this is to minimize the impact of agricultural chemicals on groundwater by encouraging,

and in some cases requiring, the use of wise management practices. This can contribute to long term drought and agricultural risk mitigation.

- Cost Share Programs
    - The NRD has cost share programs related to well decommissioning, irrigation management, water quality observation, and soil and water conservation. The NRD addresses concerns related to drought through these mechanisms as well.
- Tree Programs
    - The NRD promotes responsible tree stewardship by providing communities with native tree species. This helps promote a healthy tree canopy in communities, which can reduce the amount of debris during severe weather events, and can improve concerns related to extreme heat and drought.
- Flood Control
    - The NRD is very active and has a number of flood control projects. The NRDs first large scale flood control project was the Little Indian Pilot Project, authorized in 1953 and completed in 1963. Mud Creed, Big Indian, Plum, Cub, Bear-Pierce-Cedar, Clatonia, and Mission were authorized between 1958 and 1969, and all were completed by 1980. Walnut Creek was approved for state funding in 1976 and completed in 1982. Swan and Wolf-Wildcat were authorized in 1983. The final structures were built in 1998. In the past five years, the NRD has constructed six Lower Turkey Creek Flood Control Sites.
    - In total there are around 187 flood control structures and 73 grade stabilization structures have been built in the above 11 flood control P.L. 566 Projects. These structures control runoff from 356,952 acres or 34% of the District.
    - The average annual benefit for these 11 flood control projects is estimated at $1,415,000.
    - The cost to construct the 253 structures was $11.641 million (Federal CDBG-NRCS) and $4.541 million (non-Federal NRC-County-NRD).
- Education / Conservation
    - The NRD works with schools to educate students about conservation. The NRD hands out trees and talks about buffer strips to about 500 5th graders at Camp Jefferson during Earth Day. High school students participate in land judging once every two years and the Envirothon every year. Doane College has also been working with the NRD on some GIS work as well as water sampling. The NRD also puts on a family fishing day once a year in conjunction with the Game and Parks free fishing day, and Hunters Education classes at the Big Indian Archery Range. Three newsletters are sent out annually to inform the residents of what the NRD is doing and what programs are offered. The NRD is also hoping to start a Test-Your-Well program in conjunction with the Groundwater Foundation and any schools, FFA chapters, or science clubs who want to participate.

The NRD has pursued and received several grants to assist in mitigation efforts. These include a NET flowmeter quality/quantity grant, Turkey Creek NWQI, various water sustainability fund grants, and Cub Creek 319 funding. Without the assistance of grant or other program funding, LBBNRD's district funds are limited and have remained the same over recent years. A large portion of the funds are dedicated to NSWCP, operations, and maintenance. The NRD could improve local capabilities by hiring and retaining a formal grant writer on staff.

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 manager, board chairman, assistant manager, and district staff. 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 social media, website updates, board meetings, and letters.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	DEVELOP A DAM FAILURE EMERGENCY ACTION AND EVACUATION PLAN
DESCRIPTION	Work with officials to develop emergency action and evacuation plans if a dam were to fail.
HAZARD(S)	Dam Failure
STATUS	Plans have been developed. An exercise will be scheduled once local EAPs have been updated.

MITIGATION ACTION	STORM SHELTER / SAFE ROOM
DESCRIPTION	Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, school, and other areas.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
STATUS	Willerd/Meyer, Big Indian, and Swan 5 recreational areas have newly constructed shelters.

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)	Tornadoes and High Winds, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$40,000
FUNDING	General Fund
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	NRD Board, Parks Dept.
STATUS	In Progress. One siren was installed at the Willerd/Meyer Recreational Areas but the NRD would like a device at the Big Indian and Cub Creek Recreation Areas.

MITIGATION ACTION	BANK STABILIZATION
DESCRIPTION	Stabilize banks along streams and rivers, specifically along the Blue River. 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	$40,000
FUNDING	General Funds
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Assistant Manager
STATUS	Various areas along the river system are in need of stabilization.

MITIGATION ACTION	EMERGENCY EXERCISE: DAM FAILURE
DESCRIPTION	Conduct table top exercises to determine the response scenarios in the event of dam failure.
HAZARD(S)	Dam Failure
ESTIMATED COST	$10,000+
FUNDING	General Funds
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	NRD Board
STATUS	Emergency Action Plans for the dams are currently being updated. Once updates are completed a dam failure exercise is anticipated.

MITIGATION ACTION	DAM/LEVEE/FLOODWALL CONSTRUCTION AND IMPROVEMENTS
DESCRIPTION	Rehabilitate existing dams structures
HAZARD(S)	Dam Failure, Flooding
ESTIMATED COST	$1,000,000
FUNDING	General Funds
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Assistant Manager
STATUS	This project is currently in progress. Dams throughout the district are being inspected to determine specific needs. Rehabilitation and improvements are currently in the works for structures Big Indian 15-B, Cub Creek 17B, Mud Creek 5-A, Plum 2-B, Cub Creek 10-A, and Cub Creek 12-A.

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
ESTIMATED COST	$10,000+
FUNDING	General Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	NRD Board
STATUS	This project has not yet been started.

MITIGATION ACTION	DEWITT FLOOD MITIGATION PROJECT
DESCRIPTION	Construct a flood mitigation structure in DeWitt
HAZARD(S)	Flooding
ESTIMATED COST	$20,000
FUNDING	NeDNR, General Funds
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	NRD Board
STATUS	Flood gates, culverts, and drainage improvements have been completed in DeWitt. The district is currently working on identifying additional flood mitigation needs.

MITIGATION ACTION	WATER SYSTEM IMPROVEMENTS
DESCRIPTION	Jurisdictions can update/improve water distribution system. This may include, but is not limited to: identifying and replacing leaky pipes, assisting homeowners in identifying inefficiencies, and transitioning to smart irrigations systems.
HAZARD(S)	Drought
ESTIMATED COST	$10,000+
FUNDING	General Funds
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	NRD Board
STATUS	This project has not yet been started.

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	$25,000
FUNDING	General Funds
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	NRD Board
STATUS	The NRD regularly shares information with residents for smart water usage and current projects. Additional outreach is always needed.

MITIGATION ACTION	FLOODPLAIN EARLY ALERT SYSTEM
DESCRIPTION	Update equipment, ensure equipment is in a secure location, and install additional gauges.
HAZARD(S)	Flooding
ESTIMATED COST	$30,000
FUNDING	General Funds
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Water Resources Specialist
STATUS	In Progress. Currently working to secure partners to fund a former USGS stream gage near DeWitt.

MITIGATION ACTION	EMERGENCY WATER MAIN SHUTOFF VALVES
DESCRIPTION	Install protection for rural water valves including cameras, fencing, or vehicular barriers to protect critical facilities and key infrastructure where possible.
HAZARD(S)	Terrorism
ESTIMATED COST	$500+ cameras, $500 per concrete barrier. $20 per linear foot of chain linked fence.
FUNDING	General Funds
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Assistant Manager, NRD Board
STATUS	Fencing is being constructed around equipment. Additional security measures have not yet been installed.

MITIGATION ACTION	STREAM AND CHANNEL RENOVATIONS
DESCRIPTION	Initiate stream augmentation activities to promote flood risk reduction and water sustainability.
HAZARD(S)	Flooding
ESTIMATED COST	$500,000
FUNDING	General Funds
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	NRD Board
STATUS	Recently constructed six Turkey Creek Flood control structures that will help with stream flow augmentation. Additional structures have been proposed but not yet started.

MITIGATION ACTION	UPDATE MASTER PLAN
DESCRIPTION	Update master plan. Integrate plan with Hazard Mitigation Plan components.
HAZARD(S)	All hazards
ESTIMATED COST	$40,000
FUNDING	NRD Board
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Technical Assistant
STATUS	This project has not yet been started.

New Mitigation Actions – 2021 Plan

MITIGATION ACTION	EMERGENCY EQUIPMENT PURCHASE AND/OR UPGRADES
DESCRIPTION	Install emergency pumps at the principal spillway in cause of a dam failure.
ESTIMATED COST	$100,000
FUNDING	General Funds
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	NRD Board
STATUS	Not Started

MITIGATION ACTION	FLOODPLAIN MAPPING/REMAPPING
DESCRIPTION	Map or update floodplain maps for the NRD
HAZARD(S)	Flooding
ESTIMATED COST	$250,000
FUNDING	General Funds
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	NeDNR, NRD Board
STATUS	Ongoing. DeWitt currently remapping.

Removed Mitigation Actions

MITIGATION ACTION	FLOOD CONTROL REHABILITATION
DESCRIPTION	Rehabilitate existing flood control structures
HAZARD(S)	Flooding
REASON FOR REMOVAL	This project is covered by "Dam Rehabilitation of Aging Structures" and was removed due to redundancy.

MITIGATION ACTION	FLOOD CONTROL PROJECTS
DESCRIPTION	Implement additional structural flood control projects
HAZARD(S)	Flooding
REASON FOR REMOVAL	This project is currently being met by either dam rehabilitation or flood control projects in DeWitt.

DISTRICT PROFILE

SOUTH HEARTLAND DISTRICT HEALTH DEPARTMENT

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

Local Planning Team

Table SHD.1: South Heartland District Health Department Local Planning Team

Name	Title	Jurisdiction
Jim Morgan	Public Health Risk Coordinator	SHDHD District

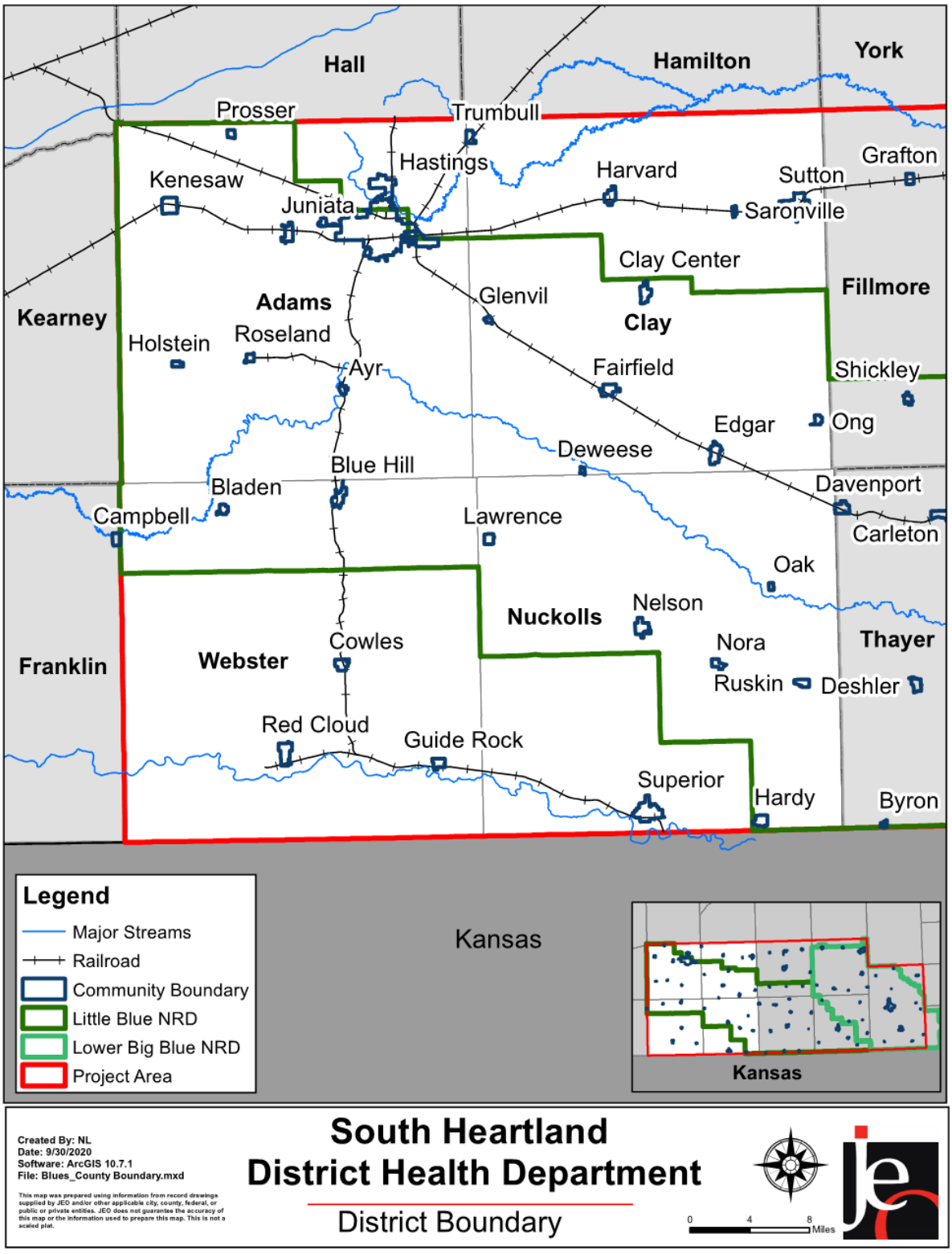
Location

The South Heartland District Health Department (SHDHD) is headquartered in the City of Hastings. The district serves communities in Adams, Clay, Webster, and Nuckolls Counties.

Transportation

US Highways 6, 34, 136, 281 and Nebraska Highways 4, 8, 14, 41, 74, 78 all travel through the district. Several railway lines travel through the district with the most lines located near the City of Hastings. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors and areas more at risk of transportation incidents. Most hazardous chemicals are transported through the district on US Highways 6, 34, and 281; however, no major spill events have occurred. The BNSF and Union Pacific rail lines run through all four counties in the district. The local planning team indicated there were two events where rail cars left the tracks and turned over, but no hazardous chemicals were spilled.

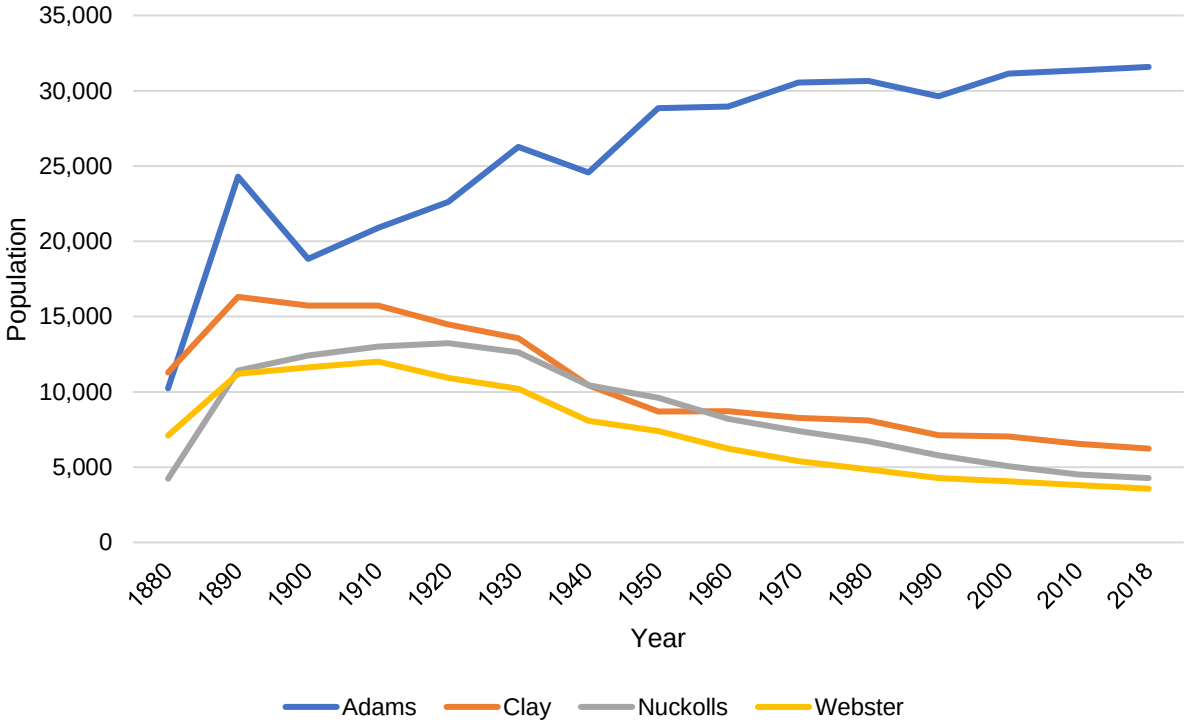
Figure SHD.1: South Heartland District Health Department Boundary



Demographics

The population served by the SHDHD has been declining since 2000 with only Adams County growing in populations. The total estimated population of the four-county region was 45,661 people in 2018.[1]

Figure SHD.2: Population 1880-2018



Source: U.S Census Bureau

The young, elderly, minority, and low-income populations may be more vulnerable to certain hazards than other groups. In comparison to the state, the population served by the SHDHD was:[2]

- **Older**. The median age of the district was 43.6 years old in 2018, compared with the state's median of 36.4. The region's population has become younger since 2010, when the median age was 44.2.
- **Less ethnically diverse**. Since 2010, the district became less ethnically diverse. In 2010, 7.1% of the population was non-white. By 2018, about 5.7% was non-white. During that time, the non-white population in the state declined from 13.9% in 2010 to 12.5% in 2018.
- **More likely to be below the federal poverty line**. The poverty rate in the district (12.6% of people living below the federal poverty line) was higher than the state's poverty rate (11.6%) in 2018.

1 United States Census Bureau. 2018. "S0101: Age and Sex." [database file]. https://data.census.gov/cedsci/.
2 United States Census Bureau. 2018. "DP03: Selected Economic Characteristics." [database file]. https://data.census.gov/cedsci/.

Future Development Trends

Over the past five years, there have been some significant changes in parts of the district. Hastings, Nebraska has had several new hotels built on the north edge of the city and Cooperative Producers, Inc. has built a new fertilizer plant on the east end of the city.

Community Lifelines

Access to Care

The four-county region served by the SHDHD has three hospitals with a total of 208 beds.

Table SHD.2: Hospital Locations

County	Hospital Name	City	Number of Beds
Adams County	Mary Lanning Healthcare	Hastings	170
Nuckolls County	Brodstone Memorial Hospital	Superior	25
Webster County	Webster County Community Hospital	Red Cloud	13

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are 119 chemical storage sites in the district which house hazardous materials. Names and addresses of the sites can be found in the community and county participant sections.

Critical Facilities

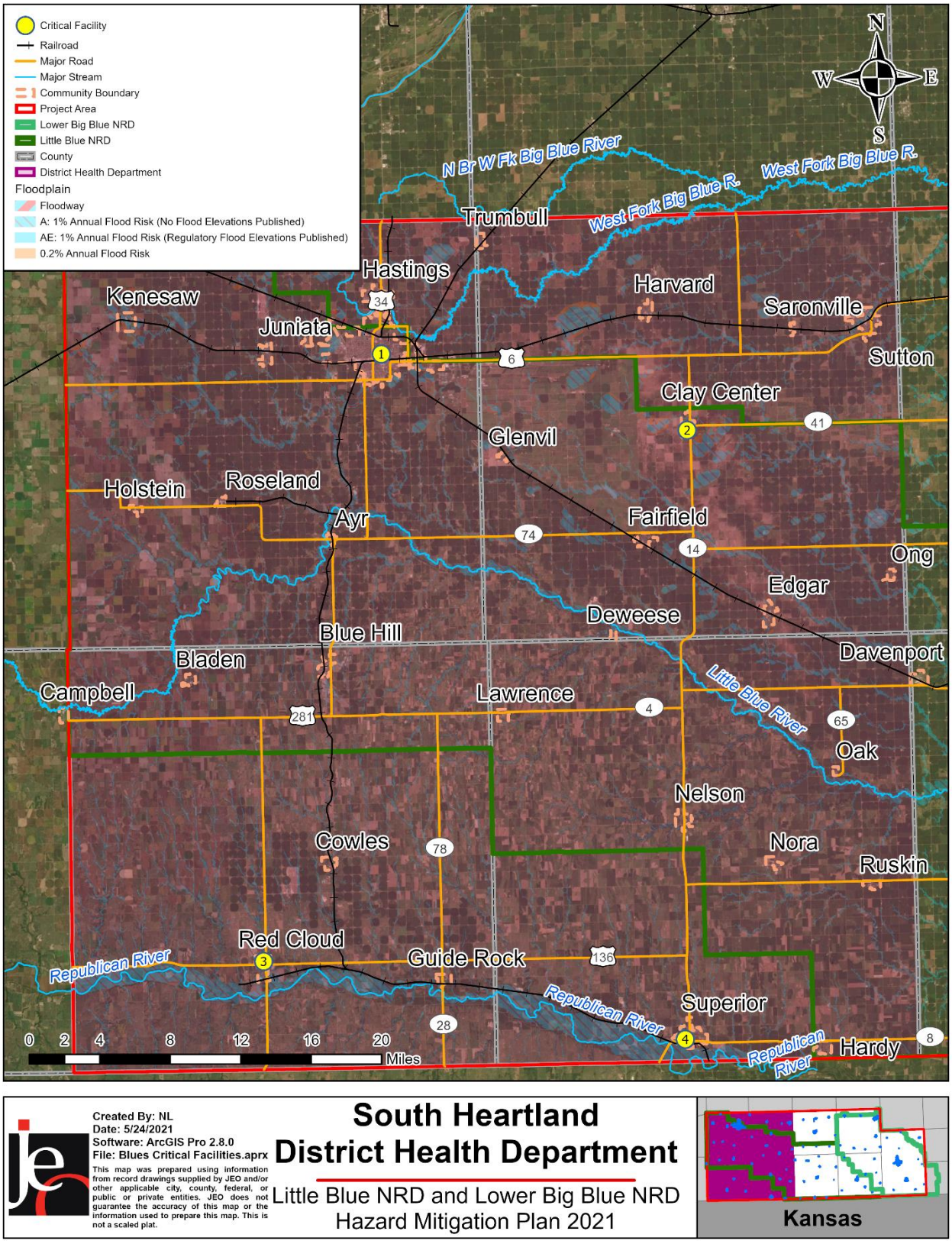
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update. The district indicated that the Hastings facility has a weather radio, but facilities in Red Cloud, Superior, and Clay Center still need radios. The health district has an Emergency Response Plan and provides training and exercises on emergency procedures to staff.

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

Table SHD.3: South Heartland District Health Department Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Health and Medical	Main Office	N	N	N
2	Health and Medical	Satellite Office - Clay	N	N	N
3	Health and Medical	Satellite Office - Webster	N	N	N
4	Health and Medical	Satellite Office - Nuckolls	N	N	N

Figure SHD.3: South Heartland District Health Department Critical Facilities



Historical Occurrences

See the Adams, Clay, Nuckolls, and Webster Counties 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 district's capabilities.

Agricultural Plant and Animal Disease

The Health Department is mainly concerned with its ability to respond to potential injuries with emergency medical services. During certain events, EMS, Hospitals, and the Health Department may be limited during a large-scale catastrophe. In the past, power outages have forced the Health Department to relocate vaccines to the hospital. Sensors in the Health Department's facilities notified staff in time to prevent the loss of several thousand dollars of vaccines. There is concern that power will go out in the Hastings office in the future, where all vaccines are stored in a refrigerator and freezer. A loss of power could lead to the loss of several thousand dollars' worth of vaccines. The Health Department hopes to obtain funding in the future to install an emergency generator to reduce the risk of losing vaccines in future power outages.

Drought and Extreme Heat

The Health Department is mainly concerned with its ability to respond to potential injuries with emergency medical services. During certain events, EMS, Hospitals, and the Health Department may be limited during a large-scale catastrophe. The department is also concerned with its limited capacity to shelter the community from extreme heat in its facilities. SHDHD plans to work with the City of Hastings to find suitable shelter spaces in the community and is already working with other partner agencies to provide shelter places during extreme heat events. Additionally, the department is working to find grant funding to pay for a portable generator for the Hastings facility.

Hazardous Materials

The Health Department is mainly concerned with its ability to respond to potential injuries with emergency medical services. During certain events, EMS, Hospitals, and the Health Department may be limited during a large-scale catastrophe. The Health Department indicated that there have been no chemical spills in the district. SHDHD is currently working with County Emergency Managers to identify their role in the event of a chemical spill in the jurisdiction. To determine their role, the Health Department plans to hold future meetings with Emergency Managers and city, town, and village governments to determine what SHDHD's role will be.

Public Health Emergency

The Health Department expressed concerns related to potential loss of power, health issues after the event from communicable diseases, vaccine demand, and contamination of public resources. The pre-stages of the current Covid-19 Pandemic began in January 2020. The World Health Organization (WHO) declared it a Pandemic on March 11, 2020. Vaccine trials are underway,

and the first vaccine may arrive in November 2020, with most of it arriving after January 1, 2021. As of October 28, 2020, The U.S. is reporting 7.58 million who have tested positive and 212,000 deaths. For the South Heartland District, there have been 800 confirmed cases and 12 deaths. Because of the number of reported cases and deaths, and the fact that these numbers continue to increase, SHDHD has had to change how it operates. SHDHD does not anticipate returning to pre-covid operations until the vaccine has proven effective and the number of cases in the district continue to decrease.

The pandemic has drastically impacted the district. Schools began closing as early as March and recently started back up during the fall of 2020. School sports have been affected with some schools needing to cancel games due to Covid-19. Businesses have closed throughout the district, with some of those closures being permanent. Hospitals stopped elective surgery until August 2020. SHDHD has been overwhelmed with contact tracing and needed to hire additional staff to assist in the process. With the arrival of the vaccine in late 2020, SHDHD has to work with public clinics and other partners to establish closed Points of Dispensing (POD's) to distribute the vaccine among the district. This Pandemic has and continues to impact normal life in the SHDHD district. SHDHD has had thousands of people quarantined or isolated due to Covid-19, which has closed businesses, schools, and stopped most of the activities planned in the four-county area. H1N1 was the last Pandemic to hit Nebraska. SHDHD took the lead to ensure everyone who wanted a vaccination could get vaccinated at no charge. To accomplish mass public vaccination clinics, nurses, medical assistants, and clerical staff were lined up to assist in the effort.

SHDHD is adjusting already existing plans to get the new covid-19 vaccine out to the district. Drive-through clinics will likely be used and partnerships with hospitals, medical clinics, and long-term care centers will be utilized to reach the vulnerable populations as defined by the CDC. Vaccine storage, Personal Protective Equipment (PPE) storage, drive-through public clinics, and a working relationship with information technology will be important for a successful future.

Severe Winter Storms

The Health Department is mainly concerned with its ability to respond to potential injuries with emergency medical services. During certain events, EMS, Hospitals, and the Health Department may be limited during a large-scale catastrophe. According to the local planning team, severe winter storms occur frequently in the district and have inhibited travel and contributed to power outages. SHDHD is working to find grant funding to pay for a portable generator for the Hastings facility.

Tornadoes and High Winds

The South Heartland District Health Department indicated that historically, tornado response, both physically and related to behavioral health, has been a top priority related to hazard mitigation. In the past, the Health Department has also suffered from a loss of power and food and water contamination from severe weather events. Tornadoes, and especially high winds occur in Nebraska all year long with storms that can spawn tornadoes occurring more frequently from March through August. Losing electrical power becomes an issue for vaccine storage and power to run computers and the network. According to the local planning team, there have been four instances of power outages in the last two years that caused loss of power to important refrigeration units in the health department. SHDHD is working to find grant funding to pay for a portable generator for the Hastings facility.

Staffing

The SHDHD is supervised by a 15-member Board of Health. They appoint the health department director, who will oversee the implementation of hazard mitigation projects. Other offices are listed below.

- Operations Manager / Financial Coordinator
- Public Health Risk Coordinator
- Grant Writer and Program Director for the HRSA Rural Network Planning Grant
- Community Health Education Coordinator
- Minority Health Educator
- Receptionist/Clerk
- Administrative Assistant
- Health Surveillance Coordinator
- Public Health Nurse, Public Health Outreach
- Public Health Nurse, Immunization Program & Every Woman Matters Program
- Public Health Nurse
- Chronic Disease Prevention Project Coordinator
- Community Health Worker
- Wellness Coordinator

Capabilities

As outlined by the department, the mission is "dedicated to preserving and improving the health of residents of Adams, Clay, Nuckolls, and Webster counties…to work with local partners to developed and implement community health improvement plans and to provide other public health services mandates by Nebraska state statutes". The following programs and services are offered to residents throughout the SHDHD region:

- Immunizations
    - Vaccine for Children Program
    - Immunization Clinic
    - Immunization Registry
- Every Woman Matters Program
    - STC Testing/Pap Test
    - Screening for breast, colon and cervical cancer, hypertension, cholesterol, glucose, obesity, and smoking
- Develops and tests plans for responding to and protecting the population from health threats such as pandemic influenza and Ebola
- Works closely with other agencies and organizations within the Health District and across Nebraska: county emergency management agencies, hospitals, Community Organizations Active in Disaster (COAD), mass fatality and Family Assistance center planning, and Tri-Cities Medical Response System (TriMRS)
- Assesses environmental health risks including radon testing, Clean Indoor Air Act (smoking) violations, meth lab clean up assurance, bed bug and mold questions, and access to State resources such as the ChemPack for chemical exposures

Due to the unique structure of health departments, the typical capability assessment table was not used. The following table summarizes the district's overall capabilities.

Table SHD.4: Overall Capability

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

Plan Integration

South Heartland District Health Department, as do all Nebraska Health Departments, follows a specific Emergency Response Plan, differed only by the sections that apply to each specific health department. The 2019 Emergency Response Plan outlines specific actions to take in the case of a disaster or emergency event. The plan includes specific sections for Continuity of Operations, public outreach and notifications, training and exercises, and pandemic specific activities (such as vaccine dispersal). While the plan does not specifically address many natural hazard events, specific sections outline response protocols for threats to local water and food supplies, chemical incidents, and radiological incidents. Chapters included in the Environmental Safety Response Plan (Annex D to the plan) include health department specific actions to take during other natural disasters such as floods (mold, tetanus, pet emergencies) and tornadoes and high winds. Due to the sensitive nature of this information, specific information about these plans is not included here. However, future updates to the ERP should include sections to address other natural hazard specific events as identified as top concerns for the district.

SHDHD's funds are limited to current facilities, with some funding from grants remaining the same over recent years. Some grants have been discontinued, but SHDHD has been awarded with a couple of additional grants. Currently a large portion of funds are already dedicated to several projects, with each project receiving funding from its own grant. Grants that SHDHD has applied for in the last five years include grants to keep current programming running.

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 Public Health Risk Coordinator is responsible for reviewing and updating this district profile as changes occur or after a major event. The district profile was last reviewed in 2016 and will be reviewed annually.

Mitigation Strategy

Continued Mitigation Actions

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Purchase and install a 22K generator
HAZARD(S)	All hazards
ESTIMATED COST	$12,500+
FUNDING	General fund, HMA
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Office Manager
STATUS	In Progress. District is currently exploring funding opportunities with FEMA.

MITIGATION ACTION	COLD STORAGE EQUIPMENT
DESCRIPTION	Purchase transportable cold storage for vaccines and medical equipment. This would improve the department's ability to respond to disaster sites
HAZARD(S)	All hazards
ESTIMATED COST	$10,000+
FUNDING	General fund, HMA
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Officer Manager
STATUS	In Progress. Working to obtain cold storage through pandemic funds.

MITIGATION ACTION	EMERGENCY COMMUNICATION
DESCRIPTION	Install redundant communications at critical facilities to ensure communications during disaster events
HAZARD(S)	All hazards
ESTIMATED COST	$2,000+
FUNDING	General fund, HMA
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Office Manager
STATUS	In Progress. Using pandemic funds to update as much as possible.

MITIGATION ACTION	MEDICAL CHAIR LIFT
DESCRIPTION	Install a chair lift to allow handicap access to the main facilities basement, which is used as a sheltering location for tornados, high winds, and severe thunderstorm events
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms
ESTIMATED COST	$2,875+
FUNDING	General fund, HMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Office Manager
STATUS	In Progress. Working on an application.

New Mitigation Actions – 2021 Plan

MITIGATION ACTION	SAFE ROOMS/STORM SHELTERS
DESCRIPTION	Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, school, and other areas.
HAZARD(S)	All hazards
ESTIMATED COST	$250+/sq ft
FUNDING	General Fund, HMA
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Board
STATUS	This is a new mitigation action.

Removed Mitigation Actions

MITIGATION ACTION	BACKUP RECORDS
HAZARD(S)	All Hazards
STATUS	SHDHD has contracted with another company to take care of backing up records.

DISTRICT PROFILE

ADAMS CENTRAL PUBLIC SCHOOLS

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

Local Planning Team

Table ACS.1: Adams Central Public Schools Local Planning Team

Name	Title	Jurisdiction
Shawn Scott	Superintendent	Adams Central Public Schools
Jodi Rostvet	Executive Secretary	Adams Central Public Schools

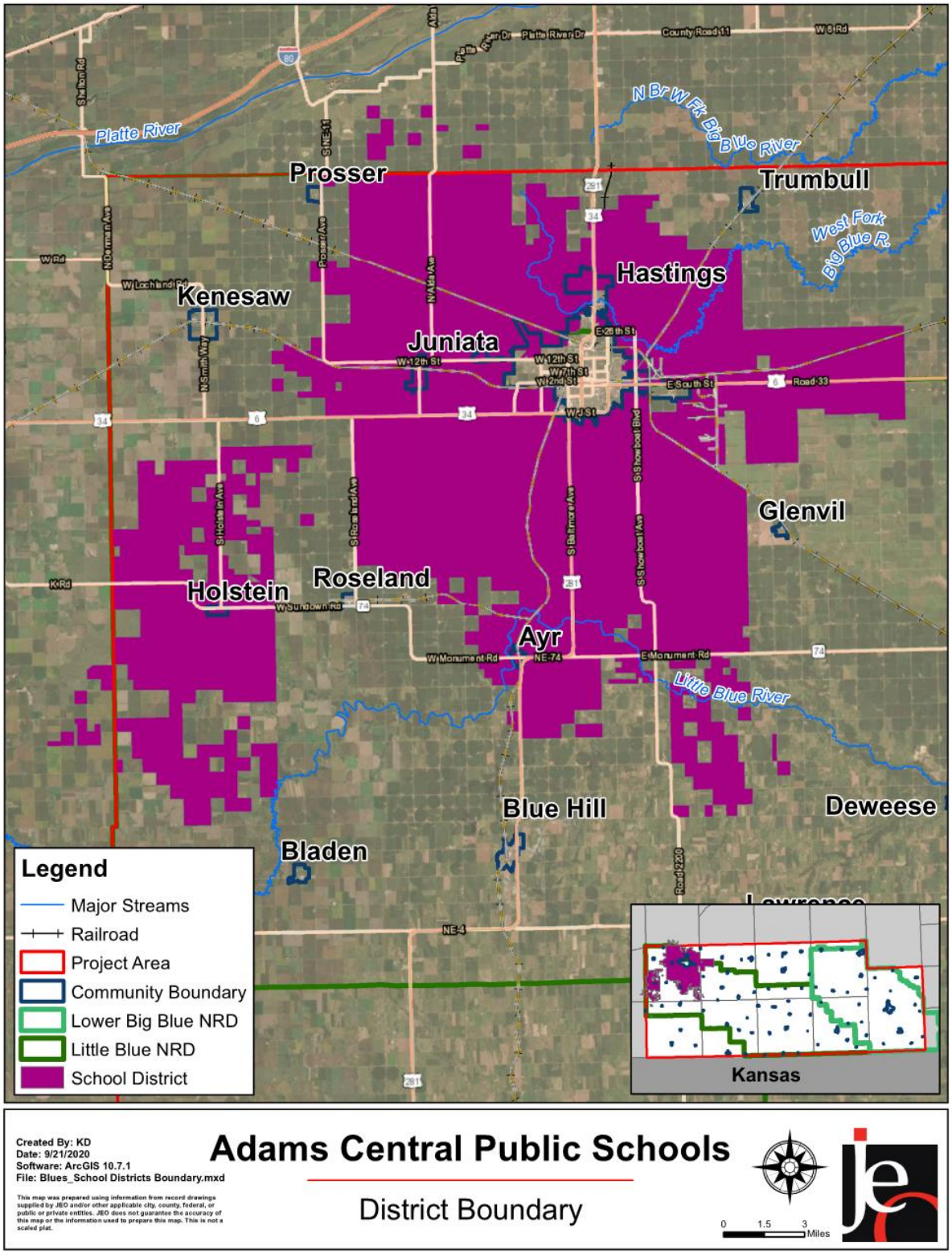
Location and Services

Adams Central Public Schools is located on the southwest side of the City of Hastings, in Adams County, in southern Nebraska. Its offices are located at 1090 S Adams Central Avenue, Hastings, NE 68901. The district is comprised of three schools: Adams Central Elementary, and Adams Central Junior-Senior High School, which are both located at the 1090 S Adams Central Avenue location, and Adams Central Early Childhood Center located at 512 N Brass Avenue, Juniata, NE 68955. The district provides services to students in Fairfield, Roseland, Bladen, Doniphan, Trumbull, Kenesaw, Blue Hill, and Grand Island, NE. English is the predominant language in the school district.

