Contents

Arcadia Public Schools	3
Duncan Fire District	15
Elba Fire and Rescue District	25
Farwell Irrigation District	33
Loup Basin Public Health Department	45
Sargent Irrigation District	55
Twin Loups Irrigation District	67
Wheeler Central Schools	79
Wheeler County Rural Fire Protection District	93

THIS PAGE INTENTIONALLY BLANK

DISTRICT PROFILE

ARCADIA PUBLIC SCHOOLS

Lower Loup Natural Resources District Hazard Mitigation Plan 202

Local Planning Team

Table APS.1: Arcadia Public Schools Local Planning Team

NAME	TITLE	JURISDICTION
CRAIG TRAMPE	Principal	Arcadia Public Schools
ERIN DORSEY	Vice President, Board of Education	Arcadia Public Schools
MIKE WILLIAMS	Superintendent	Arcadia Public Schools

Location and Services

Arcadia Public Schools is a suburban school district located in Valley County, in central Nebraska. Its offices are located at 320 W Owens Street, Arcadia, Nebraska, 68815. The district is comprised of two schools: Arcadia Elementary and Arcadia High School. The school district provides educational services to students in Arcadia, Ansley, Broken Bow, Loup City, and Ord.

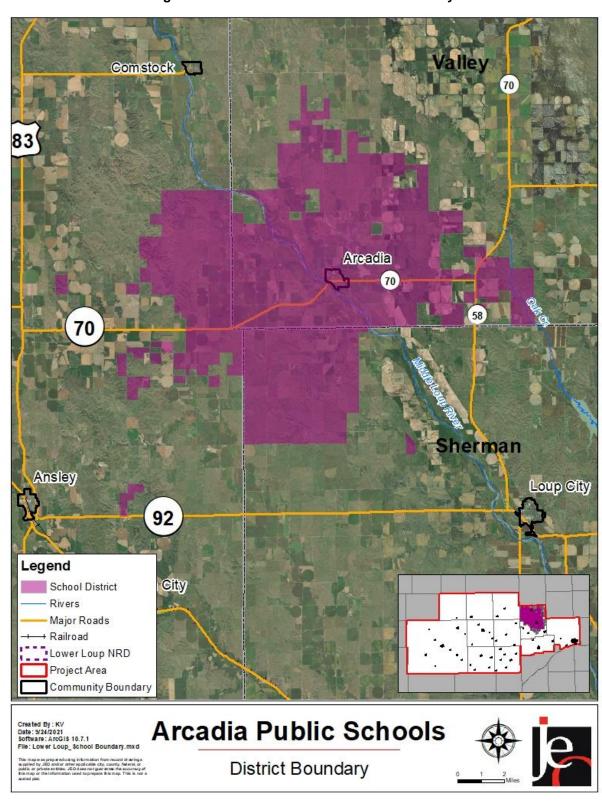


Figure APS.1: Arcadia School District Boundary

Demographics

The following figure displays the historical student population trend starting with the 2004-05 school year and ending with the 2019-20 year. It indicates that the student population has held relatively stable with an increasing trend in recent years. There are approximately 128 students enrolled in Arcadia Public Schools. The district serves 64 different families for the 128 students enrolled. The district anticipates little change in student population.

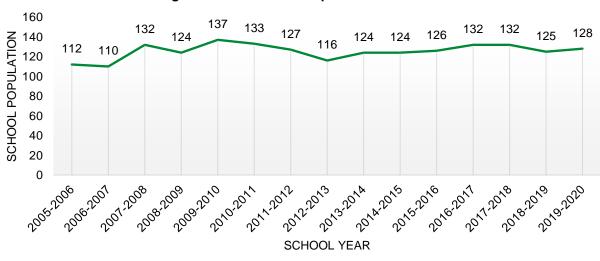


Figure APS.2: Student Population 2004-2019

Source: Nebraska Department of Education

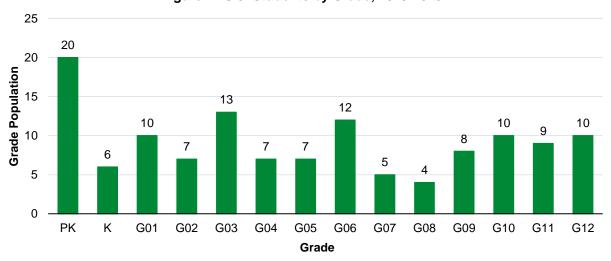


Figure APS.3: Students by Grade, 2019-2020

Source: Nebraska Department of Education

The figure above indicates that the largest number of students are in Pre-Kindergarten, followed by 3rd and 6th grades. The lowest population of students are in 8th and 7th grade. According to the Nebraska Department of Education (NDE), 50.78% of students receive either free or reduced priced meals at school in the 2019-20 year. This is lower than the state average of 45.60%.

Additionally, 11.11% of students are in the Special Education Program. These students may be more vulnerable during a hazardous event than the rest of the student population.

Table APS.2: Student Statistics, 2019-2020

		DISTRICT	STATE OF NEBRASKA
FREE/REDUCED	PRICED	50.78%	45.60%
MEALS			
SPECIAL	EDUCATION	11.11%	15.56%
STUDENTS			
ENGLISH	LANGUAGE	N/A*	7.43%
LEARNERS (ESL)			
SCHOOL MOBILITY	Y RATE	4.07%	8.36%

^{*}Data is not available with fewer than 10 students.

Source: Nebraska Department of Education

Administration

The school district has a superintendent, two principals, and supportive staff. The school board is made up of a six-member panel. The custodial/maintenance department and district safety committee may also be available to implement hazard mitigation initiatives.

Capabilities

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

Table APS.5: Capability Assessment

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

		SURVEY COMPONENTS	Yes/No
		Other (if any)	
EDUCATION OUTREACH	AND	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/yr
		Tornado	2/yr
		Intruder	1/yr
		Bus Evacuation	2/yr
		School Evacuation	1/yr
		Other (if any)	

Table APS.6: Overall Capability

OVERALL CAPABILITY	2022 PLAN
FINANCIAL RESOURCES NEEDED TO IMPLEMENT MITIGATION	Limited
PROJECTS	
STAFF/EXPERTISE TO IMPLEMENT PROJECTS	Moderate
COMMUNITY SUPPORT TO IMPLEMENT PROJECTS	Moderate
TIME TO DEVOTE TO HAZARD MITIGATION	Moderate

School Drills and Staff Training

The school district conducts safety drills annually for staff and students, including:

- Fire Drills monthly
- Tornado Drills two drills annually
- Shelter in Place/Evacuation/Reunification Drills

Additionally, district staff are trained annually at pre-year meetings in August on emergency procedures and again throughout the year if needed. Throughout the year, post-drill meetings are held to discuss and assess any potential changes.

During the beginning of the school year, teachers go over emergency response procedures with students. The school district also offers access to the procedures via the K12 Standard Response Protocol. Parents are notified of emergency events through a call system called SwiftReach that calls, texts, and emails information in English only.

Plan Integration

The district has several planning documents that discuss or relate to hazard mitigation. Each applicable planning mechanism is listed below along with a short description of how it is integrated with the hazard mitigation plan. Participating jurisdictions will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

Grants and Funding

School funds are currently limited to maintaining current facilities and systems, but are not already dedicated to specific projects. Funds have decreased in recent years, primarily because of a decline in property valuations that forced Arcadia Public Schools to spend its cash on-hand to deal with the resulting raised tax levy. In March 2021, the district passed a levy override so that the school can return its cash on-hand to a healthy level. The district expects this process of savings to take approximately four to five years.

No hazard mitigation projects are included in the district budget. The district has not applied for any grants. However, the local Future Farmers of America (FFA) chapter applied for and was awarded a grant from Cargill to build a greenhouse for its members to learn in.

Crisis Response Plan

The district's Crisis Response Plan is reviewed annually and updated as needed. Arcadia Public Schools updated their Emergency Operations Plan (EOP) in 2021. The district also reviews this plan annually and updates it as needed. Their EOP addresses actions to take for tornadoes, fire, flooding, blizzard, and other severe weather hazards. The Crisis Response Plan addresses shelter in place protocols and shelter locations; identifies evacuation scenarios and routes; as well as opportunities for mitigation following hazard events and preparedness gaps for particular hazards.

Strategic Plan

Arcadia Public Schools does not currently have a five- to seven-year strategic plan. The district plans to develop a strategic plan in the near future.

Future Development Trends

In the past five years, the district purchased a used bus and has a greenhouse under construction. There are no new constructions or renovations planned for the upcoming five years. According to the Department of Education, the student population is growing. The local planning team indicated that the student population has remained relatively stable, and any new growth would come from additional option enrollment students.

Community Lifelines

Transportation

The district's major transportation corridors include Highway 70, Highway 58, and Highway 92. The local planning team noted that the western bus routes in Custer County are difficult to navigate as they become muddy whenever there is heavy rain or snowmelt. The district owns one 53-passenger bus, one 71-passenger bus, and one 22-passenger bus. The district currently transports 44 students. There are no rail lines in the district. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environmental Quality, there are four chemical storage sites that house hazardous materials in Arcadia. The school is approximately 6 blocks south of Trotter Grain and Fertilizer, which has chemical storage on the edge of town. The local planning team noted no specific concerns regarding chemical spills at this time.

Table APS.3: Chemical Storage Fixed Sites

FACILITY NAME	Address	LOCATED IN FLOODPLAIN?
TROTTER GRAIN & FERTILIZER CO	300 W Railroad, Arcadia	No
TROTTER OIL CO	135 E Bridge St, Arcadia	No
TROTTER OIL CO CARDTROL & BULK	225 W Bridge St, Arcadia	No
NEBRASKA CENTRAL TELEPHONE CO	110 W Bridge St, Arcadia	No

Source: Nebraska Department of Environment and Energy¹

Critical Facilities

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

Table APS.4: Arcadia Critical Facilities

CF #	NAME	Address	# OF STUDENTS	# OF STAFF	SHELTER (Y/N)	GENERATOR (Y/N)
1	Arcadia Elementary School	320 West Owens Street, Arcadia, NE 68815-0248	68	7	Υ	N
2	Arcadia High School	320 West Owens Street, Arcadia, NE 68815-0248	53	15	Υ	N

¹ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

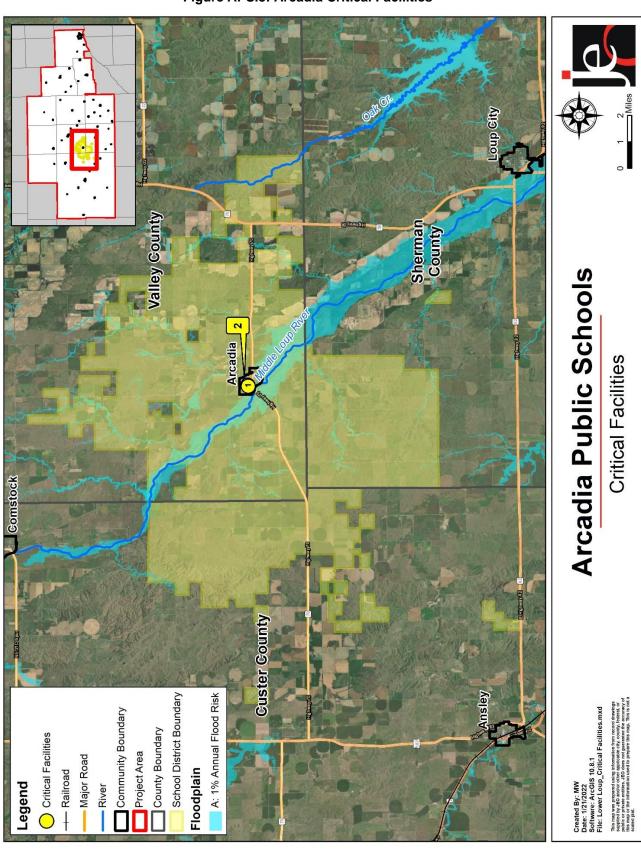


Figure APS.3: Arcadia Critical Facilities

Although not listed in the table above, critical infrastructure also include power substations, cell towers, and alert sirens which provide service to the district. These assets are typically owned and maintained by other agencies and are not the responsibility of the school district.

Hazard Prioritization

For additional discussion regarding area wide hazards, please see *Section Four: Risk Assessment*. A full list of historical hazard occurrences can be found in the Valley County jurisdictional profile. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the district's capabilities.

Severe Thunderstorms

Severe thunderstorms include impacts from heavy rain, lightning, hail, and thunderstorm winds. Local concerns for the district pertain to loss of power and safety for staff and students. Arcadia School District and its surrounding areas are vulnerable to severe thunderstorms. The local planning team indicated that while all of the children have the availability of sheltering in an inside area, the buildings and grounds can still be affected by a lightning strike. Past events have produced hail up to 2.5 inches in Arcadia which damaged homes and properties.

Mitigation Strategy

New Mitigation Actions - 2022 Plan

New mitigation Act		
OBJECTIVE	BACKUP AND EMERGENCY GENERATORS	
DESCRIPTION	 Identify and evaluate current backup and emergency generators Obtain additional generators based on identification and evaluation Provide portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters 	
HAZARD(S) ADDRESSED	All hazards	
ESTIMATED COST	\$30,000	
POTENTIAL FUNDING	Local District funds, HMA	
TIMELINE	2-5 years	
PRIORITY	High	
LEAD AGENCY	Superintendent	
STATUS	This is a new mitigation action.	

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to

other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The district Superintendent, Principal, Maintenance Director, and Board Member Representative on the Safety Committee will review and update the Arcadia Public Schools community profile annually. These district leaders will conduct the annual reviews at a committee meeting held prior to a regular Board of Education meeting. The community will be invited to attend the committee meeting, hear the plan as it has been developed, and asked to offer comments or input for consideration or improvement.

SECTION SEVEN: ARCADIA SCHOOLS DISTRICT PROFILE

THIS PAGE INTENTIONALLY BLANK

DISTRICT PROFILE

DUNCAN FIRE DISTRICT

Lower Loup Natural Resources District Hazard Mitigation Plan 2022

Local Planning Team

Table DFD.1: Duncan Fire District Local Planning Team

NAME	TITLE	JURISDICTION
PATRICK SIEMEK	Secretary	Village of Duncan
JOSH DAHLBERG	Fire Chief	Village of Duncan

Location and Geography

The Duncan Fire District covers approximately 110 acres in Platte and Polk Counties, including the Village of Duncan. The district responds to both grass/wildfire and structural fires in the village and surrounding rural areas.

