Special Districts Appendix

District Profile

REGION 23 EMERGENCY MANAGEMENT AGENCY

Region 23 Emergency Management Agency

Multi-Jurisdictional Hazard Mitigation Plan Update

2020

Local Planning Team

Table REG.1: Region 23 Local Planning Team

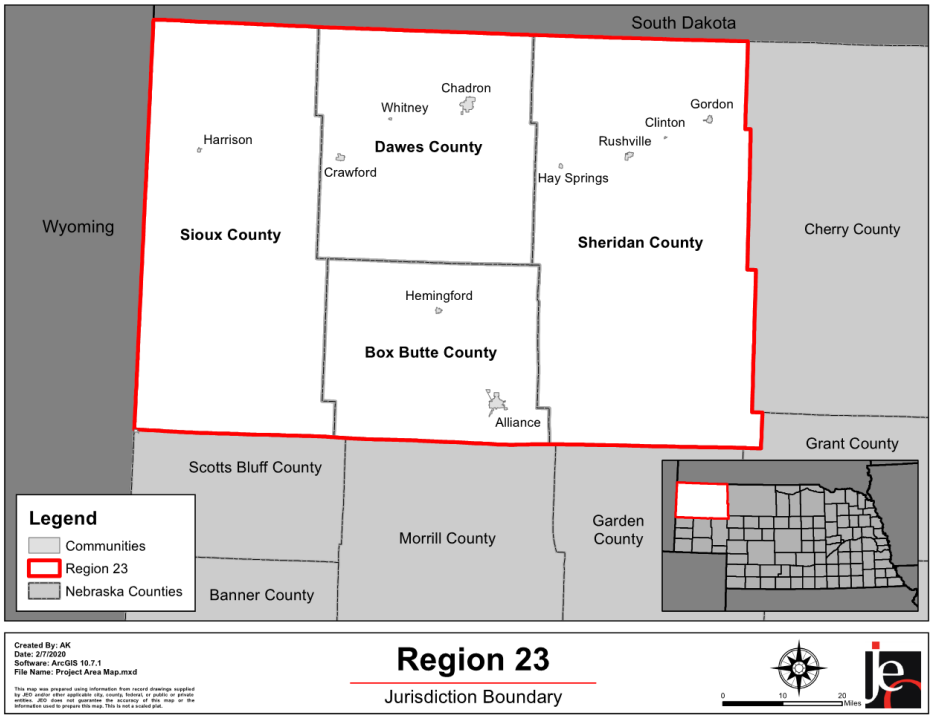
NAME	TITLE	JURISDICTION
NAN GOULD	Coordinator	Region 23 EMA
MIKE MCGINNIS	Commissioner	Box Butte County
JAKE STEWART	Commissioner	Dawes County
JAMES KROTZ	Commissioner	Sheridan County
JW GEISER	Commissioner	Sioux County

Location and Geography

Region 23 Emergency Management Agency encompasses the north western corner of Nebraska and includes the entirety of Box Butte, Dawes, Sheridan, and Sioux Counties. Region 23 Emergency Management was established in 1989 following the Ft. Robinson State Park Fire. The four counties have an Inter-local Agreement and By-Laws which outline the membership and cost-share. Each county contributes a percentage of the annual budget based upon population. Each respective county appoints a representative (historically a Commissioner) to sit on the Region 23 Board.

Major waterways in the area include the Niobrara River and White River. The Box Butte Reservoir is located in the southern portion of Dawes County and the entire area sits atop the Ogallala Aquifer. The Oglala National Grassland, Nebraska National Forest at Chadron, Fort Robinson State Park and Agate Fossil Beds National Monument are all located within the Region's jurisdiction as well. The Region's topographic regions include sand hills, plains, dissected plains, valley-side slopes, and bluffs and escarpments. A vast majority of the Region is characterized by livestock ranching. Altogether the Region covers an area of 7,016 square miles.

Figure REG.1: Region 23 Emergency Management Agency



Transportation

The Region's major transportation corridors include Nebraska Highways 2, 27, 29, 71, 87, 250, and U.S. Highway 20 and 385. These highways are of top concern for the Region. On these major transportation routes, the planning area experiences between 60 and 4,300 vehicles per day. Several major railroads run through the planning area. A DM&E rail line runs from Ft. Robinson to Chadron and then into South Dakota. Several Burlington Northern Santa Fe lines join in the City of Alliance with one line running north through the planning area to South Dakota. Rail lines commonly transport hazardous material through the Region including coal, oil, and waste materials. At least one county airport is located in Box Butte, Dawes, and Sheridan counties, with smaller private airstrips spread across the planning area.[1] Past major transportation incidents include a small airplane crash near Chadron and a train derailment within Chadron where diesel fuel was spilled. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

Chemical Transportation

Hazardous materials are commonly transported pipeline, highways, and rail lines throughout the planning area. Descriptions of chemical transportation and incidents are found in appropriate community profiles.

Demographics

It is estimated that Region 23 serves a population of about 26,669 people over four 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.*

Table REG.2: Region 23 Estimated Population

COUNTY	2010 POPULATION	2017 POPULATION	PERCENT CHANGE
BOX BUTTE	11,308	11,200	-1.0%
DAWES	9,182	8,972	-2.3%
SHERIDAN	5,469	5,241	-4.4%
SIOUX	1,311	1,256	-4.4%
TOTAL	27,270	26,669	-2.3%

Source: U.S. Census Bureau[2]

[1] Nebraska Department of Roads. "Traffic Flow Map of the State Highways: State of Nebraska." [map]. Scale 1"= 20 miles. State of Nebraska: Department of Roads, 2015. http://www.roads.nebraska.gov/media/2510/2014-statewide-traffic-flow-map.pdf

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

Future Development Trends

There have been no recent developments specific to Region 23 nor are there any planned. Please refer to the individual Community Profiles for information regarding development trends and discussion for specific jurisdictions across the planning area.

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.

Critical Infrastructure/Key Resources

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.

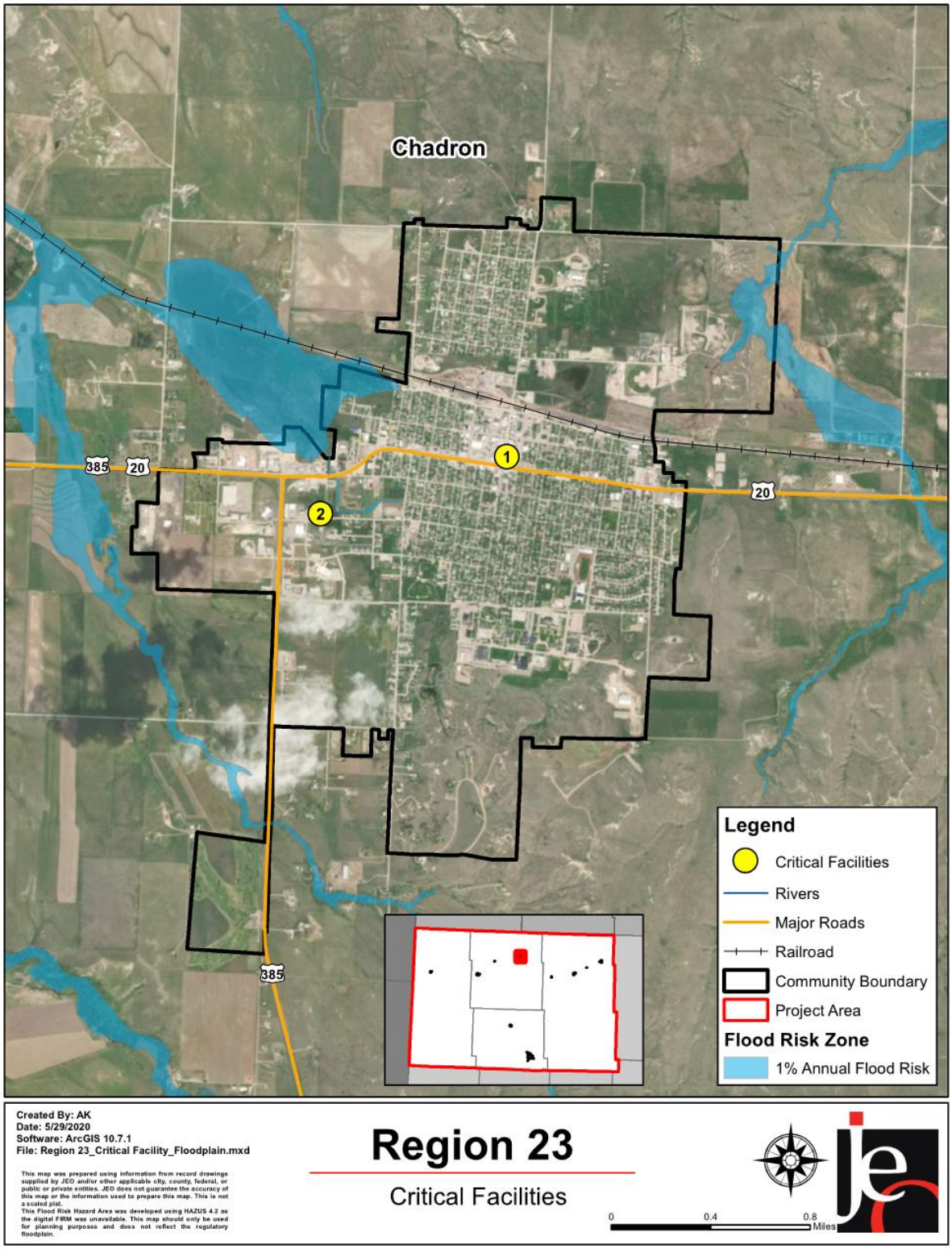
Critical Facilities

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

Table REG.3: Critical Facilities

CF Number	Name	Red Cross Shelter (Y/N)	Generator (Y/N)	Floodplain (Y/N)
1	Region 23 EMA Office	N	N	N
2	Chadron VFD Training Bldg.	N	N	N