Transportation

Adams Central Public Schools major transportation corridors include US Highway 34, which runs north-south through the center of the district, US Highway 6, which runs east-west through the southern part of the district, and US Highway 281, which runs north-south through the southern part of the district. Additional routes of concern for the school district include those leading to serviced communities (Fairfield, Roseland, Bladen, Doniphan, Trumbull, Kenesaw, Blue Hill, and Grand Island, NE). The district owns six school buses which transport students daily. There are two rail lines in the district traveling east-west and north-south through and around Hastings. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

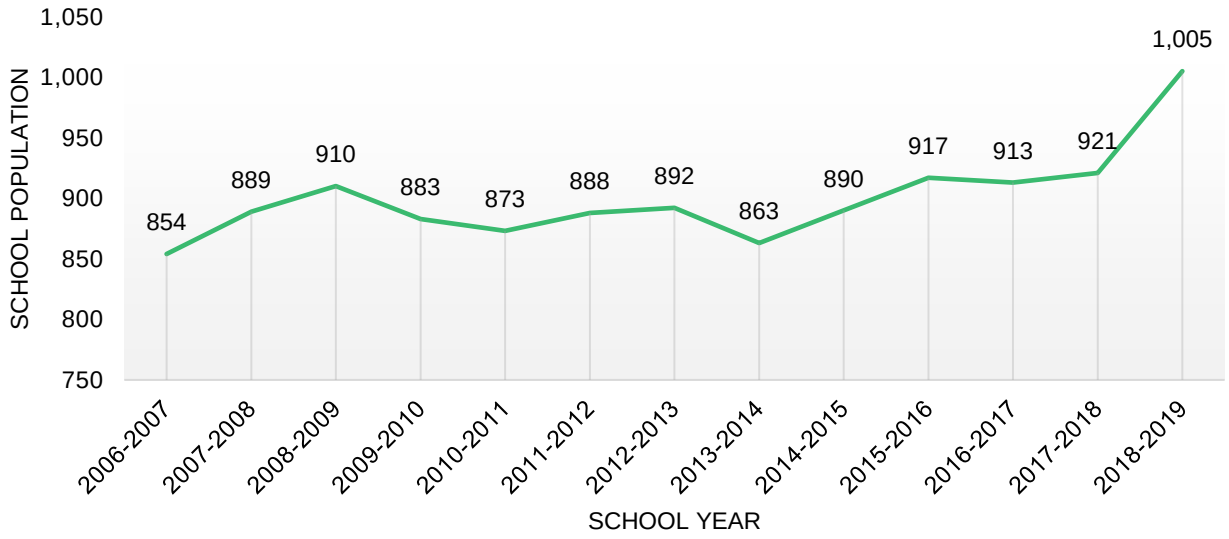
Figure ACS.1: Adams Central Public Schools District Boundary



Demographics

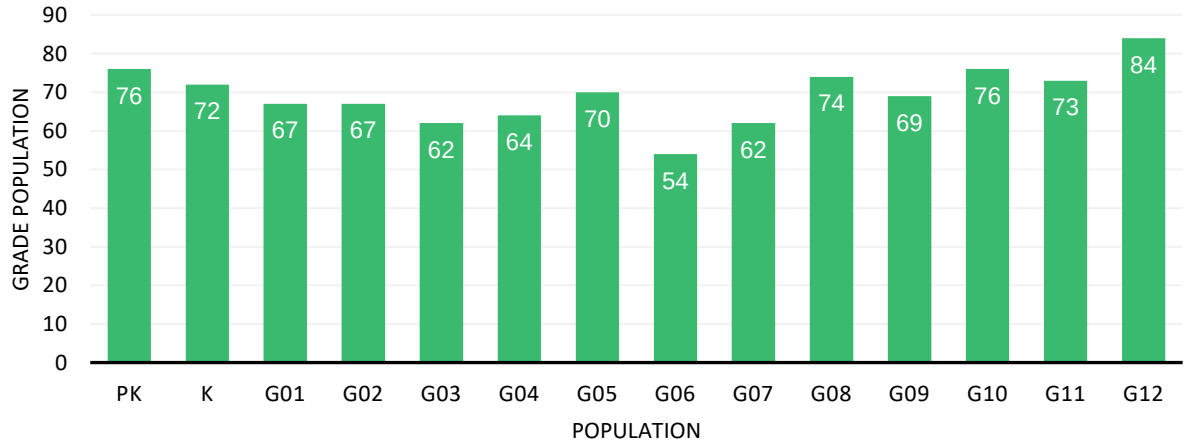
The following figure displays the historical student population trend starting with the 2007-08 school year and ending with the 2018-19 year. It indicates that the student population has been relatively stable over time with a major increase recently. The local planning team noted overall student population is anticipated to increase in the coming years due to the newly constructed elementary building. There are approximately 1,005 students enrolled in Adams Central Public Schools.

Figure ACS.2: Student Population 2007-2018



Source: Nebraska Department of Education[3]

Figure ACS.3: Students by Grade, 2018-2019



Source: Nebraska Department of Education[1]

3 Nebraska Department of Education. 2019. "Nebraska Education Profile". https://nep.education.ne.gov/. Accessed December 2020.

The figure above indicates that the largest number of students are in 12th, pre-kindergarten, and 10th grades. The lowest population of students are in 6th, 3rd, and 7th grade. According to the Nebraska Department of Education (NDE), 22.7% of students receive either free or reduced priced meals at school in the 2018-19 year. This is similar to the state average of 45.2%. Additionally, 12.2% of students are in the Special Education Program. These students may be more vulnerable during a hazardous event than the rest of the student population. The district employs five administrators, 70 teachers, and 62 other staff members.

Table ACS.2: Student Statistics, 2018-2019

	District	State of Nebraska
Free/Reduced Priced Meals	22.7%	45.2%
Special Education Students	12.2%	15.5%
English Language Learners (ESL)	N/A	7.2%
School Mobility Rate	4.9%	10.3%

Source: Nebraska Department of Education
N/A: Data is not available if there is less than 10 students

Future Development Trends

In the past five years the district has closed three elementary sites and sold property at two of the sites. In the Fall of 2018, a new K-6 building was established and opened in the district. Currently, the district has no plans for new construction or renovations.

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 34 chemical storage sites in the district which house hazardous materials.

Table ACS.3: Chemical Storage Fixed Sites

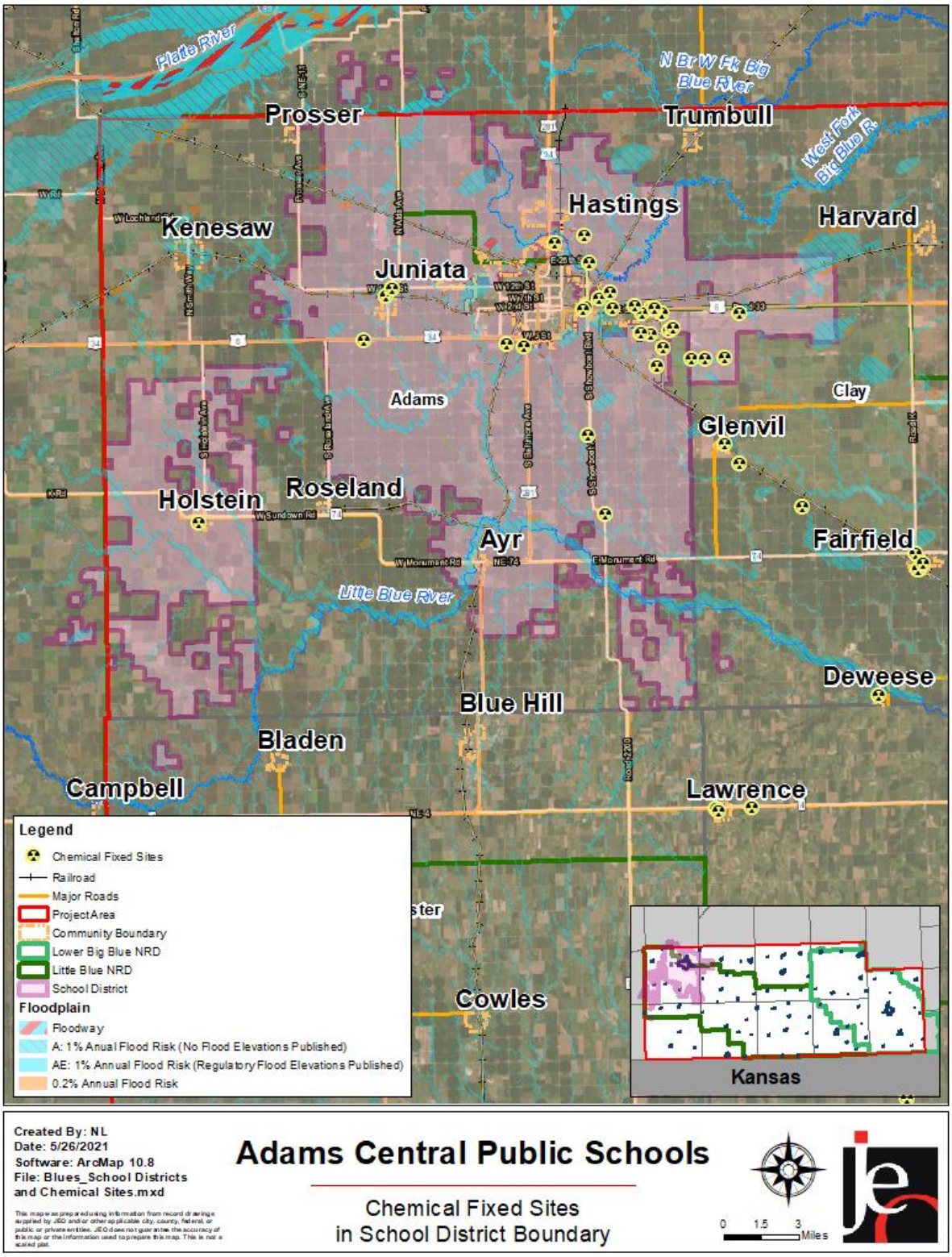
Facility Name	Address	Located in Floodplain?
A-1 Fiberglass	4495 S Gunpowder Cir, Hastings	N
AGP Grain Marketing LLC	2315 W Highway 6, Hastings	N
AGP Grain Marketing LLC	1845 E Assumption Rd, Glenvil	N
AGP Soy Processing	2801 E 7th St, Hastings	N
ARS Nebraska LLC	250 S Maxon Ave, Hastings	N
Aurora Co-Op Equalizer Whse	4965 E South St, Hastings	N
Chief Ethanol Fuels Inc	4225 E South St, Hastings	N
Cooperative Producers Inc	265 N Showboat Blvd, Hastings	N
Cooperative Producers Inc	9870 S Main Ave, Holstein	N
Cooperative Producers Inc	8440 12th St, Juniata	N
Cooperative Producers Inc	200 S Depot St, Juniata	N
CPI Hastings Hub Agronomy Ctr	1030 S Heartland Ave, Hastings	N

Facility Name	Address	Located in Floodplain?
Eaton Torque Control Products	300 E 39th St, Hastings	N
Equalizer Midwest Inc Terminal	4955 E South St, Hastings	N
Fairfield Non-Stock Co-Op Assn	9865 S Showboat Blvd, Paulina	N
G&G Warehouse and Distribution	4495 S Gunpowder Cir, Hastings	N
Gavilon Fertilizer LLC	4935 E J St, Hastings	N
Gerhold Concrete Co Portable	4305 N Showboat Blvd, Hastings	Y
Hastings Irrigation Pipe Co	1801 E South St, Hastings	N
Hastings Pollution Control Ctr	2120 E 26th St, Hastings	N
Hastings WWTF Maxon Avenue	1851 S Maxon Ave, Hastings	N
Lawrence Industries Inc	2720 S Cornhusker Ave, Hastings	N
Mid-Nebraska Lubricants LLC	8430 12th St, Juniata	N
NDOT Hastings Yard	111 E Highway 6, Hastings	N
Norder Supply Inc	9765 W Highway 6, Juniata	N
Nutrien Ag Solutions	150 N Blaine Ave, Hastings	N
Pillen Family Farms LLC	Highway 6E, Hastings	N
Remington Seeds LLC	311 Road 3168, Hastings	Y
Rosen's Inc Hastings Warehouse	4965 E South St, Hastings	N
T-L Irrigation Co	151 E Highway 6, Hastings	N
Titan Machinery Inc	1660 S Baltimore Ave, Hastings	N
Werner Construction Shop	2430 E 7th St, Hastings	N
Whelan Energy Center	4520 E South St, Hastings	N
Winfield United	5780 E J St, Hastings	Y

Source: Nebraska Department of Environment and Energy[4]

4 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed X.

Figure ACS.4: Chemical Storage Fixed Sites near School Facilities



Critical Facilities

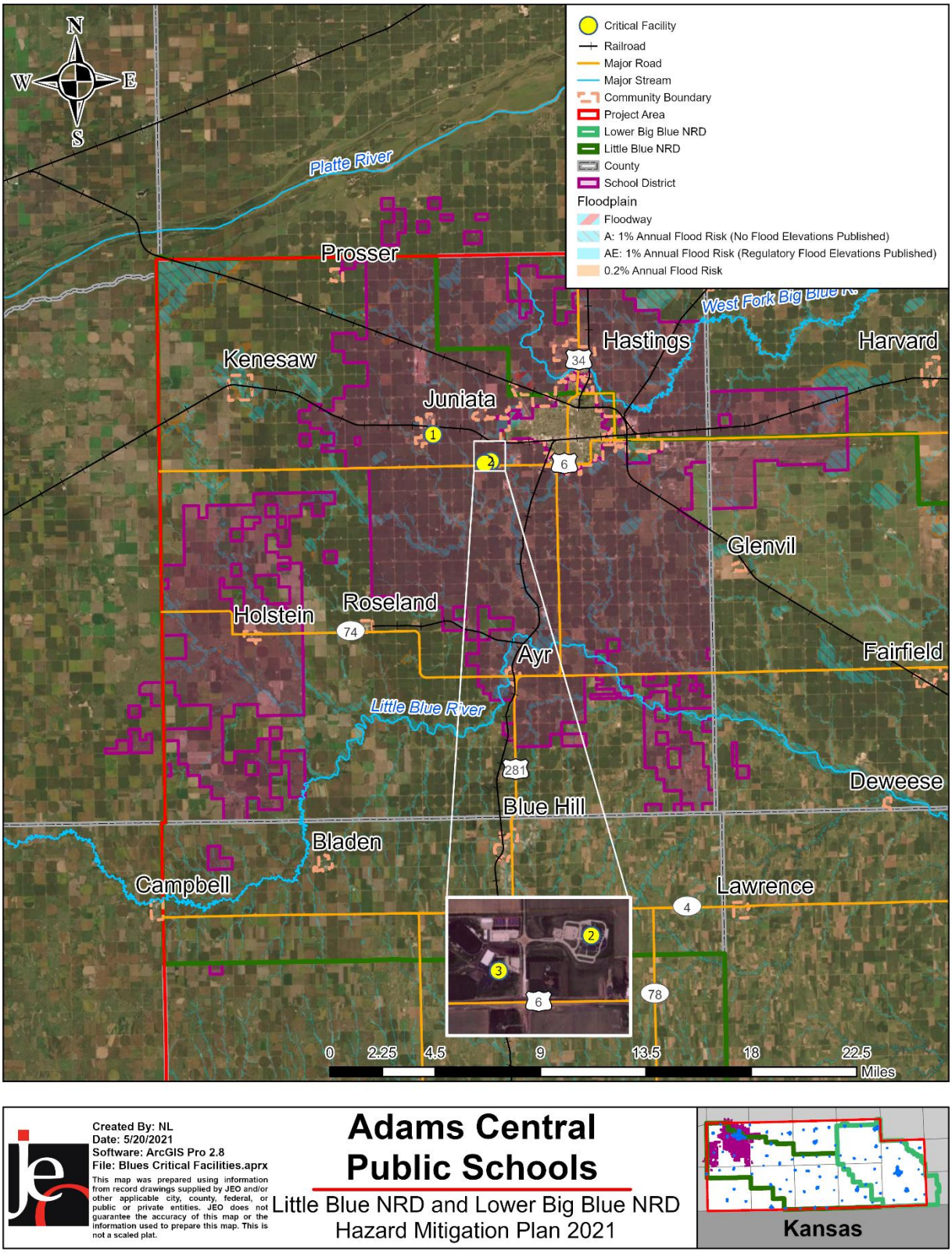
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update. The school district operates eight facilities. School facilities are listed below, along with information indicating the school's address, number of students and staff, if the facility is used as a shelter during emergencies, if the facility is located in the floodplain, and the presence of a backup power generator.

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

Table ACS.4: Adams Central Public Schools Critical Facilities

CF #	Type of Lifeline	Name	# of Students	# of Staff	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	AC Early Childhood Center	79	15	Y	N	N
2	Safety and Security	AC Elementary	463	65	Y	Y	N
3	Safety and Security	AC Jr/Sr High School	423	58	Y	N	N

Figure ACS.5: Adams Central Public Schools Critical Facilities



Created By: NL
Date: 5/20/2021
Software: ArcGIS Pro 2.8
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 plat.

Adams Central Public Schools

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

Kansas

School Drills and Staff Training

Students and staff participate in a number of drills throughout the school year. The school follows the Standard Response Protocol (SRP Model) for the types of drills that are covered, which include:

- Fire drills – ten times annually
- Tornado – twice annually
- Shelter in Place/Intruder – once annually
- Evacuations/Reunification – once annually
- Bus Evacuations – twice annually

Staff undergo training for drills and emergency procedures. Mass communication including email and social media are used to notify all staff members, parents, and students of hazard events. Students and parents are notified of emergency procedures via emails, assemblies, trainings, posters, and handouts.

Historical Occurrences

See the Adams 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 district's capabilities.

Tornadoes and High Winds

High winds and tornadoes are common across Adams County and the school district. District communities and its surrounding areas are vulnerable to severe local storms. The effects are generally transportation problems and loss of utilities. NCEI data reports several tornado events specifically in the Adams Central School District area including a series of tornadoes near the Village of Ayr. This "Ayr/Paulina Tornado" was rated F1, traveled over 7 miles from Ayr to Paulina (unincorporated community to southeast), and caused major damage to center pivot systems in the area. No damages have been reported to school facilities from these tornado events. High winds in the area have caused damages to rooftop utilities and exterior fascia. There are no hazardous trees on campus. Power lines to the elementary school have been buried but not to the high school. The elementary school has a generator and storm shelter built in, while the high school uses interior walls, locker rooms, and restrooms.

The district noted there are currently no alert or warning sirens which service the campus. The district is working with Adams County Emergency Management to procure and install a siren. This siren would be located on campus but could be activated by county EMA. Currently the district receives emergency text alerts and uses calling trees to alert parents of severe weather events.

Administration

The school district has a superintendent, two principals, two assistant principals, and supportive staff. The school board is made up of a six-member panel. The district also has a number of additional departments and staff that may be available to implement hazard mitigation initiatives such as the District Safety Committee.

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 ACS.5: Capability Assessment

Survey Components		Yes/No
Planning Capability	Capital Improvements Plan/Long-Term Budget	Yes
	Continuity of Operations Plan	No
	Disaster Response Plan	Yes
	Other (if any)	
Administrative & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Staff who can assess jurisdictional vulnerability to hazards	No
	Grant Manager	No
	Mutual Aid Agreements	No
	Other (if any)	
Fiscal Capability	Applied for grants in the past	Yes
	Awarded grants in the past	Yes
	Authority to levy taxes or bonds for specific mitigation projects	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds in place	Yes
	Flood Insurance	No
	Other (if any)	
Education and Outreach	Local school groups or non-profit organizations focused on environmental protection, emergency preparedness, access, and functional needs populations, etc. (Ex. Parent groups, hazard mitigation boards, etc.)	Yes
	Ongoing public education or information program (Ex. Responsible water use, fire safety, household preparedness, environmental education, etc.)	No
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10/yr

Survey Components		Yes/No
	Tornado	2/yr
	Intruder	1/yr
	Bus Evacuation	2/yr
	School Evacuation	1/yr
	Other (if any)	

Table ACS.*6*: Overall Capability

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

Plan Integration

Adams Central Public Schools district funds are limited and have stayed the same over recent years. A large portion of funds are dedicated to the repayment of bonds to pay for the district's current facilities. The district will continue to follow necessary codes to incorporate hazard and mitigation during the planning process.

The district has a Crisis Response Plan which is reviewed and updated on an annual basis or as major events occur. The plan addresses a range of both natural and man-made hazards such as intruder, bomb threats, loss of power, severe storms, tornadoes, flooding, and wildfire. All staff undergoes yearly training for emergency procedures and is provided a copy of the Crisis Response Plan. The district also has a building committee which evaluates a 1-year, 5-year, and 15-year growth plan for future development and facility improvements.

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 superintendent is responsible for reviewing and updating this district profile as changes occur or after a major event. The superintendent will review the plan no less than bi-annually and will include the public in the review and revision process by: updating social media, website updates, and letters.

Mitigation Strategy

New Mitigation Actions – 2021 Plan

MITIGATION ACTION	ALERT SIREN
DESCRIPTION	Purchase and install a new alert siren on campus to provide early warnings for severe weather events
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	$45,000
FUNDING	General Fund, HMA
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Superintendent, County EMA
STATUS	This is a new mitigation action.

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Purchase and install new backup generator for redundant power at the high school.
HAZARD(S)	All hazards
ESTIMATED COST	$25,000
FUNDING	General Fund, HMA
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Superintendent
STATUS	This is a new mitigation action.

DISTRICT PROFILE

BEATRICE PUBLIC SCHOOL DISTRICT

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

Local Planning Team

Table BPS.1: Beatrice Public Schools Local Planning Team

Name	Title	Jurisdiction
Jason Alexander	Superintendent	Beatrice Public Schools

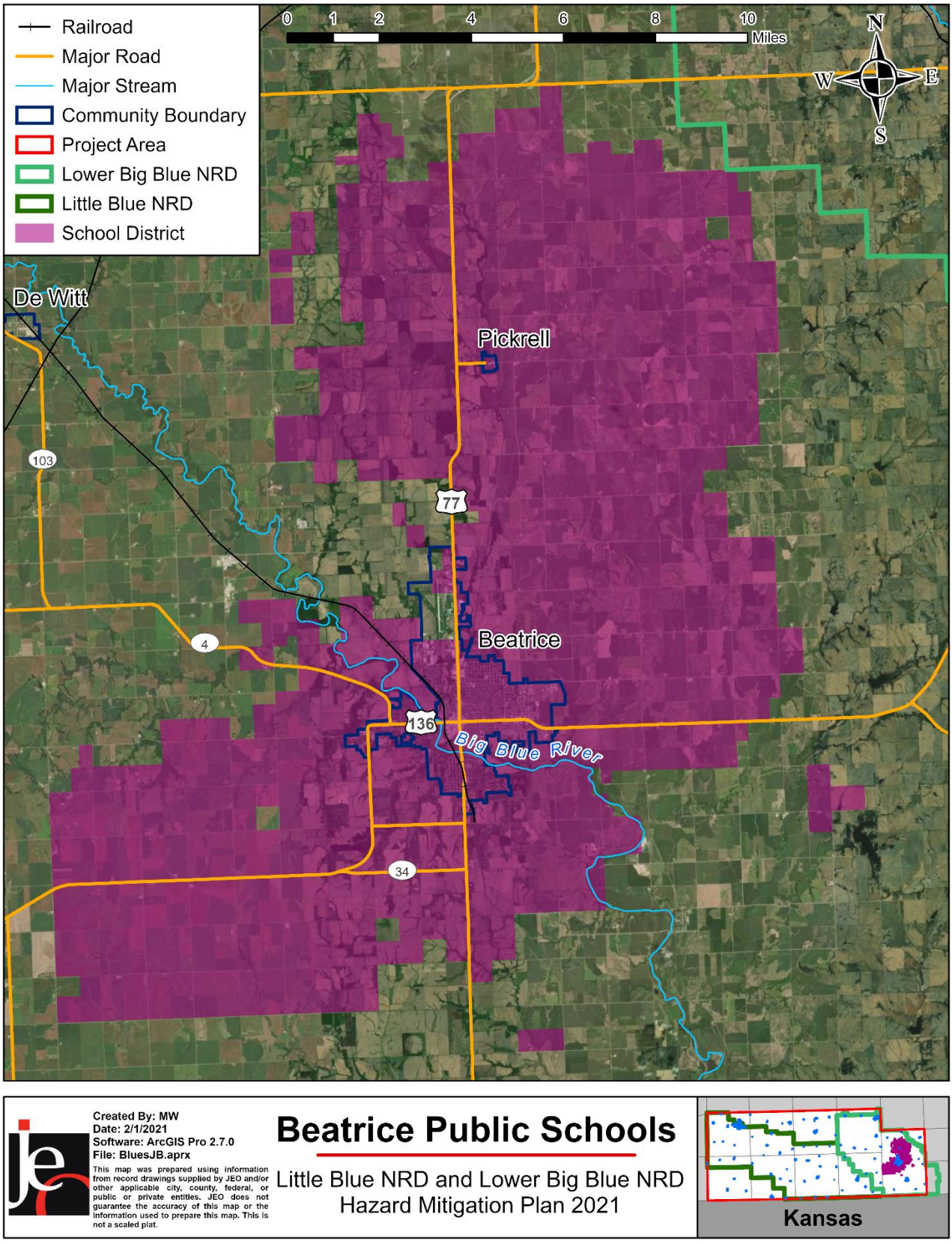
Location and Services

Beatrice Public Schools is located in the City of Beatrice, in Gage County and serves one Preschool (Beatrice Community Preschool), three elementary schools (Lincoln Elementary, Paddock Lane Elementary, Stoddard Elementary), Beatrice Middle School, and Beatrice High School. The school district also provides services to the two local parochial elementary schools (St. Joseph's Elementary and St. Paul's Elementary). The district provides services to students who opt in from Tri County, Fairbury, Adams/Filley, Diller/Odell, Norris, Lincoln, Wilber/Clatonia and Wymore encompassing areas of Jefferson, Saline, and Lancaster counties. English is the predominant language in the district, with some Spanish and Chinese speaking students as well.

Transportation

Beatrice is intersected by two major highways. Highway 77 runs north and south, and Highway 136 runs east and west, through the middle of the city. There are also a couple of additional major thoroughfares such as 19th Street, Dorsey Street, Industrial Row, Market Street, Monroe Street, Scott Street, and Ella Street which can affect some of the schools in Beatrice. At this time, no accidents have impacted the district. If accidents occur during drop off and pick up time, the district works directly with Beatrice Police Department to mitigate the impact as quickly as possible. Beatrice Public Schools currently owns 5 buses, 3 minivans and 8 full size vans, 1 full size handicap van, and 2 cars. Currently 23 special education children are transported to and from school daily. The district also contracts with MidStates Bus Service which owns a total of 18 buses. Of the buses, 14 of them are used to transport 631 students, with the remaining 4 buses available as back-ups.

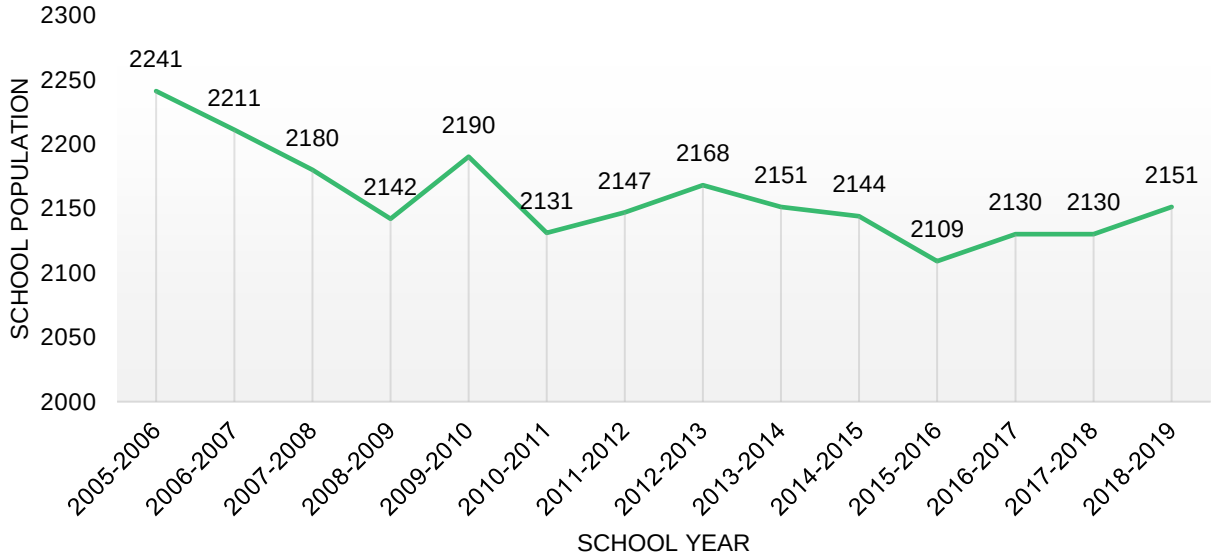
Figure BPS.1: Beatrice Public School District Boundary



Demographics

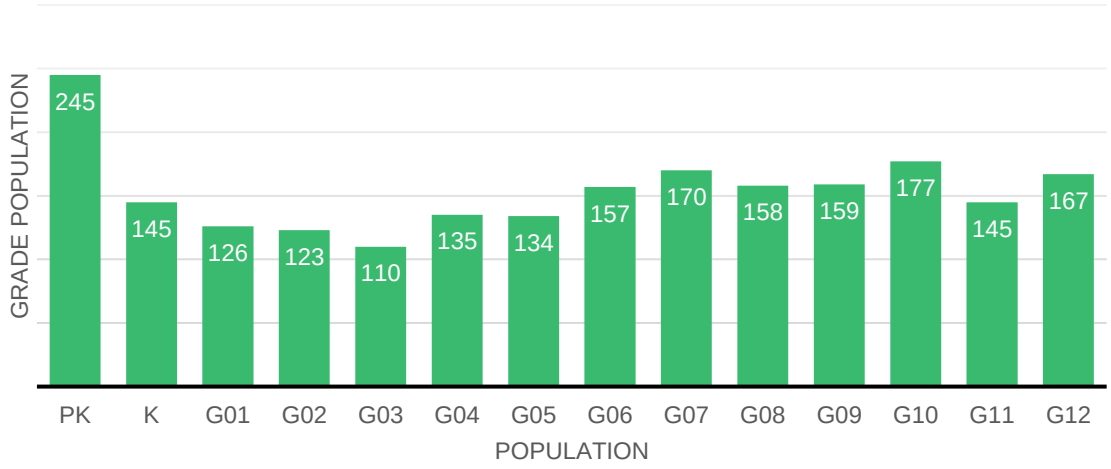
The following figure displays the historical student population trend starting with the 2010-11 school year and ending with the 2018-19 year. It indicates that the student population has been decreasing over time with a slight increase recently. However, the local planning team noted overall student population is anticipated to decrease in the coming years due to declining populations in surrounding communities. There are approximately 430 students enrolled in Superior Public Schools.

Figure BPS.2: Student Population 2005-2018



Source: Nebraska Department of Education[5]

Figure BPS.3: Students by Grade, 2018-2019



Source: Nebraska Department of Education[1]

5 Nebraska Department of Education. 2019. "Nebraska Education Profile". https://nep.education.ne.gov/. Accessed January 2021

The figure above indicates that the largest number of students are in pre-kindergarten, 7th and 10th grades. The lowest population of students are in 2nd and 3rd grade. According to the Nebraska Department of Education (NDE), 51.5% of students receive either free or reduced priced meals at school in the 2018-19 year. This is greater than the state average of 45.2%. Additionally, 24.4% of students are in the Special Education Program. These students may be more vulnerable during a hazardous event than the rest of the student population.

Table BPS.2: Student Statistics, 2018-2019

	District	State of Nebraska
Free/Reduced Priced Meals	51.5%	45.2%
Special Education Students	24.4%	15.5%
English Language Learners (ESL)	0.63%	7.2%
School Mobility Rate	10.0%	10.3%

Source: Nebraska Department of Education

Future Development Trends

In the past five years the district has added seven classrooms to Paddock Lane Elementary. A new storage building for the food truck and backpack program were built in 2016 at the High School. In 2017 a new boiler was added in the Middle School Skills area and a new roof was added at Paddock Lane Elementary. In 2017, the district installed new HVAC equipment as well as LED lights at the high school, middle school, and administration building. In 2020 the high school cooling tower was rebuilt and new switches were installed throughout the whole district to provide network communication to all devices. Future projects for the district include construction on a bus/maintenance shed, elementary school building, and middle school building. The district is considering potential safe rooms, backup generators, and tornado shelters to incorporate mitigation in future planning.

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 18 chemical storage sites in the district which house hazardous materials.

Table BPS.3: Chemical Storage Fixed Sites

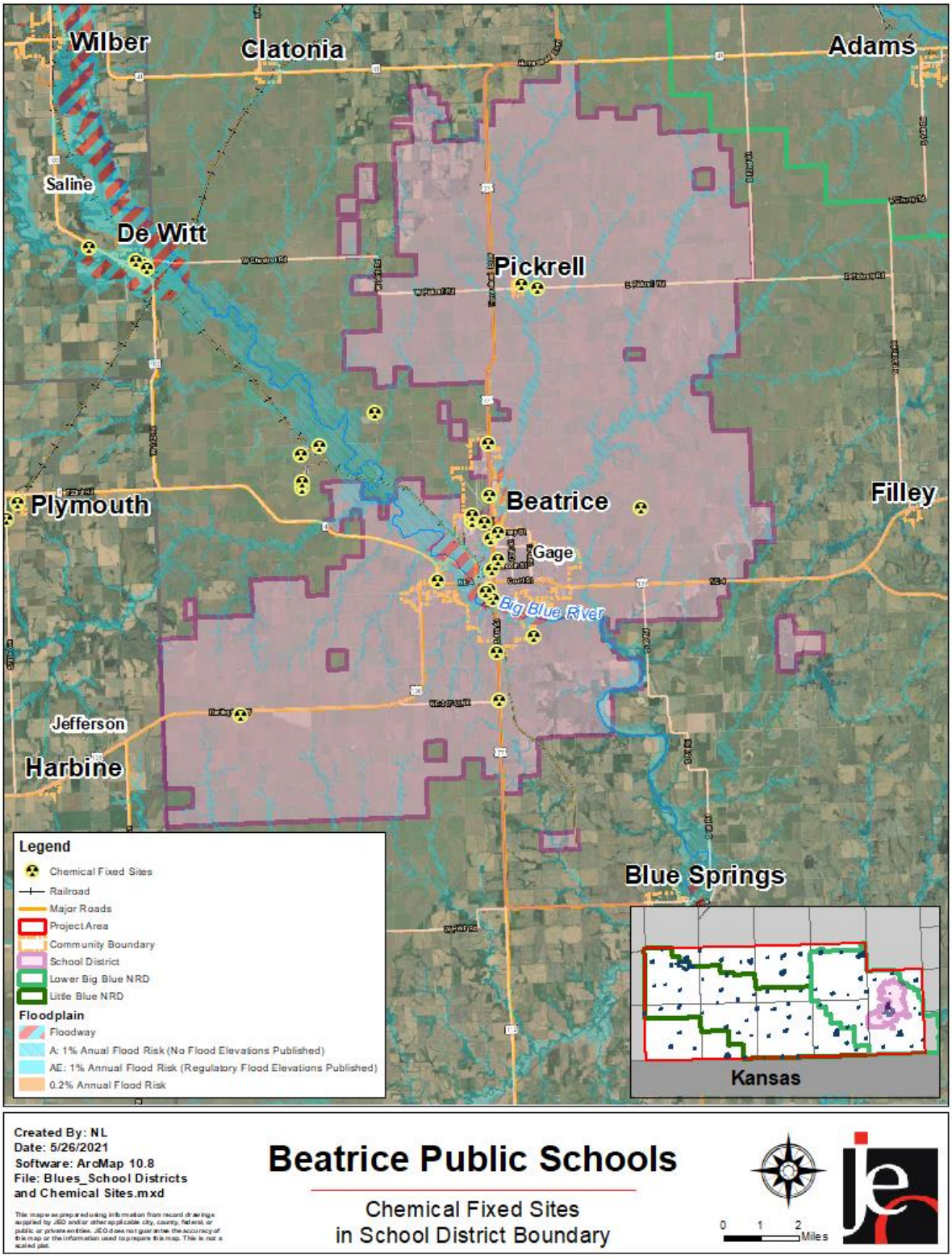
FACILITY NAME	ADDRESS	LOCATED IN FLOODPLAIN?
Beatrice Concrete Co Office	400 Scott St.	N
NGPL Compressor Station	21372 US Highway 77	N
Exmark Manufacturing Co	2101 Ashland Ave	N
Farmers Cooperative	805 S 6th St.	Y
Farmers Cooperative	403 S 3rd St.	Y
Farmers Cooperative	21169 SW 80th LN	N
Northern Natural Gas Company	30694 US Highway 77	N
Koch Fertilizer Beatrice LLC	21178 SW 89th Rd.	N
Beatrice Municipal Airport	3301 N 6th St.	N
Windstream Communications	445 N 6th St.	N
NDOT Beatrice Yard	117 Hill St.	N

FACILITY NAME	ADDRESS	LOCATED IN FLOODPLAIN?
Farmers Cooperative	1615 N 6th St.	N
Farmers Cooperative	800 Dorsey St.	N
Continental Carbonic Products	21410 SW 89th Rd.	N
Neapco Inc.	501 W. Sargent St.	N
Nutrien Ag Solutions	3400 N 8th St.	N
NPPD Beatrice Power Station	20261 SW 61st Rd.	N
Beatrice Concrete Co. Inc.	2300 S. 6th St.	N
Corn Oil & Renewable Energy	722 Kinney Dr.	Y
Charger Communications NE22072	2010 S. 19th St.	Y
Agrium Homestead Terminal	22292 SW 89th Rd.	N

Source: Nebraska Department of Environment and Energy[6]

[6] Nebraska Department of Environment and Energy. "Search Tier II Data." December 2020.

