BOX BUTTE COUNTY SCHOOL DISTRICT #07-0010
HEMINGFORD PUBLIC SCHOOLS
BOARD OF EDUCATION MEETING AGENDA
Monday, September 15, 2025
South Campus

The Board of Education of School District 07-0010 will meet on Monday, September 15, 2025 in the South Campus as duly advertised in the Alliance Times-Herald.

I. Pledge of Allegiance
II. Notices
III. Call Meeting to Order
  III.A. Roll Call
  III.B. Excuse Absent Board Member(s)
IV. Report from Board Committee(s)
V. Student Board Member Oath of Office
VI. Regular Meeting Agenda
  VI.A. Recognition of Student Achievement (Bobcat Excellence)
  VI.B. Public Participation (Maximum of 30 Minutes Allotted for this Portion of the Meeting)
  VI.C. Correspondence
  VI.D. Consent Agenda
    Approve Minutes of Prior Meeting(s)
    Approve Treasurer's Report
    Approve School Activity Fund Report
    Approve Control Budget
    Report Required by State Statute 79-506
  VI.E. Payment of Claims
  VI.F. Discuss, Consider, and Take All Necessary Action Regarding Authorizing Purchase and Use of Online Mathematics and English Language Arts Intervention Materials for the Middle School (Grade 5 and 6 Supplementary and Reinforcement Materials)
  VI.G. Discuss, Consider, and Take All Necessary Action Regarding A Request from the Hemingford Education Association to be recognized as the exclusive bargaining agent for the district's non-supervisory certificated staff.
  VI.H. Discuss, Consider, and Take All Necessary Action Regarding Approval of the 2025-2026 Budget of Expenses (This includes the General Fund, Depreciation Fund, Employee Benefit Fund, Activities Fund, School Nutrition Fund, Special Building Fund, Cooperative Fund, Qualified Capital Purpose Undertaking Fund, and Student Fee Fund)
  VI.I. Discuss, Consider, and Take All Necessary Action Regarding Approval of the Tax Request Resolution for 2025-2026
  VI.J. Discussion Regarding Participation in the State Education Conference and Selection of a Delegate to Represent the Hemingford Public Schools Board of Education at the Delegate Assembly
  VI.K. Presentation and Discussion with Mrs. Gilkerson and Mrs. Johnston Regarding Student and Staff Wellbeing Initiatives
  VI.L. Discuss, Consider, and Take All Necessary Action Regarding a Resolution to Adopt the Region 23 Emergency Management Agency Hazard Mitigation Plan
  VI.M. Discuss, Consider, and Take All Necessary Action Regarding Investment of Funds in the Employee Benefit Fund, the Qualified Capital Purpose Undertaking Fund, and the Depreciation Fund
VII. Discussion/Possible Action Items
VIII. Student Board Representative Report

IX. Administration Reports
X. Superintendent Report
XI. Policy Review
XII. Items For Next Board Meeting
XIII. Adjournment



Welcome to the Hemingford Public Schools Board of Education Meeting.
The board welcomes citizens to attend board meetings to become acquainted with the programs and operations of the district. Members of the public are also encouraged to share their ideas and opinions with the Board during the agenda item labeled **"Public Comment"**. Comments or questions from the audience at any other time during the meeting except for the agenda item "Public Comment" will be declared out of order.

School board meetings are a meeting held in public; however, the meetings are not public meetings.

TALKING POINTS FOR BOARD MEETING

3 MINUTES PER INDIVIDUAL/30 MINUTES ON TOPIC

The board chair will recognize these individuals to make their comments at the appropriate time. Only those speakers recognized by the board chair shall be allowed to speak. Comments by others are out of order. If disruptive, the individual making the comments, or other individuals causing disruption may be asked to leave the board meeting.

The purpose of public participation is a forum for the public to provide information and be heard by the members of the board. By law, the board is not allowed to respond, discuss, or take action on items that are not included in the published agenda.

Any written or printed materials to be circulated for a meeting of the school board must be submitted to the superintendent by the **Thursday** preceding a Monday night meeting. (Per policy # 0204.12)

*If you want to speak, you must fill out a Public Comment Request Card. When you have completed this, please submit the card to the superintendent. The cards will be numbered as they are received by the superintendent. You will be called on, by the board president, according to the number on your completed Public Comment Request Card. The board president will signal when the speaker has 30 seconds remaining.

*By law, you must state your name, address, and we ask that you state the topic you are addressing, before you begin.