Figure REG.2: Critical Facilities



Historical Occurrences

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

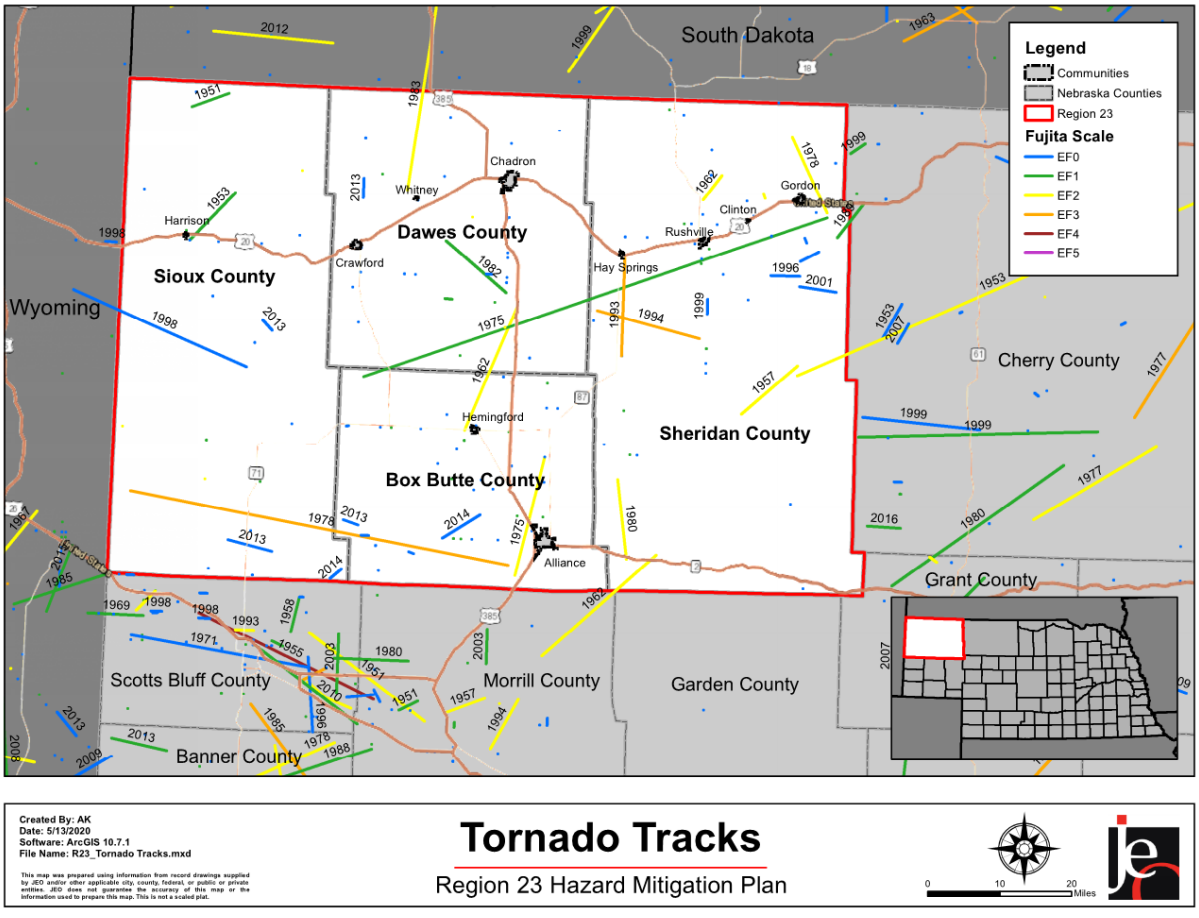
Hazard Prioritization

For an in-depth 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 community. The selected hazards were then prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

High Winds and Tornadoes

Due to the location of the district within the high plains, straight-line and high wind events are the largest concern for the district. Damage from high wind events primarily impacts power lines and trees and windbreaks. Winds up to 60mph are common across the region. The Nebraska Rural Public Power District provides power to the region. The district actively repairs and reinforces power line infrastructure throughout the region and works with the EMA to manage power outages. High wind events have caused over $129,000 in property damages and $11 million in damages to crops in the four-county district. The most significant tornado events included two EF2 tornadoes in 2016 and 2017 and an EF0 in 2017 which caused $1,000,000 in damages and knocked over 65 train cars south of Alliance.

Figure REG.3: Tornado Tracts in Region 23



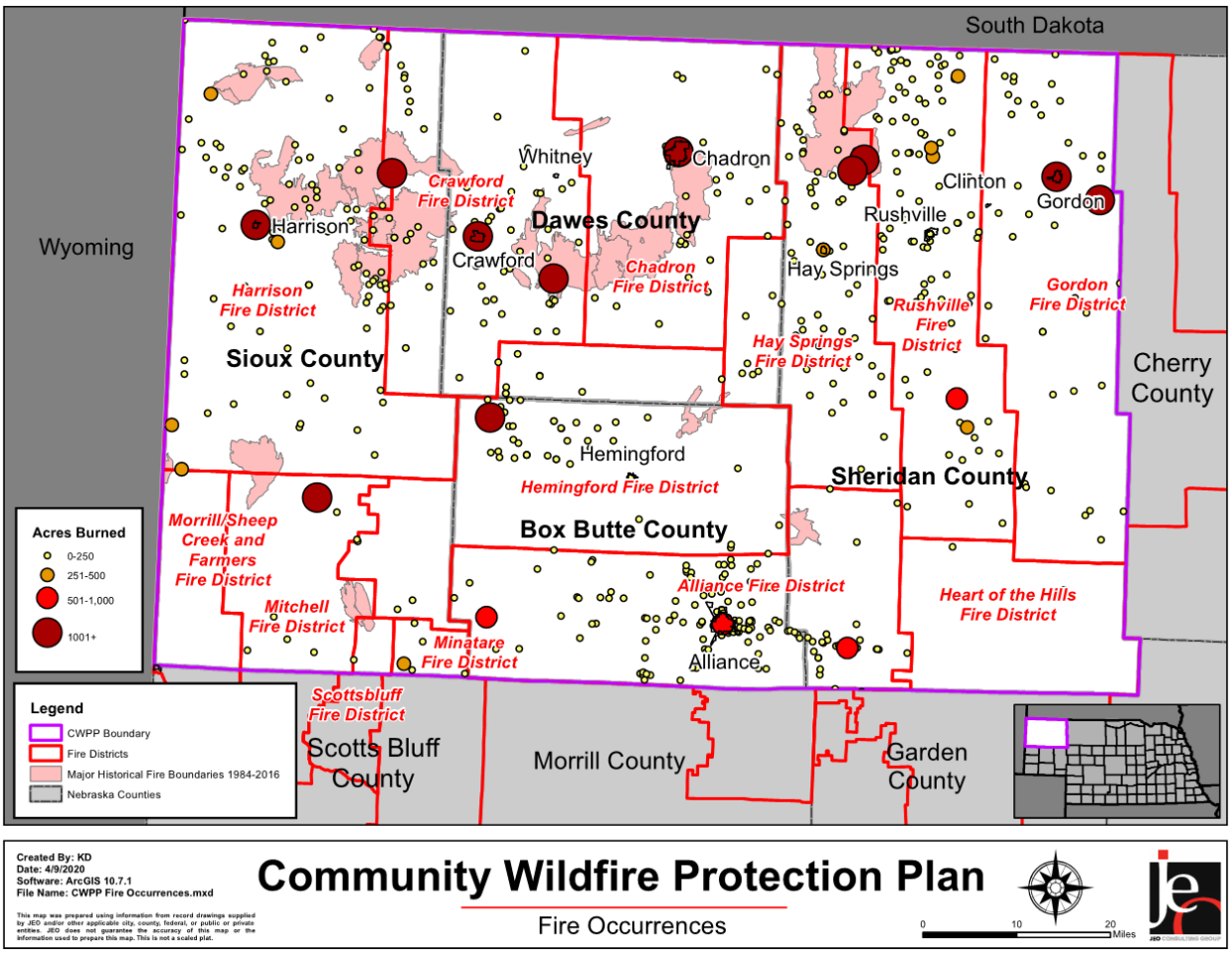
Severe Thunderstorms
Severe thunderstorms are a common occurrence across the entire district. Heavy rain, thunderstorm wind, lightning, and hail are all associated with severe thunderstorms. Hail events cause the majority of damage to infrastructure and crops. According to NCEI, severe thunderstorm property damages have exceeded $4 million and crop damages have exceeded $9 million in the region. Hail can cause up to 100% crop loss for local produces which directly impacts the local economy and tax base of the EMA. Region 23 actively shares and promotes education efforts and information from the National Weather Service for severe storms, general safety information, and school materials. Many communities across the district are transitioning to hail resistant roofing, including Chadron where the EMA is located. All four counties in the planning area participate in the NWS Storm Ready program, which the EMA provides support and guidance as needed.

Severe Winter Storms
Severe winter storms are a hazard of top concern as they occur annually and have a high potential of significant damages. Severe winter storms in the planning area are commonly associated with heavy snow fall, extreme cold temperatures, and high winds. A blizzard in 2009 caused over $70,000 in property damages and occurred during calving season, significantly impacting the local agricultural community and economy. Specific concerns also exist for road and bridge damages, blocked transportation routes, and springtime flooding from melting snowpack. Region 23 assists local emergency responders to coordinate resources and response.

Wildfire
Wildfire is the top hazard of concern for the planning area and for the Region 23 EMA. As defined in the CWPP, the entire four-county region is located within the WUI. The Pine Ridge Area in the northern portion of the district is a top concern for wildfire events due to high potential fuel load and rural area, while grass fires are of concern for private property. There have been 2,098 wildfire events reported in the Pine Ridge CWPP area by the Nebraska Forest Service. These wildfire events have burned nearly half a million acres and caused significant damage to agricultural land, recreation sites, and local infrastructure. The NFS reported $227,420 in crop damages and $1,267,162 in property damages. Wildfire events caused 12 injuries, threatened 118 homes and 127 other structures, and destroyed 12 homes and 57 other structures.

The Region 23 EMA works closely with all fire departments across the district for emergency response, as well as with state and Federal entities for resource management and for reimbursement when mutual aid resources are exhausted. Overall mutual aid resources in the district are relatively limited. Region 23 also manages county and municipality training, certification, and identifications for emergency response. Most emergency responders receive training annually. Local fire districts identified specific areas of concern for wildfire events which closely mirror past major historical fire locations. These areas in general have heavy fuel loads and limited accessibility. See *Section Four* or the CWPP for more information about regional wildfire risk and a full list of historical fire events.

Figure REG.4: Wildfire Events in Region 23



Governance

The Region is governed by a group of four elected Board of Directors. Primary roles within the agency are the Director position and the remaining deputies in each county. The Region serves both incorporated and unincorporated areas within the district and has the capability to financially and administratively assist communities and counties with mitigation actions (most commonly resource allocation and emergency planning endeavors).

Capability Assessment

The Region has the authority to issue general obligation bonds to finance certain projects. The Region also regularly engages in public education and information programs related to hazard mitigation in the area, and routinely works with other counties, cities, and villages within their jurisdictional boundaries.

Overall Capability	Limited/Moderate/High
Does your jurisdiction have the financial resources need to implement mitigation projects?	Limited
Does your jurisdiction have the staff/expertise to implement projects?	Moderate
Does your jurisdiction have the community support to implement projects?	High

Overall Capability	Limited/Moderate/High
Does your jurisdiction staff have the time to devote to hazard mitigation?	Moderate

Region 23 Emergency Management provides emergency management services and coordination efforts for all member counties and communities. Services include emergency response, recovery, mitigation, and planning. The Region does not own or manage any structures or infrastructure located within the four county area. Region 23 is sponsoring this plan to serve their jurisdictions and assist villages, cities, and counties administratively and financially with mitigation actions.

Plan Integration

Region 23 has several plans which emphasize hazard mitigation efforts across the district. As part of this HMP update, the regional Pine Ridge Community Wildfire Protection Plan was also updated and integrated into the HMP. This concurrent plan development process ensured consistent priorities and actions were used in the development of each. Moving forward, these two plans will continue to be integrated and updated together.

The Region assists with the development of emergency plans for each community and utilizes the HMP as a resource in the plan update process. Region 23 leads the development and update process for county Local Emergency Operation Plans. LEOPs identify roles and responsibilities of emergency responders and describes hazards of concern for the area.