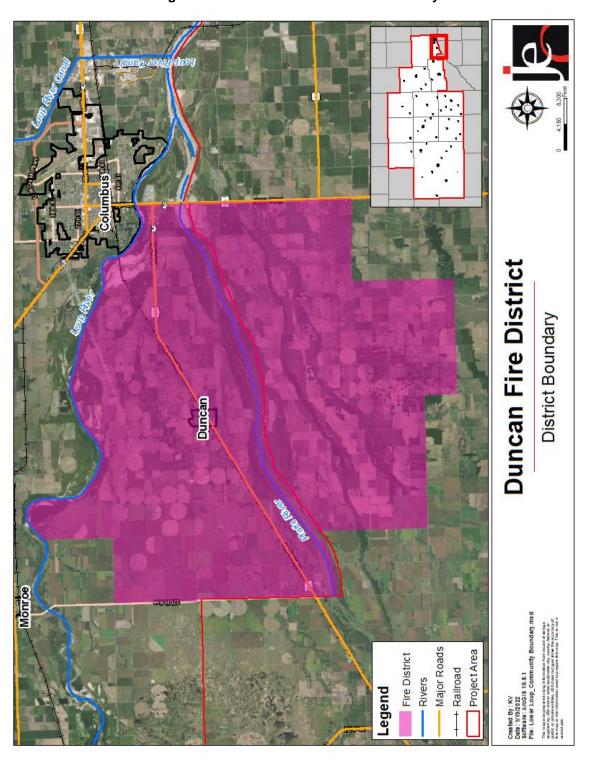


Figure DFD.1: Duncan Fire District Boundary

Demographics

See the Village of Duncan and Platte County profiles for regional demographic information. The local planning team estimated total demographics in the district as 1,200 residents. This includes the Village of Duncan and several sand-pit lake communities in the county.

Future Development Trends

In the past five years the fire district has updated several pieces of equipment including a 3,000 gallon water tender. The fire hall was built in 1980 but recently remodeled to expand capacity and update the space. In the next five to ten years the district plans to continue renovations to include new lights, heaters, and connectors for a backup generator.

Staffing

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

Capabilities

Due to the unique structure of fire districts, the typical capability assessment table was not used. The following table summarizes the district's overall capabilities. The Duncan Fire District will continue to utilize existing relationships with local, county, state, and federal agencies in the implementation of mitigation projects. As of 2021, the Duncan Fire District had an average Insurance Services Office rating of 4.5. This is a composite of both the rural areas and incorporated community the district serves.

Table DFD.2: Overall Capability

OVERALL CAPABILITY	2022 PLAN
FINANCIAL RESOURCES NEEDED TO IMPLEMENT MITIGATION	Limited
PROJECTS	
STAFF/EXPERTISE TO IMPLEMENT PROJECTS	Moderate
COMMUNITY SUPPORT TO IMPLEMENT PROJECTS	Moderate
TIME TO DEVOTE TO HAZARD MITIGATION	Limited

Plan Integration

Grants and Funding

The Duncan Fire District's general budget has been relatively steady over the past decade. The district noted that funds are sufficient for current facilities; however, any additional funding is currently being used to update equipment as available. The district is planning to use future funds for a new engine. The majority of funding comes from pickle cards or local taxes. The district also utilizes grant programs to accomplish projects including FEMA fire grants for equipment upgrades and structural gear.

Emergency Plans and Mutual Aid

The Duncan Fire District has established mutual aid agreements in place with all surrounding fire districts. In particular, an agreement is in place with the City of Columbus in the case a ladder truck is needed.

The district also falls under and follows the Platte County Local Emergency Operations Plan. The LEOP was last updated in 2016 and addresses both natural and man-made disasters. The LEOP is anticipated to be updated again by 2022. The plan assigns clear responsibility in case of an emergency, identifies shelter locations, and includes all communities in the county as an annex.

Community Lifelines

Transportation

Major transportation corridors in the district include Highway 30, which runs east-west along the southern portion of Duncan. Highway 30 accommodates 3,865 vehicles per day, 835 of which are heavy commercial vehicles. Union Pacific has a rail line which bisects the district as well. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents. Hazardous materials are commonly transported through the district.

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are two chemical storage sites in the district which house hazardous materials. In the case of a chemical spill event, the local fire department would be first to respond. The nearest HAZMAT team is located in Columbus.

Table DFD.3: Chemical Storage Fixed Sites

FACILITY NAME	Address
CENTRAL VALLEY AG	28115 158th St
FRONTIER COOPERATIVE	912 Highway 30

Source: Nebraska Department of Environment and Energy²

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.

Table DFD.4: Duncan Fire District Critical Facilities

CF #	LIFELINE	Name	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Safety and Security	Fire Hall/Equipment Storage/Alert Siren	Y	N	N

² Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed August 2020.

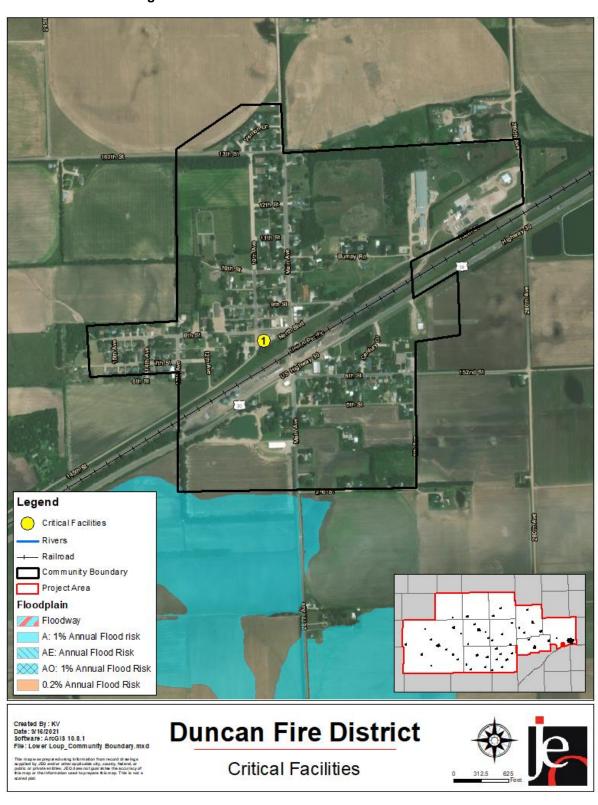


Figure DFD.2: Duncan Fire District Critical Facilities

Although not listed in the table above, critical infrastructure also include power substations, cell towers, and alert sirens which provide service to the district. These assets are typically owned and maintained by other agencies and are not the responsibility of the fire district.

Hazard Prioritization

For additional discussion regarding area wide hazards, please see *Section Four: Risk Assessment*. A full list of historical hazard occurrences can be found in the Valley County jurisdictional profile. 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

Flooding was identified as a hazard of top concern for the fire district due to the breadth of area in the district's boundaries which experience flooding impacts and as the district is the primary responder for hazard events. The local planning team noted approximately one third of the district's area experiences impacts from flooding (both riverine and flash flooding) annually. The March 2019 flood event was particularly damaging for the area and local district. Department personnel logged over 800 hours for response time and assisted with numerous evacuations and rescues. Unfortunately, one fatality occurred during this flood event when a wheelchair bound woman was trapped in her home. Highway 30 and gravel roads throughout the county were severally damaged during this event which impeded the districts ability to access remote areas.

Grass/Wildfires

Grass and wildfires are a concern for the district and a common occurrence in the district. The district has equipment with a total capacity over 3,000 gallons for emergency response. Additional rural water sources are needed for refill ability, rather than returning to town. Between 2000 and 2019 the district reported 135 fire events to the Nebraska Forest Service which burned over 871 acres. One fire event in 2008 reported one injury.

Severe Thunderstorms/Severe Winter Storms/Tornadoes and High Winds

Specific concerns for these hazards all revolve around the lack of available shelters in the Village of Duncan and surrounding areas. No weather radios are currently stored at the fire hall. All residents and fire district volunteers receive AlertSense notifications from Platte County Emergency Management.

Mitigation Strategy

New Mitigation Actions – 2022 Plan

OBJECTIVE	NEW STRUCTURAL ENGINE
DESCRIPTION	Purchase a new structural engine for the fire district
HAZARD(S) Grass/Wildfire	
ADDRESSED	
ESTIMATED COST	\$500,000, plus equipment costs
POTENTIAL FUNDING	Tax Funding, Fire Grants
TIMELINE	5+ years
PRIORITY	High
LEAD AGENCY	Fire Chief
STATUS	This is a new mitigation action.

OBJECTIVE	BACKUP AND EMERGENCY GENERATORS		
DESCRIPTION	 Identify and evaluate current backup and emergency generators Obtain additional generators based on identification and evaluation Provide portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters 		
HAZARD(S) ADDRESSED	All hazards		
ESTIMATED COST	\$60,000 - \$80,000		
POTENTIAL FUNDING	General Fund, HMA		
TIMELINE	2-5 years		
PRIORITY	Medium		
LEAD AGENCY	Fire Chief		
STATUS	This is a new mitigation action.		

OBJECTIVE	BUILDING IMPROVEMENTS	
DESCRIPTION	 Improvements to Fire Hall to include but are not limited to: new windows, new furnace system, and/or backup generator connectors 	
HAZARD(S)	All hazards	
ADDRESSED	RESSED	
ESTIMATED COST	\$20,000 - \$25,000	
POTENTIAL FUNDING	General Fund, HMA	
TIMELINE	2-5 years	
PRIORITY	High	
LEAD AGENCY	Fire Chief	
STATUS	This is a new mitigation action.	

Plan Maintenance

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

The Duncan Fire Chief, Board Members, and Rural Fire Board Member are responsible for reviewing and updating this district profile as changes occur or after a major event. The plan will be reviewed no less than annually and will include the public in the review and revision process by sharing information via social media and on community bulletin boards.

SECTION SEVEN: DUNCAN FIRE DISTRICT PROFILE

THIS PAGE INTENTIONALLY BLANK

DISTRICT PROFILE

ELBA FIRE AND RESCUE DISTRICT

Lower Loup Natural Resources District Hazard Mitigation Plan 2022

Local Planning Team

Table EFR.1: Elba Fire District Local Planning Team

NAME	TITLE	JURISDICTION
RANDY FAABORG	Fire Chief	Elba Fire and Rescue

Location and Geography

The Elba Fire and Rescue District covers approximately 64,000 acres in Howard County and includes the communities of Elba and Cotesfield. The district responds to wildfire and structural fires and responds to emergencies in the villages and surrounding rural areas.

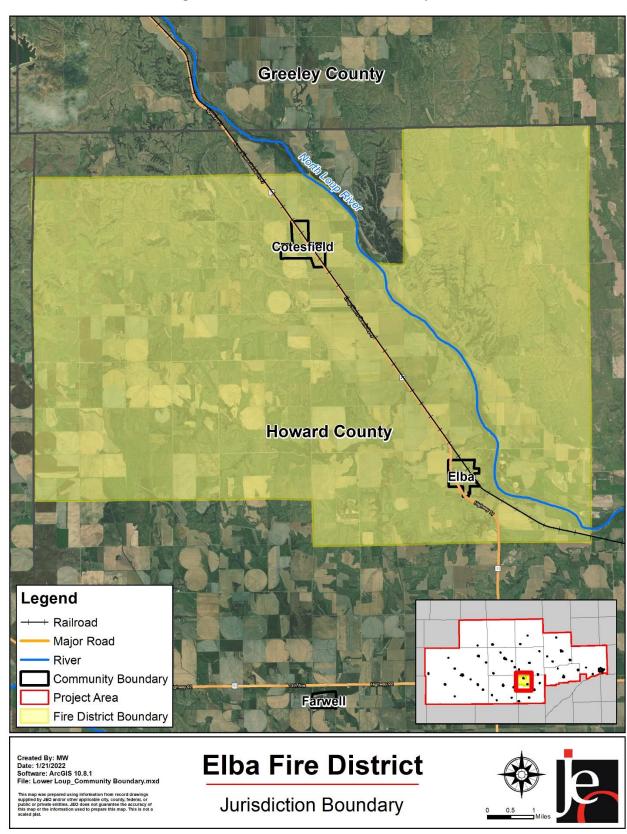


Figure EFR.1: Elba Fire District Boundary

Demographics

See the Village of Elba, Village of Cotesfield, and Howard County profiles for regional demographic information. The local planning team estimated total population in the district is 500 people.

Future Development Trends

In the past five years the fire district has built a new fire station. There is currently no future construction planned at this time; however, the district would like to purchase a large portable generator for use at the community hall or fire station as needed.

Staffing

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

Capabilities

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

Table EFR.4: Overall Capability

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

Plan Integration

Grants and Funding

According to the planning team, district funds are mostly limited to maintaining current facilities and systems. In recent years, funds have remained about the same. No grants were applied for in the last five years.

Community Lifelines

Transportation

Transportation routes of most concern for the district include Highway 11 and Central Nebraska Railroad. The local planning team noted that agricultural chemicals and fuel are regularly transported along Highway 11 and that the railroad regularly carries ethanol. No chemical spills were reported to have occurred, according to the planning team. If a major spill were to occur,

evacuation of the Village of Elba may have difficulty evacuating due to the proximity of schools and homes to the highway and railroad. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the county, as well as areas more at risk to transportation incidents.

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are two chemical storage sites in the district which house hazardous materials. The planning team noted that in addition to these storage sites, some farmers store agricultural chemicals on their land. In the case of a chemical spill event, the local fire department would be first to respond. According to the planning team, the school would be at risk if a spill were to occur due to its location near a storage site.

In the case of a chemical spill event, Elba Fire and Rescue would be first to respond. The department has some personnel trained in HAZMAT operations, but mitigation equipment and supplies are lacking. Department equipment includes two pumper trucks, one tanker, three brush trucks, and two ambulances. The department engages the public in fire safety and prevention outreach on a regular basis.

Table EFR.2: Chemical Storage Fixed Sites

FACILITY NAME	Address	
TROTTER FERTILIZER INC	515 Market St, Elba	
NEBRASKA CENTRAL TELEPHONE CO	614 Pearl St, Elba	

Source: Nebraska Department of Environment and Energy³

Critical Facilities

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

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

Table EFR.3: Elba Critical Facilities

CF#	NAME	Address	SHELTER (Y/N)	GENERATOR (Y/N)
1	Fire Hall	713 12th St	Y	N
2	School	711 Caroline	Y	N
3	Water Tank	1S Elba	N	N

³ Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed August 2020.