*If you are planning to speak about personnel or student matters involving an individual, please understand that our policies require that such concerns initially be directed to the administration for consideration. Board members ***may not*** respond to any questions you ask or comments you make about individual staff members or students.

++++++++++++++++++tear off++++++++++++++tear off++++++++++++tear off++++++++++++++++++++

Number	

Hemingford School District—Board of Education
Public Comment Request Card
Name:
District resident: _____Yes _____No
Address:
City/State/Zip Code:
Agenda Item or Topic to address:
Signature:

Standard Procedures for Executive (Closed) Session
Hemingford Public Schools Board of Education

Closed Session Procedures (Checklist)
Reference/Background Information
- Before the Meeting
- Identify Lawful Purpose(s) for Closed Session
- Make a Proper Motion in Open Session
- Vote on the Motion (In Open Session)
- Conduct the Closed Session Properly
- Return to Open Session and Record in Minutes
- Document Compliance:
- Formal Action:

Closed Session Procedures (Checklist)

- ☐ Make a proper motion in open session
  - ☐ Specific subject matter – A brief description of the topic to be discussed **and**
  - ☐ Stated purpose – A statement of which section of the Nebraska Open Meetings Act applies
    - ☐ protection of the public interest; **or**
    - ☐ prevention of needless injury to the reputation of an individual and if such individual has not requested a public meeting.
- ☐ Vote on the motion in open session)
- ☐ The Presiding Officer restates the limitation of the closed session
- ☐ Record the time going to the closed session
- ☐ The Board locks/leaves all electronic devices and proceeds to the school library
- ☐ Conduct the closed session properly
- ☐ Return to South Campus
- ☐ The Presiding Officer declares return to open session,
- ☐ The Presiding Officer restates the limitations of the closed session
- ☐ Record the time returning to open session
- ☐ If necessary, take formal action and vote in open session

Reference/Background Information

Before the Meeting

- Confirm whether the planned subject matter is eligible for a closed session under Nebraska law. (e.g., superintendent or board president consultation with legal counsel).
- Prepare a brief summary of the topic to be cited in the motion.

Identify Lawful Purpose(s) for Closed Session

- Under the Nebraska Open Meetings Act, a public body (such as a school board) may convene in closed (executive) session only for specific, lawful purposes. Closed/Executive Session must be clearly necessary to ensure:
  - protection of the public interest; or
  - prevention of needless injury to the reputation of an individual and if such an individual has not requested a public meeting.
- Common reasons include:
  - Strategy sessions with respect to litigation, real estate purchases, pending or imminent.
  - Discussion regarding collective bargaining negotiations.
  - Discussion regarding the evaluation or job performance of a staff member (like the Board evaluation of the Superintendent), or for the prevention of needless injury to an individual's reputation (if that individual has not requested an open meeting).
  - Discussion concerning security personnel or devices.

Make a Proper Motion in Open Session

- Before moving into a closed session, a board member must make a motion in open session. The motion should include:
  - Specific Subject Matter – A brief description of the topic to be discussed (e.g., "to discuss litigation strategy regarding the [XYZ] lawsuit," "to discuss negotiations with the local teachers' association," etc.) and
  - Stated Purpose – A statement of which section of the Nebraska Open Meetings Act applies (e.g., "to prevent needless injury to the reputation of a staff member" if evaluating job performance).
    - Example: "I move to go into closed session to discuss negotiations (subject matter) for the protection of the public's interest (reason necessitating the closed session)." "I move to go into closed session to discuss a performance evaluation to protect the reputation of an individual and that individual has been notified and has not requested a public meeting."

Vote on the Motion (In Open Session)

- Once the motion is made, the board president (or presiding officer) must call for a vote in open session.
- A majority of board members present must vote in favor of the motion for the board to legally enter closed session.

- The vote must be recorded in the meeting minutes.
- If the motion to close passes, the presiding officer shall restate for the record the limitation of the subject matter of the closed session immediately and prior to moving into closed session.
- Make a note of the time the board entered closed session (Board meeting minutes must include the entire motion, the vote of each member, time in which the closed session started and ended.)