The Region also has the following plans: Pandemic Response Plan, Mass Casualty Plan, Emergency Action Plans for the local airports, and an Emergency Action Plan for the Box Butte Reservoir which is managed by the Bureau of Reclamation. These plans are utilized across the planning area for a variety of hazard mitigation goals.

Mitigation Strategy

The Region 23 Emergency Management Agency takes a primary role in assisting jurisdictions and communities throughout the district pursue and implement mitigation actions. As such, the Region prioritizes local ownership of projects rather than Region 23-specific projects.

Ongoing or New Actions

MITIGATION ACTION	ALERT/WARNING SIRENS
DESCRIPTION	Reduce the risk of death/injury associated with severe weather promoting awareness, and ensures people take shelter when needed
HAZARD(S)	High Winds and Tornadoes, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$5,000+ per siren, varies by scope
FUNDING	General Fund, local match from communities pursuing projects
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Individual jurisdictions, Region 23 Emergency Management Agency
STATUS	Region 23 EMA assists communities as requested to update/replace alert and warning sirens. Currently the City of Crawford is seeking funding to replace sirens with the help of Region 23.

MITIGATION ACTION	COMPREHENSIVE DISASTER/EMERGENCY RESPONSE/RESCUE PLAN
DESCRIPTION	Update comprehensive city/village disaster and emergency response /rescue plan. Assist communities in updating plans.
HAZARD(S)	All Hazards
ESTIMATED COST	Staff Time
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 23 Emergency Management Agency
STATUS	Region 23 provides matching funds for Emergency Planning efforts throughout the region. The Region also updates and revises LEOP's for the four-county planning area on a five year cycle and takes a lead in other emergency planning efforts.

MITIGATION ACTION	HAZARDOUS FUELS REDUCTION
DESCRIPTION	The Nebraska Forest Service (NFS) Forest Fuels Reduction Program creates strategically located corridors of thinned forests across the landscape reduces fire intensity, improves fire suppression effectiveness, increases firefighters' safety, and better protects lives and property.
HAZARD(S)	Wildfire
ESTIMATED COST	Varies by scale
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Nebraska Forest Service, Region 23 Emergency Management Agency
STATUS	Region 23 partners with the NFS to identify areas in need of mitigation and reducing fuel loads across the district.

MITIGATION ACTION	PUBLIC AWARENESS/EDUCATION
DESCRIPTION	Considerations for activities include outreach projects and the distribution of maps and environmental education materials to increase public awareness of natural hazards to public and private property owners, property renters, businesses, and local officials. Other activities include providing education to citizens on water conservation methods. Purchasing and using equipment such as overhead projectors and laptops can allow for easier ways to educate the public during meetings.
HAZARD(S)	All Hazards
ESTIMATED COST	$500+
FUNDING	General Fund
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Region 23 Emergency Management Agency
STATUS	Public education efforts are an ongoing effort. At this time education efforts are focused on encouraging residents to sign up for CodeRed alerts and sharing safety information from the National Weather Service.

SCHOOL PROFILE

CHADRON PUBLIC SCHOOLS

Region 23 Emergency Management Agency
Multi-Jurisdictional Hazard Mitigation Plan Update

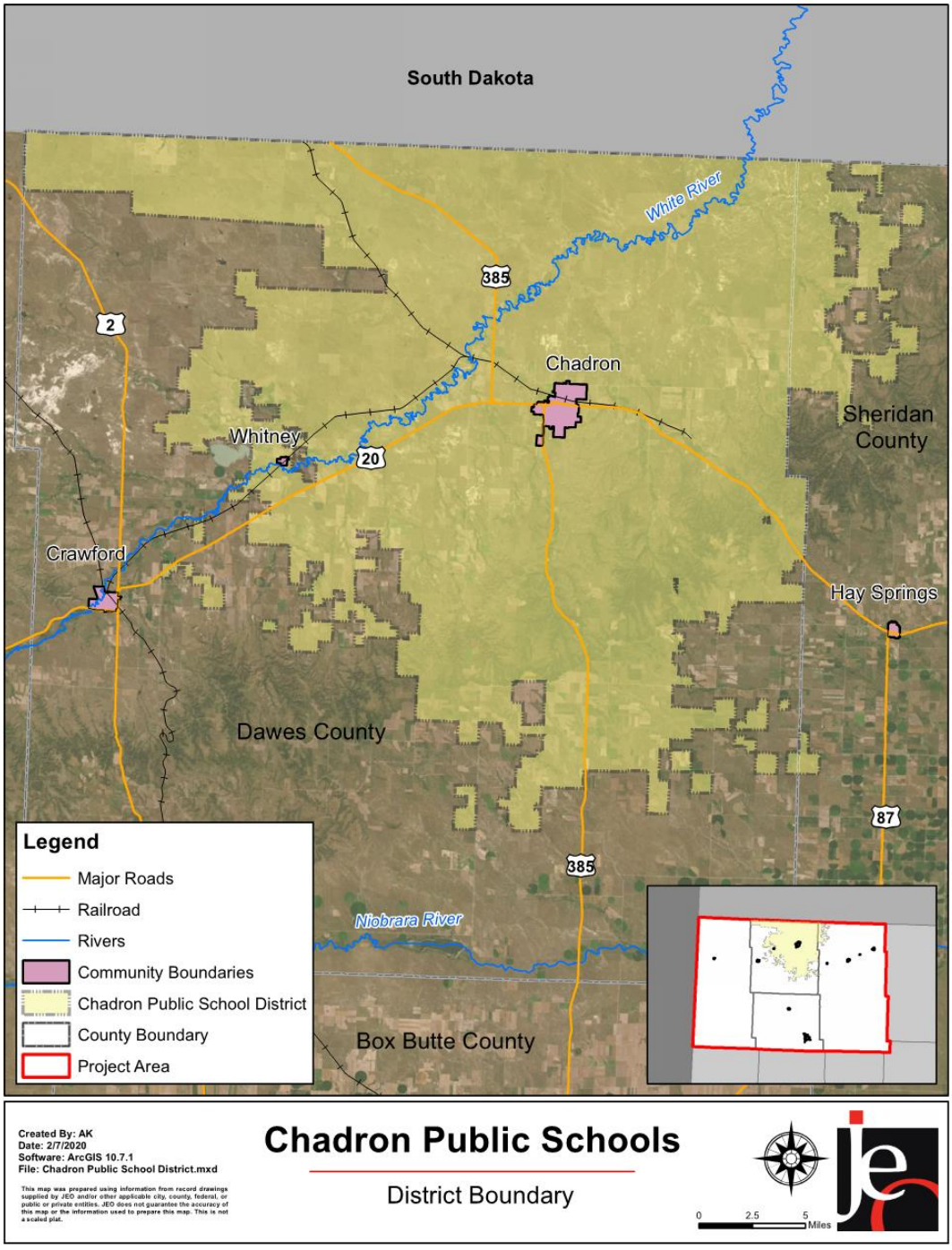
2020

Local Planning Team

Table CPSD.1: Chadron Public Schools Local Planning Team

NAME	TITLE	JURISDICTION
DR CAROLINE WINCHESTER	Superintendent (retiring)	Chadron Public Schools
JERRY MACK	High School Principal	Chadron Public Schools

Figure CPSD.1: Chadron Public School District Boundary



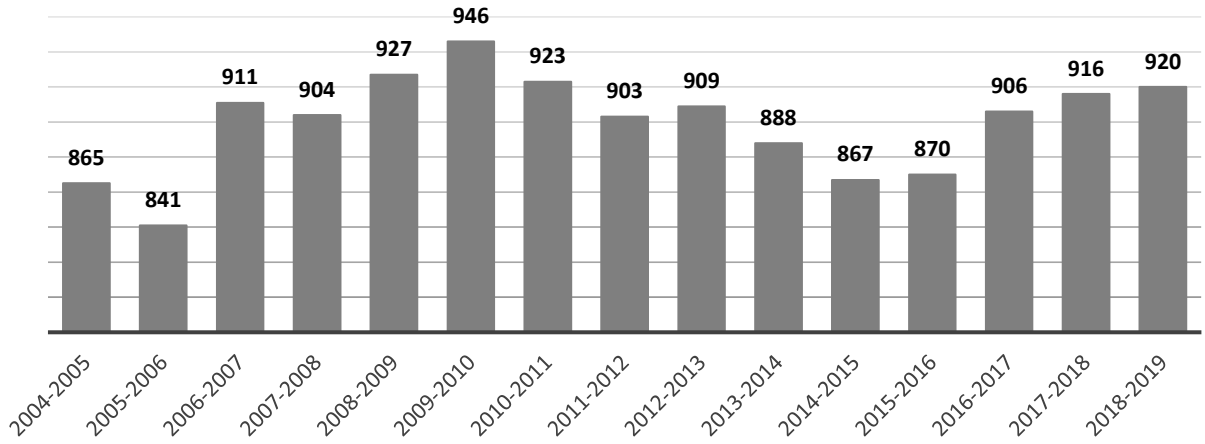
Location and Services

The Chadron Public School District is primarily located in Dawes County and serves four schools: Chadron Intermediate, Chadron Primary, Chadron Middle School, and Chadron Senior High School. The school district provides services to approximately 900 students in Chadron. While the primary language for the school is English, a few students speak either Mandarin or Marshallese.

Demographics

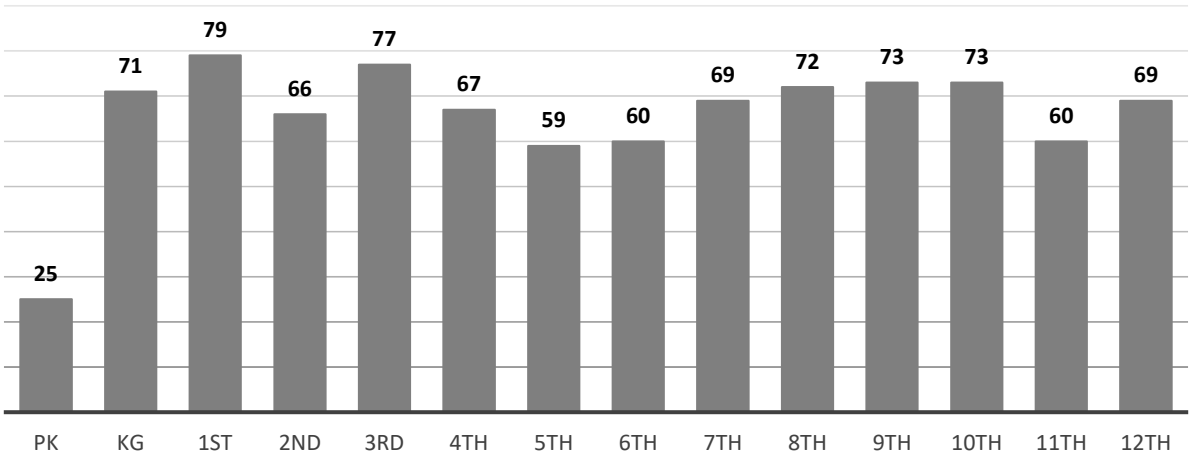
The following figure displays the historical student population trend starting with the 2004-05 school year and ending with the 2018-19 year. It indicates that the student population has fluctuated over the past decade. There are currently 920 students enrolled in the Chadron Public School District.[3] The local planning team indicated the student population has been experiencing a slight increase which is anticipated to continue as the City of Chadron grows.