Figure BPS.4: Chemical Storage Fixed Sites near School Facilities



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 school district operates eight facilities. School facilities are listed below, along with information indicating the school's address, number of students and staff, if the facility is used as a shelter during emergencies, if the facility is located in the floodplain, and the presence of a backup power generator.

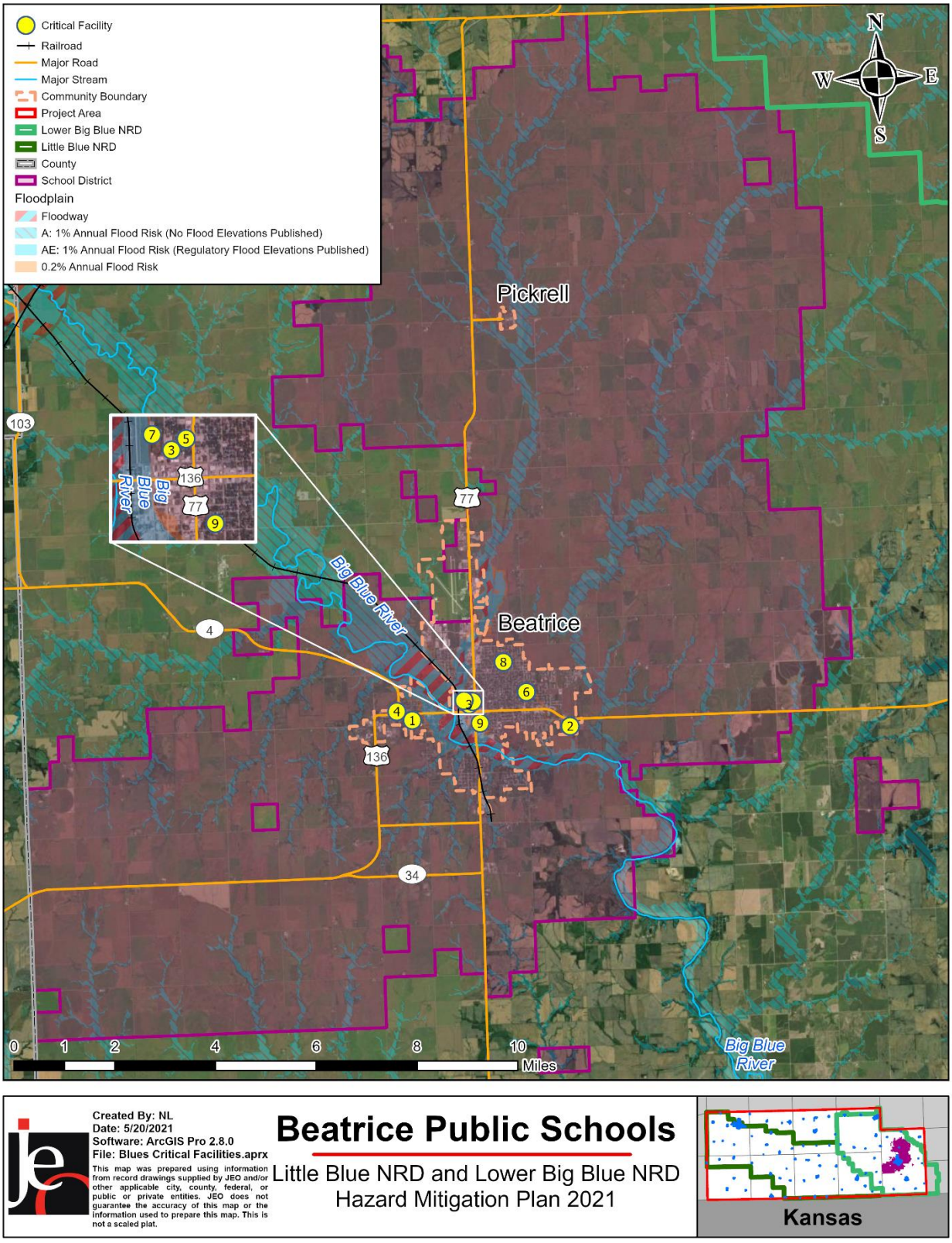
According to the local planning team, the majority of chemical fixed sites (21 sites) are on the outskirts of the City of Beatrice, a few within a couple of miles of each of the buildings. While some schools are closer to these sites than others, all would be impacted in this 9.48 sq mile community, in some manner, if there were to be a chemical spill.

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

Table BPS.4: Beatrice Public Schools Critical Facilities

CF #	Type of Lifeline	Name	# of Students	# of Staff	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	Beatrice Community Preschool	185	24	N	N	N
2	Safety and Security	Beatrice High School	645	81	N	N	N
3	Safety and Security	Beatrice Middle School	471	74	N	N	N
4	Safety and Security	Compass Learning Center	24	2	N	N	N
5	Safety and Security	District Office	0	15	N	N	N
6	Safety and Security	Lincoln Elementary	223	33	N	N	N
7	Safety and Security	Operation & Maintenance Building	0	7	N	N	N
8	Safety and Security	Paddock Lane Elementary	347	81	N	N	N
9	Safety and Security	Stoddard Elementary	197	25	N	N	N

Figure BPS.5: Beatrice Public Schools Critical Facilities



School Drills and Staff Training

Students and staff participate in a number of drills throughout the school year. The school follows the Standard Response Protocol (SRP Model) for the types of drills that are covered, which include:

- Fire drill – ten times annually
- Tornado – twice annually
- Shelter in Place/Intruder – four times annually
- Secure drill – twice annually
- Hold drill – twice annually
- Evacuations/Reunification – twice annually
- Bus Evacuations – twice annually

Standard Response Protocol training and refreshers will be conducted within the first 30 days of the school year for all school personnel in coordination with local fire, law enforcement, and emergency managers. This School EOP training will include:

- Hazard and incident awareness training for all staff.
- Orientation to the School EOP.
- First Aid and CPR/AED training for designated staff.
- Team training to address specific incident response or recovery activities such as Parent-Student Reunification, Special Needs, and Relocation.
- Two online FEMA courses: ICS 100 and IS-700 for assigned staff. Both courses are available for free at FEMA's Emergency Management Institute Website.

Additional training will include drills, tabletop, and functional exercises. Drills will be conducted at least once per semester. Exercises will occur at least once per school year. The details of training are outlined in the Multi-Year Training and Exercise Plan. Records of the training provided include date(s), type of training, and participant rosters that will be maintained. Approved parent volunteers and community members will also be incorporated into larger training efforts. Students actively participate in the drills listed above for fire, tornado, busing, and other emergency protocols. The district has contracts in place for two full time (during regular school days) resource officers, one located at Beatrice Middle School and one at Beatrice High School. The Beatrice Chief of Police meets once a year with the administration to review the facilities and emergency procedures. Beatrice Public Schools utilizes School Messenger. This service sends messages out via phone calls and/or emails to the parents, emergency contacts listed, staff and even students themselves letting them know of any information that is deemed a priority. This can be emergencies, updates, school closures, etc. School Messenger has the capabilities to broadcast this information in another language other than English. As our EL numbers increase in our district, this has become an opportunity that is being researched.

Historical Occurrences

See the Gage 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 district's capabilities.

Flooding

According to NCEI data, heavy rains on May 6th, 2007, caused a flood event in Beatrice that resulted in $650,000 in property damage. In Beatrice, the Big Blue River reached flood stage on the morning of the 6th and didn't drop back below flood stage until the 9th. The river flooded agricultural farmland and county roads in the region. Seven county roads were flooded from Beatrice toward Blue Springs and Wymore. Beatrice Public Schools is generally in a no flood zone. When the river rises, however, anything is possible. The City of Beatrice is divided by two main highways that intersect the town. The Big Blue River also intersects through Beatrice, requiring a bridge on the west and south sides of town. When the river reaches flood stage, the West Court Bridge shuts down first. Then, if the river continues to rise, the south bridge will also shut down. The roads can be navigated, but this is a delay driving around the river. The district usually has enough notice to be able to make sure the students make it home safely. In 2015 water rose from the river, flooding up to the dock doors at the Beatrice Public Schools maintenance building. Supplies and equipment had to be moved to prepare for further water rising.

Grass/Wildfire

Fire hazards are the most prevalent types of hazard. Beatrice Public Schools prides itself in their prevention efforts and drills so that they avoid any injuries resulting from fires. A rapid response by Beatrice Fire and Rescue during a scheduled lunch in recent years due to a smoke alarm, identified a burnt-up motor in the ventilation system at Beatrice High School. It is unknown when the last actual fire was inside a school building in Beatrice.

Hazardous Materials

Hazardous chemicals are used for a variety of purposes and are regularly transported through many areas in and around Beatrice. Currently, ammonia, chlorine, and acetylene are all used and stored on school grounds. With some of the schools in Beatrice surrounded by farmland, and streets transporting farming chemicals adjacent to all schools, chemical exposure is always a concern. With toxic chemicals like Anhydrous Ammonia and others prevalent, education and awareness are paramount.

Severe Thunderstorms

According to NCEI data, a severe thunderstorm event on April 8, 2001 produced one-inch hail and resulted in $20,000 in property damage. NCEI data also reports a severe thunderstorm event on April 11, 2006 that produced lightning and resulted in one death and three injuries. Beatrice and the surrounding areas are vulnerable to severe thunderstorms. The local planning team indicated that while all of the children have the availability of sheltering in an inside area, the buildings and grounds can still be affected by a lightning strike. In July 2020 one such storm hit

the high school and damaged the district phone service. Also, the high school marquee, located by Highway 136 was struck and damaged. The district has students practice drills to reduce risk to severe thunderstorms.

Severe Winter Storms

A representative from Beatrice Public Schools is usually one of the first on the roads checking to ensure the safety of travelling students. The district is made up of many rural gravel roads that can get snowed-in very easily. There are also a number of 14+ year old students who are able to drive on their own. The district makes it a priority to make sure the roads stay accessible for the students coming and going to school.

Tornadoes and High Winds

NCEI data reports two tornado events in Beatrice since 1996. On May 8, 1996, an F2 tornado hit Beatrice and resulted in 15 injuries and $12,000,000 in property damage. Beatrice and its surrounding areas are vulnerable to severe local storms. The effects are generally transportation problems and loss of utilities. Still, they can vary with the intensity of the storm, the level of preparation by Beatrice Public Schools, and the equipment and staff available to perform tasks to lessen the effects of severe local storms. Strong shelter locations increase safety for all staff and students. One such storm visited our area in 2006 at about 10:00 p.m. As most tornadoes do, it jumped around, this time both west of town and a few places downtown. One of the areas that were hit downtown was the old high school, which is now a middle school. The current middle school at that time was also hit. There was minor damage to the roof and water damage, but the maintenance crew was able to get right on the repairs as soon as it was safe to do so.

Administration

The school district has a superintendent, one assistant superintendent one special education director, one early childhood director, four principals, three assistant principals, and supportive staff. The school board is made up of a seven-member panel along with one student representative from the high school. In the event of a disaster, the district may also utilize support from the Beatrice Incident Command which is made up of representatives from Beatrice Fire and Rescue, Beatrice Police Department, Gage County Emergency Management Systems, Beatrice Community Hospital, Beatrice Area Chamber of Commerce, Beatrice Mary YMCA, Gage County NGage, Beatrice Main Street, and the Beatrice Mayor.

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 BPS.5: Capability Assessment

Survey Components		Yes/No
Planning Capability	Capital Improvements Plan/Long-Term Budget	N
	Continuity of Operations Plan	N
	Disaster Response Plan	N

Survey Components		Yes/No
	Other (if any)	N
Administrative & Technical Capability	GIS Capabilities	N
	Civil Engineering	N
	Staff who can assess jurisdictional vulnerability to hazards	N
	Grant Manager	N
	Mutual Aid Agreements	N
	Other (if any)	N
Fiscal Capability	Applied for grants in the past	Y
	Awarded grants in the past	Y
	Authority to levy taxes or bonds for specific mitigation projects	Y
	Development Impact Fees	N
	General Obligation Revenue or Special Tax Bonds in place	Y
	Flood Insurance	Y
	Other (if any)	N/A
Education and Outreach	Local school groups or non-profit organizations focused on environmental protection, emergency preparedness, access, and functional needs populations, etc. (Ex. Parent groups, hazard mitigation boards, etc.)	N
	Ongoing public education or information program (Ex. Responsible water use, fire safety, household preparedness, environmental education, etc.)	N
	StormReady Certification	N
	Other (if any)	
Drills	Fire	10/yr
	Tornado	2 /yr
	Bus Evacuation	2 /yr
	School Evacuation	2 /yr
	Secure Drill	2 /yr
	Lock Down Drill	4 /yr
	Hold Drill	2 /yr
	Other (if any)	

Table BPS.6: Overall Capability

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

Plan Integration

Beatrice Public Schools districts funds are limited and have decreased over recent years. Funds are mostly dedicated to maintaining current facilities and systems. In the last five years, the district was awarded a Big Red Math and Science grant, a CARES ACT grant, a GEERS grant, an ELO grant, and a 21st Century grant.

Beatrice Public Schools started work on the Beatrice Emergency Operations Plan during the summer of 2020 in conjunction and collaboration with several community entities such as the Beatrice Fire and Rescue, Beatrice Police and Gage County Sheriff departments, just to name a few. The purpose of the Beatrice Public School's Emergency Operations Plan (School EOP) is to identify and respond to incidents by outlining the responsibilities and duties of Beatrice Public Schools and its employees. Developing, maintaining, and exercising the plan empowers employees in an incident to act quickly and knowledgeably. In addition, the plan educates staff, faculty, students, and other key stakeholders on their roles and responsibilities before, during, and after an incident. This plan provides parents and other members of the community with assurances that Beatrice Public Schools has established guidelines and procedures to respond to threats, hazards and incidents in an effective way.

The developed guidelines and procedures for dealing with existing and potential student and school incidents are defined in the plan below. The basic plan and the functional and hazard-specific systems outline an organized systematic method to prevent, prepare for, respond to, and recover from incidents. Faculty and staff have been trained to assess the seriousness of incidents and respond according to these established procedures and guidelines. Beatrice Public Schools regularly schedules in-service training for faculty and staff.

Lastly, developing, maintaining, and exercising the School EOP increases Beatrice Public School's legal protection. Schools without established incident management procedures have been found liable for their absence of planning. While no set of policies rules out the potential for legal problems, establishing procedures and guidelines on the best professional practices provides a margin of protection against liability.

The district also has a Strategic Plan which is due to be updated in 2021. The local planning team noted the Strategic Plan is focused on identifying strengths and weaknesses for overall student learning and success. The plan identifies a strength as the districts overall and continual training for students and staff for multiple hazard events. Training and exercises are conducted monthly, quarterly, or yearly dependent on the training type.

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 administrative team, school resource officers, school psychologists, and building safety and security teams 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 annually and will include the public in the review and revision process by an annual update held at the Beatrice Public Schools Board meeting.

Mitigation Strategy

New Mitigation Actions – 2021 Plan

MITIGATION ACTION	MAP/RELOCATE CRITICAL INFRASTRUCTURE
DESCRIPTION	Relocate the Maintenance Shed to alleviate loss from flooding. This is in the beginning plan stages to move from the current area, to the High School grounds where there is no risk of flooding.
HAZARD(S)	Flooding
ESTIMATED COST	$3,000,000
FUNDING	District Building Funds
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Superintendent
STATUS	This is a new mitigation action.

MITIGATION ACTION	SAFE ROOMS/STORM SHELTERS
DESCRIPTION	Construct and install safe rooms or storm shelters – specifically at the elementary/preschool buildings
HAZARD(S)	All hazards
ESTIMATED COST	$250-$300/sq ft
FUNDING	District Building Funds
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Superintendent
STATUS	This is a new mitigation action.

DISTRICT PROFILE

EXETER-MILLIGAN PUBLIC SCHOOLS

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

Local Planning Team

Table EMS.1: Exeter-Milligan Public Schools Local Planning Team

Name	Title	Jurisdiction
Paul D. Sheffield	Superintendent	Exeter-Milligan Public Schools
Steve Briske	Director of Maintenance	Exeter-Milligan Public Schools
Jordan Marr	Safety Committee Chair	Exeter-Milligan Public Schools

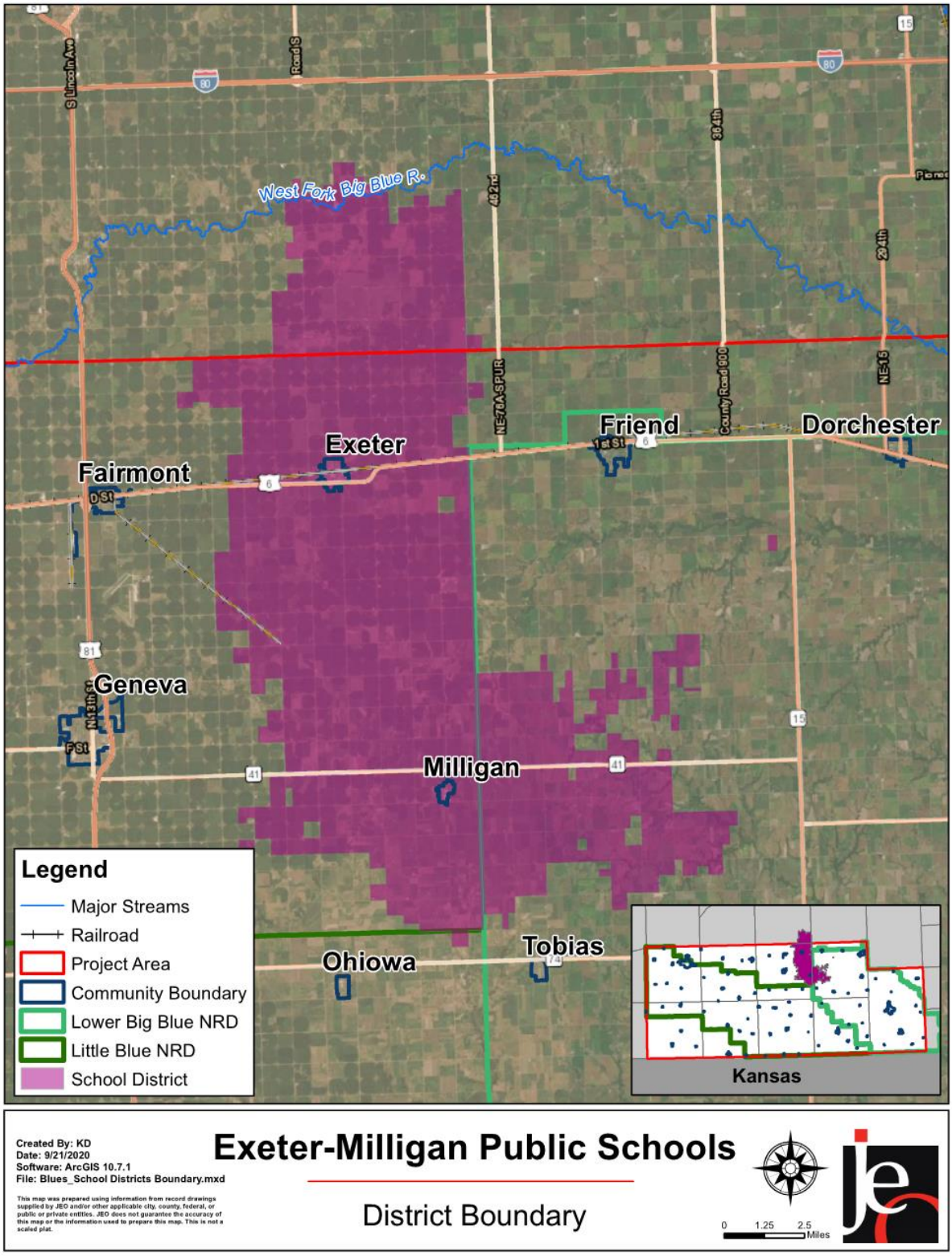
Location and Services

Exeter-Milligan Public Schools is a small rural district located primarily in Fillmore County, in southern Nebraska. Its offices are located at 318 South River Avenue, Exeter, NE 68531. The district is comprised of three schools with two located in the same building in Exeter: Exeter-Milligan High School (for grades 7-12) and Exeter Elementary School-Exeter (for grades K-2). The third school, Exeter Elementary School-Milligan (for grades 3-6), is located at 502 9th Street, Milligan, NE 68406. The district provides services to students in Exeter, Milligan, Burress, and Cordova, NE. English is the predominant language in the school district.

Transportation

Exeter-Milligan Public Schools major transportation corridors include US Highway 6, which runs east-west through the northern part of the district and Nebraska Highway 41, which runs east-west through the southern part of the district. There are two rail lines in the district traveling east-west near Exeter. Additional routes of concern for the school district include unpaved Roads 21 and 24 in which are the main transportation routes between Milligan and Exeter. The District contracts transportation with A&M Inc., which is a local company. Approximately 20 students ride morning routes both in Exeter and Milligan. There are 23 students transported from Exeter to Milligan for classes and 27 students transported from Milligan to Exeter for classes. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

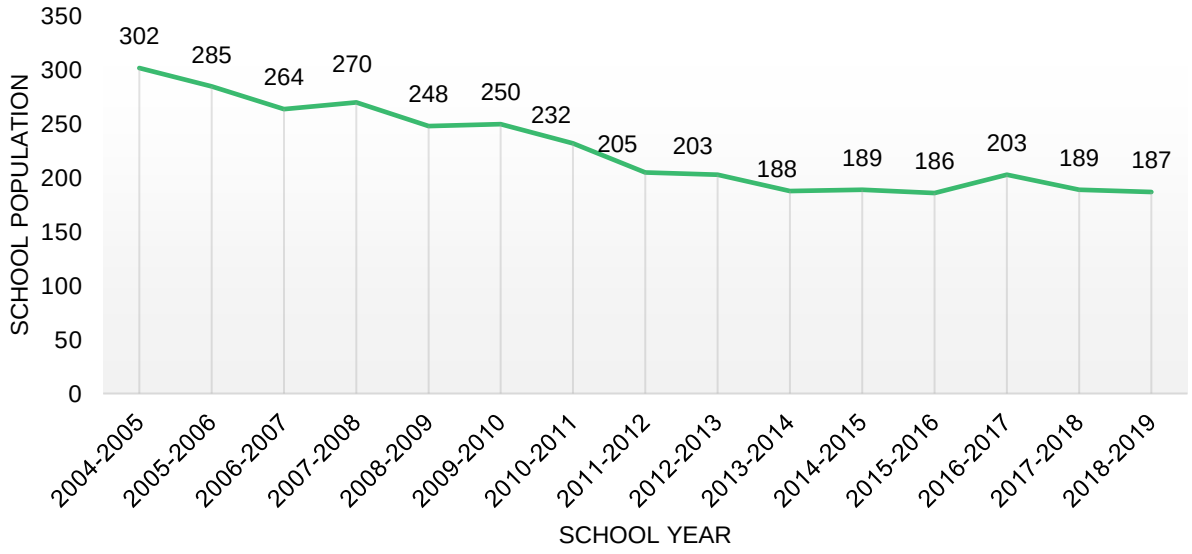
Figure EMS.1: Exeter-Milligan Public Schools Boundary



Demographics

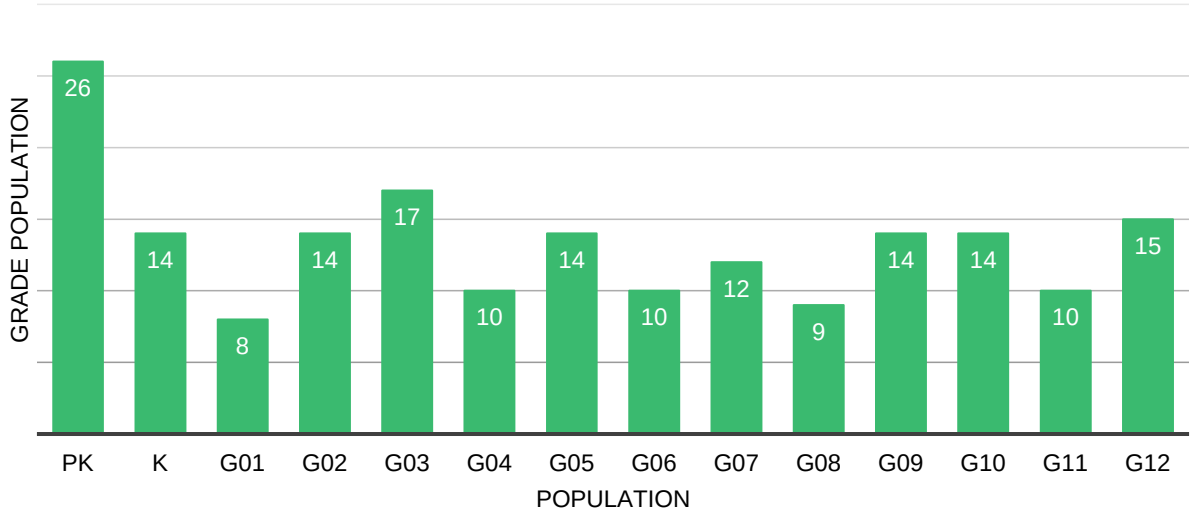
The following figure displays the historical student population trend starting with the 2004-05 school year and ending with the 2018-19 year. It indicates that the student population has been decreasing over time with a stable population recently. The local planning team noted overall student population is anticipated to stay consistent in the next five years. There are approximately 187 students enrolled in Exeter-Milligan Public Schools.

Figure EMS.2: Student Population 2004-2018



Source: Nebraska Department of Education[7]

Figure EMS.3: Students by Grade, 2018-2019



Source: Nebraska Department of Education

7 Nebraska Department of Education. 2019. "Nebraska Education Profile". https://nep.education.ne.gov/. Accessed September 2020.

The figure above indicates that the largest number of students are in pre-kindergarten, followed by 3rd grade. The lowest population of students are in 1st and 8th grade. According to the Nebraska Department of Education (NDE), 23.5% of students receive either free or reduced priced meals at school in the 2018-19 year. This is low than the state average of 45.2%. Additionally, 18% of students are in the Special Education Program. These students may be more vulnerable during a hazardous event than the rest of the student population. The district employs two administrators, 27 teachers, and 12 other staff members.

Table EMS.2: Student Statistics, 2018-2019

	District	State of Nebraska
Free/Reduced Priced Meals	23.5%	45.2%
Special Education Students	18.0%	15.5%
English Language Learners (ESL)	N/A	7.2%
School Mobility Rate	7.5%	10.3%

Source: Nebraska Department of Education
N/A: Data is not available if less than 10 students

Future Development Trends

In the past five years the district saw the construction of a 16,000 square-foot addition at the Exeter school location, completed in 2016. The addition included spaces for music, art, foreign language, preschool, a community classroom and a fitness center also available to the public. The local planning team noted the student body population is decreasing due to a lack of affordable and quality housing. The lack of housing contributes to a decline in young people moving back to the community. Additionally, smaller families have contributed to decline in student enrollment. Currently, there are no new plans for construction or renovation in the district.

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 in the district which house hazardous materials.

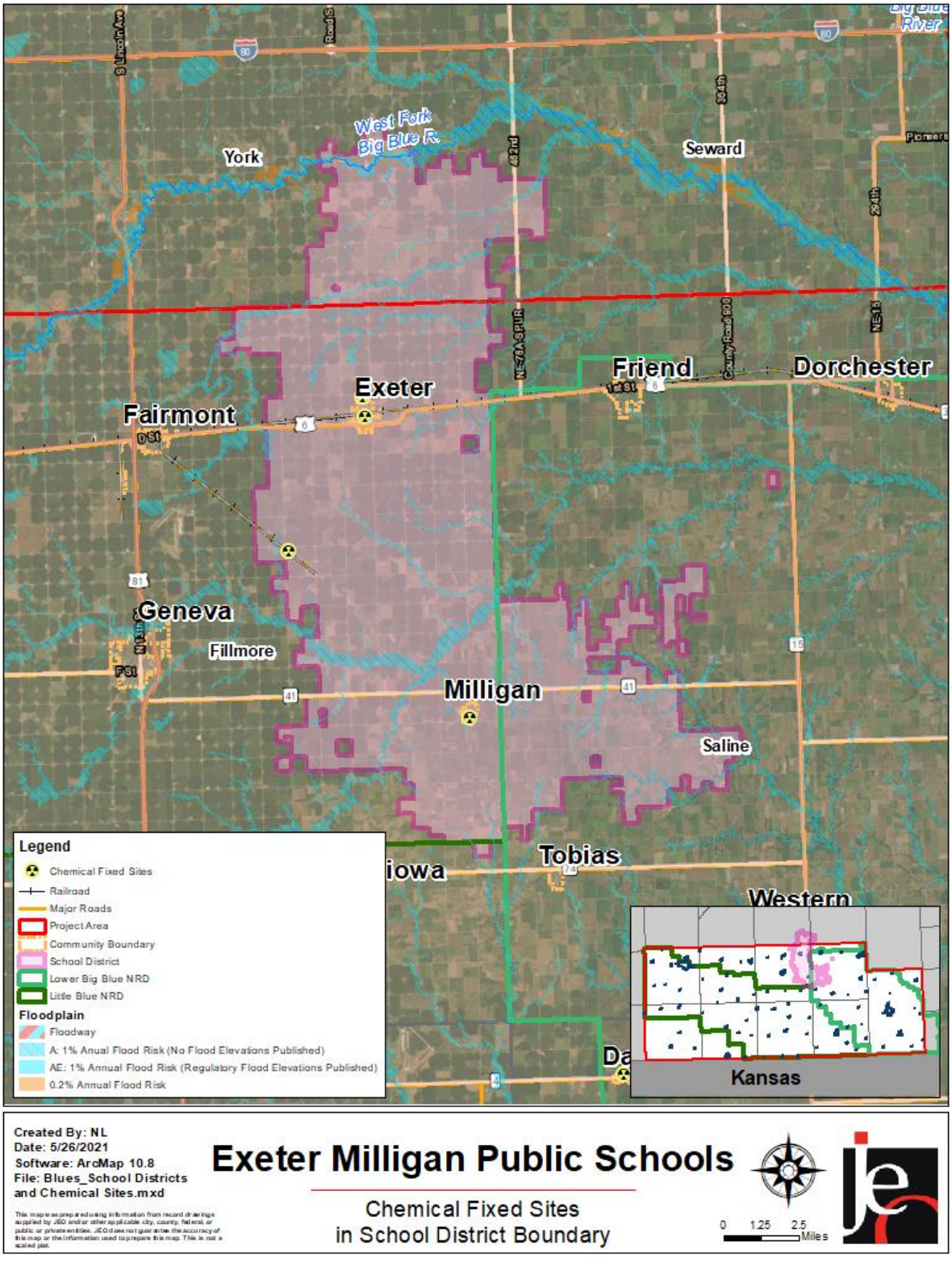
Table EMS.3: Chemical Storage Fixed Sites

Facility Name	Address	Floodplain
Manning Grain Co	4 Burress Rd, Burress, NE	N
Farmers Cooperative	307 N St, Geneva, NE	N
Farmers Cooperative Grain	134 S Burlington Ave, Exeter, NE	N
Farmers Cooperative Bulk/Chems	919 N Exeter Dr, Exeter, NE	N

Source: Nebraska Department of Environment and Energy[8]

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

Figure EMS.4: Chemical Storage Fixed Sites near School Facilities



Critical Facilities

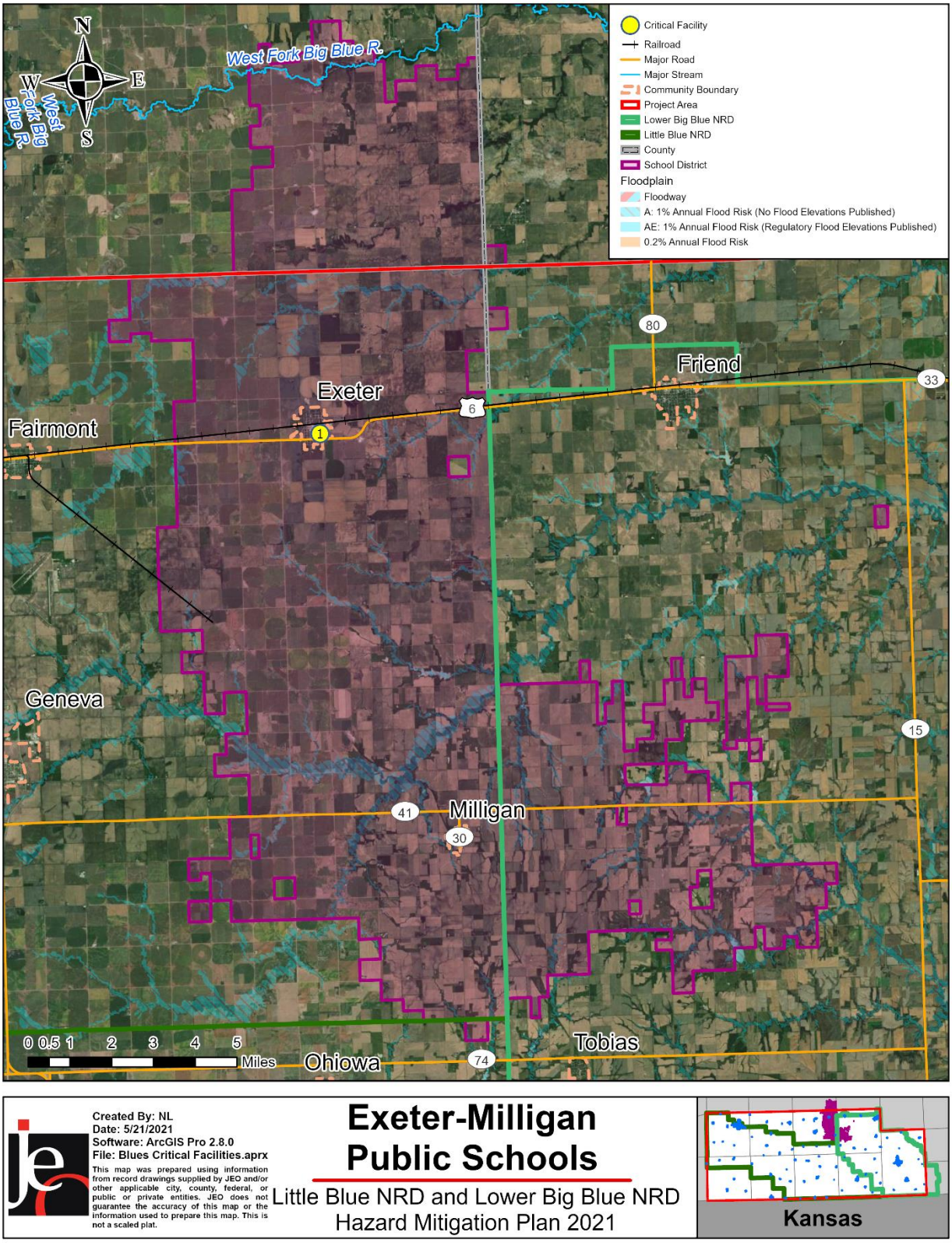
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update. The school district operates one facility. School facilities are listed below, along with information indicating the school's address, number of students and staff, if the facility is used as a shelter during emergencies, if the facility is located in the floodplain, and the presence of a backup power generator.

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

Table EMS.4: Exeter-Milligan Public Schools Critical Facilities

CF #	Type of Lifeline	Name	# of Students	# of Staff	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	Exeter-Milligan Public School	160	41	Y	N	N

Figure EMS.5: Exeter-Milligan Public Schools Critical Facilities



School Drills and Staff Training

Students and staff participate in a number of drills throughout the school year. The school follows the Standard Response Protocol (SRP Model) for the types of drills that are covered, which include:

- Fire drills – monthly
- Tornado – four times annually
- Shelter in Place/Intruder – four times annually
- Evacuations/Reunification – twice annually
- Bus Evacuations – twice annually

Staff undergo training conducted by the local safety committee on emergency procedures. Mass communication including school newsletters, website updates, and student handbooks are used to educate students and families of emergency procedures. The district currently uses an emergency alert system through Tyco IS to notify parents and staff about emergency events. The district plans to transfer to a new alert system that syncs with the student information system in the winter of 2020.

Historical Occurrences

See the Fillmore County 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 district's capabilities.

Hazardous Materials

The proximity of the rail line two blocks north of the school and US Highway 6 is a concern to the school, students, and staff. A train carrying ferrous chloride solution derailed about a half-mile east of the Village of Exeter in 1991. The derailment did not impact the community or the school. It is unknown the type or quantity of materials transported along Highway 6, but hazardous materials are regularly transported along this route, which could impact the school if a spill was to occur. With the railroad tracks only 2 blocks north of the school, this could present a hazard if there was another train derailment. Occasionally railroad crossings are blocked for long periods of time. Students who live on the north side of the tracks would not have a route home in the event of an emergency. The nearest unblocked crossings are 1 mile east or west of town. To mitigate this hazard, the district is currently working on a school continuity plan. In the future, the district hopes to find a safer route for students who could be blocked by railroad crossings when returning home.

Severe Thunderstorms

A severe thunderstorm brought golf ball size hall to Exeter in June 2014 and caused $150,000 in property damage. The hail from this storm did only minor damage to the school but many homes

and vehicles in the village were damaged. High winds from severe thunderstorms are also a concern due to the risk of power outages. On July 25, 2005 severe thunderstorm winds in Milligan, NE reached estimated gusts of 60 miles per hour and caused nearly $25,000 in property damages. Severe thunderstorm events are a major concern for the district. Damages to buildings can create safety concerns and interrupt the education process. To mitigate this hazard, the district has included projects to purchase a backup generator and write a school continuity plan.