Conduct the Closed Session Properly

- Board Members will close/lock any laptops and will leave their cell phones and any other media or recording devices at South Campus.
- The Board will move to another location to conduct closed sessions (typically the school library in the elementary school.
- Admit Only Necessary Individuals: During the closed session, typically, the board members, required staff (e.g., superintendent, board secretary), legal counsel, or others with relevant input may remain present. Anyone not necessary for the closed-session discussion is welcome to remain at South Campus until the board returns to open session.
- Discuss Only the Announced Topic: The board must limit the discussion strictly to the purpose(s) identified in the motion. Venturing into unrelated topics violates the Open Meetings Act.
- No Formal Action: The board cannot take final action (e.g., vote to approve a policy) during the closed session. Any vote or final decision must be conducted in open session.
- If, during the closed session, a member believes the discussion has strayed away from the reason or motion for the closed session, the board member may challenge the continuation of the closed session. If the board member believes the discussion is inappropriate, next steps:
    - If a challenge is made, the board will return to open session, note the time, and vote in public.
        - If a majority of the board members vote against the challenge to terminate [i.e., motion failed], the board will return to the closed session referencing the original motion to enter closed session, note the time, and continue.
    - If the challenge is made, it shall be reflected in the minutes, and it will list how each member voted.
    - If a challenge is made by a member and the board votes against it, the member making the motion should consider leaving the meeting if he/she believes the board is discussing material that is not relevant to the reason for the closed session. The board member may also return to the closed session.

Return to Open Session and Record in Minutes

- When the board finishes its closed-session discussion:
    - Reconvene in Open Session: The board president (or presiding officer) announces the end of the closed session, restates the limitations of the closed session, and reconvenes the open meeting.
    - Record the Time: The start and end times of the closed session must be noted in the minutes.

Document Compliance:

- The minutes should reflect:
  - The motion to go into closed session, including who made and seconded it.
  - The vote (roll call or otherwise) on the motion.
  - The statutory reason for the closed session.
  - The start time of the closed session and the end time when the board returned to open session.

Formal Action:

- If any formal action (e.g., a decision or vote) results from the closed-session discussion, that action must be taken in the open session so that it is publicly recorded.

2024

American Civics/Curriculum :	Cullan, Randolph, Votruba
Finance :	Randolph, Ansley, Cullan
Negotiations :	Ansley, Schumacher, Votruba
Transportation :	Horstman, Cullan, Ansley
Building and Grounds :	Schumacher, Randolph, Horstman

Hemingford Public Schools

Board Committee Report

Date of Report:

Committee:

Items Reviewed Discussed:

Information for the Full Board:

Recommendations to the Full Board:

Hemingford Public Schools
Annual Board of Education Calendar

Month	Budget	Curriculum	Personnel	Policy	Board Development	Other
January **5:00 PM**			• Approve Negotiated Agreement with HEA (Upon Mutual Acceptance) • Appoint Superintendent as Authorized Representative for Federal, State, and Local Matters.	• Adopt Board and Superintendent Goals • Review Board Member Code of Ethics • Review/Revise Policies	• Discussion and/or Appointment of Board Committees • NASB Legislative Issues Conference • Community Engagement Session • Board Retreat/Workshop • Strategic Plan Review/Board Self-Assessment	• Oath of Office • Board Officer Elections • Designate Depository • Designate Legal Firm • Designate Treasurer • Designate Auditor for the District • Review Report Required by State Statute 79-506
February **5:00 PM**		• Review Report on Multicultural Education	• Approve Negotiated Agreement with HEA (Upon Mutual Acceptance)	• Review/Revise Policies	• NASB Presidents' Retreat	• Monitor Proposed Legislation
March **7:00 PM**	• Review State Aid Certification (When Available) • Establish Technology Budget for Following Year	• Curriculum Committee Review of Curriculum Materials Proposed for Adoption (as needed) • Committee on American Civics Meeting	• Establish Salaries for Administrators • Approve Negotiated Agreement with HEA (Upon Mutual Acceptance)	• Adopt Resolution Pertaining to Non-Resident Students • Review/Revise Policies	• NRCSA Spring Conference	• Discuss School Calendar • Monitor Proposed Legislation
April **7:00 PM**	• Review State Aid Certification (When Available)	• Consider Adoption of Curriculum and/or Textbooks for Subsequent Year		• Review/Revise Policies		• Adopt School Calendar • Review Report Required by State Statute 79-506
May **7:00 PM**	• Review State Aid Certification (When Available)	• Review Statewide Assessment Results (Writing)		• Review/Revise Policies	• Attend Graduation Ceremony	