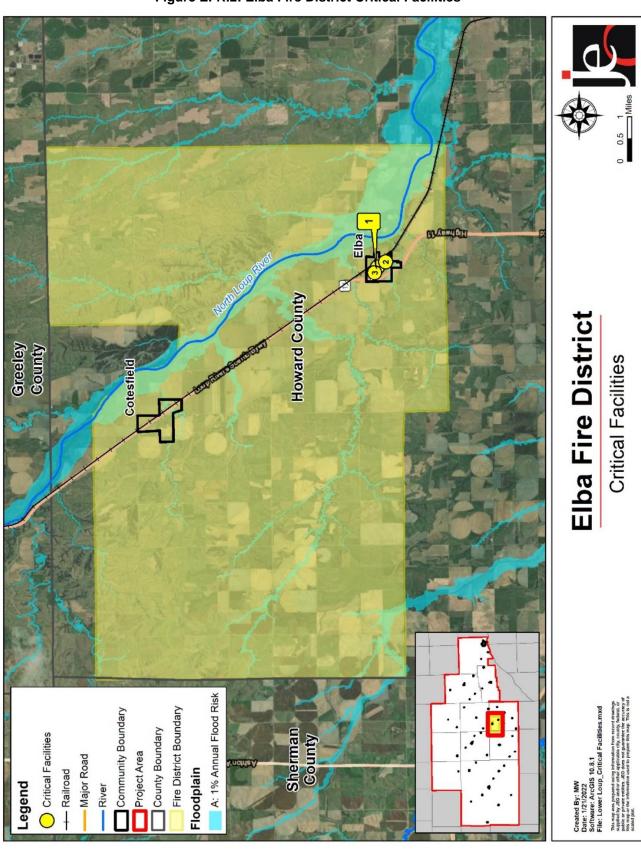


Figure EFR.2: Elba Fire District Critical Facilities

Hazard Prioritization

For additional discussion regarding area wide hazards, please see *Section Four: Risk Assessment*. A full list of historical hazard occurrences can be found in the Howard County jurisdictional profile. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the district's capabilities.

Grass/Wildfire

Wildfires are common in the district and were identified as a top concern by the planning team. According to the Nebraska Forest Service, lightning, equipment fires, and burning debris are the most common causes of fires in the district. Both wildfire and structural fires are a concern for the fire district. With limited to moderate resources and capabilities, fire response and mitigation may be more difficult.

Mitigation Strategy

New Mitigation Actions

OBJECTIVE	BACKUP AND EMERGENCY GENERATORS	
DESCRIPTION	 Identify and evaluate current backup and emergency generators Obtain additional generators based on identification and evaluation Provide 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	
ADDRESSED		
ESTIMATED COST	\$40,000	
POTENTIAL FUNDING District General Fund, Villages		
TIMELINE 2-5 Years		
PRIORITY	Medium	
LEAD AGENCY	Elba Fire and Rescue District	
STATUS	A large portable generator is needed to power the community hall or fire station when needed.	

Plan Maintenance

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

SECTION SEVEN: ELBA FIRE DISTRICT PROFILE

THIS PAGE INTENTIONALLY BLANK

DISTRICT PROFILE

FARWELL IRRIGATION DISTRICT

Lower Loup Natural Resources District Hazard Mitigation Plan 2022

Local Planning Team

Table FID.1: Farwell Irrigation District Local Planning Team

NAME	TITLE	JURISDICTION
MATT LUKASIEWICZ	General Manager	District

Location and Geography

The Farwell Irrigation District supplies water to their farmers via canal networks with diversions from the Middle Loup River and the Sherman Reservoir, in central Nebraska. The Farwell Irrigation District operates approximately 370 miles of canals and distribution systems across Custer, Valley, Sherman, and Howard counties. The Farwell Irrigation District serves approximately 200 water users over 53,414 acres.

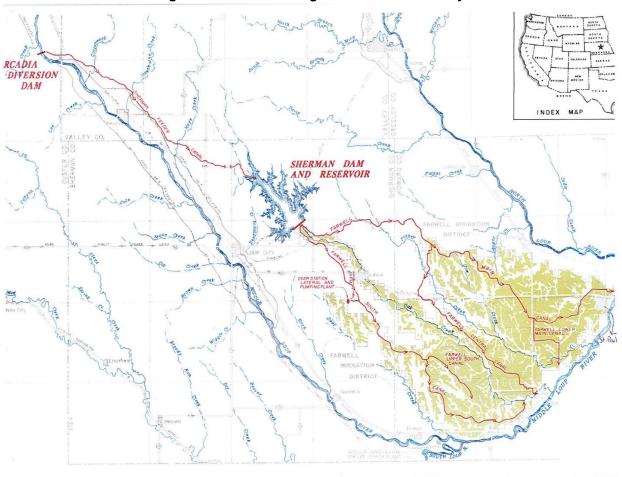


Figure FID.1: Farwell Irrigation District Boundary

Governance and Staffing

Farwell Irrigation District has 16 employees including: general manager, project manager, administrative manager, three operations and maintenance staff, and ten ditch riders. There is also a Board of Directors made up of three elected individuals, per State statute requirements.

Capabilities

Due to the unique structure of irrigation districts, the typical capability assessment table is not used. The table below shows a broad overview of the district's overall capability.

Table FID.2: Overall Capability

OVERALL CAPABILITY	2017 PLAN	2021
FINANCIAL RESOURCES NEEDED TO	Moderate	Moderate
IMPLEMENT MITIGATION PROJECTS		
STAFF/EXPERTISE TO IMPLEMENT	Moderate	Moderate
PROJECTS		
COMMUNITY SUPPORT TO IMPLEMENT	Moderate	Moderate
PROJECTS		
TIME TO DEVOTE TO HAZARD MITIGATION	Moderate	Moderate

Plan Integration

Farwell Irrigation District has an Emergency Operations Plan that identifies specific actions and responsibilities during a hazardous event. The Irrigation District does not have any other formal plans on file. In any future planning mechanisms, the Farwell Irrigation District will work to integrate the goals and objectives of the Hazard Mitigation Plan within them (as appropriate). Currently, there is not a schedule for creating other planning mechanisms, thus there is no formal strategy for plan integration at this time.

Grants and Funding

The planning team indicated that district funds are limited to maintaining current facilities and that funds have remained the same over recent years. The district budget currently includes funds for mitigating drought, flooding, dam failure, and for backup systems. In 2019, the district was awarded a grant from the Nebraska Environmental Trust.

PLAN/ORDINANCE	Yes/No	YEAR OF MOST RECENT UPDATE
Strategic Plan	No	N/A
Response Plan	Yes	2016

Future Development Trends

In the past five years there have been no changes in the Farwell Irrigation District.

Community Lifelines

Transportation

The district's major transportation corridors include Highway 70 and Highway 91. The district has one Nebraska Central Railroad Company rail line that runs through the eastern portion. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

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 previous 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 district.

Table FID.4: Farwell Irrigation District Critical Facilities

CF #	Community Lifeline	Name	Shelter (Y/N)	Generator (Y/N)	Floodplain (Y/N)
1	Food, Water, and Shelter	Arcadia Diversion Dam	Ν	N	Υ
2	Food, Water, and Shelter	Sherman Dam	Y	Y	Υ
3	Food, Water, and Shelter	District Office	Y	N	Υ
4	Food, Water, and Shelter	*115 Miles of Canal	N	N	N/A
5	Food, Water, and Shelter	*255 Miles of Laterals	N	N	N/A

^{*}Not mapped

Although not listed in the table above, critical infrastructure also includes power substations, cell towers, and alert sirens which provide service to the district. These assets are typically owned and maintained by other agencies and are not the responsibility of the irrigation district.

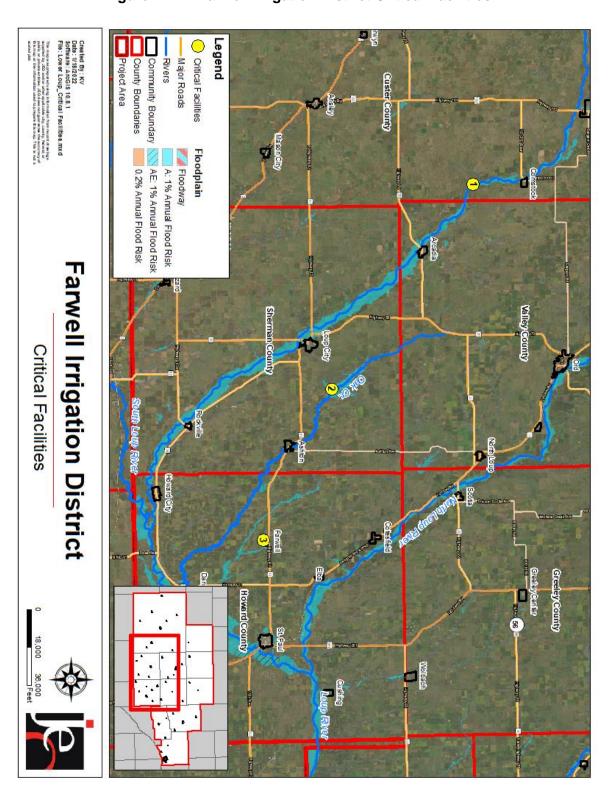


Figure FID.2: Farwell Irrigation District Critical Facilities

Hazard Prioritization

For additional discussion regarding area wide hazards, please see *Section Four: Risk Assessment*. A full list of historical hazard occurrences can be found in the county jurisdictional profiles. 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 two dams within the Farwell Irrigation District, the Arcadia Diversion Dam and the Sherman Dam. The Arcadia Diversion Dam is located eight miles northwest of Arcadia. It is a gated concrete dam, spanning 550 feet across the Middle Loup River. Sherman Dam is located four and a half miles northeast of Loup City. It is an earthen dam spanning 4,450 feet, with a reservoir capacity of 69,000-acre feet. It is owned by the Loup Basin Reclamation District and the Farwell Irrigation District.

In the event of a dam failure, there is the potential for property and crop damages, as well as loss of life. The Sherman Dam is a greater risk for the district and a failure would likely result in losses. There is an Emergency Action Plan for the Sherman Dam.

Drought

Local concerns regarding drought focus on the potential for the lack of an adequate water supply to serve the district's water users. The district has flow meters, automation, and direct measurement to monitor water supply. Drought is in the district is defined as a lack of rain and limited stream flows in the Middle Loup River.

In 2012, the drought led to the reservoir reaching dangerous levels. The district, along with two others, needed to shut down in order to restore depleted water supply. Irrigation within the district is limited to 12 inches per acre.

Flooding

Significant flooding events include the flood of 2010 along the Middle Loup River and the 2019 flood. The 2019 flood damaged much of the district's delivery system such as canals, canal roads, and diversion dam gates. The emergency spillway on the diversion dam was also jeopardized. These all had to be repaired before water could safely be supplied to the district's customers.

The planning team indicated that the top end of the Arcadia Diversion Dam on the Middle Loup River is the area most prone to flooding. As seen in 2019, flooding has the potential to cause damages to both the canal system and crops along nearby low-lying areas.

Terrorism

Terrorism was indicated as a top concern by the local planning team. The district has not experienced any incident previously. However, an attack on either dam could result in the loss of life and property.

Mitigation Strategy

Completed Mitigation Actions

OBJECTIVE	DAM FAILURE EMERGENCY ACTION/EVACUATION PLAN
DESCRIPTION	Work with officials to develop emergency action and evacuation
	plans if a dam were to fail
HAZARD(S)	Dam Failure
ADDRESSED	
STATUS	Emergency Action Plan has been completed

OBJECTIVE	DEVELOP DROUGHT MANAGEMENT PLAN
DESCRIPTION	1. Work with relevant stakeholders to develop a drought
	management plan
HAZARD(S)	Identify water monitoring protocols, outline drought responses, identify
ADDRESSED	opportunities to reduce water consumption, and establish the
	jurisdictional management procedures
STATUS	Completed

OBJECTIVE	EMERGENCY EXERCISE: DAM FAILURE
DESCRIPTION	Conduct tabletop exercises to determine the response scenarios
	in the event of a dam failure
HAZARD(S)	Dam Failure
ADDRESSED	
STATUS	This was completed with the development of the Emergency Action Plan.

OBJECTIVE	IMPROVE EMERGENCY COMMUNICATION
DESCRIPTION	Develop/Improve Emergency Communication Action plan
HAZARD(S)	Implement Emergency Communication Action Plan
ADDRESSED	
STATUS	Emergency Action Plan was completed.

OBJECTIVE	MONITOR DROUGHT CONDITIONS
DESCRIPTION	1. Establish specific drought monitoring protocols to serve as
	triggers for implementing drought response actions
HAZARD(S)	Drought
ADDRESSED	
STATUS	Agreements with other appropriators is in place.

OBJECTIVE	MONITOR WATER SUPPLY
DESCRIPTION	Establish a system/process for monitoring water supplies (establishing timeframes for measuring well depths, increasing stream flow, etc.)
HAZARD(S) ADDRESSED	Drought
STATUS	Completed

Continued Mitigation Actions

Softmaca Miligation Actions	
OBJECTIVE	BACKUP AND EMERGENCY GENERATORS
DESCRIPTION	 Identify and evaluate current backup and emergency generators Obtain additional generators based on identification and evaluation Provide 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
ADDRESSED	
ESTIMATED COST	\$20,000 to \$75,000+ per generator
POTENTIAL FUNDING	District General Fund
TIMELINE	1 Year
PRIORITY	Medium
LEAD AGENCY	General Manager
STATUS	In progress

OBJECTIVE	DEVELOP FLOOD ASSISTANCE STRATEGIES
DESCRIPTION	 Develop Strategies to provide necessary services in the event of flooding.
HAZARD(S)	Flooding
ADDRESSED	
ESTIMATED COST	\$0
POTENTIAL FUNDING	District General Fund
TIMELINE	5+ Years
PRIORITY	Low
LEAD AGENCY	General Manager
STATUS	In progress

OBJECTIVE	REDUCE TREE DAMAGE & DAMAGE FROM TREES
DESCRIPTION	 Conduct tree inventory Develop tree maintenance/trimming program Implement tree maintenance/trimming program Remove hazardous limbs and/or trees
HAZARD(S)	Severe Thunderstorms
ADDRESSED	
ESTIMATED COST	\$50+ per tree
POTENTIAL FUNDING	District General Fund
TIMELINE	5+ Years
PRIORITY	Low
LEAD AGENCY	General Manager, Ditch Riders
STATUS	Tree removal occurs annually and as needed.

OBJECTIVE	SITE SECURITY
DESCRIPTION	 Install fences around key infrastructure (water towers, municipal well, lift stations, etc.) Install security cameras in/around critical facilities and key infrastructure
HAZARD(S)	Terrorism
ADDRESSED	
ESTIMATED COST	\$100 per unit
POTENTIAL FUNDING	District General Fund
TIMELINE	Ongoing
PRIORITY	Medium
LEAD AGENCY	General Manager
STATUS	The district continuously upgrades its security.