Severe Winter Storms

The safety of students transported to and from school during winter weather and school closings are of concern to the district. An additional concern is the possibility of power outages during severe storm events. In the winter of 2011, several severe winter storms occurred and forced school closures in the district. To mitigate this hazard, the district would like to purchase a backup generator and pave County Road 24 to Milligan to reduce hazards along this road. The district also operates a tree maintenance program, to reduce the risk of trees being downed by storms.

Tornadoes and High Winds

In May 2014 a tornado occurred only three miles north of Exeter in was rated an EF-3. No damages were reported at the school or in the village, but the tornado caused approximately $7,500,000 in damages to Fillmore County. The greatest concern is the safety of students and staff in the event of a tornado during school hours. When constructing an addition to the school in 2016, the district considered adding a safe room, but did not proceed due to the excessive costs and regulations. After observing issues raised in other school districts, Exeter-Milligan Public Schools changed the location of its tornado shelters by moving them out of the lowest levels in the building. To mitigate this hazard, the district would like to purchase a backup generator and pave County Road 24 to Milligan to reduce hazards along this road.

Administration

The school district has a superintendent, two principals, and support staff. The school board is made up of a six-member panel. The district also has a number of additional departments and staff that may be available to implement hazard mitigation initiatives.

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 EMS.5: Capability Assessment

Survey Components		Yes/No
Planning Capability	Capital Improvements Plan/Long-Term Budget	Yes
	Continuity of Operations Plan	Yes
	Disaster Response Plan	Yes
	Other (if any)	
	GIS Capabilities	No
	Civil Engineering	No

Survey Components		Yes/No
Administrative & Technical Capability	Staff who can assess jurisdictional vulnerability to hazards	No
	Grant Manager	No
	Mutual Aid Agreements	No
	Other (if any)	
Fiscal Capability	Applied for grants in the past	No
	Awarded grants in the past	No
	Authority to levy taxes or bonds for specific mitigation projects	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds in place	No
	Flood Insurance	No
	Other (if any)	
Education and Outreach	Local school groups or non-profit organizations focused on environmental protection, emergency preparedness, access, and functional needs populations, etc. (Ex. Parent groups, hazard mitigation boards, etc.)	No
	Ongoing public education or information program (Ex. Responsible water use, fire safety, household preparedness, environmental education, etc.)	No
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 /yr
	Tornado	4 /yr
	Intruder	4 /yr
	Bus Evacuation	2 /yr
	School Evacuation	2 /yr
	Other (if any)	

Table EMS.*6*: Overall Capability

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

Plan Integration

Exeter-Milligan Public Schools maintains a Safety and Security Management Plan, which was last updated in 2015. The plan outlines the chain of command for crisis situations, communication procedures during an emergency, crisis management procedures, safety precaution and emergency preparedness measures, and procedures to ensure building security. The crisis management section of this plan outlines the procedures for managing a variety of hazardous events, including tornados, intruder alerts, and severe weather events.

The district's superintendent would be the main actor in overseeing the implementation of mitigation actions in school facilities. The districts safety committee participated in an Emergency Operations Planning workshop in the summer of 2020 in conjunction with the Village of Exeter, the Fillmore County Emergency Management office and the Fillmore County Sheriff's Department. The updated plan meets the needs of all the emergency planning requirements as expressed by the Nebraska Department of Education. The district will continue to update its safety plan in conjunction with the Village of Exeter, the Fillmore County Emergency Management office and the Fillmore County Sheriff's Department.

Exeter-Milligan Public Schools district funds are sufficient and have stayed the same over recent years. Currently there are no major projects that funds are dedicated to any specific projects.

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 district profile was last reviewed by the local planning team in the summer of 2020 with necessary changes made through recommendations from the workshop and planning process. The superintendent and safety committee chair 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 annually and will include the public in the review and revision process by: website updates, newsletters, student and staff handbook updates, and the schools "Friday note".

Mitigation Strategy

Continued Mitigation Actions

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Provide a portable or stationary source of backup power
HAZARD(S)	All hazards
ESTIMATED COST	$50,000+
FUNDING	School taxes, HMGP, BRIC
TIMELINE	2+ years
PRIORITY	Medium
LEAD AGENCY	Superintendent, School Board
STATUS	This project has not yet been started.

MITIGATION ACTION	CONTINUITY PLANNING
DESCRIPTION	Develop continuity plans for critical services in order to increase resiliency after a hazardous event
HAZARD(S)	All hazards
ESTIMATED COST	$5,000+
FUNDING	School taxes, HMGP, BRIC
TIMELINE	1 year
PRIORITY	Medium
LEAD AGENCY	Superintendent, School Board
STATUS	This project has not yet been started.

MITIGATION ACTION	PROTECT AND IMPROVE ROADS AND BRIDGES
DESCRIPTION	Pave County Road 24 between Exeter and Milligan. This would reduce traffic accidents and improve emergency response capabilities
HAZARD(S)	All hazards
ESTIMATED COST	$1,000,000+
FUNDING	School taxes, HMGP, BRIC
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Superintendent, School Board
STATUS	This project has not yet been started.

Removed Mitigation Actions

MITIGATION ACTION	COMMAND CENTER
HAZARD(S)	All hazards
STATUS	This project was identified as no longer a priority for the district.

MITIGATION ACTION	SAFE ROOM AND STORM SHELTERS
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms
STATUS	This project was identified as no longer a priority for the district.

DISTRICT PROFILE

FILLMORE CENTRAL PUBLIC SCHOOLS

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

Local Planning Team

Table FCS.1: Fillmore Central Public Schools Local Planning Team

Name	Title	Jurisdiction
Josh Cumpston	Superintendent	Fillmore Central Public Schools
Ryan Theobald	High School Principal/Safety Committee Chair	Fillmore Central Public Schools

Location and Services

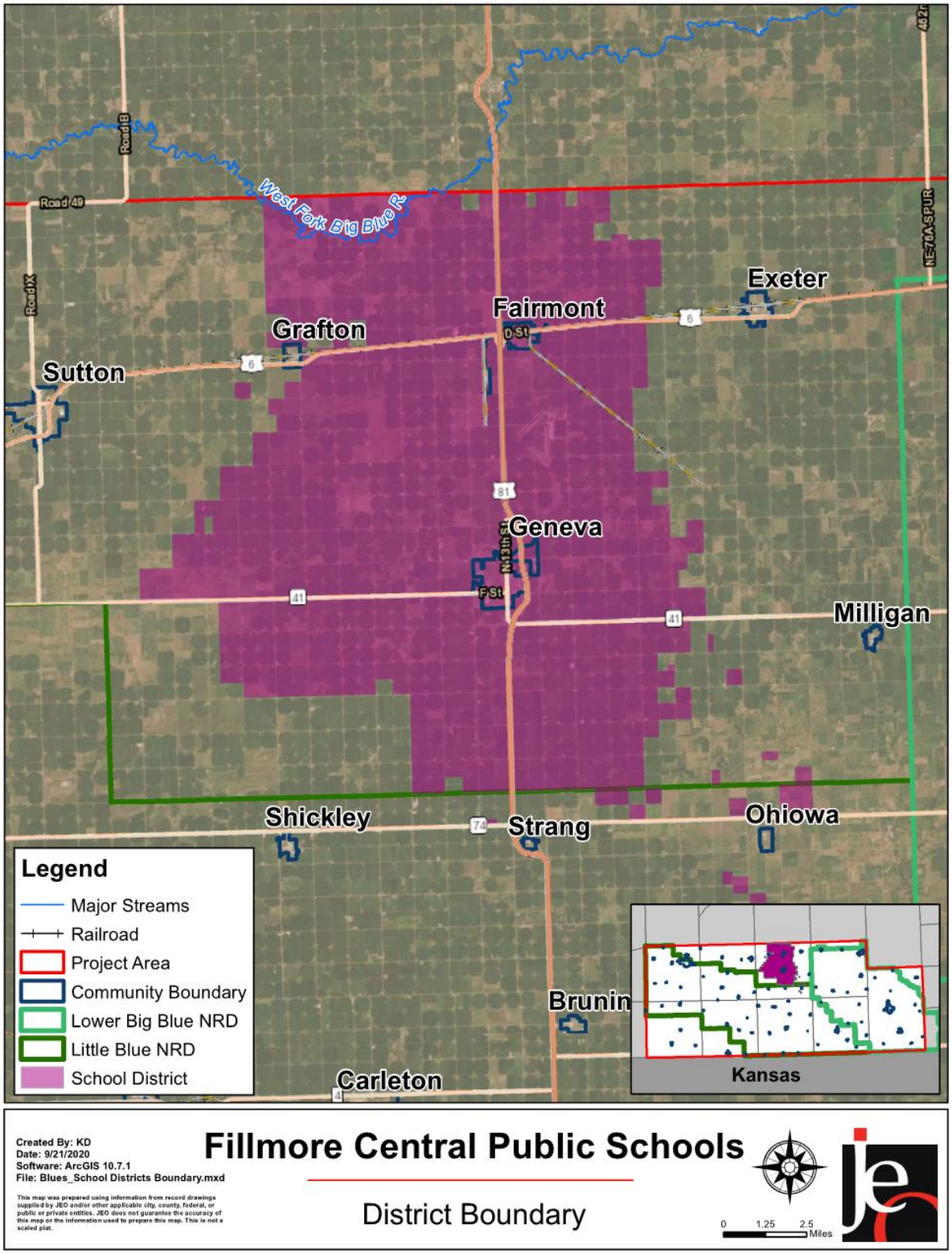
Fillmore Central Public Schools is a small rural district located in Fillmore County, in southern Nebraska. Its offices are located at 1410 L Street, Geneva, NE 68361. The district is comprised of three schools: Fillmore Central Elementary School, Fillmore Central Middle School, and Fillmore Central High School.

The district provides services to students who opt in from Sutton, Exeter-Milligan, Shickley, Meridian, Centennial, Thayer Central, Bruning Davenport, and York school districts. English is the predominant language in the district, with some Spanish speaking students as well.

Transportation

Fillmore Central Public Schools major transportation corridors include US Highway 6, which runs east-west through the northern part of the district, US Highway 81, which runs north-south through the center of the district, and Nebraska Highway 41, which runs east-west through the southern part of the district. Highway 81 is of particular concern due to the high volume of traffic present. District school buses commonly use this highway and the district noted crossing the highway can be a challenge for local bus drivers. The district owns and operates six school buses which transport 200 students on average daily. There are two rail lines in the district traveling east-west through Fairmont. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

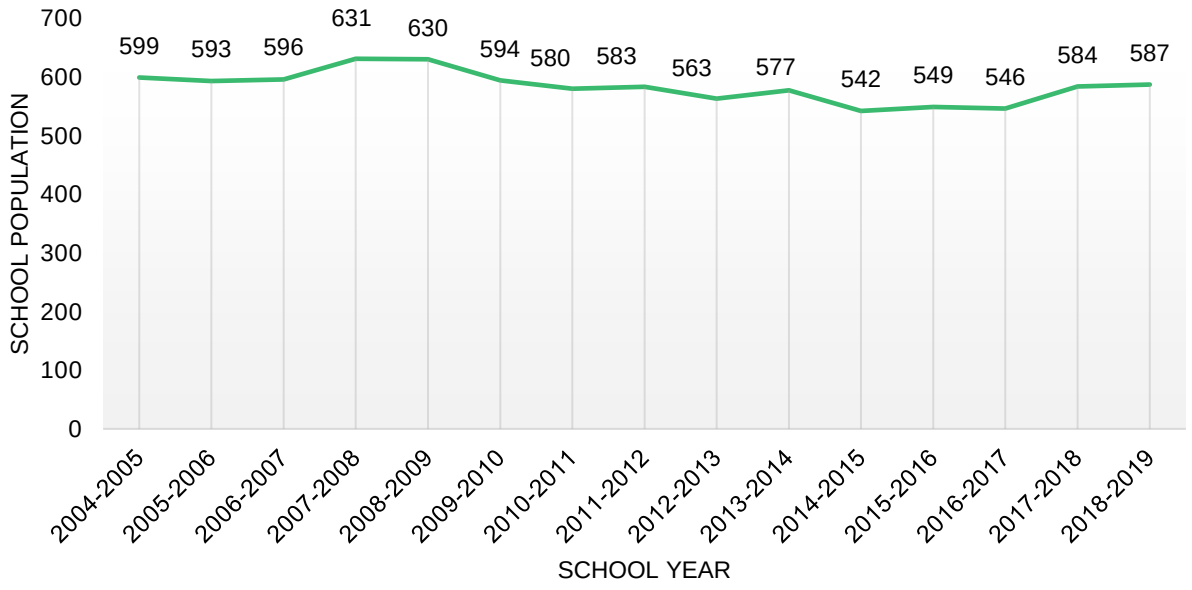
Figure FCS.1: Fillmore Central Public Schools District Boundary



Demographics

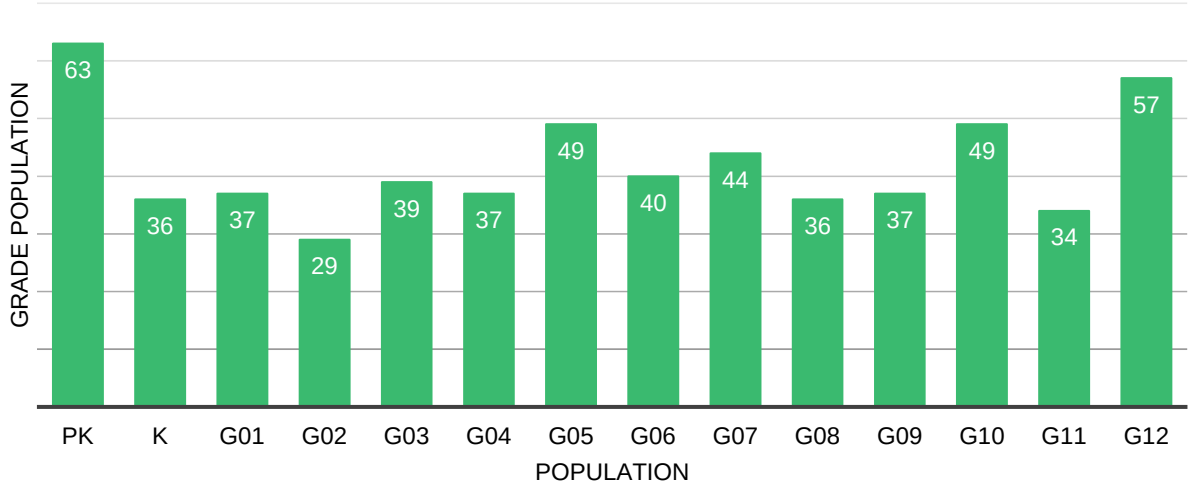
The following figure displays the historical student population trend starting with the 2004-05 school year and ending with the 2018-19 year. It indicates that the student population has been decreasing over time with a slight increase recently. There are approximately 587 students enrolled in Fillmore Central Public Schools District. The district noted they anticipate little to no change in student population in the coming years.

Figure FCS.2: Student Population 2004-2018



Source: Nebraska Department of Education[9]

Figure FCS.3: Students by Grade, 2018-2019



Source: Nebraska Department of Education

9 Nebraska Department of Education. 2019. "Nebraska Education Profile". https://nep.education.ne.gov/. Accessed September 2020.

The figure above indicates that the largest number of students are in pre-kindergarten, followed by 12th and 5th grades. The lowest population of students are in 2nd and 11th grades. According to the Nebraska Department of Education (NDE), 39.9% of students receive either free or reduced priced meals at school in the 2018-19 year. This is lower than the state average of 45.2%. Additionally, 19.3% of students are in the Special Education Program. These students may be more vulnerable during a hazardous event than the rest of the student population.

Table FCS.2: Student Statistics, 2018-2019

	District	State of Nebraska
Free/Reduced Priced Meals	39.9%	45.2%
Special Education Students	19.3%	15.5%
English Language Learners (ESL)	N/A	7.2%
School Mobility Rate	7.1%	10.3%

Source: Nebraska Department of Education
N/A: Data is not available is less than 10 students

Future Development Trends

In the past five years the district has added a new weight room, wrestling room, locker rooms, and a green house at the high school. These athletic facilities can be used as sheltering locations during severe weather events. Additionally the HVAC system at the elementary school has been replaced. There are currently no future development or improvements planned for the next five years.

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 16 chemical storage sites in the district which house hazardous materials. While no major spill events have occurred which impacted school facilities, local concerns exist as the high school is located near Bioberica, Ipso, Fortigen, and Mmetal Tech and the middle school is located near the Farmers Co-Op East facility.

Table FCS.3: Chemical Storage Fixed Sites

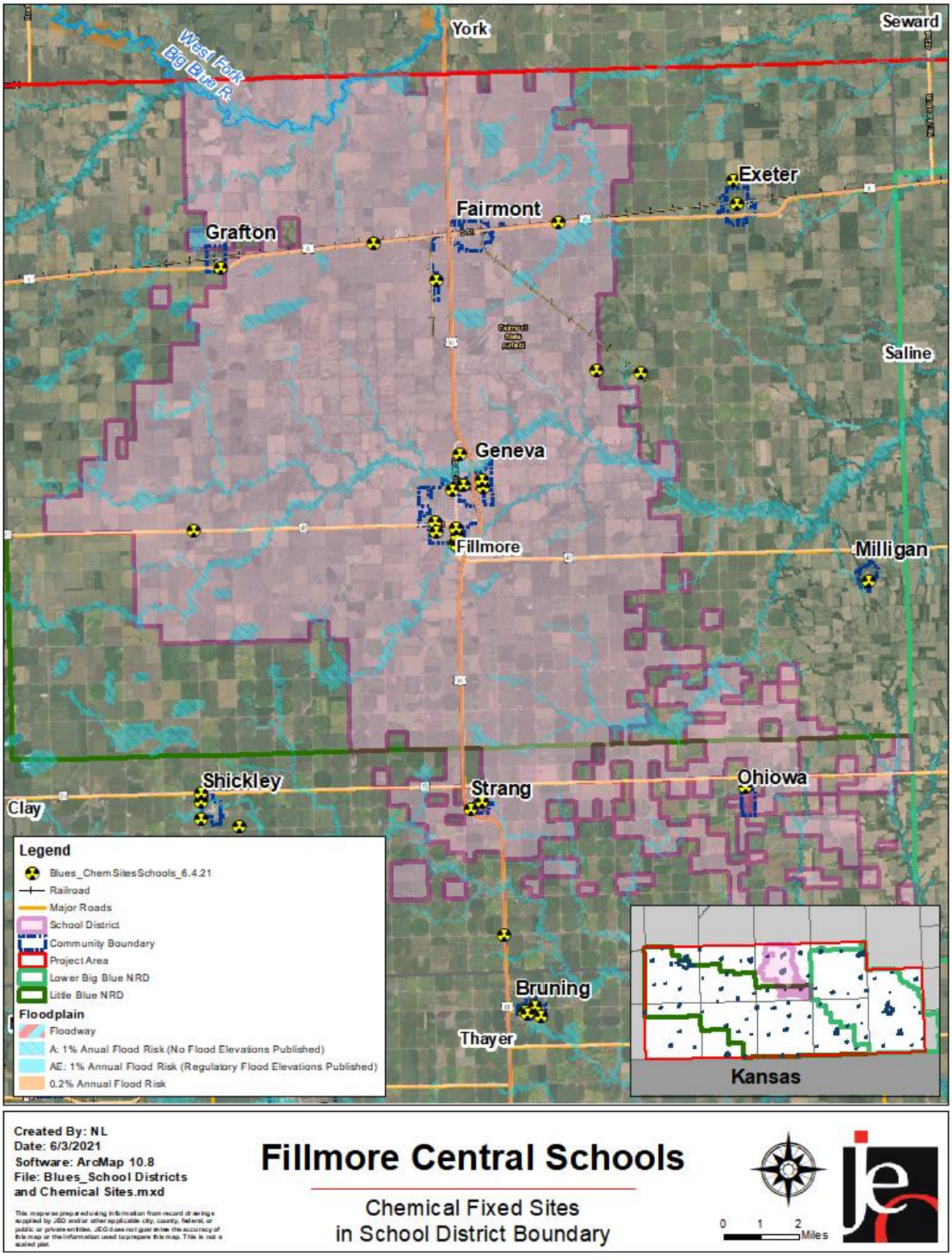
Facility Name	Address	Located in Floodplain?
Bioibercia Nebraska Inc	1660 R St, Geneva, NE	N
Plains Equipment Group	736 S 13th St, Geneva, NE	N
Wynee Transport Service Shop	Road I, Fairmont, NE	N
Geneva Terminal	1479 N 13th St, Geneva, NE	N
Aurora Co-op Elevator Company	703 G St, Geneva, NE	N
NDOT Geneva Yard	535 S 13th St, Geneva, NE	N
IPSCO Tubulars Inc	1201 R St, Geneva, NE	N
Aurora Co-op Elevator Company	Jct 7th & D Sts, Geneva, NE	N
Lichti Bros Oil Co Inc	723 S 13th St, Geneva, NE	N
Farmers Cooperative East	Highway 6 E, Fairmont, NE	N
Nutrien Ag Solutions	2010 Road 11, Fairmont, NE	N

Facility Name	Address	Located in Floodplain?
Lichti Bros Oil Co Inc	Highway 41 W, Geneva, NE	N
Metal-Tech Partners	2103 R St, Geneva, NE	N
George Bros Propane & Fertilizer	Road 6 & Highway 41, Grafton, NE	N
Flint Hills Resources Fairmont	1214 Road G, Fairmont, NE	N
Fortigen Geneva LLC	2240 R St, Geneva, NE	N

Source: Nebraska Department of Environment and Energy[10]

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

Figure FCS.3: Chemical Storage Fixed Sites near School Facilities



Critical Facilities

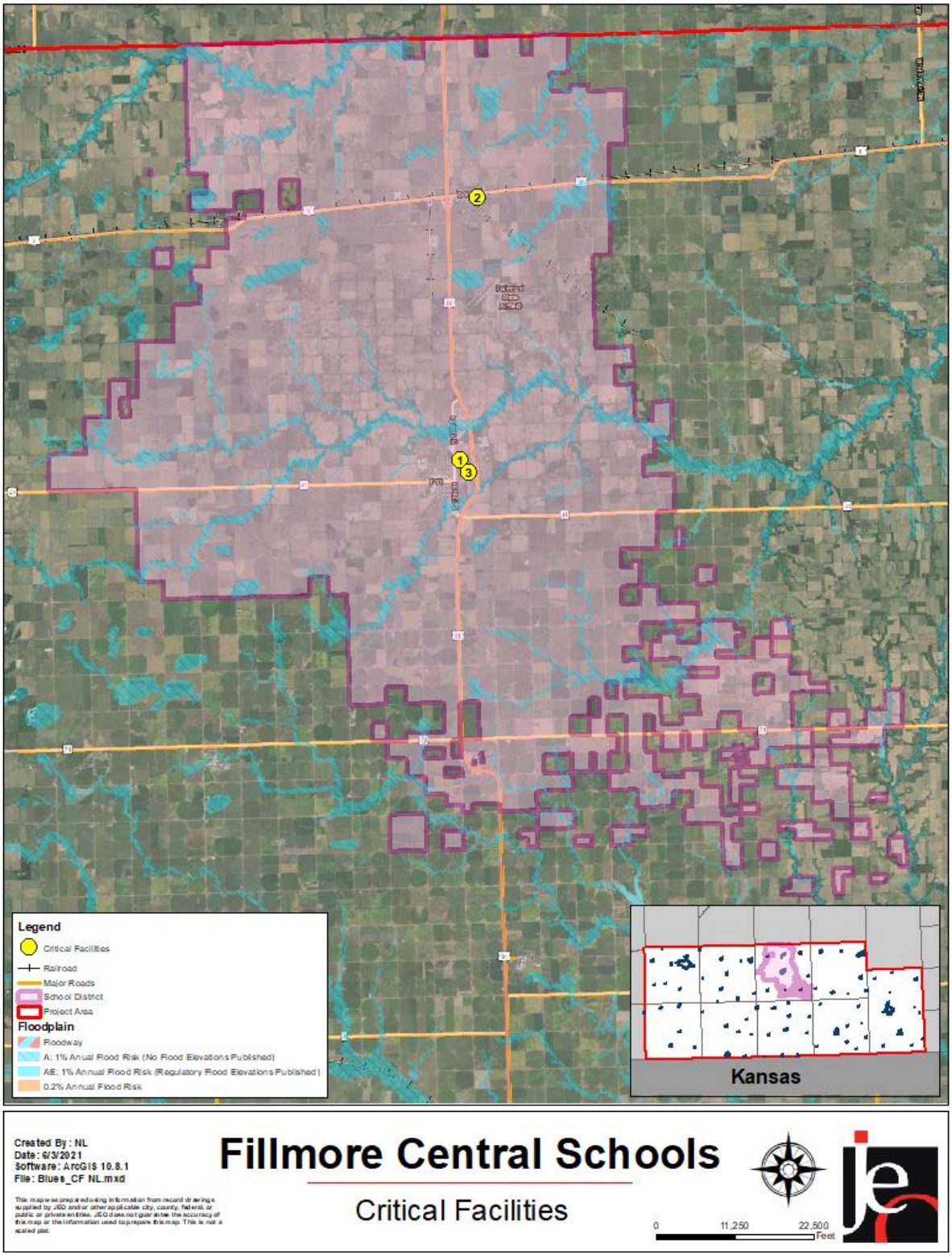
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update. The school district operates three facilities. School facilities are listed below, along with information indicating the school's address, number of students and staff, if the facility is used as a shelter during emergencies, if the facility is located in the floodplain, and the presence of a backup power generator.

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

Table FCSS.4: Fillmore Central Public Schools Critical Facilities

CF #	Type of Lifeline	Name	# of Students	# of Staff	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	High School	180	25	Y	N	N
2	Safety and Security	Middle School	180	27	Y	N	N
3	Safety and Security	Elementary School	200	30	Y	N	N

Figure FCS.4: Fillmore Central Public Schools Critical Facilities



School Drills and Staff Training

Students and staff participate in a number of drills throughout the school year. The school conducts the following types and frequency of drills:

- Fire drill – once a month
- Tornado – once annually
- Bus Evacuations – twice annually
- Evacuations/Reunification – once annually

Staff and students have trainings throughout the year to practice drills and emergency procedures. Workshops, in-service trainings, and specific first aid training is also conducted to bolster staff knowledge. The school newsletter and website are used to educate students and families of emergency procedures. The district currently also uses an emergency alert system through an automated text and phone call system or social media.

Historical Occurrences

See the Fillmore County 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 district's capabilities.

Severe Thunderstorms

The school indicated that severe thunderstorms are the most frequently experienced hazard event with storms that impact the school nearly every spring and summer. The school is primarily concerned with wind and hail damage to roofs, windows, structural damage, and power failures. The school has a backup system for their records. The school does not have any generators in place. The school does have weather radios. The school has not identified any hazardous trees that need removal. The school has used insurance in the past for minor hail damage.

Severe Winter Storms

The school is impacted by severe winter storms each year. The school is primarily concerned with power failure, heating issues, low visibility or other transportation issues. The school has not had notable structural damages from winter storms, but has had to close schools due to rolling blackouts, icy road conditions, and poor road visibility in the past. The school does have snow fence next to the high school. The school contracts snow removal for its property.

Tornadoes and High Winds

High winds and tornadoes are common throughout the planning area and have the potential for devastating impacts in the district and surrounding communities. As the district houses hundreds of students, specific concerns exist for the safety of children. Other concerns include structural damage, power failure, and debris. In 2020 during a school open house parents, students, and

staff at the middle school had to relocate to storm shelters due to a tornado in Fairmont. No damages or injuries were reported. The school uses interior locker rooms to serve as storm shelters for staff and students. The district noted a need for certified safe room facilities at the elementary and middle schools.

Administration

The school district has a superintendent, three principals, and support staff. The school board is made up of a six-member panel. The district also has a number of additional departments and staff that may be available to implement hazard mitigation initiatives.

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 FCS.5: Capability Assessment

Survey Components		Yes/No
Planning Capability	Capital Improvements Plan/Long-Term Budget	*Yes*
	Continuity of Operations Plan	*No*
	Disaster Response Plan	*No*
	Other (if any)	
Administrative & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Staff who can assess jurisdictional vulnerability to hazards	Yes
	Grant Manager	No
	Mutual Aid Agreements	No
	Other (if any)	
Fiscal Capability	Applied for grants in the past	No
	Awarded grants in the past	No
	Authority to levy taxes or bonds for specific mitigation projects	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds in place	No
	Flood Insurance	No
	Other (if any)	
Education and Outreach	Local school groups or non-profit organizations focused on environmental protection, emergency preparedness, access, and functional needs populations, etc. (Ex. Parent groups, hazard mitigation boards, etc.)	No
	Ongoing public education or information program (Ex. Responsible water use, fire	Yes

Survey Components		Yes/No
	safety, household preparedness, environmental education, etc.)	
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 /yr
	Tornado	1 /yr
	Intruder	1 /yr
	Bus Evacuation	2 /yr
	School Evacuation	1 /yr
	Other (if any)	

Table FCS.*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	Limited

Plan Integration

Fillmore Central Public Schools maintains a Fillmore Central Safety Plan, procedures during an emergency, crisis management procedures, safety precaution and emergency preparedness measures, and procedures to ensure building security. The plan is reviewed and updated annually or on an as needed basis by the Safety and Security Committee. The committee discusses response actions and ways to mitigate impacts to hazard events.

The district's superintendent would be the main actor in overseeing the implementation of mitigation actions in school facilities. The district's efforts to educate its staff, students, and the community about its preparedness plans and emergency procedures.

Fillmore Central Schools district funds are sufficient for current operations and have stayed the same over recent years. Currently there are no major projects that funds are dedicated to any specific projects. Any new projects or developments would require additional bonds or 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 district profile was last reviewed by the local planning team in the summer of 2020 with necessary changes made through recommendations from the workshop and planning process. The local planning team noted specific updates including consistency and alignment between

departments and more detailed emergency response actions. The superintendent, Administrative team, and members of the Safety and Security Committee 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 annually and will include the public in the review and revision process by: website updates, newsletters, student and staff letters.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	PROMOTE FIRST AID
DESCRIPTION	Promote first aid training for all staff
HAZARD(S)	All hazards
STATUS	Staff are continually trained in first aid. This is an established and ongoing action.

MITIGATION ACTION	WEATHER RADIOS
DESCRIPTION	Conduct an inventory of weather radios at schools and school facilities and provide new radios as needed
HAZARD(S)	All hazards
STATUS	Weather radios have been purchased and are available in all school facilities.

Continued Mitigation Actions

MITIGATION ACTION	CONTINUITY PLANNING
DESCRIPTION	Develop continuity plans for critical services in order to increase resiliency after a hazardous event
HAZARD(S)	All hazards
ESTIMATED COST	Staff Time
FUNDING	Staff Time
TIMELINE	3 years
PRIORITY	High
LEAD AGENCY	Board of Education
STATUS	This project has not yet been started. The district continues to review and update the EOP.

MITIGATION ACTION	SAFE ROOMS/STORM SHELTERS
DESCRIPTION	Design and construct fully supplied safe room sin school facilities
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms
ESTIMATED COST	$1,500,000
FUNDING	General fund, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Board of Education
STATUS	This project has not yet been started.

DISTRICT PROFILE

MERIDIAN PUBLIC SCHOOLS

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

Local Planning Team

Table MPS.1: Meridian Public Schools Local Planning Team

Name	Title	Jurisdiction
Randy Kort	Superintendent	Meridian Public Schools

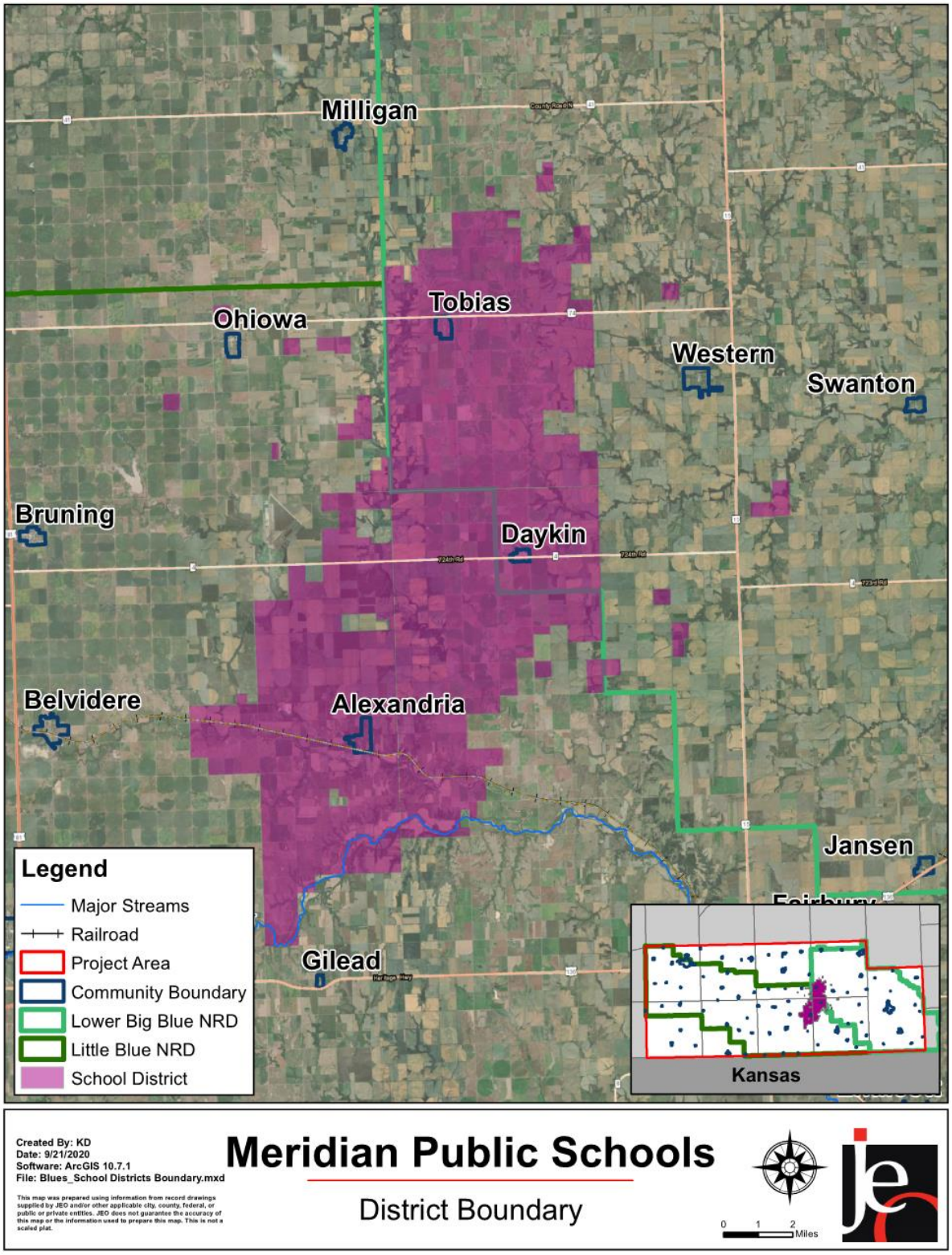
Location and Services

Meridian Public Schools is a small rural district located in Jefferson County, in southern Nebraska. Its offices are located at 72380 560th Avenue, Daykin, NE, 68338. The district's belief statements profess that each student "has the right to a safe and comfortable physical and emotional environment." The district is comprised of two schools: Meridian Elementary and Meridian High School. The district provides services to students in Fairbury, Ohiowa, and Western. While English is the predominant language in the school, some student's primary language is Spanish.

