SPECIAL JURISDICTIONS APPENDIX

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District Profile

NORTH PLATTE NATURAL RESOURCES DISTRICT

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

Table NRD.1: North Platte NRD Local Planning Team

NAME	TITLE	JURISDICTION
DAVID CHRISTIAN	Water Resources Specialist	North Platte NRD
JOHN BERGE	General Manager	North Platte NRD
SCOTT SCHANEMAN	Assistant Manager	North Platte NRD

Location and Geography

The North Platte NRD is located in the panhandle of Nebraska, and includes the counties of Banner, Garden, Morrill, Scotts Bluff, and a portion of southern Sioux County. The total area of the NRD is 5,139 square miles. Major waterways within the district include the North Platte River, which runs through the center of the NRD, from northwest to southeast. The NRD is primarily made up of shrub land and herbaceous/grassland land types.

The North Platte NRD is responsible for monitoring water levels, checking the quality of ground water, and maintaining recreational areas throughout the district. The NRD works to consistently update the public on new recreational opportunities, and educational outreach workshops the NRD regularly hosts.

Transportation

Major transportation corridors in the NRD include U.S. Highways 26 and 385, and Nebraska Highways 71, 92, and 88. A BNSF railway travels from northwest to southeast through Scotts Bluff County and into Morrill County where it meets a north-south rail line. A Union Pacific railway travels from northwest to southeast through Scotts Bluff, Morrill, and Garden counties. Both railways primarily carry coal. Highways, 26, 91, and 71 are of most concern because they are portions of four lanes and are the most used in the district. Many years ago, a tanker train carrying industrial chemicals derailed and spilled in Scottsbluff. No large spills or significant accidents have occurred recently.

Demographics

It is estimated that NPNRD serves a population of about 43,441 people throughout the district. However, the NRD does not collect the demographic information of the district's population, nor does the U.S. Census Bureau recognize it as a distinct unit. As a result, there is no population data generated specifically for the NRD. For information regarding population data, please refer to a specific jurisdiction's community profile or to Section Three: Demographics and Asset Inventory.[1]

[1] United States Census Bureau. "2019 Census Bureau American Community Survey: S0101: Age and Sex." [database file]. https://data.census.gov.

Figure NRD.1: North Platte NRD

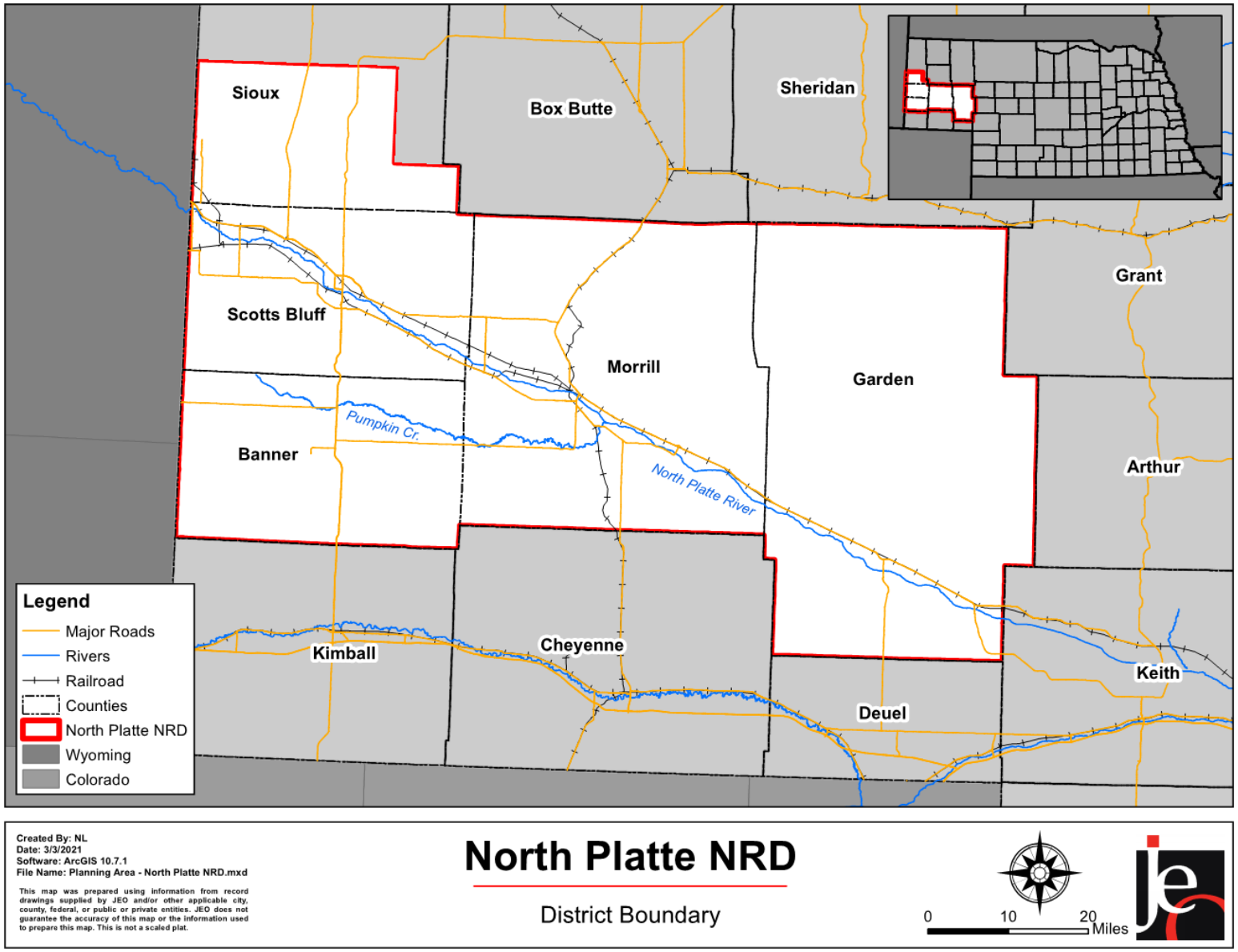


Table NRD.2 North Platte NRD Estimated Population

COUNTY	2010 POPULATION	2019 POPULATION	PERCENT CHANGE
BANNER	690	722	4.6%
GARDEN	2,057	1,864	-9.4%
MORRILL	5,042	4,781	-5.2%
SCOTTS BLUFF	36,970	36,074	-2.4%
TOTAL*	**44,759**	**43,441**	**-2.9%**

Source: U.S. Census Bureau[2]
*As Sioux County participated in the Region 23 Hazard Mitigation Plan, the NRD's small population within Sioux County is not included in this total.

Future Development Trends

Over the past five years, population has continued to decline slightly with no big changes within the NRD. Most businesses were negatively impacted by Covid-19 and supply problem persist in some area with small businesses hardest hit. In the next five years, some small businesses are being developed, but nothing major.

Structural Inventory and Valuation

Please refer to the individual community 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 sites are located throughout the NRD. Complete lists of chemical storage sites in each jurisdiction may be found in their community profile.

Critical Facilities

The local planning team identified critical facilities that are vital for disaster response, public shelter, 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.

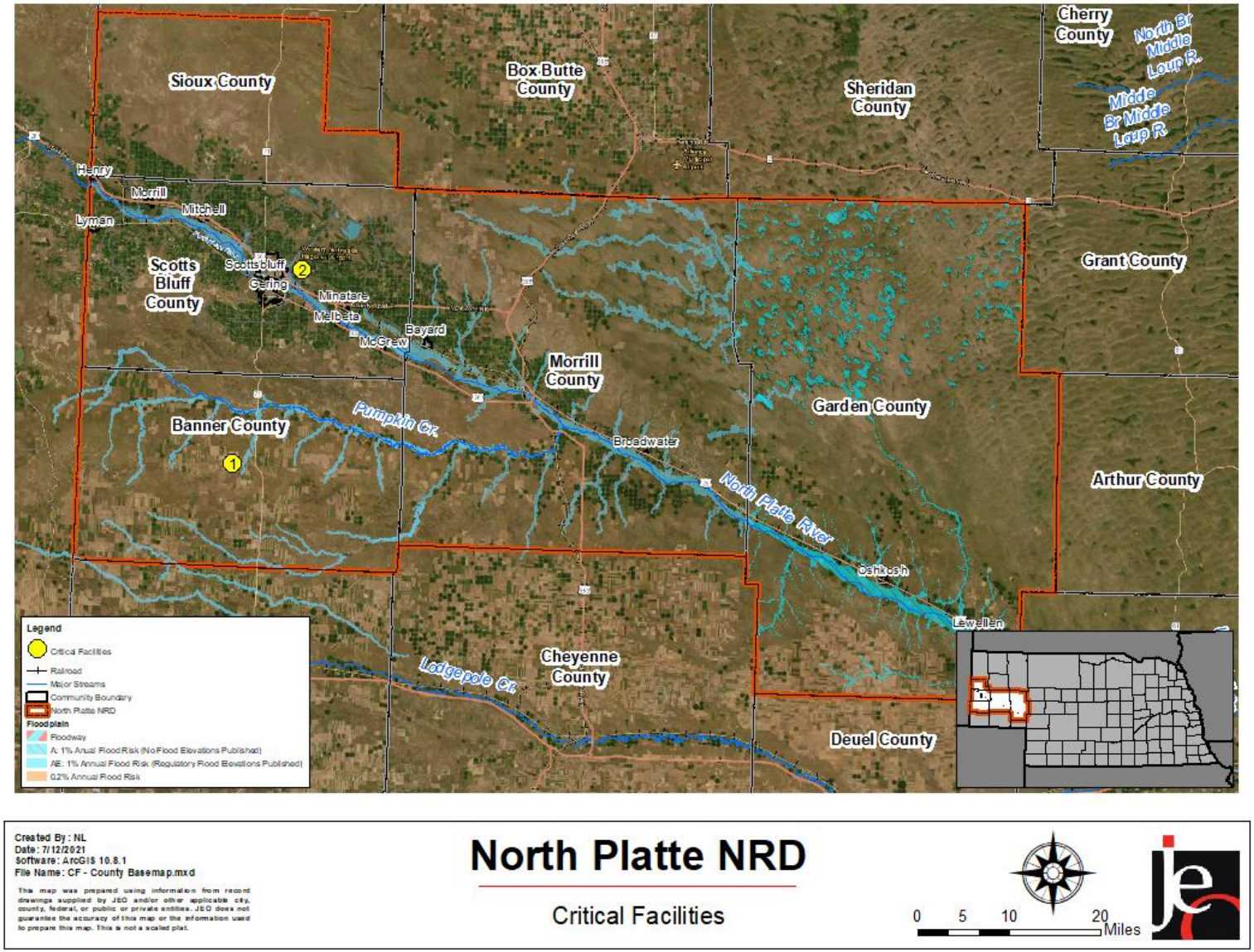
Table NRD.4: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Harrisburg Water System (Pump house, storage tank, etc.)	N	Y	N
2	North Platte NRD Office	N	N	N
3*	High Hazard Dams	-	-	-

**High Hazard Dams are mapped in Figure NRD.5*

[2] United States Census Bureau. "2019 Census Bureau American Community Survey: S0101: Age and Sex." [database file]. https://data.census.gov.

Figure NRD.3: Critical Facilities



**Floodplains in Banner County and Morrill County are based off a HAZUS created floodplain.*

Governance

The North Platte NRD is governed by a board of nine elected directors and entrusted with a broad range of responsibilities to protect and enhance the district's natural resources. The NRD serves both incorporated and unincorporated areas within their jurisdiction and have the capability to assist villages, cities, and counties financially and administratively with mitigation actions. The positions of Board Chair, Vice Chair, Secretary, and Treasurer are elected annually from the board of directors.

Subcommittees

- Executive
- Budget/Personnel
- District Operations
- Water Resources

Capability Assessment

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

Table NRD.6: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning & Regulatory Capability	Master Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operational Plan HWS Dams	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	No
	Building Codes	No
	National Flood Insurance Program	No
	Community Rating System	No
	Other (if any)	
Administrative & Technical Capability	Planning Commission	No
	Floodplain Administration	Yes
	GIS Capabilities	Yes
	Chief Building Official	No
	Civil Engineering	No
	Local Staff Who Can Assess Community's Vulnerability to Hazards	Yes
	Grant Manager	Yes

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	Capital Improvement Plan/ 1 & 6 Year plan	No
	Applied for grants in the past	Yes
	Awarded a grant in the past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric Service Fees	No
	Storm Water Service Fees	No
	Water/Sewer Service Fees	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	Yes
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes
	Natural Disaster or Safety related school programs	Yes
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	N/A
	Other (if any)	

Table NRD.7: 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	Moderate

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 planning documents (e.g., 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 manager, and water resource specialist. The plan will be reviewed no less than annually and will include the public in the review and revision process by sharing information through the website and at board meetings.

Plan Integration

The NPNRD has multiple plans that are consistent with the goals and objectives of the hazard mitigation plan. In addition, a zone study on nitrates in ground water is currently underway. The first step will be to gather samples from existing monitoring wells in the district to indicate in which areas nitrate levels may be a problem. Possible controls or solutions may be addressed in the future for some areas after this information is gathered.

Basin-Wide Plan for Joint Integrated Water Resources Management of Overappropriated Portions of the Platte River Basin, Nebraska (2019)
This plan encompasses portions of the Central Platte NRD, Tri-Basin NRD, Twin Platte NRD, South Platte NRD, and North Platte NRD. The purpose is to meet the requirements for portions of the Upper Platte River Basin that have been designated as overappropriated and achieve the goals and objectives described in *Neb. Rev. Stat. 46-715(2)*. Goals include (1) sustaining a fully appropriated condition while maintaining economic viability and welfare, (2) Prevent flow reductions that would cause non-compliance with any interstate compact or agreement, (3) Partner with municipalities and industries to maximize conservation, (4) identify disputes between groundwater users and surface water appropriators and implement solutions, and (5) keep the plan current and keep stakeholder informed. Also identified are actions that need to be taken to meet those goals.

Dam Emergency Actions Plans
As required for high hazard dams, the NRD has emergency actions plans for three of the dams that they own. These dams and subsequent action plans include Wes Clark CAT Dam Emergency Action Plan (2015), Gering Valley Dam A Emergency Action Plan (2016), and Gering Valley Dam B Emergency Action Plan (2021). Dam Emergency Action Plans include event detection, notification and communication, expected actions, responsibilities, and dam inundation areas.

Groundwater Management Plan (1993)
A groundwater management plan outlines groundwater supply, use, and management within the NRD. The plan includes hydrogeologic characteristics of the NRD, a water quality inventory, land use and contamination source inventory, water use and demand, critical areas for protection, groundwater goals and objectives, groundwater programs and practices, and groundwater management areas implementation.

Harrisburg Water System Emergency Response Plan (2020)
A water system emergency response plan serves as a guideline for water operators and system administration to minimize the disruption of normal services to consumers and to provide public health protection during an emergency event. The document identifies several natural and human-caused events and discusses the water system's response during those events.

Integrated Management Plan (2019)
The district's Integrated Management Plan focuses on ground water issues specifically water availability across the district. Water availability during drought can be a concern for the district and this plan has reinforced the moratorium of the expansion of irrigated acres and prohibits the use of existing wells to increase the number of acres historically irrigated prior to July 2004. Since 2002, the NPNRD has had a moratorium on permits for new well throughout the entire district. The district also has groundwater quality management areas designated to ensure the availability of quality drinking water for communities located in those areas.

Long Range Implementation Plan (2019)
The Long Range Implementation Plan gives a general timeline for completion and will indicate the funding necessary to carry out the goals and objectives of the NRD's Master Plan. It includes a summary of planned activities and an assessment of current and projected needs. The NRD Board of Directors and staff will review this plan on an annual basis and make any modifications that are deemed necessary.

Master Plan (2012)
The NRD's Master Plan outlines the goals and objectives for the NRD. It also outlines current activities that are being done to meet these goals and objectives. NPNRD updates the Master Plan every ten years with the next update scheduled for 2022. The NRD will evaluate projects in the hazard mitigation plan for inclusion in the Master Plan.

North Platte Natural Resources District Community Drought Plan (2018)
The drought mitigation plan outlines how the NRD will manage and plan for drought going forward. Sections of the plan include drought education, drought monitoring, drought impacts and district vulnerabilities, and plan implementation and modification. Throughout these sections there are general goals and specific action items to meet these goals.

Rules and Regulations (2019)

The Rules and Regulations adopted by the North Platte NRD establish procedures for the implementation of management practices to conserve and protect groundwater supplies and to prevent the contamination or improper use of groundwater. It does this through certification of groundwater withdrawals, allocation of irrigated areas, flow meter and telemetry unit requirements, well construction permits, temporary groundwater use permits, chemigation requirements, nitrogen application requirements, irrigation runoff rules, transfers of groundwater, and enforcement. These Rules and Regulations are reviewed annually and updated as needed.

Additions to the Rules and Regulations include quality controls for the Lisco-Oshkosh-Lewellen subarea and Pumpkin Creek Basin subarea. These special management areas have their own rules and regulations that differ from all other areas within the NRD.

Wellhead Protection Plan (1997)
The purpose of wellhead protection plans is to protect the public drinking water supply wells from contamination. It includes identifying potential sources of groundwater contamination in the area and managing the potential contaminant sources.

Historical Occurrences

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

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

There are 75 dams located throughout the NRD. Of these, eight dams have been identified as a high hazard dam. A "high hazard" designation is not an evaluation of the condition of the dam. Instead, it shows the number of individuals who live behind it. If a high hazard dam were to fail, loss of human life is probable and would cause significant economic impacts. A "significant hazard" dam would not likely cause loss of life, but could result in major economic loss, environmental damage, or disruption of lifeline facilities. Table NRD.8 lists all dams in the district and Table NRD.9 lists current high hazard dams. Dams within the NRD, as well as their hazard level, can be seen in Figure NRD.5. They can also be viewed on the Nebraska Department of Natural Resources Dam Inventory map (https://dnr.nebraska.gov/dam-safety). Dams in Gering Valley and Garden County have been tested by high rain events and have had no problems. Two dam failures have occurred in Banner County. No damages were reported from the two events.

To mitigate risk the district does yearly dam inspections on all dams under its jurisdiction and schedules repairs. High hazard dams are also inspected by NeDNR on a yearly basis. Most dams under NPNRD jurisdiction that are not high hazard are also inspected by NeDNR every five years. We have conferred with NeDNR on the needs of Dam B and the spillway and are proceeding with repairs. NPNRD has participated in floodplain planning conferences and dam failure and inspection conferences as part of its planning. This information has been used in their emergency and repair plans. NPNRD has developed each of the Emergency Action Plans (approved by NeDNR) for three of their Dams. Other agencies have been sent copies outlining their responsibilities in case of an actual emergency.

Table NRD.8: Dams within the NRD and their Hazard Level

	Number of Dams	Low	Significant	High
North Platte NRD	75	52	15	8

Table NRD.9: High Hazard Dams in North Platte NRD

NIDID	Dam Name	Stream Name	Owner
NE00664	Gering Valley Dam A	Tr-Gering Drain	North Platte NRD
NE01072	Lake Alice No.1-1/2	Interstate Canal off North Platte River	Bureau of Reclamation
NE01072	Lake Alice No.1	Interstate Canal off North Platte River	Bureau of Reclamation
NE01071	Lake Alice Lower Dam	Interstate Canal off North Platte River	Bureau of Reclamation
NE01075	Minatare Dam	Interstate Canal off North Platte River	Bureau of Reclamation
NE01204	Wes Clark CAT Dam	Tr-North Platte River	North Platte NRD
NE00650	Wildhorse 5-A	E. Wildhorse Creek	City of Bayard
NE00651	Wildhorse 14-A	W. Wildhorse Creek	City of Bayard

Flooding

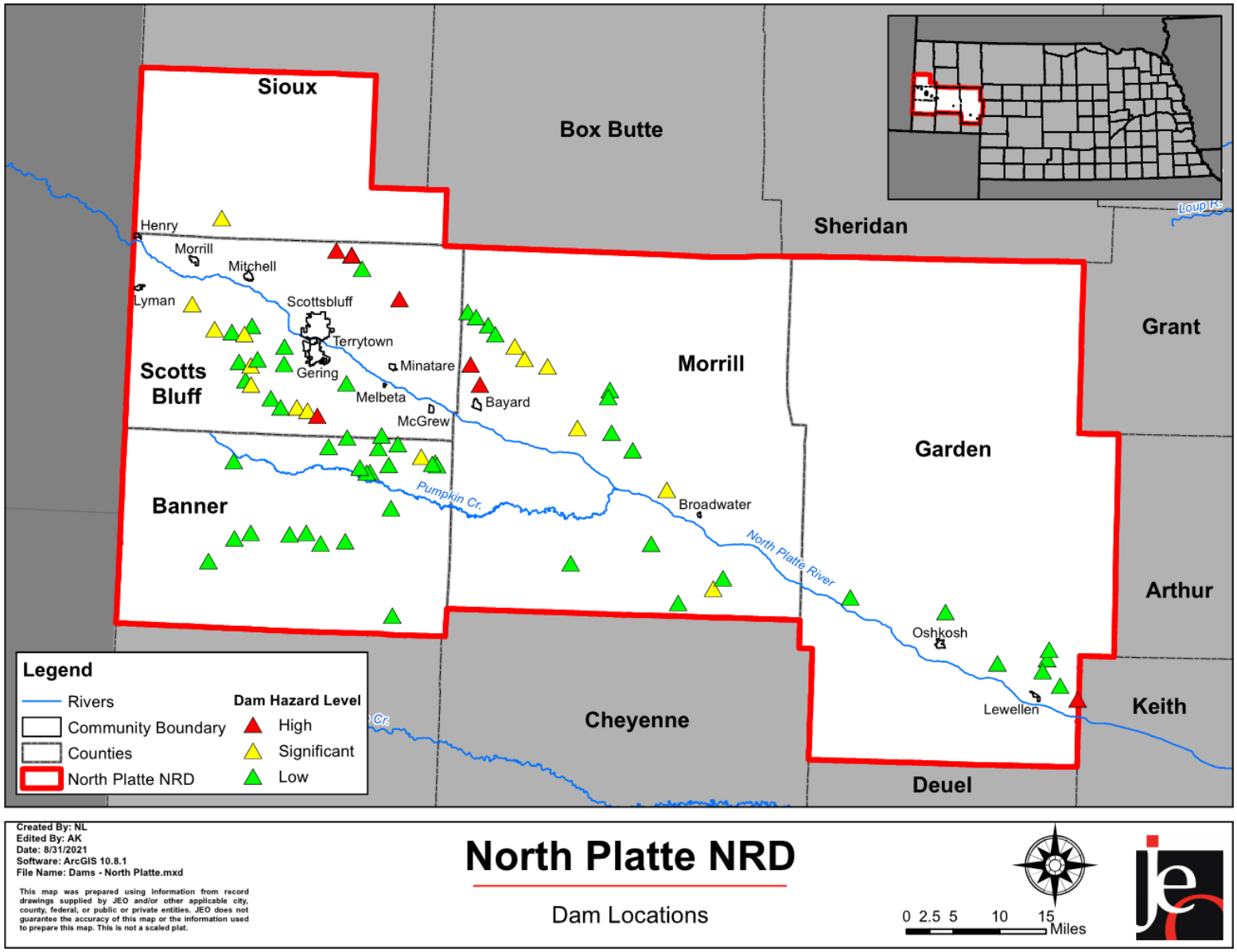
The North Platte NRD local planning team identified flooding as one of the top concerns for the NRD. During the March 2019 flood event county roads across the district were highly impacted by snow and then water damage from the flooding after it melted. Specific areas of North Platte NRD are more vulnerable than others to flooding, the local planning team indicated that Main Street in Bridgeport, and the City Water Treatment Plant is often damaged by flooding. The biggest concern for the NRD is flooding as a result of the North Platte River, however much of the city of Bridgeport has poor storm water drainage, which further compounds the flooding issues. Much of the City of Scottsbluff lies in the floodplain but has experienced only minor flooding from past high-water events.

To help mitigate flood the impacts of flooding, NPNRD has worked with the City of Bridgeport and the Nebraska Rural Water Association on decommissioning abandoned wells within the city limits of Bridgeport to lessen groundwater contamination in case of flooding. Several improvements have been made to the Gering Valley Flood Control Project. This includes the addition of structures and a drainage improvement project, as well as yearly maintenance to drainage and dams. The NPNRD has assisted landowners with flood damage and assessed how the drainage system in the district can be improved to avoid future damage. Drainage responsibility and ownership issues have also been addressed in many cases to get organizations involved in the hazard mitigation process.

Grass/Wildfires

The primary concern with grass/wildfires is crop and grassland damage and the potential to impact cities and villages. The largest fire in the district occurred in July 2000. This lightning started fire burned a total of 65,000 acres but did not threaten any homes or structures. There are 16 fire districts within the NRD, with most being made up of volunteer members. To help reduce spread of wildfires, the North Platte NRD regularly helps perform prescribed burns of pastures and promotes tree thinning.

Figure NRD.5: Dams within the North Platte NRD



Hazardous Materials - Transportation
The North Platte NRD local planning team identified chemical spills (transportation) as one of the top concerns for the NRD. The specific concerns the NRD has is how a chemical spill might affect the public, specifically on railroads and Highways 4A, 26, 27, 29, 62A, 79D, 88, 92, and 385. Various farm chemicals are always being transported on the highways. While no significant chemical events have occurred recently, the capacity for a significant chemical event is present, based on the number of chemicals regularly transported along the corridors. Proximity of critical facilities to the transportation corridors makes this issue a bigger concern, many of the county's critical facilities are located on a major transportation route, like an ethanol plant, cooperatives, city offices, courthouse, sheriff's office, Simplot, police and fire departments. To help mitigate the risk, the NRD monitors ground water to ensure contamination of water has not occurred.

Public Health Emergency
The NRD is primarily concerned with nitrates in groundwater, which can be a public health emergency if they go above the maximum contaminant level. The drinking water allowable standard for nitrates is 10 ppm and it can cause many health problems if this level is exceeded. This is a problem throughout rural America and is usually blamed on runoff or different other ways that groundwater can be contaminated from above. The NRD is conducting a zone study and is taking 700 water samples from observation wells in the district to see where the most acute problems may be. Mitigation and remediation strategies will be discussed and implemented after two years of data is gathered.

Severe Thunderstorms (includes Hail)
A typical severe thunderstorm in North Platte NRD makes travel especially difficult across the district, due to flooded roadways, downed power lines and down trees. Past occurrences have shown that hail has caused the most damage to crops, buildings, and vehicles. Many car dealers' insurance has required hail awnings at dealerships. Hail insurance is part of the insurance package for most farmers. In 2019, the NRD office roof had to be replaced from a hail and severe thunderstorm event. A few factors make North Platte NRD more resilient to impacts from a severe thunderstorm: The local planning team indicated that many privately owned critical infrastructure has backup generators to mitigate a prolonged power outage. The NRD owns one backup generator and that is at the Harrisburg Water System pumphouse. The NRD has also outfitted all critical facilities with severe weather radios, to notify residents of severe weather. Most of the district's power lines are above ground, which may increase the risk of prolonged power outage county-wide.

Severe Winter Storms
Severe winter storms can make travel extremely difficult across the district due to closed and impassable roadways. The most damaging winter storm event occurred on April 4th, 1997. Strong winds combined with snow amounts of generally 8 to 12 inches to created blizzard conditions across the district. Many automobile accidents occurred as a result of the treacherous conditions, and many power lines were downed due to the weight of snow. Livestock were killed by the snow and accompanying cold temperatures because the storm occurred in the calving season. The event caused approximately $5,000,000 in property damages. To help mitigate severe winter storms, the NRD provides education on living tree fences and sells trees that can be planted to create the living fences.

Tornadoes and High Winds

The primary concerns of the local planning team are centered on life safety, property damages, and damage to infrastructure. While no tornado events have struck North Platte NRD structures, tornados are common in the planning area. Some attributes of the North Platte NRD make the NRD more resilient to tornados; the NRD does have backup systems in place for electronic records, in case of a storm surge. While the NRD does not have any safe rooms, community members may find refuge in church buildings, resident basements, and the county courthouse. Regarding NRD staff, however, the NRD offices are left highly vulnerable to a tornado event, based on the topography of the area and the building components used by the NRD. A common tornado/storm shelter was investigated by the NRD for the businesses in the airport area adjacent to the NRD offices. It was found that some had basements or shelters, but the project would be difficult to do for all parties. In terms of awareness, the County Emergency Management offers text alerts during times of severe weather. Further, the county tests tornado sirens regularly, and hosts an annual storm spotter class.

Mitigation Strategy

New Mitigation and Strategic Actions

MITIGATION ACTION	BACKUP AND EMERGENCY GENERATORS
DESCRIPTION	Install backup and emergency generators at critical facilities in the event of power loss.
HAZARD(S)	All Hazards
ESTIMATED COST	$40,000+
FUNDING	General Fund
TIMELINE	5+ Years
PRIORITY	Low
LEAD AGENCY	NPNRD
STATUS	Not Started

MITIGATION ACTION	LIVING SNOW FENCES
DESCRIPTION	Help educate landowners and help install living snow fences to reduce the impacts of severe winter storms.
HAZARD(S)	Severe Winter Storms
ESTIMATED COST	$5,000+
FUNDING	General Fund
TIMELINE	5+ Years
PRIORITY	Low
LEAD AGENCY	NPNRD
STATUS	In Progress. The NRD annually helps homeowners learn about the importance of living snow fences and sells trees to plant them.

MITIGATION ACTION	FUEL LOAD REDUCTION
DESCRIPTION	Promote tree thinning and perform pasture burns to reduce the fuel load in the district.
HAZARD(S)	Grass/Wildfire
ESTIMATED COST	$5,000+
FUNDING	General Fund, Tree Sale Funds
TIMELINE	5+ Years
PRIORITY	Low
LEAD AGENCY	NPNRD
STATUS	In Progress. The NRD regularly helps perform pasture burns.

MITIGATION ACTION	WATER SYSTEM TELEMETRY
DESCRIPTION	Install telemetry at the Harrisburg Water System to help monitor the water system.
HAZARD(S)	Drought
ESTIMATED COST	Unknown
FUNDING	General Fund
TIMELINE	5+ Years
PRIORITY	Low
LEAD AGENCY	NPNRD
STATUS	Not Started

MITIGATION ACTION	ZONE NITRATE STUDY
DESCRIPTION	Conduct a 2-year study of the scope of nitrates in groundwater in the entire NRD using observation wells. Use the results to determine management areas for nitrogen.
HAZARD(S)	Drought
ESTIMATED COST	Equipment: $58,000 Sampling: $28,000
FUNDING	General Fund, Water Quality NeDNR Funds
TIMELINE	2-5 Years
PRIORITY	High
LEAD AGENCY	NPNRD
STATUS	In Progress. 2021 is the first year of samples.

Continued Mitigation and Strategic Actions

MITIGATION ACTION	COMMUNITY EDUCATION
DESCRIPTION	Continue developing educational programs dealing with groundwater and other hazard mitigation areas.
HAZARD(S)	Hazardous Materials - Fixed Sites and Transportation
ESTIMATED COST	$1,000
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	NPNRD, Region 21 Emergency Management, Region 22 Emergency Management
STATUS	In Progress. The NRD participates in water training for 5th graders called WET. They have also started a Water Expo in the fall. The NRD also provides trees, addresses water issues for community outreach and education, provides tree trimming workshops, and water operator trainings.

MITIGATION ACTION	EMERGENCY MANAGEMENT EXERCISE
DESCRIPTION	Develop and facilitate an exercise to identify gaps in planning and to ensure that community response plans are sufficient to meet the needs of the jurisdictions.
HAZARD(S)	All hazards
ESTIMATED COST	$5,000
FUNDING	General Fund
TIMELINE	1 year
PRIORITY	Low
LEAD AGENCY	NP NRD, Region 21 EM, Region 22 EM
STATUS	In Progress. Exercises are done for the NRD dams and for the Harrisburg Water System.

MITIGATION ACTION	FLOODPLAIN MANAGEMENT
DESCRIPTION	Preserve natural and beneficial functions of floodplain land through measures such as: retaining natural vegetation, restoring streambeds, and preserving open space in the floodplain. Develop and pass more restrictive floodplain regulations.
HAZARD(S)	Flooding
ESTIMATED COST	$10,000
FUNDING	General Fund
TIMELINE	1 year, ongoing
PRIORITY	High
LEAD AGENCY	NPNRD
STATUS	In Progress. NPNRD has been involved in many areas of floodplain management including proper floodplain construction, well location studies and permits, tree planting, retirement of irrigated acres on floodplains, and invasive species removal.

MITIGATION ACTION	IDENTIFY AND ORGANIZE FLOOD RELATED PROJECTS
DESCRIPTION	Identify potential flooding sources and flood-vulnerable areas. Explore solutions and prioritize.
HAZARD(S)	Flooding
ESTIMATED COST	$10,000
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	NPNRD, Region 21 Emergency Management, Region 22 Emergency Management,
STATUS	In Progress. Flood control projects and improvements and emergency plans has been done. The NRD has researched the ownership and maintenance responsibilities of many of the drains in the NRD.

MITIGATION ACTION	IMPROVE DRAINAGE
DESCRIPTION	Improve storm sewers and drainage patterns in and around cities and villages.
HAZARD(S)	Flooding
ESTIMATED COST	$25,000
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	NPNRD, Municipalities
STATUS	In Progress. Various flood control projects have been implemented by the NRD.

MITIGATION ACTION	MUTUAL AID AMONG WATER SYSTEMS
DESCRIPTION	Establish mutual aid agreements through Water/Wastewater Agency Response Network (WARN) Program.
HAZARD(S)	All Hazards
ESTIMATED COST	$3,000
FUNDING	General Fund
TIMELINE	1 year
PRIORITY	Low
LEAD AGENCY	NPNRD, Harrisburg Water System
STATUS	In Progress. The Harrisburg Water System has mutual aid agreements with Gering and Scottsbluff.

MITIGATION ACTION	STORM WATER MANAGEMENT
DESCRIPTION	Upgrade combined sewer system to improve storm water management. Mitigate property damage, groundwater contamination, and prevent flooding.
HAZARD(S)	Flooding
ESTIMATED COST	$100,000
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	NPNRD, Municipalities
STATUS	In Progress. The NRD has done various specific flood control projects.

MITIGATION ACTION	STREAM BANK STABILIZATION/ GRADE CONTROL STRUCTURES/ CHANNEL IMPROVEMENTS
DESCRIPTION	Stream bed/grade stabilization improvements can serve to protect structures, increase conveyance, prevent down cutting, and provide flooding benefits more effectively.
HAZARD(S)	Flooding
ESTIMATED COST	$100,000
FUNDING	General Fund, Counties, Irrigation Districts, Flood Control Project Funds
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	NPNRD
STATUS	Not Started

MITIGATION ACTION	TREE ASSISTANCE, TREE PLANTING, WINDBREAK INSTALLATION
DESCRIPTION	Educate public on appropriate tree planting, and establish an annual tree trimming program. Develop tree planting and maintenance guidelines.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	$10,000
FUNDING	General Fund
TIMELINE	5+ year years
PRIORITY	Low
LEAD AGENCY	NPNRD
STATUS	In Progress. The NRD does education and provides services on tree planting, tree trimming, and living windbreaks.

Removed Mitigation and Strategic Actions

MITIGATION ACTION	BANK STABILIZATION
DESCRIPTION	Stabilization banks along streams and rivers. This may include, but is not limited to: reducing bank slope, addition of riprap, installation of erosion control materials/fabrics.
HAZARD(S)	Flooding
STATUS	Removed. This action would be better led by ditch and drain companies, the Bureau of Reclamation, or Army Corps of Engineers. NPNRD supports this effort and all erosion control but are not the authority on most surface water issues.

MITIGATION ACTION	ELECTRICAL SYSTEM LOOPED DISTRIBUTION/REDUNDANCIES
DESCRIPTION	Provide looped distribution services and other redundancies in the electrical system as a backup power supply in the event the primary system is destroyed or fails.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
STATUS	Removed. This is the responsibility of electrical companies and municipalities.

MITIGATION ACTION	EMERGENCY EXERCISE: HAZARDOUS SPILL
DESCRIPTION	Perform an emergency exercise to prepare for potential explosions or hazardous spills. Ensure that nearby businesses and residents have appropriate plans in place.
HAZARD(S)	Hazardous Materials - Fixed Sites and Transportation
STATUS	Removed. This action will be combined with the Emergency Management Exercise mitigation action.

MITIGATION ACTION	EMERGENCY SHELTER/SAFE ROOM
DESCRIPTION	Establish a community safe room or safe areas for residents living in vulnerable structures/locations.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
STATUS	Removed. A study of the feasibility was conducted, and it was decided not to proceed further with this action.

MITIGATION ACTION	FIRM MAPPING
DESCRIPTION	Develop digital FIRM maps for regulatory use.
HAZARD(S)	Flooding
STATUS	Removed. This action would be completed by FEMA and NeDNR.

MITIGATION ACTION	FLOODPLAIN REGULATIONS
DESCRIPTION	Develop and pass more restrictive floodplain regulations. Enhancements may include: limiting types of development within the floodplain, redefining substantial loss for impacted homes, and increasing the free-board requirements to more than one foot above base flood elevation.
HAZARD(S)	Flooding
STATUS	Removed. This action will be combined with Floodplain Management.

MITIGATION ACTION	STORM WATER SYSTEM AND DRAINAGE IMPROVEMENTS
DESCRIPTION	These improvements can serve to convey runoff more effectively within cities and towns, preventing interior localized flooding. May also reduce the risk of illness/ disease by eliminating standing water.
HAZARD(S)	Flooding
STATUS	Removed. This action will be combined with the mitigation action Storm Water Management.

MITIGATION ACTION	TREE PLANTING
DESCRIPTION	Develop tree planting and maintenance guidelines.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
STATUS	Removed. Combined with Tree Assistance and Windbreak Installation.

District Profile

REGION 21 EMERGENCY MANAGEMENT AGENCY

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

Table R21.1: Region 21 Local Planning Team

NAME	TITLE	JURISDICTION
RON LEAL	Director	Region 21 Emergency Management Agency
KAY ANDERSON	Deputy Director	Region 21 Emergency Management Agency

Location and Geography

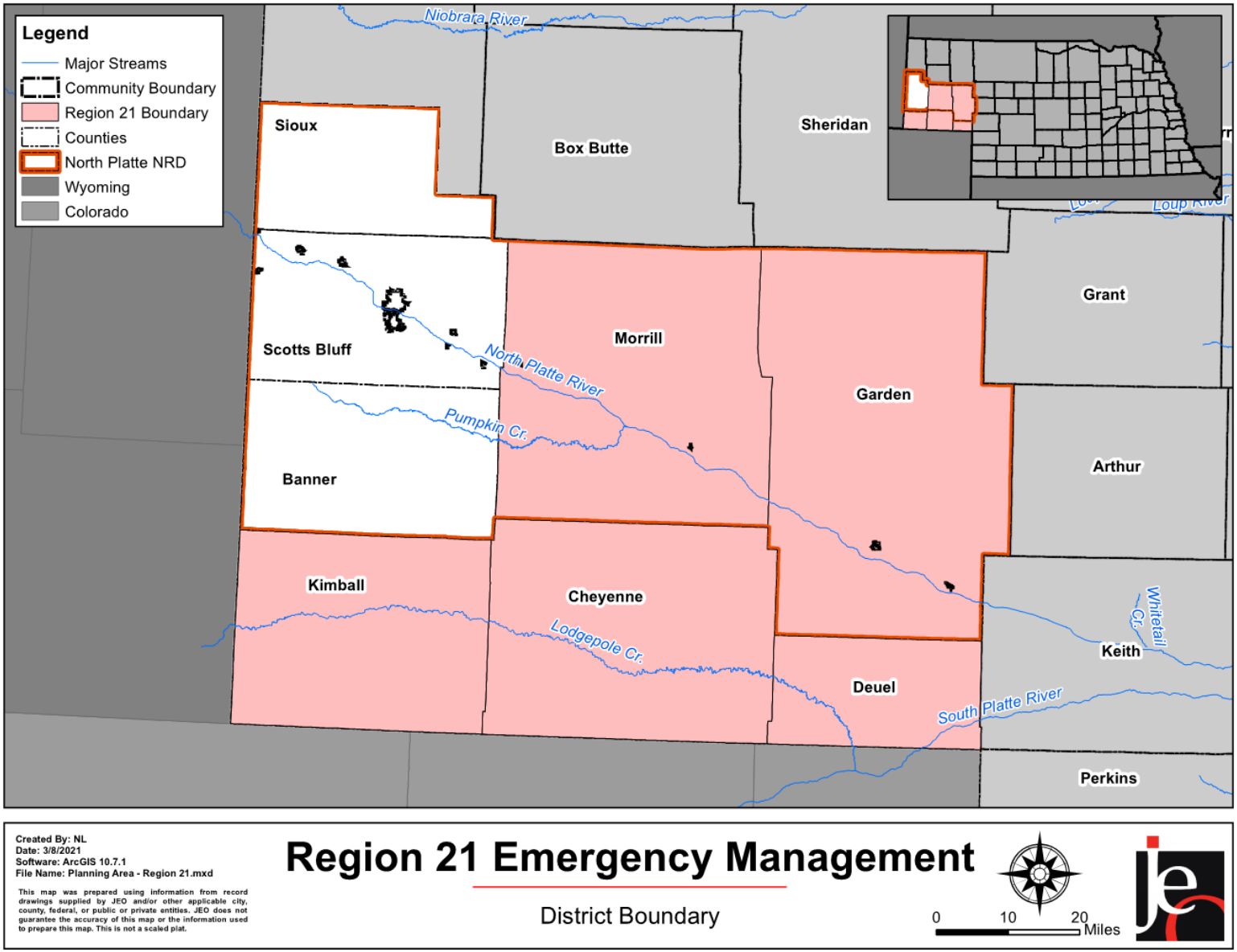
The Region 21 Emergency Management is located in the panhandle of Nebraska and covers Cheyenne, Deuel, Garden, Kimball, and Morrill counties. The total area of Region 21 is 5,750 square miles. Major waterways within the region include the North Platte River, running through the center of the emergency management district, from northwest to southeast. Region 21 is primarily made up of shrub land and herbaceous/grassland land types.

Transportation

Major highways in Region 21 include Interstate 80, U.S. Highway 26, U.S. Highway 385, and Nebraska Highway 92. According to the Nebraska Department of Transportation, the average daily traffic count for Interstate 80 (at Sidney) is 7,345 vehicles, 4,560 of which are heavy commercial vehicles. The traffic count near the junction of U.S Highway 26 and 385 (north of Bridgeport) is 5,000 vehicles per day, 500 of which are heavy commercial vehicles. The traffic count for the junction of U.S. Highway 26 and Nebraska Highway 92 (at Bayard) is 2,895, with 465 trucks per day.[3] A BNSF railway goes north-south through Cheyenne and Morrill counties and two Union Pacific railways go east-west through the region. I-80, Highway 30 and Highway 385 are the transportation routes of most concern. Diesel spills from truck accidents are the most common types of spills.

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

Figure R21.1: Region 21 Emergency Management District



Demographics

It is estimated that Region 21 serves a population of about 21,712 people over five counties. However, the Region does not collect the demographic information of their population, nor does the U.S. Census Bureau recognize the Region as a distinct unit. As a result, there is no population data generated specifically for the Region. For information regarding population data, please refer to a specific jurisdiction's community profile or to Section Three: Demographics and Asset Inventory.[4]

Table R21.2 Region 21 Estimated Population

COUNTY	2010 POPULATION	2019 POPULATION	PERCENT CHANGE
CHEYENNE	9,998	9,604	-3.9%
DEUEL	1,941	1,831	-5.7%
GARDEN	2,057	1,864	-9.4%
KIMBALL	3,821	3,633	-4.9%
MORRILL	5,042	4,781	-5.2%
TOTAL	**22,859**	**21,713**	**-5.0%**

Source: U.S. Census Bureau[5]

Future Development Trends

Over the past five years, there have been no changes within Region 21 Emergency Management, however in Cheyenne County the Cabela's is in the process of being sold. There are no planned changes over the next five years at this time.

Structural Inventory and Valuation

Please refer to the individual community 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 sites are located throughout the Region. Complete lists of chemical storage sites in each jurisdiction may be found in their community profile.