Hemingford Public Schools
Annual Board of Education Calendar

Month	Budget	Curriculum	Personnel	Policy	Board Development	Other
June **7:00 PM**		• Year End Assessment and Curriculum Review • Review School Improvement Plan • Committee on American Civics Meeting	• Superintendent Evaluation (end of year)	• Review Bullying Prevention Policy • Approve Student, Athletic, and Staff Handbooks	• Board Self-Assessment and Goal Planning • NASB School Law Seminar	
July **7:00 PM**	• Budget Committee Work Session • Review Budget Authority and Allowable Reserve Percentage Certification	• Review Summer School Program Report		• Student Fees Policy • Parent Involvement Policy	• NASB School Finance Workshop • Review NASB Board Awards of Achievement • NASB School Law Workshop	• Adopt Board Goals • Review Report Required by State Statute 79-506
August **7:00 PM**	• Review Proposed Budget • Review Certifications of District's Assessed Valuation				• NASB Area Membership Meeting	• Facilities Tour
September **7:00 PM**	• Budget Hearing • Adopt Budget • Tax Request Hearing • Approve Tax Request for Fund Levies	• Review ACT Results • Review School Improvement Plan • Review Statewide Assessment Results (Reading, Math, Science)	• Consider HEA Request for Recognition as Bargaining Agent (if delivered to Board)		• NASA/NASB Labor Relations Conference	• Review Statewide Assessment Results (when available)
October **7:00 PM**	• Review Fall Enrollment Figures • Prepare for Negotiations		• Consider HEA Request for Recognition as Bargaining Agent			• Review Annual Emergency Safety Plan • Review Report Required by State Statute 79-506
November **5:00 PM**	• Audit Committee Review of Audit Report	• Review District Annual Report	• Distribute/Complete Superintendent Evaluation • Begin Negotiations		• NASB/NASA State Education Conference	
December **5:00 PM**	• Approve Fiscal Year Audit Report	• Review School Improvement Plan	• Approve Negotiated Agreement with HEA (Upon Mutual Acceptance)		)	• Host Board/Staff Recognition Dinner

Hemingford Public Schools
Annual Board of Education Calendar

Month	Budget	Curriculum	Personnel	Policy	Board Development	Other
	(November or December)		• Superintendent Evaluation			

Revised February 2023

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++++++++++++++++++tear off++++++++++++++tear off++++++++++++tear off++++++++++++++++++++

Number	

Hemingford School District—Board of Education
Public Comment Request Card
Name:
District resident: _____Yes _____No
Address:
City/State/Zip Code:
Agenda Item or Topic to address:
Signature:

Report Required by State Statute 79-506

Regarding Board Member Purchase of Health Insurance

Hemingford Public Schools

One member of the Board of Education currently participates in the District's health insurance program. Trish Schumacher is a participant.

Trish Schumacher pays the full cost of the insurance in accordance with State Statute 79-506. There is no cost to the district associated with her participation in this program.

BOX BUTTE COUNTY SCHOOL DISTRICT 07-0010
HEMINGFORD PUBLIC SCHOOLS
HEMINGFORD, NEBRASKA

August 11, 2025
Board of Education Regular Meeting Minutes

A regular meeting of the Board of Education of School District 07-0010 was called to order at 7:03 PM at South Campus by Justin Ansley. Notice of the meeting was given in advance through the Alliance Times-Herald. Board members were notified in advance of the meeting.

Justin Ansley: Present, Brett Cullan: Present, Rick Horstman: Absent, Blanche Randolph: Present, Trish Schumacher: Present, Micki Votruba: Absent.

Motion by Justin Ansley Excuse Rick Horstman and Micki Votruba Seconded by Blanche Randolph Roll Call: Ansley: Aye, Cullan: Aye, Horstman: Absent, Randolph: Aye, Schumacher: Aye, Votruba: Absent 4-0 Motion carried

Motion by Blanche Randolph to approve the Consent Agenda Seconded by Brett Cullan Roll Call: Ansley: Aye, Cullan: Aye, Horstman: Absent, Randolph: Aye, Schumacher: Aye, Votruba: Absent 4-0 Motion carried

Motion by Brett Cullan claims for August be approved as presented in the amount of General Fund $219,101.46, and Building Fund $30,833.36 Seconded by Blanche Randolph Roll Call: Ansley: Aye, Cullan: Aye, Horstman: Absent, Randolph: Aye, Schumacher: Aye, Votruba: Absent 4-0 Motion carried

Motion by Justin Ansley Accept bid from Wood Construction to install new doors on modular classrooms Seconded by Blanche Randolph Roll Call: Ansley: Aye, Cullan: Aye, Horstman: Absent, Randolph: Aye, Schumacher: Aye, Votruba: Absent 4-0 Motion carried