OBJECTIVE	WATER SYSTEM IMPROVEMENTS
DESCRIPTION	 Make water system improvements to include additional fire hydrants/increase supply and pressure to effectively fight fires and meet increasing demands Update/improve water distribution system (identifying and replacing leaky pipes, assisting residents in identifying inefficiencies, transitioning to smart irrigation systems, etc.) Upgrade water district infrastructure to decrease likelihood of damages and improve water system for emergency use
HAZARD(S)	Drought
ADDRESSED	
ESTIMATED COST	\$15,000+ varies by need and project
POTENTIAL FUNDING	District General Fund
TIMELINE	5+ Years
PRIORITY	Medium
LEAD AGENCY	General Manager
STATUS	The district continuously repairs and upgrades the system as needed.

Removed Mitigation Actions

OBJECTIVE	EMERGENCY EXERCISE: DROUGHT TOURNAMENT
DESCRIPTION	1. Work with relevant stakeholders to develop a drought
	management plan
HAZARD(S) ADDRESSED	Identify water monitoring protocols, outline drought responses, identify opportunities to reduce water consumption, and establish the jurisdictional management procedures
REASON FOR REMOVAL	Drought exercises are being completed at the NRD level.

OBJECTIVE	FACILITY FLOOD PROOFING
DESCRIPTION	1. Explore possibility of flood proofing facilities which fall within
	HAZUS 1% flood inundation areas
HAZARD(S)	Conduct flood proofing feasibility study for structures and implement
ADDRESSED	identified measures
REASON FOR	This is no longer a priority for the district.
REMOVAL	

OBJECTIVE	GRADE CONTROL STRUCTURES
DESCRIPTION	 Monitor stream bed degradation occurring along river and creeks Install grade control structures including sheet-pile weirs, rock weirs, ponds, road dams, etc. to maintain channel bed
HAZARD(S)	Flooding
ADDRESSED	
REASON FOR	This is no longer a priority for the district.
REMOVAL	

OBJECTIVE	GROUNDWATER RECHARGE
DESCRIPTION	Divert excess flows from river to recharge groundwater within the
	aquifer.
HAZARD(S)	Drought
ADDRESSED	
REASON FOR	This is no longer a priority for the district.
REMOVAL	

OBJECTIVE	REDUCE WATER DEMAND/IMPROVE DROUGHT EDUCATION
DESCRIPTION	 Conduct water use study to evaluate/implement methods to conserve water/reduce consumption Evaluate/implement water use restriction ordinance Identify/evaluate current/additional potable water sources Develop or obtain drought education materials to conduct multifaceted public education and awareness program
HAZARD(S) ADDRESSED	Drought
REASON FOR	This is no longer a priority for the district.
REMOVAL	

Plan Maintenance

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

The district board is responsible for reviewing and updating this profile as changes occur or after a major event. The board 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 meetings and water user meetings.

SECTION SEVEN: FARWELL IRRIGATION DISTRICT PROFILE

THIS PAGE INTENTIONALLY BLANK

HEALTH DISTRICT PROFILE

LOUP BASIN PUBLIC HEALTH DEPARTMENT

Lower Loup Natural Resources District Hazard Mitigation Plan 2022

Local Planning Team

Table LBH.1: Loup Basin Public Health Department Local Planning Team

Name	Title	Jurisdiction
Ashley Jeffres	Public Health Nurse/ERC Back-up	LBPHD
Catie Larsen	ERC	LBPHD

Location and Services

The Loup Basin Public Health Department is located in central Nebraska and covers Blaine, Custer, Garfield, Greeley, Howard, Loup, Sherman, Valley, and Wheeler Counties. The district has one service site and main office located in Burwell, Nebraska.

Demographics

The population served by the Loup Basin Public Health Department has been decreasing since 1920. In 2018, the total population of the nine county region was 30,773.

30,000 25,000 **POPULATION** 20,000 15,000 10,000 5.000 Custer County Garfield County — -Greeley County Howard County --Loup County -Sherman County Valley County Wheeler County — Blaine County Source: U.S. Census Bureau4

Figure LBH.2: Population Served 1880-2018

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

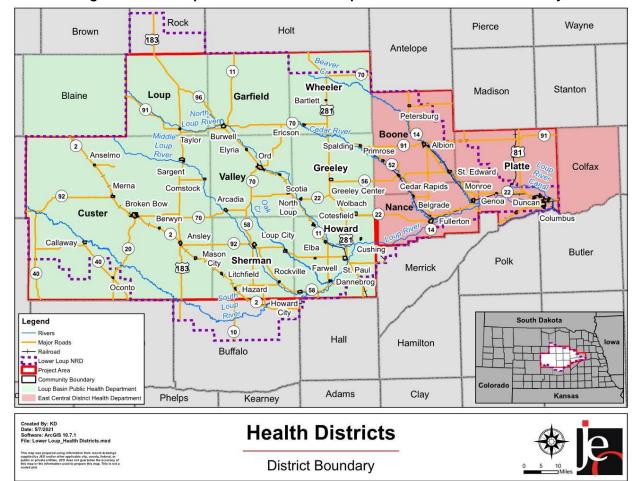


Figure LBH.1: Loup Basin Public Health Department Jurisdictional Boundary

Staffing

The Loup Basin Public Health Department is supervised by an <u>20</u>-member board of directors. They appoint the health department director, who will oversee the implementation of hazard mitigation projects. Additional offices and departments that could assist with hazard mitigation related activities include: Sherman/Valley LEPC, Greeley/Wheeler LEPC, TBLG LEPC, Custer LEPC, Region 26, Nebraska Department of Environmental Quality, Nebraska Department of Natural Resources, Natural Resources District, EPA, and Emergency Managers.

Capabilities

As outlined by the department, the mission is "It shall be the duty of the board of health to be well informed regarding all matters affecting the health of the citizens of the Loup Basin nine county area". The following programs and services are offered to residents throughout the district.

- Education
 - Bed Bugs, Lead, Indoor Air Quality, Mercury, Mold, Rabies, Tobacco Awareness, Water Testing, West Nile
- Emergency Preparedness

- Immunizations and Vaccinations
- Fluoride Varnish Program
- Tobacco Prevention
- On-site Wellness Screenings

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

Table ECH.2: Overall Capability

Overall Capability	2021
Financial Resources Needed to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Limited
Community Support to Implement Projects	Limited
Time to Devote to Hazard Mitigation	Limited

Plan Integration

Grants and Funding

The Loup Basin Public Health Department's funds are very limited, but are not currently dedicated to specific projects. Generally, state Public Health Emergency Preparedness (PHEP) funds have decreased in recent years. The Loup Basin Public Health Department has not applied for grants beyond the PHEP grant through the Department of Health and Human Services.

Future Development Trends

In the past five years, the district has added additional staff members due to Covid-19. The district office building has also been remodeled to make room for more office space. The district is in the process of building a new storage building that will have drive-through capabilities and can accommodate mass vaccinations if necessary. There are no new structures or developments planned at this time. The district hopes to obtain additional staff in the future to implement additional programs.

Community Lifelines

Transportation

US Highways 183 and 281 and Nebraska Highways 2, 10, 11, 20, 22, 40, 56, 58, 70, 92, and 96 all travel through the district. Several railway lines travel through the district. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors and areas more at risk of transportation incidents.

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there 101 chemical storage sites throughout the district which house hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident. The local planning team noted that chemical spills pose a risk to people, water supplies, air quality, wildlife, and livestock.

Critical Facilities

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

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

Table ECH.3: Loup Basin Public Health Department Critical Facilities

CF #	Lifelin	е	Name		Ac	dres	S	Shelter (Y/N)	Generator (Y/N)	Floodplain (Y/N)
1	Health Medical	and	LBPHD Burwell	-	934 Burwe 68823	•	St, NE	N	Y	N

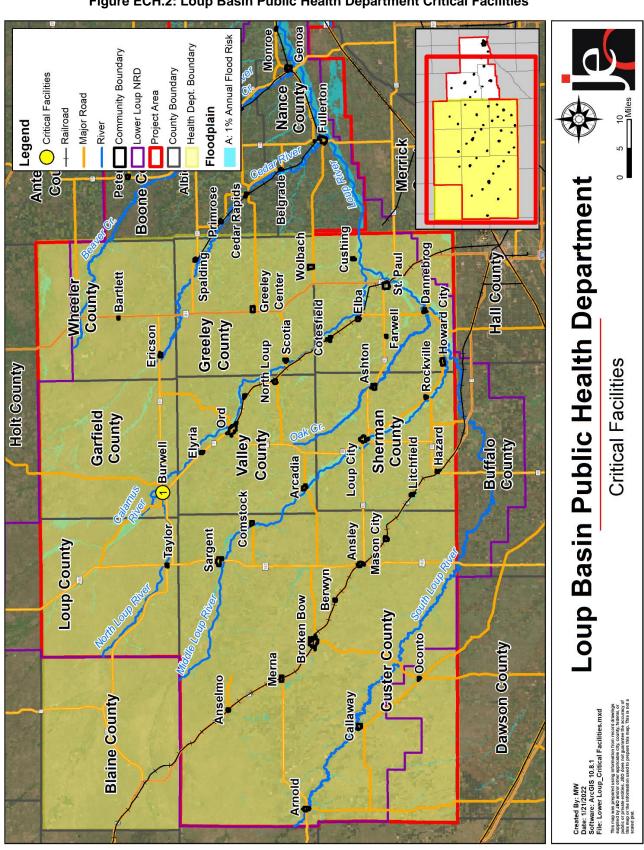


Figure ECH.2: Loup Basin Public Health Department Critical Facilities

Although not listed in the table above, critical infrastructure also include power substations, cell towers, and alert sirens in the county. These assets are typically owned and maintained by other agencies and are not the responsibility of the jurisdiction.

Health and Medical Facilities

The following medical and health facilities are located within the county.

Table ECH.4: Medical Facilities

Table ECH.4. Medical Facilities			Number of
Type of Facility	Name	Community	licensed Beds
Assisted Living	Custer Care	Broken Bow	10
Assisted Living	Off Broadway Apartments	Broken Bow	50
Assisted Living	Quality Senior Villages	Broken Bow	14
Assisted Living	Friendship Home Assisted Living	Burwell	18
Assisted Living	Greeley Assisted Living	Greeley	12
Assisted Living	Rose Lane Home	Loup City	12
Assisted Living	Grandview Assisted Living Facility	Ord	50
Assisted Living	Matelyn Retirement Community LLC	St Paul	66
Hospital	Jennie M Melham Memorial Medical Center	Broken Bow	23
Hospital	Callaway District Hospital	Callaway	12
Hospital	Valley County Hospital	Ord	16
Hospital	Howard County Medical Center	St Paul	10
Long Term Care	Brookestone View	Broken Bow	60
Long Term Care	Community Memorial Health Center	Burwell	64
Long Term Care	Callaway Good Life Center	Callaway	35
Long Term Care	Greeley Care Home	Greeley	26
Long Term Care	Rose Lane Home	Loup City	64
Long Term Care	Valley View Senior Village	Ord	60
Long Term Care	Brookefield Park	St Paul	70
Rural Health Clinic	VCHS Medical Clinic	Burwell	-
Rural Health Clinic	Burwell Family Practice Clinic	Burwell	-
Rural Health Clinic	Callaway Medical Clinic	Callaway	-
Rural Health Clinic	Greeley Medical Clinic	Greeley	-
Rural Health Clinic	Howard County Medical Center	Loup City	-
Rural Health Clinic	VCHS Medical Clinic	Loup City	-
Rural Health Clinic	VCHS Medical Clinic	Ord	-
Rural Health Clinic	Spalding Medical Clinic	Spalding	-

Type of Facility	Name	Community	Number of licensed Beds
Rural Health Clinic	Howard County Medical Clinic	St. Paul	-

Source: Nebraska Department of Health and Human Services^{5,6,7,8}

Historical Occurrences

See the Custer, Garfield, Greeley, Howard, Loup, Sherman, Valley, and Wheeler Counties profile for historical hazard events. For Blaine County historical events, see the *Upper Loup NRD Multi-Jurisdictional Hazard Mitigation Plan 2020*.

Hazard Prioritization

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

Flooding

The 2019 flood did a lot of damage across our entire jurisdiction. Farmers/Ranchers lost cattle and had damage to their land. Homes and business were flooded. The Loup Basin Public Health District building was not damaged during the 2019 flood. The health department did establish incident command and worked with area emergency managers and county leaders to help find needed resources. Additionally, health department staff administered tetanus shots and set up on-site booster clinics in communities impacted by the flood.

After the 2019 flood, the health department acquired more resources to quickly assist communities in emergencies. They recognized that communication with DHHS could have been improved, and that they needed to receive water test kits and other supplies more quickly. They also realized that Red Cross Shelters are very limited, and do not always meet their needs, but the health department does not have the resources or buildings to supply proper shelters. The health department has worked with the Red Cross to develop a better system to organize shelters.

Public Health Epidemic

The ongoing Covid-19 pandemic created many difficulties across the Lower Loup NRD. Businesses and restaurants had to close, schools were not able to function as normal, some individuals were not able to work if they were quarantined, causing financial stress. The Loup Basin Public Health Department experienced the challenges of Covid-19 acutely. Due to a lack

Department of Health and Human Services. 2021. "State of Nebraska: Assisted Living Facilities." https://dhhs.ne.gov/licensure/Documents/ALF%20Roster.pdf.

⁶ Department of Health and Human Services. 2021. "State of Nebraska Roster: Hospitals." https://dhhs.ne.gov/licensure/Documents/Hospital%20Roster.pdf.

Department of Health and Human Services. 2021. "State of Nebraska Roster: Long Term Care Facilities." https://dhhs.ne.gov/licensure/Documents/LTCRoster.pdf.

B Department of Health and Human Services. 2021. "State of Nebraska Roster: Rural Health Clinic." https://dhhs.ne.gov/licensure/Documents/RHC_Roster.pdf.

of resources at the pandemic's start in March 2020, the health department's employees experienced severe stress and increased work expectations. Personal Protective Equipment (PPE) was very limited, even after coordinating with DHHS to procure more. The health department worked with the National Guard to supply testing within its communities. Once Test Nebraska became available, the health department, along with two area hospitals, became a testing location.