Figure CPSD.2: Student Population 2004-2019



Source: Nebraska Department of Education

Figure CPSD.3: Number of Students by Grade, 2018-2019



Source: Nebraska Department of Education

[3] Nebraska Department of Education. January 2020. "2018-19 Education Profile for District: Chadron Public Schools." https://nep.education.ne.gov//Districts/Index/23-0002-000?DataYears=20182019.

The figure above indicates that the largest number of students are in the 1st, 3rd, 9th, and 10th grades. The lowest population of students are Pre-Kindergarten, 5th, 6th, and 11th grades. According to the Nebraska Department of Education (NDE), 43% of students receive either free or reduced priced meals at school. This is slightly lower than the state average of 45%. Additionally, nearly 11.3% of students are in the Special Education Program and 1.8% of students are English Language Learners in 2017-2018. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Table CPSD.2: Student Statistics, 2018-2019

	School District	State of Nebraska
FREE/REDUCED PRICED MEALS	43.04%	45.21%
SCHOOL MOBILITY RATE	7.56%	4.61%
ENGLISH LANGUAGE LEARNERS	1.8% (2017-2018)	6.87%
SPECIAL EDUCATION STUDENTS	11.28%	15.48%

Source: Nebraska Department of Education[4]

Future Development Trends

Over the past five years the school district has updated interior restrooms to comply with ADA regulations and all entrance and windows have been updated. Currently there are no identified improvements or changes anticipated in the next five years.

Critical Infrastructure/Key Resources

Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are a total of 11 chemical storage sites that house hazardous materials in Chadron.

Critical Facilities

The school district operates four facilities. These facilities are listed below, along with information indicating the school's address, number of students and staff, if the facility is used as a shelter during emergencies (i.e. Red Cross Shelter), if the facility is located in the floodplain, and the presence of a tornado safe room and backup power generator.

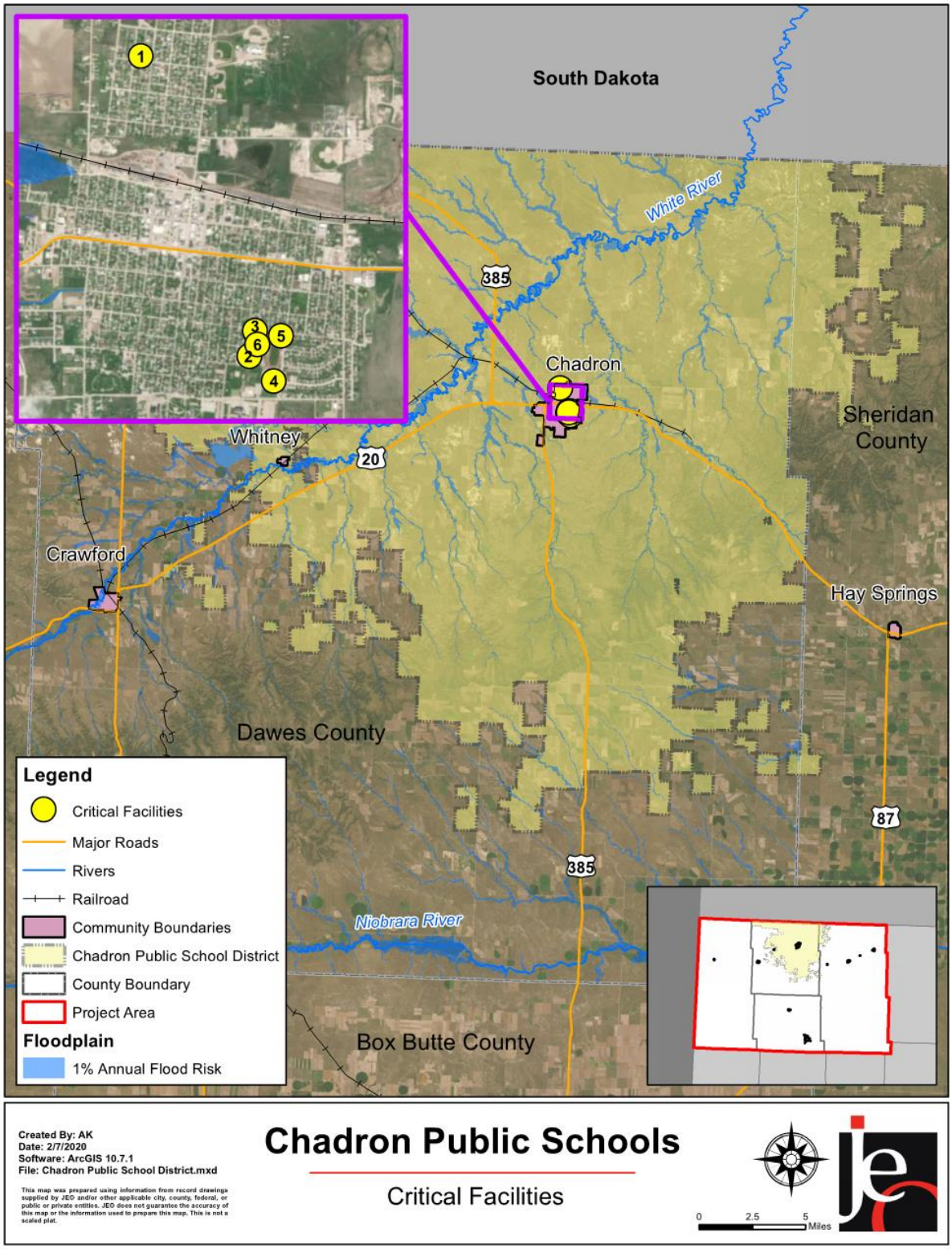
The local planning team indicated the Middle and High Schools would be used as local shelters in the case of a disaster for the City of Chadron. At this time, no facilities currently have weather radios; however the entire District uses the City of Chadron's and Region 23 EMA's CodeRed notification system.

[4] Nebraska Department of Education. January 2020. "2018-19 Education Profile for District: Chadron Public Schools." https://nep.education.ne.gov//Districts/Index/23-0002-000?DataYears=20182019.

Table CPSD.3: Critical Facilities

CF #	Name	Number of Students	Number of Staff	Shelter Location (Y/N)	Generator (Y/N)	Floodplain (Y/N)
1	Chadron Intermediate	144	12	N	N	N
2	Chadron Primary	241	20	N	N	N
3	Chadron Middle School	260	30	Y	N	N
4	Chadron Senior High School	275	40	Y	N	N
5	Bus Barn	0	0	N	N	N
6	Skills for Living House	0	0	N	N	N

Figure CPSD.4: Critical Facilities



School Drills and Staff Training

The school district conducts the following drills with their staff and students:

- Fire – monthly
- Tornado/Shelter in Place – twice a year
- Lockdown – twice a year
- Buss Evacuation – twice a year
- Active Shooter Drills – Staff only practice annually

The school district conducts regular professional development and training sessions for emergency procedures. The building administrators, new staff, and all substitutes undergo annual training. The Safety Team meets and reviews policies quarterly and attends several school safety summits or conferences every year.

The district shares information about emergency procedures and safety protocols with staff, students, and parents through drills, a text messaging service, various parent programs, and the school district website.

Historical Occurrences

See the Dawes County community profile for historical hazard events.

Hazard Prioritization

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

High Winds and Tornadoes

Tornadoes and high winds have the potential to cause extensive to catastrophic damage to property and can endanger the lives of students and staff. During a high wind storm event in 2012 the school district experienced significant damage to the High School's gymnasium roof while an event was taking place. The district also experiences several tornado events annually during the school year or while events are taking place. Tornado sirens are located throughout the City of Chadron for early outdoor warnings, but none are located on school grounds. The local planning team identified a need for improved communication resources and capabilities during hazard events, including two-way battery powered radios in case of power outages. Sheltering locations are located in windowless basements or the lowest level of rooms per building, but there are no FEMA certified safe rooms in the schools. The middle and high schools are also used for community shelter locations in the event of a community wide disaster event, but neither facility have backup generators. School staff conduct training through various national and state safety conferences and the school safety plan is updated as needed.

Terrorism

In February of 1994 an active shooter event occurred at Chadron Middle School, the first school shooting to occur in Nebraska. A seventh-grade student shot and injured one teacher. The school district has prioritized and emphasized the need for effective safety procedures since this event. All doors in the facilities have secure key-less locking mechanisms on interior doors and visitors are required to have door identification cards to enter the buildings. Safety buckets, which house materials such a blanket, hammer, and first aid materials, are found in every classroom and are

used during drills. Students and staff practice lockdown and active shooter drills annually. Staff continue training through national and state safety conferences regularly. The school safety plan is updated as needed and all standards meet or exceed established standards. The local planning team indicated a need for two-way radios as a backup communication method in the case of incident or power outages.

Administration/Capability Assessment

The school district has a superintendent and four principals. The school board is made up of a six member panel.

- Administrators/Principals
- Curriculum/Assessment
- Facilities
- Finance Department
- Human Resources
- Teachers
- Library/Media Services
- PARA Education
- Technology
- Transportation

Overall Capability	*Limited/Moderate/High*
Does your jurisdiction have the financial resources needed to implement mitigation projects?	Limited
Does your jurisdiction have the staff/expertise to implement projects?	Moderate
Does your jurisdiction have the community support to implement projects?	High
Does your staff have the time to devote to hazard mitigation?	Moderate

Plan Integration

The school district has a Schools Safety Plan which is reviewed and updated annually. This plan outlines safety and security procedures including: lockdown, tornado drills, fire drills, reunification procedures, crisis response (death/suicide, chemical spills, intruder, bus accident, bomb threats, etc.) and evacuation. The plan identifies the district's crisis team in an Incident Command System and identifies roles per team member during an event and prioritized response actions. In particular the plan also addresses media responses and parent-student reunification procedures. This plan is available for review online on the school district website. The District also undergoes an annual Alicap Safety Audit and independent safety audits per state regulation.

Mitigation Strategy

New Mitigation Actions

MITIGATION ACTION	BACKUP POWER GENERATORS
DESCRIPTION	Provide a portable or stationary source of backup power to redundant power supplies and school facilities
HAZARD(S)	High Winds and Tornadoes, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$15,000 - $30,000+ per generators
FUNDING	School funs, Community Taxes
TIMELINE	5+ years
PRIORITY	Medium
LEAD AGENCY	School Administration
STATUS	This is a new mitigation action. Both Chadron Middle School and Chadron High School are in need of generators

MITIGATION ACTION	EMERGENCY COMMUNICATION
DESCRIPTION	Improve communication capabilities between schools and other government agencies to better assist students and staff during and following emergencies. Establish inner-operable communications.
HAZARD(S)	High Winds and Tornadoes, Severe Thunderstorms, Severe Winter Storms, Terrorism
ESTIMATED COST	$500
FUNDING	School funds, Community Taxes
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	School Administration
STATUS	This is a new mitigation action. Battery operated two-way radios are needed.