Motion by Justin Ansley Motion to accept bid for purchase of a John Deere 5075M tractor and loader from 21st Century Equipment and to accept trade allowance of $9,000 from 21st Century on the school district's used tractor Seconded by Brett Cullan Roll Call: Ansley: Aye, Cullan: Aye, Horstman: Absent, Randolph: Aye, Schumacher: Aye, Votruba: Absent 4-0 Motion carried

Motion by Brett Cullan Approve sale of tables, and oven, filing cabinets, and a dishwasher Seconded by Blanche Randolph Roll Call: Ansley: Aye, Cullan: Aye, Horstman: Absent, Randolph: Aye, Schumacher: Aye, Votruba: Absent 4-0 Motion carried

Motion by Blanche Randolph Approve the following policies on second reading: following policies on second reading: Proposed Revised 506.01 - STUDENT ACTIVITY ELIGIBILITY, Proposed 506.01R2 - LB 89 (2025) Designations, Proposed Revised 605.07 - FULL-TIME AND PART-TIME ENROLLMENT, Proposed 605.07R1 - Part-Time Enrollment Application for Exempt (Home) School Students, Proposed Revised 602.01 - SCHOOL CALENDAR, Proposed Revised 603.03 - CURRICULUM GUIDES AND COURSE OUTLINES Seconded by Trish Schumacher Roll Call: Ansley: Aye, Cullan: Aye, Horstman: Absent, Randolph: Aye, Schumacher: Aye, Votruba: Absent 4-0 Motion carried

Motion by Justin Ansley Approve transfers from the General Fund to the following funds: Cooperative Fund: $50,000, School Nutrition Fund: $100,000, Activities Fund: $125,000 Employee Benefit Fund: $50,000 Depreciation Fund: $200,000 Seconded by Trish Schumacher Roll Call: Ansley: Aye, Cullan: Aye, Horstman: Absent, Randolph: Aye, Schumacher: Aye, Votruba: Absent 4-0 Motion carried

Motion by Brett Cullan Authorize the payment of bills received through the end of August 2025 Seconded by Blanche Randolph Roll Call: Ansley: Aye, Cullan: Aye, Horstman: Absent, Randolph: Aye, Schumacher: Aye, Votruba: Absent 4-0 Motion carried

Administrative reports were provided by Mr. Arneson, Mrs. Plog, Mr. Redden, Mr. Westover, Mrs. Hanks, and Dr. Miller.

Policy review for the month was conducted for policies in the 1000 series. The board will review the 100 series of policies for next month.

Meeting was adjourned at 8:14 PM.

The Board will conduct a work session on August 18th at 4:30 PM at South Campus. The next regular meeting of the Hemingford Board of Education will be held on September 15th at 7:00 PM at South Campus.