The health department had plans in place to respond to an emergency event like this, but the state government elected for different response protocols. The health department has had to hire more staff to cover the workload the pandemic created, but still they are short-handed and employees put in overtime. The department constructed a new building to create more storage for PPE. They organized disease surveillance efforts like training staff to conduct contract tracing. The department has implemented plans and provided the Covid-19 vaccine to all ages, fortunately already having the proper freezers and refrigerators to store the vaccine. Department officials have worked with hospitals and pharmacies to become ready to store and distribute the vaccine. Communication was and remains to be key to the health department's efforts against Covid-19. The department has launched daily and weekly meetings with multiple partners including hospitals, pharmacies, long-term care/assisted living centers. Emergency Management, schools, DHHS, and others. The department quickly developed a presence on social media to educate the community and combat disinformation. Unfortunately, all other health department programs ground to a halt as the pandemic ramped up. Better communication and coordination between local, state, and other government entities is needed before another significant public health emergency occurs.

Severe Thunderstorms

Past thunderstorm events have caused power outages in health department buildings, but have not damaged any buildings. The Loup Basin Public Health Department relies on city back-up generators during power outages. When those fail to work, the department has additional back-up generators that can run both of their buildings. Additionally, the department has surge protectors and vaccine temperature alarms. This ensures department staff can continue to work and that refrigerators stay running to preserve vaccine. During the winter storms in the south United States in early 2021, the department, along with much of the state, experienced rolling blackouts. Staff carefully monitored refrigerator temperatures during these outages and kept cellphones charged to continue working and communicating with others. Powerlines near the department's buildings are buried. To continue mitigating risk to severe thunderstorms, the department encourages staff to work from home when necessary, use portable resources, and is working with the Red Cross to improve emergency shelters.

Severe Winter Storms

In the past, severe winter storms have forced the health department to close due to hazardous travel conditions and staff unable to make it in to work. The department has been affected by road closures and power outages resulting from severe winter storms. While the department does not have emergency response vehicles, they do have two SUVs that are used for work travel and could be used.

Mitigation Strategy

New Mitigation Actions - 2022 Plan

Mow willigation / tot	10110 2022 1 1011
OBJECTIVE	IMPROVE INTRA-COOPERATION AND AID AGREEMENTS
DESCRIPTION	Evaluate and improve existing relationships and agreements in place between communities, health departments, and state officials to effectively exactlinate emergency reappears activities.
	officials to effectively coordinate emergency response activities
HAZARD(S)	All Hazards
ADDRESSED	
ESTIMATED COST	Unknown
POTENTIAL FUNDING	General Budget
TIMELINE	2-5 years
PRIORITY	High
LEAD AGENCY	Director, community and state officials as applicable
STATUS	Began as part of COVID-19 emergency response activities; additional clarity and efforts are needed.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms. The Loup Basin Public Health Department's Emergency Response Coordinator, Back-up Emergency Response Coordinator, and Director will be responsible for bi-annually reviewing and updating their profile.

DISTRICT PROFILE

SARGENT IRRIGATION DISTRICT

Lower Loup Natural Resources District Hazard Mitigation Plan 2022

Local Planning Team

Table SID.1: Sargent Irrigation District Local Planning Team

NAME	TITLE	JURISDICTION
MATT LUKASIEWICZ	General Manager	Sargent Irrigation District

Location and Geography

The Sargent Irrigation District serves 56 water users over 14,287 acres in central Nebraska along the Middle Loup River in parts of Blaine, Custer, and Valley counties.

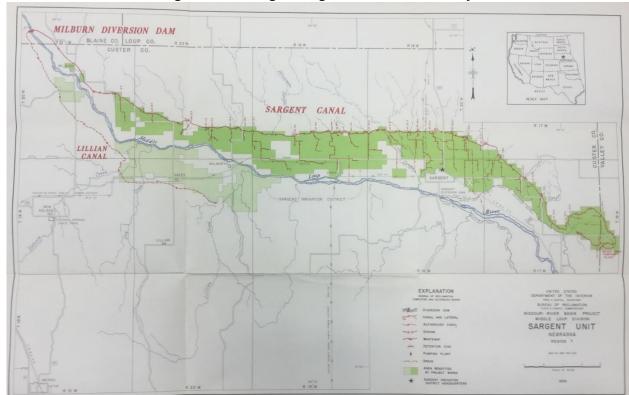


Figure FID.1: Sargent Irrigation District Boundary

Governance and Staffing

The irrigation district employs five people including: the general manager, administrative manager, and three co-project managers/ditch riders.

Capabilities

Due to the unique structure of irrigation districts, the typical capability assessment table is not used. The table below shows a broad overview of the district's overall capability.

Table SID.2: Overall Capability

OVERALL CAPABILITY	2017 PLAN	2021 LIMITED/MODERATE/HIGH			
FINANCIAL RESOURCES NEEDED TO	Moderate	Moderate			
IMPLEMENT MITIGATION PROJECTS					
STAFF/EXPERTISE TO IMPLEMENT	Moderate	Moderate			
PROJECTS					
COMMUNITY SUPPORT TO IMPLEMENT	High	Moderate			
PROJECTS	9				
TIME TO DEVOTE TO HAZARD MITIGATION	Moderate	Moderate			

Plan Integration

Sargent Irrigation District has an emergency operations plan that identifies specific actions and responsibilities during a hazardous event. The irrigation district does not have any other formal plans on file. In any future planning mechanisms, the Sargent Irrigation District will work to integrate the goals and objectives of the hazard mitigation plan within them (as appropriate). Currently, there is not a schedule for creating other planning mechanisms, thus there is no formal strategy for plan integration at this time.

Grants and Funding

The planning team indicated that district funds are limited to maintaining current facilities and that funds have remained the same over recent years. The district budget currently includes funds for mitigating drought, flooding, dam failure, and for backup systems. The district did not apply for any grants in the last five years.

Future Development Trends

In the past five years there have been no changes to the Sargent Irrigation District.

Community Lifelines

Transportation

Major transportation routes within the district include: Highway 183, Highway 33, and Victoria Springs Road. The district has one Burlington Northern Santa Fe rail line that travels through the district. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

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 previous 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 district.

Table SID.4: Sargent Irrigation District Critical Facilities

CF #	COMMUNITY LIFELINE	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Food, Water, and Shelter	District Office	Y	N	N
2	Food, Water, and Shelter	Milburn Diversion Dam	N	N	Y
3	Food, Water, and Shelter	Semler Dam	N	N	N
4	Food, Water, and Shelter	*40 Miles of Canal	Ν	N	N/A
5	Food, Water, and Shelter	*45 Miles of Laterals	N	N	N/A

^{*}Not mapped

Although not listed in the table above, critical infrastructure also includes power substations, cell towers, and alert sirens which provide service to the district. These assets are typically owned and maintained by other agencies and are not the responsibility of the irrigation district.

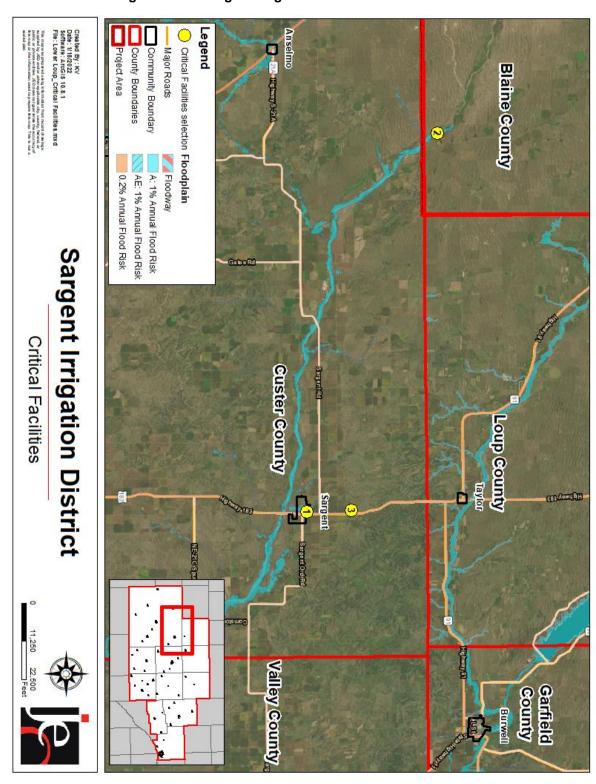


Figure SID.2: Sargent Irrigation District Critical Facilities

Hazard Prioritization

For additional discussion regarding area wide hazards, please see *Section Four: Risk Assessment*. A full list of historical hazard occurrences can be found in the county jurisdictional profiles. 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 two dams located in the district. The Milburn Diversion Dam is a concrete structure within an earth embankment and a crest elevation of 2,490 feet. The dam is owned by the Loup Basin Reclamation District/Sargent Irrigation District. The Semler Dam is an earth embankment of approximately 450 feet. These dams are not listed as high hazard dams; therefore, they are not required to have an emergency plan. If the dams were to fail, they would result in minor flooding in low lying properties below the structure. Local concerns regarding dam failure include that the district would be unable to regulate and provide irrigation water to district users. Annual dam inspections by a practicing engineer are currently planned.

Drought

Local concerns regarding drought focus on the potential lack of water supply to serve water users. Drought would reduce the available water within the Middle Loup River and likely increase irrigation on agricultural fields. The district has flow meters, automation, and direct measurement systems to monitor water supply. Drought is defined by the district as a lack of rain and low stream flows in the Middle Loup River. The district has the ability to limit the amount of water used by customers during times of drought. Actions needed in the future include more water conservation projects and increased automation.

Flooding

Flooding could occur from significant rainfall, dam failure, or flow restrictions within the Middle Loup River or district canals. Flooding has the potential to cause damages to the canal system and crops along nearby low-lying areas. The district has plans to place rip rap along vulnerable areas. An action needed in the future to reduce risk to flooding is tree removal in potential drainage areas.

Terrorism

Terrorism was determined to be a top concern by the local planning team due to the potential inability to deliver water to the district's customers. The district has not experienced any incident previously. However, an attack on a diversion dam could result in significant damages to infrastructure, property, and crops. The district has installed multiple cameras in critical areas.

Mitigation Strategy

Completed Mitigation Actions

OBJECTIVE	MONITOR WATER SUPPLY
DESCRIPTION	 Establish a system/process for monitoring water supplies (establishing timeframes for measuring well depths, increasing stream flow, etc.)
HAZARD(S)	Drought
ADDRESSED	
STATUS	Completed

Continued Mitigation Actions

Continued witigation Actions		
OBJECTIVE	BACKUP AND EMERGENCY GENERATORS	
DESCRIPTION	 Identify and evaluate current backup and emergency generators Obtain additional generators based on identification and evaluation Provide 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	
ADDRESSED		
ESTIMATED COST	\$20,000 to \$75,000+ per generator	
POTENTIAL FUNDING	District General Fund	
TIMELINE	Medium	
PRIORITY	1 Year	
LEAD AGENCY	General Manager	
STATUS	In the process of evaluating what needs to be acquired.	

OBJECTIVE	DAM FAILURE EMERGENCY ACTION/EVACUATION PLANS
DESCRIPTION	Work with officials to develop emergency action and evacuation plans if a dam were to fail
HAZARD(S)	Dam Failure
ADDRESSED	
ESTIMATED COST	\$15,000
POTENTIAL FUNDING	District General Fund
TIMELINE	5+ Years
PRIORITY	High
LEAD AGENCY	General Manager, NeDNR
STATUS	Not yet started

OBJECTIVE	DEVELOP A DROUGHT MANAGEMENT PLAN
DESCRIPTION	 Work with relevant stakeholders to develop a drought management plan Identify water monitoring protocols, outline drought responses, identify opportunities to reduce water consumption, and establish the jurisdictional management procedures
HAZARD(S)	Drought
ADDRESSED	
ESTIMATED COST	\$25,000
POTENTIAL FUNDING	District General Fund
TIMELINE	5+ Years
PRIORITY	Low
LEAD AGENCY	General Manager
STATUS	Not yet started

OBJECTIVE	DEVELOP FLOOD ASSISTANCE STRATEGIES	
DESCRIPTION	 Develop Strategies to provide necessary services in the event of flooding. 	
HAZARD(S) ADDRESSED	Flooding	
ESTIMATED COST	\$0	
POTENTIAL FUNDING	District General Fund	
TIMELINE	5+ Years	
PRIORITY	Low	
LEAD AGENCY	NeDNR, Emergency Management	
STATUS	Not yet started	

OBJECTIVE	EMERGENCY EXERCISE: DAM FAILURE
DESCRIPTION	Conduct tabletop exercises to determine the response scenarios in the event of a dam failure
HAZARD(S)	Dam Failure
ADDRESSED	
ESTIMATED COST	\$5,000
POTENTIAL FUNDING	District General Fund
TIMELINE	5+ Years
PRIORITY	Low
LEAD AGENCY	General Manager
STATUS	Not yet started

OBJECTIVE	EMERGENCY EXERCISE: DROUGHT TOURNAMENT
DESCRIPTION	 Work with regional stakeholders to develop and facilitate a drought tournament.
HAZARD(S)	Drought
ADDRESSED	
ESTIMATED COST	\$1,500+
POTENTIAL FUNDING	District General Fund
TIMELINE	5+ Years
PRIORITY	Low
LEAD AGENCY	General Manager
STATUS	Not yet started

OBJECTIVE	IMPROVE EMERGENCY COMMUNICATION	
DESCRIPTION	 Develop/Improve Emergency Communication Action plan Implement Emergency Communication Action Plan Establish inner-operable communications Obtain/Upgrade Emergency Communication 	
	Facilities/Equipment 5. Obtain/Upgrade/Distribute Weather Warning Radios	
HAZARD(S)	All Hazards	
Addressed		
ESTIMATED COST	\$1,000+ Staff Time	
POTENTIAL FUNDING	District General Fund	
TIMELINE	High	
PRIORITY	5+ Years	
LEAD AGENCY	General Manager, Emergency Management	
STATUS	Not yet started	

OBJECTIVE	MONITOR DROUGHT CONDITIONS
DESCRIPTION	Establish specific drought monitoring protocols to serve as triggers for implementing drought response actions
HAZARD(S)	Drought
ADDRESSED	
ESTIMATED COST	\$1,000+
POTENTIAL FUNDING	District General Fund
TIMELINE	5+ Years
PRIORITY	Low
LEAD AGENCY	General Manager
STATUS	Not yet started

OBJECTIVE	PARCEL LEVEL EVALUATION OF FLOOD PRONE PROPERTIES	
DESCRIPTION	Conduct a study examining parcels located in the flood prone	
	areas	
	Identify mitigation measures that can reduce future impacts	
HAZARD(S)	Flooding	
ADDRESSED		
ESTIMATED COST	\$25,000+	
POTENTIAL FUNDING	District General Fund	
TIMELINE	5+ Years	
PRIORITY	Low	
LEAD AGENCY	General Manager, NeDNR, LLNRD	
STATUS	Not yet started	

OBJECTIVE	REDUCE TREE DAMAGE & DAMAGE FROM TREES	
DESCRIPTION	 Conduct tree inventory Develop tree maintenance/trimming program Implement tree maintenance/trimming program Remove hazardous limbs and/or trees 	
HAZARD(S)	Severe Thunderstorms	
ADDRESSED		
ESTIMATED COST	\$50+ per tree	
POTENTIAL FUNDING	District General Fund	
TIMELINE	Low	
PRIORITY	5+ Years	
LEAD AGENCY	General Manager, Ditch Riders	
STATUS	The district has hired a tree service to clear trees along its operations areas and will continue this program as needed.	