Transportation

Meridian Public Schools major transportation corridors include Nebraska Highway 4, which runs east-west through the center of the district, Nebraska Highway 53, which runs north-south through the eastern part of the district, and Nebraska Highway 74, which runs east-west through the northern part of the district. There is one rail line in the district traveling east-west near Alexandria. The district owns seven school buses with approximately 150 students bused daily. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

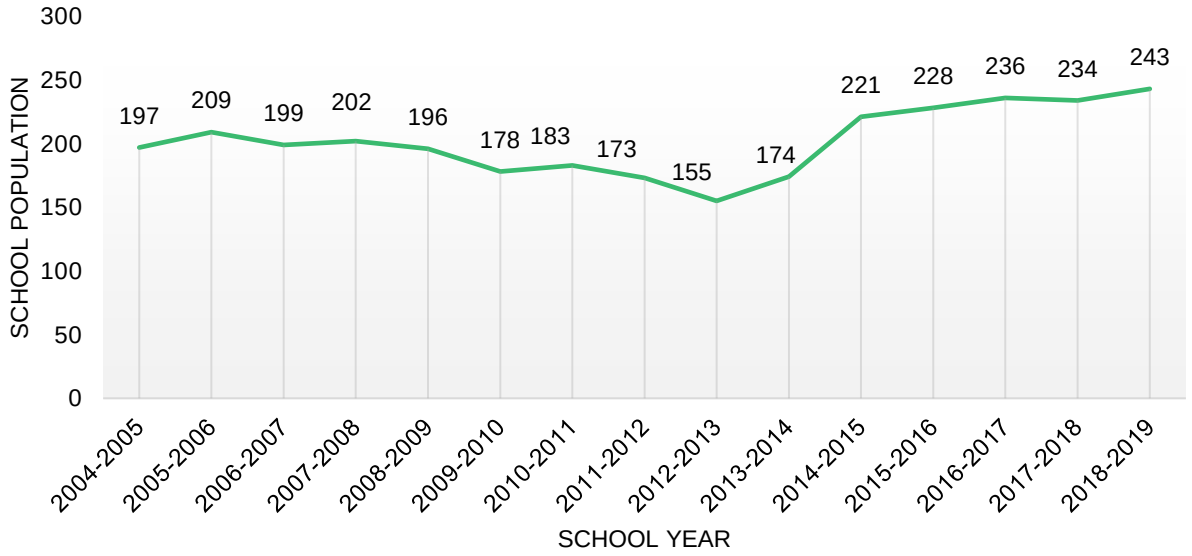
Figure MPS.1: Meridian Public Schools District Boundary



Demographics

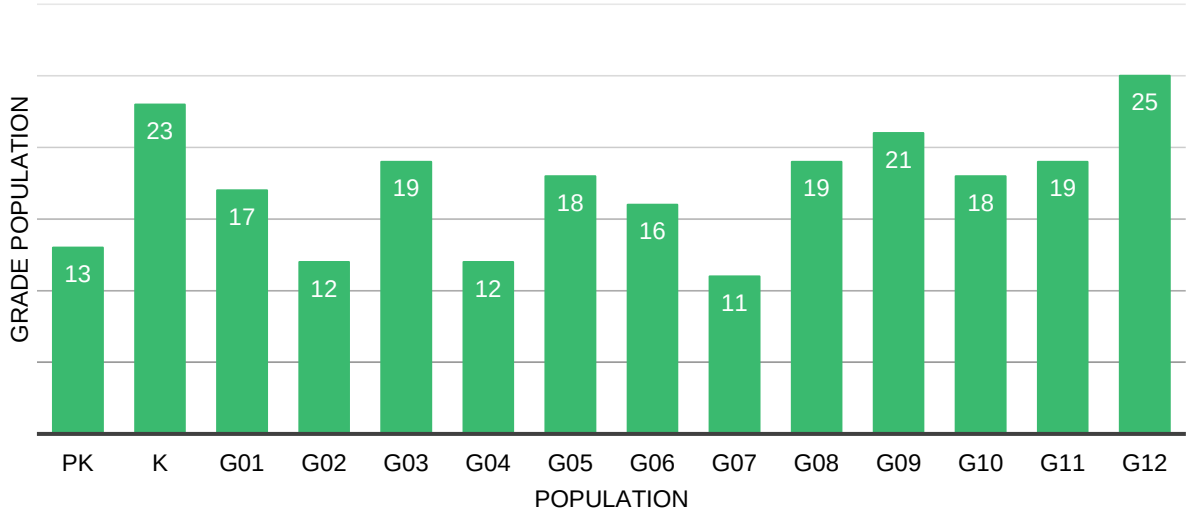
The following figure displays the historical student population trend starting with the 2004-05 school year and ending with the 2018-19 year. It indicates that the student population has been increasing over time. The local planning team noted that overall student population is anticipated to stay the same over the next five years. There are approximately 243 students enrolled in Meridian Public Schools

Figure MPS.2: Student Population 2004-2018



Source: Nebraska Department of Education[11]

Figure MPS.3: Students by Grade, 2018-2019



Source: Nebraska Department of Education

11 Nebraska Department of Education. 2019. "Nebraska Education Profile". https://nep.education.ne.gov/. Accessed September 2020.

The figure above indicates that the largest number of students are in 12th grade, followed by pre-kindergarten and 9th grade. The lowest population of students are in 11th, 2nd, and 4th grade. According to the Nebraska Department of Education (NDE), 61.1% of students receive either free or reduced priced meals at school in the 2018-19 year. This is higher than the state average of 45.2%. Additionally, 23.3% of students are in the Special Education Program. These students may be more vulnerable during a hazardous event than the rest of the student population. The district employs two administrators, 28 teachers, and 18 other staff members.

Table MPS.2: Student Statistics, 2018-2019

	District	State of Nebraska
Free/Reduced Priced Meals	57.6%	45.2%
Special Education Students	20.0%	15.5%
English Language Learners (ESL)	N/A	7.2%
School Mobility Rate	7.8%	10.3%

Source: Nebraska Department of Education
N/A: Data is not available when there is less than 10 students

Future Development Trends

In the past five years the district has added a second gym to their facilities. The local planning team noted the student body population is increasing due to an increase of people moving to the area and an increase in "option" students. Currently, there are no new renovations or construction projects planned for the district.

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 in the district which house hazardous materials.

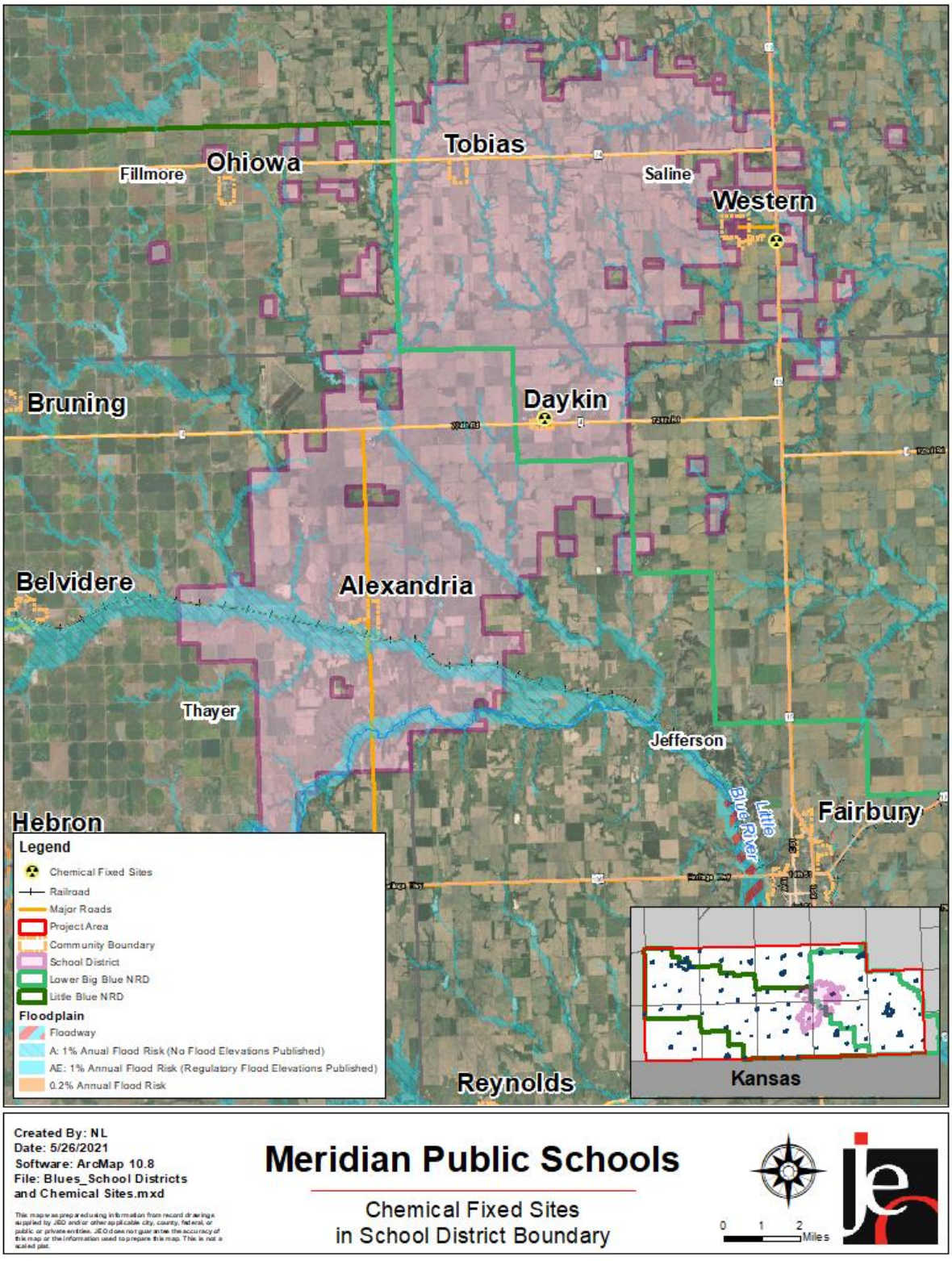
Table MPS.3: Chemical Storage Fixed Sites

Facility Name	Address	Floodplain
Farmers Cooperative	602 Jefferson St, Daykin, NE	N
Farmers Cooperative	2234 State Highway 15, Western	N

Source: Nebraska Department of Environment and Energy[12]

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

Figure MPS.4: Chemical Storage Fixed Sites near School Facilities



Critical Facilities

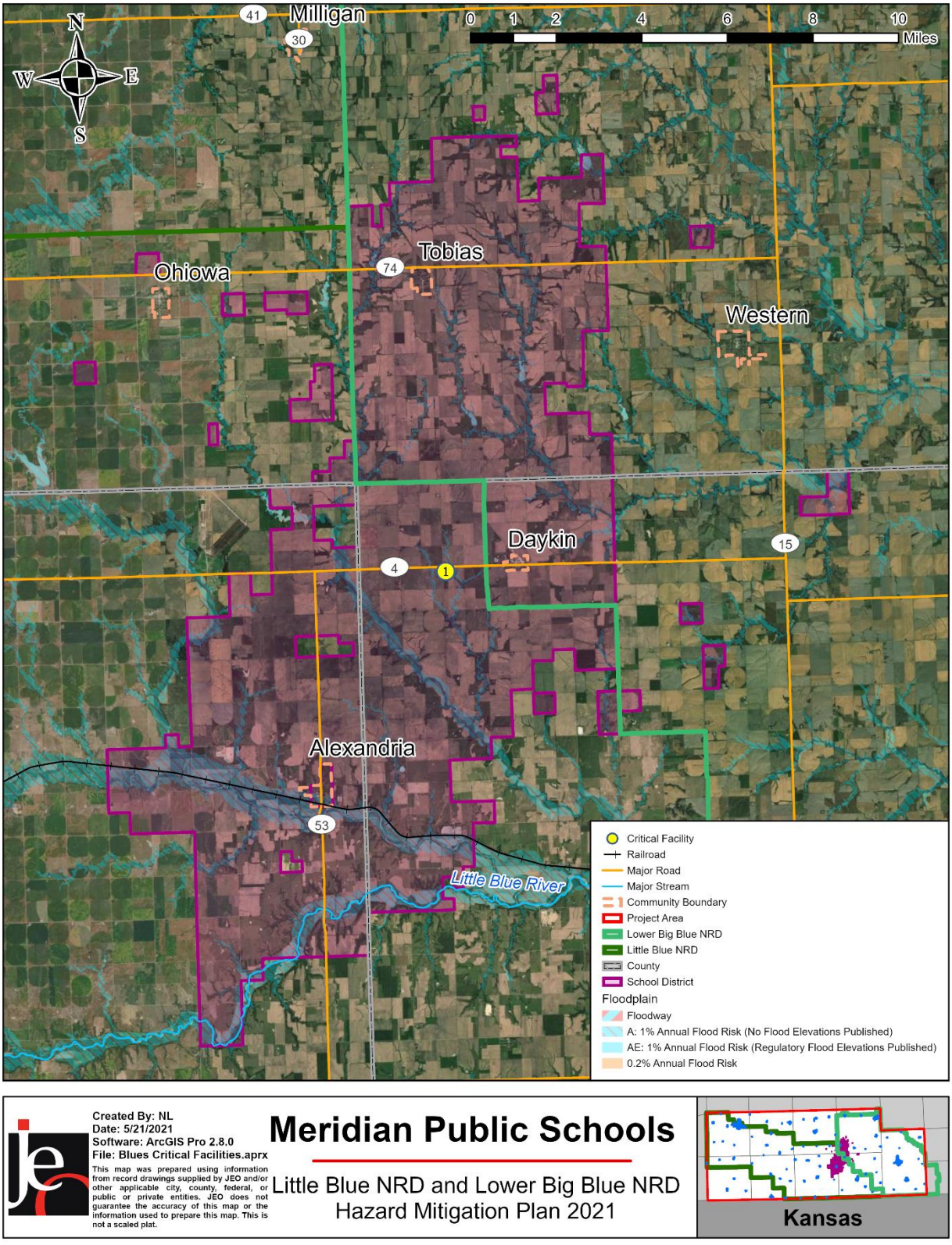
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update. The school district operates one facility. School facilities are listed below, along with information indicating the school's address, number of students and staff, if the facility is used as a shelter during emergencies, if the facility is located in the floodplain, and the presence of a backup power generator.

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

Table MPS.4: Meridian Public Schools Critical Facilities

CF #	Type of Lifeline	Name	# of Students	# of Staff	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	Meridian Public School	220	50	Y	Y	N

Figure MPS.5: Meridian Public Schools Critical Facilities



School Drills and Staff Training

Students and staff participate in a number of drills throughout the school year. The school follows the Standard Response Protocol (SRP Model) for the types of drills that are covered, which include:

- Fire drills – monthly
- Tornado – twice annually
- Shelter in Place/Intruder – twice annually
- Evacuations/Reunification – monthly
- Bus Evacuations – twice annually

Staff undergo training annually for drills and emergency procedures. The district uses an "All Call System" to notify parents and staff about emergency events.

Historical Occurrences

See the Jefferson County 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 district's capabilities.

Severe Thunderstorms

The school is primarily concerned about loss of power, building damage, property damage, student safety and loss of life for this hazard. The school experienced a hail event during a severe thunderstorm in May 2014. The school does use surge protectors to protect files. All power lines come into the school through the ground. The school has one weather radio and one backup generator. The school has not identified any hazardous trees that need to be removed.

Severe Winter Storms

The school anticipates that winter storms will occur on an annual basis. The school is primarily concerned about loss of power, and the care for staff and students stranded by storms. There are no backup generators and limited battery backup lighting. School staff is in charge of removing snow. The school uses a tractor with a bucket and blade to do this.

Tornadoes and High Winds

The school is primarily concerned about loss of power, building damage, property damage, and loss of life for this hazard. A tornado impacted the village of Meridian in May of 2014, but the school was not damages. In May of 2014 and 2015 two high wind events impacted the area, although the school was not damaged. The school has three backup procedures and protocols. The school does not have safe rooms and instead shelters in bathrooms and hallways.

Administration

The school district has a superintendent, one principal, and support staff. The school board is made up of a six-member panel. The district also has a number of additional departments and staff that may be available to implement hazard mitigation initiatives.

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 MPS.5: Capability Assessment

Survey Components		Yes/No
Planning Capability	Capital Improvements Plan/Long-Term Budget	Yes
	Continuity of Operations Plan	No
	Disaster Response Plan	Yes
	Other (if any)	
Administrative & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Staff who can assess jurisdictional vulnerability to hazards	Yes
	Grant Manager	No
	Mutual Aid Agreements	No
	Other (if any)	
Fiscal Capability	Applied for grants in the past	No
	Awarded grants in the past	No
	Authority to levy taxes or bonds for specific mitigation projects	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds in place	No
	Flood Insurance	No
	Other (if any)	
Education and Outreach	Local school groups or non-profit organizations focused on environmental protection, emergency preparedness, access, and functional needs populations, etc. (Ex. Parent groups, hazard mitigation boards, etc.)	No
	Ongoing public education or information program (Ex. Responsible water use, fire safety, household preparedness, environmental education, etc.)	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	8 /yr
	Tornado	2 /yr

Survey Components		Yes/No
	Intruder	2/yr
	Bus Evacuation	2/yr
	School Evacuation	2/yr
	Other (if any)	

Table MPS.*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	Limited
Time to Devote to Hazard Mitigation	Limited

Plan Integration

Meridian Public Schools district funds are sufficient but have decreased over recent years. Currently there are no major projects that funds are dedicated to. In the last five years, the district was awarded a grant for a backup generator.

Meridian Public Schools maintains a Crisis Response Plan which is reviewed and updated annually. The plan outlines the chain of command for crisis situations, communication procedures during an emergency, crisis management procedures, safety precaution and emergency preparedness measures, and procedures to ensure building security. The plan describes sheltering procedures for staff and students and outlines scenarios that require evacuation. The crisis management section of this plan outlines the procedures for managing the following events:

- Tornadoes, fire, evacuation, intruders, hostage, bus accident, bomb, suicide alerts, deaths, earthquakes, and chemical spills.

Copies of the plan are held in the superintendents office, classrooms, local fire departments, and the county sheriff's offices. The district also has a Strategic Plan which is used to identify areas for safe shelter, operational power, and means to communicate and prioritize reunification. Other non-natural hazards addressed in the plan include communication loss, terrorism, and equipment supply shortages. The district's superintendent would be the main actor in overseeing the implementation of mitigation actions in school facilities. The district will use crisis team training and evaluation procedures to incorporate hazards and mitigation into future planning mechanisms.

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 district profile was last reviewed by the local planning team in the summer of 2020. The superintendent, principal, and counselor are responsible for reviewing and updating the district profile as changes occur or after a major event. The superintendent and board will review the plan no less than bi-annually and will include the public in the review and revision process by: updating social media, website updates, and letters.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	BACKUP AND EMERGENCY GENERATORS
DESCRIPTION	Obtain a backup generator for the school well and school building
HAZARD(S)	All hazards
STATUS	Backup generators have been purchased and installed at the school facilities.

Continued Mitigation Actions

MITIGATION ACTION	SAFE ROOMS/STORM SHELTERS
DESCRIPTION	Construct a storm shelter or safe room for 150 students and staff
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms
ESTIMATED COST	$185,000
FUNDING	Taxes
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	School Board, Superintendent
STATUS	This project has not yet been started.

DISTRICT PROFILE

SOUTH CENTRAL NEBRASKA UNIFIED SCHOOL DISTRICT #5

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

Local Planning Team

Table SCN.1: South Central Nebraska USD #5 Local Planning Team

Name	Title	Jurisdiction
Amanda Skalka	Curriculum Director/PowerSchool	District
Dana Epley	Principal	Lawrence-Nelson PK-12th grades
Jason Searle	Principal	Sandy Creek MS-HS
Jody Hitesman	Special Education Director	District
Julie Otero	Superintendent	SCNUSD #5
Julie Studnicka	Principal	Sandy Creek PK and elementary
Stan Essink	Assistant Principal	NCAPS program

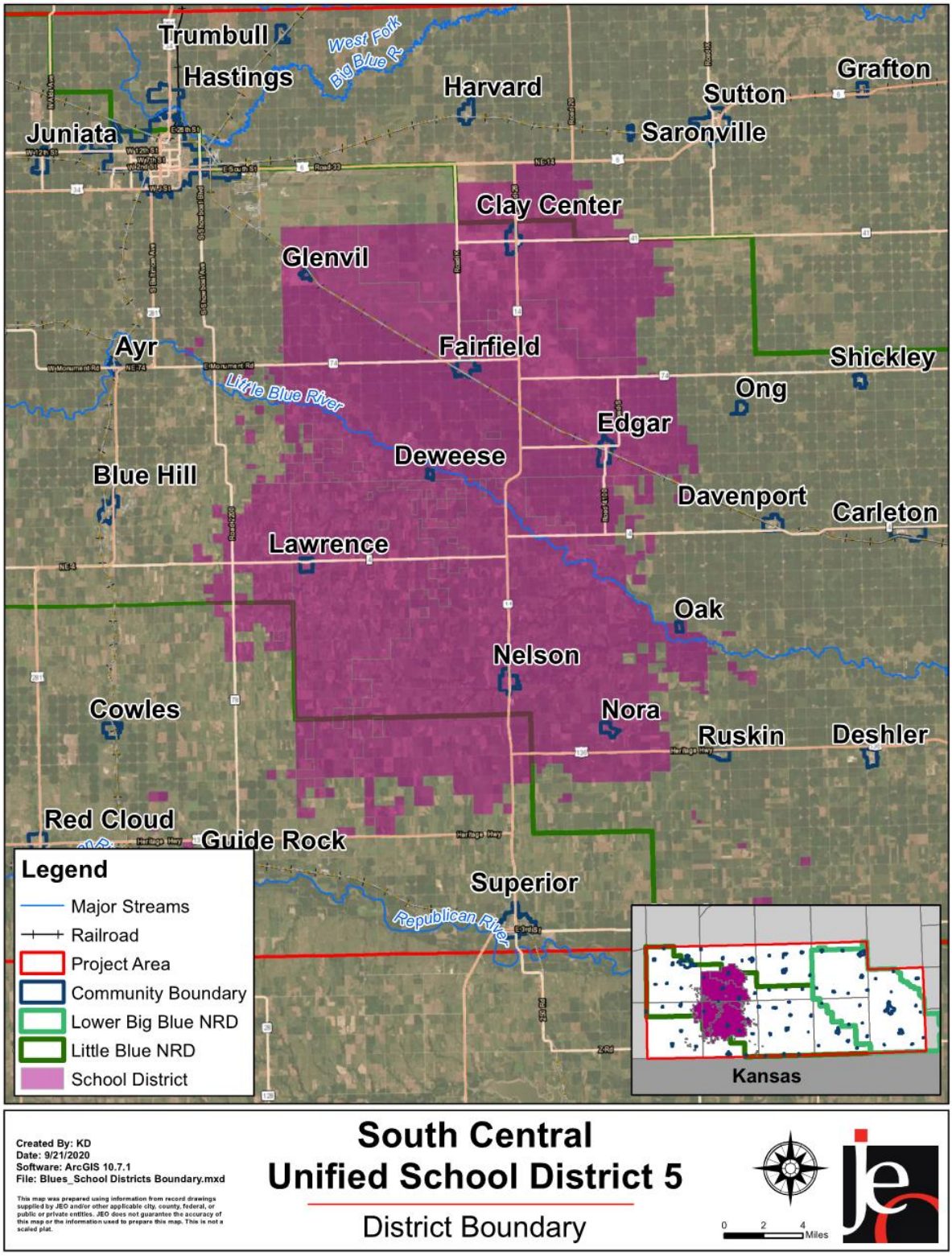
Location and Services

South Central Nebraska Unified School District (USD) #5 is primarily located in Clay County, Webster County, and Nuckolls County, in south central Nebraska. The district's mission, as expressed on its website, is "educate, support, prepare citizens of the world." The district is comprised of eight schools: Clay County Learning Center, Lawrence-Nelson Middle School, Lawrence Early Learning Center, Lawrence/Nelson Elementary School, Lawrence/Nelson High School, Sandy Creek Elementary School, Sandy Creek High School, and Sandy Creek Middle School. Students and staff are located in the following locations: Clay Center School, Sandy Creek School, Lawrence School, and Nelson School. The district provides services to students in Sutton, Aurora, Shickley, Hastings, and Harvard. While English is the predominant language in the school, some student's primary language is Spanish.

Transportation

The districts major transportation corridors include US Highway 136, which runs east-west through the southern part of the district, Nebraska Highway 4, which runs east-west through the center of the district, Nebraska Highway 8, which runs east-west through the southern part of the district, Nebraska Highway 14 which runs north-south through the center of the district, Nebraska Highway 41, which runs east-west through the northern part of the district, Nebraska Highway 74, which runs east-west through the northern part of the district, and Nebraska Highway 78, which runs north-south through the eastern part of the district. There are two rail lines in the district traveling east-west near Superior and Fairfield. The local planning team is primarily concerned with Highway 14 as it runs north to south across the whole district. Highway 14 is directly to the east of the Sandy Creek/NCAPS facility and directly to the west of the Clay Center School. Also, Highway 4 and 8 runs east-west through the district. Highway 74 also runs east and west across the northern part of the district. The district encompasses 720 sq. miles. The district owns 26 buses transporting approximately 475 students daily. The bus number includes spare buses and mini buses. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

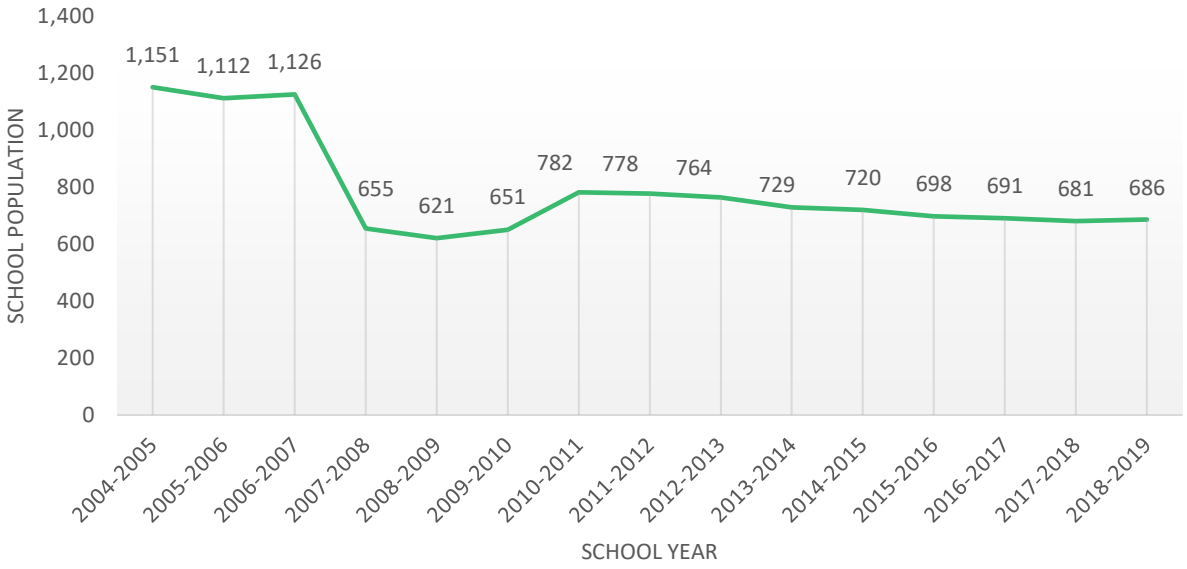
Figure SCN.1: South Central Nebraska USD #5 District Boundary



Demographics

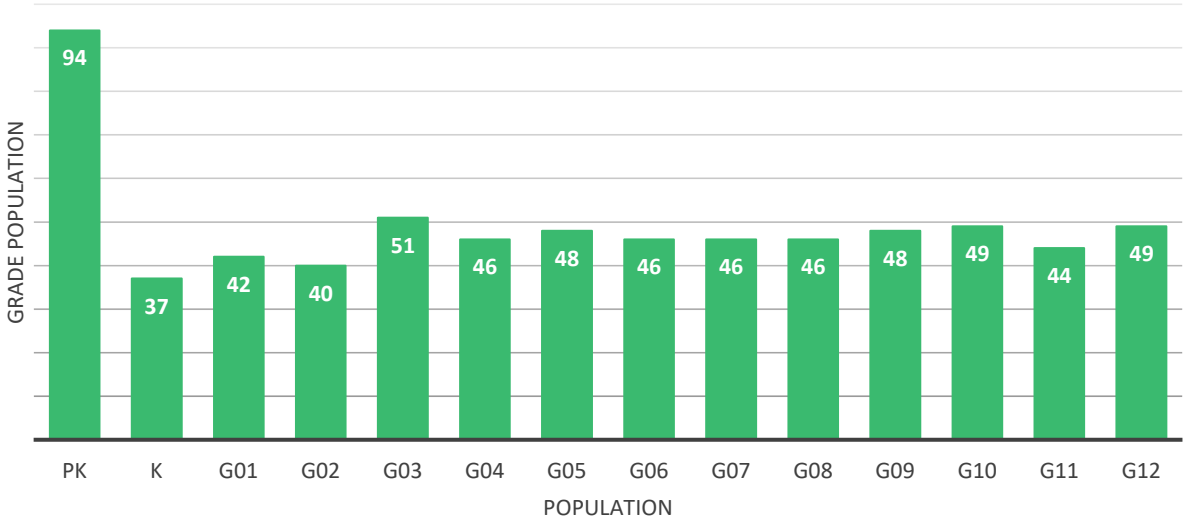
The following figure displays the historical student population trend starting with the 2004-05 school year and ending with the 2018-19 year. It indicates that the student population has been decreasing over time with a with a more stable population recently. The local planning team noted that overall student population is anticipated to decrease or stay the same over the next five years. There are approximately 686 students enrolled in South Central Nebraska USD #5.

Figure SCN.2: Student Population 2004-2018



Source: Nebraska Department of Education[13]

Figure SCN.3: Students by Grade, 2018-2019



Source: Nebraska Department of Education

[13] Nebraska Department of Education. 2019. "Nebraska Education Profile". https://nep.education.ne.gov/. Accessed September 2020.

The figure above indicates that the largest number of students are in pre-kindergarten, followed by 3rd grade. The lowest population of students are in kindergarten and 2nd grade. According to the Nebraska Department of Education (NDE), 51.0% of students receive either free or reduced priced meals at school in the 2018-19 year. This is higher than the state average of 45.2%. Additionally, 23.3% of students are in the Special Education Program. These students may be more vulnerable during a hazardous event than the rest of the student population.

Table SCN.2: Student Statistics, 2018-2019

	District	State of Nebraska
Free/Reduced Priced Meals	51.0%	45.2%
Special Education Students	23.3%	15.5%
English Language Learners (ESL)	N/A	7.2%
School Mobility Rate	10.5%	10.3%

Source: Nebraska Department of Education
N/A: Information is not available when less than 10 students.

The district employs 145.45 classified and certified individuals. Additionally, nine more individuals work at the district on a daily or nearly daily basis but are not direct employees of the school district.

Future Development Trends

In the past five years, the new two-story NCAPS building was built at the Sandy Creek facility and occupied in January of 2019 where both Lawrence-Nelson and Sandy Creek students take classes. The construction of the facility included a backup generator to run the Sandy Creek School in the event of a power failure. It also includes a fire suppression system and wheelchair lift. The local planning team noted the student body population is increasing due to families moving back to smaller communities to raise their families. The board of education has developed architectural plans to build a new performance gym and theater that will be located at the Sandy Creek campus. The date for construction has not yet been determined.

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 18 chemical storage sites in the district which house hazardous materials.

Table SCN.3: Chemical Storage Fixed Sites

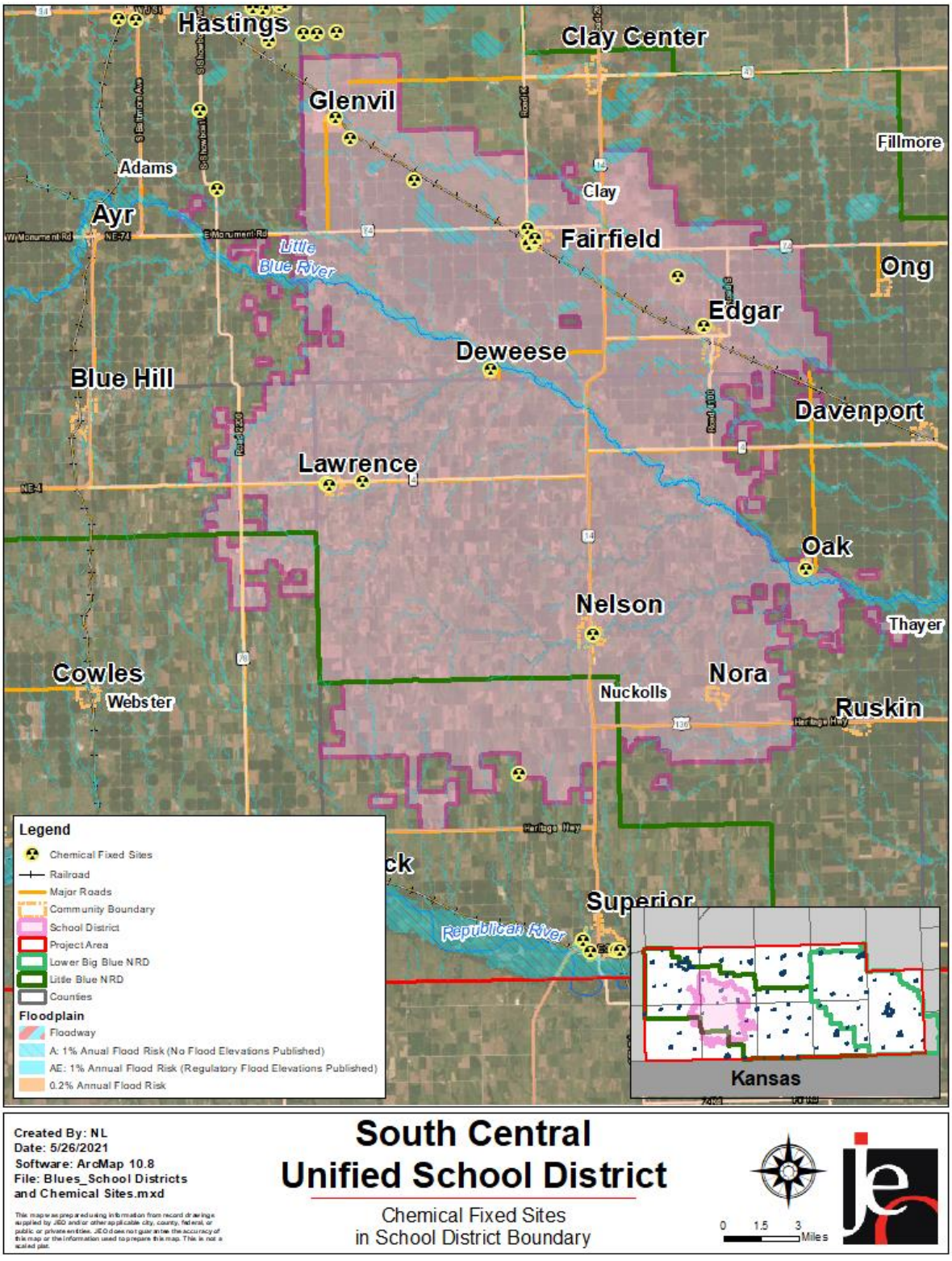
Facility Name	Address	Floodplain
AGP Grain Marketing LLC	201 W 2nd St, Fairfield, NE	N
AGP Grain Marketing LLC	600 Road 309 Glenvil, NE	N
C & M Supply Inc	210 S Deweese Ave, Deweese, NE	N
C & M Supply Inc	922 Road 3300, Superior, NE	N
C & M Supply Inc	Spur S-65, Oak, NE	N
Cooperative Producers Inc	411 W 2nd St, Lawrence, NE	N
Cooperative Producers Inc	1593 Highway 14, Nelson, NE	N
Cooperative Producers Inc	115 E 4th St, Nelson, NE	Y

Facility Name	Address	Floodplain
Fairfield Non-Stock Co-op Assn	202 N D St, Fairfield, NE	N
Fairfield Non-Stock Co-op Assn	31080 Road C, Glenvil, NE	N
Fairfield Non-Stock Co-op Assn	30491 Road Q, Edgar, NE	N
Fairfield Non-Stock Co-op Assn	Jct Fairfield Ave & Hwy 74, Fairfield, NE	N
Ken & Al's Service Bulk Plan	N B St, Fairfield, NE	N
Ken & Al's Service Bulk Plant	W 1st St, Lawrence, NE	N
Ken & Al's Service Inc	308 N D St, Fairfield, NE	N
Ken & Al's Service LLC	200 Winters St Glenvil, NE	N
Nutrien Ag Solutions	30251 Road R, Edgar, NE	Y
Pohlmeier Ag Chem Inc	2702 Highway 4, Lawrence, NE	N

Source: Nebraska Department of Environment and Energy[14]

[14] Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed August 2020.

Figure SCN.4: Chemical Storage Fixed Sites near School Facilities



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. Although no major chemical spills have impacted the district, the local planning team is concerned about potential spills that could occur. Some school facilities are close to gas stations and The Lawrence facilities are close to Lawrence Is close to Ken and Al's. Nelson is close to CPI and Sandy Creek has a railroad running by it.