Dr. Travis Miller
Superintendent

Blanche Randolph
Board Secretary

GENERAL FUND INVOICES/CLAIMS:
ADAMSON AUTOMOTIVE, 7,527.06, ALLIANCE TIMES HERALD, 187.78, AMAZON, 5,548.28, AMERICAN CHORAL DIRECTORS ASSOCIATION, 125.00, ARNESON, SARAH, 750.00, AVI-SPL, LLC, 2,440.00, BLACK HILLS ENERGY, 257.13, BLOEDORN'S LUMBER CO., 1,456.67, BLUEBEAM APP, 10.69, BOX BUTTE AG SERVICE, INC, 253.66, BUD'S PEST CONTROL, 390.00, CENGAGE LEARNING, 440.00, COACH MASTERS, 7,994.94, CRESCENT ELECTRIC SUPPLY CO., 2,069.50, CULLIGAN WATER CONDITIONING, 479.73, DARREN'S CARQUEST AUTO PARTS, 46.33, DAS STATE ACCOUNTING - CENTRAL FINANCE, 292.87, DEAN, WHITNEY, 750.00, EAKES OFFICE SOLUTIONS, 1,777.96, ED PUZZLE, 11.50, EDGERTON EXPLORIT CENTER, 3,327.20, EDUCATIONAL SERVICE UNIT #13, 2,104.18, EMPOWER CONSULTING INC., 2,190.00, ESU COORDINATING COUNCIL, 9,359.60, FROST, JAKE, 60.00, FUEL TRIPS- ELAN, 20.00, GILKERSON, SAMANTHA, 750.00, GUADALAJARA RESTAURANT, 45.19, H & H SANITATION, 150.00, HANGSAFE HOOKS, 325.00, HARBOR FREIGHT, 171.16, HEMINGFORD CO-OP TELEPHONE CO, 1,548.22, HEMINGFORD MUNICIPAL UTILITIE, 11,391.76, HEMINGFORD PUBLIC SCHOOLS, 273.13, HUSS AUTO REPAIR, 1,215.05, IDEAL LINEN AND UNIFORM, 166.88, J.J. PRATT ENTERPRISES, LLC, 4,940.00, JOURNEYED.COM, INC., 500.00, KSB School Law PC, LLO, 80.00, LAKESHORE LEARNING MATERIALS, 26.98, LAQUINTA INN & SUITES KEARNEY, 1,978.35, LEGACY COOP, 334.86, LEGO EDUCATION, 2,091.80, LINCOLN JOURNAL STAR, 31.99, LISA BRIGGS, OT, LLC, 374.70, MAILCHIMP, 13.00, MAIN STREET APPLIANCE, 2,700.00, McREL INTERNATIONAL, 230.23, NASB ALICAP, 116,628.00, NATIONAL ASSOCIATION FOR MUSIC EDUCATION, 143.00, NE COUNCIL OF SCHOOL ADMINISTRATORS, 1,326.00, NEEFE, SUZANNE, 600.00, OMNIFY BENEFITS, 82.60, ONE SOURCE BACKGROUND CHECK CO, 72.00, PHILLIPS 66, 39.14, PLAYPIPER.COM, 810.26, PRAIRIE STORAGE CONTAINERS, 150.00, PROTEX CENTRAL INC., 197.00, QUICKCARE MEDICAL SERVICES, 250.00, QUILL CORPORATION, 272.28, RABEN'S MARKET, 45.70, RASMUSSEN MECHANICAL SERVICES, INC., 3,952.62, RENAISSANCE LEARNING, 2,086.40, ROBERTS ELECTRIC INC., 5,882.22, ROCKY MOUNTAIN AIR SOLUTIONS, 412.59, SAX ALLEY, 1,281.00, SCHOLASTIC INC., 510.76, SCHOOL FIX CATALOG, 1,206.66, SCHOOL SERVICE INC, 154.79, SCHOOL SPECIALTY LLC, 332.25, SMARTWAVE TECHNOLOGIES, 1,511.00, SOAR PEDIATRIC THERAPY, LLC, 453.75, TIME MANAGEMENT SYSTEMS, INC., 122.50, TWO BAR BOWL, 19.75, WESTCO, 1,350.81, **TOTAL, 219,101.46**

BUILDING FUND INVOICES/CLAIMS:
ENVIRONMENTAL SERVICES, INC., 9,507.00, MORFORD'S DECORATING CENTER, 4,039.93, ROBERTS ELECTRIC INC., 770.16, SIMPLY CLEAN, 6,347.59, WOOD CONSTRUCTION, 10,168.68, **TOTAL, 30,833.36**

BOX BUTTE COUNTY SCHOOL DISTRICT 07-0010
HEMINGFORD PUBLIC SCHOOLS
HEMINGFORD, NEBRASKA

August 18, 2025
Board of Education Work Session Minutes

A work session meeting of the Board of Education of School District 07-0010 was called to order at 4:32 PM at South Campus by Justin Ansley. Notice of the meeting was given in advance through the Alliance Times-Herald. Board members were notified in advance of the meeting.

Justin Ansley: Present, Brett Cullan: Absent, Rick Horstman: Present, Blanche Randolph: Present, Trish Schumacher: Present, Micki Votruba: Present.

The board conducted a work session regarding recent and future facilities proposals, recent and future bond elections, ongoing facilities needs and priorities, school budgeting and tax asking, facilities financing, and facilities planning.

Meeting adjourned at 6:03 PM.