Critical Facilities

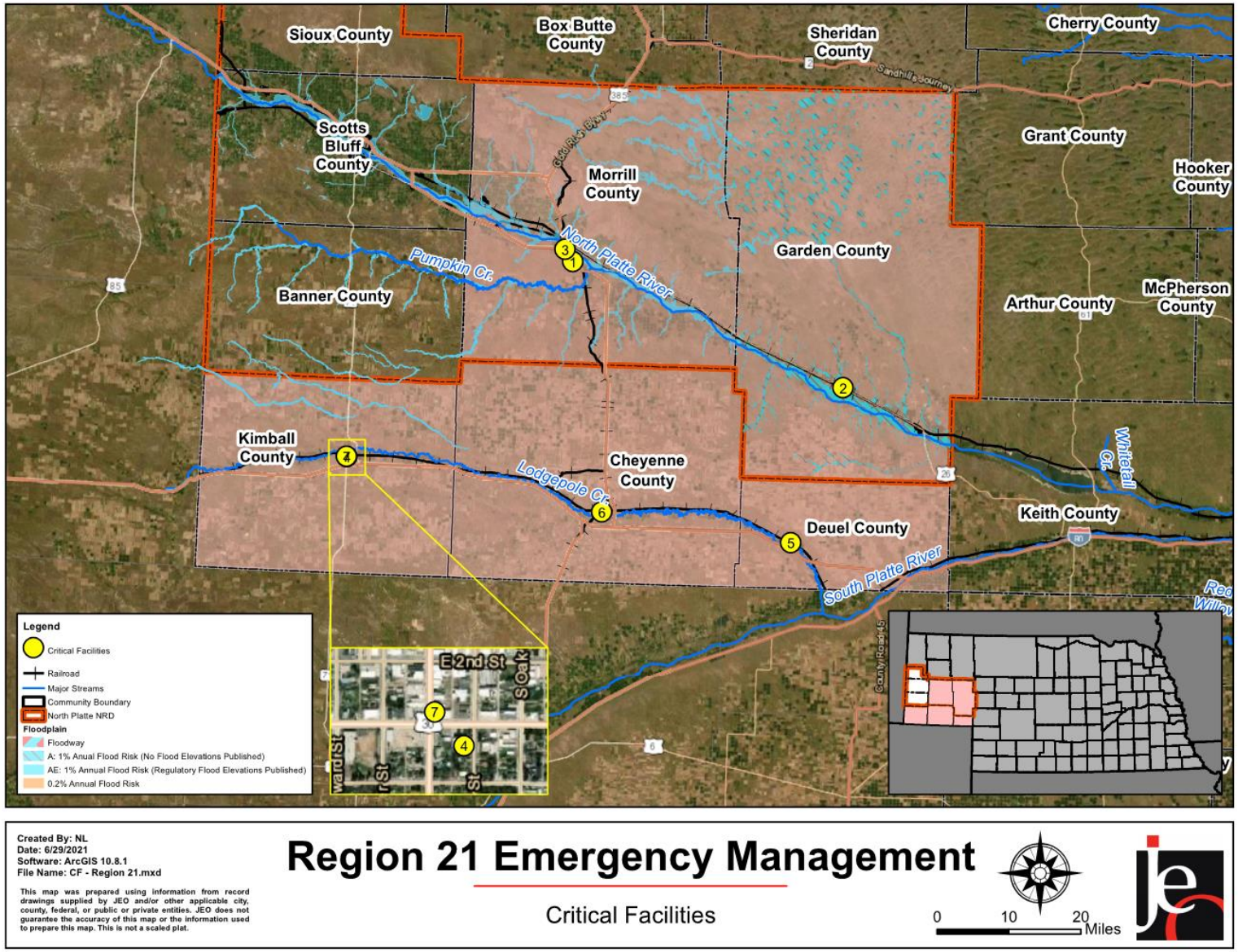
The local planning team identified critical facilities that are vital for disaster response, public shelter, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original 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.

[4] United States Census Bureau. "2019 Census Bureau American Community Survey: S0101: Age and Sex." [database file]. https://data.census.gov.
[5] United States Census Bureau. "2019 Census Bureau American Community Survey: S0101: Age and Sex." [database file]. https://data.census.gov.

Table R21.4: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Bridgeport Ethanol	N	N	N
2	Garden County Courthouse	N	Y	N
3	Morrill County Courthouse	N	N	N
4	Kimball County Courthouse	N	Y	N
5	Deuel County Courthouse	N	Y	N
6	Cheyenne County Courthouse	N	Y	N
7	Kimball County Transportation Building	Y	Y	N

Figure R21.3: Critical Facilities



**Floodplains in Banner County and Morrill County are based off a HAZUS created floodplain.*

Governance

The Region is governed by a group of five elected Board of Directors. The Region serves both incorporated and unincorporated areas within the district and has the capability to assist communities and counties financially and administratively with mitigation actions (most commonly flood control and drainage improvements). The following positions may help implement mitigation projects:

- Director
- Deputy Director

Capability Assessment

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

Table R21.6: Capability Assessment

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

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

Table R21.7: 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	Moderate

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 (e.g., 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 profile was last reviewed in 2018. The local planning team will include the Region 21 Director and Deputy Director. The plan will be reviewed no less than annually and will include the public in the review and revision process by sharing information at board meetings.

Plan Integration

Region 21 Emergency Management has multiple planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan. The emergency management agency will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

Community Wildfire Protection Plans - Wildcat Hills (2019), Western Sandhills (2021)
Region 21 EMA resides in two Community Wildfire Protection Plan (CWPP) regions. Morrill, Cheyenne, and Kimball counties are part of the Wildcat Hills CWPP region, and Garden and Deuel counties are part of the Western Sandhills CWPP region. Their plans were updated in October 2019 and July 2021, respectively. The purpose of the CWPPs is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPPs discuss county-specific historical wildfire occurrences and impacts, identify areas most at risk from wildfires, discuss protection capabilities, and identify wildfire mitigation strategies. These documents are updated every five years.

Local Emergency Operations Plan - Garden County (2018), Morrill County (2019)
Region 21 EMA updated the Garden County Local Emergency Operations Plan (LEOP) in 2018 and the Morrill County LEOP in 2019. Both LEOPs establish standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. They contain information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. These plans are updated every five years.

Historical Occurrences

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

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
The local planning team indicated that the most recent impacts were during May and June of 2015, when many County Roads were washed out. The entire emergency management region experienced highway damages, and minor flooding was experienced in Bridgeport and Lewellen. The counties within the region were not heavily impacted by the 2019 March flooding event. According to the local planning team, Bridgeport is the biggest concern for the region, because many residences and a sewage lagoon are at risk of flooding damages. Another additional concern is the historic bridge near Lewellen. The bridge is consistently the catalyst of flooding events, largely due to ice jams occurring at the bridge. To prevent lasting impacts as a result of flooding, the emergency manager monitors water levels during high precipitation events. Further, the emergency management region also keeps 800 1-ton sandbags on hand at all times, and 5,000 small sandbags to prevent floodwaters from reaching certain areas of the community. In

the past, to prevent flooding at Lewellen, individuals had to cut the dirt road, to relieve tension near the Lewellen Bridge, allowing water to pass both under and around the bridge. To prevent lasting impacts in the future, the local planning team intends to emphasize preparedness and monitoring, to improve lead-time for any flooding events.

Hazardous Materials - Transportation
No significant events have occurred, save a few minor diesel spills. The primary concerns of the emergency management region are transported chemicals from both truck traffic and railroad transportation. For truck traffic, Highway 385 is a particular concern for the local planning team because so many trucks utilize this highway. Another area of concern includes Bridgeport Ethanol, an ethanol producer just outside of Bridgeport, NE. To limit lasting impacts due to chemical spills, local firefighters are trained in a hazmat awareness capacity of chemical spills, in addition, some firefighters have taken “Firefighter 1” classes, which contain some limited chemical spill response techniques. In the case of a significant chemical spill, the Hazardous Materials Team out of Scottsbluff would respond. Moving forward, the emergency management region intends to offer hazardous material training every two years to all firefighters.

Severe Thunderstorms (includes Hail)
While the area experiences a severe thunderstorm event annually, the local planning team recalled 2010, 2013, and 2015 as especially difficult years for severe thunderstorms. Thunderstorm components of greatest concern for the region include flooding, hail, and lightning strikes. Jurisdictions across the Region 21 district have experienced damages as a result of severe thunderstorms, specifically related to hail on crops. Once hail reaches quarter size, individuals in the community become very concerned about impacts to crops. Region 21 has a number of vulnerable populations which would require additional support in a thunderstorm event, including the hospital and nursing homes in Bridgeport and Oshkosh. To prevent lasting impacts as a result of severe thunderstorms, the emergency management region intends to emphasize backup generators and notification systems to improve awareness of hazard events. Recently, Region 21 Emergency Management provided weather radios to each office in the Morrill County Courthouse to encourage awareness of hazard events, the emergency manager intends to outfit the Morrill County courthouse next with more weather radios. The emergency management region was also able to provide a backup generator to the Bridgeport Sheriff’s office, to prevent any sort of prolonged power outages.

Severe Winter Storms
Based on the characteristics of the region, the local planning team is most concerned about rural residents, especially those who may lose access to power or safe transportation. The entire planning area experiences one or more winter storms annually, but significant years included the winter of 2011/2012, which included short term road closures. Presently, little is done for mitigation techniques of severe winter storms to prevent lasting impacts. Current snow removal resources are sufficient for most events. According to the local planning team, it takes about 10” of snow to exhaust local resources. In cases where local resources are completely exhausted, additional assistance is available from the Nebraska Department of Roads, Scottsbluff Public Works, and Bridgeport may be able to help clear unincorporated areas in the region. The southern half of Region 21 Emergency Management is occupied by the South Platte NRD, which works to utilize living snow fences whenever possible.

Tornadoes and High Winds
While the entire planning area is equally prone to a tornado event, each jurisdiction has unique characteristics which make them uniquely vulnerable to a tornado event. In 2017, the City Bayard was damaged from a tornado event. Based on land use, the vast majority of the emergency

management region is dedicated to agriculture, meaning that the risk for injury/loss of life is relatively low, compared to other more urban areas. The local planning team estimates that about 50 percent of homeowners have basements to seek refuge in a tornado event. Region 21 has a number of highly vulnerable populations which the local planning team would be concerned about should they experience a tornado event, specifically nursing homes and hospitals. To improve awareness of tornado events, Region 21 was able to help Broadwater get a new outdoor warning siren. The Emergency Management Region encourages the testing of tornado sirens once a month at trailer parks, schools, and parks.

Mitigation Strategy

Continued Mitigation and Strategic Actions

MITIGATION ACTION	ALERT/WARNING SIRENS
DESCRIPTION	Perform an evaluation of existing alert sirens in order to determine sirens which should be replaced or upgraded. Install new sirens where lacking and add remote activation.
HAZARD(S)	All Hazards
ESTIMATED COST	$5,000+ per siren, Staff Time
FUNDING	General Fund, local match from communities pursuing projects
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Individual Jurisdictions, Region 21 Emergency Management
STATUS	In progress. Broadwater, Gurley, and Bushnell have been upgraded with new outdoor sirens.

MITIGATION ACTION	BACKUP GENERATOR
DESCRIPTION	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters.
HAZARD(S)	All Hazards
ESTIMATED COST	$3,500+ depending on site requirements
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 21 Emergency Management, Fire Departments
STATUS	This project has not yet started due to lack of funds.

Mitigation Action	COMMUNITY EDUCATION – HAZARDOUS MATERIALS
DESCRIPTION	Develop an education program to inform residents of risks related to chemical releases; could include direct outreach to residents living in the immediate vicinity of chemical storage sites
HAZARD(S)	Hazardous Materials - Fixed Sites, Hazardous Materials - Transport.
ESTIMATED COST	$3,000+
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 21 Emergency Management
STATUS	The district is currently working with NEMA to start a hazardous materials vulnerability study in the Panhandle.

Mitigation Action	COMPREHENSIVE CITY DISASTER/EMERGENCY RESPONSE PLAN
DESCRIPTION	Develop a Comprehensive City/Village Disaster and Emergency Response Plan
HAZARD(S)	All Hazards
ESTIMATED COST	$5,000+, Staff Time
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Region 21 Emergency Management
STATUS	This project is currently in progress.

Mitigation Action	CONTINUITY PLANNING
DESCRIPTION	Develop continuity plans for critical community services; encourage businesses to do the same
HAZARD(S)	All Hazards
ESTIMATED COST	$5,000+, Staff Time
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Region 21 Emergency Management
STATUS	This project is currently in progress and is an ongoing action.

Mitigation Action	EMERGENCY COMMUNICATION
DESCRIPTION	Establish an action plan to improve communication between agencies to better assist residents and businesses during and following emergencies; establish inter-operable communications.
HAZARD(S)	All Hazards
ESTIMATED COST	$1,000+, Staff Time
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 21 Emergency Management
STATUS	The district currently uses a Facebook page to notify the public of emergencies and disaster events. An action plan has not been completed.

Mitigation Action	EMERGENCY EXERCISE: HAZARDOUS SPILL
DESCRIPTION	Perform and emergency exercise to prepare for potential explosions or hazardous spills; ensure that nearby businesses and residents have appropriate plans in place
HAZARD(S)	Hazardous Materials - Fixed Sites, Hazardous Materials - Transport.
ESTIMATED COST	$5,000+
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 21 Emergency Management
STATUS	The district regularly works with local volunteer fire departments and city/village officials to prepare them for a hazardous spill event. This is an ongoing action.

Mitigation Action	EMERGENCY MANAGEMENT EXERCISE
DESCRIPTION	Develop and facilitate an exercise to identify gaps in planning and to ensure that community response plans are sufficient to meet the needs of the jurisdiction.
HAZARD(S)	Flooding
ESTIMATED COST	$5,000+
FUNDING	General Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Region 21 Emergency Management
STATUS	In Progress. Firefighters are trained to a hazmat awareness capacity.

Mitigation Action	EMERGENCY OPERATIONS CENTER
DESCRIPTION	Identify and establish an Emergency Operations Center
HAZARD(S)	All Hazards
ESTIMATED COST	$0-$10,000
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 21 Emergency Management
STATUS	An Emergency Operations Center has not yet been established.

Mitigation Action	PUBLIC AWARENESS AND EDUCATION
DESCRIPTION	Outreach projects, distribution of maps and environmental education increase public awareness of natural hazards and how people can protect themselves; other examples include educating citizens on water conservation methods, evacuation plans, etc.; purchase equipment such as overhead projectors and laptops to facilitate presentation of information
HAZARD(S)	All Hazards
ESTIMATED COST	$3,000+
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 21 EMA, Cheyenne County LEPC
STATUS	This project is still in the planning process.

Mitigation Action	SAFE ROOMS
DESCRIPTION	Assess, design and construct fully supplied safe rooms in highly vulnerable urban and rural areas such as mobile home parks, campgrounds, schools, and other such areas throughout the planning area; assess the adequacy of current public buildings to be used as safe rooms; construct safe rooms in areas of greatest need, either as new construction or retrofitting; Region 21 is interested in installing safe rooms in new schools and companies, in addition to improving existing buildings.
HAZARD(S)	Tornadoes and High Winds
ESTIMATED COST	$200-$300/sq ft stand alone, $150-$200 addition/retrofit
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 21 Emergency Management
STATUS	This project has not yet started due to lack of funds.

Mitigation Action	SHORT TERM RESIDENCY SHELTERS
DESCRIPTION	Identify and designate short term shelters for rural residents: these structures would not serve as FEMA approved safe rooms; the building could also be used for short-term sheltering during a high heat event for those without A/C; the building is not intended to be used for long term recovery such as long-term displacement from floods, fires, etc. The number of shelters needed depends on the size of the building, population, proximity to users, etc.
HAZARD(S)	All Hazards
ESTIMATED COST	Staff Time
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 21 Emergency Management
STATUS	The district is working with the Red Cross to identify short term shelters. The district recently renewed a five-year MOU with the Red Cross for all five counties in Region 21.

Mitigation Action	WEATHER RADIOS
DESCRIPTION	Conduct an inventory of weather radios at schools and other critical facilities; provide new radios as needed
HAZARD(S)	All Hazards
ESTIMATED COST	$50 per unit
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 21 Emergency Management
STATUS	This is an ongoing activity for Region 21.

District Profile

REGION 22 EMERGENCY MANAGEMENT AGENCY

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

Table R22.1: Region 22 Local Planning Team

NAME	TITLE	JURISDICTION
TIM NEWMAN	Director	Region 22 Emergency Management Agency

Location and Geography

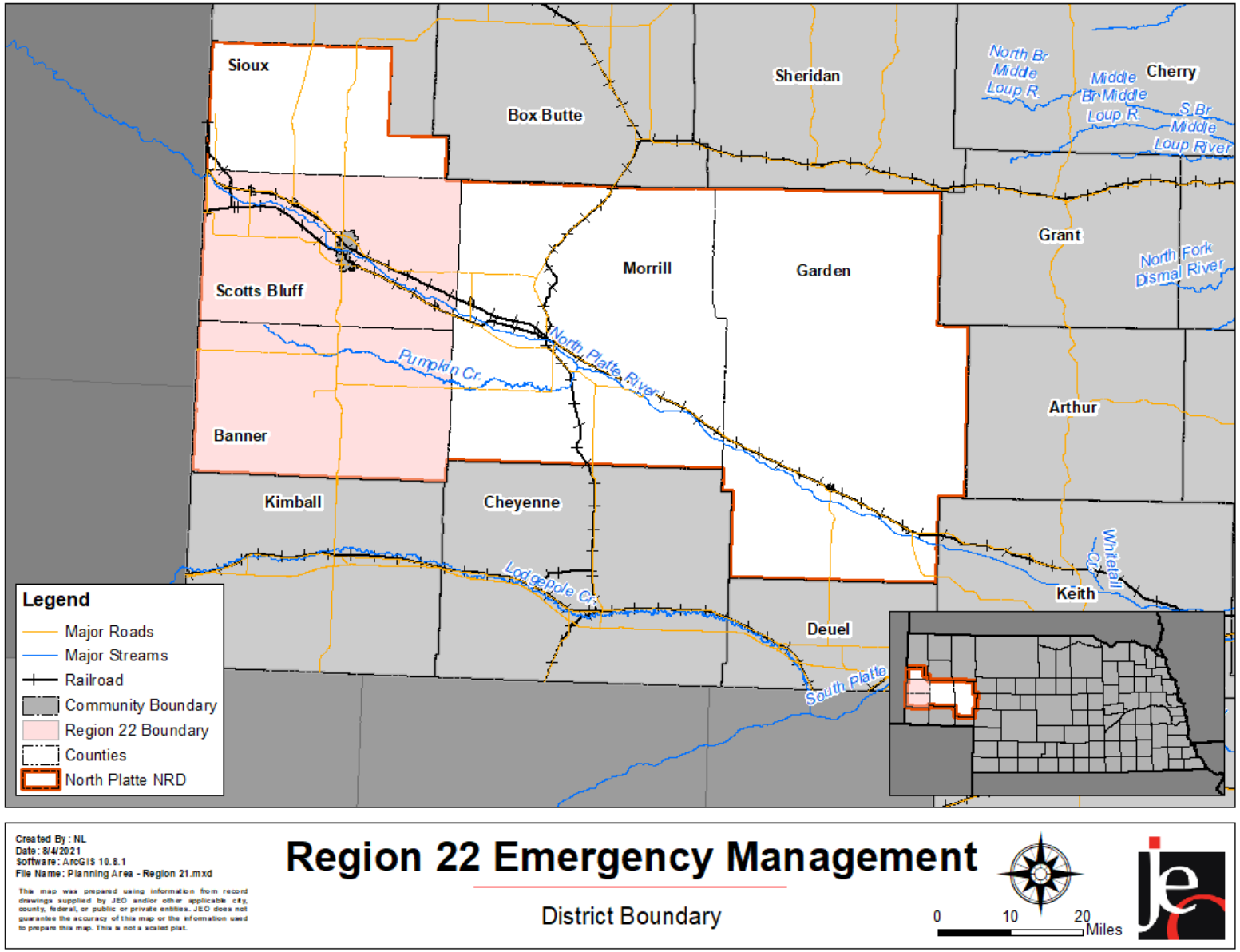
The Region 22 Emergency Management is located in the panhandle of Nebraska, covering Banner and Scotts Bluff counties. The total area of Region 22 is 1,492 square miles. Major waterways within the emergency management district include the North Platte River, which runs through the center of Scotts Bluff County, from northwest to southeast. Region 22 is primarily made up of shrub land and herbaceous/grassland land types.

Transportation

Major transportation corridors in Region 22 include US Highway 26, Nebraska Highway 71, Nebraska Highway 92, and Nebraska Highway 88. According to the Nebraska Department of Transportation, the average daily traffic count for US Highway 26 is 3,790 vehicles per day, 335 of which are heavy commercial vehicles. Highway 71 has an average traffic count of 1,150 vehicles per day, 150 of which are heavy commercial vehicles. Highway 92 has an average traffic county of 2,675 vehicles per day, with 300 being heavy commercial vehicles; and Highway 88 accommodates 670 vehicles per day, 110 of which are heavy commercial vehicles.[6] Both a BNSF railway and Union Pacific railway travel from northwest to southeast through Scotts Bluff County. According to the planning team, the transportation routes of most concern are US Highway 26 and the two railways. Highway 71 is also a concern, but to a lesser extent. The planning team noted that numerous wrecks have occurred between beet trucks and passenger vehicles on US Highway 26.

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

Figure R22.1: Region 22 Emergency Management District



Demographics

It is estimated that Region 22 serves a population of about 36,796 people over two counties. However, the Region does not collect the demographic information of their population, nor does the U.S. Census Bureau recognize the Region as a distinct unit. As a result, there is no population data generated specifically for the Region. For information regarding population data, please refer to a specific jurisdiction's community profile or to Section Three: Demographics and Asset Inventory.[7]

Table R22.2 Region 22 Estimated Population

COUNTY	2010 POPULATION	2019 POPULATION	PERCENT CHANGE
BANNER	690	722	4.6%
SCOTTS BLUFF	36,970	36,074	-2.4%
TOTAL	**37,660**	**36,796**	**-2.3%**

Source: U.S. Census Bureau[8]

Future Development Trends

According to the planning team, no major changes have occurred over the past five years. There are no new developments planned for the next five years.

Structural Inventory and Valuation

Please refer to the individual community 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 sites are located throughout the Region. Complete lists of chemical storage sites in each jurisdiction may be found in their community profile.

Critical Facilities

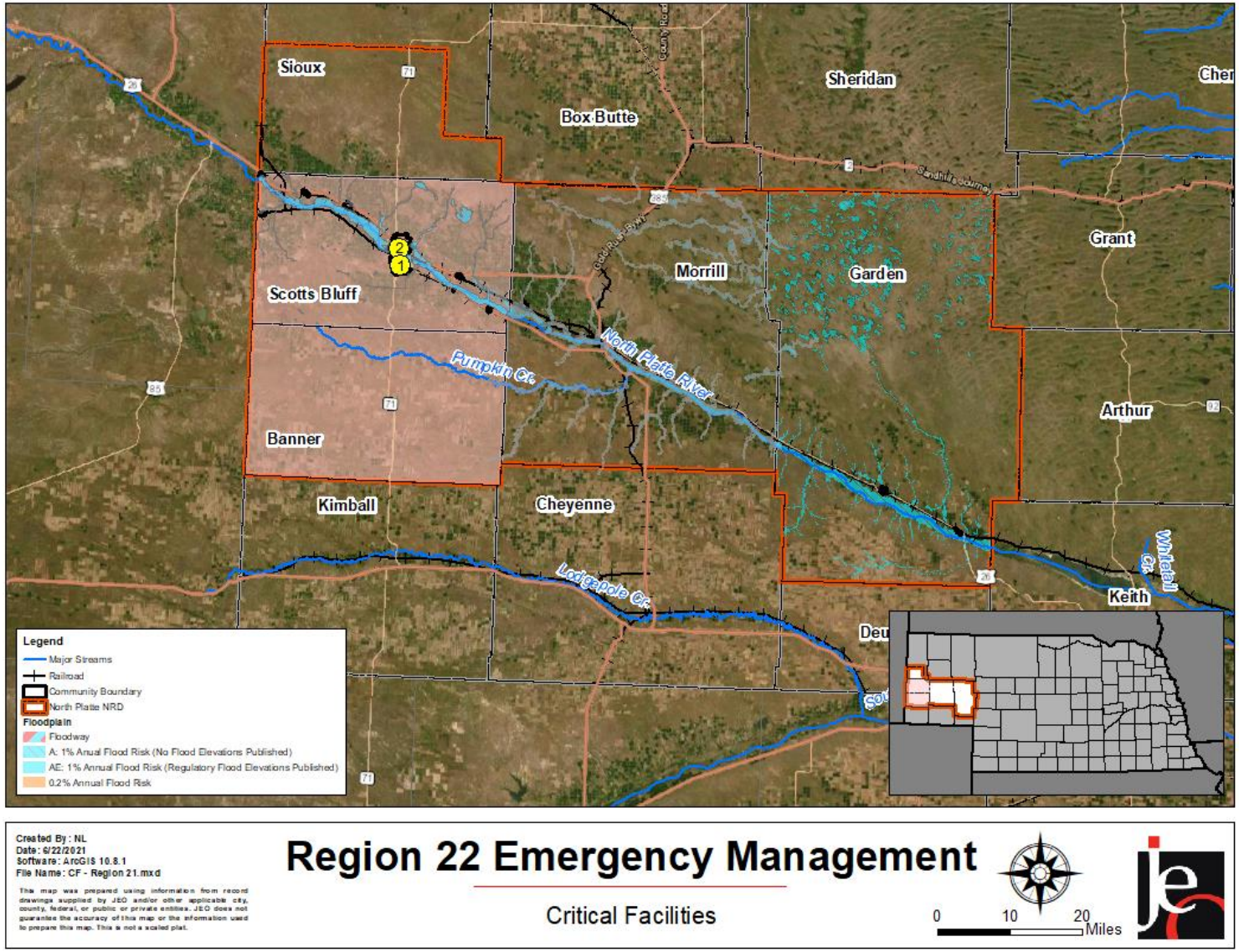
The local planning team identified critical facilities that are vital for disaster response, public shelter, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original 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 R22.4: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Region 22 EMA Office	Y	Y	N
2	Region 22 EOC	N	Y	N

[7] United States Census Bureau. "2019 Census Bureau American Community Survey: S0101: Age and Sex." [database file]. https://data.census.gov.
[8] United States Census Bureau. "2019 Census Bureau American Community Survey: S0101: Age and Sex." [database file]. https://data.census.gov.

Figure R22.3: Critical Facilities



**Floodplains in Banner County and Morrill County are based off a HAZUS created floodplain.*

Governance

Region 22 is governed by an eight-member Board of Directors. The Region serves both incorporated and unincorporated areas within the district and has the capability to assist communities and counties financially and administratively with mitigation actions (most commonly flood control and drainage improvements). The following positions may help implement mitigation projects:

- **Emergency Management Director**

Capability Assessment

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

Table R22.6: Capability Assessment

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

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

Table R22.7: 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 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 (e.g., 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 profile was last reviewed in 2019. Updates were made

for recent storm events in the region. The local planning team will include the Emergency Manager. The plan will be reviewed no less than annually and will include the public in the review and revision process by sharing information through social media.

Plan Integration

Region 22 Emergency Management has multiple planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan. The emergency management agency will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

Local Emergency Operations Plan - Banner County (2017), Scotts Bluff County (2020)
Region 22 EMA updated the Banner County Local Emergency Operations Plan (LEOP) in 2017 and the Scotts Bluff County LEOP in 2020. Both LEOPs establish standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. They contain information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. These plans are updated every five years.

Wildcat Hills Community Wildfire Protection Plan (2021)
The Nebraska Forest Service updated the Wildcat Hills Community Wildfire Protection Plan (CWPP) which includes Region 22 in July 2021. The purpose of the CWPP is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. This document is updated every five years.

Historical Occurrences

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

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.

Drought
The local planning team indicated that drought is a top concern for the community. Extreme drought last occurred in the region in 2012/2013, according to the NCEI. Significant drought, however, was reported in September of 2020.The greatest concerns are economic impacts and the potential threat to drinking water. Because the emergency management region does not directly monitor drought, they would support any mitigation or response actions from the North Platte NRD. As it stands presently, there are no region-wide response plans for drought. However,

the City of Scottsbluff has worked to inform the public on mitigation techniques for drought and water conservation.

Extreme Heat

The local planning team identified extreme heat as a top concern for the Region 22 Emergency Management. Extreme heat can be defined as a period of high heat and humidity for multiple days where temperatures hover at or above 90 degrees Fahrenheit. For the local planning team, the highest concerns are those who are most vulnerable to extreme heat events: the very old and the very young. The very old even more so, as they are more likely to be left alone. While an estimated 90 percent of homes in the Region have air conditioning, some elderly residents are on fixed income or social security and may be reluctant to turn on air conditioners due to the additional expense. To prevent lasting impacts from any significant extreme heat events, Region 22 provides public awareness programs and encourages the public to take breaks, drink water, and stay in cool areas whenever possible. Region 22 uses Rave Mobile Safety to notify the public of severe weather or disasters.

Flooding

The local planning team identified flooding as a top concern for Region 22 Emergency Management. According to the NCEI, there have been 36 flood events throughout the Region from 1996 to September 2020, resulting in $896,000 in property damage and $475,000 in crop damage. The biggest concern is riverine flooding from the North Platte River, especially in highly populated areas such as Scottsbluff. To mitigate lasting impacts from flood events, 158 property owners in Scottsbluff have purchased flood insurance. The City of Scottsbluff also participates in the Community Rating System floodplain management program. According to the local planning team, significant flood events include flooding in Scottsbluff in 2011 and 2018. The city zoo has flooded on multiple occasions, but drainage was improved in recent years.

Significant flooding also occurred in the Region in 2016. These events inundated roads and intersections at various locations. Other specific areas of concern for the emergency management region include Henry, Lyman, Mitchell, and McGrew. To improve lead-time for flooding events, the Region 22 Emergency Manager maintains a close relationship with the National Weather Service. In the case of a flood event, Region 22 has stockpiled 150,000 sandbags for flooding events. Additionally, the Emergency Manager intends to investigate levee construction/repair over the life of the current plan.

Grass/Wildfire

Large wildfires are common in the Nebraska panhandle. According to the Nebraska Forest Service, the two-county region had a total of 789 wildfires between 2000 and May 2020. These fires burned 27,344 acres, injured one person, destroyed one home and five structures, and resulted in damages totaling $115,300. Region 22 participated in the update to the Wildcat Hills Community Wildfire Protection Plan (CWPP). Region 22 has also provided input to the Nebraska Wildfire Risk Assessment Portal (WRAP).

The planning team indicated that the Hubbard Gap Fire burned almost 4,000 acres over six days in August 2021 and cost nearly $700,000 to extinguish. The cost was covered by the Governor's Emergency Fund through the Wildfire Protection Act of 2012. More than 30 fire departments and support agencies were used to put out the fire, including the first use of large air tankers in Nebraska on a non-federal fire.

The planning team's concerns for grass/wildfires in the area include the destruction of agricultural crops and grazing lands, potential for evacuation of homes and businesses, potential for damage

or destruction of homes and businesses, and damage to utilities such as electrical lines. The team is also concerned with environmental hazards such as runoff, mud slides, smoke, and firefighting foam and slurry.

Severe Thunderstorms (includes Hail)
Severe thunderstorms are common events in the area and were identified as a top concern Region 22 Emergency Management. Severe thunderstorms and hail can result in the loss of electricity, blocked roadways, damages to trees, and flooding. The NCEI recorded 571 severe thunderstorm events throughout Region 22 from 1996 to September 2020. These storms resulted in approximately $106 million in property damage and $2.9 million in crop damage. Hailstones from these storms have ranged from 0.75 to 4.25 inches.

According to the planning team, a major hailstorm hit Scottsbluff in August of 2019. Another major hailstorm occurred in the spring of 2015, which hit Morrill and Mitchell especially hard. Hail is an annual occurrence for the region and affects older homes disproportionately due to their older building materials, such as shingles and siding. Many homeowners are forced to replace their roof every five years, largely due to hail damages. Most often, hail occurs in the region during the late spring and early summer, when crops are most vulnerable, in the tilling phase. To improve awareness for hail events, the local planning team intends to encourage the use of insurance through public awareness efforts.

Severe Winter Storms
Severe winter storms are a regular part of the climate in the planning area and were identified as a hazard of top concern. Severe winter storms include blizzards, ice accumulation, extreme cold, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. According to the NCEI, there were 166 severe winter storm events throughout Region 22 from 1996 through September 2020, resulting in about $5.2 million in property damages and $9,000 in crop damages.

According to the planning team, blizzards in 2019 and 2021 impacted the region. Another severe winter storm hit the area in the winter of 2014/2015, and snow removal resources were stretched thin to adequately clear the roads. During a severe winter storm, the highest priority for the emergency management region is lead-time and awareness. Region 22 keeps the public informed of coming storms through media and the Panhandle Alert mass notification system.

The City of Scottsbluff periodically experiences power outages due to severe winter storms. During these power outages, many individuals can lose heat. Of highest concern are the vulnerable populations at risk during these disasters, especially the elderly, who have a difficult time maintaining body heat. Emergency snow routes are in place in some areas of the Region and snow removal resources are currently sufficient for most events. However, no side streets are plowed in the City of Scottsbluff, which may be a point of consideration over the next five years.

Tornadoes and High Winds
Tornadoes and high winds were identified as hazards of top concern for the Region. High winds are common across the region and can cause property and tree damage and brief power outages. Tornadoes are much less common, but the impacts can be far greater. Between January 1996 and September 2020, the NCEI recorded 118 high wind events and 41 tornadoes throughout Region 22. These events resulted in property damages totaling $565,000 and crop damages of $7,000. Region 22 is actively working to upgrade the siren system by replacing old and obsolete

sirens with modern electronic sirens. All schools, city halls, hospitals, and long-term care facilities have weather radios.

The planning team indicated that the main concern for tornadoes and high winds include damage or destruction of buildings and trees, potentially lethal debris, and the disruption to various services such as transportation, power, water, gas, and communications.

Mitigation Strategy

Completed Mitigation and Strategic Actions

MITIGATION ACTION	DRAINAGE STUDY/ STORM WATER MASTER PLAN
DESCRIPTION	The City of Scottsbluff is currently working with the Silver Jackets Program to do a study of the floodplain in and around Scottsbluff.
HAZARD(S)	Flooding
STATUS	Floodplain mapping project is complete. Awaiting final approval from FEMA.

Continued Mitigation and Strategic Actions

MITIGATION ACTION	ALERT/WARNING SIRENS
DESCRIPTION	Perform an evaluation of existing alert sirens in order to determine sirens which should be replaced or upgraded. Install new sirens and remote activation where needed.
HAZARD(S)	All hazards
ESTIMATED COST	$15,000+
FUNDING	General Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Region 22 Emergency Management
STATUS	Sirens were recently replaced in Scottsbluff, Henry, Lyman, Morrill, and Harrisburg. Other sirens will be replaced as needed.

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	$15,000-$30,000
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Region 22 EMA, Public Works and Utilities departments
STATUS	Backup generators were installed at the Banner County Courthouse and at the Morrill Village Hall. Additional backup generators will be installed at needs are identified and funding allows.

MITIGATION ACTION	FLOOD PRONE PROPERTY ACQUISITION
DESCRIPTION	Voluntary acquisition and demolition of properties prone to flooding will reduce the general threat of flooding for communities. Additionally, this can provide flood insurance benefits to those communities within the NFIP. Repetitive loss structures are typically highest priority.
HAZARD(S)	Flooding
ESTIMATED COST	$300,000 - $1,000,000
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Region 22 Emergency Management, Banner County Floodplain Manager, Scotts Bluff County Floodplain Manager
STATUS	This project has not yet started. Properties will be acquired as funding and need arise.

MITIGATION ACTION	HAZARDOUS TREE REMOVAL PROGRAM
DESCRIPTION	Develop a hazardous tree removal program to decrease the risk of damage to electrical lines and personal property.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	$20,000
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Region 22 Emergency Management, Local PPDs, Public Works departments
STATUS	Trees are removed as needed. Local jurisdictions often lead this effort.

MITIGATION ACTION	LEVEE/FLOODWALL CONSTRUCTION AND/OR IMPROVEMENTS
DESCRIPTION	Levees and floodwalls serve to provide flood protection to businesses and residents during large storm events. Improvements to existing levees and floodwalls will increase flood protection. If possible, the structure may be designed to FEMA standards to provide 100-year flood protection providing additional flood insurance benefits.
HAZARD(S)	Flooding
ESTIMATED COST	$500,000+
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Region 22 Emergency Management, Banner County Floodplain Manager, Scotts Bluff County Floodplain Manager
STATUS	This project has not yet started due to a lack of funding.

MITIGATION ACTION	PUBLIC AWARENESS/ EDUCATION
DESCRIPTION	Public awareness reduces the risk of property loss and damage, injury and death. It increases knowledge on emergency procedures, facilities, conservation, and is key to preparedness.
HAZARD(S)	All hazards
ESTIMATED COST	$500+
FUNDING	General Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Region 22 Emergency Management, Fire Departments, Police Departments, Sheriff's Departments
STATUS	Region 22 Emergency Management and all fire departments have public awareness campaigns. Public are alerted to storms and other hazards through Panhandle Alert.

MITIGATION ACTION	SAFE ROOMS
DESCRIPTION	Assess, design, and construct fully supplied safe rooms in highly vulnerable urban and rural areas such as mobile home parks, campgrounds, schools and other such areas throughout the planning area. Assess the adequacy of current public buildings to be used as safe rooms. Construct safe rooms in areas of greatest need, either as new construction or retrofitting.
HAZARD(S)	Tornadoes and High Winds
ESTIMATED COST	$200-$300/sq. ft. stand alone, $150-$200/sq. ft. addition/retrofit
FUNDING	General Fund, School Board funds
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Region 22 Emergency Management, School Superintendents/Owners
STATUS	This project is ongoing. The Minatare School safe room was built in 2016. Safe rooms are built as funding allows.

MITIGATION ACTION	STORM WATER SYSTEM AND DRAINAGE IMPROVEMENTS
DESCRIPTION	These improvements can serve to convey runoff more effectively within cities and towns, preventing interior localized flooding. May also reduce the risk of illness/ disease by eliminating standing water.
HAZARD(S)	Flooding
ESTIMATED COST	$50,000-$100,000
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Region 22 Emergency Management, Banner County Floodplain Manager, Scotts Bluff County Floodplain Manager
STATUS	Property acquisition for the project is moving forward by the City of Scottsbluff and Scotts Bluff County.

MITIGATION ACTION	STREAM BANK STABILIZATION/ GRADE CONTROL STRUCTURES/ CHANNEL IMPROVEMENTS
DESCRIPTION	Stream bed/grade stabilization improvements can serve to more effectively protect structures, increase conveyance, prevent down cutting, and provide flooding benefits.
HAZARD(S)	Flooding
ESTIMATED COST	$10,000-$100,000
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Region 22 Emergency Management, Banner County Floodplain Manager, Scotts Bluff County Floodplain Manager
STATUS	This project has not yet started.

MITIGATION ACTION	WARNING SYSTEMS
DESCRIPTION	Improve city cable TV interrupt warning system and implement telephone interrupt system such as Reverse 911.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	$5,000+
FUNDING	General Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Region 22 Emergency Management
STATUS	This project is ongoing. KNEB radio is currently the Emergency Alert System hub for Region 22.

Removed Mitigation and Strategic Actions

MITIGATION ACTION	GROUNDWATER/ IRRIGATION/ WATER CONSERVATION MANAGEMENT PLAN AND PRACTICES
DESCRIPTION	Develop and implement a plan/ best management practices to conserve water use and reduce total use (high water use to low water use) and consumption of groundwater resources by citizens and irrigators of agricultural land during elongated periods of drought.
HAZARD(S)	Drought
REASON FOR REMOVAL	This project will be performed by the North Platte NRD.

MITIGATION ACTION	POWER, SERVICE, ELECTRICAL, AND WATER DISTRIBUTION LINES
DESCRIPTION	To protect the power and water infrastructure and prevent lines from coming down or being washed out during storm events.
HAZARD(S)	All hazards
REASON FOR REMOVAL	This project will be performed by the public power districts or municipal utilities.

MITIGATION ACTION	**WEATHER RADIOS**
DESCRIPTION	Conduct an inventory of weather radios at schools and other critical facilities and provide new radios as needed.
HAZARD(S)	All hazards
REASON FOR REMOVAL	All critical facilities now have weather radios.

School District Profile

BANNER COUNTY SCHOOL DISTRICT

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

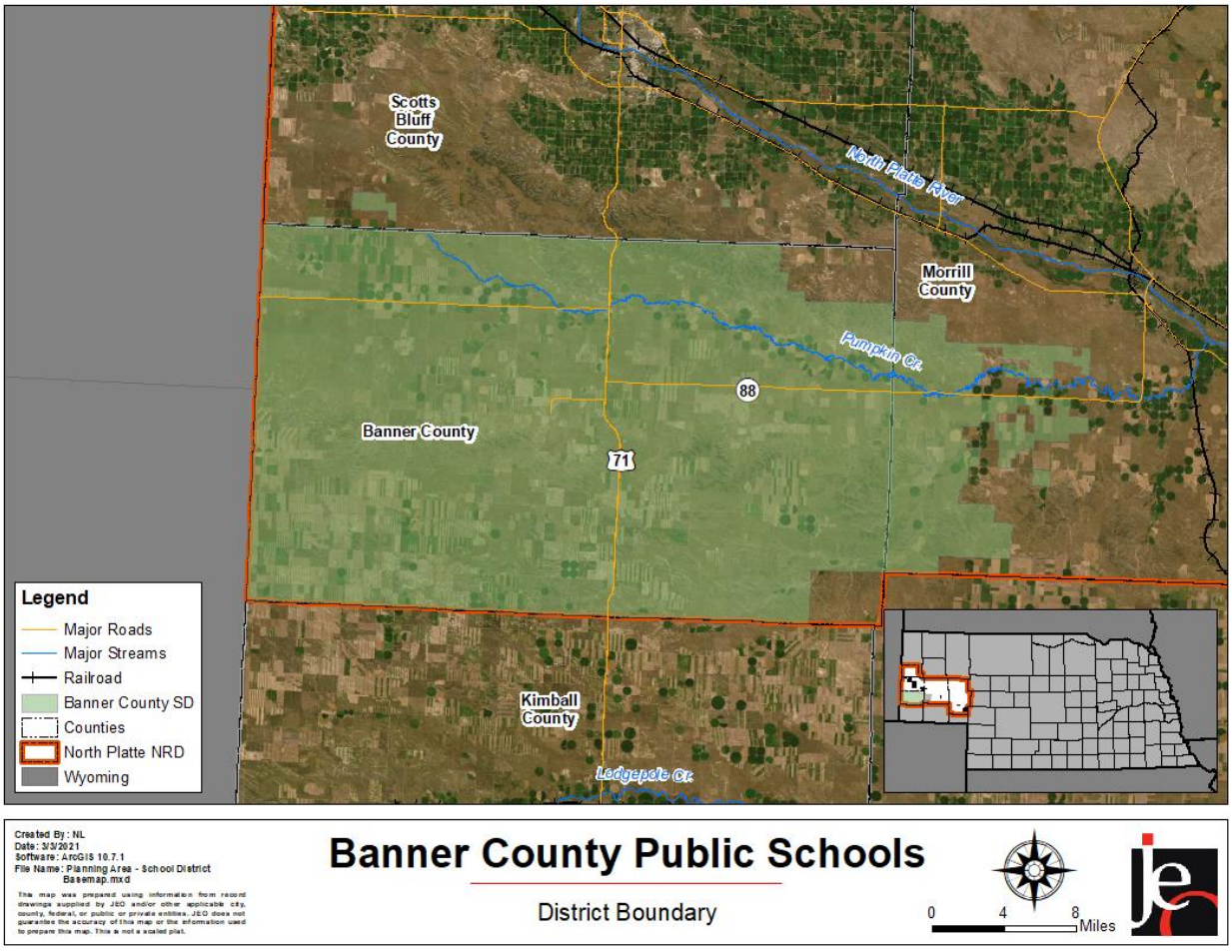
Table BCS.1: Banner County School District Local Planning Team

NAME	TITLE	JURISDICTION
CHARLES JONES	Principal	Banner County School District

Location

Banner County School District covers most of Banner County and southwestern Morrill County and serves three schools: Banner County Elementary School, Banner County Middle School, and Banner County High School. The school district provides services to students in the unincorporated community of Harrisburg and the rural areas surrounding it.

Figure BCS.1: District Boundary



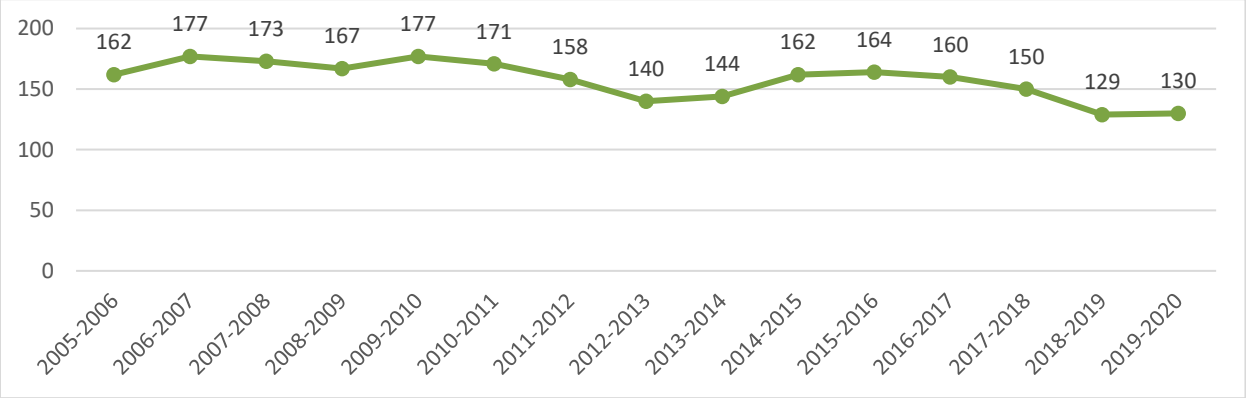
Transportation

Two major transportation corridors travel through the district: NE HWY 71 and NE HWY 88. The most traveled route is NE HWY 71 with an average of 2,400 vehicles daily, 345 of which are trucks.[9] No rail lines travel through the district. The district owns 10 buses and approximately 125 students are bused to and from school. County roads are of most concern as moisture can make it difficult for buses to go down. Transportation information is important to hazard mitigation plans because it suggests areas more at risk of transportation incidents.