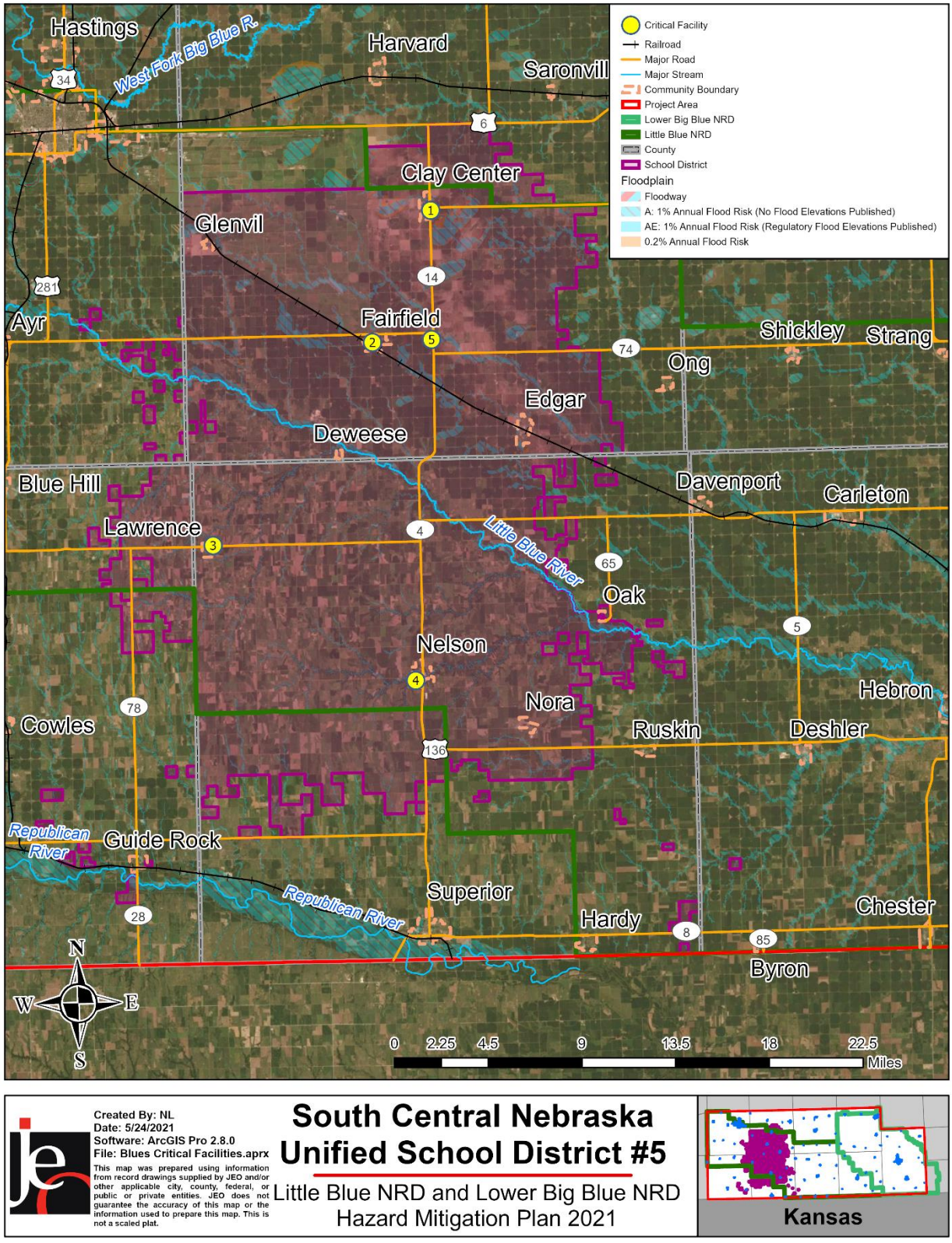
The school district operates four facilities. School facilities are listed below, along with information indicating the school's address, number of students and staff, if the facility is used as a shelter during emergencies, if the facility is located in the floodplain, and the presence of a backup power generator.

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

Table SCN.4: South Central Nebraska USD #5 Critical Facilities

CF #	TYPE OF LIFELINE	NAME	# OF STUDENTS	# OF STAFF	SHELTER (Y/N)	GENERATOR (Y/N)	LOCATED IN FLOODPLAIN (Y/N)
1	Safety and Security	Clay Center SCALE Program	10	4	Y	N	N
2	Safety and Security	Fairfield School	0	0	N	N	N
3	Safety and Security	Lawrence-Nelson Elementary	119	28	Y	N	N
4	Safety and Security	Lawrence-Nelson Middle / High School	153	29	Y	N	N
5	Safety and Security	Sandy Creek Elementary, Middle School, & Senior High	451	103	Y	Y	N

Figure SCN.5: South Central Nebraska USD #5 Critical Facilities



School Drills and Staff Training

Students and staff participate in a number of drills throughout the school year. The school follows the Standard Response Protocol (SRP Model) for the types of drills that are covered, which include:

- Fire drills – ten times annually
- Tornado – twice annually
- Shelter in Place/Intruder – twice annually
- Evacuations/Reunification – once annually
- Bus Evacuations – twice annually

Students and staff undergo training for emergency procedures through drills and online "Safe Schools Training." The district utilizes the Standard Response Protocol for K-12, where staff and students have been trained on protocols with information hanging up in all classrooms and various locations across the facilities. The district utilizes SwiftReach, located within PowerSchool, to notify parents and staff about emergencies. Generally, the notification goes out in English but can be sent out in Spanish as well.

Historical Occurrences

See the Clay, Webster, and Nuckolls County profiles 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 district's capabilities.

Grass/Wildfires

There are pasture fields located near the facilities of Sandy Creek, Lawrence, and Nelson. There have been previous fires near the Lawrence-Nelson Elementary School, although the school did not sustain damages itself. Fires could occur easily, especially in years of extreme drought, in several of the pastures located near our schools. In the event of a grassfire, the schools have procedures in place to evacuate and the school regularly conducts fire drills. There are no outside plans to help contain the fire until the fire department arrives. To mitigate against this hazard, the district plans to stay in touch with local emergency managers to be informed on severe weather conditions that could lead to a fire. In the future, the district would like to utilize its own wells to assist in extinguishing a fire if one were to occur near or at their facilities.

Hazardous Materials

For the Lawrence-Nelson Elementary School, Highway 4 has high farm and semi-truck traffic involving the transportation of chemicals. The Lawrence-Nelson High School is located 2.5 blocks from Highway 4 that has similar types of traffic. The Clay Center Facility and Sandy Creek are both located close to Highway 14 which has high farm and semi-truck traffic as well. The Clay Center facility is located near Highway 41 as well. There have not been any previous chemical

spills that have impacted the schools. None of the schools have drills or action plans that can address this hazard. In the event of a spill, the schools would contact the hazardous material response team in Hastings. To mitigate against this hazard, the district would like to correspond with other schools that have experienced a hazardous material spill and learn from their experience. The district is also looking into conducting a drill for hazardous material spills.

Public Health Emergency

Since last March the school district has dealt with the Public Health Emergency of the COVID-19 Pandemic. This has caused us to cease in-person instruction from March until May of 2020. For school year 20-21 we have had face-to-face instruction. However, we have been forced to either not have school or go back to e-learning at some schools due to not being able to fully staff the schools. This will likely be an on-going issue. As a school district, we mandated mask usage on October 12th and have on-going conversations with individuals who do not support the wearing of masks. The district has also purchased masks, hand sanitizers, and thermometers.

Severe Thunderstorms

The district indicated it is very concerned about lightning strikes. Sandy Creek Elementary & Senior High is the only school with a backup generator if a power failure occurs. According to NCEI data, a severe thunderstorm event on August 22, 1996, in Nelson, NE, produced lightning that struck a local business, starting a fire, and resulting in $100,000 in property damages. NCEI data also reports a severe thunderstorm event on May 3, 2012, in Fairfield, NE, produced 1.75-inch hail and resulted in $25,000 in property damages. The district has not identified any hazardous trees in need of removal on school property. The district does not use weather radios but does monitor weather conditions via the internet. Cell phones are also utilized for weather alerts. To mitigate this hazard, the district plans to conduct more training for students and bus drivers to inform them on best practices during a severe thunderstorm event while at off-site locations.

Severe Winter Storms

Severe winter storms are a large concern for the district as they are common in the area and can do a lot of damage in terms of knocked down power lines, large amounts of snow, and icy roads. Each winter, the district stresses that bus and student drivers exercise caution on icy roads. The district is also concerned about power outages. The local planning team noted that although there have been no major winter storms in the past five years, it plans to remain diligent about the possibility of future storms. To mitigate the impacts of this hazard, the district has included projects to continue emergency planning and has purchased an emergency generator for the Sandy Creek facility. The district is also looking into purchasing additional emergency generators to use at other facilities. To improve its response to severe winter storms, the district plans to attend the severe weather updates provided by the National Weather Service located in Hastings, NE. The district also plans to communicate with the district staff and patrons through the SwiftReach program located in its PowerSchool database.

Terrorism

Like many school districts, South Central Nebraska USD #5 has indicated concern for student safety. In the past, fugitives have fled from the police and ended up in the vicinity of the schools. In the fall of 2018, all schools were on lockdown when a sheriff deputy was shot in Kansas at the Jewel County Courthouse and the suspect was on the run and it was unknown if he had headed

into Nebraska or not. At that time the schools did not all have controlled access and doors were oftentimes left open. This is no longer the case. In the spring of 2020, there was a manhunt for a fugitive that had evaded law enforcement in the general vicinity of Sandy Creek Public Schools. Although bus routes were running and school was in session for those days, the bus drivers and schools were vigilant of the surroundings. All of the schools use the intercom to notify if weapons are present in the school. The district does not have any system in place to physically check for students with weapons.

Lawrence-Nelson Elementary School indicated that students play football outside of the school, but there are no security cameras to monitor the students. In 2015, a suspicious van was reported to authorities near the Lawrence-nelson Elementary School. The district also does not have any security cameras to monitor the parking lots. The district has indicated huge security concerns for the preschool and elementary students with unreliable security equipment. The district has practiced lock downs drill with locking of doors, covering windows, turning lights off, etc.

To mitigate against this hazard, all schools in SCNUSD #5 now have controlled access on all doors. All doors are kept locked during the day and all visitors must request access to the facilities. Terrorism within the school or having the schools targeted is a very real scenario that the school is consistently working on to keep it at a minimum. Once the new NCAPS facility opened for use by staff and students, the district invited a former state patrol woman who was working for NDE in the safety and security division. She spent the day in the facility and talked with the school about each learning area and helped administrators map out expectations for intruders into the school. The plan was then shared with all staff and students and practiced. From this visit, internal locks were placed on the restroom doors and a few other locations where students can go to hide. The district continues to be vigilant and frequently practices drills and asks staff and students to scan the school for anything or anyone that looks out-of-place. The district has found blind spots and as a result added even more cameras to facilities and added cameras to the bus system. The district personnel also train in the Standard Protocol Response yearly and bring forth any suggested changes. The school district has included projects to continue emergency planning, improve safety equipment at the school and on buses, and to purchase a backup generator.

Tornadoes and High Winds

According to NCEI data, on May 9, 2016 an EF0 tornado touched down two miles east of the City of Fairfield with a maximum wind speed of 85 miles per hour. The tornado damaged at least one irrigation pivot and caused minor damage to the front walkway overhang at the Sandy Creek High School. Windows were blown out of numerous vehicles in the school parking lot, and a concession area under construction suffered minor damage. The tornado knocked down portions of building structures, forcing the district to demolish and rebuild the NCAPS facility. According to the local planning team, Sandy Creek Middle School was hit by a straight-line wind in 2019 which ruined the school roof and caused other structural damage. As a result, the district has to install a new roof on the middle school. In the past, tornadoes have touched down very close to school property. These events have caused minor wind damage to roofs of the schools and lighting damage on the football field. In the past, high winds have shattered approximately 30 vehicle windows and damaged the greenhouse. All schools have an alert system in place and regularly practice tornado drills. The district plans to reduce the risk and improve its response to this hazard by practicing tornado drills a minimum of two times a year. Teachers also discuss with their classes the best actions to take when caught in a tornado. Additionally, district bus drivers, coaches, and

administrators work together to have plans in place while at other locations or while hosting large crowds of people at district facilities.

Administration

The school district has a superintendent, three principals, and support staff. The school board is made up of a six-member panel from both Lawrence-Nelson and from Sandy Creek which then makes up a 12-member Board of Education. The district also has a safety committee and crisis committee that assist with hazard mitigation related activities when necessary. There is also a maintenance director who oversees custodians at the various district facilities.

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 SCN.5: Capability Assessment

SURVEY COMPONENTS		YES/NO
Planning Capability	Capital Improvements Plan/Long-Term Budget	Yes
	Continuity of Operations Plan	No
	Disaster Response Plan	Yes
	Other (if any)	
Administrative & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Staff who can assess jurisdictional vulnerability to hazards	Yes
	Grant Manager	No
	Mutual Aid Agreements	Yes
	Other (if any)	
Fiscal Capability	Applied for grants in the past	Yes
	Awarded grants in the past	Yes
	Authority to levy taxes or bonds for specific mitigation projects	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds in place	No
	Flood Insurance	No
	Other (if any)	
Education and Outreach	Local school groups or non-profit organizations focused on environmental protection, emergency preparedness, access, and functional needs populations, etc. (Ex. Parent groups, hazard mitigation boards, etc.)	Yes
	Ongoing public education or information program (Ex. Responsible water use, fire	No

SURVEY COMPONENTS		YES/NO
	safety, household preparedness, environmental education, etc.)	
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10/yr
	Tornado	2/yr
	Intruder	2/yr
	Bus Evacuation	2/yr
	School Evacuation	1/yr
	Other (if any)	

Table SCN.*6*: Overall Capability

OVERALL CAPABILITY	LIMITED/MODERATE/HIGH
Financial Resources Needed to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Moderate
Community Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited

Plan Integration

South Central Nebraska USD #5's district funds are sufficient to pursue new capital projects but have decreased significantly over recent years. The valuation of the school district has decreased six years in a row. Currently a large portion of funding is dedicated to staffing schools. In the last five years, the district was awarded a school bus rebate purchase grant, a Governor's education grant, and Perkins grant.

Sandy Creek Middle School maintains a Safety and Security Management Plan, which was last updated 2020. Sandy Creek Elementary and Senior High maintains a School Safety Plan, which was last updated in 2020. Lawrence-Nelson Elementary and Middle/High School maintains a Safety and Security Management Plan which was last updated in 2020. The plans outline the chain of command for crisis situations, communication procedures during an emergency, crisis management procedures, safety precaution and emergency preparedness measures, and procedures to ensure building security. The crisis management section of the plans outlines the procedures for managing the natural disasters, intruders, and hazardous spills.

The school district has held scenarios with local emergency managers during in-service training days. This has allowed faculty to discuss natural disasters, intruders, and hazardous spills. Faculty discuss these procedures with students throughout the school year. As for parents, faculty have included information in mailings such as newsletters. The administrative team in the district would be in charge of implementing a plan and seeing that it would be carried out to the respective buildings and their staff. SCNUSD #5 maintains a Safety and Security Management Plan, which was last updated 2020 and the plan references hazard mitigation. The district also meets with local law enforcement and emergency planners on a regular basis.

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 district profile was last reviewed by the local planning team on October 29, 2020. The district administrators 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 annually and will include the public in the review and revision process by: website updates, social media, and board meetings.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	"ALERT NOW" SYSTEM
DESCRIPTION	Install the "Alert Now" system (similar to Reverse 911)
HAZARD(S)	All hazards
STATUS	Installed for the district in 2017 and is used consistently.

Mitigation Action	Continued School Security and Emergency Planning
Description	Conduct continued school security and emergency planning
Hazard(s)	All hazards
Status	Completed. This action has been integrated into regular maintenance procedures and is conducted regularly by the district. No additional improvements were currently identified.

Continued Mitigation Actions

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Obtain backup generators for schools.
HAZARD(S)	All hazards
ESTIMATED COST	$50,000+ per generator
FUNDING	General funds, HMGP, BRIC
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	School Board, Superintendent
STATUS	In Progress. One school is completed. Working on the other schools.

MITIGATION ACTION	EMERGENCY COMMUNICATIONS
DESCRIPTION	Establish an action plan to improve communication between schools and other government agencies to better assist students and staff during and following emergencies. Establish interoperable communications. Install intruder phones or emergency alert buttons in each classroom.
HAZARD(S)	All hazards
ESTIMATED COST	$50,000
FUNDING	General fund, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Superintendent, School Board
STATUS	The district has a Crisis Response Plan in place which is updated every year. The school district would like to install emergency alert buttons for intruders.

MITIGATION ACTION	EMERGENCY EQUIPMENT PURCHASE AND/OR UPGRADES
DESCRIPTION	Obtain/install safety equipment for schools and buses
HAZARD(S)	All hazards
ESTIMATED COST	$50,000
FUNDING	General fund, HMGP, BRIC
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	School Board, Superintendent
STATUS	Have first aid kits in facilities and busses. The busses recently were installed with cameras. Integrated child seats need to be installed on several busses.

MITIGATION ACTION	FIRST AID TRAINING
DESCRIPTION	Promote first aid training and CPR certification for all staff and students
HAZARD(S)	All hazards
ESTIMATED COST	$250+
FUNDING	General fund, HMGP, BRIC
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	School Nurses, Superintendent
STATUS	The majority of staff is trained annually for first aid. The school would like to expand training to students.

MITIGATION ACTION	INSTALL VEHICULAR BARRIERS
DESCRIPTION	Install vehicular barriers to protect school facilities, along Highway 14.
HAZARD(S)	Terrorism
ESTIMATED COST	$5,000
FUNDING	General fund, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	School Board, Superintendent
STATUS	This project is not yet started.

MITIGATION ACTION	SAFE ROOMS / STORM SHELTERS
DESCRIPTION	Design and construct fully supplied safe rooms or storm shelters in school facilities
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms
ESTIMATED COST	$400,000
FUNDING	Special building fund, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	School Board, Superintendent
STATUS	This project has not yet been started.

MITIGATION ACTION	WEATHER RADIOS
DESCRIPTION	Conduct an inventory of weather radios at schools and school facilities, and provide new radios as needed
HAZARD(S)	All hazards
ESTIMATED COST	$100+
FUNDING	General fund, HMGP, BRIC
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	School Board, Superintendent
STATUS	No school facilities have weather radios. The district is currently attempting to work with the Hastings NWS for radios.

DISTRICT PROFILE

SUPERIOR PUBLIC SCHOOLS

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

Local Planning Team

Table SUP.1: Superior Public Schools Local Planning Team

Name	Title	Jurisdiction
Marty Kobra	Superintendent	Superior Public Schools
Bob Cook	Principal	Superior Public Schools
Doug Hoins	Principal	Superior Public Schools
Matt Sullivan	Board Member	Superior Public Schools
Peggy Meyer	Board Member	Superior Public Schools
Brad Biltoft	Board Member	Superior Public Schools
Kent Kottenmeyer	Maintenance Supervisor	Superior Public Schools

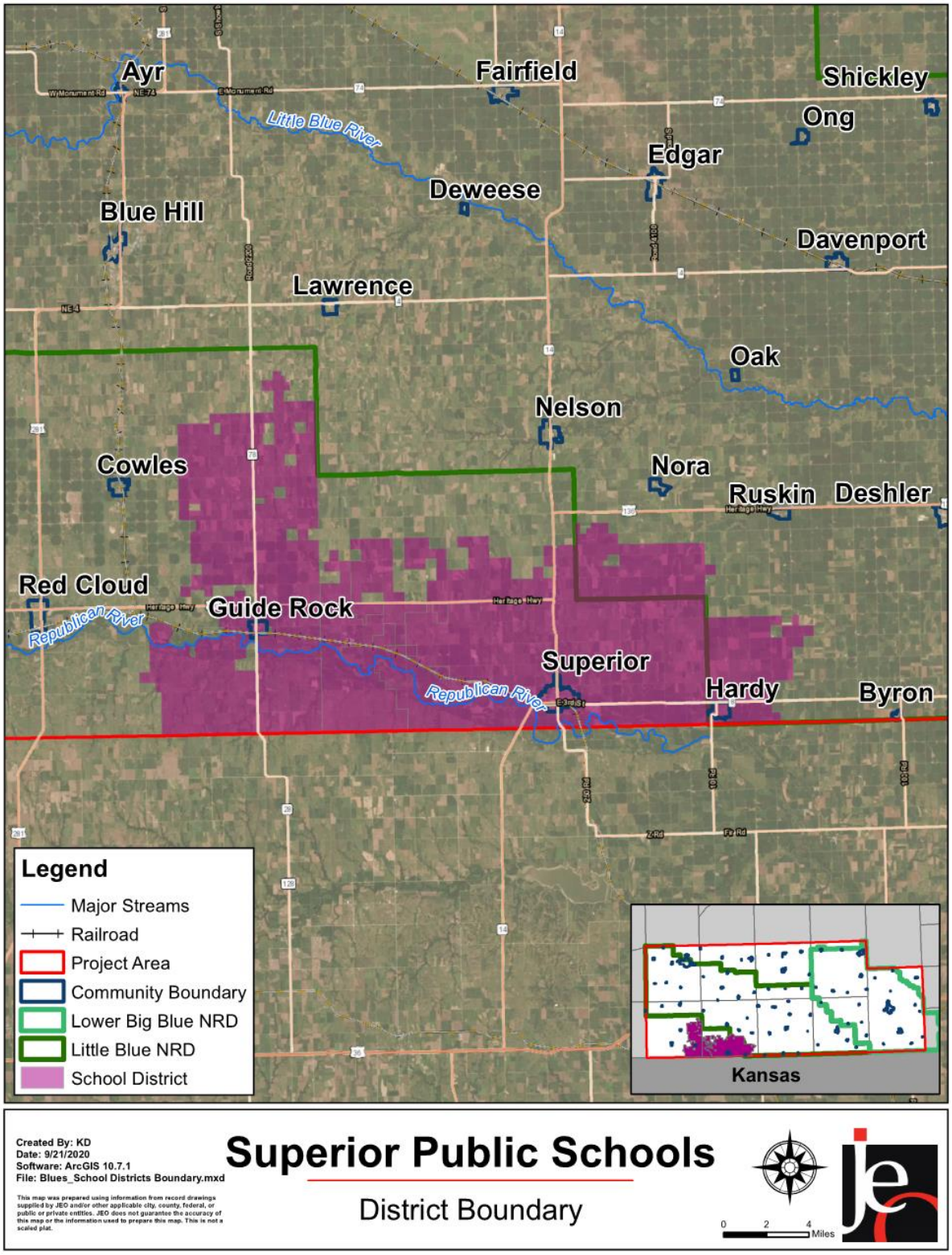
Location and Services

Superior Public Schools is located on the west side of the City of Superior, in Nuckolls County, in southern Nebraska. Its offices are located at 601 West 8th Street, Superior, NE, 68978. The district is comprised of two schools: Superior Elementary and Superior Junior-Senior High School. Both of these schools are located at the 601 West 8th street location. The district provides services to students in Superior, Nelson, Red Cloud, and rural Thayer County. While English is the predominant language in the school, some students' primary language is Spanish.

Transportation

Superior Public Schools major transportation corridors include US Highway 136, which runs east-west through the northern part of the district, Nebraska Highway 8, which runs east-west through the southeastern part of the district, and Nebraska Highway 14, which runs north-south through the center of the district. Additional routes of concern for the school district include those leading to serviced communities (Hardy, Nelson, and rural Thayer County). The district owns eight school buses which transport students daily. There is one rail line in the district traveling east-west near Superior. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

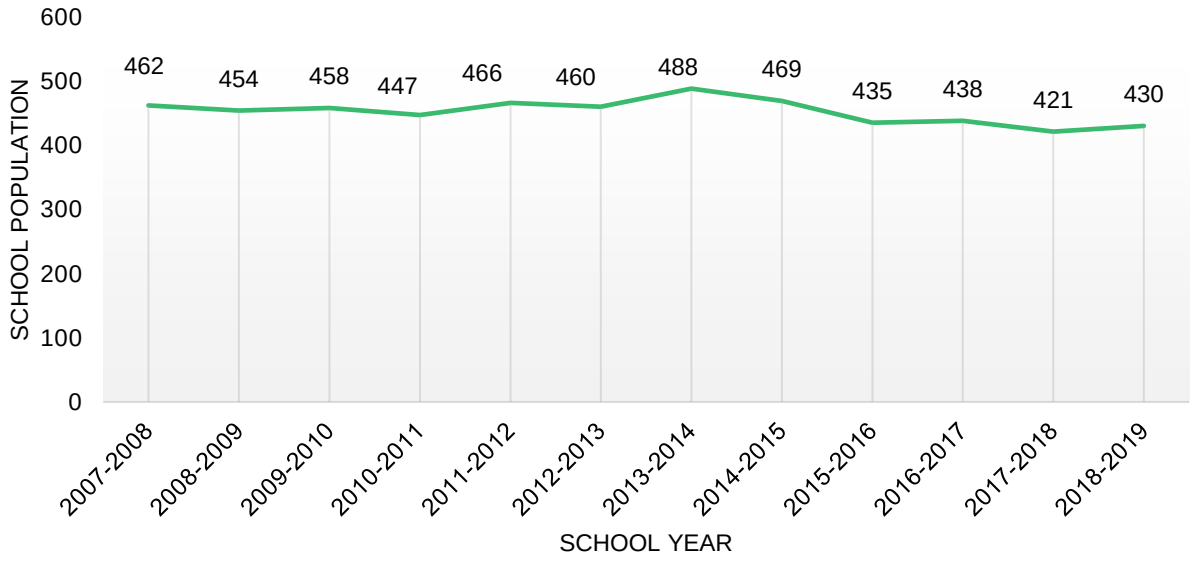
Figure SUP.1: Superior Public Schools District Boundary



Demographics

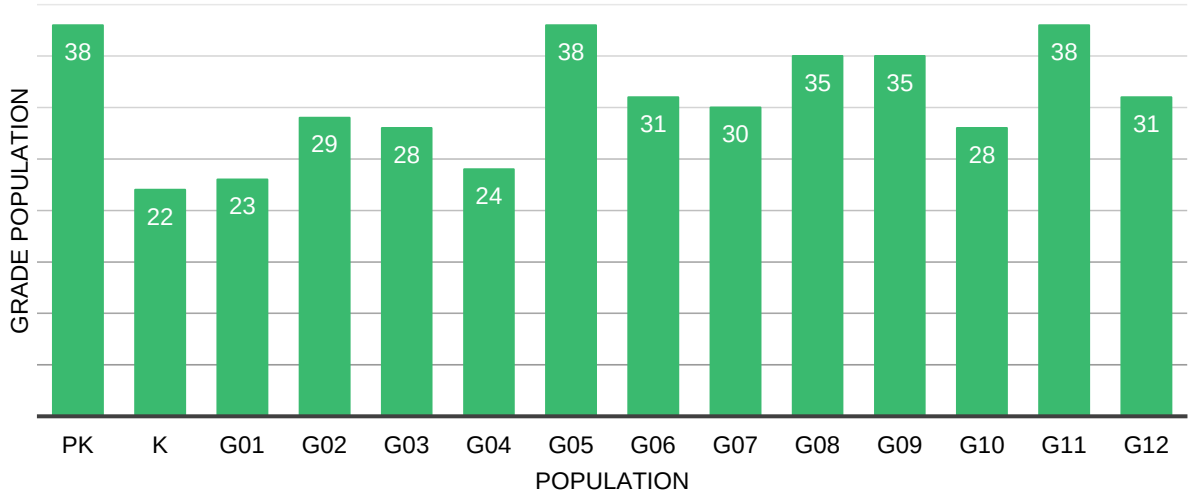
The following figure displays the historical student population trend starting with the 2007-08 school year and ending with the 2018-19 year. It indicates that the student population has been decreasing over time with a slight increase recently. However, the local planning team noted overall student population is anticipated to decrease in the coming years due to declining populations in surrounding communities. There are approximately 430 students enrolled in Superior Public Schools.

Figure SUP.2: Student Population 2007-2018



Source: Nebraska Department of Education[15]

Figure SUP.3: Students by Grade, 2018-2019



Source: Nebraska Department of Education

15 Nebraska Department of Education. 2019. "Nebraska Education Profile". https://nep.education.ne.gov/. Accessed September 2020.

The figure above indicates that the largest number of students are in 5th, pre-kindergarten, and 11th grades. The lowest population of students are in kindergarten and 1st grade. According to the Nebraska Department of Education (NDE), 44.9% of students receive either free or reduced priced meals at school in the 2018-19 year. This is similar to the state average of 45.2%. Additionally, 26.8% of students are in the Special Education Program. These students may be more vulnerable during a hazardous event than the rest of the student population. The district employs three administrators, 45 teachers, and 45 other staff members.

Table SUP.2: Student Statistics, 2018-2019

	District	State of Nebraska
Free/Reduced Priced Meals	44.9%	45.2%
Special Education Students	26.8%	15.5%
English Language Learners (ESL)	N/A	7.2%
School Mobility Rate	11.7%	10.3%

Source: Nebraska Department of Education
N/A: Data is not available if there is less than 10 students

Future Development Trends

In the past five years the district has added a new weight room to the school campus. The local planning team noted the student body population is decreasing due to mobility; however, they anticipate that trend to reverse with the development of a Bomgaars in Superior. The district has updated lighting throughout the schools and the HVAC system in the gymnasiums. An addition to the campus is planned for summer 2022 and the parking lot will also be reconfigured during this time.

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 seven chemical storage sites in the district which house hazardous materials.

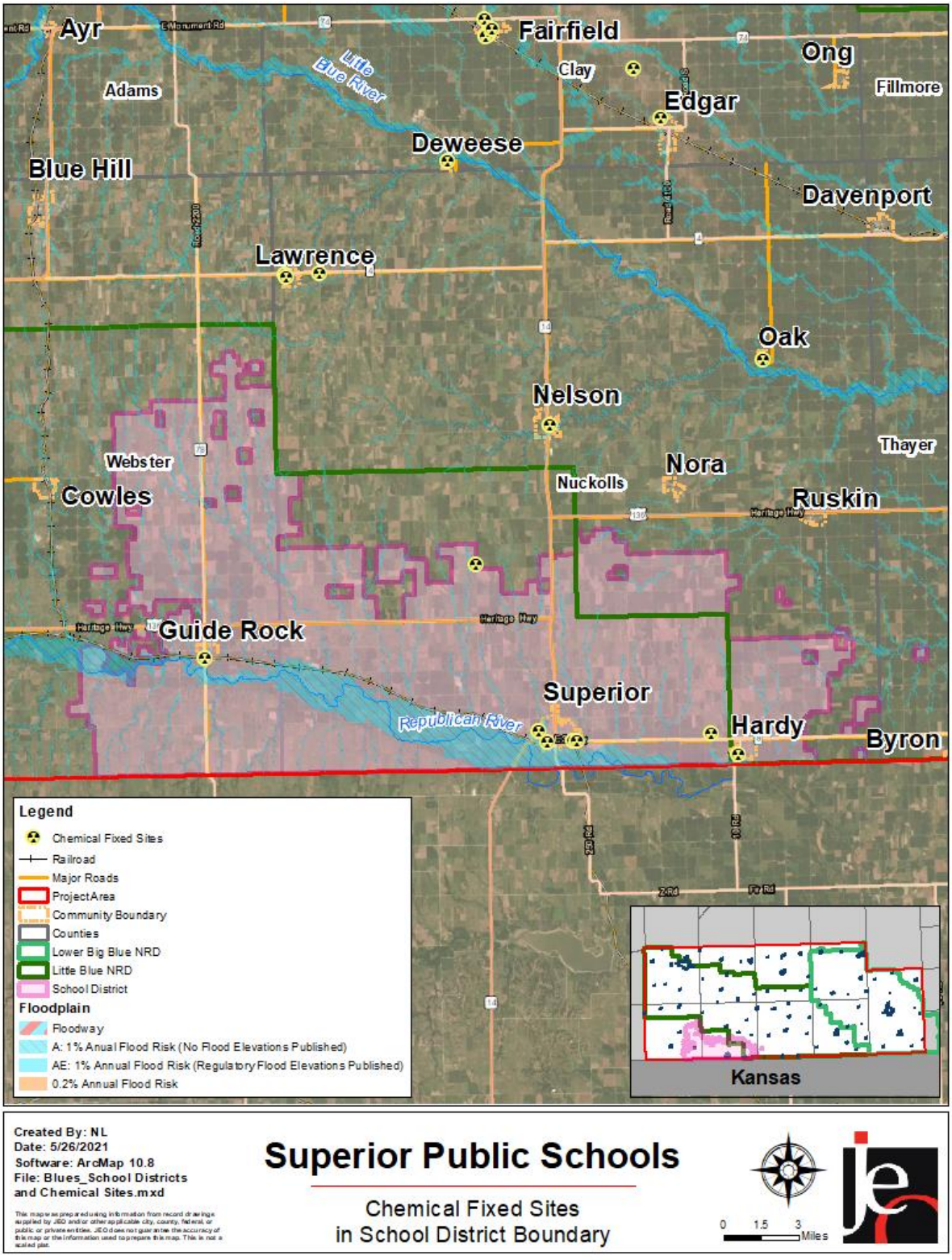
Table SUP.3: Chemical Storage Fixed Sites

Facility Name	Address	Floodplain
Aurora Co-op Elevator Company	410 Railroad St, Hardy	N
Aurora Co-op Elevator Company	161 W 2nd St, Superior	N
Blackstone Aerial Spraying LLC	422 Highway 14, Superior	N
Elys Inc	101 S University St, Guide Rock	Y
Holcim US Inc	W 8th St, Superior	N
Jensby Livestock Trucking Inc	4230 Hwy 8, Hardy	N
NDOT Superior Yard	1330 E 3rd St, Superior	N
Nutrien Ag Solutions	1221 E 3rd St, Superior	N

Source: Nebraska Department of Environment and Energy[16]

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

Figure SUP.4: Chemical Storage Fixed Sites near School Facilities



Critical Facilities

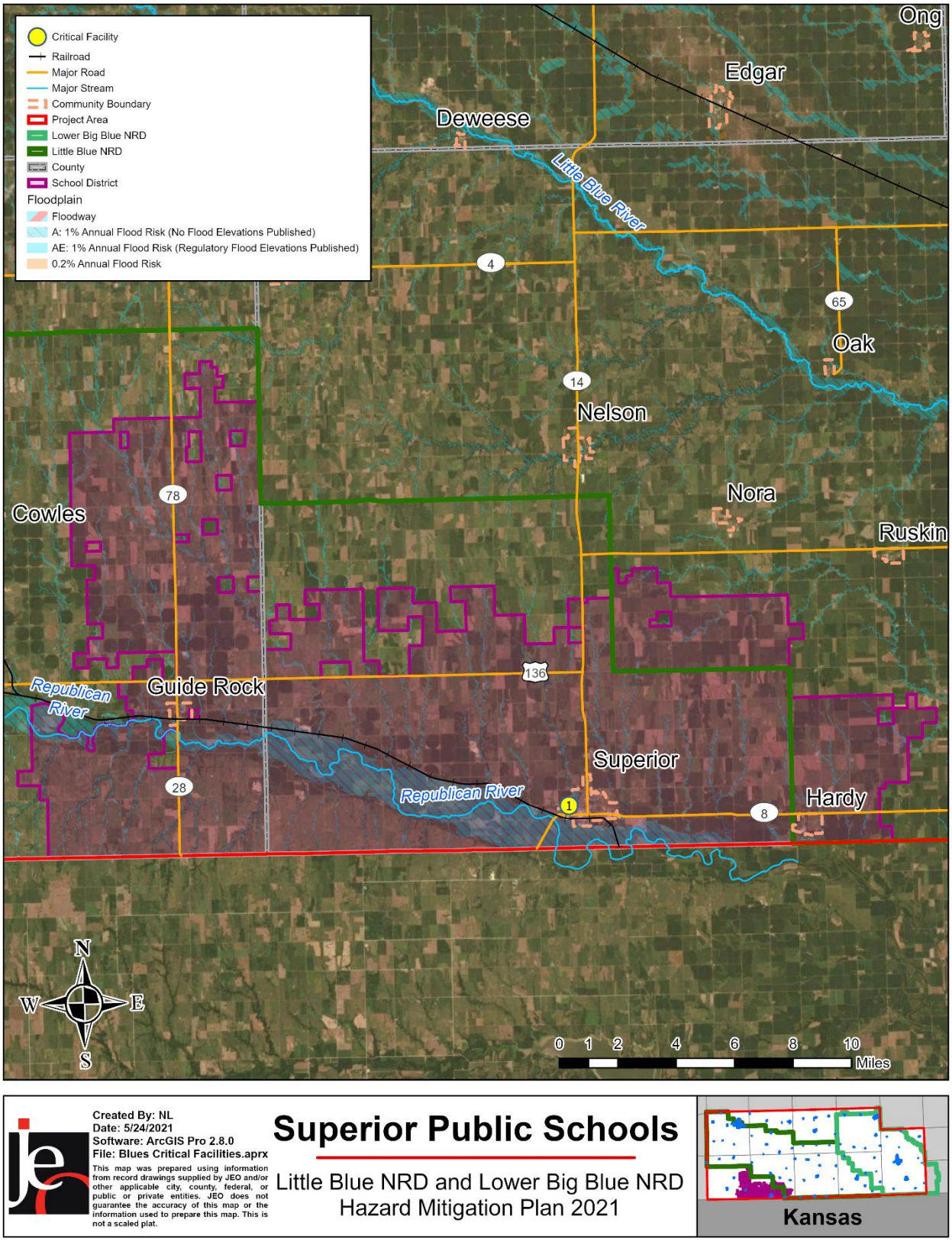
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update. The school district operates one facility. School facilities are listed below, along with information indicating the school's address, number of students and staff, if the facility is used as a shelter during emergencies, if the facility is located in the floodplain, and the presence of a backup power generator.

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

Table SUP.4: Superior Public Schools Critical Facilities

CF #	Type of Lifeline	Name	# of Students	# of Staff	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	Superior Schools Campus	430	90	Y	N	n

Figure SUP.5: Superior Public Schools Critical Facilities



School Drills and Staff Training

Students and staff participate in a number of drills throughout the school year. The school follows the Standard Response Protocol (SRP Model) for the types of drills that are covered, which include:

- Fire drills – monthly
- Tornado – twice annually
- Shelter in Place/Intruder – twice annually
- Evacuations/Reunification – once annually
- Bus Evacuations – twice annually

Staff undergo training annually for drills and emergency procedures. Mass communication including text messages and phone calls are used to notify all staff members, parents, and students of hazard events. Students and parents are notified of hazard events via texts, emails, social media, and call.

Historical Occurrences

See the Nuckolls County 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 district's capabilities.