Dr. Travis Miller
Superintendent

Blanche Randolph
Board Secretary

HEMINGFORD PUBLIC SCHOOLS
September 15, 2025

GENERAL FUND:

Statement Balance 08-31-25			$ 863,299.23
G/F MM Statement Balance 08-31-25			$ 2,198,988.21
3 Month CD-2094 Mat. 10-29-25			$ 324,262.55
3 Month CD-0776 Mat. 11-28-25			$ 327,943.45
3 Month CD-0962 Mat. 09-27-25			$ 324,357.63
- Outstanding Checks			$ 107,028.27
Balance 08-31-25			$ 3,931,822.80
+ August Tax Receipts			$ 1,000,239.08
+ State Aid			$ -
Subtotal			$ 4,932,061.88
September Bills:	$	155,194.85	
September Payroll:	$	527,741.53	
- Total August Expenses			$ 682,936.38
General Fund Balance:			$ 4,249,125.50

BUILDING FUND:

Statement Balance 08-31-25			$ 463,509.26
Liquid Asset Fund ($1,565.12 Dividend)			$ 459,915.84
3 CD's : 6 Month CD-2604 Mat. 10-30-25			$ 879,433.24
3 Month CD-0954 Mat. 09-27-25			$ 540,596.05
3 Month CD-0784 Mat. 11-28-25			$ 546,572.43
August Tax Receipts:			$ 47,415.89
- Outstanding Checks			$ 46,686.78
Building Fund Balance:			$ 2,890,755.93

QCPUF:

Statement Balance 08-31-25			$ 59,205.04
August Tax Receipts:			$ 11,854.51
QCPUF Fund Balance:			$ 71,059.55

NEBRASKA LIQUID ASSET FUND

Account Statement

For the Month Ending **August 31, 2025**

Hemingford Public Schools - Hemingford Public Schools - 9300699

Trade Date	Settlement Date	Transaction Description	Share or Unit Price	Dollar Amount of Transaction	Total Shares Owned
NLAF					
Opening Balance					**458,350.72**
08/29/25	09/02/25	Accrual Income Div Reinvestment - Distributions	1.00	1,565.12	459,915.84
Closing Balance					**459,915.84**

	Month of August	Fiscal YTD September-August
Opening Balance	458,350.72	440,897.58
Purchases	1,565.12	19,018.26
Redemptions (Excl. Checks)	0.00	0.00
Check Disbursements	0.00	0.00
Closing Balance	**459,915.84**	**459,915.84**
Cash Dividends and Income	1,565.12	19,018.26

Closing Balance	459,915.84
Average Monthly Balance	458,502.18
Monthly Distribution Yield	4.02%

Function Number		Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
01	GENERAL FUND								
0500	0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	REGULAR INSTRUCTIONAL PROGRAMS	0.00	281,471.89	281,471.89	0.00	(281,471.89)	0.00	14,243.29	(295,715.18)
1120	1120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1140	1140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1150	VO AG PROGRAM	0.00	0.00	0.00	0.00	0.00	0.00	609.93	(609.93)
1160	PROVERTY PROGRAMS	0.00	18,352.79	18,352.79	0.00	(18,352.79)	0.00	0.00	(18,352.79)
1170	1170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1180	1180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1190	EARLY CHILDHOOD ED PROGRAMS	0.00	11,547.37	11,547.37	0.00	(11,547.37)	0.00	659.34	(12,206.71)
1200	SPECIAL EDUCATION INSTRUCTIONAL PROGRAMS	0.00	41,294.25	41,294.25	0.00	(41,294.25)	0.00	1,604.33	(42,898.58)
1212	1212	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1213	1213	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1252	1252	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1253	1253	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1291	SPED AGES 3-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1292	SPED AGES 0-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	SUMMER SCHOOL	0.00	0.00	0.00	0.00	0.00	0.00	50.00	(50.00)
2120	GUIDANCE SERVICES	0.00	13,388.04	13,388.04	0.00	(13,388.04)	0.00	431.47	(13,819.51)
2130	HEALTH SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	3,330.00	(3,330.00)
2140	PSYCHOLOGICAL SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2141	PSYCHOLOGICAL SERVICES SPED SCHOOL AGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2142	PSYCHOLOGICAL SERVICES SPED AGE 3-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2150	SPEECH & AUDIOLOGY SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2151	SPEECH & AUDIOLOGY SERV SPED SCHOOL AGE	0.00	11,336.86	11,336.86	0.00	(11,336.86)	0.00	0.00	(11,336.86)
2152	SPEECH & AUDIOLOGY SERV SPED AGE 3-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2153	SPEECH & AUDIOLOGY SERV SPED AGE 0-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2161	OT SERVICES SPED SCHOOL AGE	0.00	1,071.60	1,071.60	0.00	(1,071.60)	0.00	0.00	(1,071.60)
2162	OT SERVICES SPED AGE 3-5	0.00	39.00	39.00	0.00	(39.00)	0.00	0.00	(39.00)
2163	OT SERVICES SPED AGE 0-2	0.00	495.00	495.00	0.00	(495.00)	0.00	0.00	(495.00)
2171	PT SERVICES SPED SCHOOL AGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2172	PT SERVICES SPED AGE 3-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2173	PT SERVICES SPED AGE 0-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2180	VISION SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2181	VISION SERVICES SPED SCHOOL AGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2182	VISION SERVICES SPED AGE 3-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2190	OTHER PUPIL SUPPORT SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2210	IMPROVEMENT OF INSTRUCTION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2211	SCHOOL IMPROVEMENT	0.00	1,595.00	1,595.00	0.00	(1,595.00)	0.00	0.00	(1,595.00)
2212	INST STAFF CURR DEV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2213	INST STAFF TRAINING	0.00	750.00	750.00	0.00	(750.00)	0.00	0.00	(750.00)
2214	IMPLEMENTATION OF STANDARDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2220	LIBRARY/MEDIA SERVICES	0.00	9,246.36	9,246.36	0.00	(9,246.36)	0.00	110.92	(9,357.28)
2224	EDUCATIONAL TELEVISION SERVICES	0.00	1,864.33	1,864.33	0.00	(1,864.33)	0.00	0.00	(1,864.33)
2230	INSTRUCTION-RELATED TECHNOLOGY	0.00	5,691.99	5,691.99	0.00	(5,691.99)	0.00	5,146.60	(10,838.59)
2240	ACADEMIC STUDENT ASSESSMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2310	BOARD OF EDUCATION	0.00	742.83	742.83	0.00	(742.83)	0.00	0.00	(742.83)
2320	EXECUTIVE ADMINISTRATION	0.00	15,214.99	15,214.99	0.00	(15,214.99)	0.00	0.00	(15,214.99)
2330	DISTRICT LEGAL SERVICES	0.00	80.00	80.00	0.00	(80.00)	0.00	0.00	(80.00)
2410	OFFICE OF PRINCIPAL	0.00	34,249.95	34,249.95	0.00	(34,249.95)	0.00	1,104.89	(35,354.84)
2440	2440	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2500	2500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2510	GENERAL ADMIN-BUSINESS SERVICE	0.00	9,275.72	9,275.72	0.00	(9,275.72)	0.00	0.00	(9,275.72)