Demographics

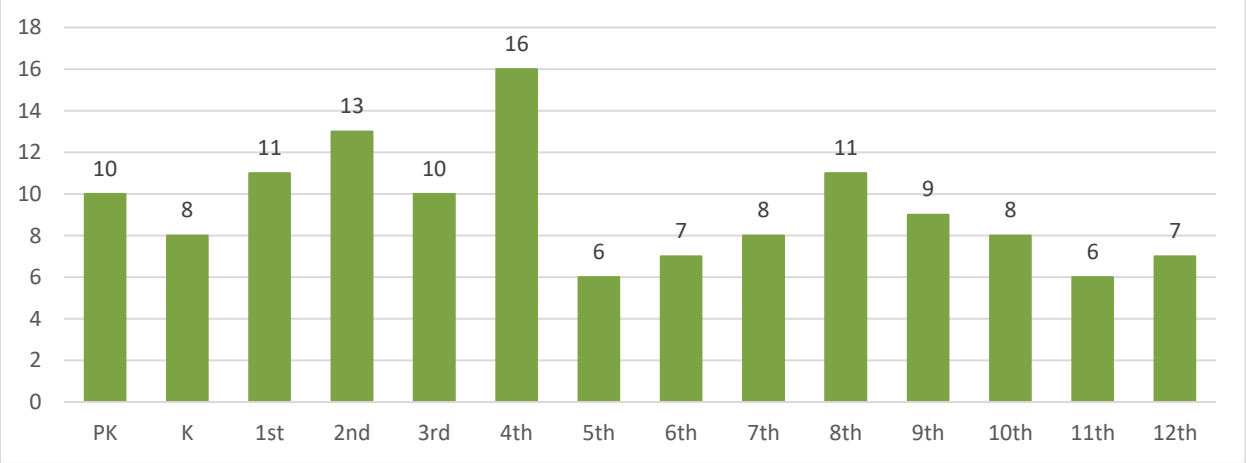
The following figure displays the historical student population trend starting with the 2005-06 school year and ending with the 2019-20 year. It indicates that the student population has been generally declining since 2015. There are 130 students enrolled in the district.[10] The district anticipates an increase in student population in the coming years as younger families are moving to the district.

Figure BCS.2: Student Population 2005-2020



Source: Nebraska Department of Education

Figure BCS.3: Number of Students by Grade, 2019-2020



Source: Nebraska Department of Education

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

10 Nebraska Department of Education. June 2021. "2019-2020 Education Profile for District: Banner County School District." https://nep.education.ne.gov/snapshot.html#04-0001-000.

The figure on the previous page indicates that the largest number of students are in the 4th and 2nd grades. The lowest population of students are in 5th and 11th grades. According to the Nebraska Department of Education (NDE), 74% of students receive either free or reduced priced meals at school, a higher percentage than the state average of 46%. Additionally, over 14% of students are in the Special Education Program. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Table BCS.2: Student Statistics, 2019-2020

	SCHOOL DISTRICT	STATE OF NEBRASKA
FREE/REDUCED PRICED MEALS	73.85%	45.60%
SCHOOL MOBILITY RATE	N/A*	8.36%
ENGLISH LANGUAGE LEARNERS	N/A*	7.43%
SPECIAL EDUCATION STUDENTS	14.17%	15.48%

**Data is not available when less than 10 students.*
Source: Nebraska Department of Education[11]

Future Development Trends

Over the past five years, the new fuse boxes, heating, and air condition units were added. There are no plans for additional updates in the next five years at 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 58 chemical storage sites in the district that contain hazardous chemicals. No spills have affected the district. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Critical Facilities

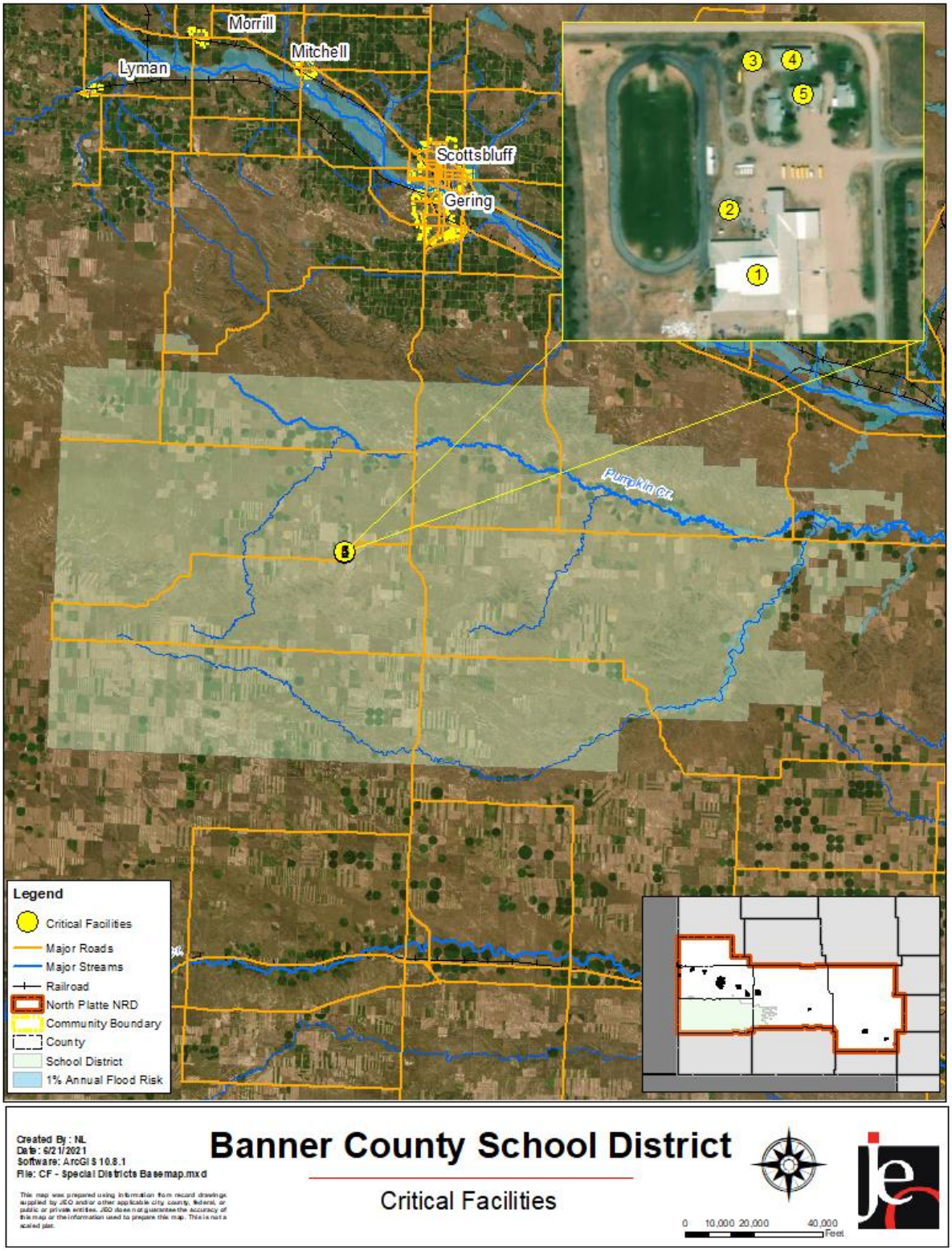
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during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

Table BCS.3: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Banner County School	Y	N	N
2	Storage Shed	N	N	N
3	Bus Barn	N	N	N
4	Old Gym	N	N	N
5	School Apartments	N	N	N

11 Nebraska Education Profile. "School Report Card." Accessed June 2021. http://nep.education.ne.gov/Home/.

Figure BCS.4: Critical Facilities



Administration

The school district has a superintendent, a principal, and 44 staff. The school board is made up of a six-member panel. Staff are trained on emergency procedures during professional development days.

Capability Assessment

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the community's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. Students and families are educated about emergency procedures through practice drills and informational nights. In addition, information is sent directly to parents.

Table BCS.4: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning Capability	Capital Improvements Plan/Long-Term Budget	Yes
	Continuity of Operations Plan	Yes
	Disaster Response Plan	Yes
	Other (if any)	
Administration & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Local staff who can assess community's vulnerability to hazards	Yes
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	Applied for grants in the past	Yes
	Awarded grants in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	No
	Development Impact Fees	Yes
	General Obligation Revenue or Special Tax Bonds	No
	Approved bonds in the past	No
	Flood Insurance	Yes
	Other (if any)	
Education & Outreach Capability	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.)	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 / year
	Tornado	2 / year
	Intruder	5 / year
	Bus evacuation	3 / year

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
	Evacuation	1 / year
	Other (if any)	

Table BCS.5: 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	Moderate

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 (e.g., 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 includes the School Safety Team and will review the plan no less than bi-annually, including the public in the review and revision process by sharing information through the school website and monthly newsletter.

Plan Integration

The crisis response plan for the school district is reviewed and updated annually by the school safety team. The plan includes topics on the standard response protocol, shelter in place protocols, evacuation drills, and sheltering locations. The current plan discusses grass fire, tornadoes, hail, snow/blizzards, wind, and power failure. In a future response plan update, the planning team would like to identify opportunities for mitigation following hazard events, as well as identify any gaps related to particular hazards. The fire department, EMS, law enforcement, and school staff are all familiar with the plan. The district's safety and security plan covers potential natural hazards.

Historical Occurrences

See the Banner County community profile for historical hazard events.

Hazard Prioritization

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

Drought
Local concerns regarding drought include the potential for impacts to the local economy which relies heavily on agriculture and livestock and fire hazards for the surrounding farmland. The school district has its own well which has lower water levels during drought conditions. The district also has water supplied from the Harrisburg water system.

Grass/Wildfire
The school building is surrounded by farm and pastureland that increases the risk of damage from grass/wildfires. The local planning team noted that there was one small fire that occurred south of the school. The local fire department was able to put the fire out quickly, however. Fires in other areas have also impacted air quality.

Severe Thunderstorms (Includes Hail)
In 2016 a hailstorm caused significant damage to windows, the school buildings, and vehicles. In the event of a severe thunderstorm watch or warning, students are directed to stay inside for classes and recess. Outdoor sporting events follow the state (NSAA) guidelines for weather protocols. Trees are regularly trimmed by school maintenance staff. The local planning team noted that there are some trees that need to be removed. All of the powerlines in the district are overhead.

Severe Winter Storms
Winter storms are a regular occurrence in the district. Heavy snow, ice, and blizzards can cause hazardous travel conditions for students and buses. Snow removal is handled by maintenance staff at the school. Snow removal resources include a plow and skid steer. Streets and roads around the district are cleared by the county. If there are large amounts of snow, the county department will assist with removal. On average, school is closed approximately five days a year due to winter storms. Students and families are notified of school closures through the school call system. Closures are also posted on the local radio, television, and school website.

Tornadoes and High Winds
In 2020, high winds caused damage to one of the outbuildings had a car was damaged from a fallen tree branch. The school has a tornado plan which instructs classes to go to specific areas of the school based on their location in the building. The school is notified of severe weather through a weather alert radio system located in the school office. The community also has a tornado siren which can be heard at the school.

Mitigation Strategy

New Mitigation and Strategic Actions

MITIGATION ACTION	BACKUP AND EMERGENCY GENERATORS
DESCRIPTION	Obtain a backup Generator for the school.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	$73,000.00
LOCAL FUNDING SOURCE	School District General Fund
TIMELINE	1 Year
PRIORITY	High
LEAD AGENCY	Banner County School Board
STATUS	The district is working to develop a cost estimate & conduct a BCA for the project

Continued Mitigation and Strategic Actions

MITIGATION ACTION	CIVIL SERVICE IMPROVEMENTS
DESCRIPTION	Improve capabilities to rescue those stranded in blizzards and increase the capacity to which snow can be removed from the roadways after an event.
HAZARD(S)	Severe Winter Storms
ESTIMATED COST	N/A
LOCAL FUNDING SOURCE	School District General Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Banner County School Board, Maintenance
STATUS	The county department of roads continues to improve snow removal. The county supervisor takes the current bus routes to ensure they are the top priority.

MITIGATION ACTION	HAZARDOUS TREE REMOVAL PROGRAM
DESCRIPTION	Identify and remove hazardous limbs and/or trees on school property
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$500+
LOCAL FUNDING SOURCE	School District General Fund
TIMELINE	Ongoing
PRIORITY	Low
LEAD AGENCY	Banner County School Board, Maintenance
STATUS	Trees are trimmed and removed as needed on the school properties.

MITIGATION ACTION	WEATHER RADIOS
DESCRIPTION	Conduct an inventory of weather radios at schools and school facilities and provide new radios as needed
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
ESTIMATED COST	$50/radio
LOCAL FUNDING SOURCE	School District General Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Banner County School Board
STATUS	The school currently has a weather radio located in the main principal's office that alerts when weather alerts are issued. The radio will be monitored to see if and when an upgrade is needed.

Removed Mitigation and Strategic Actions

MITIGATION ACTION	STATIC DETECTORS
DESCRIPTION	Install a static detector to mitigate the danger of lightning strikes in the area
HAZARD(S)	Severe Thunderstorms
REASON FOR REMOVAL	The administration uses lightning detection apps on phones to track lightning in the area within 10 miles of the school.

School District Profile

BAYARD PUBLIC SCHOOLS

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

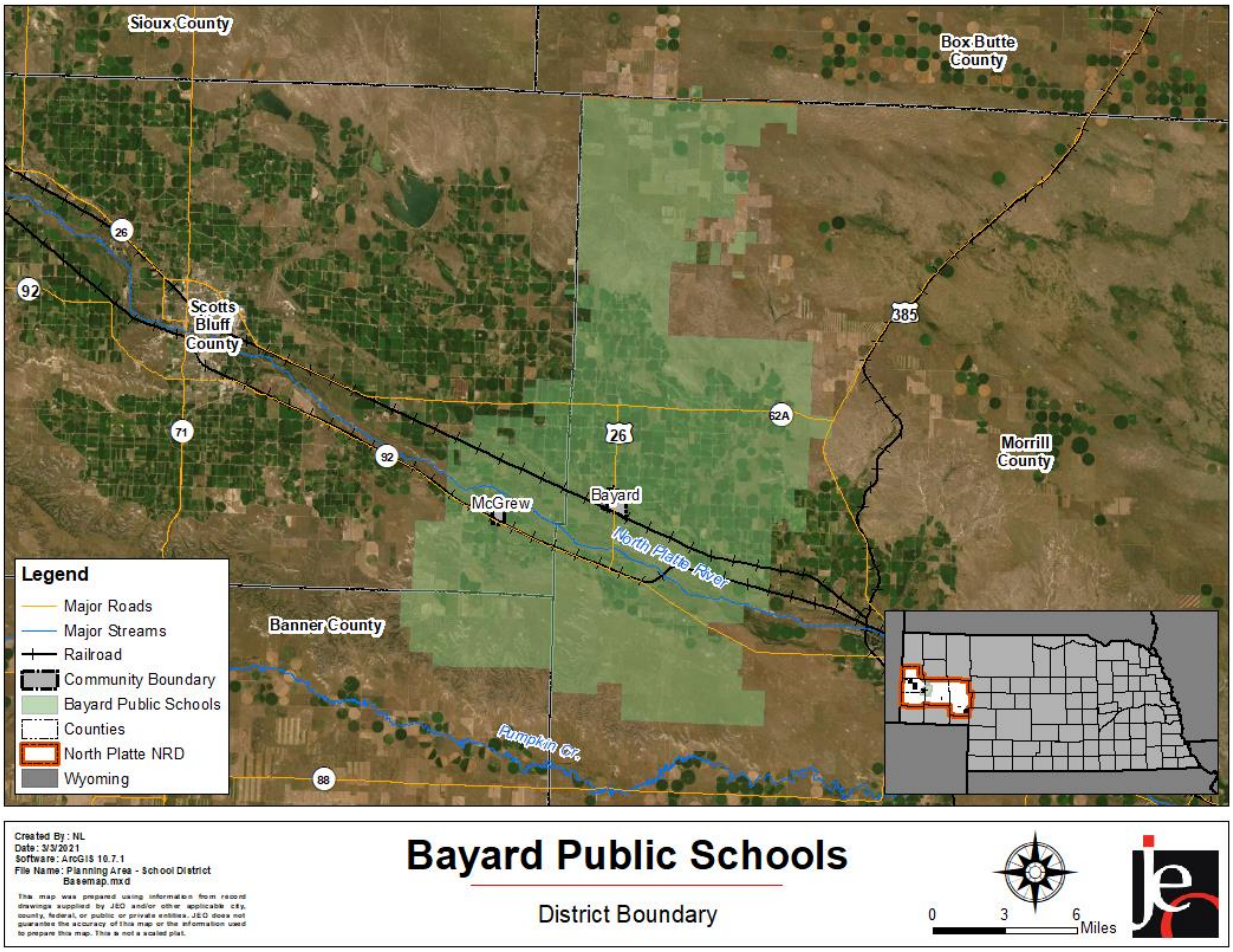
Table BPS.1: Bayard Public Schools Local Planning Team

NAME	TITLE	JURISDICTION
TRAVIS MILLER	Superintendent	Bayard Public Schools
BOBBIE STUART	Business Manager / Safety Coordinator	Bayard Public Schools

Location

Bayard Public Schools covers northwest Morrill County, northeast Banner County, and southeast Scotts Bluff County and serves two schools: Bayard Elementary School and Bayard Secondary School. In addition, the district owns a storage building, bus barn, custodial shed, press box, two storage sheds, and a greenhouse. The school district provides services to students in the Village of Bayard, Village of McGrew, and the rural areas surrounding them.

Figure BPS.1: District Boundary



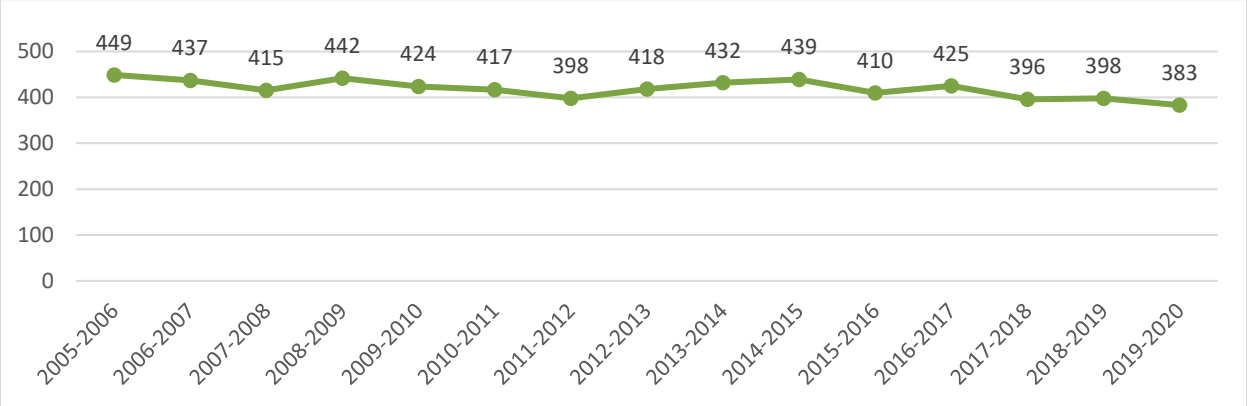
Transportation

Three major transportation corridors travel through the district: US HWY 26, NE HWY 92 and NE HWY 62A. The most traveled route is US HWY 26 with an average of 4,870 vehicles daily, 420 of which are trucks.[12] Two rail lines, travel east to west through the center of the district. The district owns 11 buses and approximately 90 students are bused to and from school daily. Transportation routes of most concern include County Road 106, Moomaws Corner, and the intersection of 2nd Ave and 7th Street. These are high traffic areas where students cross.

Demographics

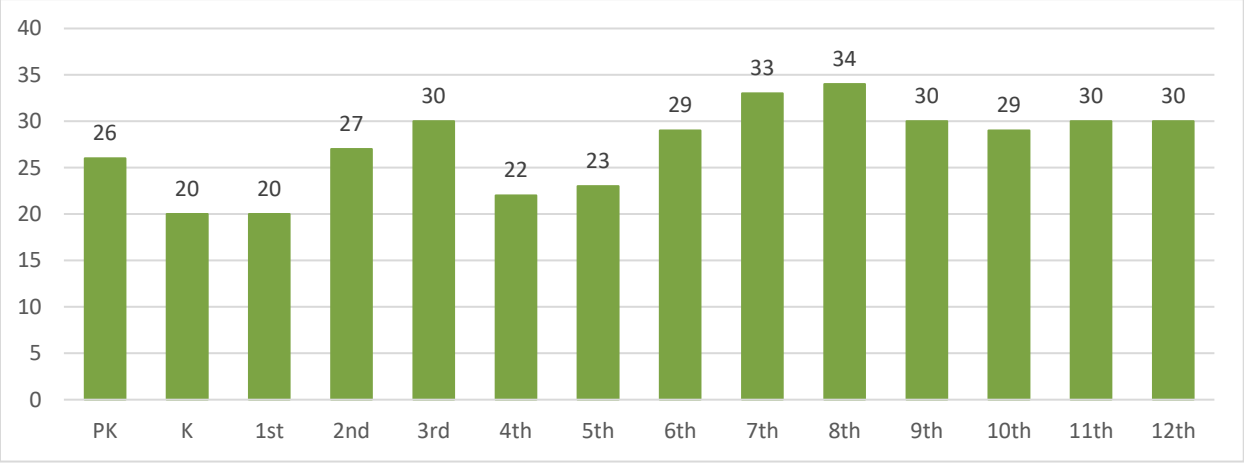
The following figure displays the historical student population trend starting with the 2005-06 school year and ending with the 2019-20 year. It indicates that the student population has been generally declining since 2016. There are 383 students enrolled in the district.[13] The district anticipates a decrease in student population in the coming years. Some students in the district speak Spanish and American Sign Language.

Figure BPS.2: Student Population 2005-2020



Source: Nebraska Department of Education

Figure BPS.3: Number of Students by Grade, 2019-2020



Source: Nebraska Department of Education

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

13 Nebraska Department of Education. June 2021. "2019-2020 Education Profile for District: Bayard Public Schools." https://nep.education.ne.gov/snapshot.html#62-0021-000.

The figure on the previous page indicates that the largest number of students are in the 7th and 8th grades. The lowest population of students are in kindergarten and 1st grades. According to the Nebraska Department of Education (NDE), 55% of students receive either free or reduced priced meals at school, a higher percentage than the state average of 46%. Additionally, over 11% of students are in the Special Education Program. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Table BPS.2: Student Statistics, 2019-2020

	SCHOOL DISTRICT	STATE OF NEBRASKA
FREE/REDUCED PRICED MEALS	55.09%	45.60%
SCHOOL MOBILITY RATE	7.56%	8.36%
ENGLISH LANGUAGE LEARNERS	N/A*	7.43%
SPECIAL EDUCATION STUDENTS	11.48%	15.48%

**Data is not available when less than 10 students.*
Source: Nebraska Department of Education[14]

Future Development Trends

Over the past five years, the district purchased a trailer park that was adjacent to the bus barn and removed all 17 trailers from the property. In addition, the district built a greenhouse on the southside of the school and built a new press box. There are no future construction or renovation projects planned at this time. However, FEMA did approve a tornado shelter in the elementary school and a backup generator, but those projects are on hold due to increased costs and lack of funding.

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 district that contain hazardous chemicals. The Simplot facility is located near the school. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Critical Facilities

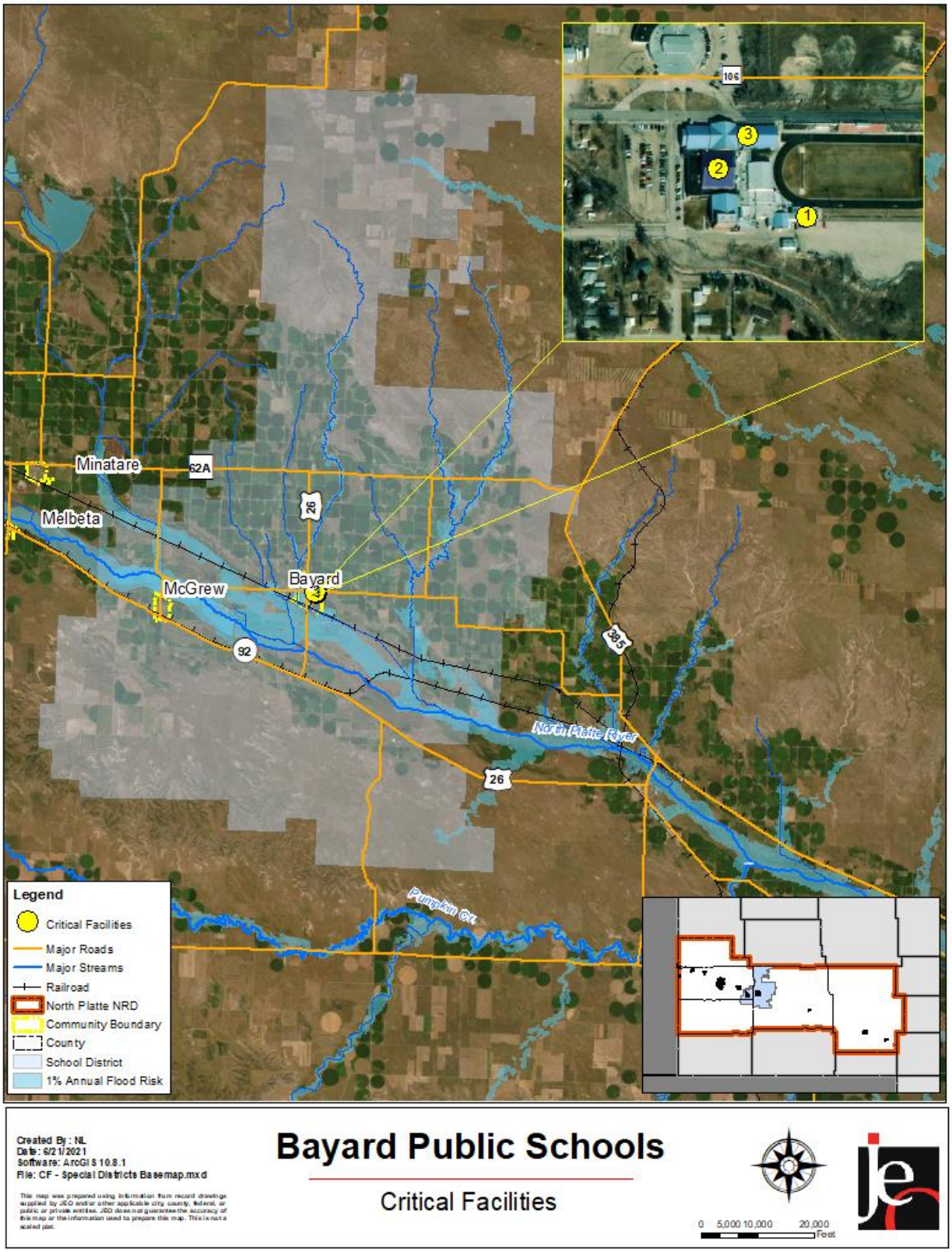
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during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

14 Nebraska Education Profile. "School Report Card." Accessed June 2021. http://nep.education.ne.gov/Home/.

Table BPS.3: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Bus Barn	N	N	N
2	Elementary	Y	N	N
3	High School	Y	N	N

Figure BPS.4: Critical Facilities



**Floodplains in Banner County and Morrill County are based off a HAZUS created floodplain.*

Administration

The school district has a superintendent, two principals, and 81 staff. The school board is made up of a six-member panel. Staff are trained on emergency procedures during dills, NIMS training, exercises, and classroom trainings.

Capability Assessment

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the community's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. Students and families are educated about emergency procedures through drills, exercises that include parent involvement, and a flyer at the beginning of the year. Every sophomore class is trained in Teen CERT and the fire/police department are part of the school Safety Committee and EOP Planning Committee.

Table BPS.4: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning Capability	Capital Improvements Plan/Long-Term Budget	Yes
	Continuity of Operations Plan	Yes
	Disaster Response Plan	Yes
	Other (if any)	
Administration & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Local staff who can assess community's vulnerability to hazards	Yes
	Grant Manager	Yes
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	Applied for grants in the past	Yes
	Awarded grants in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved bonds in the past	Yes
	Flood Insurance	No
	Other (if any)	
Education & Outreach Capability	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.)	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 / year
	Tornado	2 / year

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
	Intruder	None
	Bus evacuation	2 / year
	Evacuation	None
	Other (if any)	Lockdown / Lock Out

Table BPS.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	Moderate
Time to devote to hazard mitigation	Moderate

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 (e.g., 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 Superintendent and Safety Chairman. The local planning team will review the plan no less than annually and will include the public in the review and revision process by reporting reviews to the Board of Education.

Plan Integration

The crisis response plan for the school district was last updated in 2021 and is reviewed and updated annually. The plan includes topics on standard response protocols, shelter in place protocols, evacuation drills, and sheltering locations. The current plan discusses natural hazards such as severe weather, flooding and grass/wildfires and identifies opportunities for mitigation following hazard events. In a future response plan update, the planning team would like to identify any gaps related to particular hazards. The safety team, school administration, board of education, and all other staff are trained in August to become familiar with the plan. Community partners that helped build the plan include emergency management, sheriffs' office, police department, and the local fire and rescue. The school has a strategic plan that was last updated in 2018 and will be updated again in the 2022/2023 school year. The plan contains information regarding CERT training for teens, emergency radio communications and reverse 911, and community partnerships. The plan also identifies a lack of pedestrian sidewalks leading to evacuation and reunification locations as weaknesses that impact preparedness to hazardous events.

The school district has a continuity of learning and reopening plan (2020) that was created in response to the Covid 19 pandemic and is adjusted for mitigation based on local circumstances.

The district also has an equity action plan/healthy schools toolkit (In progress) that aids in developing evacuation routes and an emergency crisis procedures plan (2020).

Historical Occurrences

See the Morrill, Banner, and Scotts Bluff County community profile for historical hazard events.

Hazard Prioritization

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

Grass/Wildfire

Local concerns regarding this hazard include proximity of school property to surrounding brush and grassland. Although there have been no major fires near the school district, the local planning team noted that a large fire south of McGrew in 2020 could have impacted bus routes if school had been in session. To reduce the risk of fire, the district maintains grass and weeds around school facilities and has a tobacco-free policy.

Hazardous Materials – Transportation

In the past, a break in the natural gas line caused the school to go into lockout. Bayard Fire and Rescue brought in air quality monitoring equipment during the incident. Local concerns regarding this hazard include chemical spills occurring on County Road 106, which travels east to west just north of the school. The planning team is also concerned with the potential spill of hazardous materials transported through agricultural areas along local bus routes. In the event of a spill that requires a school lockout, students and staff would evacuate to Bayard Church of Christ and Faith United Church. If the air quality in the community is impacted, evacuations to neighboring towns would take place. The district has conducted tabletop drills that involved first responders to prepare for a hazardous spill scenario. The district has also identified intake air handlers and breaker locations to cut the flow from our shelter in place locations. Students have also been trained on procedures for taping off windows and doors.

Public Health Emergency

District operations were interrupted, and school closures were implemented during the Covid-19 pandemic. During school closure, remote learning and work was implemented. Once students were allowed to return to school, contact tracing was utilized. To mitigate this hazard in the future the district plans to refer to the Morrill County LEOP and communicate with other entities facing similar challenges.

Severe Thunderstorms

Past severe thunderstorm events that have impacted the district include wind, hail, tornadoes, and lightning. Water damages have occurred as a result of severe thunderstorm events. Powerlines at the school are all above ground. Most school records are not stored on district owned servers. The district utilizes the cloud and keep software data on the software company's servers. Most records are stored electronically. To mitigate against the impacts of future events the district has updated roofs and performed masonry work.

Severe Winter Storms
Past severe winter storm events have shut down school operations, impacted transportation, and resulted in water damage from heavy snow on the roof. School custodial staff are responsible for removing snow. The district can contract with a local excavating company if additional snow removal resources are needed. Winter storms close school for an average of three days per year. Students and families are notified of school closures through an all-call system, a remind app, social media, and radio announcements. To mitigate the impacts of severe winter storms the district has implemented snow day protocols, line up snow removal ahead of events, and call school off as early as possible to avoid travel accidents.

Tornadoes and High Winds
In 2017 the school was impacted by a tornado that caused damages to buses, trees, and the roof. Operations were halted due to major power outages in the community and surrounding areas. Damage to electronics occurred due to these power outages. Food had to be donated to volunteers to prevent waste from freezers being down. There are interior designated shelter locations in both school buildings. The school is notified of severe weather through radio communications, social media, and information shared by the emergency manager and comm center. There is a tornado siren located in the Bayard city park a few blocks from the school.

Mitigation Strategy

New Mitigation and Strategic Actions

MITIGATION ACTION	DIRECT EVACUATION ROUTE
DESCRIPTION	Create a direct pathway behind the school to connect two evacuation sites.
HAZARD(S)	Hazardous Materials, Terrorism, Tornadoes & High Winds,
ESTIMATED COST	250,000
FUNDING	School District General Fund
TIMELINE	2-5 year
PRIORITY	Medium
LEAD AGENCY	Superintendent's Office
STATUS	Equity action plan created. We have applied for grants and awaiting the results.

Continued Mitigation and Strategic Actions

MITIGATION ACTION	BACKUP GENERATOR
DESCRIPTION	Provide a stationary source of backup power to both school buildings. It is possible that the school district will require two generators to cover both buildings. This generator would allow for a redundant power supply during summer thunderstorms and severe winter storms, which often damage power lines.
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$150,000
FUNDING	School District General Fund, Building Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Superintendent's Office
STATUS	FEMA funding was granted however due to the increase cost in materials due to the pandemic the total cost increased, and the school budget could not absorb the extra costs. Engineered plans have been constructed and paid for.

MITIGATION ACTION	CIVIL SERVICE IMPROVEMENTS
DESCRIPTION	Purchase a skid steer for snow removal purposes.
HAZARD(S)	Severe Winter Storms
ESTIMATED COST	$35,000
FUNDING	School District General Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Maintenance Department
STATUS	A skid steer has not been purchased yet and is still needed

MITIGATION ACTION	IMPACT RESISTANT WINDOWS
DESCRIPTION	Investigate the feasibility of hail resistant windows due to past hazard events.
HAZARD(S)	Severe Thunderstorms/Hail
ESTIMATED COST	$200,000
FUNDING	School District General Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Superintendent's Office
STATUS	The district will be seeking bids for new windows as part of our COVID mitigation strategy.

MITIGATION ACTION	INSTALL VEHICULAR BARRIERS
DESCRIPTION	Install vehicular barriers (concrete or steel posts) to place in front of the high school, and elementary school playground to provide protection from vehicles.
HAZARD(S)	Hazardous Materials – Transportation
ESTIMATED COST	$10,000
FUNDING	School District Building Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Superintendent's Office
STATUS	Paint and cones have been used temporarily at the elementary school.

MITIGATION ACTION	SAFE ROOM
DESCRIPTION	Design and construct a storm shelter at the Bayard Elementary School for protection from high wind events.
HAZARD(S)	Tornadoes and High Winds
ESTIMATED COST	$2.25 million
FUNDING	School District Building Fund, Bond Funding, City/County Partnership
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Superintendent's Office
STATUS	FEMA funding was offered but the board denied this project at this time due to the cost.

MITIGATION ACTION	SHELTER IN PLACE TRAINING
DESCRIPTION	Provide shelter in place training to house vulnerable populations during a chemical spill event. The school also wishes to purchase items like gas masks, plastic, and duct tape to prepare for a chemical event, Bayard Public Schools would like to also include training for this sort of event.
HAZARD(S)	Hazardous Materials – Transportation
ESTIMATED COST	$5,000 - $10,000
FUNDING	School District General Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Superintendent's Office
STATUS	Purchases for supplies still needs to be completed but staff, students, and first responders have been coordinating trainings.

MITIGATION ACTION	**STATIC DETECTORS**
DESCRIPTION	The school district is interested in outfitting the schools with static detectors in order to preemptively predict lightning strikes in the area. Bayard Schools are most interested in this action due to the benefits for individuals outside, especially during events like football games, track meets, and children at recess.
HAZARD(S)	Severe Thunderstorms
ESTIMATED COST	$25,000
FUNDING	School Activities Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Superintendent's Office
STATUS	This project is still in progress.

School District Profile

BRIDGEPORT PUBLIC SCHOOLS

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

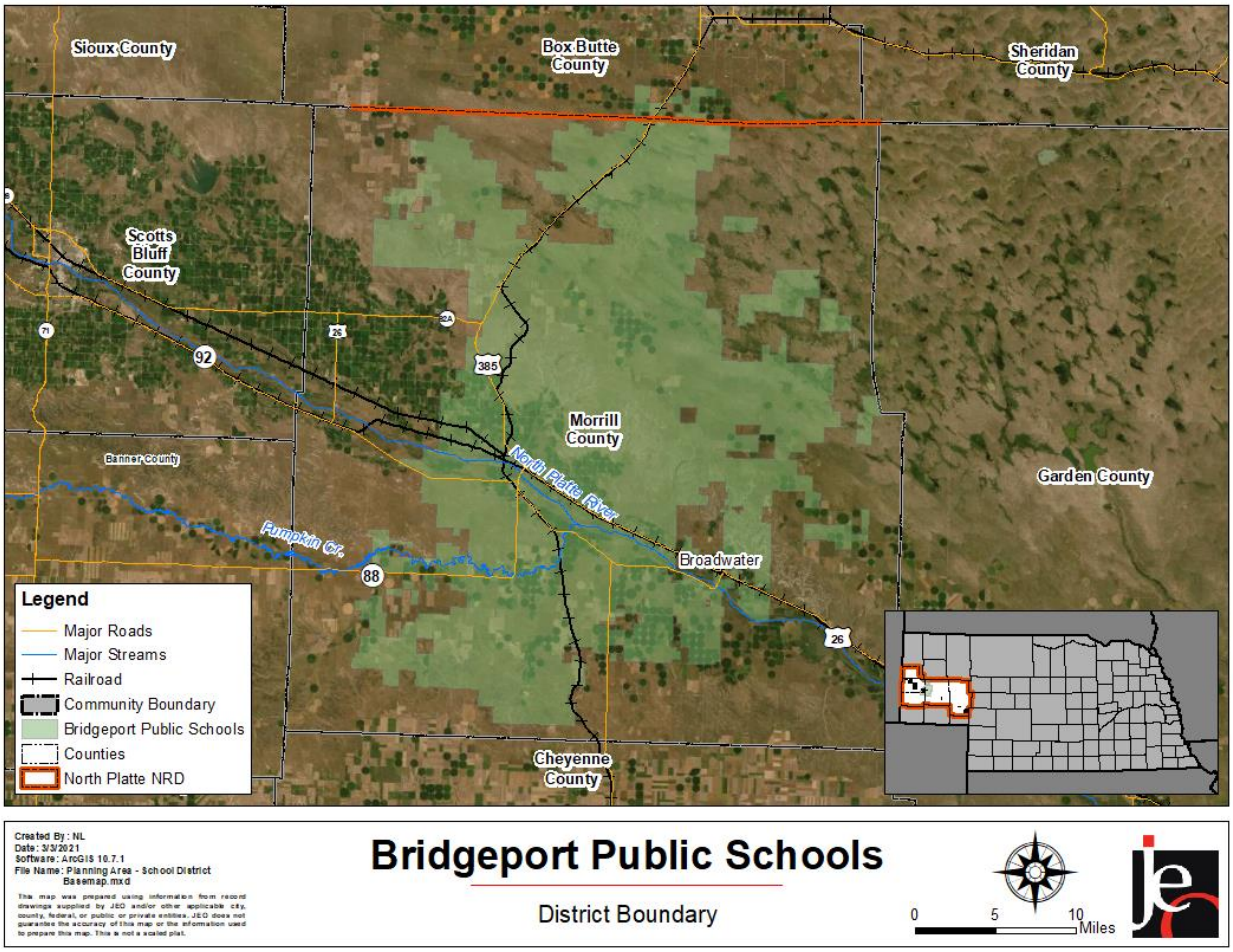
Table BSD.1: Bridgeport Public Schools Local Planning Team

NAME	TITLE	JURISDICTION
CHARLES LAMBERT	Superintendent	Bridgeport Public Schools

Location

Bridgeport Public School District covers most of Morrill County and serves two schools: Bridgeport High School and Bridgeport Elementary School.

Figure BSD.1: District Boundary



Transportation

Three major transportation corridors travel through the district: US HWY 26, US HWY 385, and NE HWY 88. The most traveled route is US HWY 385 with an average of 2,495 vehicles daily, 390 of which are trucks.[15] A Burlington-Northern Santa Fe line and Union Pacific Railroad line

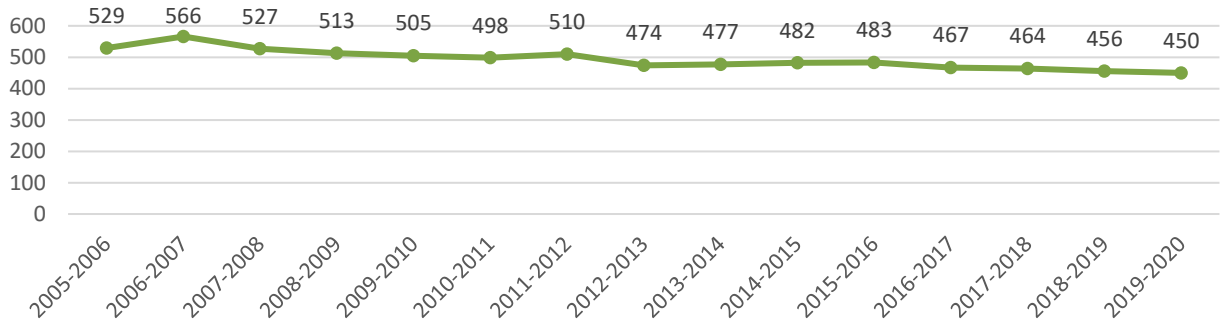
[15] Nebraska Department of Transportation. 2018. "Interactive Statewide Traffic Counts Map." [map]. https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34.

travel through the district. The district owns 10 buses and approximately 260 students are bused to and from school.

Demographics

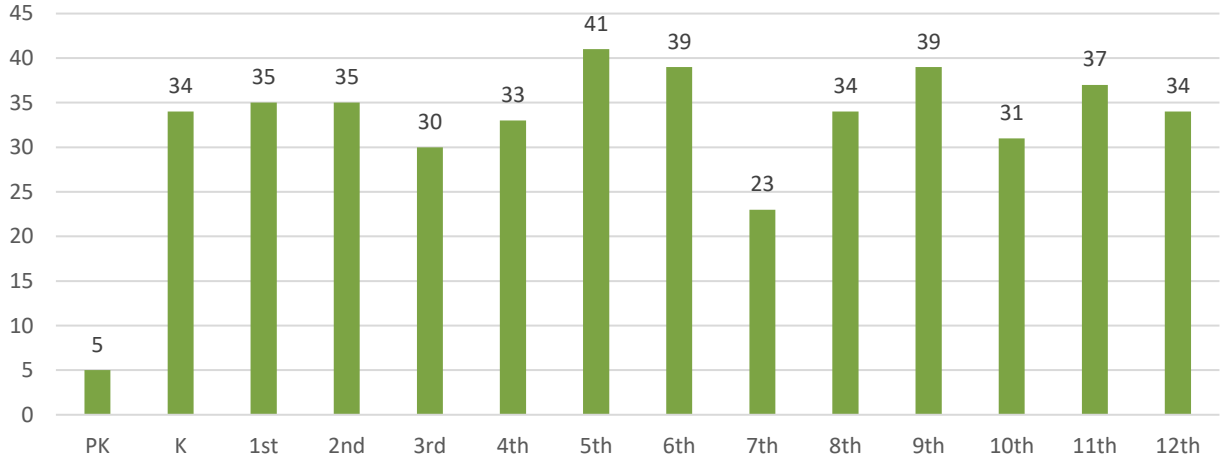
The following figure displays the historical student population trend starting with the 2005-06 school year and ending with the 2019-20 year. It indicates that the student population has been generally declining since 2012. There are 450 students enrolled in the district.[16] Some students in the district speak Spanish.

Figure BSD.2: Student Population 2005-2020



Source: Nebraska Department of Education

Figure BSD.3: Number of Students by Grade, 2019-2020



Source: Nebraska Department of Education

The figure on the previous page indicates that the largest number of students are in the 5th, 6th, and 9th grades. The lowest population of students are in pre-kindergarten and 7th grades. According to the Nebraska Department of Education (NDE), 65% of students receive either free or reduced priced meals at school, a higher percentage than the state average of 46%. Additionally, over 16% of students are in the Special Education Program. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

16 Nebraska Department of Education. June 2021. "2019-2020 Education Profile for District: Bridgeport Public Schools." https://nep.education.ne.gov/snapshot.html#62-0021-000.

Table BSD.2: Student Statistics, 2019-2020

	SCHOOL DISTRICT	STATE OF NEBRASKA
FREE/REDUCED PRICED MEALS	64.67%	45.60%
SCHOOL MOBILITY RATE	5.62%	8.36%
ENGLISH LANGUAGE LEARNERS	4.04*	7.43%
SPECIAL EDUCATION STUDENTS	16.63%	15.48%

**Data is not available when less than 10 students.*
Source: Nebraska Department of Education[17]

Future Development Trends

Over the past five years, there have been no new developments 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 21 chemical storage sites in the district that contain hazardous chemicals.