Hazardous Materials

For this hazard, Superior Public Schools indicated that the main source of risk is the Southern Star Gas Company, located approximately a quarter mile west of the school campus. There is also a Burlington Northern rail line immediately to the west of the school campus. Two chemical mixing plants are within the railroad loop (Aurora COOP and CPS). Materials are brought in via rail, mixed, and then leave Superior via truck. And this rail line regularly transports agricultural chemicals. While there have not been historical occurrences of this hazard, the risk is present. The district has concerns that in the event of a gas leak or chemical spill, the wind could carry harmful fumes to their location. The district may also be impacted if chemical spills were to occur along Highways 14 or 8. To mitigate this hazard, Superior Public School has included a project to improve emergency communication and public awareness/education, has recently updated their crisis plan, and continues to practice drills and shelter in place procedures.

Severe Thunderstorms

NCEI data reports 59 severe thunderstorm events since 1996. On June 20, 2017, thunderstorm winds in excess of 75 mph blew through Superior and caused $3,000,000 in damages to roofs, vehicles, and irrigation pivots. Most of the damage occurred between 8th street and The Republican River. The same thunderstorm also produced 1.75-inch hail and resulted in $1,000,000 in damages. There were no reported injuries or deaths associated with this event.

While this hazard has caused power outages in the past, power has been quickly restored. The district notes that the last major thunderstorm event occurred in the summer of 2013. For this hazard, the district did express concern regarding tornadoes, high winds, and hail damage. Additionally, there are concerns regarding the school's tree maintenance. There are not a lot of trees on the property, but some are diseased with Pine Welt and infested with beetles. These could post hazardous threats during a severe thunderstorm. Hailstorms have damaged the school's greenhouse three times in 2008, 2012, and 2019. Damage to the greenhouse caused $75,000 in damage each in 2008 and 2012. The hail in 2019 also caused additional damage to the school roof. The school has had to replace its roof twice in eight years due to hail damage and does not employ hail resistant roofing. The school is considering whether to build a new shed to protect its vehicles, and currently uses a bus barn to shelter its buses. Air conditioning and heating units are also on the roof of the school, making it prone to hail damage. The district does have weather radios to warn of severe weather, and the superintendent receives storm-related updates from the National Weather Service. To mitigate this hazard, Superior Public School has included a project to improve emergency communication, public awareness/education initiatives, enroll in a tree maintenance program, install a vehicle shed, and purchase a backup generator.

Severe Winter Storms

The school has not sustained notable historical damages from severe winter storms. However, power outages from severe winter storms have shut down HVAC and technology systems. Additionally, the school did install a roof over an outside area that was prone to heavy snow accumulation. To mitigate this hazard, the district is considering obtaining backup generators. The district also operates a tree maintenance program, to reduce the risk of trees being downed by storms.

Terrorism

While there have been no terrorist incidents at the school, the risk for an event does exist. To mitigate potential terrorist incidents, the school has identified a project to improve safety and security on its campus. In recent years the district practices drills more frequently and has updated its crisis plan. During an incident in Kansas where two sheriffs were shot, the school went into lockdown and felt the process worked well. In the future when an addition to the facility is completed, the school will secure its front entrance.

Tornadoes and High Winds

NCEI data reports three tornado events since 1996. On May 27, 2019, a brief tornado touched down in the center of Superior with an estimated maximum wind speed of 81 miles per hour. The tornado damaged a detached garage and caused shingle and gutter damage to the adjacent house which resulted in $75,000 in damages. The school has never sustained damages from tornadoes; however, it has been very fortunate in this regard. In 2010, a tornado came one block south of the school facility. The school uses its gym as a storm shelter, and believes it is probably the safest sheltering area in Superior. It can house 250 elementary students and faculty. The High School and Middle School use locker rooms. The school did indicate that it has difficulty hearing the sirens in Superior when they are sounded. The school regularly participates in National Weather Service webinar's that are conducted out of Hastings. The school also has three weather radios. The High School is the designated American Red Cross shelter for the community. To mitigate this hazard, Superior Public School has included a project to improve emergency

communication, public awareness/education initiatives, enroll in a tree maintenance program, and purchase a backup generator. The district has also updated their crisis plan and is utilizing JMC for mass communications. The district is planning to implement two-way radio communication and is currently looking into a county-wide system for radio communication with buses and buildings.

Administration

The school district has a superintendent, two principals, and support staff. The school board is made up of a six-member panel. The district also has a number of additional departments and staff that may be available to implement hazard mitigation initiatives.

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 SUP.5: Capability Assessment

Survey Components		Yes/No
Planning Capability	Capital Improvements Plan/Long-Term Budget	*Y*
	Continuity of Operations Plan	*N*
	Disaster Response Plan	*N*
	Other (if any)	
Administrative & Technical Capability	GIS Capabilities	*N*
	Civil Engineering	*N*
	Staff who can assess jurisdictional vulnerability to hazards	*Y*
	Grant Manager	*N*
	Mutual Aid Agreements	*N*
	Other (if any)	
Fiscal Capability	Applied for grants in the past	*Y*
	Awarded grants in the past	*Y*
	Authority to levy taxes or bonds for specific mitigation projects	*Y*
	Development Impact Fees	*N*
	General Obligation Revenue or Special Tax Bonds in place	*N*
	Flood Insurance	*N*
	Other (if any)	
Education and Outreach	Local school groups or non-profit organizations focused on environmental protection, emergency preparedness, access, and functional needs populations, etc. (Ex. Parent groups, hazard mitigation boards, etc.)	*N*
	Ongoing public education or information program (Ex. Responsible water use, fire	*Y*

Survey Components		Yes/No
	safety, household preparedness, environmental education, etc.)	
	StormReady Certification	*N*
	Other (if any)	
Drills	Fire	*Monthly*
	Tornado	*2/yr*
	Intruder	*2/yr*
	Bus Evacuation	*1/yr*
	School Evacuation	*2/yr*
	Other (if any)	

Table HPS.*6*: 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	Moderate

Plan Integration

Superior Public Schools district funds are somewhat limited but have increased slightly over recent years. A large portion of funds are currently dedicated to a project to reconfigure the school entrance and parking lot. In the last five years, the district was awarded a 21st Century Learning grant.

Superior Public Schools maintains a Safety and Security Management Plan, which was last updated in 2015. The plan outlines the chain of command for crisis situations, communication procedures during an emergency, crisis management procedures, safety precaution and emergency preparedness measures, and procedures to ensure building security. The district plans to incorporate hazards and mitigation in the future development of the school's middle school and high school entrance by relocating and renovating it. The new entrance will include a vestibule entrance system which will allow for more secure entry into the building.

The district's superintendent would be the main actor in overseeing the implementation of mitigation actions in school facilities. The district's efforts to educate its staff, students, and the community about its preparedness plans and emergency procedures include providing such information on its Facebook page, and providing information directly to parents.

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 district profile was last reviewed by the local planning team in August 2020. The superintendent as well as faculty committee members 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: posting information on the faculty meeting agenda and minutes.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	COOLING CENTER
DESCRIPTION	Install cooling equipment at the gym
HAZARD(S)	Drought and Extreme Heat
STATUS	The HVAC system was renovated and connected to the gymnasium.

MITIGATION ACTION	PUBLIC AWARENESS / EDUCATION
DESCRIPTION	Conduct activities to raise awareness of emergency communication between staff, parents, and students.
HAZARD(S)	All hazards
STATUS	This has been integrated with normal curriculum.

MITIGATION ACTION	SAFETY / SECURITY IMPROVEMENTS
DESCRIPTION	Retrofit all classrooms with deadbolt locks
HAZARD(S)	Terrorism
STATUS	Deadbolt locks were installed. Magnetic holds and button-activated automatic locks were also installed.

MITIGATION ACTION	SECURITY CAMERAS
DESCRIPTION	Install outdoor security cameras
HAZARD(S)	Terrorism
STATUS	Security cameras were installed.

Continued Mitigation Actions

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Provide a portable or stationary source of backup power on campus
HAZARD(S)	All hazards
ESTIMATED COST	$3,500+
FUNDING	General fund, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Superintendent
STATUS	In Progress. The school will plan to pay for the project through grant funding or capital construction.

MITIGATION ACTION	EMERGENCY COMMUNICATIONS
DESCRIPTION	Obtain/Install emergency communications
HAZARD(S)	All hazards
ESTIMATED COST	$50,000
FUNDING	General fund, HMGP, BRIC
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Superintendent
STATUS	In Progress. The district would like to install radio communications for school buses. The school uses a JMC student info system for mass text services, as well as the radio and Facebook for important notifications.

MITIGATION ACTION	HAZARDOUS TREE REMOVAL
DESCRIPTION	Identify and remove hazardous limbs and/or trees on school property
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	$50 per tree
FUNDING	General fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Superintendent
STATUS	In Progress. The district has already removed 20 trees and will remove more as needed.

MITIGATION ACTION	VEHICULAR SHED
DESCRIPTION	Construct a shed to provide vehicle protection
HAZARD(S)	Severe Thunderstorms
ESTIMATED COST	$2,500+
FUNDING	General fund, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	School Board
STATUS	In Progress. A new off-site bus barn is planned to be built.

DISTRICT PROFILE

TRI-COUNTY PUBLIC SCHOOLS

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

Local Planning Team

Table TPS.1: Tri-County Public Schools Local Planning Team

Name	Title	Jurisdiction
Randy Schlueter	Superintendent	Tri County Public Schools
Building Safety Committee	Staff Members	Tri County Public Schools
District Safety Committee	County Emergency Personnel	Jefferson/Saline/Gage county

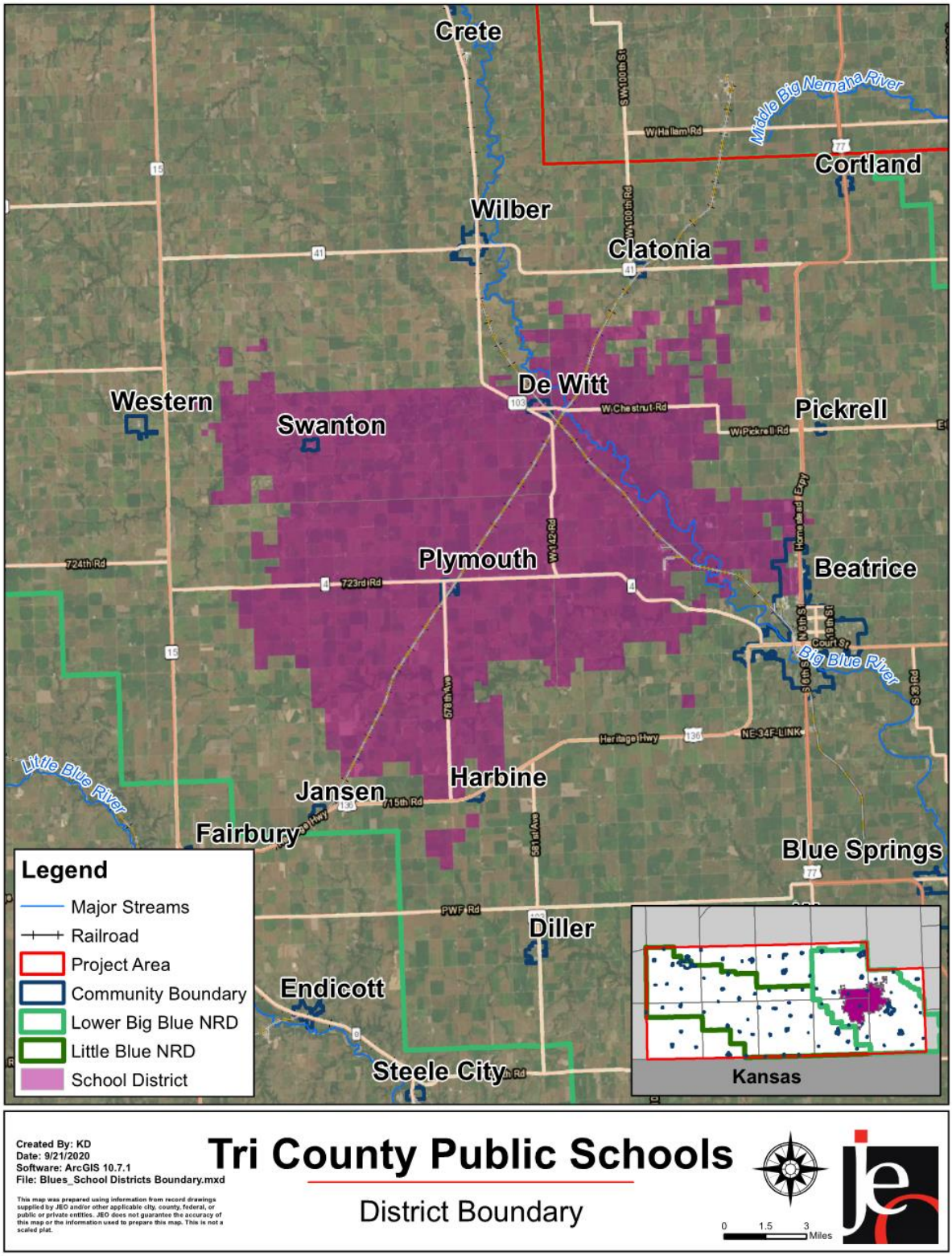
Location and Services

Tri-County Public Schools is a rural district located in Jefferson, Gage, and Saline Counties in southern Nebraska. Its offices are located at 72520 Highway 103, DeWitt, NE, 68341. The district is comprised of two schools: Tri County Elementary School and Tri County Junior-Senior High School. The district allows option enrollment for students from any community as long as the student meets the requirements established by the board of education. English is the predominant language in the school district.

Transportation

Tri-County Public Schools major transportation corridors include Nebraska Highway 4, which runs east-west through the southern part of the district and Nebraska Highway 103, which runs north-south through the center of the district. There are two rail lines in the district traveling northeast-southwest and northwest-southeast. The local planning team is most concerned with travel via county roads after a major rainfall or snowfall event as they can be difficult to navigate. When bus drivers encounter issues while on the route, they report it the transportation director who then contacts the township/county roads department. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents. The district owns ten buses, seven of which are used daily for bus routes. The remaining three are spare buses for routes or activity transportation. Approximately 200 students ride the buses throughout the school year.

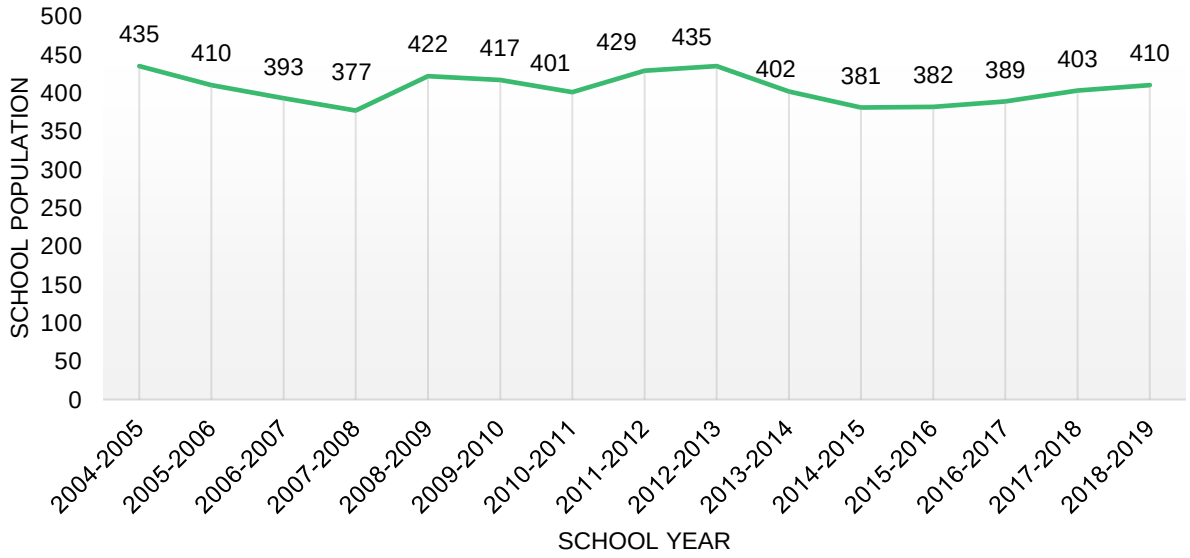
Figure TPS.1: Tri-County Public Schools District Boundary



Demographics

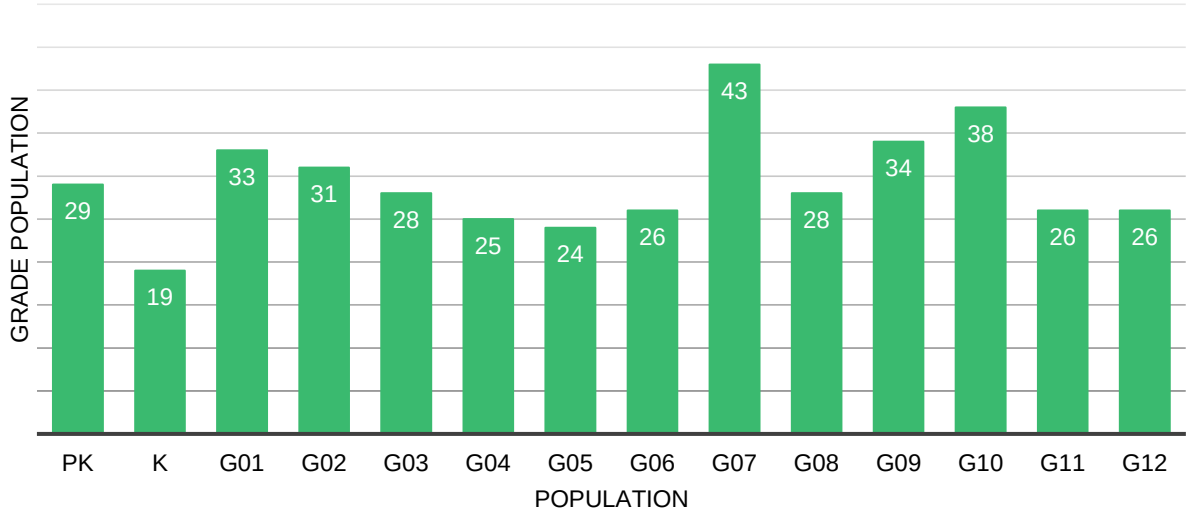
The following figure displays the historical student population trend starting with the 2004-05 school year and ending with the 2018-19 year. It indicates that the student population has been decreasing over time but has been increasing recently. The local planning team noted overall student population is anticipated to remain steady over the next five years. There are approximately 410 students enrolled in Tri-County Public Schools.

Figure TPS.2: Student Population 2004-2018



Source: Nebraska Department of Education[17]

Figure TPS.3: Students by Grade, 2018-2019



Source: Nebraska Department of Education

17 Nebraska Department of Education. 2019. "Nebraska Education Profile". https://nep.education.ne.gov/. Accessed September 2020.

The figure above indicates that the largest number of students are in 7th grade, followed by 10th and 9th grades. The lowest population of students are in kindergarten and 5th grade. According to the Nebraska Department of Education (NDE), 35.9% of students receive either free or reduced priced meals at school in the 2018-19 year. This is lower than the state average of 45.2%. Additionally, 17.6% of students are in the Special Education Program. These students may be more vulnerable during a hazardous event than the rest of the student population. The district employs three administrators, 38 teachers, and 40 other staff members.

Table TPS.2: Student Statistics, 2018-2019

	District	State of Nebraska
Free/Reduced Priced Meals	35.9%	45.2%
Special Education Students	17.6%	15.5%
English Language Learners (ESL)	N/A	7.2%
School Mobility Rate	4.7%	10.3%

Source: Nebraska Department of Education
N/A: Data is not available if there is less than 10 students

Future Development Trends

In the past five years the district has added a new fire sprinkler system throughout the school building. A new HVAC system was installed in the districts elementary schools and both secondary and elementary gyms had an AC system installed. Future updated will include the replacement of the elementary gym roof. The local planning team noted the student body population is increasing as a result of the district increasing the capacity number for elementary and secondary grades to allow for additional students to attend Tri-County Public Schools. Currently, the district plans to finish the installation of the fire suppression system and HVAC updates. All building codes have been met as identified by the state fire marshal and code enforcing agencies. No safe rooms or backup generators have been added. In addition to the fire suppression sprinkler system and HVAC systems, the district has also acquired a new kitchen hood and updated its emergency lighting and signage.

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 14 chemical storage sites in the district which house hazardous materials.

Table TPS.3: Chemical Storage Fixed Sites

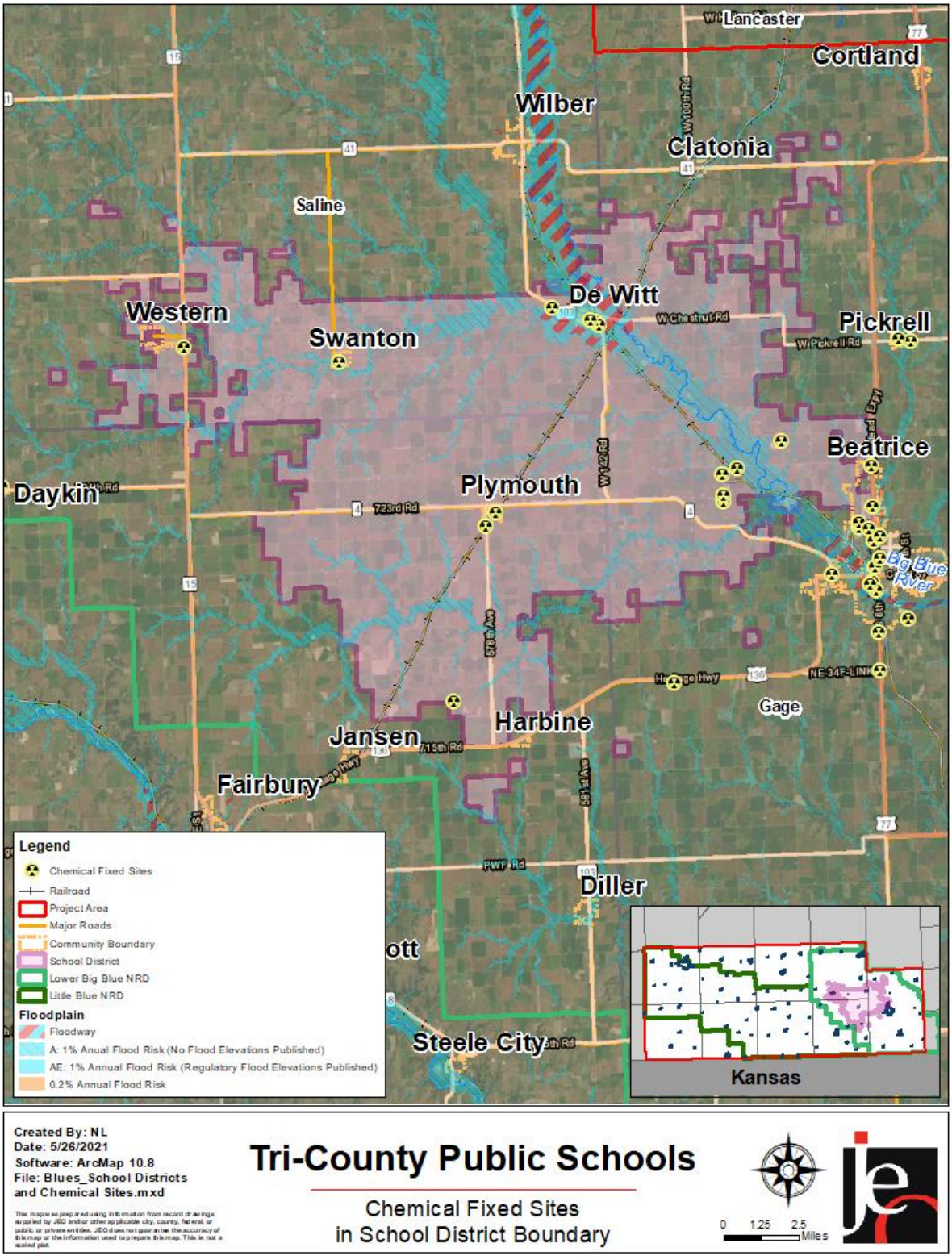
Facility Name	Address	Floodplain
Agrium Homestead Terminal	22292 SW 89th Rd, Beatrice	N
Continental Carbonic Products	21410 SW 89th Rd, Beatrice	Y
Farmers Cooperative	21169 SW 80th Lane, Beatrice	N
Farmers Cooperative	501 E Main St, Plymouth	N
Farmers Cooperative	200 S Broad St, Jansen	N
Farmers Cooperative	101 S Fillmore, Swanton	N
Farmers Cooperative	2336 County Road U, DeWitt	Y

Facility Name	Address	Floodplain
Farmers Cooperative	601 E Madden Ave, DeWitt	Y
Farmers Cooperative Agronomy	72245 578th Ave, Plymouth	N
Farmers Cooperative South	2234 State Highway 15, Western	N
Koch Fertilizer Beatrice LLC	21178 SW 89th Rd, Beatrice	Y
Malco Products Inc	108 S Pear St, DeWitt	Y
NPPD Beatrice Power Station	20261 SW 61st Rd, Beatrice	N
Windstream Communications	203 E Filmore St, DeWitt	Y

Source: Nebraska Department of Environment and Energy[18]

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

Figure TPS.4: Chemical Storage Fixed Sites near School Facilities



Critical Facilities

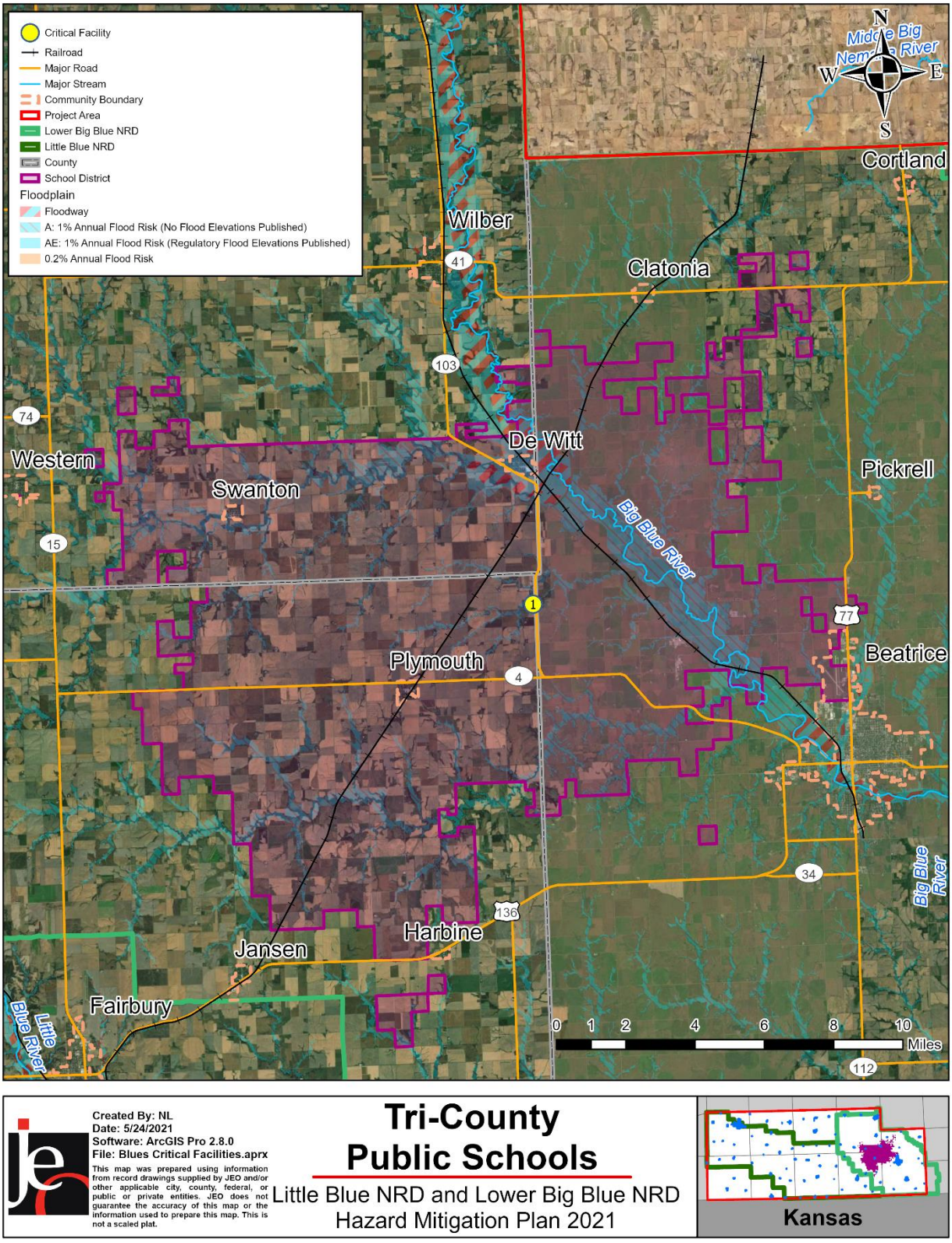
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update. Although no major chemical spill events have occurred locally, the local planning team remains concerned about potential spills from the high amount of tankers that transport hazardous chemicals past the school on Highway 103. Koch Fertilizer is located five miles southwest of the school. The school district operates one facility. School facilities are listed below, along with information indicating the school's address, number of students and staff, if the facility is used as a shelter during emergencies, if the facility is located in the floodplain, and the presence of a backup power generator.

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

Table TPS.4: Tri-County Public Schools Critical Facilities

CF #	Type of Lifeline	Name	# of Students	# of Staff	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Safety and Security	Tri-County Public Schools	406	80	Y	N	N

Figure TPS.5: Tri-County Public Schools Critical Facilities



School Drills and Staff Training

Students and staff participate in a number of drills throughout the school year. The school follows the Standard Response Protocol (SRP Model) for the types of drills that are covered, which include:

- Fire drills – monthly
- Tornado – once annually
- Shelter in Place/Intruder – twice annually
- Evacuations/Reunification – twice annually
- Bus Evacuations – twice annually

Staff undergo training for drills and emergency procedures by reviewing the district safety manual at the start of the school year. Students review the procedures with staff at the start of the school year, with families receiving the safety information on school procedures. Students practice all of the safety procedures during the school year through drills. Mass communication including email are used to notify all staff members of events. Students and parents are notified of emergency procedures via newsletters.

Historical Occurrences

See the Jefferson, Saline, and Gage County profiles 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 district's capabilities.

Hazardous Materials

There is a fertilizer plant within four miles of the school, and trucks travelling to the plant pass near the school, carrying anhydrous ammonia. The school district is concerned about the risk of these chemicals threatening the safety of students and staff, should there be an accident resulting in a spill. To mitigate this hazard, the district has practiced a relocation to a designated off-site location. All staff members are aware of the locations of the shut off switch for the air handlers in the building. In the future, the district will continue to do additional evacuation training to make sure current plans are workable and manageable and also seek out a possible communication link with the nearby fertilizer plant.

Severe Thunderstorms

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. According to NCEI data, a severe thunderstorm event on June 29, 2005 produced golf ball sized hail that damaged several vehicles and trees in the Village of DeWitt. The school district is concerned about the safety of students and staff during these storms, as well as the risk of power outages. To mitigate this hazard, the district is considering purchasing backup generators, hardening its

power line infrastructure, upgrading its emergency communications and alert siren infrastructure, using hail resistant materials in any new construction, and developing a continuity of operations plan.

Severe Winter Storms

The Village of DeWitt, where the school facilities are located, and surrounding areas is at risk for crippling winter storms, such as the 2012 Christmas Eve storm that knocked out power and blocked highways. The school is worried about downed power lines leading to outages, and the safety of students being transported on icy roads. The district uses the school's robocall feature to inform parents if there is a school closure in the event of a severe winter storm. Winter storms are a concern on highways and especially county roads. The local planning team remains concerned about buses getting stuck in snow and the school building losing power and heat during a storm. To mitigate this hazard, the district is considering purchasing backup generators, and hardening its power line infrastructure.

Terrorism

The school district performs active shooter drills and is formulating updated protocols regarding whether to shelter students in place or evacuate them, in case of such an incident. In recent years, the school district has had several alleged threats to students and staff members which made them nervous to come to school during the alleged threat. The district has adopted the Standard Response Protocol for communication for students and staff if there is an emergency which includes terrorism. The district practices a lockdown every semester in the building. To mitigate this hazard, the district would like to establish quicker communication and response with the county sheriff's departments located in Jefferson, Saline, and Gage counties.

Tornadoes and High Winds

DeWitt is at risk for experiencing damaging tornadoes. Multiple tornadoes 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 campus has not experienced tornado damage in recent years. The school district is concerned about the safety of students and staff during these storms, as well as the risk of power outages. To mitigate this hazard, the district has updated emergency lighting in the building and implemented the Standard Response Protocol to improve communications to staff and students. The district would also like to remove trees that are close to the building and improve communication with weather spotters and emergency management in the Tri-County area.

Administration

The school district has a superintendent, two principals, and support staff. The school board is made up of a six-member panel. The district also has a number of additional departments and staff that may be available to implement hazard mitigation initiatives. Some of those include the administration team, building safety team, and district safety 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 TPS.5: Capability Assessment

Survey Components		Yes/No
Planning Capability	Capital Improvements Plan/Long-Term Budget	*Yes*
	Continuity of Operations Plan	*No*
	Disaster Response Plan	*Yes*
	Other (if any)	
Administrative & Technical Capability	GIS Capabilities	*No*
	Civil Engineering	*No*
	Staff who can assess jurisdictional vulnerability to hazards	*Yes*
	Grant Manager	*No*
	Mutual Aid Agreements	*Yes*
	Other (if any)	
Fiscal Capability	Applied for grants in the past	*Yes*
	Awarded grants in the past	*Yes*
	Authority to levy taxes or bonds for specific mitigation projects	*Yes*
	Development Impact Fees	*No*
	General Obligation Revenue or Special Tax Bonds in place	*No*
	Flood Insurance	*Yes*
	Other (if any)	
Education and Outreach	Local school groups or non-profit organizations focused on environmental protection, emergency preparedness, access, and functional needs populations, etc. (Ex. Parent groups, hazard mitigation boards, etc.)	*No*
	Ongoing public education or information program (Ex. Responsible water use, fire safety, household preparedness, environmental education, etc.)	*Yes*
	StormReady Certification	*No*
	Other (if any)	
Drills	Fire	*8 / yr*
	Tornado	*1 / yr*
	Intruder (Lock down)	*2 / yr*
	Bus Evacuation	*1 / yr*
	School Evacuation	*2 /yr*
	Other (if any)	

Table TPS.*6*: Overall Capability

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

Plan Integration

The Tri-County Public Schools District funds are sufficient and have stayed the same over recent years. A large portion of funds are dedicated to HVAC and fire safety systems. In the last five years the district has been awarded a new mower from ExMark and new cameras for buses through grant funding. Other grants were also received which updated equipment for school programs, updated building exteriors, and the new mower.

Tri County Public Schools has a Crisis Response Plan which is reviewed and updated annually or after a crisis event occurs. Crisis events include both natural and man-made hazards such as severe storms, power outages, intruders, or deaths within the district. After any event occurs the district debriefs and includes updates or revisions to the plan. Additionally, the district has mutual aid agreements with the communities of Plymouth and DeWitt and surrounding school districts, as well as is included in emergency plans for Jefferson, Gage, and Saline Counties. The LEOPs outline the chain of command for crisis situations, communication procedures during an emergency, crisis management procedures, safety precaution and emergency preparedness measures, and procedures to ensure building security.

The district's superintendent would be the main actor in overseeing the implementation of mitigation actions in school facilities, in coordinating with the Jefferson County Sheriff's Office, and Emergency Management. The district's efforts to educate its staff, students, and the community about its preparedness plans and emergency procedures include tornado drills for students and staff; and an annual safety audit with staff, to go over possible vulnerabilities. The district strategic plan calls for "ensuring well maintained, safe, and appropriate facilities." The district continues to update the campus and continues to make sure the district meets all necessary codes and ADA requirements. Additionally, the two district safety teams meet regularly and hopes to achieve training in emergency response from the county emergency planning coordinator.

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 superintendent, director of buildings and grounds, board of education, and building level principles 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 annually and will include the public in the review and revision process by: website updates, newsletters, social media, and board/council meetings.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	WARNING SYSTEMS
DESCRIPTION	Implement telephone warning system such as Reverse 911, and/or emergency text messaging warning system.
HAZARD(S)	All hazards
STATUS	Completed. The district has an emergency robocall system to contact all parents in the district if there is an emergency.

Continued Mitigation Actions

MITIGATION ACTION	ALERT SIRENS
DESCRIPTION	Perform an evaluation of existing alert sirens, to determine which should be replaced or upgraded; install new sirens with remote activation options, as needed.
HAZARD(S)	Severe Thunderstorms, Tornadoes and High Winds
ESTIMATED COST	$15,000+
FUNDING	General fund, HMGP, BRIC
TIMELINE	1 year
PRIORITY	Low
LEAD AGENCY	Superintendent
STATUS	In Progress. The security company that Tri County works with checks the emergency alert sirens within the building and surrounding areas.

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Provide a portable or stationary source of backup power on campus
HAZARD(S)	All hazards
ESTIMATED COST	$3,500+
FUNDING	General fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Buildings and Grounds Department
STATUS	In Progress. The board of education continues to discuss the idea of backup power when they get a copy of the safety report.

MITIGATION ACTION	BURY POWER AND SERVICE LINES
DESCRIPTION	Identify vulnerable transmission and distribution lines on school property, to replace or retrofit existing structures to be less vulnerable to storm events.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	Varies
FUNDING	General fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Building and Grounds Department, Norris Public Power
STATUS	In Progress. Lines into the building are all underground.