SCHOOL PROFILE

HEMINGFORD PUBLIC SCHOOL DISTRICT

Region 23 Emergency Management Agency
Multi-Jurisdictional Hazard Mitigation Plan Update

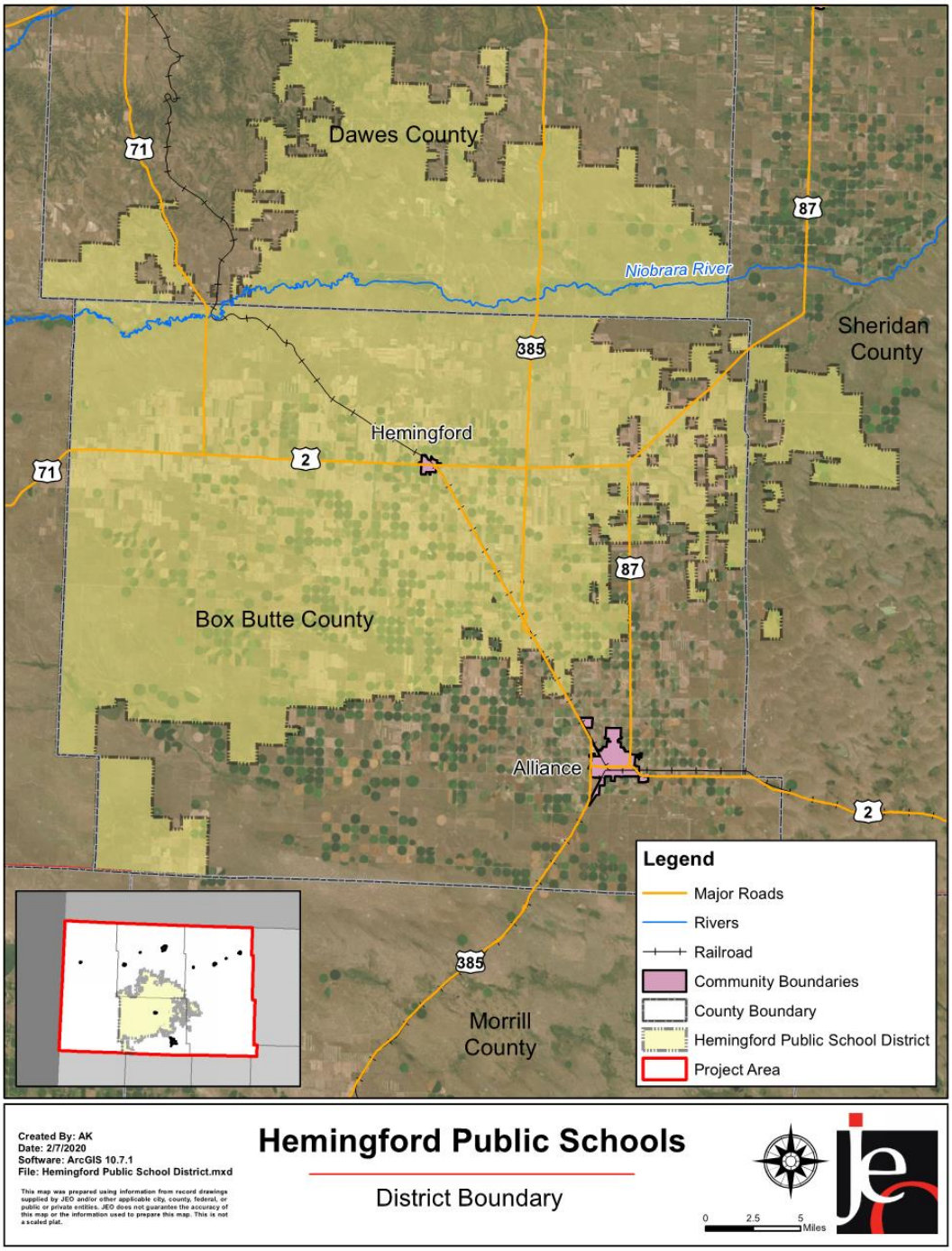
2020

Local Planning Team

Table HPSD.1: Hemingford Public Schools Local Planning Team

NAME	TITLE	JURISDICTION
CHARLES ISOM	Superintendent	Hemingford Public Schools
JIM MILES	Maintenance Supervisor	Hemingford Public Schools

Figure HPSD.1: Hemingford Public School District Boundary



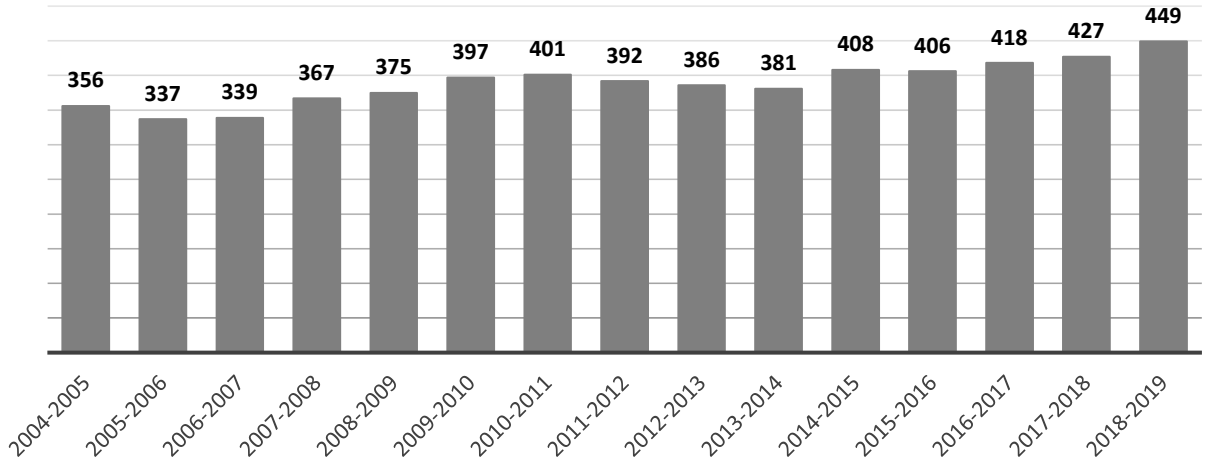
Location and Services

The Hemingford Public School District is primarily located in Box Butte County and serves two schools: Hemingford Elementary and Hemingford High School. The school district provides services to approximately 449 students in Hemingford, Alliance, and the surrounding rural area.

Demographics

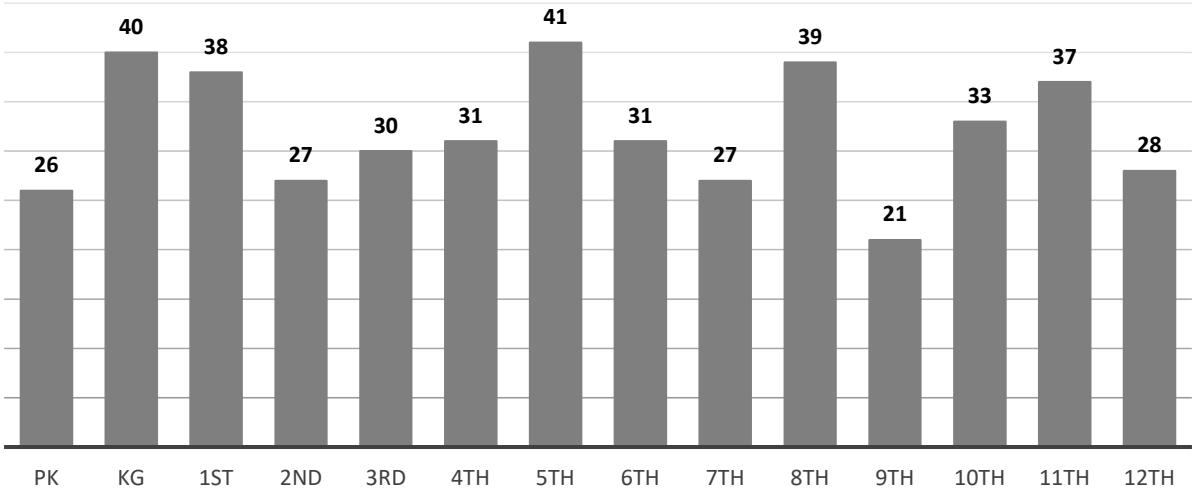
The following figure displays the historical student population trend starting with the 2004-05 school year and ending with the 2018-19 year. It indicates that the student population has grown slightly in the past decade. There are currently 449 students enrolled in the Hemingford Public School District.[5] The local planning team indicated the student population will likely experience little to no change in the coming decade.

Figure HPSD.2: Student Population 2004-2019



Source: Nebraska Department of Education

Figure HPSD.3: Number of Students by Grade, 2018-2019



Source: Nebraska Department of Education

[5] Nebraska Department of Education. January 2020. "2018-19 Education Profile for District: Hemingford Public Schools." https://nep.education.ne.gov//Districts/Index/23-0002-000?DataYears=20182019.

The figure above indicates that the largest number of students are in the 5th, Kindergarten, and 8th grades. The lowest population of students are 9th, Pre-Kindergarten, 2nd, and 7th grades. According to the Nebraska Department of Education (NDE), 40% of students receive either free or reduced priced meals at school. This is lower than the state average of 45%. Additionally, nearly 15% 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 HPSD.2: Student Statistics, 2018-2019

	School District	State of Nebraska
FREE/REDUCED PRICED MEALS	39.64%	45.21%
SCHOOL MOBILITY RATE	2.97%	4.61%
ENGLISH LANGUAGE LEARNERS	N/A	6.87%
SPECIAL EDUCATION STUDENTS	14.89%	15.48%

Source: Nebraska Department of Education[6]

Future Development Trends

Over the past five years the school district has added several new buildings including a concession stand and crow's nest at the football field and connected three buildings on campus. Future developments are dependent on available funding and community support. A bond measure is on the 2020 agenda.

Critical Infrastructure/Key Resources

Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are five chemical storage sites that house hazardous materials in Hemingford. These facilities are not located near school facilities; however, staff and students that live in the community may be located nearby.