Critical Facilities

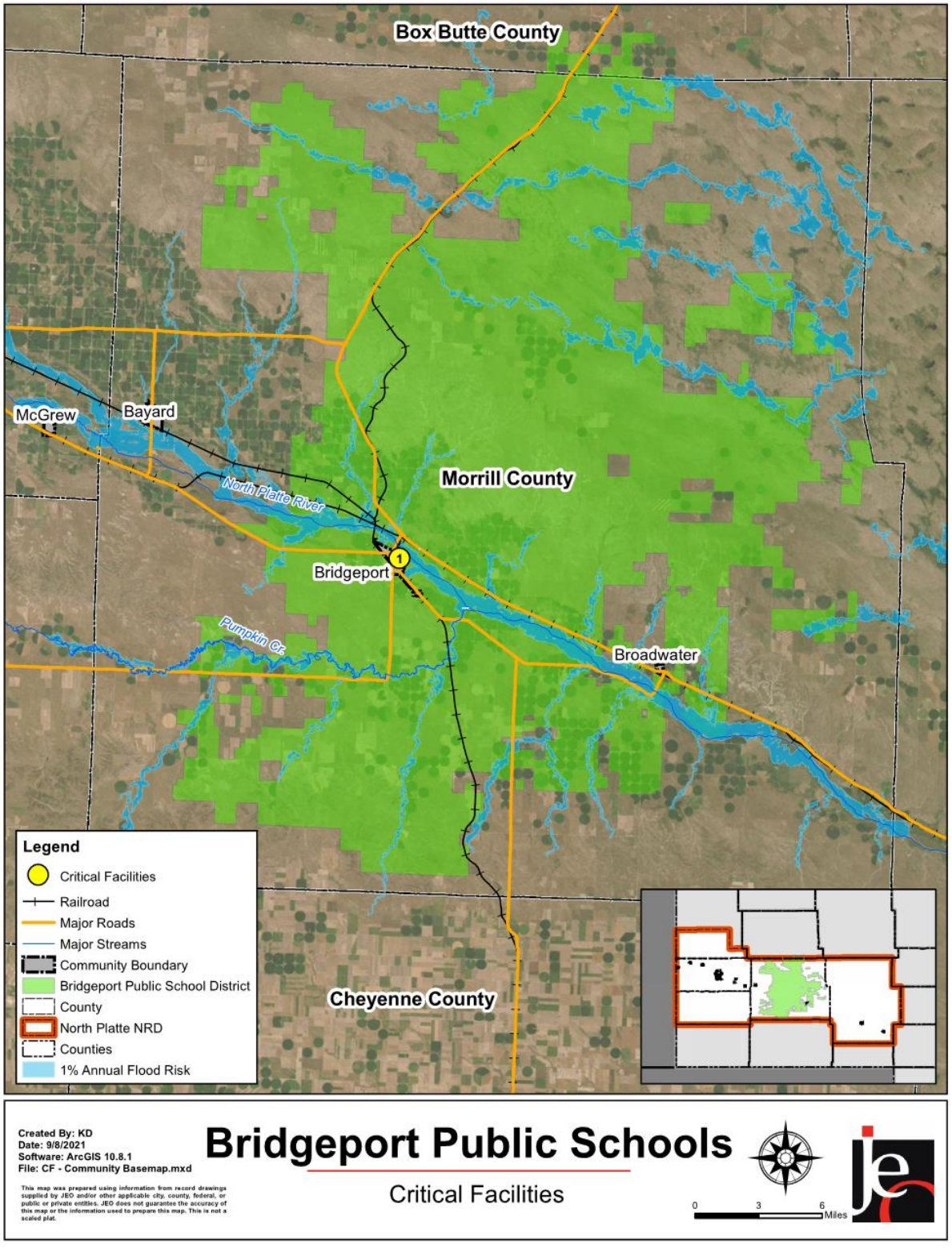
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during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

Table BSD.3: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Bridgeport Public School	Y	Y	N

17 Nebraska Education Profile. "School Report Card." Accessed June 2021. http://nep.education.ne.gov/Home/.

Figure BSD.4: Critical Facilities



**Floodplains in Banner County and Morrill County are based off a HAZUS created floodplain.*

Administration

The school district has a superintendent, two principals, and other staff. The school board is made up of six members.

Capability Assessment

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

Table BSD.4: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning Capability	Capital Improvements Plan/Long-Term Budget	Yes
	Continuity of Operations Plan	Yes
	Disaster Response Plan	Yes
	Other (if any)	
Administration & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Local staff who can assess community's vulnerability to hazards	Yes
	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	Applied for grants in the past	Yes
	Awarded grants in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Approved bonds in the past	Yes
	Flood Insurance	Yes
	Other (if any)	
Education & Outreach Capability	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.)	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 / year
	Tornado	1 / year
	Intruder	2 / year
	Bus evacuation	2 / year
	Evacuation	1 / year
	Other (if any)	

Table BSD.5: 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	Moderate

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 (e.g., 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 Superintendent and Safety Chairman. The local planning team will review the plan no less than annually and will include the public in the review and revision process through the newsletter and alert system.

Plan Integration

The school district currently has no plans that incorporate hazards and mitigation.

Historical Occurrences

See the Morrill County community profile for historical hazard events.

Hazard Prioritization

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

Drought

Drought was identified by the local planning team as being a hazard of top concern for the school district. Drought is very common in the area and a significant concern is the economic impact that could affect the district should a large-scale drought occur. Drought could impact families financially in the district and possibly affect enrollment. The last severe drought in the area occurred in 2012. According to the planning team, water supply has been adequate during past drought events.

Grass/Wildfire

Bridgeport Public School District is concerned with wildfires due to the surrounding farmland and pastures. The district is at an increased risk because of recent drought and high wind events. To

reduce the risk of fire, the district maintains grass and weeds around the school facilities and has a tobacco-free policy.

Severe Winter Storms

Past severe winter storm events have shut down school operations and impacted transportation in the area. Heavy snow and winds in March 2019 caused power outages and blocked many of the main roads near the school. The area experiences extreme cold in February 2021, resulting in high electric bills. Snow removal is performed by the school maintenance team and is sufficient according to the planning team.

Mitigation Strategy

Completed Mitigation and Strategic Actions

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	Completed.

Continued Mitigation and Strategic Actions

MITIGATION ACTION	BACKUP GENERATOR
DESCRIPTION	Provide a stationary source of backup power to both school buildings. It is possible that the school district will require two generators to cover both buildings. This generator would allow for a redundant power supply during summer thunderstorms and severe winter storms, which often damage power lines.
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$55,000
FUNDING	Building Fund
TIMELINE	1-2 years
PRIORITY	Medium
LEAD AGENCY	Superintendent's Office
STATUS	No new progress at this time.

MITIGATION ACTION	PROTECT ROOFTOP UTILITIES
DESCRIPTION	Cover roof-mounted A/C units. Encourage the use of hail resistant roofing for any new construction.
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	Staff Time
FUNDING	Depreciation Fund
TIMELINE	1 year
PRIORITY	Medium
LEAD AGENCY	Superintendent's Office
STATUS	In progress.

FIRE DISTRICTS PROFILE

North Platte NRD
Hazard Mitigation Plan 2021

District Planning Teams

Table FD.1: District Planning Team Members

PARTICIPATING FIRE DISTRICT	NAME	TITLE
BRIDGEPORT FIRE DISTRICT	John Pankowski	Fire Chief
BROADWATER VOLUNTEER FIRE DEPARTMENT	Kay Anderson	Rescue Captain
LEWELLEN VOLUNTEER FIRE DEPARTMENT	David Dymak	Fire Chief
MINATARE/MELBETA RURAL FIRE DISTRICT	Brandi Ehler	Fire Chief

Location and Geography

Landscapes within the planning area include crop land, mixed-grass/shortgrass prairie, ponderosa pine forests, savannas, and riparian deciduous forests. Areas with ponderosa pine can develop heavy grass and shrubs in the undergrowth creating increased fuels and fire risk. There are two fire seasons in the planning area. The early season starts from snowmelt until early may when last year's vegetation dries. The late season begins mid-summer to mid-November when grasses begin to dry. Water sources for fighting fires include community water systems, Pumpkin Creek, Willow Creek, Lawrence Fork, North Platte River, ponds, lakes, windmills, and stock tanks. Specific areas most at-risk from wildfire include Pumpkin Creek along the Lawrence Fork, the southeast quadrant of Banner County, the southeast corner of Morrill County, Chimney Rock, Wagon Box Ranch, Goodstreak-Dove Ranch, Scotts Bluff National Monument, Wildcat Hills, Lake Minatare, Sheep Creek, and the North Platte River.[18,19] Figure FD.1 shows the location of all the fire districts in the planning area.

Table FD.2: Acres Covered

PARTICIPATING FIRE DISTRICT	ACRES COVERED
BRIDGEPORT FIRE DISTRICT	308,574 acres
BROADWATER VOLUNTEER FIRE DEPARTMENT	280,320 acres
LEWELLEN VOLUNTEER FIRE DEPARTMENT	250,000 acres
MINATARE/MELBETA RURAL FIRE DISTRICT	192,000 acres

Demographics

See the individual community and county profiles for regional demographic information. The table below gives an approximate number of people served for each participating district.

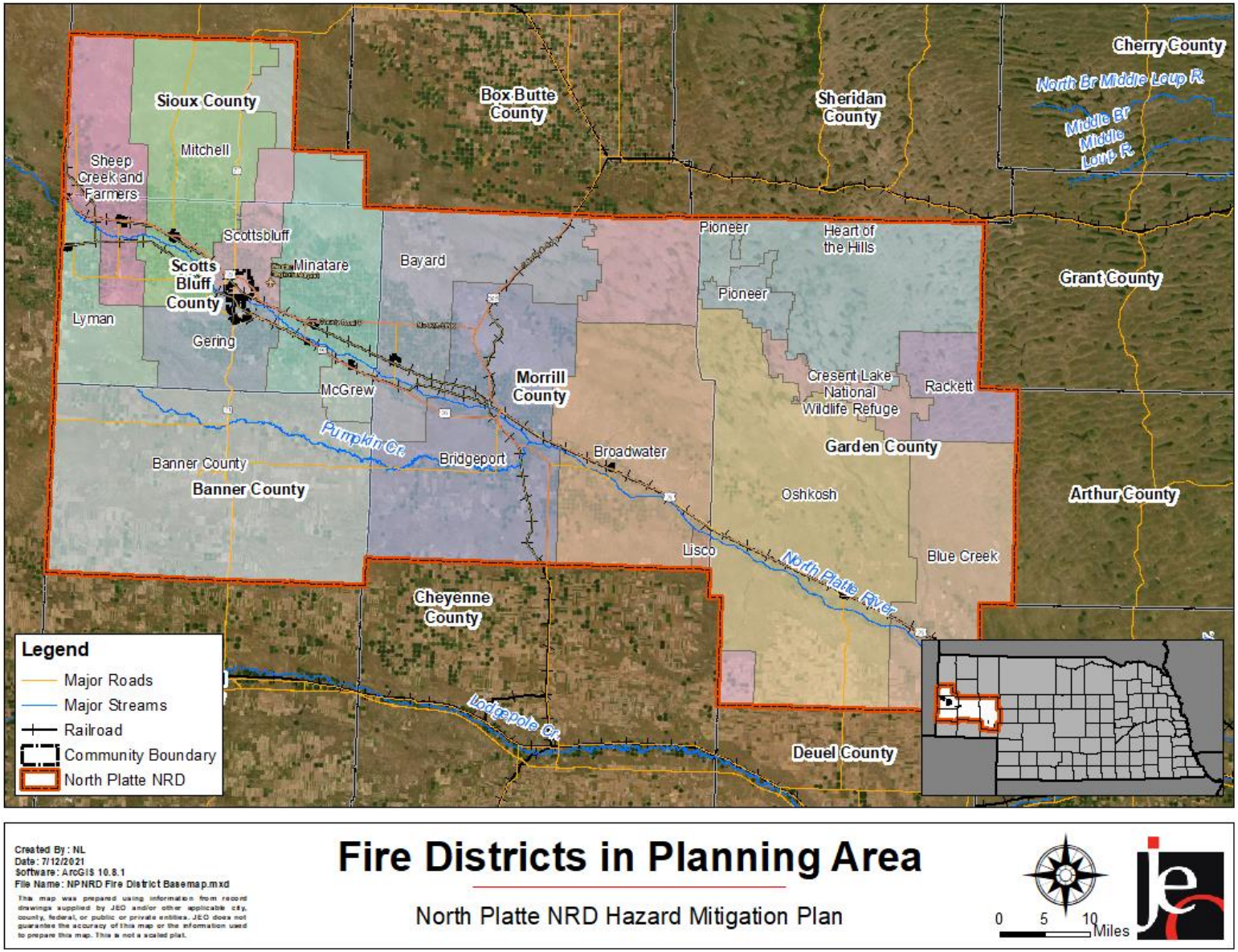
Table FD.3: Populations Served

PARTICIPATING FIRE DISTRICT	POPULATION SERVED
BRIDGEPORT FIRE DISTRICT	2,000
BROADWATER VOLUNTEER FIRE DEPARTMENT	200
LEWELLEN VOLUNTEER FIRE DEPARTMENT	400
MINATARE/MELBETA RURAL FIRE DISTRICT	3,000

[18] Nebraska Forest Service. 2019. "Western Sandhills Community Wildfire Protection Plan". https://nfs.unl.edu/community-wildfire-protection-plan.

[19] Nebraska Forest Service. 2021. "Wildcat Hills Community Wildfire Protection Plan". https://nfs.unl.edu/community-wildfire-protection-plan.

Figure FD.1: Fire Districts in the Planning Area



Staffing

Each fire district is supervised by a fire chief and a board of directors who will oversee the implementation of hazard mitigation projects. The number of staff and type for each participating district is listed below.

Table FD.4: Staffing

PARTICIPATING FIRE DISTRICT	NUMBER OF STAFF	TYPE
BRIDGEPORT FIRE DISTRICT	16	Volunteer
BROADWATER VOLUNTEER FIRE DEPARTMENT	19	Volunteer
LEWELLEN VOLUNTEER FIRE DEPARTMENT	15	Volunteer
MINATARE/MELBETA RURAL FIRE DISTRICT	14	Volunteer

Capability Assessment

Due to the unique structure of fire districts, the typical capability assessment table was not used. The following table summarizes each district's overall resources. In addition, each district can leverage mutual aid, county, and state resources if needed during large-scale events. The planning area has a permanent single engine air tanker (SEAT) base located in Scottsbluff. The SEAT can assist in wildfire suppression in difficult to access terrain or for quick spreading fires.

Table FD.5: Overall Resources

PARTICIPATING FIRE DISTRICT	AERIAL	PUMPER	TANKER	PUMPER / TANKER	GRASS-WEED TRUCK	UTILITY TRUCK	RESCUE UNITS	SPECIAL TEAMS	SPECIAL EQUIPMENT
BRIDGEPORT FIRE DISTRICT	-	2	2	1	5	1	-	-	-
BROADWATER VOLUNTEER FIRE DEPARTMENT	-	-	1	1	5	-	1	-	Foam for chemical spills
LEWELLEN VOLUNTEER FIRE DEPARTMENT	-	1	2	-	5	1	-	-	Jaws
MINATARE/MELBETA RURAL FIRE DISTRICT	-	2	2	1	3	1	3	-	1 Dive Trailer

Table FD.6: Mutual Aid Agreements

PARTICIPATING FIRE DISTRICT	MUTUAL AID PARTNERSHIPS
BRIDGEPORT FIRE DISTRICT	- Central Panhandle Mutual Aid
BROADWATER VOLUNTEER FIRE DEPARTMENT	- Central Panhandle Mutual Aid
LEWELLEN VOLUNTEER FIRE DEPARTMENT	- Southwest Mutual Aid
MINATARE/MELBETA RURAL FIRE DISTRICT	- Scotts Bluff County Mutual Aid - Bayard Mutual Aid Agreement

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 planning documents (e.g., annual budget), 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 table below shows who will be responsible for reviewing the profile, the frequency of review, and how the public will be involved.

Table FD.7: Plan Maintenance

PARTICIPATING FIRE DISTRICT	REVIEWERS	FREQUENCY	PUBLIC INVOLVEMENT
BRIDGEPORT FIRE DISTRICT	City Representative, Rural Fire Board Representative, Fire Chief	Annually	Board and City Council Meetings
BROADWATER VOLUNTEER FIRE DEPARTMENT	Fire Chief, Assistant Chief	Annually	Board Meetings
LEWELLEN VOLUNTEER FIRE DEPARTMENT	Fire Chief, Region 21 Emergency Management Agency	Annually	Board/Council Meetings

Plan Integration

Each fire district has standard operating procedures (SOPs) or standard operating guidelines (SOGs). The SOPs/SOGs outline the district's response to a variety of different calls that could be received. In addition, the districts will either be a part of the 2021 Wildcat Hills Community Wildfire Protection Plan (CWPP) or the 2019 Western Sandhills CWPP. These CWPPs discuss county specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. These documents are updated every five years. Finally, each county has its own Local Emergency Operation Plan (LEOP). Annex F in these LEOPs covers fire services by listing the county fire departments, mutual aid partners, and equipment lists. Each LEOP is updated every five years by county emergency management.

Future Development Trends

Bridgeport Fire District

Over the past five years there have not been any changes within the fire district. During the next five years, the district would like to add on to the existing rural fire hall in order to have all equipment in the building.

Broadwater Volunteer Fire Department

Over the past five years a new Hemmitt tanker truck and Hemmitt grass truck added to the fleet of vehicles and a backup generator was installed at the fire hall. These additions help the district increase resilience to power loss and grass/wildfires. There are no planned developments in the next five years.

Lewellen Volunteer Fire Department

Over the past five years, housing along the lake has increased with development. These areas have limited access and may be more difficult to evacuate. There is no planned development in the next five years.

Minatare/Melbeta Rural Fire District

Over the past five years, the fire district built a new fire hall which was completed in 2021. In addition, a new storm shelter was added on to the high school. There are no planned developments in the next five years.

Community Lifelines

Transportation

US Highways 26, 385 and Nebraska State Highways 27, 29, 71, 88, 92 all travel through the planning area. The most traveled route is US Highway 26 near Scottsbluff with an average of 12,240 vehicles daily, 605 of which are trucks.[20] Two Burlington Northern Santa Fe rail lines and two Union Pacific Railroad lines travel through the planning area, crossing many of the fire districts. Trains have caused fires near the tracks in the past. Fertilizer and other agricultural chemicals are regularly transported along many roadways across the planning area. Many county roads, especially those near rivers and creeks, may become closed due to flooding. These closures could possibly impact response times for the fire districts. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors, areas more at risk of transportation incidents, and high-risk spill areas. Evacuating people in rural areas that only have one road leading to their homes may be difficult if the roads are damaged.

Chemical Storage Fixed Sites

Information on chemical storage sites can be found in the county profiles. The Broadwater Volunteer Fire Department is specifically concerned with dry chemical storage at the co-op. The district does a hazardous material training on an annual basis. Bridgeport Fire District is specifically concerned with Bridgeport Ethanol, Nutrien Fertilizer, and the local Coop.

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

Critical Facilities

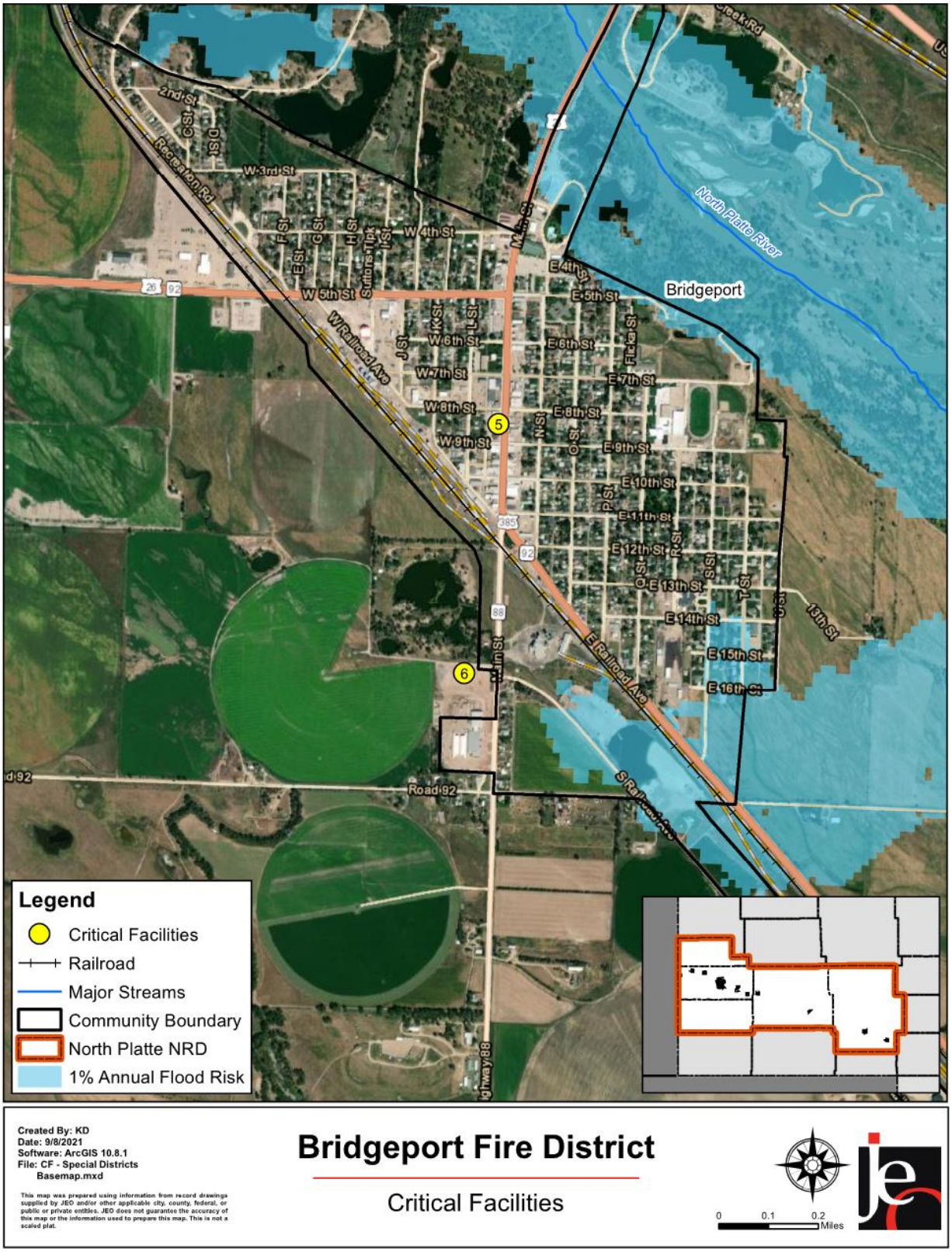
Each participating district identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during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

Although they may not be listed in the table below, critical infrastructure also includes power infrastructure, cell towers, alert sirens, water infrastructure, and roadways.

Table FD.8: Critical Facilities

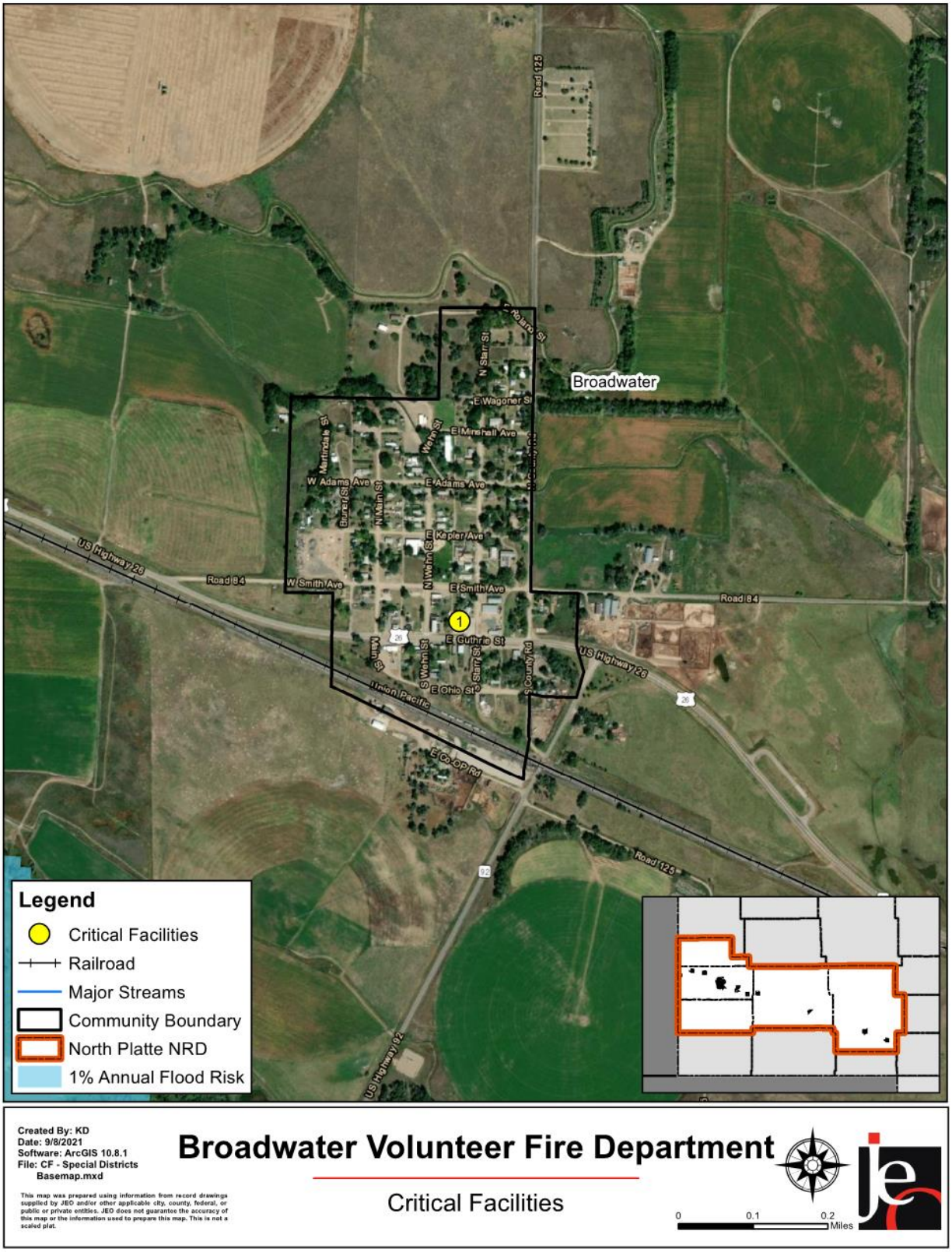
CF #	NAME	COMMUNITY SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Broadwater Fire Hall	N	Y	N
2	Minatare/Melbeta Fire Station #1	N	N	N
3	Minatare/Melbeta Fire Station #2	N	N	N
4	Minatare/Melbeta Water Tower	N	N	N
5	Bridgeport City Hall	N	N	N
6	Bridgeport Fire Hall	N	N	N
7	Lewellen Fire Hall and Water Well	N	N	N
8	Lewellen Fire Water Well	N	N	Y

Figure FD.2: Bridgeport Fire District Critical Facilities



**1% Annual Flood Risk is based off a HAZUS generated floodplain*

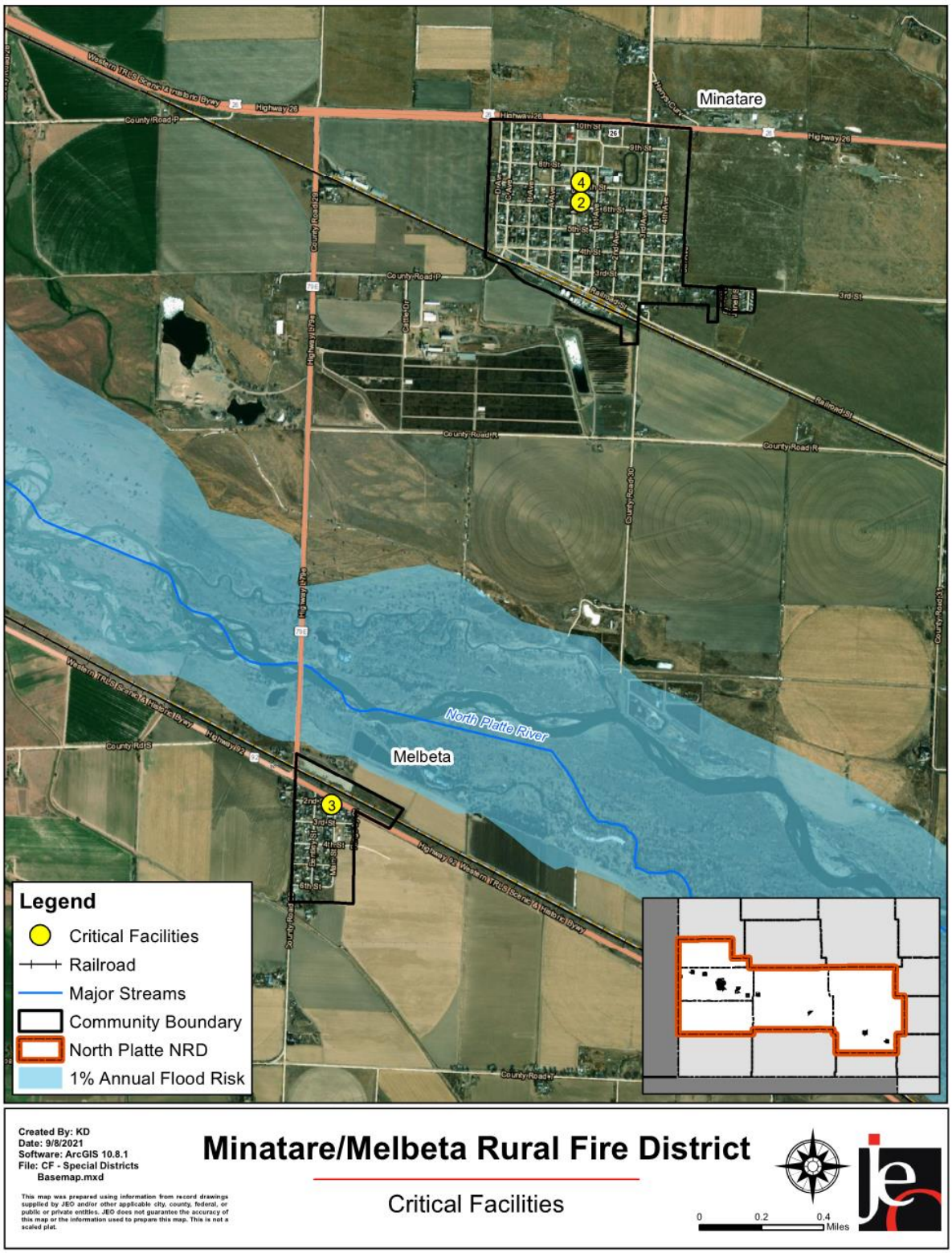
Figure FD.3: Broadwater Volunteer Fire Department Critical Facilities



**1% Annual Flood Risk is based off a HAZUS generated floodplain*

Figure FD.4: Lewellen Volunteer Fire Department Critical Facilities

Figure FD.5: Minatare/Melbeta Fire Critical Facilities



Historical Occurrences

See the county profiles for historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

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.

Table FD.9: Hazard Prioritization

HAZARDS	BRIDGEPORT FIRE DISTRICT	BROADWATER VOLUNTEER FIRE DEPARTMENT	LEWELLEN FIRE DISTRICT	MINATARE/MELBETA RURAL FIRE DISTRICT
Animal and Plant Disease				
Dam Failure				
Drought	X	X		X
Earthquakes				
Extreme Heat				
Flooding		X		X
Grass/Wildfire	X	X	X	X
Hazardous Materials – Fixed Sites	X			
Hazardous Materials - Transportation				
Levee Failure				
Public Health Emergency				
Severe Thunderstorms	X	X	X	X
Severe Winter Storms	X	X	X	X
Terrorism				
Tornadoes and High Winds		X		X

Drought

Drought can affect fire districts in several ways. Due to the dry conditions during a drought, vegetation can become extremely dry which increases the risk of wildfires starting. The dry conditions can also make it difficult to contain wildfires as they are more likely to spread quickly. Drought can also affect the water supply, making it harder for the fire districts to find water sources if needed during a response.

Flooding

As first responders, fire districts will be a part of the response and recovery efforts during any major flood event. Even minor flooding can impact roadways throughout the planning area. Closed roads and poor road conditions can impact response times for fire districts. The Minatare/Melbeta Rural Fire District is specifically concerned with the North Platte River. It runs between the two communities they serve and if the river would rise enough, it would make getting from community to community very difficult.

Grass/Wildfires

Grass/Wildfires are the primary responsibility of the fire districts. Specific grass/wildfire concerns for each participating district are discussed below.

Bridgeport Fire District

The largest reported wildfires occurred in July 2006 with two 500-acre fires occurring within the district. The district's largest concern was having enough manpower to respond to larger grass/wildfires.

Broadwater Volunteer Fire Department

The largest reported wildfire occurred in January 1989 burning 14,497 acres. The district also mentioned that several fires have been caused by birds getting electrocuted and falling in grassy areas. The power company has started to put devices on the tops of power poles to reduce the likelihood of this occurring.

Lewellen Volunteer Fire Department

The fire district has reported 15 grass/wildfires since 2000. The largest fire occurred in March 2002 and burned 10 acres. Areas most at risk of fire include grasslands, highway right of ways, and railroad right of ways.

Minatare/Melbeta Rural Fire District

In July 2000, a lightning strike caused the Snake Creek Fire which burned 65,00 acres in the district. The fire district's largest concerns are a lack of personnel during a large fire event and lack of communication. The local planning team indicated there are 15 different radio frequencies and a lack of radios, which makes communication difficult. The district recently began updating its radio inventory.

Hazardous Materials – Fixed Site

Fire districts are some of the first responders to a hazardous materials spill. Although many districts do not have or have minimal training for hazmat response, they will help in evacuation, containment, securing a permitter around the spill, and give medical attention to any injured individuals. The Bridgeport Fire District is particularly concerned with the local ethanol and fertilizer plants because they house a large amount of chemicals. The district has limited resources to respond to a spill.

Severe Thunderstorms

Lightning is a major cause of grass/wildfires in the planning area. Hail can cause damage to district owned buildings and vehicles. In addition, severe thunderstorms can cause power outages and can knockout communication. If needed fire districts will help with response and recovery efforts for a severe thunderstorm event. Many districts perform storm spotting to help with notification to the public.

Severe Winter Storms

Severe winter storms can negatively impact response times due to closed roads and hazardous travel conditions. In addition, ice and heavy snow can cause power and communication outages. Fire districts will also help in response and recovery efforts during and after a severe winter storm. The local planning team noted the bomb cyclone of 2019 caused roads to be closed for several days.

Tornadoes and High Winds

Like severe thunderstorms, tornadoes and high winds can cause power outages, knockout communication, and cause damage to district owned buildings and vehicles. High winds are a primary factor in fire spread and can make it difficult for districts to contain a wildfire. As first responders, fire districts will be a part of the response and recovery efforts during any major tornado or high wind event. Many districts perform storm spotting to help with notification to the public. Travel after a tornado or high wind event can also be impacted due to downed power lines and tree limbs.

Mitigation Strategy

Most fire districts have limited financial resources with annual budgets limited to maintaining current facilities and equipment. As such, each district will continue to utilize existing relationships with local, county, state, and federal agencies in the implementation of mitigation projects.

Mitigation and Strategic Actions

Bridgeport Fire District

MITIGATION ACTION	BACKUP AND EMERGENCY GENERATOR
DESCRIPTION	Add a backup emergency to the rural fire hall.
HAZARD(S)	All hazards
ESTIMATED COST	$50,000+
FUNDING	General Budget
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Fire Chief, Rural Board
STATUS	Not Started

MITIGATION ACTION	EQUIPMENT UPGRADES
DESCRIPTION	Upgrade equipment used for response. The district is in need of battery-operated extraction equipment.
HAZARD(S)	All hazards
ESTIMATED COST	$10,000+
FUNDING	General Budget
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Fire Chief, Rural Board
STATUS	Not Started

MITIGATION ACTION	VEHICLE UPGRADES
DESCRIPTION	Upgrade vehicles by purchasing new or used tankers, fire trucks, engines, pumpers, etc. The district is in need of a new tanker truck.
HAZARD(S)	Grass/Wildfires
ESTIMATED COST	$150,000 - $200,000
FUNDING	General Budget
TIMELINE	1 Year
PRIORITY	High
LEAD AGENCY	Fire Chief, Rural Board
STATUS	Planning Stage. Currently in the budget for 2022.

Broadwater Volunteer Fire Department

MITIGATION ACTION	EMERGENCY EXERCISES AND TRAININGS
DESCRIPTION	Work with Region 21 Emergency Management Agency and other area fire departments to perform tabletop and full-scale exercises to keep everyone informed about the equipment and how to use it safely and efficiently.
HAZARD(S)	All hazards
ESTIMATED COST	$5,000+, Staff Time
FUNDING	General Budget
TIMELINE	5+ Years
PRIORITY	High
LEAD AGENCY	Fire Chief, Region 21 Emergency Management Agency
STATUS	In Progress. The fire department regularly participates in emergency exercises and trainings.

Lewellen Volunteer Fire Department

MITIGATION ACTION	BACKUP AND EMERGENCY GENERATORS
DESCRIPTION	Add an emergency backup generator to critical facilities.
HAZARD(S)	All hazards
ESTIMATED COST	$20,000
FUNDING	General Budget
TIMELINE	5+ Years
PRIORITY	High
LEAD AGENCY	Fire Chief, Region 21 Emergency Management Agency
STATUS	Not Started

MITIGATION ACTION	UPDATE RADIO EQUIPMENT
DESCRIPTION	Update radio equipment at the fire hall and trucks.
HAZARD(S)	All hazards
ESTIMATED COST	$50,000
FUNDING	General Budget
TIMELINE	5+ Years
PRIORITY	Medium
LEAD AGENCY	Fire Chief, Region 21 Emergency Management Agency
STATUS	Not Started

Minatare/Melbeta Rural Fire District

MITIGATION ACTION	BACKUP AND EMERGENCY GENERATOR
DESCRIPTION	Add a backup emergency to the rural fire hall.
HAZARD(S)	All hazards
ESTIMATED COST	$50,000+
FUNDING	General Budget
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Fire Chief, Region 22 Emergency Management Agency
STATUS	Not Started

MITIGATION ACTION	PUBLIC AWARENESS/EDUCATION
DESCRIPTION	Public awareness reduces the risk of property loss and damage, injury, and death. It increases knowledge on emergency procedures, facilities, conservation, and is key to preparedness
HAZARD(S)	All hazards
ESTIMATED COST	$500+
FUNDING	General Budget
TIMELINE	Ongoing
PRIORITY	High
LEAD AGENCY	Fire Chief, Rural Board
STATUS	Firefighters provide education and awareness at the local elementary school annually during fire prevention week.

MITIGATION ACTION	UPDATE RADIO EQUIPMENT
DESCRIPTION	Update radio equipment at the fire hall and trucks.
HAZARD(S)	All hazards
ESTIMATED COST	$5,000+
FUNDING	General Budget
TIMELINE	5+ Years
PRIORITY	Medium
LEAD AGENCY	Fire Chief, Rural Board
STATUS	The district has purchased some new radios and is in the process of updating the rest.

School District Profile

GERING PUBLIC SCHOOLS

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

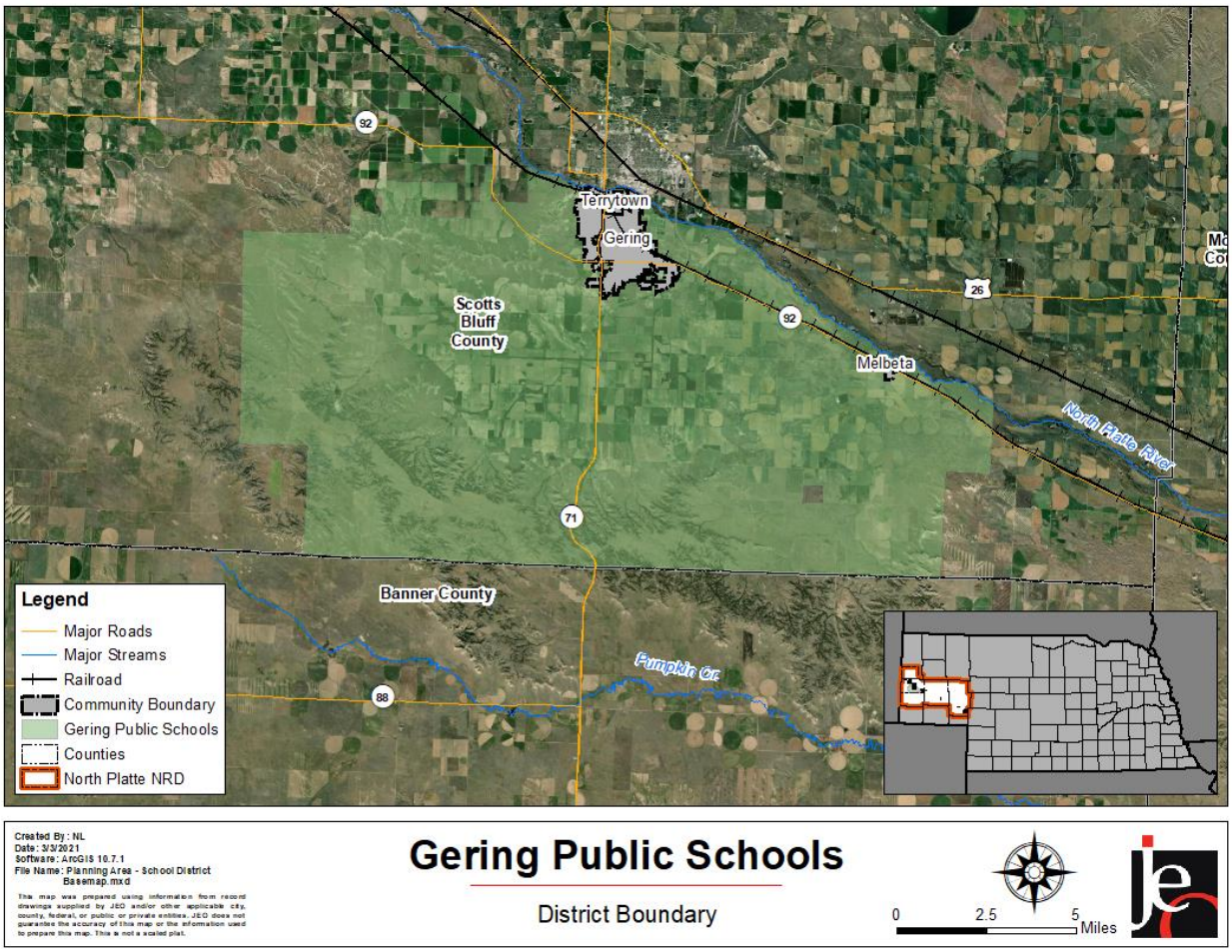
Table GPS.1: Gering Public Schools Local Planning Team

NAME	TITLE	JURISDICTION
GARY COOPER	Interim Superintendent	Gering Public Schools
NICOLE REGAN	Superintendent	Gering Public Schools

Location

Gering Public Schools covers southern Scotts Bluff County and serves six schools: Geil Elementary School, Gering Early Childhood Program, Gering High School, Gering Junior High School, Lincoln Elementary School, and Northfield Elementary School. The school district provides services to students in the communities of Gering, Melbeta, Terrytown, and the rural areas surrounding them.

Figure GPS.1: District Boundary



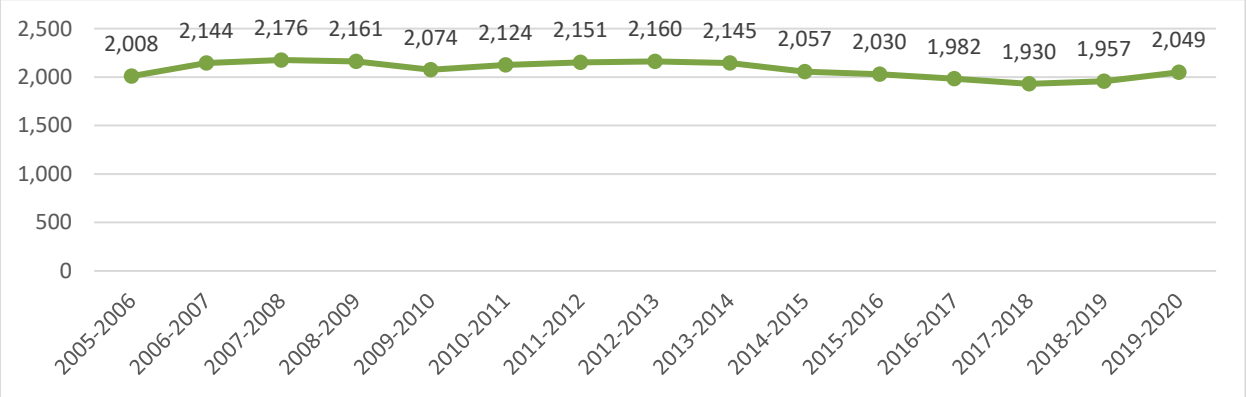
Transportation

Two major transportation corridors travel through the district: NE HWY 71 and NE HWY 92. The most traveled route is NE HWY 71 with an average of 3,855 vehicles daily, 555 of which are trucks.[21] One rail line travels east-west through the northern part of the district. The district contracts with Fist Student to bus approximately 450 students to and from school on a daily basis. In addition, the district owns an activity bus and special education bus. Transportation information is important to hazard mitigation plans because it suggests areas more at risk of transportation incidents.