OBJECTIVE	SITE SECURITY	
DESCRIPTION	1. Install fences around key infrastructure (water towers, municipal	
	well, lift stations, etc.)	
HAZARD(S)	Install security cameras in/around critical facilities and key infrastructure	
ADDRESSED		
ESTIMATED COST	Terrorism	
POTENTIAL FUNDING	Varies by size and materials used.	
TIMELINE	District General Fund	
PRIORITY	High	
LEAD AGENCY	General Manager	
STATUS	Fencing and security cameras have been installed in areas indicated as potential concerns.	

OBJECTIVE	WATER SYSTEM IMPROVEMENTS		
DESCRIPTION	 Make water system improvements to include additional fire hydrants/increase supply and pressure to effectively fight fires and meet increasing demands Update/improve water distribution system (identifying and replacing leaky pipes, assisting residents in identifying inefficiencies, transitioning to smart irrigation systems, etc.) Upgrade water district infrastructure to decrease likelihood of damages and improve water system for emergency use 		
HAZARD(S) ADDRESSED	Drought		
ESTIMATED COST	\$15,000+ varies by need and project		
POTENTIAL FUNDING	District General Fund		
TIMELINE	Ongoing		
PRIORITY	Medium		
LEAD AGENCY	General Manager		
STATUS	The district continues to make improvements to its delivery system by means of bank stabilization, automation, and technology.		

Removed Mitigation Actions

0	En autoria En ana Para antica	
OBJECTIVE	FACILITY FLOOD PROOFING	
DESCRIPTION	 Explore possibility of flood proofing facilities which fall within HAZUS 1% flood inundation areas Conduct flood proofing feasibility study for structures and implement identified measures 	
HAZARD(S)	Flooding	
ADDRESSED		
REASON FOR	This is no longer a priority for the district.	
REMOVAL		

OBJECTIVE	GRADE CONTROL STRUCTURES
DESCRIPTION	 Monitor stream bed degradation occurring along river and creeks Install grade control structures including sheet-pile weirs, rock weirs, ponds, road dams, etc. to maintain channel bed
HAZARD(S)	Flooding
ADDRESSED	
REASON FOR	This is no longer a priority for the district.
REMOVAL	

OBJECTIVE	GROUNDWATER RECHARGE	
DESCRIPTION	Divert excess flows from river to recharge groundwater within the	
	aquifer	
HAZARD(S)	Drought	
ADDRESSED		
REASON FOR	This is no longer a priority for the district.	
REMOVAL		

OBJECTIVE	REDUCE WATER DEMAND/IMPROVE DROUGHT EDUCATION		
DESCRIPTION	 Conduct water use study to evaluate/implement methods to conserve water/reduce consumption Evaluate/implement water use restriction ordinance Identify/evaluate current/additional potable water sources Develop or obtain drought education materials to conduct multifaceted public education and awareness program 		
HAZARD(S) ADDRESSED	Drought		
REASON FOR REMOVAL	This is no longer a priority for the district.		

Plan Maintenance

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

The district board is responsible for reviewing and updating this profile as changes occur or after a major event. The board 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 meetings and water user meetings.

DISTRICT PROFILE

TWIN LOUPS IRRIGATION DISTRICT

Lower Loup Natural Resources District Hazard Mitigation Plan 2022

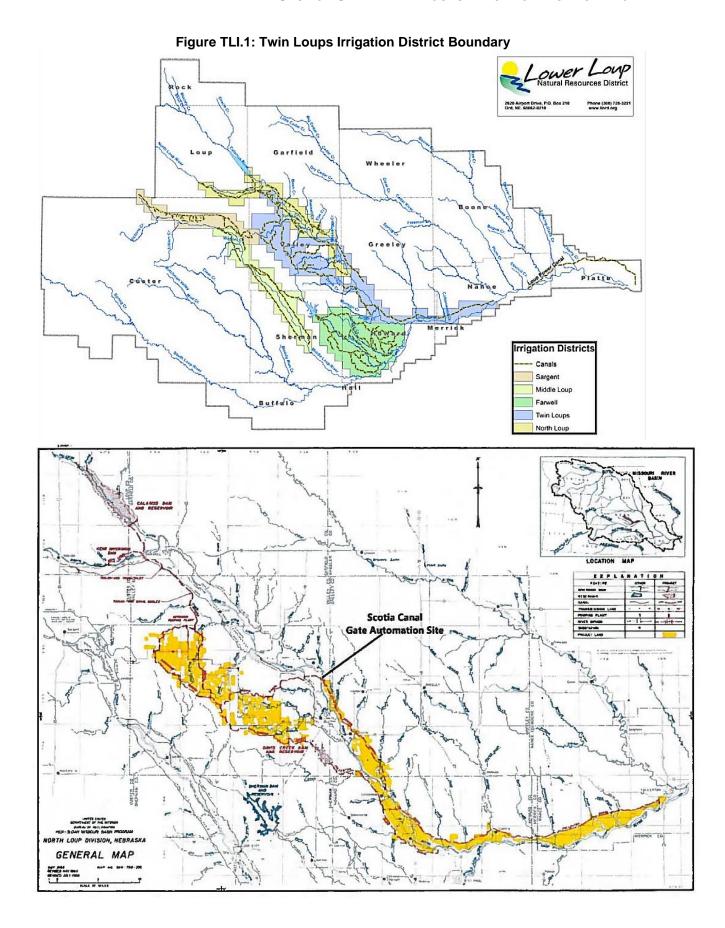
Local Planning Team

Table TLI.1: Twin Loups Irrigation District Local Planning Team

NAME	TITLE	JURISDICTION
MIKE WELLS	General Manager	Twin Loups Irrigation District

Location and Geography

The Twin Loups Irrigation District covers 55,400 acres across Loup, Garfield, Valley, Greeley, Howard, Merrick, and Nance counties in Nebraska. The district currently serves 348 owners, 266 tenants, and 720 farm turnouts.



Governance and Staffing

The Irrigation District employs seven ditch riders, two maintenance staff, three part-time maintenance staff, and four office staff. The district is led by an eight-member board.

Capabilities

Due to the unique structure of irrigation districts, the typical capability assessment table is not used. The table below shows a broad overview of the district's overall capability.

Table TLI.2: Overall Capability

OVERALL CAPABILITY	2017 PLAN	2021 LIMITED/MODERATE/HIGH
FINANCIAL RESOURCES NEEDED TO IMPLEMENT MITIGATION PROJECTS	Limited	Limited
STAFF/EXPERTISE TO IMPLEMENT PROJECTS	High	Moderate
COMMUNITY SUPPORT TO IMPLEMENT PROJECTS	High	High
TIME TO DEVOTE TO HAZARD MITIGATION	Limited	Moderate

Plan Integration

The district does not have any formal plans in place that relate to hazard mitigation. There are no plans to further integrate plans with hazard mitigation. The district's regular maintenance program ensures their drainage systems are functioning properly.

Grants and Funding

District funds are limited to maintaining current facilities and systems. The district noted that tolls have not been increased in four years, however, the district has been able to add acres to offset the effects of inflation. The district was award a Bureau of Reclamation WaterSMART grant for water meters.

Future Development Trends

In the past five years, the district has acquired additional equipment which includes a dump truck, a backhoe, a box scraper, a gopher machine, a tractor, and a 1000-gallon trailer. In the next five years, the district plans to increase the canal gate automation and monitoring.

Community Lifelines

Transportation

Major transportation routes within the district include Highways: 11, 22, 70, 91, 96, and 281. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the district, as well as areas more at risk to transportation incidents.

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 previous 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 district.

Table TLI.4: Twin Loups Irrigation District Critical Facilities

CF#	NAME	Address	SHELTER (Y/N)	GENERATOR (Y/N)
1	District Office	80309 487 th Ave, North Loup, NE 68859	Y	Υ
2	Diversion Dams	Not Mapped	Y	Y
3	Irrigation Canals	Not Mapped	N	N

Although not listed in the table above, critical infrastructure also includes power substations, cell towers, and alert sirens which provide service to the district. These assets are typically owned and maintained by other agencies and are not the responsibility of the irrigation district.

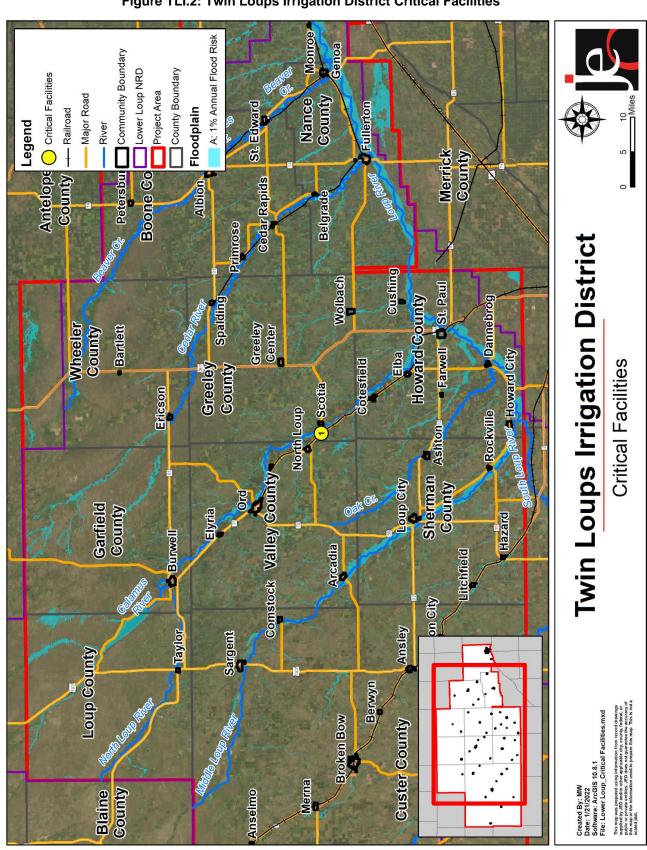


Figure TLI.2: Twin Loups Irrigation District Critical Facilities

Hazard Prioritization

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

Dam Failure

The Twin Loups Irrigation District has diversion dams that diverts water into a system of canals. The failure of one of these dams could lead to damages to district infrastructure and the district's customers. The failure of upstream dams could also cause damages to district infrastructure. During the major flooding in 2019, impacts included canal erosion and damage to county bridges. The district has a dam failure evacuation plan. Davis Creek Dam is a high hazard dam in the area that poses the greatest risk to the district. The district plans to update their emergency action plan as well as continue participating in monthly instrumentation, annual inspections, and maintain regular updates to the district SOP.

Flooding

Flooding could occur from significant rainfall, dam failure, agricultural levee failure, or flow restrictions within the district's canal system. Flooding has the potential to cause damages to district infrastructure and crops along nearby low-lying areas. During the major flooding in 2019, the district experienced erosion to canals and regulating structures within the canals. Specifically, floodwaters flowed into the canals causing bank and road damage and displacing concrete liners. The district plans to maintain drainage next to and under the canals. To further mitigate against this hazard, the district needs additional large temporary holding ponds and to maintain and improve overflow structures.

Levee Failure

The failure of an agricultural levee could result in damages to the Irrigation District's infrastructure. This failure could lead to subsequent damages downstream as water flows from the canal system into the natural streams. Many of the district canals are above nearby farms and roads, which puts them at risk in the event of a break or leak. In the past a canal failure resulted in water entering a natural drain to the river and damaged nearby pasture fence. The district plans to continue close monitoring of the canals and structures and maintain heavy equipment to use for site repairs.

Mitigation Strategy

Completed Mitigation Actions

OBJECTIVE	BACKUP AND EMERGENCY GENERATORS	
DESCRIPTION	 Identify and evaluate current backup and emergency generators. Obtain additional generators based on identification and evaluation. 	
HAZARD(S) ADDRESSED	All Hazards	
STATUS	Installed generator at headquarters to ensure communication by phone and computer, and to ensure headquarters and the shop area are heated.	

OBJECTIVE	GRADE CONTROL STRUCTURES
DESCRIPTION	 Stream bed degradation occurs along many river and creeks. Grade control structures including sheet-pile weirs, rock weirs, ponds, road dams, etc. can be implemented to maintain the channel bed.
HAZARD(S)	Flooding
ADDRESSED	
STATUS	Installed rock riprap at the canal return and installed structures to creeks and rivers.

Continued Mitigation Actions

OBJECTIVE	EMERGENCY EXERCISE: DAM FAILURE
DESCRIPTION	 Conduct table top exercises to determine the response scenarios in the event of dam failure.
HAZARD(S)	Dam Failure
ADDRESSED	
ESTIMATED COST	\$500
POTENTIAL FUNDING	Ad Valorem Fund
TIMELINE	5+ Years
PRIORITY	1 Year
LEAD AGENCY	General Manager
STATUS	The dam failure functional exercise is scheduled for February 2, 2022.

OBJECTIVE	DEVELOP DAM FAILURE EMERGENCY ACTION/EVACUATION PLAN		
DESCRIPTION	Work with officials to develop/update emergency action and evacuation plans		
HAZARD(S)	Dam Failure		
ADDRESSED			
ESTIMATED COST	\$0, Staff Time		
POTENTIAL FUNDING	District General Fund		
TIMELINE	5+ Years		
PRIORITY	High		
LEAD AGENCY	General Manager		
STATUS	Will be developed after the dam failure functional exercise on February 2, 2022.		

OBJECTIVE	IMPLEMENT WATER SYSTEM IMPROVEMENTS	
DESCRIPTION	 Update/improve water distribution system. This may include, but is not limited to: identifying and replacing leaky pipes, assisting residents in identifying inefficiencies, and transitioning to smart irrigation systems. Replace open laterals with pipelines 	
HAZARD(S)	Drought	
ADDRESSED		
ESTIMATED COST	\$5,000 - \$500,000 varies by need and project	
POTENTIAL FUNDING	District General Fund, Water Sustainability Fund, HMGP	
TIMELINE	Medium	
PRIORITY	5+ Years	
LEAD AGENCY	General Manager	
STATUS	This project has not yet been started. No pipelines are currently planned; the district is maintaining existing pipelines.	