Table HPSD.3: Chemical Storage Fixed Sites

FACILITY NAME	ADDRESS
PHILLIPS F & T INC	7600 Dodge Rd
FARMERS CO-OP ELEVATOR CO	1017 Laramie Ave
NDOT HEMINGFORD YARD	Roland St
WESTCO BULK FUEL	Osborn St
WESTCO PROPANE	Box Butte Ave

Source: Nebraska Department of Environment and Energy[7]

Critical Facilities

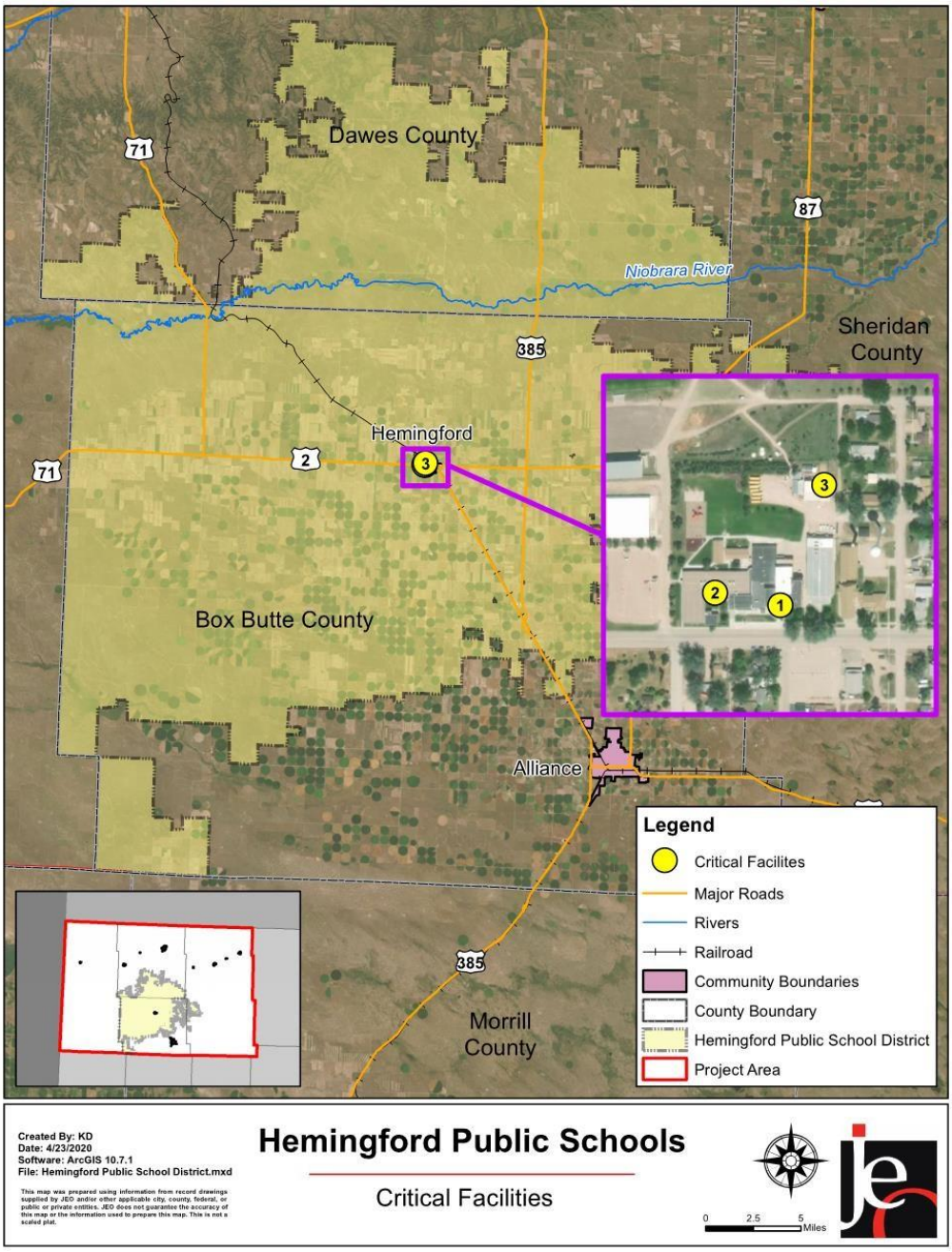
The school district operates four facilities. These facilities are listed below, along with information indicating the school's address, number of students and staff, if the facility is used as a shelter during emergencies (i.e. Red Cross Shelter), if the facility is located in the floodplain, and the presence of a tornado safe room and backup power generator. The Dawes County floodplain was available as a DFIRM from FEMA, while the Box Butte County flood risk area was generated using HAZUS for this planning update.

[6] Nebraska Department of Education. January 2020. "2018-19 Education Profile for District: Hemingford Public Schools." https://nep.education.ne.gov//Districts/Index/23-0002-000?DataYears=20182019.
[7] Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed November 2018. https://deq-iis.ne.gov/tier2/search.faces.

Table HPSD.3: Critical Facilities

CF #	Name	Number of Students	Number of Staff	Shelter Location (Y/N)	Generator (Y/N)	Floodplain (Y/N)
1	Hemingford Elementary	264	40	Y	N	N
2	Hemingford High School	185	42	Y	N	N
3	Maintenance Building/Ag Shop	0	0	N	N	N

Figure HPSD.4: Critical Facilities



School Drills and Staff Training

The school district conducts the following drills with their staff and students:

- Fire – 10 per school year
- Tornado – twice a year

The school district regularly discusses and updates safety and emergency response procedures at staff meetings. The student handbook, mailings, and social media are opportunities to inform students and families about emergency procedures. In the case of emergency events or school closures, the district utilizes Remind, Facebook, and Twitter to notify parents and students.

Historical Occurrences

See the Box Butte County community profile for historical hazard events.

Hazard Prioritization

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

Flooding

Flooding was identified as a hazard of top concern for the school district. The school district extends across Box Butte, Dawes, and Sheridan counties and commonly transports students from surrounding rural areas on roads at risk to washout or damage during flood events. While Dawes County has an available DFIRM and formally mapped floodplain, flood risk areas have not been fully developed for Box Butte or Sheridan counties. This effort would be taken at the county and state levels. No major rivers or creeks are located near the school buildings. Most flood impacts would be due to flash flood events and inadequate stormwater infrastructure. Floods also have the potential to cause damage to school properties and vehicles. The district does not currently have the resources to mitigate facilities to flooding.

High Winds and Tornadoes

High winds and tornadoes can cause widespread to catastrophic damages to trees and property and are a common occurrence across the school district and planning area. Concerns about high winds include damage to property, loss of power from downed power lines, the spread of wildfire, and injury or death to students and staff. The schools do not have backup generators or tornado safe rooms but are used as community shelter locations during severe storms. No significant wind or tornado events have occurred which have directly damaged or endangered school district properties.

Severe Thunderstorms

Severe thunderstorms are typically associated with heavy rain, lightning, high winds, and hail. Severe events can flood facilities and damage trees or school property. Primary concerns are for the safety of staff and students during storm events, especially during summer activities or outdoor sporting events. There are no backup generators in school facilities. Past heavy rains and hail during storms have caused damage to the gym roof and leakage issues. The roof is inspected annually, and the district maintains a fund to assist in covering infrastructure damage costs.

Severe Winter Storms
Severe winter storms include snow, ice accumulation, blizzards, and other winter weather. They can cause power outages from downed power lines, damage to buildings or school vehicles, hinder transportation, and risk injuries for students and staff. The school experiences closures due to winter weather annually. In the case of school closures, the district uses Remind, Facebook, and Twitter to share information. Past winter storms have also caused roof damage and concrete heaving.

Wildfire
Wildfire is a major concern for the school district and across the entire planning area. Fire conditions can be exacerbated by drought conditions, spread by high winds, or caused by lightning strikes. The school district is not responsible for firefighting response, and primary concerns are for the safety of students and staff, damage to buildings or infrastructure, and overall lack of resources. School facilities are located within the WUI for Hemingford.

Administration/Capability Assessment

The school district has a superintendent and two principals. The school board is made up of a six-member panel.

- Communications
- Curriculum/Assessment
- Facilities
- Finance Department
- Human Resources
- Learning Coaches
- Library/Media Services
- PARA Education
- Technology
- Transportation

Overall Capability	*Limited/Moderate/High*
Does your county have the financial resources need to implement mitigation projects?	Moderate
Does your county have the staff/expertise to implement projects?	Moderate
Does your county have the community support to implement projects?	Moderate
Does your county staff have the time to devote to hazard mitigation?	Limited

Plan Integration

The school district has a Crisis Plan which was last updated in September 2019. This plan outlines safety and procedures for active shooters, medical emergencies, bomb threats, chemical spills, or train derailments near or on campus. This plan builds on appropriate evacuation and emergency response protocols in the case of a natural disaster. All staff and faculty have access to the plan, and it is reviewed and updated as needed.

Mitigation Strategy

New Actions

MITIGATION ACTION	BACKUP POWER GENERATORS
DESCRIPTION	Provide a portable or stationary source of backup power to redundant power supplies and school facilities
HAZARD(S)	High Winds and Tornadoes, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$15,000 - $30,000+ per generators
FUNDING	General Fund, Building Funds
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	School Administration
STATUS	This is a new mitigation action. The high school facility serves as a local emergency shelter and is in need of a generator for the kitchen.

MITIGATION ACTION	SAFE ROOMS/STORM SHELTERS
DESCRIPTION	Design and construct storm shelters or safe rooms in school facilities.
HAZARD(S)	High Winds and Tornadoes, Severe Thunderstorms, Severe Winter Storms
ESTIMATED COST	$250-$300/sf
FUNDING	General Fund, Building Funds
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	School Administration
STATUS	This is a new mitigation action. The school is currently working on adding a bond election to provide funding for safe rooms.

Natural Resources District Profile

UPPER NIOBRARA WHITE NATURAL RESOURCES DISTRICT

Region 23 Emergency Management Agency

Multi-Jurisdictional Hazard Mitigation Plan Update

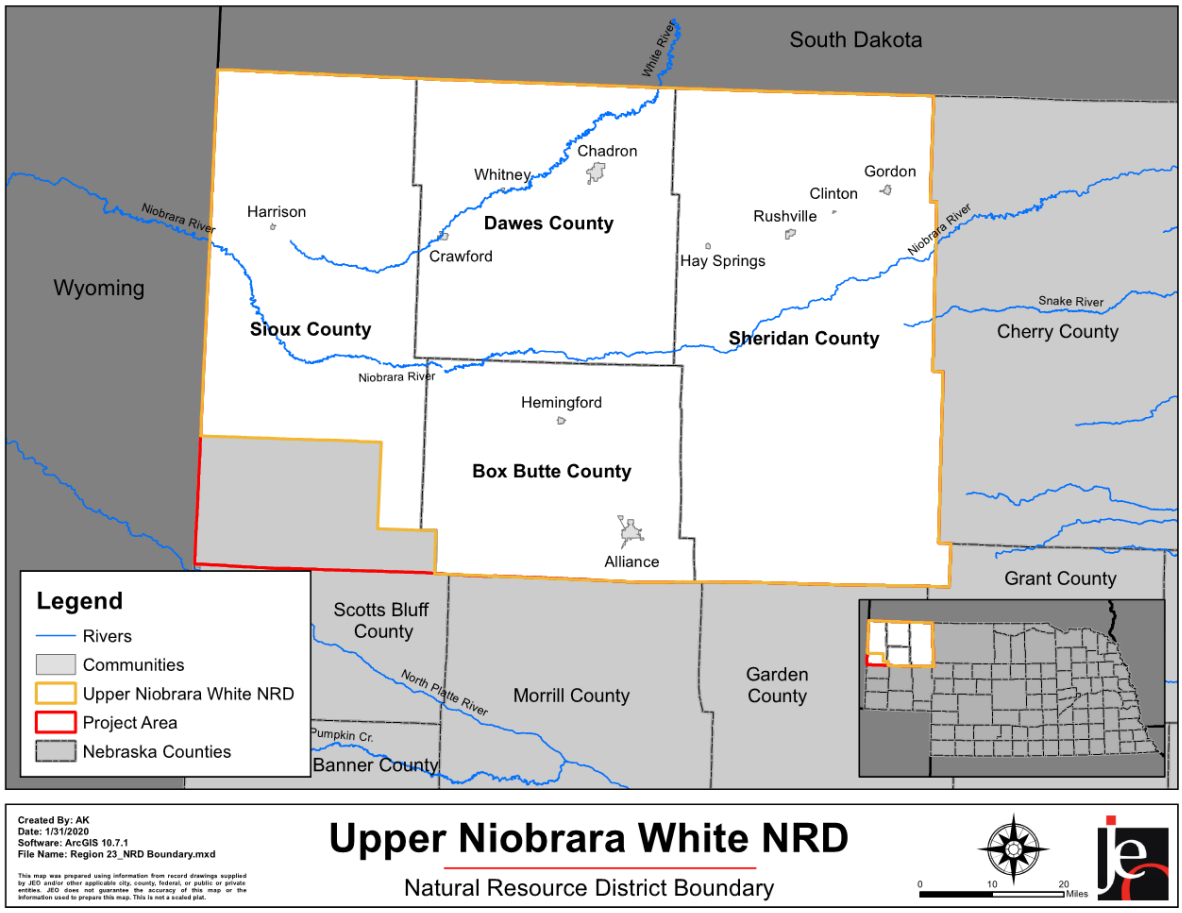
2020

Local Planning Team

Table UNWNRD.1: Upper Niobrara White NRD Local Planning Team

NAME	TITLE	JURISDICTION
LYNN WEBSTER	Assistant Manager	UNWNRD
PAT O'BRIEN	General Manager	UNWNRD