Demographics

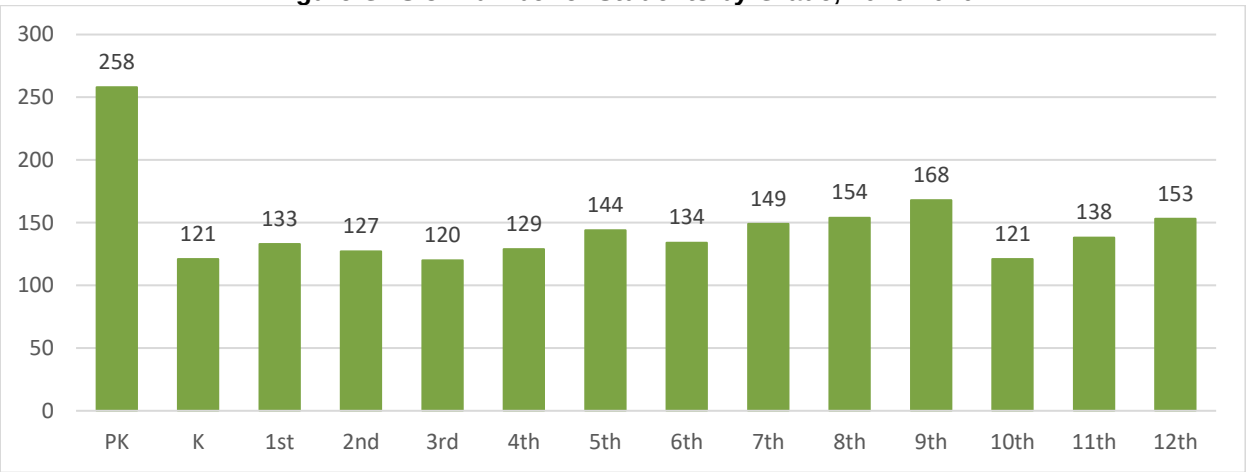
The following figure displays the historical student population trend starting with the 2005-06 school year and ending with the 2019-20 year. It indicates that the student population has been increasing since 2017. There are 2,049 students enrolled in the district.[22] The district anticipates decreasing enrollment in the coming years due to option enrollment.

Figure GPS.2: Student Population 2005-2020



Source: Nebraska Department of Education

Figure GPS.3: Number of Students by Grade, 2019-2020



Source: Nebraska Department of Education

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

22 Nebraska Department of Education. June 2021. "2019-2020 Education Profile for District: Gering Public Schools." https://nep.education.ne.gov/snapshot.html#79-0016-000.

The figure on the previous page indicates that the largest number of students are in the pre-kindergarten and 9th grades. The lowest population of students are in kindergarten, 3rd, and 10th grades. According to the Nebraska Department of Education (NDE), 46% of students receive either free or reduced priced meals at school, similar to the state average of 46%. Additionally, over 12% of students are in the Special Education Program. These particular students may be more vulnerable during a hazardous event than the rest of the student population. Along with English, Spanish is also spoken in the district. All emergency information and notices are provided in Spanish and English.

Table GPS.2: Student Statistics, 2019-2020

	SCHOOL DISTRICT	STATE OF NEBRASKA
FREE/REDUCED PRICED MEALS	46.36%	45.60%
SCHOOL MOBILITY RATE	9.60%	8.36%
ENGLISH LANGUAGE LEARNERS	1.17%	7.43%
SPECIAL EDUCATION STUDENTS	12.51%	15.48%

Source: Nebraska Department of Education[23]

Future Development Trends

In 2018 the district brough the football stadium into ADA compliance and in 2019 an addition was built onto the high school. There no plans for construction or renovation in 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 14 chemical storage sites in district that contain hazardous chemicals. No spills have affected the district. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Critical Facilities

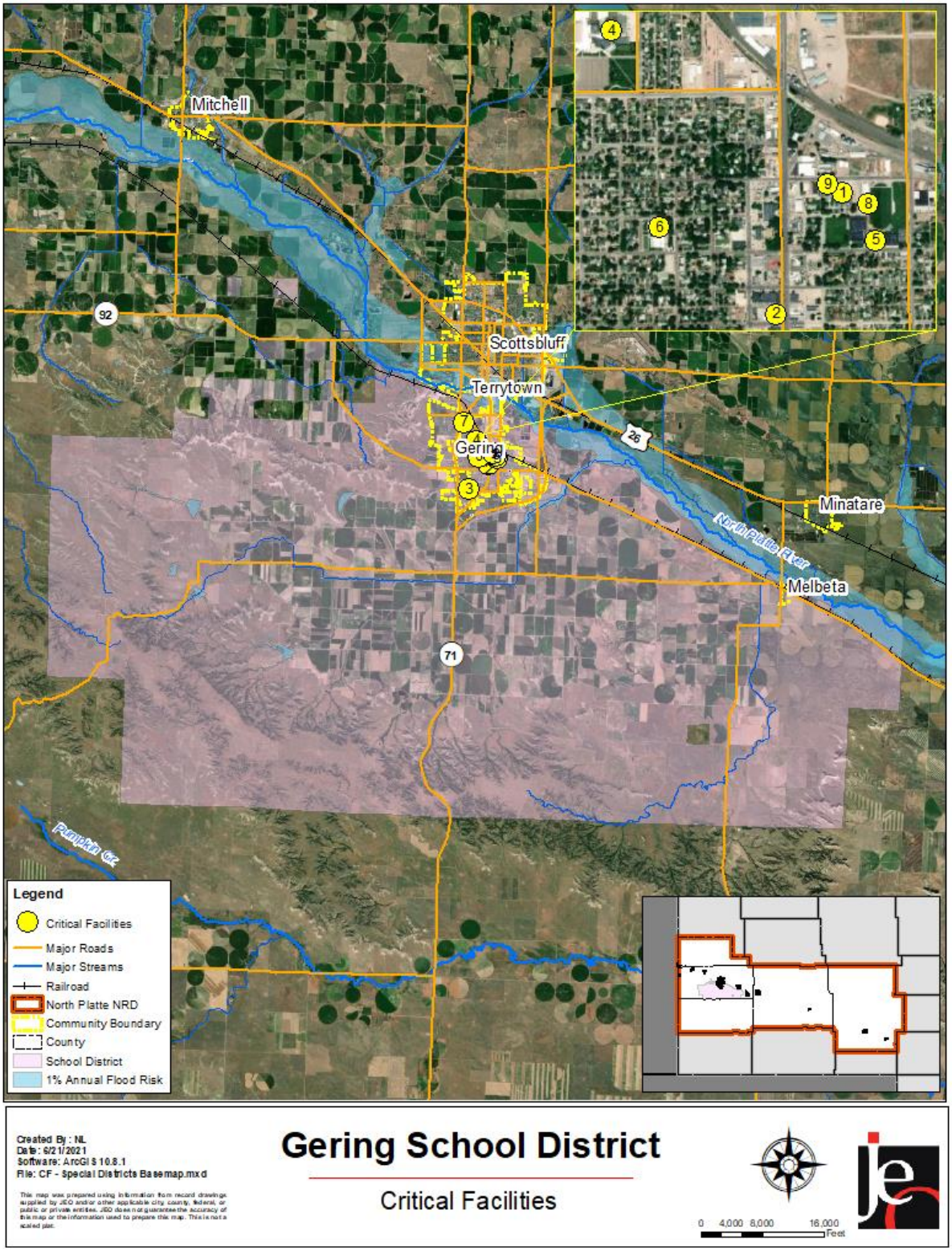
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during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

23 Nebraska Education Profile. "School Report Card." Accessed June 2021. http://nep.education.ne.gov/Home/.

Table GPS.3: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Bus Barn	N	N	N
2	District Office	N	N	N
3	Geil Elementary	Y	N	N
4	High School	Y	N	N
5	Jr. High	Y	N	N
6	Lincoln Elementary	Y	N	N
7	Northfield Elementary	Y	N	N
8	Stadium	N	N	N
9	Storage Buildings	N	N	N

Figure GPS.4: Critical Facilities



Administration

The school district has a superintendent, five principals, and approximately 300 staff. The school board is made up of a six-member panel. Staff are trained on emergency procedures during in service training, posters, and drills.

Capability Assessment

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the community's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. Students and families are educated about emergency procedures through practice drills, literature mailings, and the district website.

Table GPS.4: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning Capability	Capital Improvements Plan/Long-Term Budget	Yes
	Continuity of Operations Plan	Yes
	Disaster Response Plan	Yes
	Other (if any)	
Administration & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Local staff who can assess community's vulnerability to hazards	Yes
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	Applied for grants in the past	No
	Awarded grants in the past	No
	Authority to levy taxes for specific purposes such as mitigation projects	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved bonds in the past	Yes
	Flood Insurance	Yes
	Other (if any)	
Education & Outreach Capability	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.)	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	9 / year
	Tornado	2 / year
	Intruder	4 / year
	Bus evacuation	2 / year

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
	Evacuation	2 / year
	Other (if any)	

Table GPS.5: Overall Capability

OVERALL CAPABILITY	LIMITED/MODERATE/HIGH
Financial resources needed to implement mitigation projects	Limited
Staff/expertise to implement projects	Moderate
Community support to implement projects	High
Time to devote to hazard mitigation	Moderate

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 (e.g., 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 Superintendent and High School Dean of Students. The local planning team will review the plan no less than annually and will include the public in the review and revision process by: website updates and board meetings.

Plan Integration

The crisis response plan for the school district was last updated in 2021 and the district safety and crisis plan committee meets monthly to review the plan. The plan includes standard response protocol, shelter in place protocols, evacuation drills, and sheltering locations. The current plan also discusses tornadoes and high winds, active shooter scenarios, and identifies opportunities for mitigation following hazard events. In a future response plan update, the planning team would like to identify any gaps related to particular hazards. All district departments are educated on crisis response in each school. The strategic plan for the district was updated in 2021 and includes goals to provide a safe and secure environment and to continue ensuring safety plans are relevant and continuously reviewed to ensure effective practices. The district is currently working on updating the district Safety Manual with help from local law enforcement and county emergency services. The expected completion date is the summer of 2021.

Historical Occurrences

See the Scotts Bluff County community profile for historical hazard events.

Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment.* The hazards discussed in detail below were selected by the local planning team

from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

Hazardous Materials - Transportation
There are several highways and a rail line that travel through the district and are located near schools. These transportation routes carry a variety of chemicals typically agricultural in nature. Past spills have not impacted the district. In the event of an evacuation, Gering High School would go to Faith Lutheran Church, Gering Junior-Senior High School would go to Gering Methodist Church, Northfield Elementary would go to Centro Hispano Methodist Church, Lincoln Elementary would go to Gering District Office, and Geil Elementary would go to The Armory. The district conducts annual training for new staff regarding chemical spills.

Severe Thunderstorms (Includes Hail)
The biggest concern for the district is hail damage to roofs. Hail has affected every building in the school district. Damages have been seen to windows, roofs, trees, and skylights. To help reduce damages, rubber roofing has been installed wherever practical. In addition, the district has installed surge protectors on computers and has buried some power lines leading to buildings. To assist in awareness, each school has a weather radio for local severe weather updates. Each school administrator also has a radio and base station which is hard wired to other schools.

Terrorism
While no significant events of terrorism have occurred, the possibility of a terrorist act still exists. The school has written an active shooter plan, to help protect students in that event. No further analysis is available on the plan due to the sensitivity of the material. The district also keeps track of nationwide events, because of the observed grouping phenomenon in school shooting events. The district has a safety committee that meets annually to review threat thresholds, protocols and procedures. The Board meets annually for policy review regarding safety. The district contracts with an external vendor for cyber security threats.

Tornadoes and High Winds
While none of the schools have safe rooms, the school district does work to have tornado drills twice a year. Sheltering locations include areas without windows, bathrooms, hallways, or gymnasiums. To assist in awareness, each school has a weather radio for local severe weather updates. Warning sirens can be heard at all school facilities.

Mitigation Strategy

Completed Mitigation and Strategic Actions

MITIGATION ACTION	FACILITY MONITORING
DESCRIPTION	Install security cameras in/around critical facilities and key infrastructure.
HAZARD(S)	Terrorism
STATUS	Completed

MITIGATION ACTION	FACILITY SECURITY
DESCRIPTION	Install access-card locks on all doors throughout the school district. This objective is completed at the junior high level, and partially complete at the high school level. This is not currently implemented at the elementary schools.
HAZARD(S)	Terrorism
STATUS	Completed

MITIGATION ACTION	SCHOOL CONTINUITY PLAN
DESCRIPTION	Develop continuity plans for critical services in order to increase resiliency after a hazardous event
HAZARD(S)	All hazards
STATUS	Completed

Continued Mitigation and Strategic Actions

MITIGATION ACTION	EMERGENCY EXERCISE: HAZARDOUS SPILL
DESCRIPTION	Utilize training to prepare for potential explosions or hazardous spills.
HAZARD(S)	Hazardous Materials - Transportation
ESTIMATED COST	$5,000
FUNDING	General Budget
TIMELINE	1-2 years
PRIORITY	Medium
LEAD AGENCY	Superintendent's Office
STATUS	Training takes place annually.

IRRIGATION DISTRICTS PROFILE

North Platte NRD
Hazard Mitigation Plan 2021

District Planning Teams

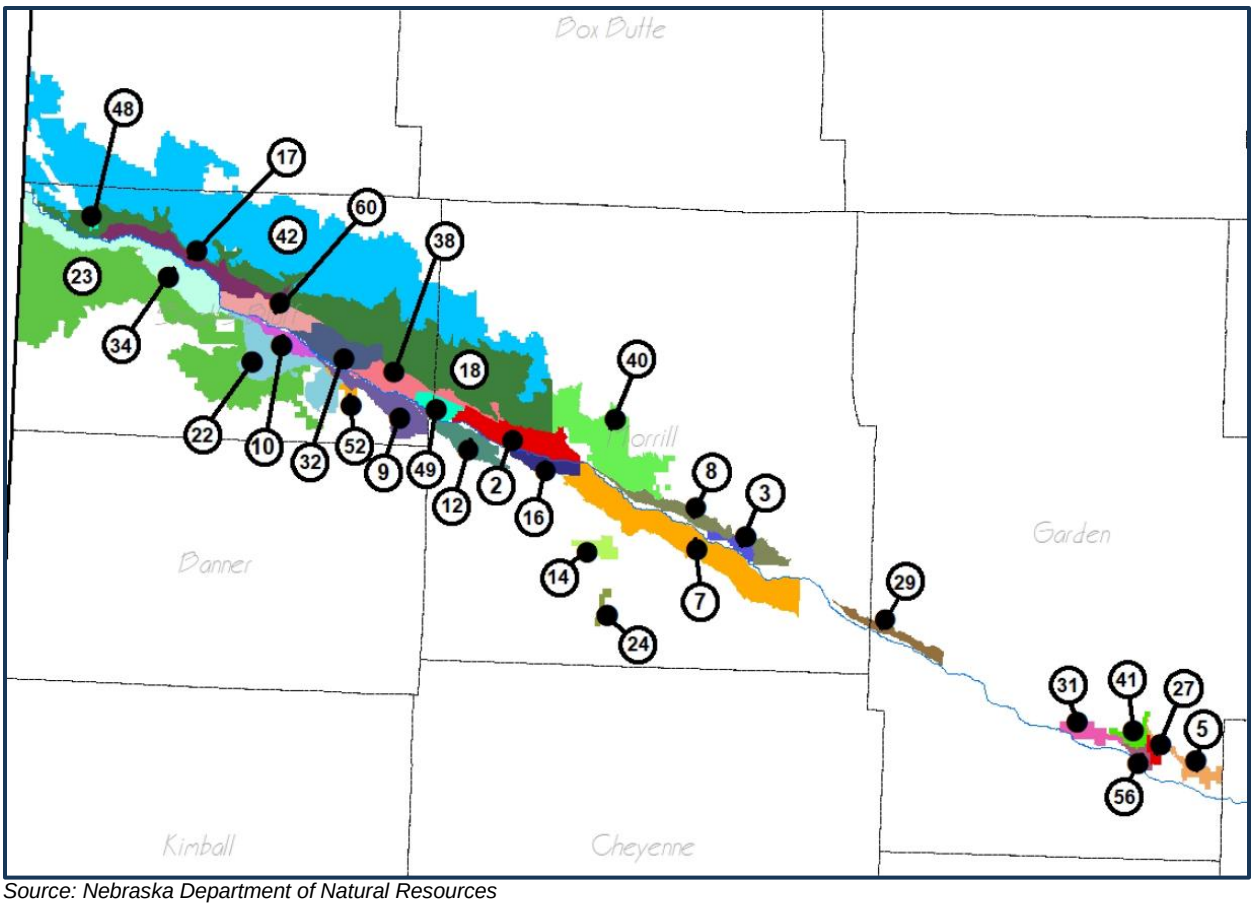
Table ID.1: District Planning Team Members

PARTICIPATING IRRIGATION DISTRICTS	NAME	TITLE
ALLIANCE IRRIGATION DISTRICT	Amanda Kepler	Secretary-Treasurer
ALLIANCE IRRIGATION DISTRICT	Bill Pierce	Chairman
BRIDGEPORT IRRIGATION DISTRICT	Kay Anderson	Secretary
CASTLE ROCK IRRIGATION DISTRICT	Steve Jobman	Chairman
CASTLE ROCK IRRIGATION DISTRICT	Jody Fiscus	Vice President
ENTERPRISE IRRIGATION DISTRICT	Scott Hort	Assistant Manager
ENTERPRISE IRRIGATION DISTRICT	Rick Preston	Manager
FARMERS IRRIGATION DISTRICT	Kevin Adams	Manager
GERING-FORT LARAMIE IRRIGATION DISTRICT	Scott Hort	Assistant Manager
HOOPER IRRIGATION DISTRICT	Bruce Burdick	Member
LISCO IRRIGATION DISTRICT	Craig Shaffer	President
MIDLAND-OVERLAND CANAL COMPANY	Joe Van Newkirk	Director
MINATARE MUTUAL CANAL AND IRRIGATION COMPANY	Gary Lofing	Manager-President
MINATARE MUTUAL CANAL AND IRRIGATION COMPANY	Val Baker	Secretary
MITCHELL IRRIGATION DISTRICT	Pete Unrein	President
MITCHELL IRRIGATION DISTRICT	Nick Lara	Secretary/Treasurer
NORTHPORT IRRIGATION DISTRICT	Robert Landrigan	Vice-President
PATHFINDER IRRIGATION DISTRICT	Rick Miller	Assistant Manager

Location

Figure ID.1 shows the location of all the irrigation districts in the planning area.

Figure ID.1: Irrigation Districts in the Planning Area



Source: Nebraska Department of Natural Resources

Table ID.2: Irrigation Districts in the Planning Area

MAP #	IRRIGATION DISTRICT	MAP #	IRRIGATION DISTRICT
2	Alliance Irrigation District	**27**	Hooper Irrigation District
3	Beerline Canal Company	**29**	Lisco Irrigation District
5	Blue Creek Irrigation District	**31**	Midland-Overland Canal Company
7	Bridgeport Irrigation District	**32**	Minatare Mutual Canal and Irrigation District
8	Browns Creek Irrigation District	**34**	Mitchell Irrigation District
9	Castle Rock Irrigation District	**38**	Nine Mile Irrigation District
10	Central Irrigation District	**40**	Northport Irrigation District
12	Chimney Rock Irrigation District	**41**	Paisley Irrigation District
14*	Court House Rock Company	**42**	Pathfinder Irrigation District
16	Empire Canal Company	**48**	Sheep Creek Lateral Company
17	Enterprise Irrigation District	**49**	Short Line Irrigation District
18	Farmers Irrigation District	**52**	Steamboat Irrigation District
22	Gering Irrigation District	**52**	Union Irrigation District
23	Gering-Fort Laramie Irrigation District	**56**	Winters Creek Canal Company
24*	Greenwood Creek Mutual Irrigation Company	**60**	Midland-Overland Canal Company

**Inactive*

Services

The primary role of irrigation districts is to serve farmers in the area with surface water irrigation. Irrigation districts within the North Platte Natural Resources District maintain canals in both Nebraska and eastern Wyoming. The table below shows the acres covered and population served by each participating irrigation district.

Table ID.3: Acres Covered and Population Served

PARTICIPATING IRRIGATION DISTRICT	ACRES COVERED	POPULATION SERVED
ALLIANCE IRRIGATION DISTRICT	5,500 acres	25 landowners
BRIDGEPORT IRRIGATION DISTRICT	6,580 acres	40 landowners
CASTLE ROCK IRRIGATION DISTRICT	6,000 acres	50 landowners
ENTERPRISE IRRIGATION DISTRICT	4,362 acres	175 landowners
FARMERS IRRIGATION DISTRICT	61,000	450 landowners
GERING-FORT LARAMIE IRRIGATION DISTRICT	54,841 acres	300 landowners
HOOPER IRRIGATION DISTRICT	832 acres	10 landowners
LISCO IRRIGATION DISTRICT	2,629.3 acres	18 landowners
MIDLAND-OVERLAND CANAL COMPANY	1,640	3 landowners
MINATARE MUTUAL CANAL AND IRRIGATION COMPANY	6,720 acres	27 landowners
MITCHELL IRRIGATION COMPANY	13,300 acres	70 landowners
NORTHPORT IRRIGATION DISTRICT	16,169.1 acres	93 landowners
PATHFINDER IRRIGATION DISTRICT	102,800 acres	865 landowners

Future Development Trends

Alliance Irrigation District

There have been no changes for the irrigation district in the past five years. In the next five years, there are plans to install new head gates at the point of withdrawal from the creek. Along with new headgates, high water warning electronics will be installed to prevent washout and safety rails will be added on catwalks. These updates will make the district more resilient to flooding, dam failure, and severe thunderstorm events.

Bridgeport Irrigation District

Over the past five years, continual maintenance has been done on the main canal, ditches, dam, and diversion boxes. This will continue in the next five years. No other developments are planned at this time.

Castle Rock Irrigation District
Over the past five years, the district made repairs to the dirt section of the diversion dam due to flooding. There are no planned developments in the next five years at this time.

Enterprise Irrigation District
Over the past five years, there have been no changes within the irrigation district. No developments are planned for at this time.

Farmers Irrigation District
Over the past five years, the district has been replacing open laterals with pvc pipe and replacing old structures. These updates make the district more resilient to flooding, dam failure, chemical spills, and severe thunderstorm events. There are currently no planned developments at this time.

Gering-Fort Laramie Irrigation District
Every year the district maintains its open ditches and tries to install at least one mile of underground pipe to conserve water. These measures help the district to become more resilient to flooding, dam failure, severe thunderstorms, tornadoes and high winds, and drought.

Hooper Irrigation District
There have been no changes over the past five years. In the next five years, the district would like to start replacing the dirt canal with pipeline.

Lisco Irrigation District
There have been no changes over the past five years. In the next five years, the district would like to make substantial repairs to the diversion dam or replace it entirely. This would help the district become more resilient to dam failure and flooding.

Midland-Overland Canal Company
Over the past five years, there have been no changes within the irrigation district. No developments are planned for at this time.

Minatare Mutual Canal and Irrigation Company
Over the past five years, infrastructure has been maintained. This includes cleaning the canal, new headgates, and new concrete for headgates. In addition, repairs to the sand diversion dam have been made. In the next five years, sand dam work with natural rock for the control structure is planned. Total Cost is estimated at $207,400.

Mitchell Irrigation District
The irrigation district was damaged, and the floor of the drain had to be repaired. In addition, the canal is maintained every winter and issues are fixed. The district is currently in the process of a re-sloping project.

Northport Irrigation District
There have been no changes over the past five years. In the next five years, there are plans to bury lateral lines for more water efficiency. This will help the district become more resilient to drought.

Pathfinder Irrigation District
Over the past five years, the district has installed underground pipelines to help eliminate some of the loss of water due to the open laterals. In addition, canals and structures are continually

maintained and repaired to lengthen life expectancy. All of these activities will continue to be done in the next five years. In 2020, the district repaired the Spring Canyon Flume by sandblasting and recoating cracks in the structure.

Staffing

Each irrigation district is supervised by a board of directors who will oversee the implementation of hazard mitigation projects. The number of staff each participating district is listed below.

Table ID.4: Staffing

PARTICIPATING IRRIGATION DISTRICT	NUMBER OF STAFF
ALLIANCE IRRIGATION DISTRICT	5 staff
BRIDGEPORT IRRIGATION DISTRICT	3 staff
CASTLE ROCK IRRIGATION DISTRICT	3 staff
ENTERPRISE IRRIGATION DISTRICT	7 staff
FARMERS IRRIGATION DISTRICT	26 staff
GERING-FORT LARAMIE IRRIGATION DISTRICT	22 staff
HOOPER IRRIGATION DISTRICT	3 staff
LISCO IRRIGATION DISTRICT	4 staff
MIDLAND-OVERLAND CANAL COMPANY	2 staff
MINATARE MUTUAL CANAL AND IRRIGATION COMAPANY	7 staff
MITCHELL IRRIGATION DISTRICT	5 staff
NORTHPORT IRRIGATION DISTRICT	10 staff
PATHFINDER IRRIGATION DISTRICT	29 staff

Capability Assessment

Due to the unique structure of irrigation districts, the typical capability assessment table was not used. The following table summarizes each district's overall capability.

Table ID.5: Overall Capability

PARTICIPATING IRRIGATION DISTRICT	FINANCIAL RESOURCES TO IMPLEMENT MITIGATION PROJECTS	STAFF/EXPERTISE TO IMPLEMENT PROJECTS	PUBLIC SUPPORT TO IMPLEMENT PROJECTS	TIME TO DEVOTE TO HAZARD MITIGATION
ALLIANCE IRRIGATION DISTRICT	Limited	Limited	High	Moderate
BRIDGEPORT IRRIGATION DISTRICT	Limited	Limited	Limited	Limited
CASTLE ROCK IRRIGATION DISTRICT	Limited	Moderate	Moderate	Moderate
ENTERPRISE IRRIGATION DISTRICT	Limited	Moderate	Moderate	Limited
FARMERS IRRIGATION DISTRICT	Limited	High	Limited	Moderate

PARTICIPATING IRRIGATION DISTRICT	FINANCIAL RESOURCES TO IMPLEMENT MITIGATION PROJECTS	STAFF/EXPERTISE TO IMPLEMENT PROJECTS	PUBLIC SUPPORT TO IMPLEMENT PROJECTS	TIME TO DEVOTE TO HAZARD MITIGATION
GERING-FORT LARAMIE IRRIGATION DISTRICT	Moderate	High	Moderate	Moderate
HOOPER IRRIGATION DISTRICT	Limited	Limited	High	Moderate
LISCO IRRIGATION DISTRICT	Limited	Limited	Limited	Limited
MIDLAND-OVERLAND CANAL COMPANY	Moderate	Moderate	Moderate	Moderate
MINATARE MUTUAL CANAL AND IRRIGATION COMPANY	Limited	Limited	Moderate	Limited
MITCHELL IRRIGATION DISTRICT	Moderate	Moderate	Moderate	Moderate
NORTHPORT IRRIGATION DISTRICT	Limited	Limited	Limited	Limited
PATHFINDER IRRIGATION DISTRICT	Limited	Limited	Moderate	Limited

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 planning documents (e.g., annual budget), 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 table below shows who will be responsible for reviewing the profile, the frequency of review, and how the public will be involved.

Table ID.6: Plan Maintenance

PARTICIPATING IRRIGATION DISTRICT	REVIEWERS	FREQUENCY	PUBLIC INVOLVEMENT
ALLIANCE IRRIGATION DISTRICT	Board Members	Annually	Board meeting
CASTLE ROCK IRRIGATION DISTRICT	Board Members	Bi-annually	None
BRIDGEPORT IRRIGATION DISTRICT	Board of Directors	Annually	Local newspaper, Letters to residents
ENTERPRISE IRRIGATION DISTRICT	Manager, Assistant Manager, Board Members	Annually	Board meetings, Letters to landowners

PARTICIPATING IRRIGATION DISTRICT	REVIEWERS	FREQUENCY	PUBLIC INVOLVEMENT
FARMERS IRRIGATION DISTRICT	Manager, Assistant Manager, Board Members	Annually	Board meeting
GERING-FORT LARAMIE IRRIGATION DISTRICT	Manager, Assistant Manager, Board Members	Annually	Board meetings, Letters to landowners
HOOPER IRRIGATION DISTRICT	Board Members	Bi-annually	Board meeting
LISCO IRRIGATION DISTRICT	Board, Ditch Rider, Landowners	Annually	Board meeting
MIDLAND-OVERLAND CANAL COMPANY	President, Secretary-Treasurer	Annually	None
MINATARE MUTUAL CANAL AND IRRIGATION COMPANY	President, Vice President, Secretary, Board Members	Annually	Local newspaper, Letters to residents, Board Meeting
MITCHELL IRRIGATION COMPANY	Board Members	Bi-annually	Board meeting
NORTHPORT IRRIGATION DISTRICT	Vice President	Annually	Local newspaper, Letters to residents
PATHFINDER IRRIGATION DISTRICT	Management	Annually	Website and text notifications

Plan Integration

Most irrigation districts within the planning area do not have any formal response plans for emergency situations or plans that discuss hazards. However, districts can open or close their diversion dam during an emergency. In any future planning mechanisms, the irrigation districts will work to integrate the goals and objectives of the hazard mitigation plan within them as appropriate.

Community Lifelines

Critical Facilities

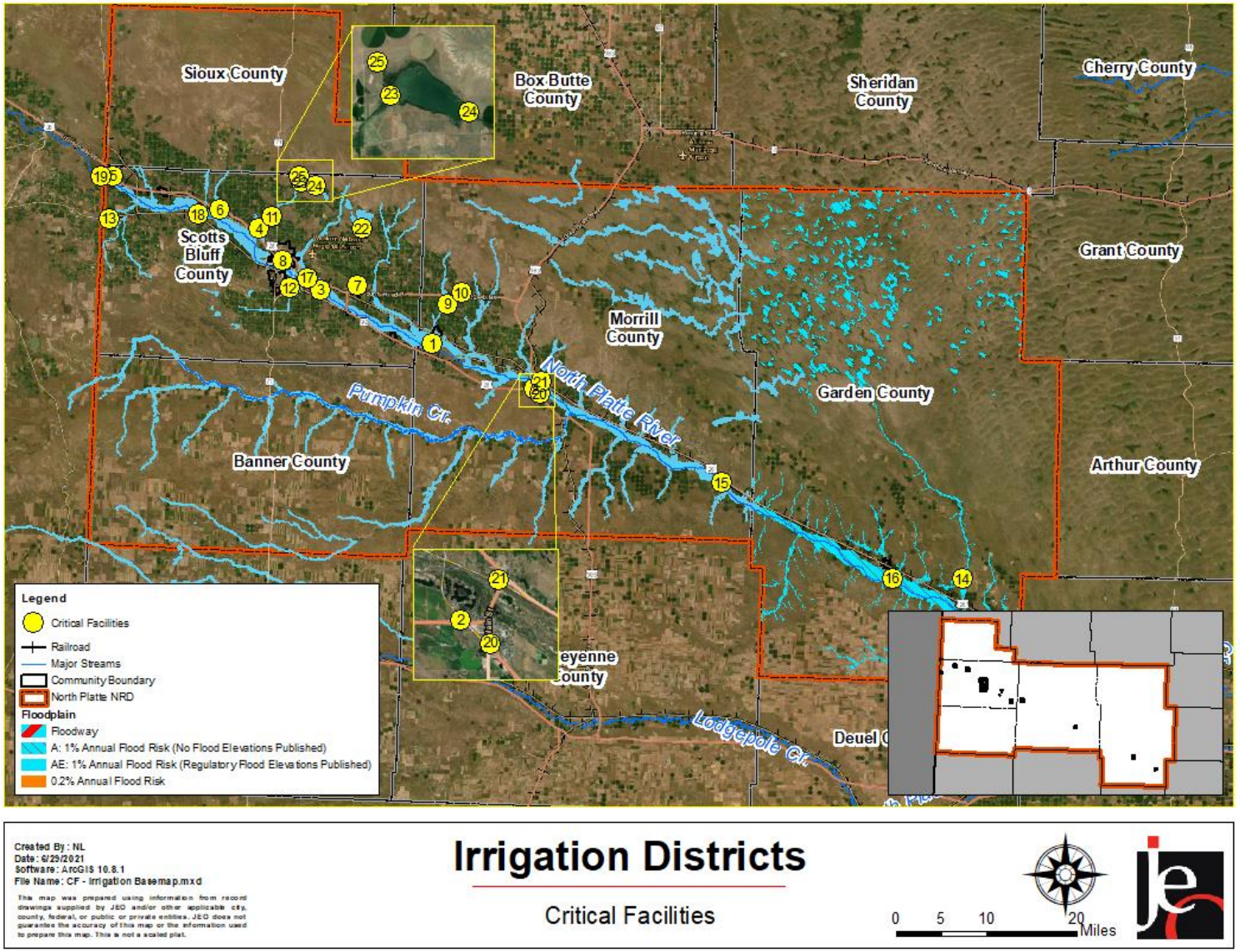
Each participating district identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster, per the FEMA Community Lifelines guidance. Critical facilities were identified during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

Table ID.7: Critical Facilities

CF #	NAME	COMMUNITY SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Alliance Irrigation District – Diversion Dam	N	N	Y
2	Bridgeport Irrigation District – Shop	N	N	N
3	Castle Rock Irrigation District – Diversion Dam	N	N	Y
4	Enterprise Irrigation District – Shop	N	N	N
5	Farmers Irrigation District – Headgates	N	Y	Y
6	Farmers Irrigation District – Mitchell Shop	N	N	N
7	Farmers Irrigation District – Minatare Shop	N	N	N
8	Farmers Irrigation District – Office	N	N	N
9	Farmers Irrigation District – Bayard Shop	N	N	N
10	Farmers Irrigation District – Red Willow Spillway	N	N	N
11	Farmers Irrigation District – Winter Creek Spillway	N	N	Y
12	Gering-Fort Laramie Irrigation District – Main Office/Shop	N	N	N
13	Gering-Fort Laramie Irrigation District – Shop	N	N	N
14	Hooper Irrigation District – Diversion Dam	N	N	Y
15	Lisco Irrigation District – Diversion Dam	N	N	Y
16	Midland-Overland Canal Company – Diversion Dam	N	N	Y
17	Minatare Mutual Canal and Irrigation Company – Diversion Dam	N	N	Y
18	Mitchell Irrigation District – Office	N	N	Y
19	Mitchell Irrigation District – Diversion Dam House	N	N	Y

CF #	NAME	COMMUNITY SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
20	Northport Irrigation District – Main Office	N	N	N
21	Northport Irrigation District – Shop Building	N	N	N
22	Pathfinder Irrigation District – Lake Minatare Dam	N	N	Y
23	Pathfinder Irrigation District – Lake Alice Dam 1	N	N	Y
24	Pathfinder Irrigation District – Lake Alice Dam 1.5	N	N	Y
25	Pathfinder Irrigation District – Automated Equipment at Diversion at High Line	N	N	N

Figure ID.2: Critical Facilities



**Floodplains in Banner County and Morrill County are based off a HAZUS created floodplain.*

Historical Occurrences

See the county profiles for historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

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. Table ID.8 shows the hazards prioritized by each irrigation district.

Dam Failure

Irrigation districts operate diversion dams that divert water into their canals. Failure of the diversion dams would lead to damages to the canal and the irrigation district's consumers. The district would also lose the ability to divert water, which would impact irrigation and cause crop loss. Failure of any upstream dams could also lead to major flooding and potentially damage the diversion dam. The Lisco Irrigation District indicated that their diversion dam is already in a weakened condition. Without it they would have to hire heavy machinery and an operator in order to get water into the ditch. The Minatare Mutual Canal and Irrigation Company has had their sand diversion dam wash out for the last eight years due to high water levels on the North Platte River. As the river channel continues to get deeper, it is becoming more expensive to replace any washouts. To help reduce this from happing the company has moved to a different location in the right of way and building the dam to the tallest regulations allowed.

Drought

Drought can be very impactful for irrigation districts. During periods of drought, there is likely to be less surface water that is able to be diverted and provided to irrigators. This would cause crop loss across the districts.

Extreme Heat

Extreme heat can impact the efficiency of a district's ability to deliver water. Heat directly impacts delivery to loss ratio that the districts are forced to absorb. This can affect the availability of water to the consumers and can potentially cause crop loss.

Flooding

Flooding can cause erosion of canal sides which causes flow restrictions or lead to flooding of surrounding fields if not repaired. In addition, flooding can damage diversion dams and equipment housed there. The Alliance Irrigation District identified a flooding event in July 2014 that washed out part of the canal. Flooding caused $200,000 in damages to the dirt section of the Castle Rock Irrigation District diversion dam. In 1987 eight inches of rain washed out part of the Farmers Irrigation District canal near Minatare. Northport Irrigation District has several siphon tubes in the canal. Flooding in 1997, 2007, and 2010 caused top damage to on the siphon tubes. If one of the siphon tubes were to fail it would compromise the entire district and could cause damage to homes, Highway 385, and railroad bridges. Replacement of one tube could cost up to $1,000,000.

Grass/Wildfire
During a nearby grass/wildfire, water from the irrigation district may be used to help in fire response and suppression. This could cause there to be less water for irrigators leading to crop loss.

Hazardous Materials – Fixed Site
If hazardous materials enter the canal system from a chemical spill, it could contaminate the water causing damage to crops. This would likely cause the irrigation district to shut down until the contaminant could be removed.

Levee Failure
Failure of any upstream levee could lead to major flooding and potentially damage the diversion dams for the irrigation districts.

Public Health Emergency
The recent Covid-19 pandemic brought this hazard to the forefront for irrigation districts. District staff can be considered essential workers and therefore required to continue their normal duties in order to provide irrigation water to consumers. An outbreak within the staff could make it difficult for a district to provide typical services. The Pathfinder Irrigation District experienced some infections and had to implement social distancing and other protections for staff.

Severe Thunderstorms
Severe thunderstorms can include heavy rain which could cause flooding issues and erosion of canal sides. This erosion can restrict flows or cause flooding of surrounding fields if not repaired. High winds during severe thunderstorms can also cause debris to get into the canal.

Tornadoes and High Winds
High winds can blow trees or other debris into the canal. This can cause flow restrictions and possibly lead to flooding of surrounding fields. In 2017 high winds caused debris to go into the Farmers Irrigation District canal and plugged up bridges. This caused the district to shut down until the debris was removed.

Table ID.8: Hazard Prioritization

PARTICIPATING IRRIGATION DISTRICT	ANIMAL AND PLANT DISEASE	DAM FAILURE	DROUGHT	EARTHQUAKES	EXTREME HEAT	FLOODING	GRASS/WILDFIRE	HAZARDOUS MATERIALS – FIXED SITES	HAZARDOUS MATERIALS - TRANSPORTATION	LEVEE FAILURE	PUBLIC HEALTH EMERGENCY	SEVERE THUNDERSTORMS	SEVERE WINTER STORMS	TERRORISM	TORNADOES AND HIGH WINDS
ALLIANCE IRRIGATION DISTRICT			X			X	X					X			
BRIDGEPORT IRRIGATION DISTRICT		X	X			X						X			X
CASTLE ROCK IRRIGATION DISTRICT		X	X			X				X		X			
ENTERPRISE IRRIGATION DISTRICT		X				X				X		X			X
FARMERS IRRIGATION DISTRICT		X	X			X		X				X			X
GERING-FORT LARAMIE IRRIGATION DISTRICT		X				X						X			X
HOOPER IRRIGATION DISTRICT			X									X			
LISCO IRRIGATION DISTRICT		X				X						X			

PARTICIPATING IRRIGATION DISTRICT	ANIMAL AND PLANT DISEASE	DAM FAILURE	DROUGHT	EARTHQUAKES	EXTREME HEAT	FLOODING	GRASS/WILDFIRE	HAZARDOUS MATERIALS – FIXED SITES	HAZARDOUS MATERIALS - TRANSPORTATION	LEVEE FAILURE	PUBLIC HEALTH EMERGENCY	SEVERE THUNDERSTORMS	SEVERE WINTER STORMS	TERRORISM	TORNADOES AND HIGH WINDS
MIDLAND-OVERLAND CANAL COMPANY		X										X			X
MINATARE MUTUAL CANAL AND IRRIGATION COMPANY		X				X						X			
MITCHELL IRRIGATION DISTRICT			X			X						X			X
NORTHPORT IRRIGATION DISTRICT		X	X			X						X			X
PATHFINDER IRRIGATION DISTRICT		X	X		X	X					X	X			

Mitigation Strategy

Most irrigation districts have limited financial resources with annual budgets limited to maintaining current facilities and equipment. As such, each district will continue to leverage existing relationships with local, county, state, and federal agencies in the implementation of mitigation projects.

Mitigation and Strategic Actions

Alliance Irrigation District

MITIGATION ACTION	HEADGATE/FLOOD CONTROL
DESCRIPTION	Purchase and install one or more headgates to provide improved flood control.
HAZARD(S)	Flooding
IRRIGATION DISTRICT	Alliance Irrigation District
ESTIMATED COST	$52,000 for one/$100,000 for two
FUNDING	North Platte NRD
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Alliance Irrigation District Board, North Platte NRD
STATUS	Not Started

Bridgeport Irrigation District

MITIGATION ACTION	BANK STABILIZATION
DESCRIPTION	Stabilize banks along streams and rivers. This may include, but is not limited to: reducing bank slope, addition of riprap, installation of erosion control materials/fabrics.
HAZARD(S)	Flooding
IRRIGATION DISTRICT	Bridgeport Irrigation District
ESTIMATED COST	$15,000
FUNDING	Irrigation District General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Bridgeport Irrigation District Board
STATUS	The district routinely performs maintenance on the diversion dam.

Castle Rock Irrigation District

MITIGATION ACTION	REDESIGN DIVERSION STRUCTURE AND INSTALL AUTOMATED DIVERSION AND SPILL GATES
DESCRIPTION	Redesign Diversion Structure and Install Automated Diversion and Spill Gates
HAZARD(S)	Dam Failure, Flooding
IRRIGATION DISTRICT	Castle Rock Irrigation District
ESTIMATED COST	$900,000
FUNDING	Irrigation District General Fund
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Castle Rock Irrigation District Board, North Platte NRD
STATUS	Not Started

Enterprise Irrigation District

MITIGATION ACTION	INSTALL UNDERGROUND PIPELINES
DESCRIPTION	Install underground pipelines
HAZARD(S)	Drought/Flooding
IRRIGATION DISTRICT	Enterprise Irrigation District
ESTIMATED COST	To be determined
FUNDING	Loan from local bank
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Enterprise Irrigation District Board
STATUS	Not Started

MITIGATION ACTION	REPLACE DIVERSION DAM
DESCRIPTION	Replace Diversion Dam
HAZARD(S)	Dam Failure, Flooding
IRRIGATION DISTRICT	Enterprise Irrigation District
ESTIMATED COST	$3 million
FUNDING	Loan from local bank
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Enterprise Irrigation District Board
STATUS	Not Started

Farmers Irrigation District

MITIGATION ACTION	EMERGENCY SPILLWAY
DESCRIPTION	Build a new emergency spillway
HAZARD(S)	Flooding, Drought
IRRIGATION DISTRICT	Farmers Irrigation District
ESTIMATED COST	$250,000
FUNDING	Irrigation District General Fund, Bureau of Reclamation
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Farmers Irrigation District Board
STATUS	Not started

Gering-Fort Laramie Irrigation District

MITIGATION ACTION	INSTALL UNDERGROUND PIPELINES
DESCRIPTION	Install underground pipelines
HAZARD(S)	Drought/Flooding
IRRIGATION DISTRICT	Gering-Fort Laramie Irrigation District
ESTIMATED COST	$20,000-$100,000
FUNDING	Irrigation District General Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Gering-Fort Laramie Irrigation District Board
STATUS	Not Started

MITIGATION ACTION	MAINTAIN AND REHAB DISTRICT SIPHONS
DESCRIPTION	Maintain and Rehabilitate district siphons
HAZARD(S)	Drought/Flooding
IRRIGATION DISTRICT	Gering-Fort Laramie Irrigation District
ESTIMATED COST	$100,000-$300,000
FUNDING	Irrigation District General Fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Gering-Fort Laramie Irrigation District Board
STATUS	Not Started

MITIGATION ACTION	TOTAL SYSTEM MAINTENANCE
DESCRIPTION	Perform maintenance on the entire irrigation ditch system
HAZARD(S)	Drought/Flooding
IRRIGATION DISTRICT	Gering-Fort Laramie Irrigation District
ESTIMATED COST	$20,000-$50,000
FUNDING	Irrigation District General Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Gering-Fort Laramie Irrigation District Board
STATUS	Not Started

Hooper Irrigation District

MITIGATION ACTION	INSTALL UNDERGROUND PIPELINES
DESCRIPTION	Install underground pipelines
HAZARD(S)	Drought/Flooding
IRRIGATION DISTRICT	Hooper Irrigation District
ESTIMATED COST	To be determined
FUNDING	Tax Levies
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Hooper Irrigation District Board
STATUS	Not Started

Lisco Irrigation District

MITIGATION ACTION	REPAIR/REPLACE DIVERSION DAM
DESCRIPTION	Repair/Replace Diversion Dam
HAZARD(S)	Dam Failure, Flooding
IRRIGATION DISTRICT	Lisco Irrigation District
ESTIMATED COST	$75,000
FUNDING	Tax collected from landowners in irrigation district
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Lisco Irrigation District Board
STATUS	Not Started

Midland-Overland Canal Company

MITIGATION ACTION	HEADGATE
DESCRIPTION	Purchase and install a headgate to provide improved flood control.
HAZARD(S)	Flooding
IRRIGATION DISTRICT	Midland-Overland Canal Company
ESTIMATED COST	$35,000
FUNDING	Irrigation District General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Midland-Overland Canal Company, North Platte NRD
STATUS	Not Started

Minatare Mutual Canal and Irrigation Company

MITIGATION ACTION	DIVERSION DAM IMPROVEMENTS
DESCRIPTION	Perform improvements to the diversion dam such as adding natural rock, cleaning channel to headgate, breaking up sand, etc.
HAZARD(S)	Flooding
IRRIGATION DISTRICT	Minatare Mutual Canal and Irrigation Company
ESTIMATED COST	$207,401
FUNDING	Farmers' operation and maintenance fees
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Minatare Mutual Canal and Irrigation Company, Paul Reed Construction
STATUS	Channel has been cleaned and sand was bulldozed in May 2021.