OBJECTIVE	MONITOR DROUGHT CONDITIONS		
DESCRIPTION	 District can establish specific drought monitoring protocols. These protocols will serve as triggers for implementing drought response actions. 		
HAZARD(S)	Drought		
Addressed			
ESTIMATED COST	\$1,000+		
POTENTIAL FUNDING	District General Fund		
TIMELINE	Low		
PRIORITY	5+ Years		
LEAD AGENCY	General Manager		
STATUS	This project has not yet been started. The district plans to maintain the Davis Creek lake levels and releases.		

Removed Mitigation Actions

OBJECTIVE		CONDUCT DROUGHT TOURNAMENT/EXERCISE		
DESCRIPTION		5. Work with regional stakeholders to develop and facilitate a		
		drought tournament.		
HAZARD(S)		Drought		
ADDRESSED				
REASON	FOR	This activity was identified as not a priority for the local planning team.		
REMOVAL				

OBJECTIVE	DEVELOP AND DISTRIBUTE EDUCATIONAL MATERIALS		
DESCRIPTION	 Work to develop and distribute educational materials related to drought and drought impacts. Topics addressed may include, but are not limited to: xeriscaping, low-flow fixtures, smart irrigation systems, water collection devices/rain barrels, permeable surfaces, rain gardens, etc. 		
HAZARD(S)	Drought		
ADDRESSED			
REASON FOR	This activity was identified as not a priority for the local planning team.		
REMOVAL			

Plan Maintenance

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

SECTION SEVEN: TWIN LOUPS IRRIGATION DISTRICT PROFILE

THIS PAGE INTENTIONALLY BLANK

78

DISTRICT PROFILE

WHEELER CENTRAL SCHOOLS

Lower Loup Natural Resources District Hazard Mitigation Plan 2022

Local Planning Team

Table WCS.1: Wheeler Central Schools Local Planning Team

NAME	TITLE	JURISDICTION
RODNEY OLSON	Superintendent	Wheeler Central Schools

Location and Services

Wheeler Central School district is located in the Village of Bartlett with two schools: Wheeler Central High School and Wheeler Central Elementary. The elementary school is split into two buildings, the Lower and Upper Elementary School. The school district provides services to the communities of Ericson and Bartlett, as well as the surrounding areas in Wheeler County, Garfield County, and a small portion of Holt County. English is the predominant language in the district, with some Spanish speaking students as well.

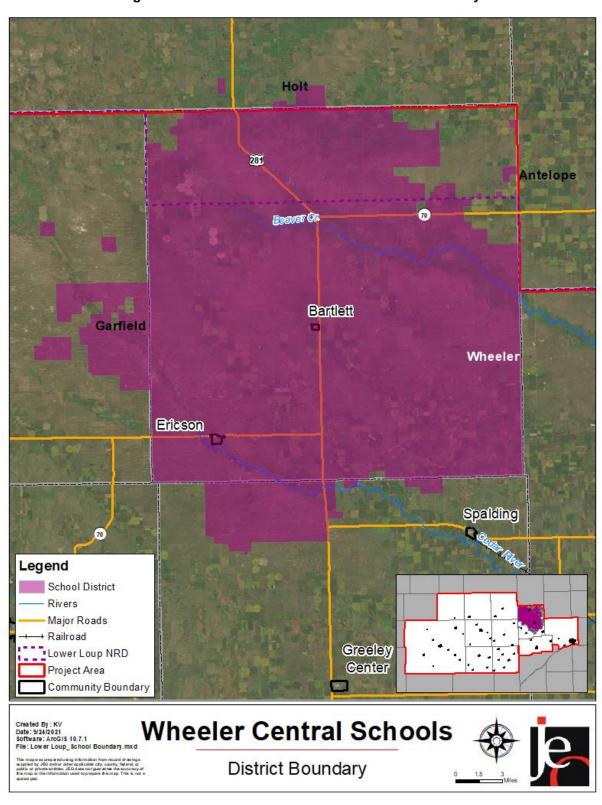


Figure WCS.1: Wheeler Central School District Boundary

Demographics

The following figure displays the historical student population trend starting with the 2006-07 school year and ending with the 2019-2020 year. It indicates that the student population has remained relatively stable for the district. However, the local planning team noted overall student population is anticipated to increase in the coming years due to larger pre-K and Kindergarten cohorts. Additionally, there are several new daycares and early childhood services in the county and areas which has led to more families staying in the area. There are approximately 106 students enrolled in Wheeler Central Public Schools.

The local planning team noted that several students opt-in to the district; however, more students opt-out and into the surrounding districts including Spalding Academy (a private parochial school), Chambers, Riverside, Central Valley, Elgin, Burwell, or Summerland districts.

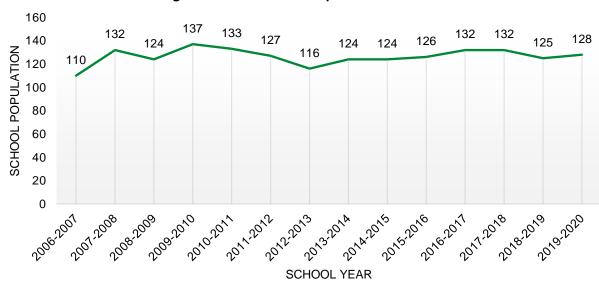


Figure WCS.2: Student Population 2006-2020

Source: Nebraska Department of Education

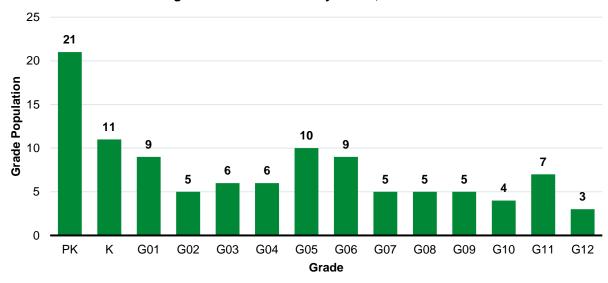


Figure WCS.3: Students by Grade, 2019-2020

Source: Nebraska Department of Education

The figure above indicates that the largest number of students are in Pre-kindergarten, followed by kindergarten and 5th grade. The lowest population of students are in 12th grade and 10th grade. According to the Nebraska Department of Education (NDE), 42.86% of students receive either free or reduced priced meals at school in the 2019-20 year. This is lower than the state average of 45.60%. Additionally, 19.51% of students are in the Special Education Program. These students may be more vulnerable during a hazardous event than the rest of the student population.

Table WCS.2: Student Statistics, 2019-2020

		DISTRICT	STATE OF NEBRASKA
FREE/REDUCED	PRICED	42.86%	45.60%
MEALS			
SPECIAL	EDUCATION	19.51%	15.56%
STUDENTS			
ENGLISH	LANGUAGE	N/A*	7.43%
LEARNERS (ESL)			
SCHOOL MOBILITY RATE		N/A*	8.36%

*Data is not available with fewer than 10 students.

Source: Nebraska Department of Education

Administration

The school district has a superintendent and approximately 32 supportive staff. The school board is made up of a six-member panel. There are three Wards in the district which provide two members each to the school board. The district also has a number of additional departments and staff that may be available to implement hazard mitigation initiatives. In the event of a disaster, the district may also utilize support from the Administrative, Custodial, Education, Instructional Paras, Business Manager, or Transportation Manager positions.

Capabilities

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

Table WCS.5: Capability Assessment

SURVEY COMPONENTS YES/NO				
PLANNING	Capital Improvements Plan/Long-Term Budget	No		
CAPABILITY	Continuity of Operations Plan	Yes		
	Crisis Response Plan	Yes		
	Other (if any)			
ADMINISTRATIVE	GIS Capabilities	Gworks for the		
& TECHNICAL		County		
CAPABILITY	Civil Engineering	No		
	Staff who can assess jurisdictional vulnerability to hazards	Yes		
	Grant Manager	Shared amongst staff		
	Mutual Aid Agreements			
	Other (if any)			
FISCAL	Applied for grants in the past	Yes		
CAPABILITY	Awarded grants in the past	Yes		
	Authority to levy taxes or bonds for specific	Yes		
	mitigation projects			
	Development Impact Fees	No		
	General Obligation Revenue or Special Tax Bonds No			
	in place	A./		
	Flood Insurance	No		
EDUCATION AND	Other (if any)	M/haalar Carreti		
EDUCATION AND OUTREACH	Local school groups or non-profit organizations focused on environmental protection, emergency	Wheeler County Foundation, local		
OUTREACH	preparedness, access, and functional needs	churches for shelter		
	populations, etc. (Ex. Parent groups, hazard	centers.		
	mitigation boards, etc.)	contors.		
	Ongoing public education or information program	Yes – along with fire		
	(Ex. Responsible water use, fire safety, household	department		
	preparedness, environmental education, etc.)	,		
	StormReady Certification	No		
	Other (if any)			
DRILLS	Fire	10/yr		
	Tornado	2/yr		
	Intruder	2/yr		
	Bus Evacuation	2/yr		
	School Evacuation	2/yr		
	Other (if any)	Shelter in Place 2/yr		

Table WCS.6: Overall Capability

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

School Drills and Staff Training

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

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

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

- Hazard and incident awareness training for all staff.
- Orientation to the School EOP.
- First Aid and CPR/AED training for designated staff.
- Team training to address specific incident response or recovery activities such as Parent-Student Reunification, Special Needs, and Relocation.

The district has three EMTs on staff which also work for the local fire districts and a Registered Nurse is also on staff. During Emergency Operations Plan review and updates local law enforcement and fire districts are included and assist with updates as needed.

The district also has an automated alert messaging system which can alert staff, students, and parents of hazard events and drill activation. This service sends messages out via phone calls and/or emails to the parents, emergency contacts listed, staff and even students themselves letting them know of any information that is deemed a priority. This can be emergencies, updates, school closures, etc.

Plan Integration

Grants and Funding

Wheeler Central School funds are primarily limited to maintaining current operations. The local planning team noted that the district has one of the lowest levy rates in the state. However, a neighboring district has a lower levy rate which has led to community meetings to discuss the overall school budget. This outreach and clarification of available funding resources for Wheeler Central versus neighboring districts was received well and no arguments have been raised against the current level. The district has noted that in the coming years the levy is likely to

decrease slightly but local property values and subsequent property taxes are increasing and will supplement the district budget.

The district has used several past funds for scholarships and building renovations for the daycare. The district is currently working on adding a wood shop to the high school to separate from the metal shop. They have also received funding for equipment upgrades for various vocational programs.

Crisis Response Plan

The school district has an Emergency Operations Plan that addresses high priority hazards for the school district, such as severe thunderstorms, tornadoes and acts of terrorism/intruders. The plan was last updated in March 2021 and outlines roles, responsibilities, and procedures for responding to these hazards. The plan was updated in collaboration with the Wheeler County Sheriff's Office, Wheeler County Fire Department, and Wheeler County Emergency Management. The EOP contains interagency agreements with the above county agencies to aid communication and coordinate services with first responders during an incident. Staff also receive annual hazard and incident awareness training which includes two online FEMA courses, drills, tabletop, and functional exercises. The plan is reviewed and updated annually with the school safety team, administrative staff, school board, county emergency management, local law enforcement and the fire department.

Future Development Trends

In the past five years the district has completed renovations to the local daycare facility, replaced roofs to all school buildings due to hail damage, and replaced many of the doors and windows due to damage and security concerns. Other improvements have been made to the gym/cafeteria facility and expansions to the parking lots at the high school, elementary schools, and daycare for buses. Some of these included removing a boiler and asbestos remediation for a shelter location. In the next five years the district anticipates completion of a new wood shop and completing renovations to the cafeteria.

Community Lifelines

Transportation

Bartlett is bisected on the east side of the village by Highway 281 which also serves as a major road for the school district. At this time, no major transportation accidents have impacted the district. If accidents occur during drop off and pick up time, the district will work with Wheeler County Sheriff's Office and the local fire districts. The district has five buses which transport students to and from school daily. Many roads throughout the county are unpaved which can pose a risk to buses during poor weather. An additional concern due to the proximity of Highway 281 are intruders on campus. The district has staff stationed to watch major transportation routes who report suspicious vehicles to local law enforcement.

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are five chemical storage sites in the district which house hazardous materials.

In the event of a chemical spill, the local fire districts would be first to respond and would notify the school administration if the school was likely to be impacted. The district has specific concerns for the Co-Op which is located approximately ¼ mile southeast of the school. The district has an agreement in place with Catholic Parish Center in Ericson for necessary evacuation/reunification during a plume or spill. Additionally, a new daycare in Ericson will also be an evacuation site once renovations/building is completed. Buses stored on site have enough capacity to transport all students/staff if needed.

Table WCS.3: Chemical Storage Fixed Sites

FACILITY NAME	Address	LOCATED IN FLOODPLAIN?
COUNTRY PARTNERS	83167 Highway 281	
COOPERATIVE		
GREAT WESTERN GAS CO	Highway 91 W	
NEBRASKA CENTRAL	423 Central Ave	
TELEPHONE CO		
NDOT BARTLETT YARD	210 Randolph St	
SAPP BROS PETROLEUM	Highway 281 S	
PROPANE		

Source: Nebraska Department of Environment and Energy9

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 previous 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. In the case of an emergency the school would use the Football Field as a reunification location and evacuation site. School officials have keys to fairground buildings if needed during evacuation from the school. Additionally, the high school students would go the Methodist Church and preschool/elementary students can go to the Lutheran Church if needed.