Figure UNWNRD.1: Upper Niobrara White NRD Boundary



Location, Geography, and Climate

The Upper Niobrara White NRD (UNWNRD or NRD) is a special conservation jurisdiction located in the far northwestern corner of Nebraska. The UNWNRD is comprised of all of Box Butte, Dawes, and Sheridan counties and the northern 80% of Sioux County. The NRD is bordered by Scotts Bluff, Morrill, Garden, Grant, and Cherry Counties in Nebraska; Oglala Lakota and Fall River Counties in South Dakota; and Niobrara and Goshen Counties in Wyoming.

The total area of the UNWNRD is about 6,511 square miles. Major water bodies within the NRD include, but are not limited to: White River, Niobrara River, Box Butte Reservoir, and Whitney Lake. The UNWNRD is composes of a variety of topographical regions[8], with large portions of land used as rangeland for livestock or as national forests.

8 Center for Applied Rural Innovation. "Topographic Regions Map of Nebraska." 2001. http://digitalcommons.unl.edu/caripubs/62.

Transportation

There are multiple types of transportation corridors located within the UNWNRD including US Highways 20 and 385; and Nebraska Highways 2, 27, 29, 71, 87, and 250. Highway 385 is the primary route of concern as it runs north/south and connects Interstates 80 and 90. Rail lines from Burlington-Northern-Santa Fe (BNSF) and Nebkota Railway bisect portions of the NRD and several air landing strips are dispersed throughout the district.

The local planning team indicated local traffic dramatically increases in late September due to sugar beet harvests, especially around Alliance, Mirage Flats, and Hemingford. Several dozen trucks travel throughout the area to Scottsbluff around the clock. Additionally, due to the high prevalence of agriculture production in the area fertilizers, pesticides, or other agricultural chemicals of concern are regularly transported throughout the district. Propane is also a popular choice for heat in municipalities and is, thus, also commonly transported throughout the district. This information is important to hazard mitigation plans as it suggests possible evacuation corridors across the NRD, as well as areas more at risk for transportation incidents.

Demographics

It is estimated that the UNWNRD serves a population of about 26,000 people across portions of six counties. However, the NRD does not collect the demographic information of the district's population, nor does the U.S. Census Bureau recognize the NRD as a distinct unit. As a result, there is no population data generated specifically for the UNWNRD. For information regarding population data, please refer to a specific jurisdiction's community profile or to *Section Three: Demographics and Asset Inventory*.

Table UNWNRD.2: UNWNRD Estimated Population

COUNTY	2010 POPULATION	2017 POPULATION (EST.)	% CHANGE
BOX BUTTE	11,308	11,200	-1.0%
DAWES	9,182	8,972	-2.3%
SHERIDAN	5,469	5,241	-4.4%
SIOUX	1,311	1,256	-4.4%

Source: US Census Bureau[9]

Future Development Trends

There have been few changes over the past five years in the district. Currently the NRD is pursuing a grant to complete a flood control analysis on Box Butte Creek in northeast Box Butte County and west-central Sheridan County. The project is expected to be completed by 2022. During the March 2019 flood event, two flood control structures, Allison I and Mirage Flats, were damaged by high water levels. The District is partnering with NRCS, Sheridan County, Dawes County, and the Mirage Flats Irrigation District to repair the structures and provide flood protection to the areas damaged.

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.

[9] *United States Census Bureau. "2016 American Fact Finder: S0101: Age and Sex." [database file]. https://factfinder.census.gov.*

Critical Infrastructure/Key Resources

Hazardous Materials

Chemical storage sites and transportation corridors are located throughout the NRD. Complete lists of chemical storage sites in each jurisdiction may be found in their community profile.

Critical Facilities

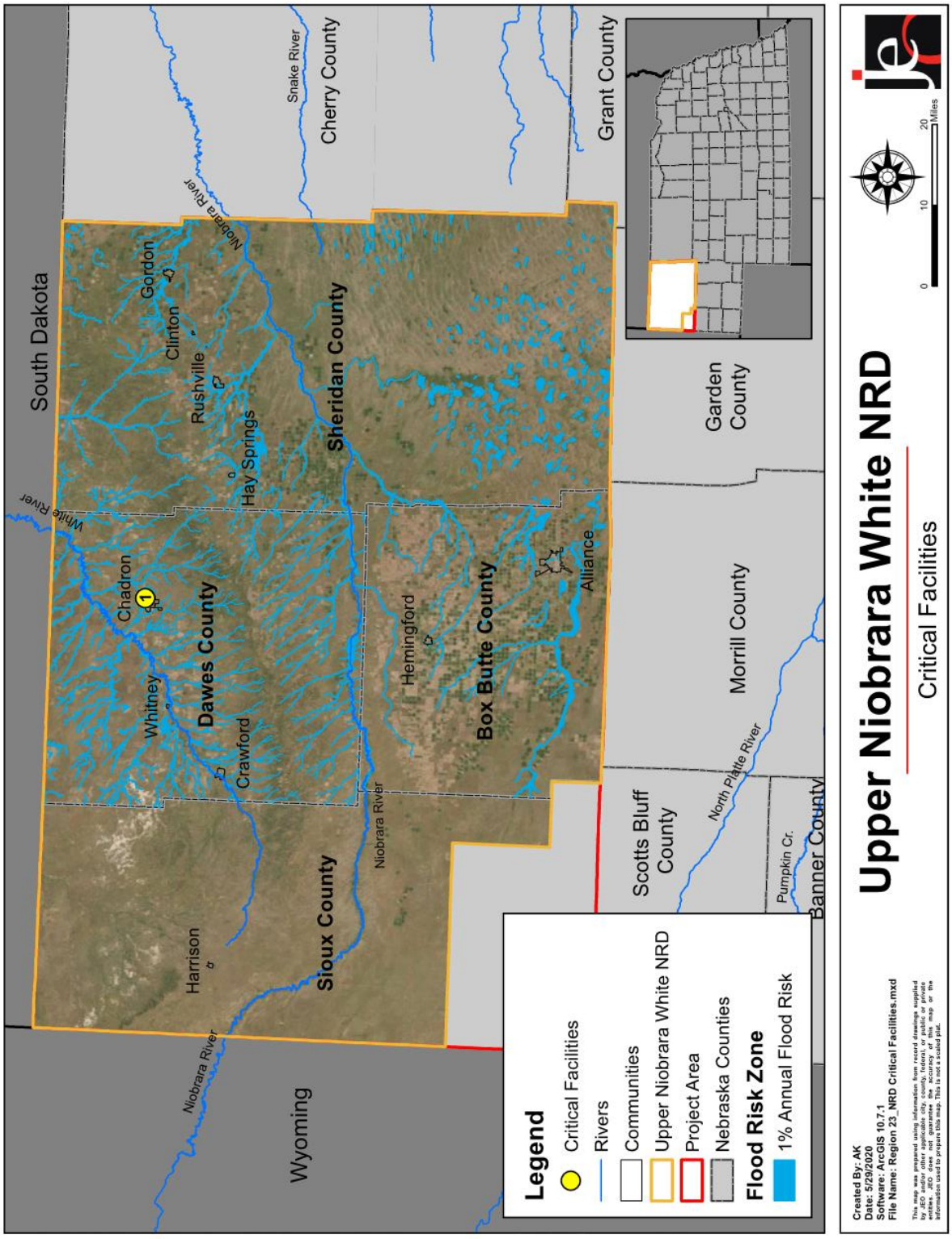
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and are essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified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

The mapped flood risk area was generated for Sheridan and Dawes Counties using HAZUS. Box Butte has an available DFIRM, while no floodplain map is available for Sioux County.

Table UNWNRD.3: Critical Facilities

CF Number	Name	Shelter Location (Y/N)	Generator (Y/N)	Floodplain (Y/N)
1	Upper Niobrara White NRD Office	N	N	N

Figure UNWNRD.2: Critical Facilities



Historical Occurrences

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

Hazard Prioritization

For an in-depth 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 community. The selected hazards were then prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

Drought and Extreme Heat

The local planning team indicated the planning area is vulnerable to the impacts of drought as the local economy is heavily tied to rangeland and livestock production. The majority of ranchers utilize groundwater resources to maintain the livestock. Prolonged drought and extreme heat conditions can reduce agricultural production, cause crop mortality, and negatively impact groundwater supplies. The NRD has actively monitored groundwater reservoirs across the district and has mapped areas of concern due to declining levels. These tools are available to help manage water supplies and land use, as well as to help address long-term demands for water across the planning area. Extreme heat conditions also exacerbate drought and grass/wildfire events and impacts. The summer of 2012 had significant drought, extreme heat, and wildfire events which strained local resources.

High Winds and Tornadoes

High winds can cause widespread damages to crops, trees, infrastructure, and personal property and tornadoes are a concern due to their potential to cause catastrophic damage to property. The NCEI reported 146 high wind events and 71 tornadoes across the entire planning area between 1996 and 2019. High winds are common across the entire planning area and often occur in conjunction with other hazards, such as severe thunderstorms and severe winter storms. The Upper Niobrara White NRD works with Region 23 to spread CodeRed messages to residents during severe weather events.

Flooding

Flooding was identified as a hazard of concern due to its potential for property damage and risk to human safety. The district is located in a very rural area of the state with few roads interconnecting communities. Flooding events have the potential to wash out major transportation routes, delaying travel and access to emergency services for residents. Due to the topography of the district, flash flooding is a major concern. There have been 22 flash floods and 2 flood events as reported by the NCEI. Together these events caused $562,000 in property damages and $109,388 in crop damages in the planning area. No flood events reported damages to NRD owned properties.