Mitchell Irrigation District

MITIGATION ACTION	CANAL RE-SLOPING
DESCRIPTION	Perform canal re-sloping to provide better flow
HAZARD(S)	Drought/Flooding
IRRIGATION DISTRICT	Mitchell Irrigation District
ESTIMATED COST	$10,000+
FUNDING	Irrigation District General Fund
TIMELINE	Ongoing
PRIORITY	Medium
LEAD AGENCY	Mitchell Irrigation District Board
STATUS	The project has begun and is performed annually during the winter.

MITIGATION ACTION	DIVERSION DAM AND HEADGATE IMPROVEMENTS
DESCRIPTION	Perform improvements on the diversion dam and headgates when they experience damage.
HAZARD(S)	Drought/Flooding
IRRIGATION DISTRICT	Mitchell Irrigation District
ESTIMATED COST	$20,000+
FUNDING	Irrigation District General Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Mitchell Irrigation District Board
STATUS	Not started.

Northport Irrigation District

MITIGATION ACTION	BURY PIPE FOR PROBLEM LATERALS
DESCRIPTION	Bury pipe for problematic laterals
HAZARD(S)	Flooding
IRRIGATION DISTRICT	Northport Irrigation District
ESTIMATED COST	To be determined
FUNDING	Irrigation District General Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Northport Irrigation District
STATUS	Not Started

Pathfinder Irrigation District

MITIGATION ACTION	CREATE A DISTRICT-WIDE MASTER PLAN TO PRIORITIZE ALL FLOOD RELATED PROJECTS
DESCRIPTION	Identify potential flooding sources and flood-vulnerable areas. Explore solutions and prioritize.
HAZARD(S)	Flooding
IRRIGATION DISTRICT	Pathfinder Irrigation District
ESTIMATED COST	$2,000
FUNDING	North Platte NRD, local counties and communities
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Pathfinder Irrigation District Board
STATUS	Currently working to identify flood-vulnerable areas, but a formal plan has not been started.

MITIGATION ACTION	DEVELOP A DROUGHT MANAGEMENT PLAN
DESCRIPTION	Work with relevant stakeholders to develop a drought management plan. The plan would identify water monitoring protocols, outline drought responses, identify opportunities to reduce water consumption, and establish the jurisdictional management procedures.
HAZARD(S)	Drought
IRRIGATION DISTRICT	Pathfinder Irrigation District
ESTIMATED COST	$2,000
FUNDING	North Platte NRD, nearby irrigation districts
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Pathfinder Irrigation District Board
STATUS	Water monitoring procedures are in place, but a formal drought plan has not yet started.

MITIGATION ACTION	DRAINAGE STUDY/ STORM WATER MASTER PLAN
DESCRIPTION	Preliminary drainage ditches and assessments can be conducted to identify and prioritize design improvements to address site specific localized flooding/drainage issues to reduce and/or alleviate flooding. Storm water master plans can be developed to help identify storm water problem areas and potential drainage improvements.
HAZARD(S)	Flooding
IRRIGATION DISTRICT	Pathfinder Irrigation District
ESTIMATED COST	$5,000
FUNDING	North Platte NRD, local counties
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Pathfinder Irrigation District Board
STATUS	Currently working to identify flood-vulnerable areas, but a formal plan has not been started.

MITIGATION ACTION	EMERGENCY EXERCISE: HAZARDOUS SPILL
DESCRIPTION	Utilize exercise to prepare for potential explosions or hazardous spills. Ensure that nearby businesses and residents have appropriate plans in place.
HAZARD(S)	Hazardous Materials – Transportation
IRRIGATION DISTRICT	Pathfinder Irrigation District
ESTIMATED COST	$3,000
FUNDING	North Platte NRD, Union Pacific/BNSF railroads, nearby irrigation districts
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Pathfinder Irrigation District Board
STATUS	Not started

MITIGATION ACTION	GROUNDWATER/ IRRIGATION/WATER CONSERVATION MANAGEMENT PLAN AND PRACTICES
DESCRIPTION	Develop and implement a plan/ best management practices to conserve water use and reduce total use (high water use to low water use) and consumption of groundwater resources by citizens and irrigators of agricultural land during elongated periods of drought. Identify water saving irrigation projects, such as sprinkler systems with soil moisture sensors. Potential restrictions on water could include limitation on lawn watering, car washing, farm irrigation restrictions, or water sold to outside sources. Implement BMPs through water conservation practices such as changes in irrigation management, education on no-till agriculture and use of xeriscaping in communities.
HAZARD(S)	Drought
IRRIGATION DISTRICT	Pathfinder Irrigation District
ESTIMATED COST	$3,000
FUNDING	North Platte NRD
TIMELINE	Ongoing
PRIORITY	Medium
LEAD AGENCY	Pathfinder Irrigation District Board, North Platte NRD
STATUS	Ongoing

MITIGATION ACTION	MONITOR DROUGHT CONDITIONS
DESCRIPTION	Jurisdictions can establish specific drought monitoring protocols. These protocols will serve as triggers for implementing drought response actions.
HAZARD(S)	Drought
IRRIGATION DISTRICT	Pathfinder Irrigation District
ESTIMATED COST	$1,000
FUNDING	North Platte NRD, nearby irrigation districts
TIMELINE	Ongoing
PRIORITY	Medium
LEAD AGENCY	Pathfinder Irrigation District Board, North Platte NRD
STATUS	Ongoing

MITIGATION ACTION	REMOTE GATE CONTROLS FOR FLOOD EVENTS
DESCRIPTION	Often, during a flood event, the Pathfinder Irrigation District would like to open gates to divert flood waters onto spillways. However, staff members have struggled to gain access to these gates during flooding events due to flood waters on roadways. The district is interested in exploring the possibility of a remote gate control, to control the gates without being physically present.
HAZARD(S)	Flooding
IRRIGATION DISTRICT	Pathfinder Irrigation District
ESTIMATED COST	$50,000
FUNDING	Irrigation District General Fund
TIMELINE	Ongoing
PRIORITY	Medium
LEAD AGENCY	Pathfinder Irrigation District Board, North Platte NRD
STATUS	Not Started

School District Profile

MINATARE PUBLIC SCHOOLS

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

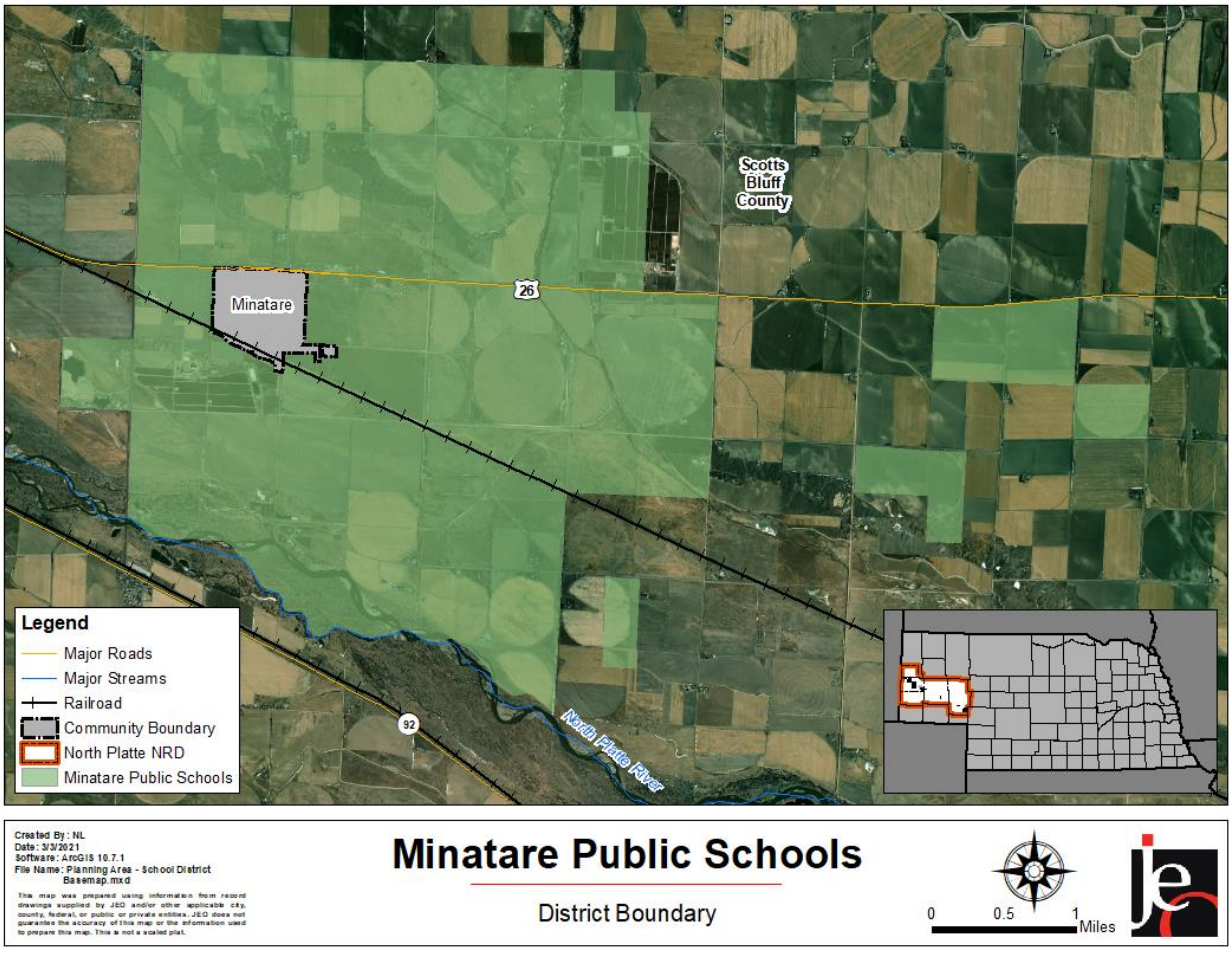
Table MPS.1: Minatare Public Schools Local Planning Team

NAME	TITLE	JURISDICTION
TIM CODY	Superintendent (Retiring)	Minatare Public Schools
ROCKY ROBBINS	Superintendent (New)	Minatare Public Schools

Location

Minatare Public Schools covers the southeast portion of Scotts Bluff County and serves three schools: Minatare Pre-Start Pre-School, Minatare Elementary School, and Minatare High School. The school district provides services to students in the community of Minatare and the rural areas surrounding it.

Figure MPS.1: District Boundary



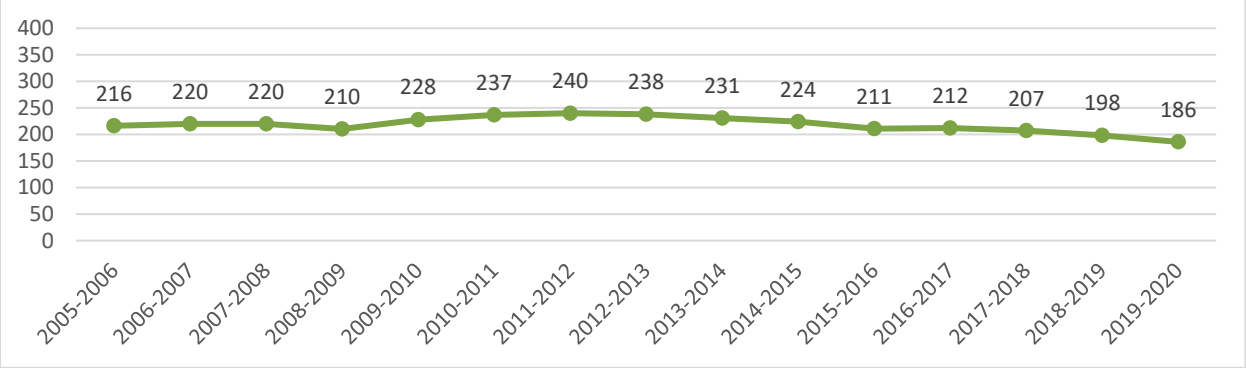
Transportation

Two major transportation corridors travel through the district: US HWY 26 and NE HWY 79E. The most traveled route is US HWY 26 with an average of 5,675 vehicles daily, 505 of which are trucks.[24] Two rail lines travel east to west through center of the district. A train derailment occurred within 10 miles of the district caused a chemical spill but did not trigger an evacuation. The district owns three buses and three vans. Approximately 20-30 students are bused to and from school daily. Transportation information is important to hazard mitigation plans because it suggests areas more at risk of transportation incidents.

Demographics

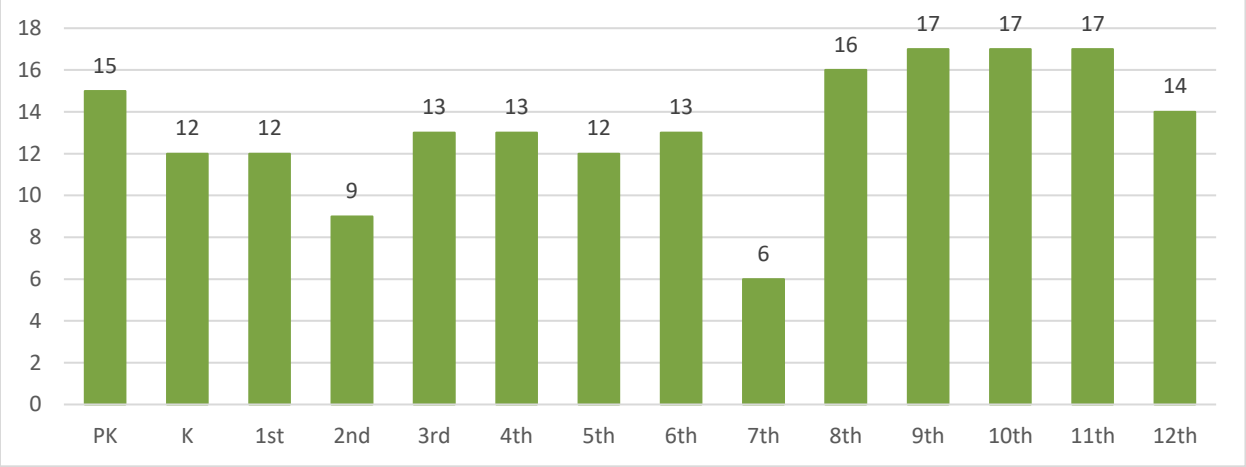
The following figure displays the historical student population trend starting with the 2005-06 school year and ending with the 2019-20 year. It indicates that the student population has been generally declining since 2012. There are 186 students enrolled in the district.[25] The district anticipates a decrease in student population in the coming years as community population declines.

Figure MPS.2: Student Population 2005-2020



Source: Nebraska Department of Education

Figure MPS.3: Number of Students by Grade, 2019-2020



Source: Nebraska Department of Education

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

25 Nebraska Department of Education. June 2021. "2019-2020 Education Profile for District: Minatare Public Schools." https://nep.education.ne.gov/snapshot.html#79-0002-000.

The figure on the previous page indicates that the largest number of students are in the 9th, 10th, and 11th grades. The lowest population of students are in 7th and 2nd grades. According to the Nebraska Department of Education (NDE), 84% of students receive either free or reduced priced meals at school, a much higher percentage than the state average of 46%. Additionally, over 11% of students are in the Special Education Program. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Table BCS.2: Student Statistics, 2019-2020

	SCHOOL DISTRICT	STATE OF NEBRASKA
FREE/REDUCED PRICED MEALS	84.41%	45.60%
SCHOOL MOBILITY RATE	16.37%	8.36%
ENGLISH LANGUAGE LEARNERS	5.85%	7.43%
SPECIAL EDUCATION STUDENTS	11.11%	15.48%

**Data is not available when less than 10 students.*
Source: Nebraska Department of Education[26]

Future Development Trends

Over the past five years, additions have been made to the Elementary building with a new HVAC system and a safe room was constructed at the JH/HS building. Transportation vehicles have also been upgraded. In the next five years, a new HVAC system is planned for the JH/HS building as well as some structural changes with rearranging and construction on office and classrooms within the building.

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 district that contain hazardous chemicals. Neither site is located near a school building and no spills have affected the district. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Critical Facilities

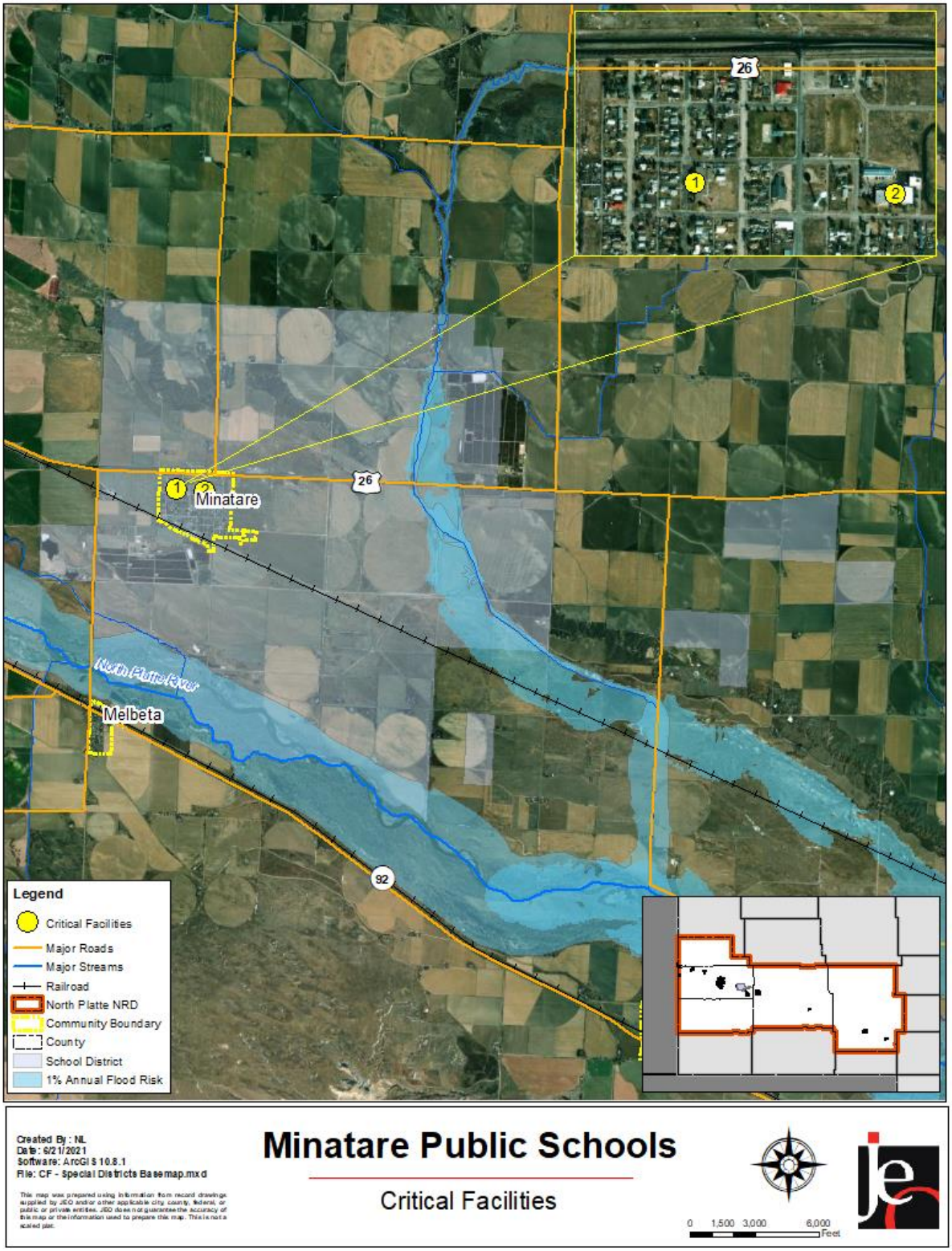
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during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

26 Nebraska Education Profile. "School Report Card." Accessed June 2021. http://nep.education.ne.gov/Home/.

Table MPS.3: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Minatare Elementary School	N	N	N
2	Minatare Jr/Sr High School	Y	Y	N

Figure MPS.4: Critical Facilities



Administration

The school district has a superintendent, two principals, and 44 staff. The school board is made up of a six-member panel. Staff are trained on emergency procedures during professional development workshops and yearly drills.

Capability Assessment

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the community's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. Students and families are educated about emergency procedures through practice drills and meetings.

Table MPS.4: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning Capability	Capital Improvements Plan/Long-Term Budget	No
	Continuity of Operations Plan	No
	Disaster Response Plan	Yes
	Other (if any)	
Administration & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Local staff who can assess community's vulnerability to hazards	Yes
	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	Applied for grants in the past	Yes
	Awarded grants in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Approved bonds in the past	Yes
	Flood Insurance	No
	Other (if any)	
Education & Outreach Capability	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.)	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	9 / year
	Tornado	2 / year
	Intruder	4 / year
	Bus evacuation	9 / year

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
	Evacuation	4 / year
	Other (if any)	

Table MPS.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	Limited
Time to devote to hazard mitigation	Limited

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 (e.g., 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 Superintendent. The local planning team will review the plan no less than annually and will include the public in the review and revision process through school website updates and public meeting invites.

Plan Integration

Minatare Schools maintain an Emergency Response Package, which was last updated in the 2020/2021 school year. It is recommended that future emergency plans incorporate the *2016 North Platte NRD Multi-Jurisdictional Hazard Mitigation Plan* to ensure redundancy in planning mechanisms. All of the following hazards are addressed in the Minatare Public School's Emergency Response Package:

- Fire
- Chemical Spill / Toxic Fumes
- Power Outage/Blackout
- Winter Storm
- Tornados
- Flooding
- Assaults
- Bomb Threats
- Intruder or Hostage Situation - Generally
- School Disturbances dealing with intruders
- Intruders/Students with Weapons
- Hostage Situation Protocol
- Confidentiality of Intruder/Hostage Protocols
- Disturbances after Hours/School Activities

- Death of a Student or Staff Member
- Vicious Animal on School Grounds

Annual plans and budgets do include maintenance and improvements to district properties consistent with the goals and mitigation measures identified in this plan. The district will continue to plan improvements and upgrades in future years through the annual budgeting process.

The school district has a Safety Plan which was last updated in 2016 and a Crisis Response Plan which was last updated in 2019 and will be updated annually. The plan includes topics on the standard response protocol, shelter in place protocols, evacuation drills, sheltering locations, and identifies opportunities for mitigation following an event. The plan also discusses tornadoes, fires, chemical spills, winter storms, blackouts, floods, and terrorism. The superintendent, principals, counselor, and other staff members are trained and familiar with the crisis response plan.

Historical Occurrences

See the Scotts Bluff County community profile for historical hazard events.

Hazard Prioritization

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

Drought

The biggest concern regarding drought is primarily related to the local economy. The local planning team worried that, in the case of a large-scale drought, residents may contest the school's tax levy, because they may not be able to afford it. While this has never occurred, the school district considers it a top concern. Drought could also impact families financially in the district and effect enrollment. The district is also surrounded by grassland with a lot of dry timber that could lead to wildfires in the area. To improve awareness, the high school has worked with the agriculture department to install a greenhouse in conjunction with their landscaping class. The landscaping course intends to teach high school students about drought tolerant crops and native plantings.

Extreme Heat

The high school does not have air conditioning, in a region where temperatures stay in the mid 90's until late September. Typically, as a response to this, the school may send students home early, if temperatures are deemed too hot. While school may be cancelled, after school practices typically continue. Coaches are trained annually on heat stroke and other heat related injuries, to prevent against significant injuries. The school is currently working on obtaining air conditioning; however, it is presently cost prohibitive. The elementary building had air conditioning installed in 2018. The district plans to install air conditioning in the high school building in the summer of 2022.

Hazardous Materials - Transportation

Hazardous Materials – Transportation was chosen because of the proximity of two rail lines that run in or near the school district and several highway routes. The first rail line is directly in the

southern area of the community itself, while the second rail line runs within one mile of the southern border of the school district and North Platte River. Also, just on the northern part of the school district boundary lies a main highway route with US 26 and the eastern boundary of Nebraska 79E, which have semi track-trailers hauling hazardous chemicals at various times on them. There have been previous chemical spills on the railroad lines within 10 miles of the school district. Evacuation was not necessary during past spills, but preparations have been made for evacuation should the need arise. In the event of an evacuation, students would evacuate to the Lighthouse Church. A secondary evacuation location is the elementary building. In the event that there are no evacuation locations available, a bus will transport students to the Scottsbluff High School.

Severe Thunderstorms (Includes Hail)
Past severe thunderstorm events have caused damages to the school from high winds and large hail. In the event of power loss, the JH/HS building has a backup generator, but the elementary building does not. The district maintenance regularly trims trees in the summer. Power lines to the school are above ground but lines from the high school building to the auxiliary building are buried. Roofing on school buildings is impact resistant and a new roof was installed on the elementary building in 2018. Severe weather preparation is addressed in administration meetings. In the event of inclement weather, consultation between school officials determines whether changes to school activities is needed.

Tornadoes and High Winds
In 1992 the City of Minatare was struck by a tornado. In addition, many other tornadoes have occurred within the district. Both schools were impacted by the tornado, but damage was limited to broken windows and unsecured items around the school being strewn around in the storm. A safe room was recently constructed at the JH/HS building that can hold 500 people. In the event of an emergency, elementary students and staff will be moved to the safe room if there is time. If time is an issue, they will shelter in place at the elementary school. The district performs two tornado drills each year. Both schools and the superintendent's office have weather radios. All administrators utilize cell phone apps that provide weather updates.

Mitigation Strategy

Completed Mitigation and Strategic Actions

MITIGATION ACTION	EMERGENCY COMMUNICATIONS
DESCRIPTION	Establish an action plan to improve communication between schools and other government agencies to better assist all students and staff during and following emergencies. Establish inter-operable communications.
HAZARD(S)	All hazards
STATUS	The school district has installed a phone system that allows for extensions that dial into every room in each building directly. Walkie Talkies have also been purchased for selected personnel to have communication should other mediums be lost.

MITIGATION ACTION	PROMOTE FIRST AID
DESCRIPTION	Promote first aid training for all staff
HAZARD(S)	All hazards
STATUS	All district employees are trained every 2 years in First Aid and CPR.

MITIGATION ACTION	TORNADO SAFETY PROGRAM
DESCRIPTION	Implement a tornado safety program for the school district.
HAZARD(S)	Tornadoes and High Winds
STATUS	This has been established and exercised for the past 5 years.

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	Completed in 2017.

Continued Mitigation and Strategic Actions

MITIGATION ACTION	COMMUNITY EDUCATION
DESCRIPTION	Develop an education program to inform residents of risks related to chemical releases. This could include district outreach to residents living in the immediate vicinity of chemical storage sites.
HAZARD(S)	Hazardous Materials - Transportation
ESTIMATED COST	Staff Time
FUNDING	School District General Fund
TIMELINE	1 year
PRIORITY	Medium
LEAD AGENCY	Minatare School Board
STATUS	In progress.

MITIGATION ACTION	DEVELOP EVENT CANCELLATION AND NOTIFICATION PROCEDURES
DESCRIPTION	Develop event cancellation and notification procedures during extreme heat events
HAZARD(S)	Extreme Heat
ESTIMATED COST	Staff Time
FUNDING	School District General Fund
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Long Range Planning Committee, Minatare School Board
STATUS	This project will be completed in our Safety Plan revision during the 2021-2022 school year.

MITIGATION ACTION	EMERGENCY EXERCISE: HAZARDOUS SPILLS
DESCRIPTION	Utilize exercise to prepare for potential explosions or hazardous spills. Ensure that nearby businesses and residents have appropriate plans in place.
HAZARD(S)	Hazardous Materials - Transportation
ESTIMATED COST	$500+
FUNDING	School District General Fund
TIMELINE	2-5 years
PRIORITY	Low
LEAD AGENCY	Minatare School Board
STATUS	This project has not been fully implemented. It will remain on the agenda for completion but will likely need to be addressed in the 2022-2023 school year.

MITIGATION ACTION	FACILITIES FOR VULNERABLE POPULATIONS
DESCRIPTION	Develop or designate cooling areas during extreme heat events.
HAZARD(S)	Extreme Heat
ESTIMATED COST	$400,000
FUNDING	School District General Fund
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Minatare School Board
STATUS	This project is slated for completion with the installation of air conditioning at the High School building in the summer of 2022.

MITIGATION ACTION	IMPACT RESISTANT ROOF COVERINGS
DESCRIPTION	Use roofing materials that are resistant to hail impacts for new buildings. Retrofit existing buildings with hail resistant roofing.
HAZARD(S)	Severe Thunderstorms/Hail
ESTIMATED COST	$50,000
FUNDING	School District General Fund
TIMELINE	2 years
PRIORITY	High
LEAD AGENCY	Minatare School Board
STATUS	This project was completed in 2018 at Minatare Elementary. The roof condition will be evaluated at the high school summer 2022 during the installation of the air conditioning units.

MITIGATION ACTION	PROTECT ROOFTOP UTILITIES
DESCRIPTION	Retrofit utilities on building rooftops to provide protection from hail events.
HAZARD(S)	Severe Thunderstorms/Hail
ESTIMATED COST	$2,000
FUNDING	School District General Fund
TIMELINE	2 years
PRIORITY	High
LEAD AGENCY	Minatare School Board
STATUS	This has been completed at Minatare Elementary. It will be completed at Minatare High School summer 2022.

MITIGATION ACTION	SAFE ROOMS
DESCRIPTION	Design and construct fully supplied safe rooms in school facilities
HAZARD(S)	Tornadoes and High Winds
ESTIMATED COST	$200-$300 sq. ft. stand alone, $150-$200 sq. ft. addition/retrofit
FUNDING	School District General Fund
TIMELINE	3-5 years
PRIORITY	High
LEAD AGENCY	Minatare School Board
STATUS	This was completed at Minatare High School. It is desirable to have the same at Minatare Elementary for both school employees and students as well as for the community.

MITIGATION ACTION	SCHOOL CONTINUITY PLAN
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	School District General Fund
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Minatare School Board
STATUS	This will be part of our revision of our Safety Plan in 2022. It will be classified as ongoing as it will be refined yearly by the Safety Committee.

MITIGATION ACTION	SHELTER IN PLACE
DESCRIPTION	Provide shelter in place training to facilities housing vulnerable populations.
HAZARD(S)	Hazardous Materials - Transportation
ESTIMATED COST	Staff Time
FUNDING	School District General Fund
TIMELINE	2-5 years
PRIORITY	Low
LEAD AGENCY	Minatare School Board
STATUS	This project has not been started and will likely be placed at a lower priority for the next few years.

Removed Mitigation and Strategic Actions

MITIGATION ACTION	WATER CONSERVATION AWARENESS PROGRAMS
DESCRIPTION	Improve and/or develop a program to conserve water use by citizens during elongated periods of drought. Potential restrictions on water could include limitations on lawn watering, car washing, or water sold to outside sources. Work with DNR on farm irrigation restrictions.
REASON FOR REMOVAL	The school district no longer wishes to pursue this. Cities/villages may be better suited to implement.

School District Profile

MITCHELL PUBLIC SCHOOLS

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

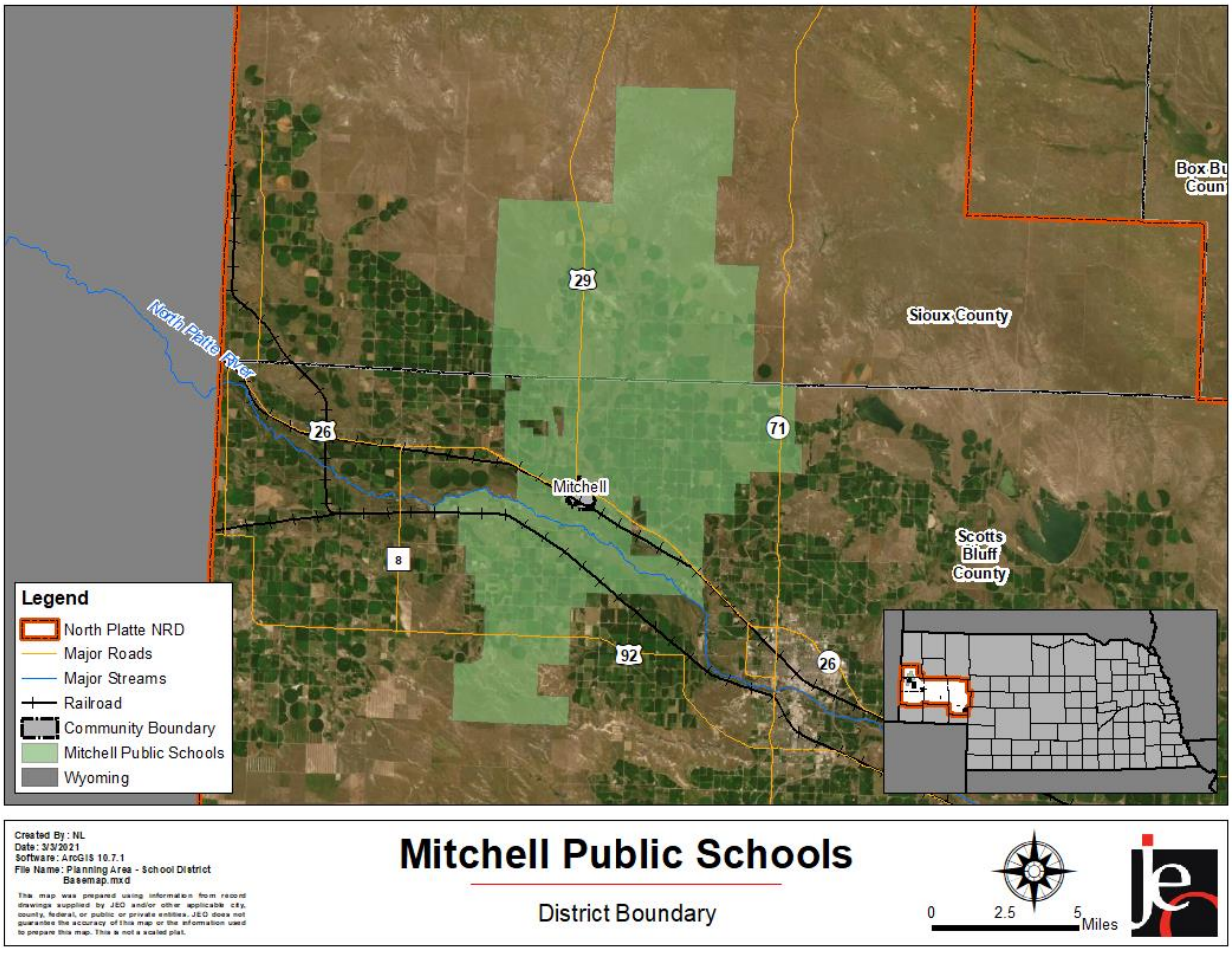
Table MTS.1: Mitchell Public Schools Local Planning Team

NAME	TITLE	JURISDICTION
KATHRYN URBANEK	Superintendent	Mitchell Public Schools
JOHN BEVINS	Head of Maintenance/Transportation	Mitchell Public Schools

Location

Mitchell Public Schools covers the north-central portion of Scotts Bluff County, the south-central portion of Sioux County, and serves two schools: Mitchell Elementary School and Mitchell Secondary School. The school district provides services to students in the community of Mitchell and the rural areas surrounding it.

Figure MTS.1: District Boundary



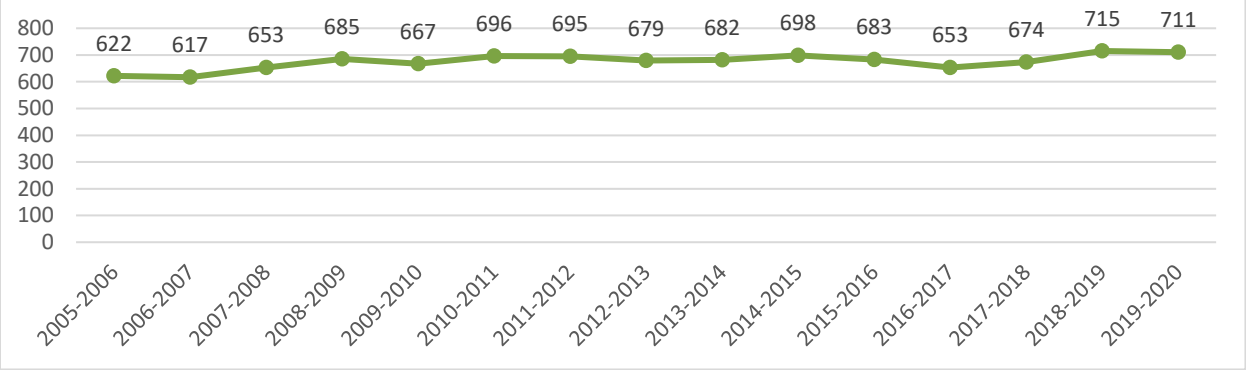
Transportation

Four major transportation corridors travel through the district: NE HWY 29, NE HWY 71, NE HWY 92, and US HWY 26. The most traveled route is US HWY 26 with an average of 8,075 vehicles daily, 585 of which are trucks.[27] Two rail lines travel east-west through the district, with one traveling through the City of Mitchell. The district owns one bus and approximately 80 students are bused to and from school. Unpaved county roads (B, G, and J) are of most concern as moisture can make it difficult to navigate. Transportation information is important to hazard mitigation plans because it suggests areas more at risk of transportation incidents.

Demographics

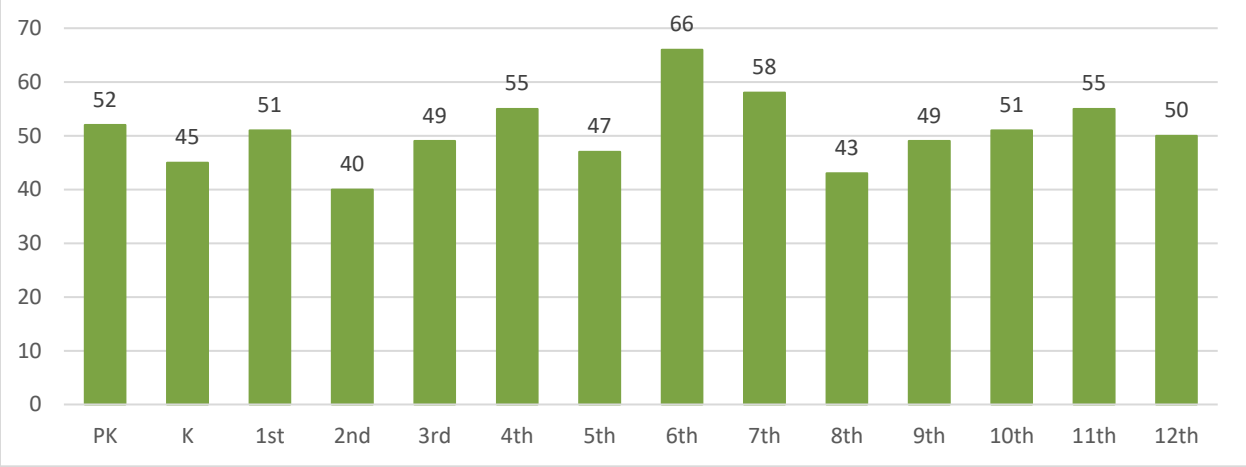
The following figure displays the historical student population trend starting with the 2005-06 school year and ending with the 2019-20 year. It indicates that the student population has been increasing since 2016. There are 711 students enrolled in the district.[28] The district anticipates little change in enrollment, with option enrollment increasing but decreasing population in the community.

Figure MTS.2: Student Population 2005-2020



Source: Nebraska Department of Education

Figure MTS.3: Number of Students by Grade, 2019-2020



Source: Nebraska Department of Education

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

28 Nebraska Department of Education. June 2021. "2019-2020 Education Profile for District: Mitchell Public Schools." https://nep.education.ne.gov/snapshot.html#04-0001-000.

The figure on the previous page indicates that the largest number of students are in the 6th and 7th grades. The lowest population of students are in 2nd and 8th grades. According to the Nebraska Department of Education (NDE), 45% of students receive either free or reduced priced meals at school, a similar percentage to the state average of 46%. Additionally, over 7% of students are in the Special Education Program. These particular students may be more vulnerable during a hazardous event than the rest of the student population. The district provides documents in Spanish when necessary and has a fluent Spanish-speaking adult on site.

Table MTS.2: Student Statistics, 2019-2020

	SCHOOL DISTRICT	STATE OF NEBRASKA
FREE/REDUCED PRICED MEALS	45.29%	45.60%
SCHOOL MOBILITY RATE	6.68%	8.36%
ENGLISH LANGUAGE LEARNERS	N/A*	7.43%
SPECIAL EDUCATION STUDENTS	7.89%	15.48%

**Data is not available when less than 10 students.*
Source: Nebraska Department of Education[29]

Future Development Trends

Over the past five years, a new track/outdoor complex was built, and the district purchased (but have not altered) a church building directly across the street from the elementary. At some point the district intends to update or alter the church building, with it likely becoming a pre-kindergarten and after school childcare building. Hail resistant roofing was installed at the elementary school in June 2019. Improved light in parking lots was completed in 2017 and the district acquired snow removal equipment in 2018.

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are no chemical storage sites in district that contain hazardous chemicals. No spills have affected the district. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

29 Nebraska Education Profile. "School Report Card." Accessed June 2021. http://nep.education.ne.gov/Home/.

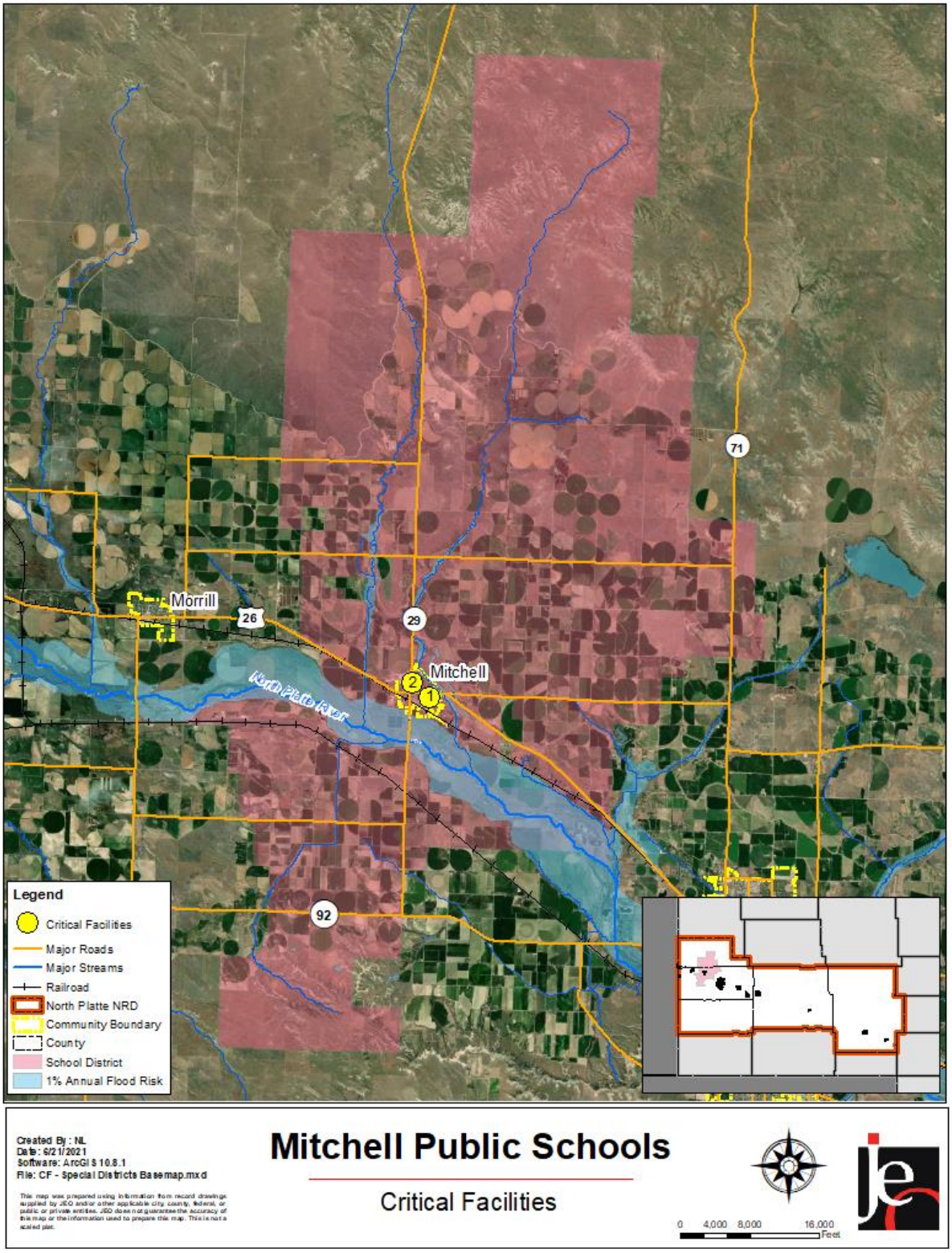
Critical Facilities

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 part of this plan update. The following table and figure provide a summary of the critical facilities for the school district.