 $^{9\ \}text{Nebraska Department of Environment and Energy.} \\ \text{``Search Tier II Data.''}\ \text{Accessed August 2020}.$

Table WCS.4: Wheeler Central Schools Critical Facilities

CF #	COMMUNITY LIFELINE	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Food, Water, and Shelter	Football Field/Fairgrounds	Y	N	N
2	Food, Water, and Shelter	Gymnasium	Y	N	Ν
3	Food, Water, and Shelter	Lower Elementary/Preschool	N	N	N
4	Food, Water, and Shelter	Superintendent Housing	N	N	N
5	Food, Water, and Shelter	Teach Reach/Daycare/Staff Apartments	N	N	N
6	Food, Water, and Shelter	Upper Elementary	N	N	N
7	Food, Water, and Shelter	Wheeler Central High School	Υ	N	N

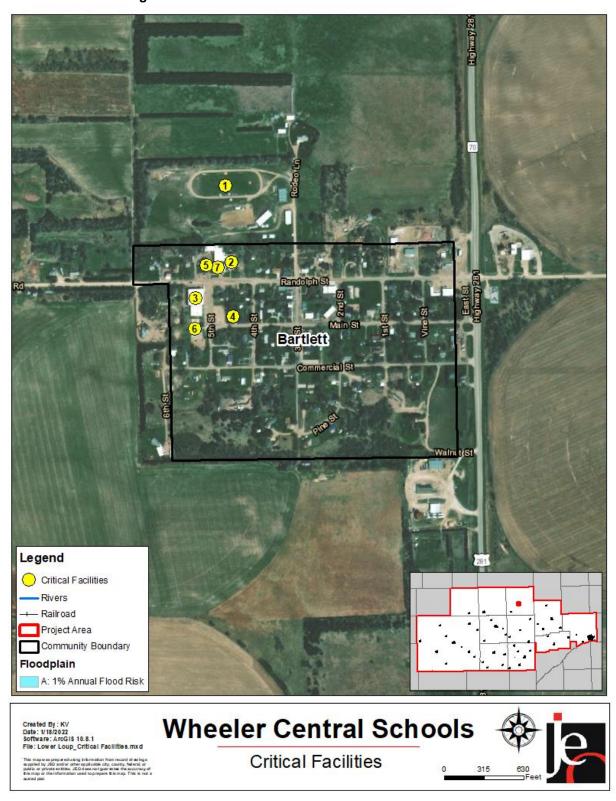


Figure WCS.3: Wheeler Central Schools Critical Facilities

Hazard Prioritization

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

Agricultural Plant and Animal Disease

There are numerous cattle, hog, and chicken facilities around Bartlett and throughout Wheeler County which greatly influence the local economy. The district has concerns about agricultural disease impacting the local economy and the students and their families livelihoods. The district has been looking into ways to diversify potential funding resources and tools to maintain and improve facilities. An additional concern exists as there are students and parents that work at facilities where they must shower in/out of the facilities. Risk of zoonotic disease coming into the school due to the surrounding working conditions.

Grass/Wildfire

Grass or fires in the surrounding areas are a concern for the district. The school campus is located on the edge of the Village of Bartlett and can be at greater risk if wildfire events were to approach the campus. There are no exterior sprinklers to wet down surrounding areas. Additionally, there are several members of school staff who serve on the Rural Fire District and must respond to calls when needed. While the district itself does not respond to wildfire events the school buildings may serve as a community shelter if other areas in the community or county are affected by a fire.

Hazardous Materials

Hazardous chemicals are used for a variety of purposes and are regularly transported through many areas in and around the county. Specific concerns for the district include transportation accidents which cause chemical spills, or spills at local chemical fixed sites. The Co-Op is located less than a mile from the school campus and poses a risk to the district if a spill were to occur. No major spills have occurred in the past and an evacuation plan has been established to either utilize the fairgrounds (for small scale spills) or neighboring churches for larger events. There are no HAZMAT or CERT teams in the immediate vicinity.

Severe Thunderstorms

Severe storms have caused damage to the school district facilities in the past. Hail damage led to all school facilities replacing roofs approximately five years ago (~2016) for approximately \$105,000. The district used insurance to cover the damages. No major power outages have occurred for the district and power lines in the area are split between above ground and underground. However, there are no backup generators at any school facilities and the schools would also likely be used as a community shelter if an event were to impact Bartlett or other surrounding communities.

A room in the high school has been remodeled to serve as a protective shelter and the daycare can also be used as a shelter location as it is located in a basement location with minimal

windows. The district has agreements in place with local churches and the surrounding school districts for aid or shelters if needed.

Mitigation Strategy

New Mitigation Actions – 2022 Plan

1011 mmganon / 10110110		
OBJECTIVE	REINFORCED BARRIER FOR SHELTERING LOCATION	
DESCRIPTION	 Build a reinforced barrier between the two elementary schools to allow community access to the gym to be used as a sheltering location during severe storms. Would ensure security maintained for elementary schools while improving safety for community. 	
HAZARD(S)	All hazards	
Addressed		
ESTIMATED COST	Unknown	
POTENTIAL FUNDING	Special Building Fund	
TIMELINE	2-5 years	
PRIORITY	High	
LEAD AGENCY	Superintendent	
STATUS	This is a new mitigation action.	

OBJECTIVE	BACKUP AND EMERGENCY GENERATORS		
DESCRIPTION	 Identify and evaluate current backup and emergency generators Obtain additional generators based on identification and evaluation Provide 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		
ADDRESSED			
ESTIMATED COST	\$60,000 - \$80,000		
POTENTIAL FUNDING	General Fund, HMA		
TIMELINE	2-5 years		
PRIORITY	Medium		
LEAD AGENCY	Superintendent, Fire District		
STATUS	This is a new mitigation action. Needed a generator for school facilities – could potentially house a portable generator at the fire hall. School would be used as a community shelter for Bartlett if needed and would need backup power.		

OBJECTIVE	RELOCATE REFRIGERATION SYSTEMS	
DESCRIPTION	 Relocate refrigeration systems at the local cafeteria to remove some hazardous materials and improve space for local programs. 	
HAZARD(S)	All hazards	
ADDRESSED		
ESTIMATED COST	\$100,000	
POTENTIAL FUNDING	Special Building Fund	
TIMELINE	2-5 years	
PRIORITY	Medium	
LEAD AGENCY	Superintendent, Head Custodian	
STATUS	This is a new mitigation action.	

Plan Maintenance

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

The Superintendent, Head Custodian, Counselor, Safety/Crisis Team Members, County Sheriff's Office, and County Emergency Manager are responsible for reviewing and updating this district profile as changes occur or after a major event. The plan will be reviewed no less than annually and will include the public in the review and revision process by sharing information via social media, district website, the local school newspaper, and the text alert system if needed.

DISTRICT PROFILE

WHEELER COUNTY RURAL FIRE PROTECTION DISTRICT

Lower Loup Natural Resources District Hazard Mitigation Plan 2022

Local Planning Team

Table WFD.1: Wheeler County Rural Fire Protection District Local Planning Team

NAME	TITLE	JURISDICTION	
DOUG REITER	Fire Board Member/County Emergency	Wheeler County Rural Fire	
	Manager	Protection District	

Location and Geography

The Wheeler County Rural Fire Protection District covers approximately 254,080 acres in Wheeler County and includes the communities of Ericson and Bartlett. The district responds to both grass/wildfire and structural fires in the villages and surrounding rural areas. The local planning team noted the eastern side of the county is heavily dominated by CRP land while the western half is primarily pasture and agricultural land.

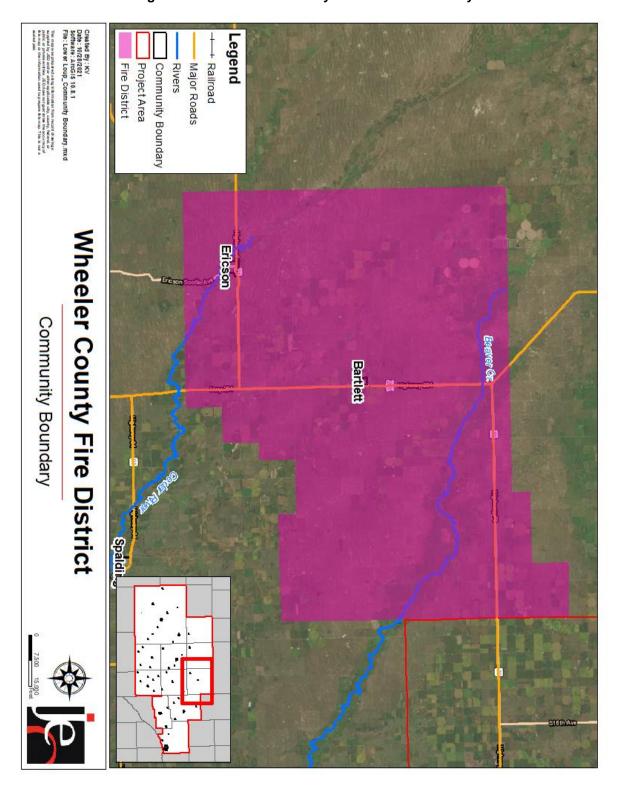


Figure WFD.1: Wheeler County Fire District Boundary

Demographics

See the Village of Bartlett, Village of Ericson, and Wheeler County profiles for regional demographic information. The local planning team estimated total population in the district is 600 residents.

Future Development Trends

In the past five years the fire district has updated several pieces of equipment. A new fire hall is currently under construction in Ericson and the district has purchased a new brush truck. There are currently no future purchases planned at this time.

Staffing

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

Capabilities

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

Table WFD.2: Overall Capability

OVERALL CAPABILITY	2022 PLAN
FINANCIAL RESOURCES NEEDED TO IMPLEMENT MITIGATION	Limited
PROJECTS	
STAFF/EXPERTISE TO IMPLEMENT PROJECTS	Moderate
COMMUNITY SUPPORT TO IMPLEMENT PROJECTS	Moderate
TIME TO DEVOTE TO HAZARD MITIGATION	Limited

Plan Integration

Grants and Funding

According to the planning team, district funds are limited to maintaining current facilities and systems. A portion of funds are currently dedicated to an addition to the Ericson Fire Station. The district has seen a slight increase in funds in recent years.

Response and Strategic Plans

The fire district's response and strategic plans include actions to provide shelter for the public during storm events and acquire backup and emergency generators. These are consistent to the actions in this hazard mitigation plan.

Community Lifelines

Transportation

Wheeler County's major transportation corridors include Highway 281 and Highway 70. The local planning team noted specific concerns regarding a lack of overall road access to rural areas. Due to the limited number and quality of county roads, emergency evacuation of residents is difficult. This information is important to hazard mitigation plans insofar as is suggests possible evacuation corridors in the county, as well as areas more at risk to transportation incidents.

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are five chemical storage sites in the district which house hazardous materials. In the case of a chemical spill event, the local fire department would be first to respond. The nearest HAZMAT team is located in Ord or O'Neil.

Table WFD.3: Chemical Storage Fixed Sites

FACILITY NAME	Address
NDOT BARTLETT YARD	210 Randolph St
COUNTRY PARTNERS COOPERATIVE	83167 Highway 281
SAPP BROS PETROLEUM PROPANE	Highway 281 S
GREAT WESTERN GAS CO	Highway 91 W
NEBRASKA CENTRAL TELEPHONE CO	423 Central Ave

Source: Nebraska Department of Environment and Energy¹⁰

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.

Table WFD.4: Wheeler County Fire District Critical Facilities

CF #	LIFELINE	NAME	SHELTER (Y/N)	GENERATOR (Y/N)	FLOODPLAIN (Y/N)
1	Safety and Security	Bartlett Fire Hall	Υ	N	N
2	Safety and Security	Ericson Fire Hall	Y	N	N

Although not listed in the table above, critical infrastructure also include power substations, cell towers, and alert sirens which provide service to the district. These assets are typically owned and maintained by other agencies and are not the responsibility of the fire district.

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

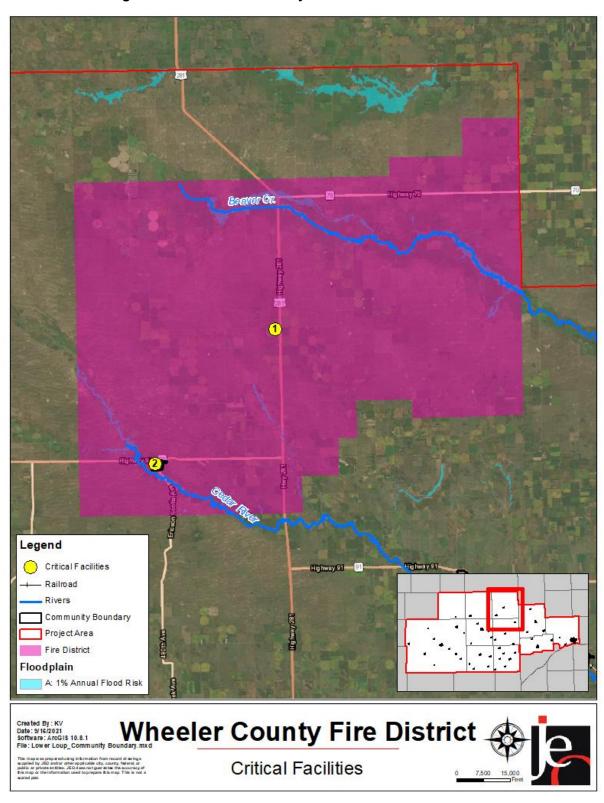


Figure WFD.2: Wheeler County Fire District Critical Facilities

Hazard Prioritization

For additional discussion regarding area wide hazards, please see *Section Four: Risk Assessment*. A full list of historical hazard occurrences can be found in the Wheeler County jurisdictional profile. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the district's capabilities.

Grass/Wildfires

Grass and wildfires are a common occurrence in the district and are therefore concerning to the planning team. The district has equipment with a total capacity over 2,000 gallons for emergency response. Additional rural water sources are needed for refill ability, rather than returning to either Bartlett or Ericson for water supplies. Between 2000 and 2019 the district did not report fire events to the Nebraska Forest Service. However, the local planning team noted lightning, equipment fires, and smoking are the most common causes of wildfires and the largest wildfire burned over 7,500 acres. In particular 2012's dry years led to numerous fires in the district. A structural fire in Ericson led to one fatality.

Tornadoes and High Winds

High winds and tornadoes were a concern due to the lack of available shelters throughout the county and past major events. The fire department are typically first on scene. Events in the past have led to injuries and transport to neighboring communities with medical facilities. No health or medical facilities are located in Wheeler County. No weather radios are currently stored at the fire hall. Due to the high water table in Ericson and Bartlett, most residents do not have basements for sheltering. The fire district would like to purchase backup generators and build safe rooms at each fire hall to provide protection to residents.

Mitigation Strategy

New Mitigation Actions - 2022 Plan

OBJECTIVE	BACKUP AND EMERGENCY GENERATORS		
DESCRIPTION	 Identify and evaluate current backup and emergency generators Obtain additional generators based on identification and evaluation Provide 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		
Addressed			
ESTIMATED COST	\$50,000 per generator		
POTENTIAL FUNDING	District General Fund, Villages		
TIMELINE	1 year		
PRIORITY	High		
LEAD AGENCY	Wheeler County Fire District		
STATUS	Not started		

OBJECTIVE	PUBLIC SAFE ROOMS & POST-DISASTER STORM SHELTERS
DESCRIPTION	 Identify and evaluate existing safe rooms and/or storm shelters Improve and/or construct safe rooms and/or storm shelters Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, schools, etc.
HAZARD(S)	Tornadoes and High Winds
ADDRESSED	
ESTIMATED COST	\$50,000+
POTENTIAL FUNDING	District General Fund, Villages
TIMELINE	1 year
PRIORITY	High
LEAD AGENCY	Wheeler County Fire District
STATUS	Not started

Plan Maintenance

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