Severe Thunderstorms

Severe thunderstorms occur regularly across the planning area and the state. They often span large areas and are accompanied by hail, high winds, heavy rain, and lightning strikes which can cause significant damage to homes, businesses, facilities, trees, and agriculture across the district. The local planning team stated that severe storms occur annually, and major concerns exist over damage to agricultural crops and livestock or from localized flooding issues which can wash out transportation routes. Severe thunderstorms have caused over $4,935,600 in damages between 1996 and 2019 in the four county planning area.

Severe Winter Storms

The widespread nature of this hazard and the potential of significant damages make severe winter storms a hazard of top concern. Severe winter storms can include extreme cold, blizzards, ice storms, and general winter weather storms. The NCEI reported 362 severe winter storm events in the district's area between 1996 and 2019. The following impacts are of concern from severe winter storms: power outages; injuries or fatalities to residents and travelers; cut off access to food, water, or fuel; blocked transportation routes; damage to sandhills topography from heavy snow; and economic loss due to winter weather impacts on livestock and agriculture.

Governance

The UNWNRD is governed by a Board of eleven elected Directors and entrusted with a broad range of responsibilities to protect and enhance Nebraska's many natural resources. The NRD serves both incorporated and unincorporated areas within their district and has the capability to financially and administratively assist villages, cities, and counties with mitigation actions. The following positions may help implement mitigation projects:

- General Manager
- Assistant General Manager
- Conservation Programs Coordinator
- Natural Resource Coordinator
- Water Programs Coordinator
- Water Committee
- Operations Committee
- Information & Education/Land & Weed Committee
- Executive Committee
- Budget Department

Capability Assessment

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

Overall Capability	Limited/Moderate/High
Does your county have the financial resources need to implement mitigation projects?	Moderate/High
Does your county have the staff/expertise to implement projects?	Moderate/High
Does your county have the community support to implement projects?	Moderate/High
Does your county staff have the time to devote to hazard mitigation?	Moderate/High

Nebraska's system of local natural resources management is unique in the United States. Unlike the county- wide districts found in most states, Nebraska's NRDs are based on river basin boundaries, enabling them to approach natural resources management on a watershed basis.

Like the other 22 NRDs in Nebraska, Upper Niobrara-White is autonomous, governed by a locally–elected Board of Directors. While NRDs share a common set of responsibilities, each district sets its own priorities and develops its own programs to serve local needs. In general, NRDs are charged under state law with 12 areas of responsibility:

- Erosion prevention and control
- Prevention of damages from flood water and sediment
- Flood prevention and control
- Soil conservation
- Water supply for any beneficial uses
- Development, management, utilization, and conservation of groundwater and surface water
- Pollution control
- Solid waste disposal and drainage
- Drainage improvement and channel rectification
- Development and management of fish and wildlife habitat
- Development and management of recreational and park facilities
- Forestry and range management

Plan Integration

The UNWNRD takes the lead on a variety of projects that fulfill the responsibilities required by state law. The UNWNRD offers educational programs, cost shares with landowners, ground water, and land improvement programs to help protect Natural Resources.

The UNWNRD developed an Integrated Water Management Plan in May 2009, which was then updated in 2011. The goals of the plan include minimizing ground water depletions and having a sustained aquifer. The full plan can be found on the UNWNRD's website www.unwnrd.org. The IMP was created for the portion of the district deemed fully appropriated by NeDNR. Currently the district and NeDNR are developing a Voluntary IMP for portions of the district not fully appropriated.

The UNWNRD participates in the wellhead protection program that is sponsored by the Nebraska Department of Environmental Quality and has several other plans which guide decision making actions. The District's Master Plan and Long Range Implementation Plans were last updated in 2019. These plans identify priorities for the district including managing groundwater supply, flood control, protection of groundwater quality, and erosion. The plans lay out specific tasks, programs, and action items to manage these priorities. The Groundwater Management Plan was last updated in August 2006 and is focused on long-term sustainability of the water supply in the district. All plans and programs are updated to maintain consistency in goals, district priorities, and hazard mitigation principles.

Other programs the UNWNRD offers include No-Till Drill Rental, in which a landowner within the NRD boundary can rent the drill from the NRD to and use it to plant a field. The NRD also will supply landowners with the equipment necessary to conduct prescribed burns as well. The NRD will also help well owners through a well decommissioning cost share program to avoid wells being abandoned.

Mitigation Strategy

Completed 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 Identify water saving irrigation projects of improvements such as sprinklers of soil moisture monitoring. 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
STATUS	The UNWNRD has an approved Groundwater Management Plan in place. The plan implements various rules and regulations to conserve available resources. The NRD measures groundwater levels annually to monitor for significant changes. If decline levels reach a specific trigger, additional regulations are put in place. Currently two management sub-areas in the district have water allocation or limitations in place.

New or Ongoing Actions

MITIGATION ACTION	BACKUP POWER 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)	All Hazards
ESTIMATED COST	$30,000+ per generator
FUNDING	General Fund, PDM, HMGP
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	General Manager - UNWNRD
STATUS	This project has not yet been started. A generator is needed for the NRD office.

MITIGATION ACTION	DAM ENGINEERING ANALYSIS/REPAIRS AND REINFORCEMENT
DESCRIPTION	Conduct a preliminary engineering analysis for dam repairs and reinforcement. Dams serve to provide flood protection to businesses and residents during large storm events. Improvements to existing dams will increase flood protection. The Emergency Action Plan, Dam Breach, Analysis, and/or inspection/ safety equipment training may need to be updated along with improvements.
HAZARD(S)	Flooding
ESTIMATED COST	$500,000
FUNDING	General Fund, PDM, HMGP, USACE
TIMELINE	5+ years

MITIGATION ACTION	DAM ENGINEERING ANALYSIS/REPAIRS AND REINFORCEMENT
PRIORITY	Medium
LEAD AGENCY	UNWNRD, dam owners
STATUS	This is an ongoing action. The NRD annually inspects six flood structures in the district. The March 2019 flood event caused damage to two structures which are currently in the process of pursuing repairs.

MITIGATION ACTION	EVALUATE FLOOD RISK
DESCRIPTION	Evaluate flood risk potential in watersheds throughout the district and identify potential projects to reduce flood risk via both structural and non-structural options.
HAZARD(S)	Flooding
ESTIMATED COST	$660,000
FUNDING	USDA-NRCS grant, General Fund
TIMELINE	2-5 years
PRIORITY	Medium
LEAD AGENCY	UNWNRD
STATUS	The NRD is currently pursuing a USDA-NRCS grant to evaluate flood concerns in the Box Butte Creek Watershed.

MITIGATION ACTION	EXPAND WATER STORAGE CAPACITY
DESCRIPTION	Evaluate the need to expand water storage capacity through a new water tower, stand pipe etc. to provide a safe water supply for the community and additional water for fire protection. Establish emergency water supplies such as dry hydrants and individual or community cisterns for defending structures from wildland fires.
HAZARD(S)	Drought and Extreme Heat, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds, Wildfire
ESTIMATED COST	$30,000
FUNDING	General Fund, NFS, Region 23 EMA, CDBG, PDM, HMGP
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	NRD and local community leadership partnership
STATUS	This project has not yet been started.

MITIGATION ACTION	FIRE PREVENTION PROGRAM
DESCRIPTION	The Nebraska Forest Service Wildland Fire Protection Program provides services in wildfire suppression training, equipment, pre-suppression planning, wildfire preventions, and aerial fire suppression
HAZARD(S)	Wildfire
ESTIMATED COST	Varies
FUNDING	General Fund, NFS
TIMELINE	Ongoing
PRIORITY	High
LEAD AGENCY	UNWNRD – Coordinator/Natural Resources Coordinator, NFS
STATUS	The UNWNRD provides office space for a SEAT base operator and assists with response actions as needed and appropriate. Additional needs have not been identified.

MITIGATION ACTION	PUBLIC AWARENESS/EDUCATION
DESCRIPTION	Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc.
HAZARD(S)	All Hazards
ESTIMATED COST	$500
FUNDING	General Funds
TIMELINE	Ongoing
PRIORITY	High
LEAD AGENCY	UNWNRD
STATUS	This is an ongoing action. The NRD promotes the use of best management practices for irrigation and water use. Weekly crop water use reports are distributed to several media outlets. The district coordinates a water quality sampling program to identify potential contaminants in drinking water. The District also provides educational events for all local school districts, along with an annual Water Education Meeting which is open to the public.

MITIGATION ACTION	SOURCE WATER CONTINGENCY PLAN
DESCRIPTION	Villages and cities can evaluate and locate new sources of groundwater to ensure adequate supplies to support the existing community and any additional growth which may occur. Also, identify develop water sources for fire protection.
HAZARD(S)	Drought and Extreme Heat, Wildfire
ESTIMATED COST	$5,000
FUNDING	General Fund, PDM, HMGP, CDBG, NDEE
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	UNWNRD – General Manager and Assistant Manager
STATUS	This is an ongoing action. The NRD is willing to assist or guide communities with source water protection plans and projects.

Removed Mitigation Actions

MITIGATION ACTION	ALERT/WARNING SIRENS
DESCRIPTION	Reduce the risk of death/injury associated with severe weather promoting awareness, and ensures people take shelter when needed
HAZARD(S)	All Hazards
REASON FOR REMOVAL	Sirens are owned and operated by EMA personnel and are not the responsibility of the NRD to maintain. There is currently a siren near the NRD office to provide outdoor weather notification.

MITIGATION ACTION	FIRE WISE COMMUNITY
DESCRIPTION	Work with the Nebraska Forest Service and US Forest Service to become a Fire Wise Communities/USA participant. Develop a Community Wildfire Protection Plan. Train land owners about creating defensible space. Enact ordinances and building codes to increase defensible space, improve building materials to reduce structure ignitability, and increase access to structures by responders. Develop and implement brush and fuel thinning projects.
HAZARD(S)	Wildfire
REASON FOR REMOVAL	The NRD is not eligible to become a Fire Wise Community. Communities interested in becoming a Fire Wise Community work alongside NFS, not the NRD.

MITIGATION ACTION	HAZARDOUS FUELS REDUCTION
DESCRIPTION	The Nebraska Forest Service (NFS) Forest Fuels Reduction Program creates strategically located corridors of thinned forests across the landscape reduces fire intensity, improves fire suppression effectiveness, increases firefighters safety, and better protects lives and property.
HAZARD(S)	Wildfire
REASON FOR REMOVAL	Fuels reduction strategies and implementation is implemented through the NFS, and not the NRD.

MITIGATION ACTION	HAZARDOUS TREE REMOVAL
DESCRIPTION	Identify and remove hazardous limbs and/or trees.
HAZARD(S)	Drought and Extreme Heat, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds, Wildfire
REASON FOR REMOVAL	While the NRD removes hazardous trees as needed on their property, general hazardous tree removal is handled per community or NFS throughout the district.

MITIGATION ACTION	WILDFIRE HAZARDS IDENTIFICATION MITIGATION SYSTEM
DESCRIPTION	Develop a hazard rating system through the use of GIS to identify and rate areas of the Region for their relative wildfire hazard.
HAZARD(S)	Wildfire
REASON FOR REMOVAL	This project was determined to no longer be a priority for the NRD. A hazard rating system would be created through collaboration between NFS and local fire districts.