MITIGATION ACTION	CONTINUITY PLANNING
DESCRIPTION	Develop continuity plans for critical services in order to increase resiliency after hazardous event.
HAZARD(S)	All hazards
ESTIMATED COST	$5,000+
FUNDING	General fund, HMGP, BRIC
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Superintendent
STATUS	In Progress. Plan and train staff members. Work with the district safety committee and insurance carrier to make sure the district is meeting the safety of students and staff members.

MITIGATION ACTION	EMERGENCY COMMUNICATIONS
DESCRIPTION	Establish an action plan to improve communication between schools and other government agencies to better assist students and staff during and following emergencies. Establish interoperable communications.
HAZARD(S)	All hazards
ESTIMATED COST	$1,000+
FUNDING	General fund
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Superintendent
STATUS	In Progress. Direct communication during a weather emergency is limited. Also, with an emergency in the immediate vicinity of the campus.

MITIGATION ACTION	FIRST AID TRAINING
DESCRIPTION	Provide first aid training for all staff
HAZARD(S)	All hazards
ESTIMATED COST	$1,000
FUNDING	General fund
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Superintendent
STATUS	In Progress. The district has three staff members who are trainers for CPR and staff are certified or recertified on a yearly basis.

MITIGATION ACTION	HAZARDOUS TREE REMOVAL
DESCRIPTION	Identify and remove hazardous limbs and/or trees on school property
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	$50 per tree
FUNDING	General fund
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Buildings and Grounds Department, Local Businesses
STATUS	In Progress. Working with a business to remove dead and diseased trees from campus. Trees are removed on a yearly basis.

MITIGATION ACTION	INFRASTRUCTURE PROTECTION
DESCRIPTION	Encourage the use of hail resistant roofing for any new construction. Update existing roofing and siding for better protection to wind and hail.
HAZARD(S)	Severe Thunderstorms
ESTIMATED COST	$1,000,000
FUNDING	Building fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Superintendent
STATUS	In Progress. The board considers that when roofs need to be replaced. Currently, the board has continued with the current roofing practice.

MITIGATION ACTION	INSTALL VEHICULAR BARRIERS
DESCRIPTION	Install vehicular barriers to protect school facilities where possible
HAZARD(S)	Terrorism
ESTIMATED COST	Varies
FUNDING	General fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Buildings and Grounds
STATUS	In Progress. Fuel storage tanks have a barrier around them to reduce the possibility of someone running into the tanks.

MITIGATION ACTION	PUBLIC EDUCATION AND OUTREACH
DESCRIPTION	Educate staff, students, and parents about hazard vulnerability and mitigation measures, such as classroom modules profiling certain hazards and discussing preparedness measures; distributing educational materials, such as brochures and flyers; training staff to understand school hazard vulnerabilities; and purchasing equipment such as overhead protectors and laptops to facilitate training.
HAZARD(S)	All hazards
ESTIMATED COST	$3,000+
FUNDING	General fund, HMGP, BRIC
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Superintendent
STATUS	In Progress. Students and staff members are continually trained and updated on emergency management. That is part of the beginning staff development at the start of the school year. When the district does practice an emergency skill, staff members debrief with students and each other on the strength of the plan and needs improvement.

MITIGATION ACTION	SAFE ROOM/STORM SHELTERS
DESCRIPTION	Design and construct fully supported safe rooms in school facilities
HAZARD(S)	Severe Thunderstorms, Tornadoes and High Winds
ESTIMATED COST	$200-$250 per square foot
FUNDING	Building fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Superintendent
STATUS	In Progress. When the district remodels a portion of the building, structural engineers make sure the roof structure can support the changes.

MITIGATION ACTION	WEATHER RADIOS
DESCRIPTION	Conduct an inventor of weather radios at schools and school facilities and provide new radios as needed.
HAZARD(S)	All hazards
ESTIMATED COST	$500
FUNDING	General fund, HMGP, BRIC
TIMELINE	1 year
PRIORITY	Medium
LEAD AGENCY	Superintendent
STATUS	In Progress. Weather radios are outdated and need to be replaced. One for the transportation director, building level principals, and the superintendent.

DISTRICT PROFILE

SOUTHEAST COMMUNITY COLLEGE - BEATRICE

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

Local Planning Team

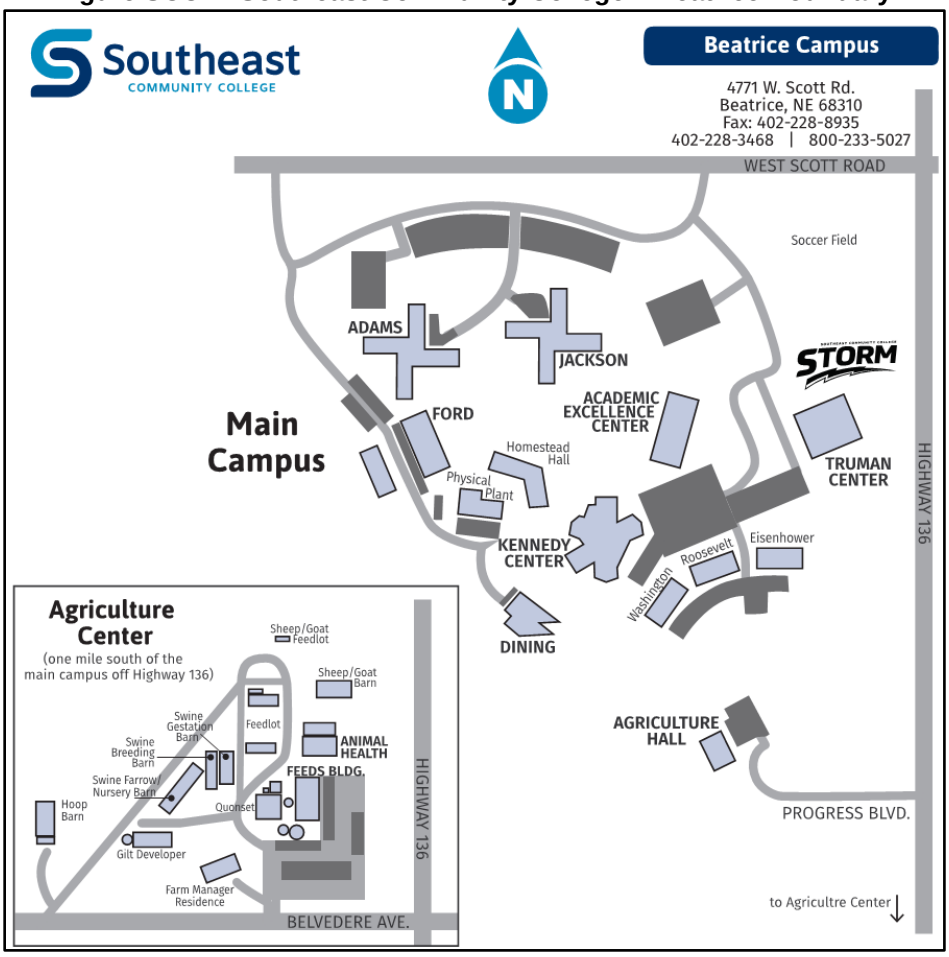
Table SCC.1: Southeast Community College - Beatrice Local Planning Team

Name	Title	Jurisdiction
Mark Meints	Safety and Security Coordinator	Southeast Community College – Beatrice Campus
Bob Morgan	Campus Director	Southeast Community College – Beatrice Campus
Lisa Wiegand	Emergency Manager	Gage County

Location and Services

Southeast Community College, Beatrice Campus is a rural campus located in Gage County, in southern Nebraska. Its offices are located at 4771 West Scott Road, Beatrice, NE, 68310-7012. The college offer degrees and certificates in 11 programs and an academic transfer program for students wishing to complete a bachelor's degree. The Beatrice Campus is located on a semi-rural campus and is home to the college's agricultural programs.

Figure SCC.1: Southeast Community College – Beatrice Boundary



Source: Southeast Community College - Beatrice

Transportation

Major transportation corridors in the City of Beatrice include US Highway 136, which runs east-west through the center of Beatrice, US Highway 77, which runs north-south through the center of Beatrice, and Nebraska Highway 4, which runs north-south through the western part of Beatrice. There is one rail line which travels through Beatrice; however, it is not located near the SCC campus. The primary route of concern for the college is West Scott Road which has the two main entrances to the campus. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

Demographics

The following table displays the enrolled student population for 2019-2020. Total enrolled students in 2014-15 were 363 (summer), 734 (fall), 520 (winter), and 454 (spring) with 1,012 total unduplicated students. The college has seen relatively stable growth in student population; however, the COVID-19 pandemic did impact the 2019-2020 academic year. Currently the school district is working to relocate the John Deer Tech program from the Milford Campus to the Beatrice Campus. This shift will bring an additional 60 to 80 students to campus. Other ongoing construction will increase overall capacity and the district anticipates future growth. There are approximately 70 professors and other teaching personnel on campus.

	Fall 2019	Spring 2020	Summer 2020
Agriculture	177	172	59
Arts & Sciences	308	266	83
Business	61	52	20
Health Sciences	53	50	24
Criminal Justice	21	22	2
Undeclared	68	77	71
Grand Total	**688**	**639**	**259**
Total Unduplicated Students		**915**	

Future Development Trends

Over the past five years the district has undergone several changes. The Hoover building, previously used for classrooms and dorm rooms, was demolished. The district has added a new cafeteria building (the Storm Center Café), a new 152-bed dorm building (Homestead Hall), and a new three story classroom building (Academic Excellence Center). The district purchased a new building on campus which was previously used by a separate company and remodeled it. The district has also remodeled the Kennedy Center and is in the planning process for demolishing Jackson and Adams Halls in the next five years. Over the next five years the district is working to relocate the John Deer Tech program from Milford to the Beatrice campus.

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 21 chemical storage sites in Beatrice which house hazardous materials.

Table SCC.2: Chemical Storage Fixed Sites

Facility Name	Address
Beatrice Concrete Co Office	400 Scott St
NGPL Compressor Station 106	21372 US Highway 77
Exmark Manufacturing Co	2101 Ashland Ave
Farmers Cooperative	805 S 6th St
Farmers Cooperative	403 S 3rd St
Farmers Cooperative	21169 SW 80th Ln
Northern Natural Gas Company	30694 US Highway 77
Koch Fertilizer Beatrice LLC	21178 SW 89th Rd
Beatrice Municipal Airport	3301 N 6th St
Windstream Communications	445 N 6th St
NDOT Beatrice Yard	117 Hill St
Farmers Cooperative	1615 N 6th St
Farmers Cooperative	800 Dorsey St
Continental Carbonic Products	21410 SW 89th RD
NEAPCO Inc	501 W Sargent St
Nutrien Ag Solutions	3400 N 8th St
NPPD Beatrice Power Station	20261 SW 61st Rd
Beatrice Concrete Co Inc	2300 S 6th St
Corn Oil & Renewable Energy	722 Kinney Dr
Charger Communications NE22072	2010 S 19th St
Agrium Homestead Terminal	22292 SW 89th Rd

Source: Nebraska Department of Environment and Energy[19]

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.

Truman Center is a Red Cross facility for major traumatic events. In addition to campus services, buildings are available for the community to use with preference going to non-profits. The following table and figure provide a summary of the critical facilities for the district.

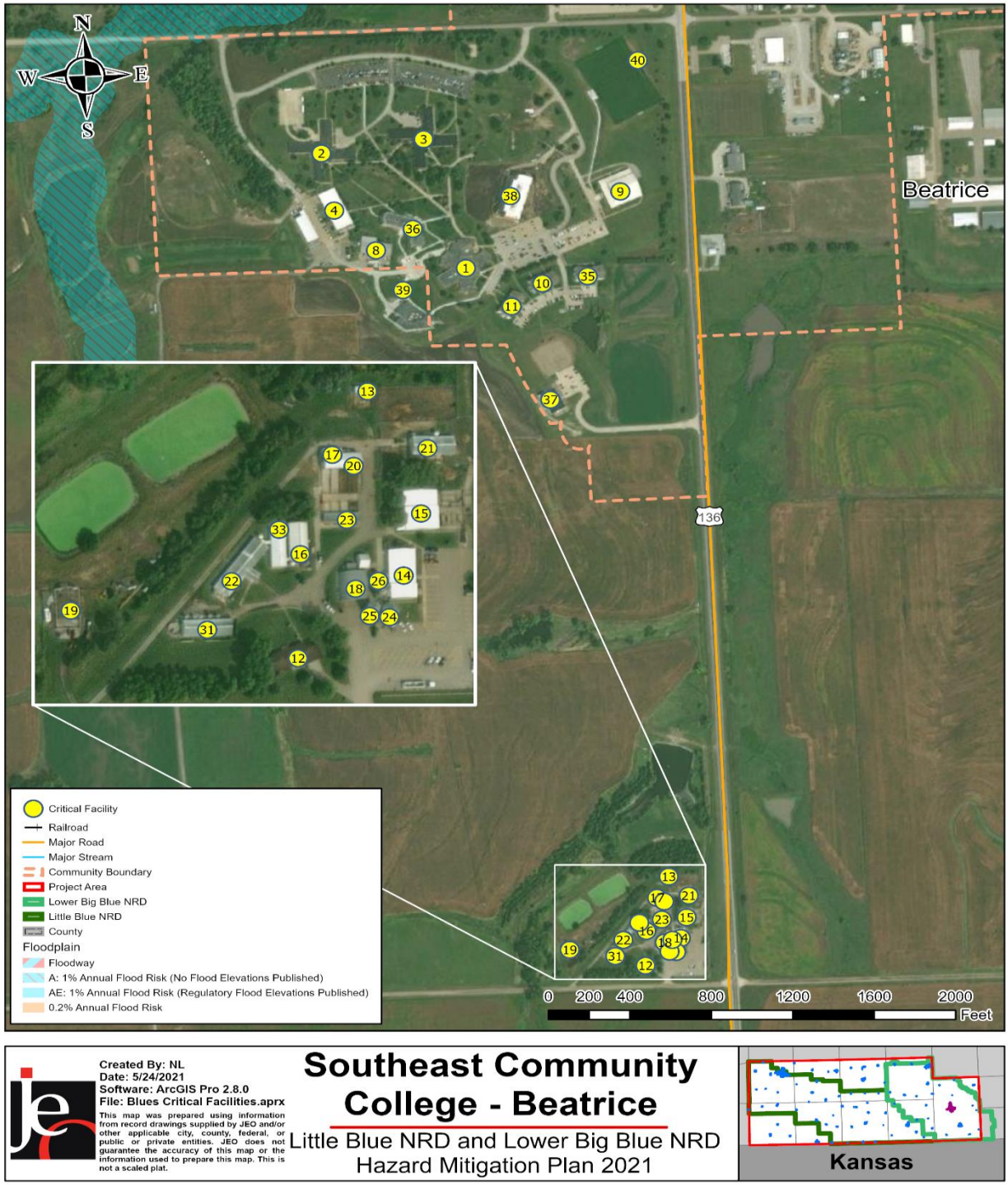
19 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed August 2020.

Table SCC.3: Southeast Community College - Beatrice Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Food, Water, & Shelter	Kennedy Center	Y	N	N
2	Safety and Security	Adams Hall	N	N	N
3	Safety and Security	Jackson Hall	N	N	N
4	Safety and Security	Ford Hall	N	N	N
5	Safety and Security	Green House	N	N	N
6	Safety and Security	Green House	N	N	N
7	Safety and Security	Cold Storage	N	N	N
8	Safety and Security	Physical Plant	N	N	N
9	Food, Water, & Shelter	Truman Center	Y	N	N
10	Safety and Security	Roosevelt Hall	N	N	N
11	Safety and Security	Washington Hall	N	N	N
12	Safety and Security	Caretaker Home	N	N	N
13	Safety and Security	Sheep Shed	N	N	N
14	Safety and Security	Feeds Building	N	N	N
15	Safety and Security	Animal Health	N	N	N
16	Safety and Security	Swine Finishing	N	N	N
17	Safety and Security	Beef Feed Shed	N	N	N
18	Safety and Security	Feed Quonset	N	N	N
19	Safety and Security	Swine Quonset	N	N	N
20	Safety and Security	Beef Barn	N	N	N
21	Safety and Security	Sheep Barn	N	N	N
22	Safety and Security	Swine Complete	N	N	N
23	Safety and Security	Feed Plan	N	N	N
24	Safety and Security	Metal Grain Bin	N	N	N
25	Safety and Security	Metal Grain Bin	N	N	N
26	Safety and Security	Metal Grain Bin	N	N	N
27	Safety and Security	West Farm Barn	N	N	N
28	Safety and Security	West Farm Sheep	N	N	N
29	Safety and Security	West Farm Cow	N	N	N
30	Safety and Security	West Farm Bull	N	N	N
31	Safety and Security	Swine Building	N	N	N
32	Safety and Security	Pump House	N	N	N
33	Safety and Security	Swine Finish #2	N	N	N
34	Power and Energy	Electrical Shed	N	N	N
35	Safety and Security	Eisenhower Hall	N	N	N
36	Food, Water, & Shelter	Homestead Hall	Y	N	N
37	Safety and Security	Agricultural Hall	N	N	N
38	Safety and Security	Academic Excellence Center	N	N	N
39	Food, Water, & Shelter	Storm Center Café	N	N	N

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
40	Food, Water, & Shelter	Christenson Field	N	N	N

Figure SCC.2: Southeast Community College - Beatrice Critical Facilities



Historical Occurrences

See the Gage County or City of Beatrice 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 district's capabilities.

Severe Thunderstorms

Severe thunderstorms are common across Gage County and include impacts from hail, lightning, heavy rain, and strong winds. The campus expressed a concern over lightning strikes during severe thunderstorm events. The campus is located on the highest part of Beatrice, making it susceptible to lightning strikes. In the past, lightning has hit the administrative building and the dorm buildings, causing lost shingles and power outages. The school recently renovated the administrative building with fuse bars for protecting phone and electrical equipment. The campus experienced significant roof damages in 2005 and required roof replacements. In 2011-2012 a hail event damaged building siding. All siding had to be replaced. There has been not damage to vehicles or the educational crop land. The campus has also had to cancel classes due to heavy rainfall and localized flooding in the city. Campus facilities were not significantly impacted by these flooding impacts.

Severe Winter Storms

The campus does experience extreme drifting during heavy snowfall. Regularly on campus there are 350+ students in the dorms, but no generators in place should power loss occur. The college clears its own campus lots and streets. They have a tractor with a blade, two mowers, three trucks with movers, one salt truck. The school does sometimes need to contract out for large snowstorms. The snow removal priorities for the school are main roads, one stop center, dorms, and finally overnight lots. During this plan update, the college identified a project to conduct public education about this hazard, purchase a generator for the storm center café and Agricultural Hall, and improve snow removal equipment. Weather radios will continue to be installed when needed at campus buildings.

Tornadoes and High Winds

In 1996 there was one tornado event that lifted many roofs on campus. In 2014, a section of Kennedy Center roof was lifted off during a high wind event. A high wind event in 2017 also caused major damages to the Kennedy Center. There are sirens on campus, which are tested monthly and maintained by the city. The Kennedy Center (gym) is the designated storm shelter. For emergencies, staff and students shelter in interior hallways or their rooms while in dorms. There are presently weathers radio in every building and at the dorm resident manager's office and home. The school does have tornado drills, and also has its instructors tell students explain emergency procedures during the first day of classes. Each classroom also has a phone, which administrative staff can call to page buildings for emergency. There is also a voluntary phone/e-

mail alert service, started in 2010. Students are automatically signed up for this via e-mail, and about 50 percent of signed up their cellular phone with this service.

The campus is located on a hill, which exacerbates vulnerability to wind events. The campus regularly files insurance claims related to wind damages. All power lines are below ground on campus, and all trees are in good shape. The landscape department works very hard to be proactive in this. The campus receives power from Beatrice Public Works. During this plan update, the college identified a project to conduct public education about this hazard, purchase a generator for the storm center café and agricultural hall, and construct a safe room near the dormitory.

Administration

Southeast community college has a president and the Beatrice Campus has a campus director. The Board of Governors for the campus is made up of 11-members. The campus also has a number of additional departments and staff that may be available to implement hazard mitigation initiatives. The campus has a Safety Committee made up of faculty, staff, and administration. This committee assists in the review and investigation of accidents and assist in mitigation planning.

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 SCC.4: Capability Assessment

Survey Components		Yes/No
Planning Capability	Capital Improvements Plan/Long-Term Budget	*Yes*
	Continuity of Operations Plan	*No*
	Disaster Response Plan	*Yes*
	Other (if any)	
Administrative & Technical Capability	GIS Capabilities	*Yes*
	Civil Engineering	*No*
	Staff who can assess jurisdictional vulnerability to hazards	*Yes*
	Grant Manager	*Yes*
	Mutual Aid Agreements	*No*
	Other (if any)	
Fiscal Capability	Applied for grants in the past	*Yes*
	Awarded grants in the past	*Yes*
	Authority to levy taxes or bonds for specific mitigation projects	*Yes*
	Development Impact Fees	*No*
	General Obligation Revenue or Special Tax Bonds in place	*Yes*
	Flood Insurance	*No*
	Other (if any)	

Survey Components		Yes/No
Education and Outreach	Local school groups or non-profit organizations focused on environmental protection, emergency preparedness, access, and functional needs populations, etc. (Ex. Parent groups, hazard mitigation boards, etc.)	*Yes - On Campus*
	Ongoing public education or information program (Ex. Responsible water use, fire safety, household preparedness, environmental education, etc.)	*Yes - On Campus*
	StormReady Certification	*No*
	Other (if any)	
Drills	Fire	*1/Yr*
	Tornado	*1/Yr*
	Intruder	*1/Yr*
	Bus Evacuation	*None*
	Campus Evacuation	*None*
	Other (if any)	

Table SCC.5: Overall Capability

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

Plan Integration

The Beatrice Campus maintains a Safety and Security Emergency Response Plan which was last updated in 2019. The plan outlines the chain of command for crisis situations, communication procedures during an emergency, crisis management procedures, safety precaution and emergency preparedness measures, and procedures to ensure building security. The district also has a long term plan which is used to outline future development and equipment purchases.

The campus's director would be the main actor in overseeing the implementation of mitigation actions in school facilities. The campus's efforts to educate its staff, students, and the community about its preparedness plans and emergency procedures include annual continuing education.

Plan Maintenance

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

The local planning team is responsible for reviewing and updating this profile as changes occur or after a major event. The local planning team will include the Campus Director, Safety and Security Coordinator, Physical Plant Manager, and Assistant Campus Director. 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 social media, website updates, board meetings, and letters.

Mitigation Strategy

Completed Mitigation Actions

MITIGATION ACTION	WEATHER RADIOS
DESCRIPTION	Purchase NOAA weather radios for all campus buildings
HAZARD(S)	All hazards
STATUS	Radios have been purchased for all current buildings. New radios will be purchased on an as-needed basis.

Continued Mitigation Actions

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Obtain a backup generator for school facilities. These should include: Truman Center, Administrative Building, Agricultural Hall, Cafeteria buildings, John Deer Tech Building.
HAZARD(S)	All hazards
ESTIMATED COST	$40,000+
FUNDING	General fund, HGMP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Physical Plant Operator
STATUS	This project has not yet been started.

MITIGATION ACTION	HIGHER BUILDING CODES AND STANDARDS
DESCRIPTION	Use roofing materials that are resistant to hail impacts for new buildings. Retrofit existing building with hail resistant roofing
HAZARD(S)	Severe Thunderstorms
ESTIMATED COST	$2.50 per square foot
FUNDING	General fund, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Physical Plant
STATUS	Shingles have been replaced on Roosevelt Hall. Other buildings still need roofing updates.

MITIGATION ACTION	IMPROVE AND REVISE SNOW/ICE REMOVAL PROGRAM OR RESOURCES
DESCRIPTION	The college would like to purchase a front-end loader in order to be able to improve snow removal capabilities
HAZARD(S)	Severe Winter Storms
ESTIMATED COST	$5,000+
FUNDING	General fund, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Physical Plant
STATUS	The district is currently waiting on funding.

MITIGATION ACTION	PUBLIC EDUCATION AND OUTREACH
DESCRIPTION	Provide information on tornado, thunderstorm, hail, and snowstorms safety to dorm students
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$3,000+
FUNDING	General fund, HMGP, BRIC
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Physical Plant
STATUS	The districts provide information to students, faculty, and staff on weather. SCC Beatrice Campus is a NOAA Weather Ambassador

MITIGATION ACTION	SAFE ROOM / STORM SHELTER
DESCRIPTION	Design and construct a safe room at the dormitory. 350+ students live in dorms
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms
ESTIMATED COST	$200-$250 per square foot
FUNDING	General fund, HMGP, BRIC
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Physical Plant, Housing Coordinator
STATUS	A storm shelter was designed and built for the new dorm facility, Homestead Hall. Remaining dorms still need shelter locations.

DISTRICT PROFILE

BARNESTON FIRE DISTRICT

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

Local Planning Team

Table BFD.1: Barneston Fire District Local Planning Team

Name	Title	Jurisdiction
Taylor McHenry	Firefighter/Officer	Barneston Volunteer Fire Department
Jeff Argo	Firefighter/President	Barneston Volunteer Fire Department

Location and Geography

The Barneston Fire District covers the southeast corner of Gage County, including the Village of Barneston and the Village of Liberty. The fire district mainly addresses grass and wildfire in the region's rural area and covers over 28,200 acres.

Transportation

Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors and areas more at risk of transportation incidents. Nebraska State Highway 8 which is traveled by a total annual average of 340 vehicles daily, 50 of which are trucks.[20] Although there have been no chemical spills in the district, agricultural chemicals are regularly transported on Highway 8.

Demographics

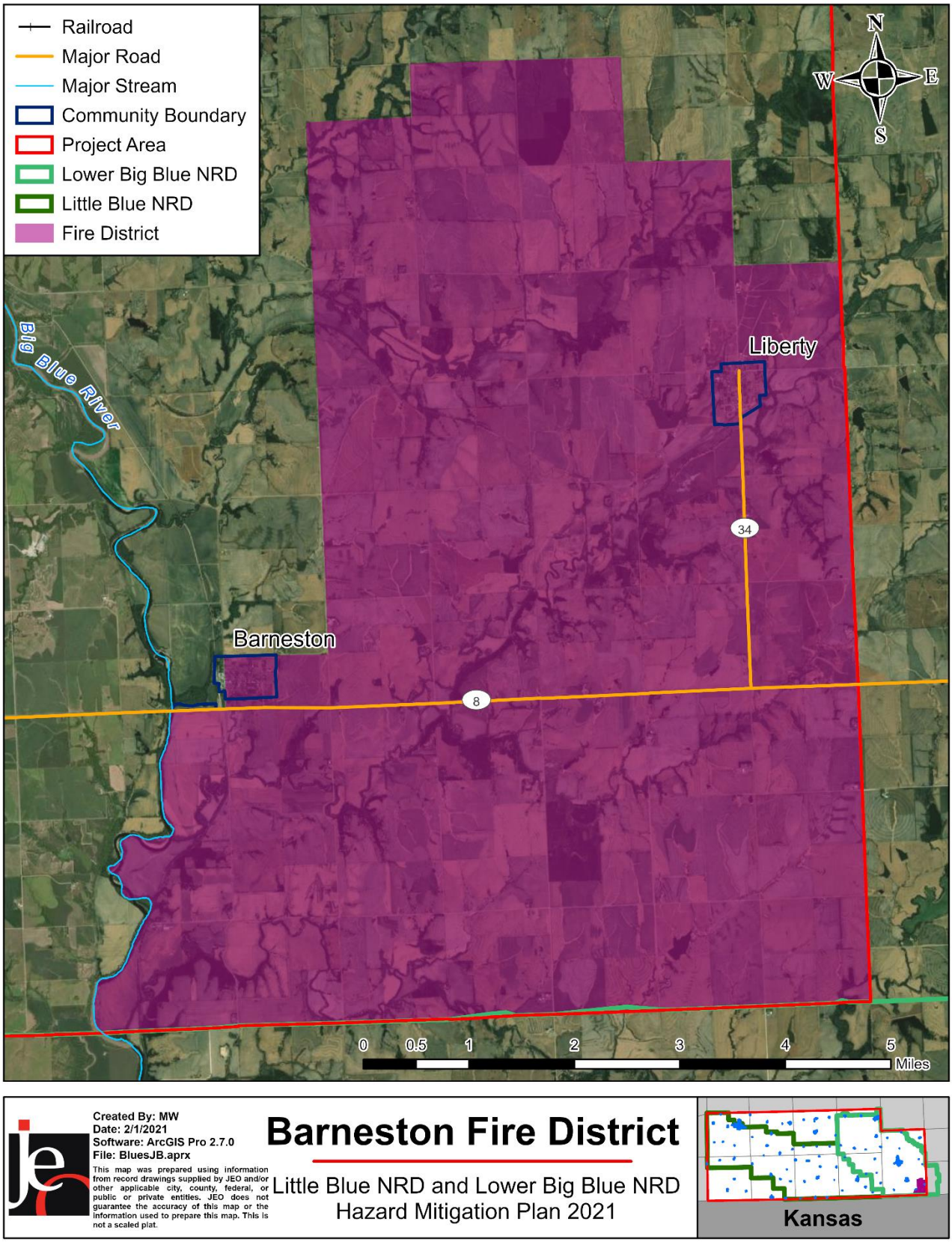
See the Village of Barneston, Village of Liberty, and Gage County profiles for regional demographic information. The local planning team estimates that there are approximately 1,000 people in the district.

Future Development Trends

Over the past five years, the district obtained a new brush truck and a new fire hall. The district is currently looking into a new storm shelter and backup generator.

[20] Nebraska Department of Roads. 2018. "Interactive Statewide Traffic Counts Map." [map]. https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34.

Figure BFD.1: Barneston Fire District Boundary



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 sites in the district which house hazardous materials. Fixed chemical sites that concern the planning team include anhydrous ammonia located at the Barneston Farmers Cooperative. The planning team is also concerned about anhydrous ammonia leaks impacting the Village of Barneston. Response resources that exist for the district are a mutual aid agreement with Beatrice Fire District HazMat, one pumper, one tanker, and three brush trucks. The district is currently looking into HazMat training with the state fire marshal service. The district has held a fire safety day and grill out event in the park and had boy scout troops tour the fire barn to learn about fire safety.

Table BFD.2: Chemical Storage Fixed Sites

Facility Name	Address	Floodplain
Farmers Cooperative	202 Grand Ave	N

Source: Nebraska Department of Environment and Energy[21]

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.

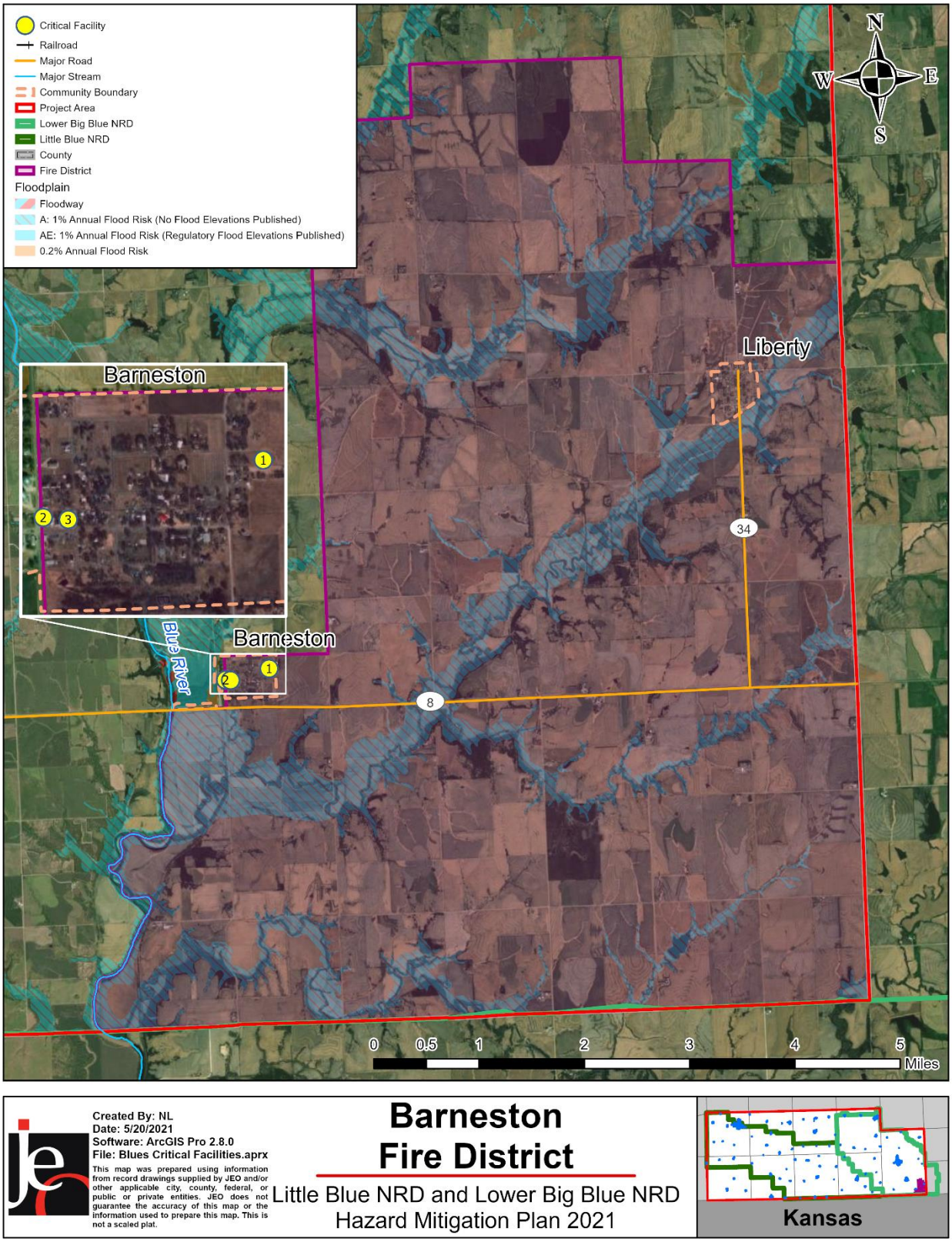
The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table BFD.3: Barneston Critical Facilities

CF #	Type of Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Located in Floodplain (Y/N)
1	Food, Water, Shelter	Community Center/Legion	Y	N	N
2	Safety and Security	City Hall	N	N	N
3	Safety and Security	Fire Hall	N	N	N

21 N5ebraska Department of Environment and Energy. "Search Tier II Data." Accessed August 2020.

Figure BFD.2: Barneston Fire District Critical Facilities



Historical Occurrences

See the Gage County 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 district's capabilities.

Grass/Wildfires

The Barneston Fire District primarily responds to grassland and row crop fires. The local planning team indicated that there have been no injuries or fatalities in the past, but crop and property damage has occurred. The primary focus of the district is training and updating response equipment including trucks, gear, and communication tools. Response equipment includes one pumper, one tanker, and three brush trucks.

Severe Thunderstorms

Thunderstorms occur multiple times a year typically between April to mid-September. According to NCEI data, a severe thunderstorm event occurred on March 28, 2019 and produced golf ball sized hail. On May 7, 2015, severe thunderstorms led to flooding that resulted in $100,000 in both crop and property damage. The local planning team is concerned about future flooding events and power outages from high winds. To mitigate this hazard, the fire district is looking to obtain a backup generator in the fire station.

Severe Winter Storms

Severe winter storms are an annual occurrence across the district and the planning area. The primary concern related to these events is power outages due to heavy winds, ice, and heavy snowfall. The district is also concerned with snow packed roads impacting its ability to respond to emergencies.

Tornadoes and High Winds

According to NCEI data, no tornadoes have impacted the district, but high winds have occurred. The local planning team is primarily concerned with high winds taking out power lines, downing trees, and potentially blocking roadways. To mitigate against this hazard, the fire district is looking to obtain a backup generator in the fire station.

Staffing

The Barneston Fire District is supervised by a fire chief and a five-member fire board who will oversee the implement of hazard mitigation projects.

Capabilities

Due to the unique structure of fire districts, the typical capability assessment table was not used. The following table summarizes the district's overall capabilities. The Barneston Fire District will continue to utilize existing relationships with local, county, state, and federal agencies in the implementation of mitigation projects.

Table BFD.4: 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 Barneston Fire District funds are limited to maintaining current facilities and have stayed the same over recent years. The district has been awarded a Thomas Foundation grant and Farmers Cooperative Rural Fire grant. For future planning efforts, the district is looking into a backup generator for the fire station and working with the city to construct a storm shelter in the community.

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 Barneston Volunteer Fire Executive Board, Barneston Fire Rural Board, and Barneston Village Board 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 annually and will include the public in the review and revision process by: notification through the village's annual public update, village meetings, and flyers.

Mitigation Strategy

New Mitigation Actions – 2021 Plan

MITIGATION ACTION	BACKUP GENERATOR
DESCRIPTION	Purchase and install a backup generator for the firehall
HAZARD(S)	All hazards
ESTIMATED COST	$6,000-$10,000
FUNDING	Fundraising, HMA, Rural Board funds
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Fire Department
STATUS	This is a new mitigation action.

MITIGATION ACTION	EMERGENCY EQUIPMENT PURCHASE AND/OR UPGRADES
DESCRIPTION	Purchase an additional new water pumper to improve fire suppression capabilities
HAZARD(S)	Grass/Wildfire
ESTIMATED COST	$200,000
FUNDING	Fundraising, HMA
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Fire Department
STATUS	This is a new mitigation action.