Table MTS.3: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Mitchell Elementary	Y	N	N
2	Mitchell High	Y	N	N

Figure MTS.4: Critical Facilities



Administration

The school district has a superintendent, two principals, and 90 staff. The school board is made up of a six-member panel. Staff are trained on emergency procedures during quarterly or biannual safety trainings led by the safety team. Mitchell Fire and the Mitchell Police Department are both part of the safety team.

Capability Assessment

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the community's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. Students and families are educated about emergency procedures through practice drills and information sent via handouts and social media.

Table MTS.4: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning Capability	Capital Improvements Plan/Long-Term Budget	Yes
	Continuity of Operations Plan	Yes
	Disaster Response Plan	Yes
	Other (if any)	
Administration & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Local staff who can assess community's vulnerability to hazards	Yes
	Grant Manager	Yes
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	Applied for grants in the past	Yes
	Awarded grants in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved bonds in the past	No
	Flood Insurance	No
	Other (if any)	
Education & Outreach Capability	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.)	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 / year
	Tornado	3 / year
	Intruder	2 / year

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
	Bus evacuation	4 / year
	Evacuation	2 / year
	Other (if any)	

Table MTS.5: Overall Capability

OVERALL CAPABILITY	LIMITED/MODERATE/HIGH
Financial resources needed to implement mitigation projects	Limited
Staff/expertise to implement projects	Moderate
Community support to implement projects	Moderate
Time to devote to hazard mitigation	High

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 (e.g., 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 Superintendent, Head Custodian, and Building Principals. The local planning team will review the plan no less than annually and will include the public in the review and revision process through website updates and social media.

Plan Integration

The crisis response plan for the school district is reviewed and updated annually. The plan includes topics on the standard response protocol, shelter in place protocols, evacuation drills, and sheltering locations. The current plan discusses chemical spills, winds, flooding, tornadoes, and fires and identifies opportunities for mitigation following hazard events. In a future response plan update, the planning team would like to identify any gaps related to particular hazards. All staff and students are familiar with the plan and train monthly or annually depending on need. The strategic plan for the district was updated in 2021 and includes goals to provide a safe and secure environment and keep school operations functioning at a high level. The district also has a building and maintenance plan (2021), a Covid re-entry to schools plan (2021), and a transportation safety plan (2020).

Historical Occurrences

See the Banner County community profile for historical hazard events.

Hazard Prioritization

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

Hazardous Materials - Transportation

Mitchell Public Schools is highly concerned about the potential for chemical spills as a result of truck transportation in front of both the Mitchell High School and Elementary School. Trucks often travel on Highway 26 (19th Ave in the city), which leads directly in front the elementary school. While the local planning team is concerned about agricultural chemicals, they are much more concerned about fracking fluids, which are regularly transported along this route. Presently, the legality of disposing of wastewater in Sioux County is being contested in the court system. If the disposal methods continue after litigation, the school district will improve its response plans and emergency exercises to include shelter in place as a result of a chemical event. The district crisis response plan addressed hazardous chemical spills by including instructions for securing the location, carrying out lockout procedures and reducing ventilation, or relocation and reunification at a more secure site.

Public Health Emergency

Impacts from Covid-19 on the district include social distancing measures that made instruction difficult, increased supply costs to accommodate necessary changes, substitute teacher shortages, and mental health impacts for both students and staff. The district has a plan in place for various risk levels from Covid-19, including social distancing measures, bus changes, sanitation, and upgrades to windows and HVAC systems to increase air flow. The district was able to mitigate impacts from Covid-19 by forming goals to focus on, implementing a response plan, and leveraging community input.

Severe Thunderstorms (Includes Hail)

The primary concern related to severe thunderstorms is damage to the roof and other parts of buildings from hail and high winds. In the past, events have caused damage to buildings and roofs. In 2019 a new hail resistant roof was installed at the elementary school building. Mitchell Public Schools have invested in weather radios, which let administrators know about inclement weather in advance. The district has procedures in place for delays or cancellation of outdoor activities in the event of inclement weather. Powerlines at the school are above ground.

Terrorism

While the school has not experienced any specific threats, concerns form national sources result in concerns within the school district. In addition, adult visitors often come to the school under the influence of another substance. To improve the school's resilience against a terrorism evet, the school regularly conducts lock down/evacuation trainings for students and staff. The school has installed stronger exterior doors, is the process of installing stronger interior doors, improved lighting in the parking lots, changed the open-door policy to a card-swipe system, and installed cameras at each entrance. Annually, the school invites local law enforcement to help them identify vulnerable areas, and areas of potential concern regarding a terrorist incident.

Tornadoes and High Winds
While the school has not experienced a tornado in the past, the local planning team identified tornadoes as a top concern based on the random nature of these events, and the fact that they are in a tornado prone area. Presently, the school regularly conducts tornado drills, three times a year. Neither the high school, nor the elementary school has below ground shelter for a tornado event. During a tornado drill, students seek shelter in interior hallways. This is become more difficult to fit all students due social distancing protocols. In the past the school has lost power for brief periods of time.

Mitigation Strategy

Completed Mitigation and Strategic Actions

MITIGATION ACTION	CIVIL SERVICE IMPROVEMENTS
DESCRIPTION	Assess the need for additional snow removal resources and purchase snow removal equipment.
HAZARD(S)	Severe Winter Storms
STATUS	Completed in the fall of 2018.

MITIGATION ACTION	FACILITY LIGHTING
DESCRIPTION	Mitchell Public Schools is working to improve lighting, to light parking lots outside school, in part to limit potential terrorism and civil disorder.
HAZARD(S)	Terrorism
STATUS	Completed in the summer of 2017

MITIGATION ACTION	HAIL RESISTANT ROOFING
DESCRIPTION	Outfit elementary school with new, hail resistant roofing, in lieu of current rock roofing.
HAZARD(S)	Severe Thunderstorms
STATUS	Completed in June 2019.

Continued Mitigation and Strategic Actions

MITIGATION ACTION	ALERT/WARNING SIRENS
DESCRIPTION	Mitchell Public Schools is looking into an intruder alarm system; this would potentially be a unique alarm sounded over an intercom or potentially a pager-like device which would alert teachers individually of an intruder.
HAZARD(S)	Terrorism
ESTIMATED COST	$1,500
FUNDING	General Fund, Depreciating Fund
TIMELINE	1 Year
PRIORITY	Medium
LEAD AGENCY	Superintendent, Safety Commissioner
STATUS	In Progress. The school implemented the “I Love You Guys” protocol.

MITIGATION ACTION	BACKUP GENERATOR
DESCRIPTION	Install a stationary source of power at the Mitchell High School
HAZARD(S)	All Hazards
ESTIMATED COST	$50,000
FUNDING	General Fund, Depreciation Fund
TIMELINE	3-5 Years
PRIORITY	Low
LEAD AGENCY	Superintendent
STATUS	Not Started

MITIGATION ACTION	COMMUNITY EDUCATION
DESCRIPTION	Develop an education program to inform students and staff of risks related to chemical release.
HAZARD(S)	Hazardous Materials – Transportation, Hazardous Materials – Fixed Site
ESTIMATED COST	$500
FUNDING	General Fund
TIMELINE	1-3 Years
PRIORITY	High
LEAD AGENCY	Superintendent
STATUS	Not Started

MITIGATION ACTION	SAFE ROOM
DESCRIPTION	Design and construct fully supplied safe rooms in school facilities.
HAZARD(S)	Tornadoes and High Winds
ESTIMATED COST	$250 per square foot
FUNDING	General Fund
TIMELINE	1-3 Years
PRIORITY	High
LEAD AGENCY	Superintendent, Maintenance Department
STATUS	Not Started. Currently cost prohibitive.

MITIGATION ACTION	SITE SECURITY
DESCRIPTION	In the past, Michell Public Schools has worked to improve the strength of external doors, and now is working to improve the strength of internal doors.
HAZARD(S)	Terrorism
ESTIMATED COST	$10,000
FUNDING	General Fund
TIMELINE	1-3 Years
PRIORITY	Medium
LEAD AGENCY	Maintenance Department
STATUS	In Progress. Some doors have been replaced at the elementary.

School District Profile

SCOTTSBLUFF PUBLIC SCHOOLS

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

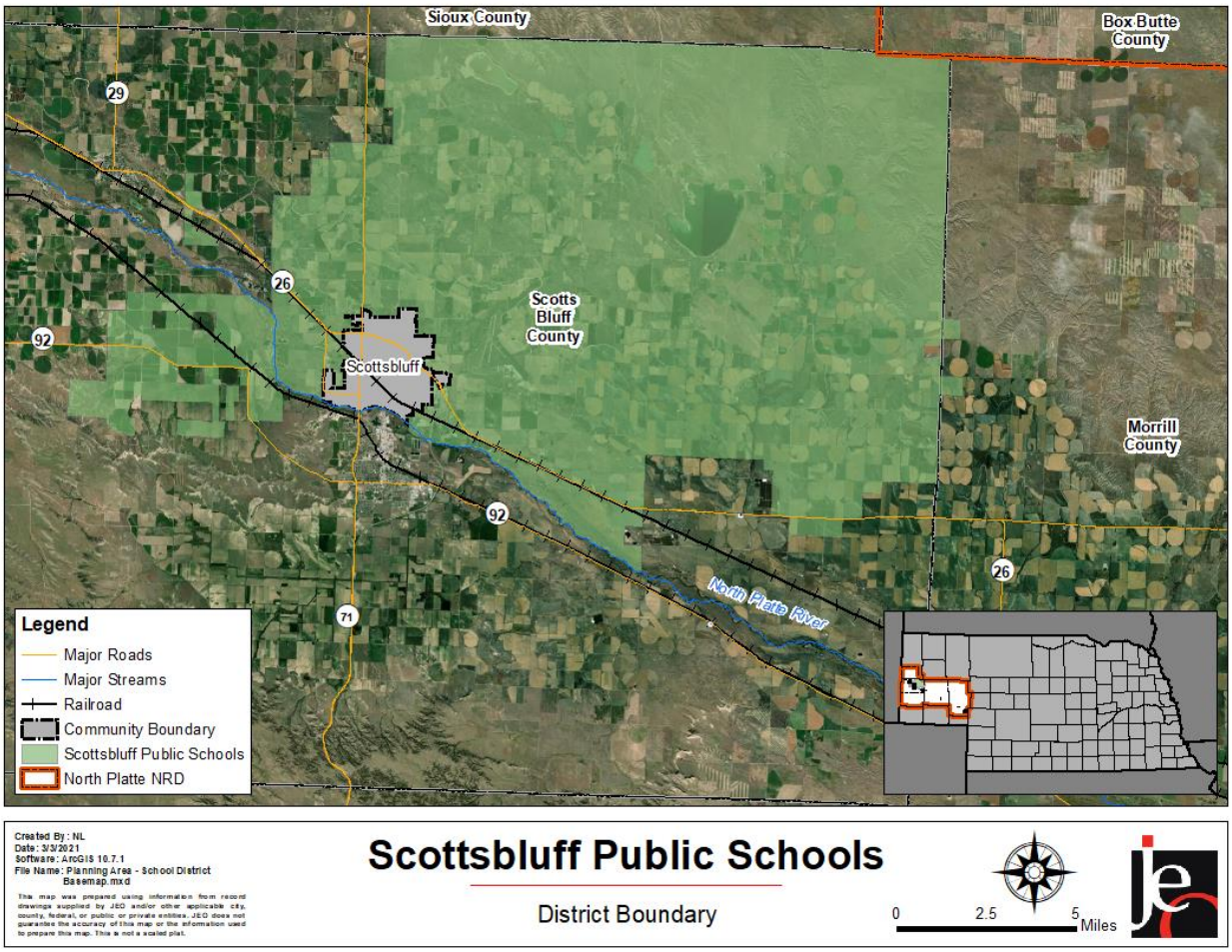
Table SPS.1: Scottsbluff Public Schools Local Planning Team

NAME	TITLE	JURISDICTION
TRAVIS RICKEY	Facility Director	Scottsbluff Public Schools
JAMES TODD	Safety and Security Director	Scottsbluff Public Schools

Location

Scottsbluff Public Schools covers the northeast corner of Scotts Bluff County and serves eight schools: Early Childhood Learning Center, Lake Minatare School, Lincoln Heights Elementary School, Longfellow Elementary School, Roosevelt Elementary School, Westmoor Elementary School, Bluffs Middle School, and Scottsbluff Senior High School. The school district provides services to students in the community of Scottsbluff and the rural areas surrounding it.

Figure SPS.1: District Boundary



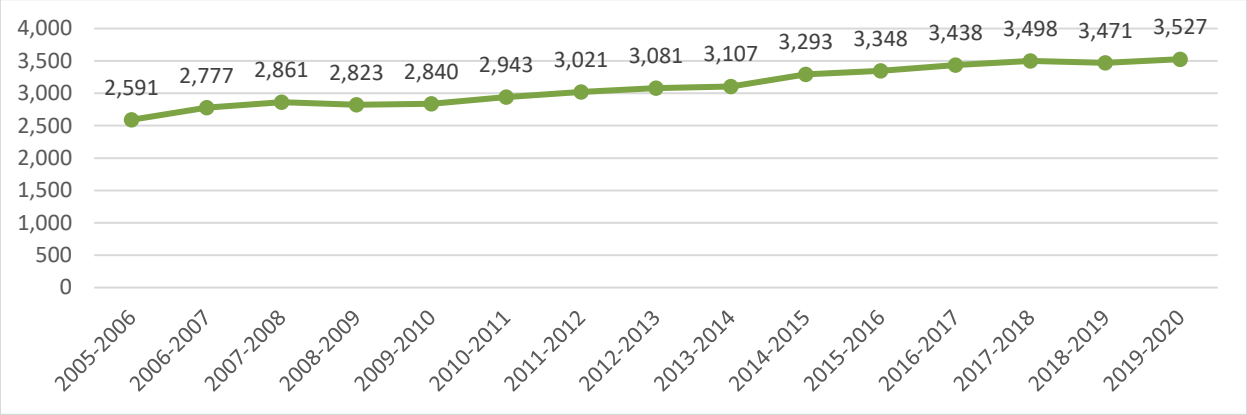
Transportation

Three major transportation corridors travel through the district: NE HWY 71, NE HWY 88, and US HWY 26. The most traveled route is US HWY 26 with an average of 12,240 vehicles daily, 605 of which are trucks.[30] Two rail lines travel east west through the district with one traveling through Scottsbluff. District bussing is contracted out to a private company and approximately 600-800 students are bused to and from school. Rural bus routes are of most concern as they can have hazardous road conditions. Transportation information is important to hazard mitigation plans because it suggests areas more at risk of transportation incidents.

Demographics

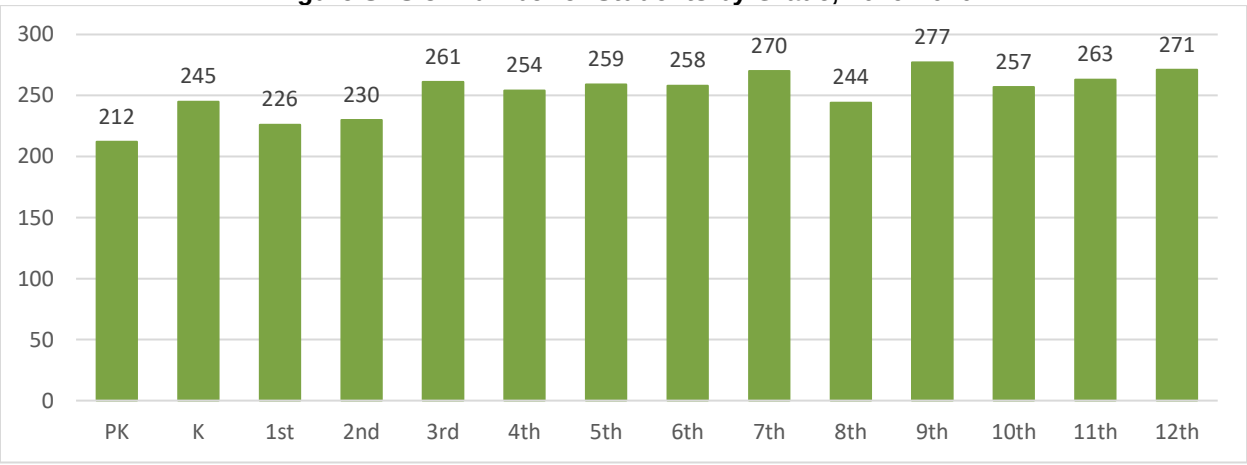
The following figure displays the historical student population trend starting with the 2005-06 school year and ending with the 2019-20 year. It indicates that the student population has been increasing since 2008. There are 3,527 students enrolled in the district.[31] The district anticipates little change in student population in the coming years.

Figure SPS.2: Student Population 2005-2020



Source: Nebraska Department of Education

Figure SPS.3: Number of Students by Grade, 2019-2020



Source: Nebraska Department of Education

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

31 Nebraska Department of Education. June 2021. "2019-2020 Education Profile for District: Scottsbluff Public Schools." https://nep.education.ne.gov/snapshot.html#04-0001-000.

The figure on the previous page indicates that the largest number of students are in the 9th and 12th grades. The lowest population of students are in pre-kindergarten and 1st grades. According to the Nebraska Department of Education (NDE), 60% of students receive either free or reduced priced meals at school, a higher percentage than the state average of 46%. Additionally, over 13% of students are in the Special Education Program. Other than English, Spanish is spoken in the district. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Table SPS.2: Student Statistics, 2019-2020

	SCHOOL DISTRICT	STATE OF NEBRASKA
FREE/REDUCED PRICED MEALS	60.42%	45.60%
SCHOOL MOBILITY RATE	12.07%	8.36%
ENGLISH LANGUAGE LEARNERS	7.66%	7.43%
SPECIAL EDUCATION STUDENTS	13.30%	15.56%

Source: Nebraska Department of Education[32]

Future Development Trends

Over the past five years, the new high school was completed. There are no plans for additional updates in the next five years at 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 19 chemical storage sites in district that contain hazardous chemicals. However, none of the facilities are located near a school. No spills have affected the district. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

32 Nebraska Education Profile. "School Report Card." Accessed June 2021. http://nep.education.ne.gov/Home/.

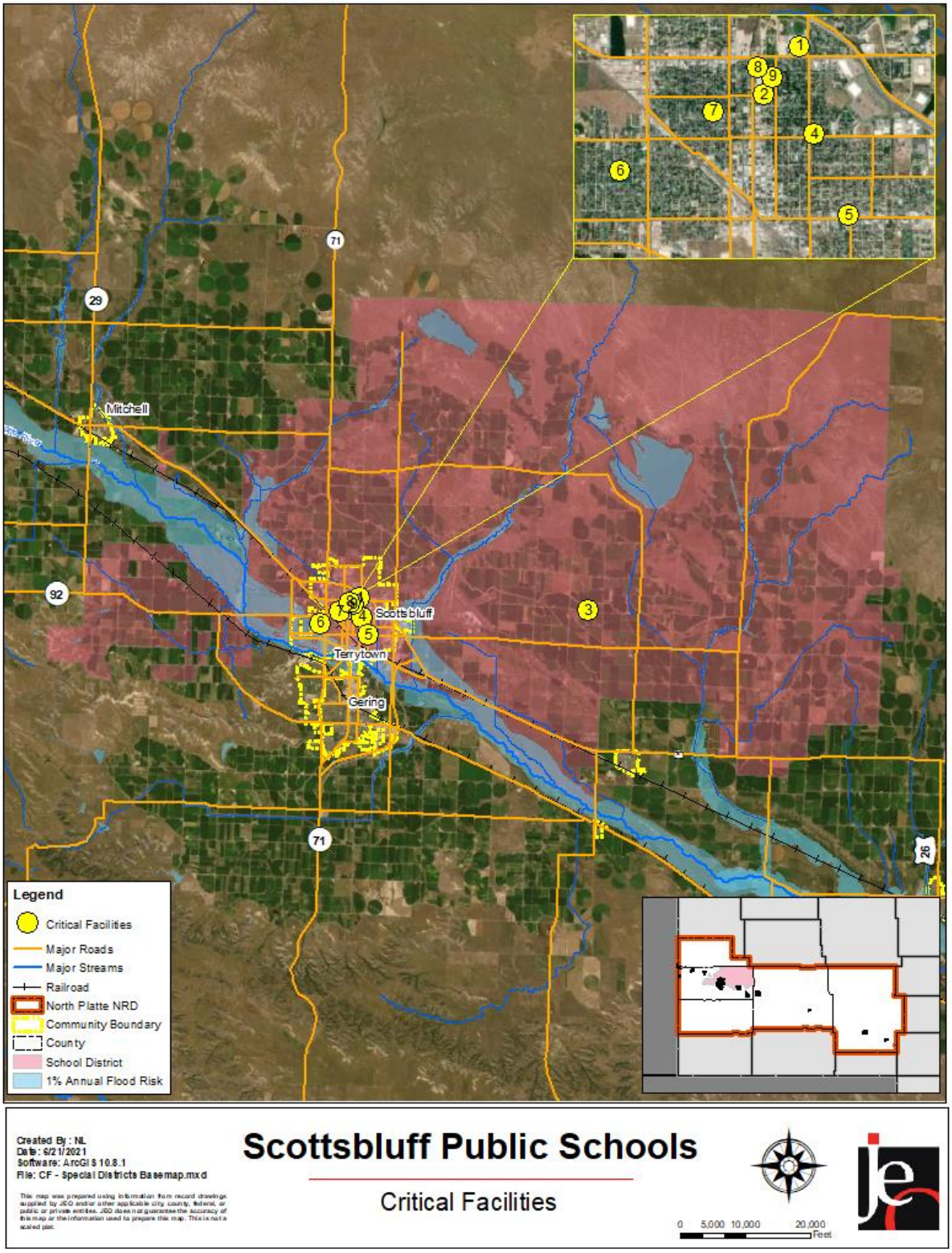
Critical Facilities

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 part of this plan update. The following table and figure provide a summary of the critical facilities for the school district.

Table SPS.3: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Scottsbluff High School	Y	N	N
2	Bluffs Middle School	Y	N	N
3	Lake Minatare Elementary	N	N	N
4	Longfellow Elementary	Y	N	N
5	Roosevelt Elementary	Y	N	N
6	Westmoor Elementary	Y	N	N
7	Lincoln Heights Elementary	Y	N	N
8	Reconnect	N	N	N
9	Bear Cob P-K	N	N	N

Figure SPS.4: Critical Facilities



Administration

The school district has a superintendent, seven principals, and more than 500 staff. The school board is made up of a six-member panel. Staff are trained on emergency procedures during orientation, at the start of each school year, and procedures are practiced on a regular basis.

Capability Assessment

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the community's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. Students and families are educated about emergency procedures at the beginning of the school year and procedures are practiced on a regular basis. The district partners with both local fire and police departments when running various drills.

Table SPS.4: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning Capability	Capital Improvements Plan/Long-Term Budget	Yes
	Continuity of Operations Plan	Yes
	Disaster Response Plan	Yes
	Other (if any)	
Administration & Technical Capability	GIS Capabilities	No
	Civil Engineering	No
	Local staff who can assess community's vulnerability to hazards	Yes
	Grant Manager	Yes
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	Applied for grants in the past	Yes
	Awarded grants in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved bonds in the past	Yes
	Flood Insurance	Yes
	Other (if any)	
Education & Outreach Capability	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 / year
	Tornado	2 / year
	Intruder	1 / year

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
	Bus evacuation	2 / year
	Evacuation	1 / year
	Other (if any)	

Table BCS.5: 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	Limited
Time to devote to hazard mitigation	Limited

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 (e.g., 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 Superintendent, Financial Director, and the School Board. The local planning team will review the plan no less than annually and will include the public in the review and revision process through board and council meetings.

Plan Integration

The school district utilizes the Standard Response Protocol (SRP) to react to hazardous events. The SRP is an all-hazards approach that uses clear common language while allowing flexibility in protocol. The district's Strategic Plan (2020-2023) has goals and objectives regarding school safety and security.

Historical Occurrences

See the Scotts Bluff 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 community's capabilities.

Flooding
Flooding has not had significant impacts on the school district in the past and there are no issues with flooding. The district carries flood insurance.

Public Health Emergency
Impacts to the district from Covid-19 include reduced learning due to remote learning protocols. Safety measures implemented involved instituting remote learning for the remainder of the 2019/2020 school year, mask mandate when students and staff returned to in-person school, installing water bottle fillers in all district buildings, and improved sanitization measures.

Severe Thunderstorms (Includes Hail)
Past thunderstorms have caused damage to trees, buildings, roofs, school vehicles, and scoreboards. The last such storm occurred in August of 2019. Damage to buildings and student/staff safety are the biggest concerns regarding severe thunderstorms. In the event of inclement weather, the district will either postpone or cancel activities. Trees are continually trimmed throughout school grounds. Some of the powerlines in the district are buried. The district has a backup generator for the IT department in the event of a power outage.

Severe Winter Storms
Winter storms can cause damage to buildings and can impact transportation routes to and from schools. The last major winter storm occurred in the district in 2019. Snow removal is maintained by the maintenance team and also contracted out to a local construction company as needed. On average, approximately one day of school is closed per year due to winter storms. Students and families are notified of school closures through social media, radio, and television. The district has improved snow removal equipment and updated HVAC equipment to reduce the impacts of winter storms.

Terrorism
Although no events have occurred in the past, the district remains concerned with keeping students and staff safe in the event of a terrorism incident. Security measures that have been implemented to reduce impacts from terrorism include: Improving security systems and cameras, moving to a badge entry system, creating additional positions on security teams to include entrance monitors, and moving district buildings to have one main entrance to improve monitoring.

Tornadoes and High Winds
No tornadoes have occurred in the district in the past but remains a concern for the district. Sheltering locations for students and staff are located in basements or interior hallways. Each school has a weather radio located at the secretary's desk to be notified of severe weather.

Mitigation Strategy

Continued Mitigation and Strategic Actions

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Provide a portable or stationary source of backup power
HAZARD(S)	All hazards
ESTIMATED COST	$50,000 - $70,000
FUNDING	School District General Fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Facility Management
STATUS	Ongoing. Added generator to IT department.

MITIGATION ACTION	HAIL RESISTANT ROOFING
DESCRIPTION	Encourage the use of hail resistant roofing for any new construction
HAZARD(S)	Severe Thunderstorms/Hail
ESTIMATED COST	$250,000
FUNDING	School District General Fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Facility Management
STATUS	In progress.

MITIGATION ACTION	POWER, SERVICE, ELECTRICAL AND WATER DISTRIBUTION LINES
DESCRIPTION	School/School districts can work with their local public power district or community electricity department to identify vulnerable transmission and distribution lines on school property and plan 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	To be determined
FUNDING	School District General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Facility Management
STATUS	In Progress.

MITIGATION ACTION	PROMOTE FIRST AID
DESCRIPTION	Promote first aid training for all staff.
HAZARD(S)	All hazards
ESTIMATED COST	Staff Time
FUNDING	School District General Fund
TIMELINE	Ongoing
PRIORITY	High
LEAD AGENCY	Human Resources, Business Services
STATUS	In Progress.

MITIGATION ACTION	SAFE ROOMS
DESCRIPTION	Design and construct fully supplied safe rooms in school facilities.
HAZARD(S)	Severe Thunderstorms, Tornadoes and High Winds
ESTIMATED COST	To be determined
FUNDING	School District General Fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Finance/Facility Management
STATUS	In Progress.

District Profile

PANHANDLE PUBLIC HEALTH DISTRICT

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

Table PPH.1: Panhandle Public Health District Local Planning Team

NAME	TITLE	JURISDICTION
TABI PROCHAZKA	Deputy Director of Health Promotions and Preparedness	Panhandle Public Health District
MICHELLE HILL	Emergency Preparedness Coordinator	Panhandle Public Health District

Location and Geography

The Panhandle Public Health District (PPHD) is headquartered in the Village of Hemingford but also has offices in Bridgeport, Scottsbluff, and Sidney. The district covers 12 counties which includes Banner, Box Butte, Cheyenne, Dawes, Deuel, Garden, Grant, Kimball, Morrill, Scotts Bluff, Sheridan, and Sioux Counties.

Transportation

Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors and areas more at risk of transportation incidents. Interstate 80, US Highways 20, 26, 30, 138, 385, and Nebraska State Highways 2, 19, 27, 29, 61, 71, 87, 88, 92, 250 all travel through the district. Union Pacific Railroad, Burlington Northern Santa Fe Railway, Sidney and Lowe, Nebraska Northwestern Railroad, and Rapid City, Pierre, and Eastern Railroad all have lines traveling through the district. No significant spills or transportation events have affected the district.

Demographics

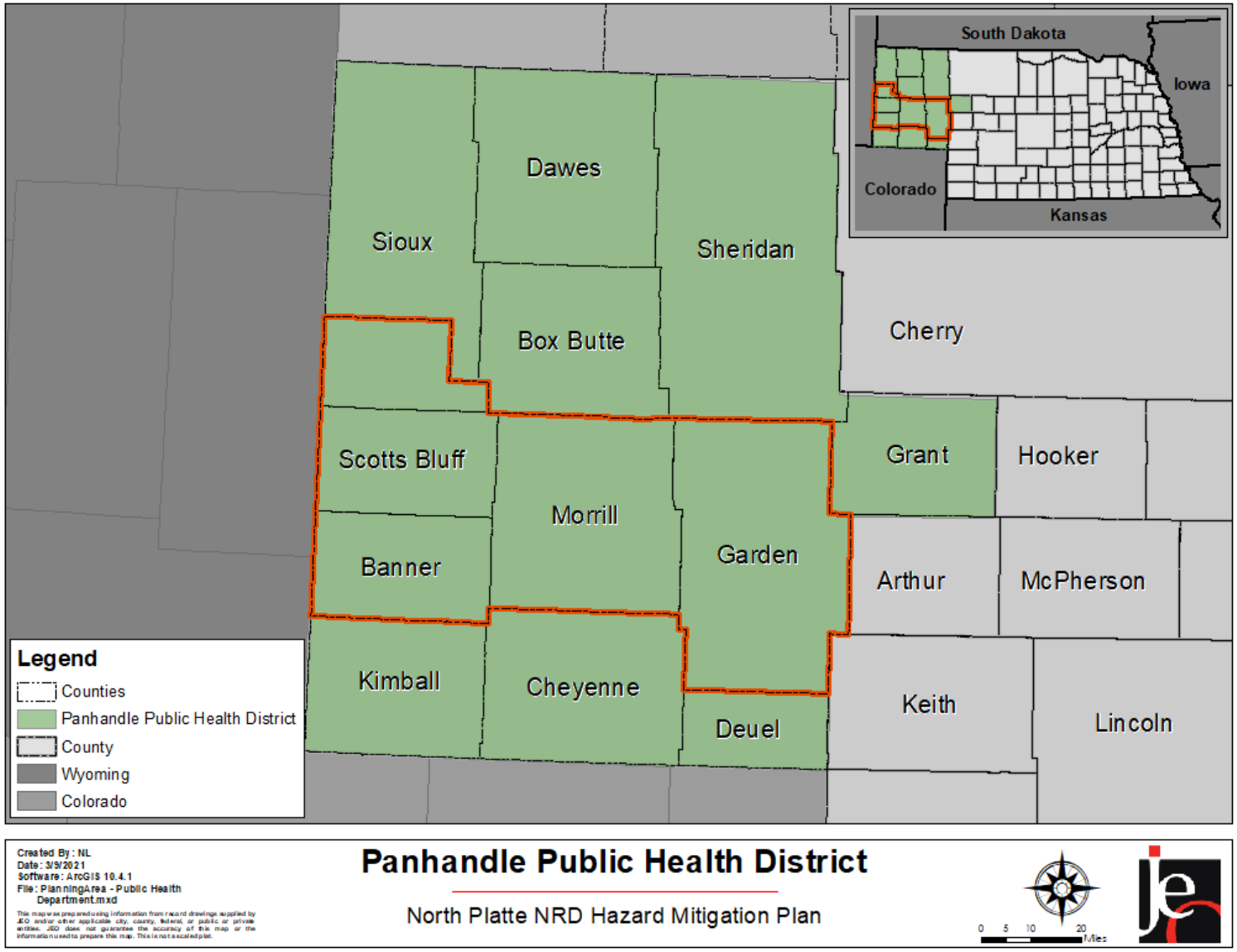
The total population of the 12-county region was 85,461 people in 2019.[33] The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. These populations are spread out across the Panhandle Public Health District. As the district is largely rural, these is likely to be a higher percentage of elderly individuals compared to the rest of the state.

Future Development Trends

Over the past five years, the district purchased a new office at 18 W 16th Street in Scottsbluff and a new office location was opened in Sidney in 2020. There are no planned changes in the next five years.

[33] United States Census Bureau. "2019 Census Bureau American Community Survey: S0101: Age and Sex." [database file]. https://data.census.gov.

Figure PPH.1: Panhandle Public Health District



Community Lifelines

Access to Care

The 12-county region served by the Panhandle Public Health District has eight hospitals with a total of 317 beds. If a hazard event were to occur, there may be a shortage of available beds within these facilities.

Table PPH.2: Hospital Locations

COUNTY	HOSPITAL NAME	COMMUNITY	NUMBER OF BEDS
Dawes	Chadron Community Hospital Corp	Chadron	25
Sheridan	Gordon Memorial Hospital District	Gordon	25
Box Butte	Box Butte General Hospital	Alliance	25
Scotts Bluff	Regional West Medical Center	Scottsbluff	172
Morrill	Morrill County Community Hospital	Bridgeport	20
Garden	Regional West Garden County Hospital	Oshkosh	10
Kimball	Kimball County Hospital	Kimball	15
Cheyenne	Cheyenne County Hospital Association	Sidney	25

Source: Nebraska Department of Health and Human Services[34]

Critical Facilities

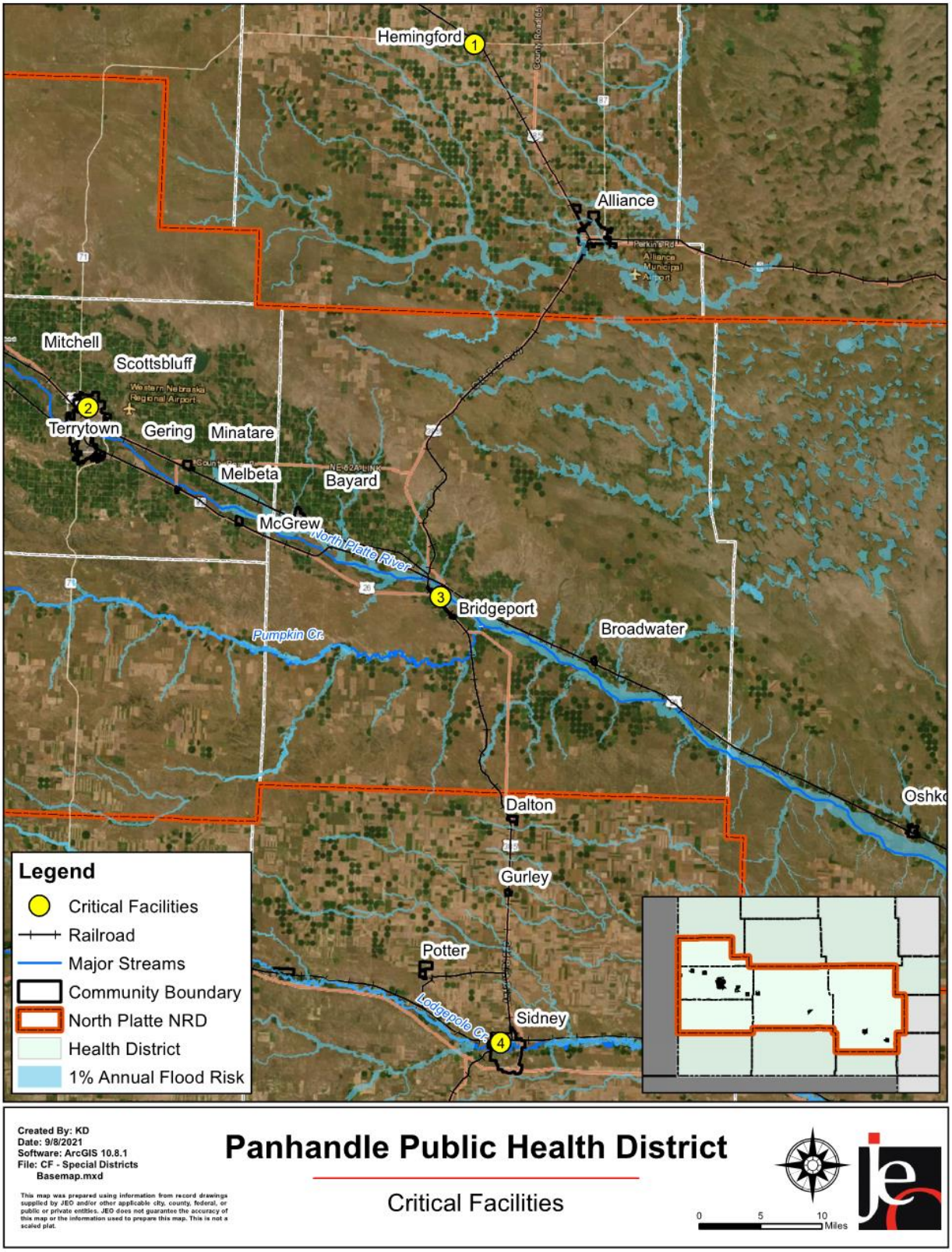
The local planning team identified critical facilities that are vital for disaster response, public shelter, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original 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 PPH.3: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Hemingford PPHD Office	Y	N	N
2	Scottsbluff PPHD Office	Y	N	N
3	Bridgeport PPHD Office	N	N	N
4	Sidney PPHD Office	N	N	N

[34] Nebraska Department of Health and Human Services. "State of Nebraska Roster Hospitals." Accessed February 2021. https://dhhs.ne.gov/licensure/Documents/Hospital%20Roster.pdf..

Figure PPH.3: Critical Facilities



**Floodplains in Banner County and Morrill County are based off a HAZUS created floodplain.*

Staffing

The Panhandle Public Health District is supervised by a 13-member Board of Directors. They appoint the health director, who will oversee the implementation of hazard mitigation projects. Other positions are listed below.

- Preparedness and Community Health Educators
- Assistant Director
- Environmental Health Coordinator
- Emergency Preparedness Coordinator
- Deputy Director of Health Promotions and Preparedness

Capability Assessment

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. The Panhandle Public Health District will continue to utilize existing relationships with local, county, state, and federal agencies to aid in the implementation of mitigation projects.

The following programs and services are offered to residents throughout the district.

- Emergency Preparedness
- Injury Prevention
- Environmental Health
- Worksite Wellness
- Training Workshops
- Public Health Data

Table PPH.4: Overall Capability Assessment

OVERALL CAPABILITY	LIMITED/MODERATE/HIGH
Financial resources needed to implement mitigation projects	Moderate
Staff/expertise to implement projects	Moderate
Community support to implement projects	High
Time to devote to hazard mitigation	Moderate

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 (e.g., 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 Director, Deputy Director of Health Promotion and Preparedness, and Emergency Preparedness Coordinator are responsible for reviewing and updating this district profile as changes occur or after a major event. These individuals will review the plan no less than bi-annually and will include the public in the review and revision process by sharing information through board council meetings.

Plan Integration

The Panhandle Public Health District has an Emergency Response Plan that was last updated in December 2019. This plan discusses responsibilities before, during and after an emergency, training and exercises, emergency operations coordination, public information, fatality management, mass care, medical dispensing and distribution, directed health measures, community disease containment, public health surveillance, and volunteer management. No other planning documents were identified during this process.

Historical Occurrences

For hazardous events in Banner, Garden, Morrill, and Scotts Bluff Counties see the individual county sections in this plan. For hazardous events in Kimball, Cheyenne, and Deuel Counties see the *2017 South Platte NRD Hazard Mitigation Plan*. Hazardous events in Sioux, Dawes, Box Butte, and Sheridan Counties can be found in the *2020 Region 23 Emergency Management Agency Multi-Jurisdictional Hazard Mitigation Plan*. Grant County hazardous events can be found in the *2019 Upper Loup NRD Hazard Mitigation Plan.*

The following table provides a summary of hazards that have or have the potential to affect the Panhandle Public Health District. The district was evaluated for previous hazard occurrence and the probability of future hazard events on each of the 15 hazards profiled in this plan. The evaluation process was based on data collected; previous impacts or the potential for impacts to infrastructure, critical facilities, people, and the economy; and the proximity to certain hazards such as dams and levees.

Table PPH.5: Panhandle Public Health District Hazard Matrix

HAZARD	PANHANDLE PUBLIC HEALTH DISTRICT
Agricultural Disease	X
Dam Failure	X
Drought	X
Earthquake	X
Extreme Heat	X
Flooding	X
Grass/Wildfire	X
Hazardous Materials – Fixed Site	X
Hazardous Materials – Transportation	X
Levee Failure	X
Public Health Emergency	X
Severe Thunderstorms	X
Severe Winter Storms	X
Terrorism	X
Tornadoes and High Winds	X

Hazard Prioritization

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

Grass/Wildfires
Grass/wildfire is an annual concern for the public health district. In the case of a grass/wildfire, PPHD would work with the Joint Information Center to assist with awareness, and perhaps some wildfire response. In the case of a significant wildfire, it is likely that the public health district will work to write a community debrief, discussing recovery and mitigation of wildfire for the future. According to the local planning team, the public health district is most concerned about lightning strikes causing wildfire, especially during drought years.

Hazardous Materials – Fixed Site
While there has not been any previous chemical fixed site events that affected the district, vulnerability still exists to this hazard. Much of northwestern Nebraska's land use is dedicated to agriculture, many co-ops throughout the region exist, which store different types of chemicals, many of which are hazardous to humans and livestock. According to the local planning team, there is not one specific community which they are most concerned about for a chemical spill from a fixed site. Instead, the local planning team noted that communities are so small in the region, that any location near a coop would be prone to a hazardous event. To prepare for chemical events, the public health district intends to work primarily in a training and preparedness role, in conjunction with communities and emergency management.

Hazardous Materials – Transportation
The district is highly concerned about rail and truck traffic, which is extremely common in the area. Recently, an additional concern has been the transportation of fracking wastewater into Sioux County from Colorado. This practice has dramatically elevated the inflow of chemical transportation, an estimated 80 trucks per day come into Nebraska to dump wastewater. While the district has never been impacted by a chemical spill as a result of a chemical transportation event, the vulnerability for an event like this is certainly possible, based on the frequency of chemical transportation. As it relates to chemical spills from a transportation event, the district will likely take a preparedness and training role. According to the local planning team, training and preparedness for a chemical spill event will likely be improved, should the Nebraska Oil and Gas Commission approve the continued disposal of fracking wastewater in Nebraska. Any trainings will be in conjunction with local hospital officials.

Public Health Emergency
As of May 17th, 2021, the district has experienced 8,563 positive cases of Covid-19 and 150 deaths. These numbers are likely to increase until the vaccine has been fully distributed. PPHD along with the Nebraska Department of Health and Human Services will lead the response and planning efforts related to any public health emergencies in the area.

PPHD is currently in the process of completing an after-action report and improvement plan to be included once it is complete. It will include:

- Impacts the district experienced because of the Covid-19 pandemic
- Lessons learned from the Covid-19 pandemic
- District response efforts
- Actions needed in the future to help reduce the risk or improve response.

Severe Thunderstorms (Includes Hail)
Severe thunderstorms are an annual occurrence for the public health district and much of Nebraska. As severe thunderstorms relate to the public health district, the local planning team is concerned about any sort of loss of power for rural citizens, as well as an increased concern of West Nile Virus, as mosquitos breed in stagnant water which thunderstorms create. The Panhandle Public Health District will take on a role of public information in the case of a significant severe thunderstorm event. To prepare for a significant thunderstorm event, the district regularly runs through drills with hospital administrators, to identify any weaknesses in their plans. The public health district also maintains a database of locations where additional emergency resources are kept, to assist in the case of an emergency.

Severe Winter Storms
Severe winter storms are a significant concern annually. During a severe winter storm, PPHD is most concerned about livestock, and power outages, which may affect the very old and the very young disproportionately. Based on where the power outage occurs, these outages may last anywhere from a few hours to a few days. Local impacts of severe winter storms include roofs collapsing, in Crawford, Nebraska, the roof of a local bowling alley caved in due to heavy snowpack. In order to mitigate the lasting impacts of a severe winter storm, the district help increase public awareness by sending out a preparedness flyer. The public health district also sends out a newsletter to encourage preparedness during severe winter storm.

Mitigation Strategy

Continued Mitigation and Strategic Actions

MITIGATION ACTION	COMMUNITY EDUCATION
DESCRIPTION	Develop an education program to inform residents of risks related to chemical releases. This could include direct outreach to residents living in the immediate vicinity of chemical storage sites.
HAZARD(S)	Hazardous Materials – Fixed Site, Hazardous Materials – Transportation
ESTIMATED COST	$2,000
FUNDING	Preparedness Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Emergency Response, Environmental Health
STATUS	Not Started

MITIGATION ACTION	EDUCATION PROGRAMS
DESCRIPTION	Establish a community education program to increase awareness related to household level mitigation actions.
HAZARD(S)	All hazards
ESTIMATED COST	$6,000
FUNDING	Preparedness Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Emergency Response, Environmental Health
STATUS	In Progress. The district is continuing to grow and build the community education programs.

MITIGATION ACTION	SHELTER IN PLACE TRAINING
DESCRIPTION	Provide shelter in place training to facilities, with housing vulnerable populations (nursing homes, childcare facilities, schools, etc.).
HAZARD(S)	Hazardous Materials - Fixed Site, Hazardous Materials - Transportation
ESTIMATED COST	$3,000
FUNDING	Preparedness Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Emergency Response, Environmental Health
STATUS	In Progress. Currently working with long-term care, day cares, schools, and other vulnerable populations for sheltering in place.

MITIGATION ACTION	WILDFIRE EDUCATION
DESCRIPTION	Develop a wildfire education program to inform citizens of actions they can take to reduce personal vulnerabilities.
HAZARD(S)	Grass/Wildfire
ESTIMATED COST	$2,000
FUNDING	Preparedness Fund
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Emergency Response, Environmental Health
STATUS	In Progress. Working with emergency management and other partners on consistent messaging.

College Profile

WESTERN NEBRASKA COMMUNITY COLLEGE

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

Table WNC.1: Community College Local Planning Team

NAME	TITLE	JURISDICTION
JOSHUA VESPER	Facilities Assistant Director	Western Nebraska Community College
NANCY HALL	Administrative Services Manager	Western Nebraska Community College
LYNEE KOSKI	Vice President of Administrative Services	Western Nebraska Community College

Location and Geography

Western Nebraska Community College (WNCC) operates three campuses across western Nebraska. The only campus located in the planning area is the Scottsbluff Campus. The other campuses are located in Alliance and Sidney. The college provides services to much of Western Nebraska, Wyoming and South Dakota. According to the local planning team, the campuses serve as meeting places for the community, and a location to attend college courses.

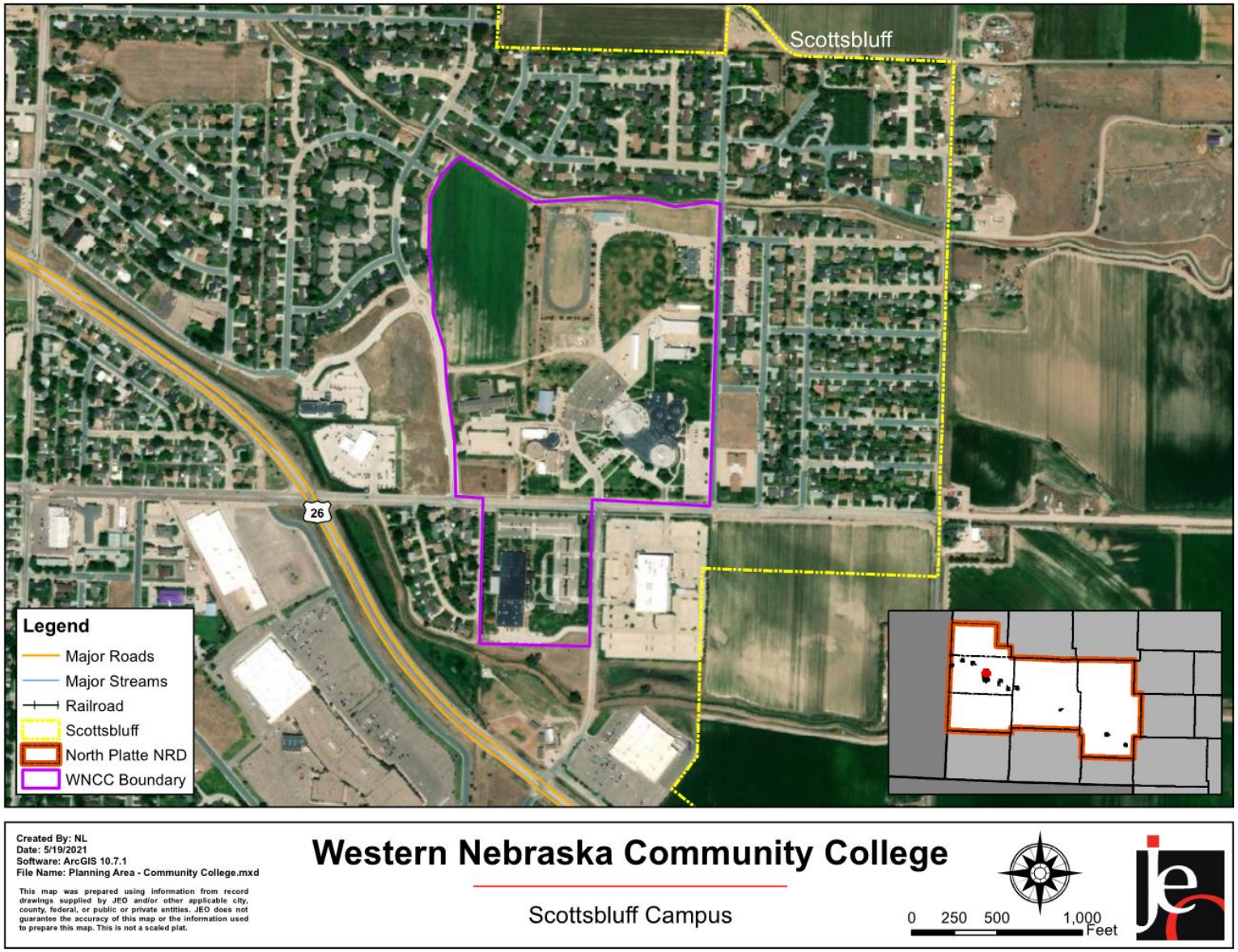
Transportation

There are several major highways that pass near the college campuses. US Highway 26, NE Highway 71 and two railroad lines travel near the Scottsbluff Campus. Interstate 80, US Highway 30, US Highway 385, and three railroad lines travel near the Sidney campus. US Highway 385, NE Highway 2, NE Highway 87, and two rail lines travel near the Alliance campus. No large transportation events or chemical spills have affected any of the campuses.

Demographics

Presently, the Western Nebraska Community College has a population of 1,625 students at three campuses: Scottsbluff, Alliance, and Sidney. Of those 1,625 students, close to 60 are international students from an estimated 25 countries. There are also 300+ staff employed by WNCC.

Figure WNC.1: Western Nebraska Community College



Housing

Student housing is available at both the Scottsbluff and Sidney Campuses. During the 2020/2021 academic year 160 students lived on the Scottsbluff Campus and 12 students at the Sidney Campus. However, these number were much lower due to the Covid-19 pandemic. Prior to the pandemic there were 300 students living on the Scottsbluff Campus and 24 students at the Sidney Campus.

Future Development Trends

Over the past five years one third of the main campus in Scottsbluff has been renovated and the fire sprinkler system was upgraded in the campus gym. In addition, a backup generator was installed at the Scottsbluff Campus for IT systems and emergency lighting. A Diesel tech program will start in the fall of 2021 at a leased facility in Scottsbluff. In the next five years, Scottsbluff Campus classrooms will be renovated, upgrades to the fire protection systems will occur, surveillance cameras and electronic door access upgrades are planned, and a backup generator may be added to the residence halls.

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 19 chemical storage sites in Scottsbluff, 16 chemical storage sites in Alliance, and 56 chemical storage sites in Sidney that contain hazardous chemicals. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

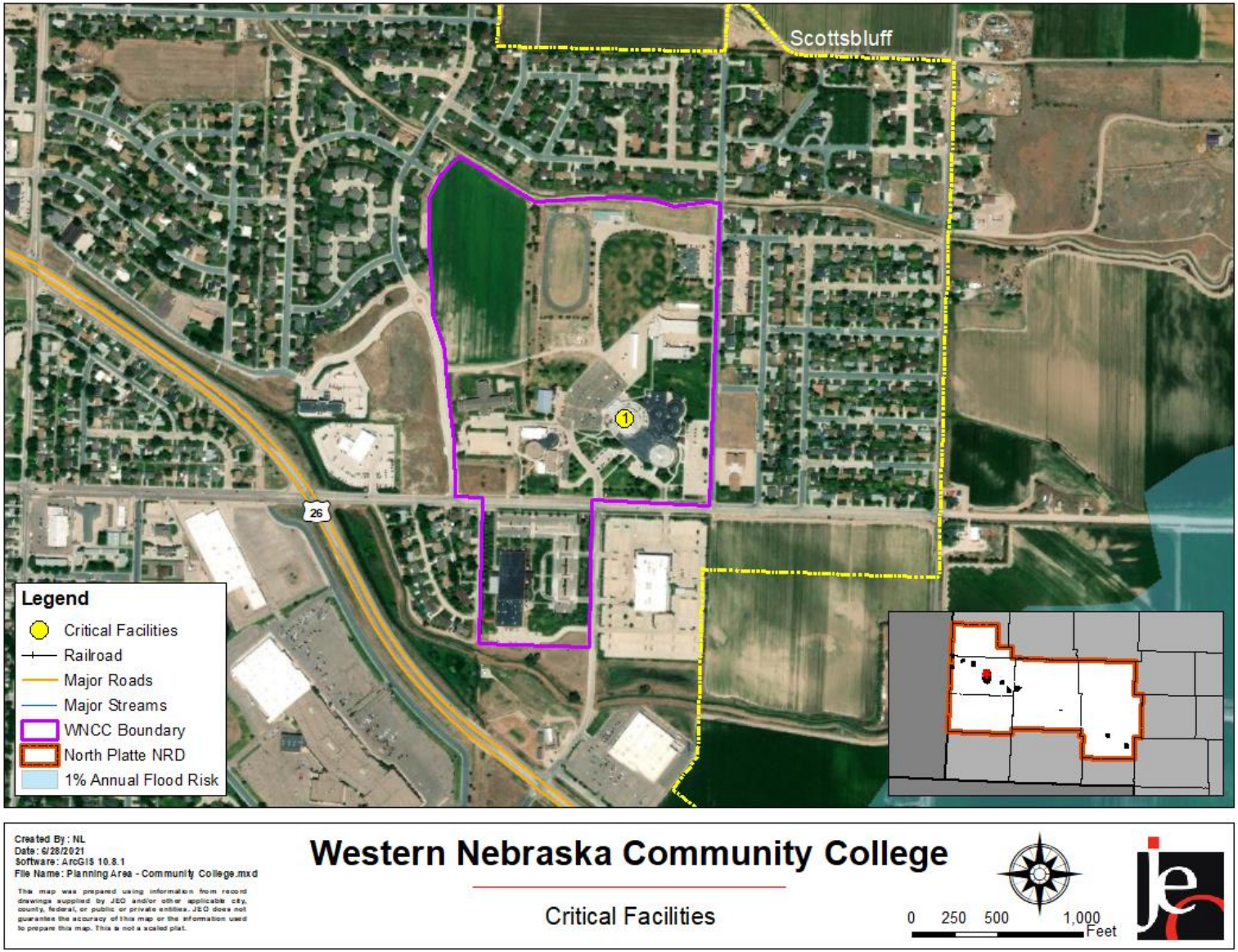
Critical Facilities

The local planning team identified critical facilities that are vital for disaster response, public shelter, 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 WNC.2: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Scottsbluff Campus	Y	Y	N
2	Alliance Campus	Y	N	N
3	Sidney Campus	N	N	N

Figure WNC.2: Critical Facilities



Governance

The school's Board of Governors would be main actor in overseeing the implementation of mitigation actions in school facilities. The board of governors can levy taxes and can self-govern through the board's operating policy and administrative guidelines. The school currently has a number of education and outreach programs These programs include natural disaster and safety related school programs as well as ongoing public education and information programs.

- Administrative Services
- Student Life
- Educational Services
- Senior Leadership

Capability Assessment

Due to the unique structure of the college, the typical capability assessment table was not used. The following table summarizes the district's overall capabilities. The Western Nebraska Community College will continue to utilize existing relationships with local, county, state, and federal agencies to aid in the implementation of mitigation projects.

Western Nebraska Community College has recently joined Region 22 Emergency Management's "Communities Active in A Disaster" (COAD) program. This will allow the community college to assist others in response efforts in case of an emergency.

Table WNC.4: Capability Assessment

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 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 (e.g., 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 Facilities Director, Administrative Services Director, and the Vice President of Administrative Services. The local planning team will review the plan no less than annually and will include the public in the review and revision process by: website updates, social media, and sharing information with Scottsbluff

City Council. The planning team also plans to work with local law enforcement and first responders for any revisions to the plan.

Plan Integration

The emergency operations plan for the community college has been undergoing revisions since 2019 and currently discusses tornadoes. The local planning team plans to include more natural hazards in upcoming revisions based on a hazard vulnerability assessment. The plan includes shelter in place protocols and identifies evacuation scenarios. In a future response plan update, the planning team would like to include shelter in place protocols, identify evacuation scenarios, identify opportunities for mitigation following hazard events, and identify any gaps related to particular hazards. All staff, faculty, and students are educated on the college's standard response protocol and emergency operations plan.

The college also has a strategic master plan which was last updated in 2017 and will be updated again in 2022. The strategic master plan includes the following goals and objectives which are consistent with those in the hazard mitigation plan.

The college also has a master facility plan (July 2013), an information technology strategic plan (March 2020), and a strategic enrollment management plan (September 2020).

Historical Occurrences

See the Scotts Bluff County profile for historical hazard events for the Scottsbluff campus. Historical events for Sidney can be found in the *2017 South Platte NRD Hazard Mitigation Plan*. Historical hazard events for Alliance can be found in the *2020 Region 23 Emergency Management Agency Multi-Jurisdictional Hazard Mitigation Plan*.

See the Scotts Bluff County community profile for historical hazard events. The following table provides a summary of hazards that have or have the potential to affect the Western Nebraska Community College. The college was evaluated for previous hazard occurrence and the probability of future hazard events on each of the 15 hazards profiled in this plan. The evaluation process was based on data collected; previous impacts or the potential for impacts to infrastructure, critical facilities, people, and the economy; and the proximity to certain hazards such as dams and levees.

Table WNA.6: Western Nebraska Community College Hazard Matrix

HAZARD	WESTERN NEBRASKA COMMUNITY COLLEGE
Agricultural Disease	
Dam Failure	X
Drought	X
Earthquake	X
Extreme Heat	X
Flooding	X
Grass/Wildfire	X
Hazardous Materials – Fixed Site	X
Hazardous Materials – Transportation	X

Levee Failure	
Public Health Emergency	X
Severe Thunderstorms	X
Severe Winter Storms	X
Terrorism	X
Tornadoes and High Winds	X

Hazard Prioritization

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

Hazardous Materials – Fixed Sites

Western Nebraska Community College has a variety of chemistry labs with pressurized gasses and chemicals for classes. The college also has fuel tanks for vehicles, which can be an additional concern for leaks and explosion liability. There are also several major chemical production and storage facilities located in three communities. While no events have occurred with chemical spills or leaks in the past, the possibility is present. In the event of a spill, the Scottsbluff Fire Department would respond with its hazardous materials team, as the college does not have the resources to respond to a chemical event. WNCC maintains hazard communication training and practices at all three campuses. The college will continue in the future to monitor and plan for any major changes in the procuring or storage of hazardous chemicals on site. As WNCC works to review and revise the emergency operations plans for the college, they will begin to conduct more education and training surrounding chemical spills / leaks and appropriate response.

Public Health Emergency

The Panhandle Public Health District and Nebraska Department of Health and Human Services will lead the response and planning efforts related to any public health emergencies in the area. According to the local planning team, Covid-19 had a small impact on student enrollment and created additional challenges to classroom delivery due to the need for social distancing and quarantining. In response to Covid-19, the college enacted the following response protocols: face covering mandate, symptom screening, travel restrictions on student activities, employee education, symptom screening of athletics, restrictions on self-serve food options on campus, and creation of quarantine spaces for students. The college reported 114 positive cases of Covid-19 for both staff and students from August 2020 to May 2021. Going forward, the college identified the need to utilize MOUs for additional housing options, provide more virtual learning options and setup courses for virtual capabilities, and cross-train staff and departments to avoid staff shortages and continue operations, develop health services for students on campus, and continue to budget for any unexpected epidemic or pandemic in the future.

Severe Thunderstorms (Includes Hail)

Hail is a common weather phenomenon in the planning area, and the Scottsbluff Campus was hit by a significant hail event in the spring of 2012. During this 2012 event, several buildings were damaged. Buildings at WNCC are typically fitted with hail resistant building materials. To protect against any lasting impacts from hail damages, the school has insured the buildings on all three campuses. WNCC recently installed a backup generator at the main campus building which will support IT infrastructure and emergency lighting. WNCC has is also considering adding backup

generators for the residence halls in Scottsbluff and Sidney. Electronic backup of vital records are kept via tape within the IT department on a regular schedule. The college is in the process of backing up paper records and files in an electronic form. Additional mitigation actions taken include protective coverings on campus for company vehicles and roof repairs will be able to withstand damage from 2+-inch hail and 75 mph winds

Severe Winter Storms
Severe winter storms are quite common in the entire planning area as a whole. During the extreme cold temperature in February 2021, the campuses were able to keep operations going without major issues. Largest impacts were with vehicles not starting which complicated athletics travel schedules. According to the local planning team, the college's biggest concern is students/staff/faculty commuting to get to the college. The local planning team is also concerned about snow removal and the snow load on roofs. Past snow melt has caused small roof leaks. The cities of Scottsbluff, Sidney, and Alliance all have designated snow routes, which assist with getting students safely to and from school. On all campuses, the college has its own truck plows, which take care of clearing parking lots and roadways. WNCC continues to make improvements to plans and procedures for major winter storm events. For example, the college annually reviews and revises the snow removal procedures for all three campuses to ensure the best plans to remove snow and ice in a timely fashion. WNCC continues to invest in more equipment to help assist in these procedures including new plows, ice melt spreaders, and machinery to handle major storms. WNCC has recently reviewed and edited the college weather closure policy and procedure to ensure that they are considering several different aspects of the situation, and if risk levels are too high, or it is not feasible to open campus or for persons to travel safely to campus, they will close operations. In the case of a snow event above three inches, a local contractor removes snow at the college.

Terrorism
The local planning team has indicated that there have been very small civil disorder events, but they have been confined to domestic disputes within residence halls. The concern of the local planning team was having a large community of students which the college needs to protect. Because the campus is so open to the public, there are potential concerns about people adversely affecting campus life from off campus. The local planning team believes that the most likely individuals who would cause issues of civil disorders are stressed students, students with mental disorders, domestic violence, and partner violence. The local planning team also included that the college is always concerned about school shootings and lockdown/lockout issues.

Since 2018, the college has undergone improvements in the education and training for terrorism events including: active shooter didactic training, updates to plans and procedures, and building improvements for notification and security. WNCC recently applied for grant funds to upgrade electronic door access and provide training for NIMS. Going forward, the college will continue to make improvements and educate/train staff regarding lockout/lockdown procedures, reporting signs or actual events of workplace violence, verbal de-escalation, and situation awareness.

Tornadoes and High Winds
The college's biggest concern with regard to tornadoes is potential of injury to students in buildings. Tornadoes are common for the entire planning region; however, none of the campuses have ever been hit directly. The college has upgraded the mass notification software to RAVE Alert, which has worked very well for the college. RAVE alert has been setup to automatically receive NWS alerts so that campus administrators are aware of pending severe weather and can notify the campus community. WNCC has upgraded on campus tornado warning notification system so that when one building activates the alarm, all buildings on the main campus will

activate as well. WNCC continues to participate in the statewide tornado drill each year, and trains employees and students regarding tornado response procedures during orientation. In the case of a tornado, the college has identified shelter locations. For the Scottsbluff Campus these spaces are located in the lower level of the gym, interior bathrooms, and locker rooms. For the Alliance Campus these spaces are located in the basement and interior restrooms. For Sidney, these spaces are located in interior offices, hallways, and restrooms.

Mitigation Strategy

Completed Mitigation and Strategic Actions

MITIGATION ACTION	IMPROVE AND REVISE SNOW/ICE REMOVAL PROGRAM
DESCRIPTION	As needed, continue to revise and improve the snow and ice removal program for streets. Revisions should address situations such as plowing snow, ice removal, parking during snow and ice removal, and removal of associated storm debris. This would include equipment that is needed and paving routes.
HAZARD(S)	Severe Winter Storms
STATUS	Completed. New machinery was purchased in the fall of 2020. Snow removal plan updated and implemented with the Physical Plant Department. Ongoing review of equipment maintenance and products used for safety.

MITIGATION ACTION	SNOWPLOW
DESCRIPTION	Purchase additional snowplow.
HAZARD(S)	Severe Winter Storms
STATUS	Completed.

MITIGATION ACTION	SPILL KIT
DESCRIPTION	Implement chemical spill kits and training/awareness activities to prevent and respond to a chemical spill in the North Shop.
HAZARD(S)	Hazardous Materials – Fixed Site
STATUS	Completed.

New Mitigation and Strategic Actions

MITIGATION ACTION	FLOODPLAIN MITIGATION/DRAINAGE ASSESSMENT
DESCRIPTION	Conduct drainage assessment and enact floodplain mitigation efforts and projects.
HAZARD(S)	Flooding
ESTIMATED COST	To be determined
FUNDING	Building/Grounds Budget
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Maintenance

Continued Mitigation and Strategic Actions

MITIGATION ACTION	ALERT/WARNING SIRENS
DESCRIPTION	Preform an evaluation of existing alert sirens in order to determine which sirens should be replaced or upgraded. Install new sirens where lacking with remote activation points.
HAZARD(S)	Tornadoes and High Winds, Terrorism, Severe Winter Storms
ESTIMATED COST	$20,000
FUNDING	Standard Fund
TIMELINE	1-3 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	In Progress. Scottsbluff Campus has been updated. Still need to complete for the Sidney and Alliance Campuses.

MITIGATION ACTION	BACKUP GENERATORS
DESCRIPTION	Provide a portable source of backup power to protect against severe weather.
HAZARD(S)	Tornadoes and High Winds, Severe Winter Storms, Severe Thunderstorms
ESTIMATED COST	$60,000 per generator
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	In Progress. Scottsbluff IT and emergency lighting systems have been completed. Residence halls in Scottsbluff and Sidney still need to updated.

MITIGATION ACTION	BUS BARN AND COVERED VEHICLE PARKING
DESCRIPTION	As part of the Master Facilities Plan, install protection for college property.
HAZARD(S)	Severe Winter Storms, Severe Thunderstorms
ESTIMATED COST	$1,000,000-$2,000,000
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	In Progress. Bus and fleet vehicle canopy installed in 2018 at the Scottsbluff Campus. Trailer canopy at the Scottsbluff Campus and vehicle canopies at Alliance and Sidney Campuses are still needed.

MITIGATION ACTION	ELECTRICAL SYSTEM LOOPED DISTRIBUTION/REDUNDANCIES
DESCRIPTION	Provide looped distribution service and other redundancies in the electrical system as a backup power supply in the event the primary system is destroyed or fails.
HAZARD(S)	Severe Winter Storms
ESTIMATED COST	$500,000
FUNDING	Standard Fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Environmental Health and Safety, Facilities Department
STATUS	Planning Stage. Electrical redundancies to be installed ruing renovation projects.

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 inter-operable communications. Also upgrade radios and mass notification systems.
HAZARD(S)	All hazards
ESTIMATED COST	$25,000
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department, Environmental Health and Safety
STATUS	In Progress. Rave emergency alert system is in place at all campuses. Radio upgrades are currently in progress with a limited number of radios connected to Scotts Bluff County Communication Center and Scottsbluff Public Schools.

MITIGATION ACTION	EMERGENCY EXERCISE: SECURITY
DESCRIPTION	Develop and facilitate an emergency management exercise to review current planning efforts and to identify areas in need of improvement or gaps in planning.
HAZARD(S)	Terrorism
ESTIMATED COST	$500
FUNDING	Standard Fund
TIMELINE	1-3 years
PRIORITY	High
LEAD AGENCY	Environmental Health and Safety
STATUS	In Progress. A security assessment was completed for all campus locations. Active shooter training completed for all campuses. Annual training is ongoing.

MITIGATION ACTION	FACILITY EMERGENCY PLANNING
DESCRIPTION	Develop emergency plans that can be enacted during events.
HAZARD(S)	Terrorism
ESTIMATED COST	$1,000
FUNDING	Standard Fund
TIMELINE	1-2 years
PRIORITY	High
LEAD AGENCY	Environmental Health and Safety
STATUS	In Progress. Base plan for emergency operations in progress using FEMA guidance for updating plans.

MITIGATION ACTION	FACILITY LIGHTING
DESCRIPTION	Install lighting at critical facilities and key infrastructure.
HAZARD(S)	Terrorism
ESTIMATED COST	$40,000
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	Planning Stage. Security assessment has identified locations that need additional lighting.

MITIGATION ACTION	FACILITY MONITORING
DESCRIPTION	Install security cameras in/around critical facilities and key infrastructure.
HAZARD(S)	Terrorism
ESTIMATED COST	$30,000
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	In Progress. Security camera upgrades in progress at all campus locations in a multi-phase project.

MITIGATION ACTION	FACILITY SECURITY
DESCRIPTION	Install locks on entries to critical areas for critical facilities.
HAZARD(S)	Terrorism
ESTIMATED COST	$40,000
FUNDING	Standard Fund
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Facilities Department
STATUS	Planning Stage. Electronic door access upgrade is planned for in 2022.

MITIGATION ACTION	HAZARDOUS TREE REMOVAL PROGRAM
DESCRIPTION	Identify and remove hazardous limbs and/or trees on school property.
HAZARD(S)	Tornadoes and High Winds, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$20,000
FUNDING	Standard Funds
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Maintenance Department
STATUS	In Progress. Using annual tree trimming maintenance protocol.

MITIGATION ACTION	IMPACT RESISTANT ROOF COVERINGS
DESCRIPTION	Use roofing materials that are resistant to hail impacts for new buildings. Retrofit existing buildings with hail resistant roofing.
HAZARD(S)	Severe Thunderstorms
ESTIMATED COST	$1,000,000
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	Planning Stage. Scottsbluff main campus roofs being replaced summer of 2021. Taper/slope modifications will be used to eliminate flat roofs. Roof materials will be able to withstand 2.5-inch hail and 75 mph winds.

MITIGATION ACTION	INSTALL VEHICULAR BARRIERS
DESCRIPTION	Install vehicular barriers to protect school facilities where possible. Location would be the main streets near campuses.
HAZARD(S)	Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$100,000
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	Planning Stage. Identified as a need on the security assessment. Planned for in 2023.

MITIGATION ACTION	LANDSCAPE IMPROVEMENTS
DESCRIPTION	Remove landscape elements that can conceal people or materials.
HAZARD(S)	Terrorism
ESTIMATED COST	$25,000
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	In Progress. The college uses CPTED standards to guide landscaping design on all campuses.

MITIGATION ACTION	POWER, SERVICE, ELECTRICAL, AND WATER DISTRIBUTION LINES
DESCRIPTION	The college intends to work with the city and local government agency to work with their local Public Power District or community electricity department to identify vulnerable transmission and distribution lines on school property and plan to replace or retrofit existing structures to be less vulnerable to storm events.
HAZARD(S)	All hazards
ESTIMATED COST	$20,000
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	Not Started

MITIGATION ACTION	PROMOTE FIRST AID
DESCRIPTION	Promote first aid training for all stuff.
HAZARD(S)	All hazards
ESTIMATED COST	$2,000
FUNDING	Standard Fund
TIMELINE	1-2 years
PRIORITY	High
LEAD AGENCY	Environmental Health and Safety, Human Resources
STATUS	In Progress. The college provides basic first aid training and AED training.

MITIGATION ACTION	PUBLIC AWARENESS/EDUCATION
DESCRIPTION	Educate staff, students, and parents about hazard vulnerability and mitigation measures. Activities may include classroom modules profiling certain hazards and discussing preparedness measures. Educational materials, such as brochures and fliers, can be developed and provided to parents to increase community wide hazard awareness. Staff training can be conducted regarding school hazard vulnerability. In addition, purchasing education equipment such as overhead projectors and laptops.
HAZARD(S)	All hazards
ESTIMATED COST	$5,000/year
FUNDING	
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Environmental Health and Safety, Human Resources
STATUS	Not Started

MITIGATION ACTION	SAFE ROOMS & STORM SHELTERS
DESCRIPTION	Design and fully construct fully supplied safe rooms in school facilities at Sidney and Scottsbluff campuses.
HAZARD(S)	Tornadoes and High Winds
ESTIMATED COST	$2,000,000
FUNDING	Buildings/Grounds Budget
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Departments, Environmental Health and Safety
STATUS	Not Started. The college is looking into improvements to tornado shelters on the Sidney and Alliance Campuses in the future.

MITIGATION ACTION	SCHOOL CONTINUITY PLAN
DESCRIPTION	Develop continuity plans for critical services in order to increase resiliency after a hazardous event.
HAZARD(S)	All hazards
ESTIMATED COST	$500
FUNDING	Standard Fund
TIMELINE	1-3 years
PRIORITY	Medium
LEAD AGENCY	Environmental Health and Safety
STATUS	Not Started. WNCC is currently reviewing and revising emergency operations plans and, in the future, will focus efforts on COOP Planning.

MITIGATION ACTION	SHELTER IN PLACE
DESCRIPTION	Provide shelter in place training to facilities, housing, and vulnerable populations (nursing homes, childcare facilities, schools, etc.).
HAZARD(S)	Hazardous Materials – Fixed Site
ESTIMATED COST	$1,000
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Environmental Health and Safety
STATUS	Not Started

MITIGATION ACTION	SITE SECURITY
DESCRIPTION	Install fences around the north shop and powerline lab.
HAZARD(S)	Terrorism
ESTIMATED COST	$100,000
FUNDING	Standard Fund
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	Planning Stage. Powerline Lab fence project is scheduled for completion in 2022.

MITIGATION ACTION	STEEL CURB INSTALLATION
DESCRIPTION	Install steel curbs for spill containment near the elevator. Locations include Room G120C and the main building.
HAZARD(S)	Hazardous Materials – Fixed Site
ESTIMATED COST	$30,000
FUNDING	Standard Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	Facilities Department
STATUS	In Progress. Upgrades were made to one elevator. The other elevator is still needed.

Removed Mitigation and Strategic Actions

MITIGATION ACTION	BUILDING CODES
DESCRIPTION	Prohibit installation of flat roofs in new construction
HAZARD(S)	Severe Winter Storms
REASON FOR REMOVAL	This action will be completed using other mitigation actions.

MITIGATION ACTION	COMMUNITY EDUCATION
DESCRIPTION	Develop an education program to inform residents of risks related to chemical releases. This could include direct outreach to residents living in the immediate vicinity of chemical storage sites.
HAZARD(S)	Hazardous Materials – Fixed Site
REASON FOR REMOVAL	The college would like to focus on other projects.

MITIGATION ACTION	CRITICAL FACILITIES SITING
DESCRIPTION	Prohibit the construction of critical facilities within the immediate radius of chemical storage facilities.
HAZARD(S)	Hazardous Materials – Fixed Site
REASON FOR REMOVAL	There are no outside chemical storage facilities in the immediate radius of the campuses.

MITIGATION ACTION	DESIGNATED SNOW ROUTES
DESCRIPTION	During winter events, the community will have designated snow routes for the community to use.
HAZARD(S)	Severe Winter Storms
REASON FOR REMOVAL	This action would be better handled by the communities.

MITIGATION ACTION	EMERGENCY EXERCISE: HAZARDOUS SPILL
DESCRIPTION	Utilize exercise to prepare for potential explosions or hazardous spills. Ensure that nearby businesses and residents have appropriate plans in place.
HAZARD(S)	Hazardous Materials – Fixed Site
REASON FOR REMOVAL	The college would like to focus on other projects.

MITIGATION ACTION	LAND USE REGULATIONS
DESCRIPTION	Develop land use ordinances and regulations to prevent storage of chemicals near residential developed.
HAZARD(S)	Hazardous Materials – Fixed Sites
REASON FOR REMOVAL	This project would be better done by the communities.

MITIGATION ACTION	PROTECT ROOFTOP UTILITIES
DESCRIPTION	Retrofit utilities on building rooftop to provide protection from hail events.
HAZARD(S)	Severe Thunderstorms
REASON FOR REMOVAL	The college would like to focus on other projects.

MITIGATION ACTION	SNOW FENCES
DESCRIPTION	Construct snow fences to protect main transportation routes and critical facilities from excessive snow drifting and road closure.
HAZARD(S)	Severe Winter Storms
REASON FOR REMOVAL	WNCC would like to focus on other actions.

MITIGATION ACTION	WIND BREAK STUDIES
DESCRIPTION	Conduct a study to identify areas in need of “shelter belts” or wind breaks.
HAZARD(S)	Severe Winter Storms
REASON FOR REMOVAL	WNCC would like to focus on other actions.

Airport Profile

WESTERN NEBRASKA REGIONAL AIRPORT

North Platte NRD
Hazard Mitigation Plan 2021

Local Planning Team

Table WNA.1: Airport Local Planning Team

NAME	TITLE	JURISDICTION
CHERYL CLAUSE	Assistant Airport Director	Western Nebraska Regional Airport
RAUL AGUALLO	Airport Director	Western Nebraska Regional Airport

Location and Geography

The Western Nebraska Regional Airport is located in on the eastern edge of the City of Scottsbluff. The Tri-State Canal, Winters Creek, and the Winters Creek Canal are all located near the airport.

Climate

As an airport within Scottsbluff, Nebraska, the plan will utilize Scottsbluff as the location for all of the climate data. For Scottsbluff, the normal high temperature for the month of July is 89.5 degrees Fahrenheit and the normal low temperature for the month of January is 14.9 degrees Fahrenheit. On average, Scottsbluff gets 15.62 inches of rain and 42.1 inches of snowfall per year. The following table compares these climate indicators with those of the entire state.

Table WNA.2: Climate Data for Scottsbluff

	SCOTTSBLUFF	STATE OF NEBRASKA
JULY NORMAL HIGH TEMP[1]	89.5 °F	88.0°F
JANUARY NORMAL LOW TEMP[1]	14.9 °F	12.0°F
ANNUAL NORMAL PRECIPITATION[2]	15.62 inches	30.3 inches
ANNUAL NORMAL SNOWFALL[2]	42.1 inches	25.9 inches

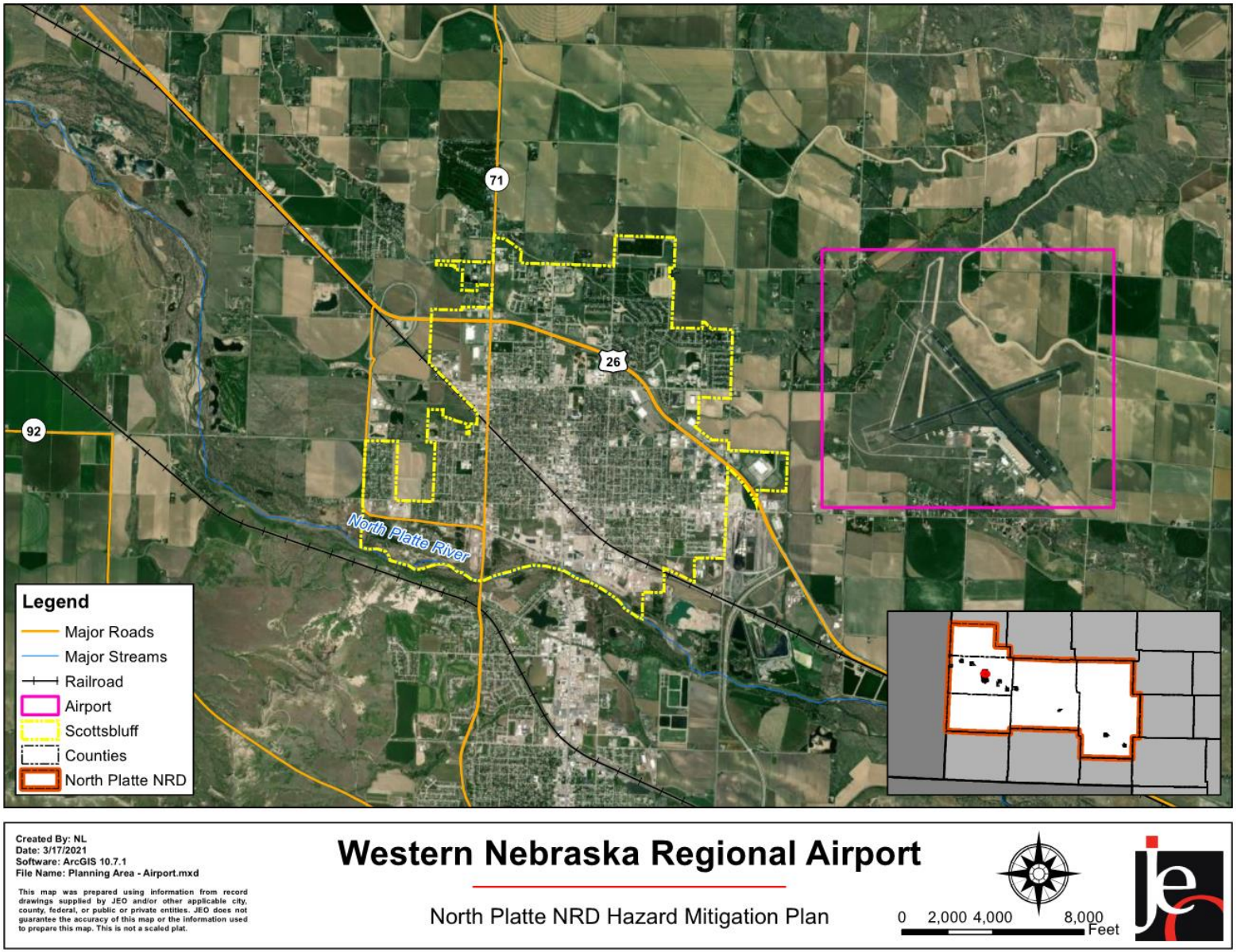
Source: NCEI 1981-2010 Climate Normals[35], High Plains Regional Climate Center, 1981-2010[36]
Precipitation includes all rain and melted snow and ice.

Transportation

There are two major highways that passes near the airport, US HWY 26 and NE HWY 71. According to the Nebraska Department of Roads the average daily traffic count for US HWY 26 is 4,980 vehicles per day, 405 of which are heavy commercial vehicles. NE HWY 71 has a traffic count of 6,910 vehicles per day, 275 of which are heavy commercial vehicles.[37] There are two railroad lines which travel near the airport. The airport averages two flights daily with 46 to 68 passengers. The security room can hold up to 250 passengers if needed. No transportation events or spills have affected the airport.

[35] National Centers for Environmental Information. "1981-2010 U.S. Climate Normals." Accessed December 2020. https://www.ncdc.noaa.gov/cdo-web/datatools.
[36] High Plains Regional Climate Center. "Monthly Climate Normals 1981-2010 – Scottsbluff, NE." Accessed December 2020. http://climod.unl.edu/.
[37] Nebraska Department of Transportation. 2018. "Interactive Statewide Traffic Counts Map." [map]. https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34.

Figure WNA.1: Western Nebraska Regional Airport



Demographics

The Western Nebraska Regional Airport does not provide information regarding demographics. While it is difficult to predict demographics at an airport, it is important to note that many patrons of airports are a part of a transient population and may not have knowledge of the area to seek refuge in a hazard event. Patrons of an airport typically do not have their own transportation and may be confined to the terminal in the case of a severe storm event.

Future Development Trends

Over the past five years, the airport added an assistant airport director and SkyWest Airlines was added. This help increase the number of boardings at the airport. In the next five years, improvements will be made to the t-hangars, a fuel tank will be added, and new office staff will possibly be added. The airport is currently in the process of adding an addition to the airport fire station.

Community Lifelines

Critical Facilities

The local planning team identified critical facilities that are vital for disaster response, public shelter, 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 WNA.3: Critical Facilities

CF #	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Western Nebraska Regional Airport	N	Y	N

Figure WNA.2: Critical Facilities

Governance

The Western Nebraska Regional Airport includes a five-member board which would be responsible for implementing any mitigation actions.

- Airport Director
- Assistant Airport Director

Capability Assessment

Due to the unique structure of the airport, the typical capability assessment table was not used. The following table summarizes the district's overall capabilities. The Western Nebraska Regional Airport will continue to utilize existing relationships with local, county, state, and federal agencies to aid in the implementation of mitigation projects.

Table WNA.4: Capability Assessment

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 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 (e.g., 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 Airport Director, Assistant Airport Director, and FAA is responsible for reviewing and updating this profile as changes occur or after a major event. These individuals will review the plan no less than annually and will include the public in the review and revision process by sharing information at board meetings.

Plan Integration

Currently the airport collaborates with the City of Scottsbluff and Scotts Bluff County on planning efforts. The airport also has an Airport Emergency Plan that is reviewed annually and was last updated in 2020. This plan outlines operations, organization and responsibilities, logistics, notification, and standard operating procedures for tornadoes and hazardous materials incidents.

Historical Occurrences

See the Scotts Bluff County community profile for historical hazard events. The following table provides a summary of hazards that have or have the potential to affect the Western Nebraska Regional Airport. The airport was evaluated for previous hazard occurrence and the probability of future hazard events on each of the 15 hazards profiled in this plan. The evaluation process was based on data collected; previous impacts or the potential for impacts to infrastructure, critical facilities, people, and the economy; and the proximity to certain hazards such as dams and levees.

Table WNA.5: Western Nebraska Regional Airport Hazard Matrix

HAZARD	WESTERN NEBRASKA REGIONAL AIRPORT
Agricultural Disease	
Dam Failure	X
Drought	X
Earthquake	X
Extreme Heat	X
Flooding	X
Grass/Wildfire	X
Hazardous Materials – Fixed Site	X
Hazardous Materials – Transportation	X
Levee Failure	
Public Health Emergency	X
Severe Thunderstorms	X
Severe Winter Storms	X
Terrorism	X
Tornadoes and High Winds	X

Hazard Prioritization

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

Severe Thunderstorms (Includes Hail)

Severe thunderstorms are an annual occurrence for the airport, and the airport's runway has been struck by lightning in the past. The airport has not seen direct damages to electrical infrastructure. The Western Nebraska Regional Airport is situated in an area of higher elevation. As a high point in Scottsbluff, the airport is often stuck by lightning. To prevent lasting impacts from lightning events, the airport has installed lightning rods, to divert the flow of electricity into the ground.

Hail is common for the planning area as a whole, and the airport has received many damages as a result of hail in recent history. According to the local planning team, the airport has seen approximately $250,000 in damages from hail, historically. The largest magnitude of hail reported by the planning team was softball-sized hail. The local planning team is most concerned about windows and siding of hangers and the terminal. Often, the airport does not have enough space for all airplanes to be covered, and hail damages to airplanes may become a concern in these

situations. In an effort to become more hail-resistant, the airport outfitted the structures with a rubberized roofing material, before placing metal roofing on top of that. This system is designed to make the roof more hail resistant as a whole. The T-Hangars and office complex roofs have been completed to a Class IV board. The main terminal roof is scheduled to be updated soon. To prevent against lasting impacts as a result of hail events, the airport has purchased insurance to protect any assets and buildings.

Severe Winter Storms
Severe winter storms are common for Nebraska and are an annual occurrence for the Western Nebraska Regional Airport. During the extremely cold temperatures in February 2021, the airport had due be closed due to ice on the runways. The airport has worked very hard to outfit the staff with as much snow removal equipment as possible to ensure that winter storms have a minimal effect on the airport. Current snow removal resources include two twenty-four-foot snowplows, two snow blowers, and a tractor with a snow blade, and a backhoe. Deicing equipment was recently purchased due to changing weather patterns. Very seldom, will the administration need to close the airport, approximately once every five years. In the case of a closed airport, the airport director will alert the Federal Aviation Administration and create a notam, which will alert pilots in the area that an airport is not fit to use.

Tornadoes and High Winds
Tornadoes and high winds are common for the planning area and are considered random events across the planning area. The airport has never been hit directly by a tornado, however the local planning team indicated that many close calls have occurred. To improve awareness of tornado events, the airport has an emergency warning siren on site, which is activated whenever severe weather threatens the county. In the case of a tornado occurring, the local planning team estimates that the airport has areas which are hardened for a severe storm event; however, these areas will likely only accommodate airport staff. The airport has an airport emergency plan, which is reviewed annually, in addition to monthly safety meetings. The Western Nebraska Regional Airport is interested in obtaining a safe room constructed to standards established by FEMA.

The airport has experienced damages as a result of high winds in the past, specifically to roofing. To prevent against any lasting impacts as a result of high winds, the airport has worked to supply backup power to the airport fire department, runway lights, office, terminal, and snow removal garage. The airport, in the case of a power outage, should be able to maintain required operations, to properly serve those in the air. To mitigate against any loss of data from airport computers, all computers are backed up to the cloud nightly.

Mitigation Strategy

Continued Mitigation and Strategic Actions

MITIGATION ACTION	IMPACT RESISTANT ROOF COVERINGS
DESCRIPTION	The Western Nebraska Regional Airport intends to investigate impact resistant roof coverings the next time roofs are damaged by hail.
HAZARD(S)	Hail
ESTIMATED COST	$25,000
FUNDING	Insurance
TIMELINE	5+ years
PRIORITY	Low
LEAD AGENCY	Airport Administration, Scotts Bluff County
STATUS	In Progress. The T-Hangars and office complex have been completed to a Class IV board. The main terminal is scheduled to be started soon.

MITIGATION ACTION	STORM SHELTERS / SAFE ROOMS
DESCRIPTION	Assess, design and construct fully supplied safe rooms in highly vulnerable urban and rural areas such as mobile home parks, campgrounds, schools, and other such areas throughout the planning area. Assess the adequacy of current public buildings to be used as safe rooms. Construct safe rooms in areas of greatest need, either as new construction of retrofitting. Location would be the east side of the current terminal
HAZARD(S)	Tornadoes and High Winds
ESTIMATED COST	$200-$300/sq. ft. stand alone, $150-$200/sq. ft. addition/retrofit
FUNDING	General Budget
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Airport Administration
STATUS	Not Started