Function Number		Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
2530	PRINT, PUB, DUP SERVICES	0.00	365.83	365.83	0.00	(365.83)	0.00	0.00	(365.83)
2560	PUBLIC INFO SERVICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2570	PERSONNEL SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2580	ADMIN TECH SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2610	SUPPORT SERVICES OPERATION OF BUILDING	0.00	31,880.45	31,880.45	0.00	(31,880.45)	0.00	195.00	(32,075.45)
2620	SUPPORT SERVICES-MAINT OF BUILDING	0.00	12,678.76	12,678.76	0.00	(12,678.76)	0.00	4,095.00	(16,773.76)
2630	2630	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2650	VEHICLE OPP, ACQUISITION AND MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2670	SAFETY	0.00	2,423.49	2,423.49	0.00	(2,423.49)	0.00	7,330.46	(9,753.95)
2710	VEHICLE OPP & PURCH REG ED	0.00	27,868.97	27,868.97	0.00	(27,868.97)	0.00	0.00	(27,868.97)
2711	VEHICLE OPP & PURCH LCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2712	VEHICLE OPP & PURCH SCHOOL AGE SPED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2713	VEHICLE OPP & PURCH AGE 0-5 SPED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2730	VEHICLE SERV & MAINT REG ED	0.00	1,503.95	1,503.95	0.00	(1,503.95)	0.00	0.00	(1,503.95)
2732	VEHICLE SERV & MAINT SCHOOL AGE SPED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2760	2760	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2790	OTHER TRANS REG STUDENTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2792	OTHER TRANS SCHOOL AGE SPED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3300	COMMUNITY SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3500	STATE CATEGORICAL PROGRAMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3512	DISTANCE EDUCATION INCENTIVE PAYMENTS	0.00	2,983.84	2,983.84	0.00	(2,983.84)	0.00	0.00	(2,983.84)
3535	HIGH ABILITY LEARNERS	0.00	286.69	286.69	0.00	(286.69)	0.00	0.00	(286.69)
3551	CAREER EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4320	4320	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4700	BUILDING IMPROVEMENTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6000	6000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6200	TITLE I, PART A ESSA IMP BASIC BY LOCAL	0.00	6,162.45	6,162.45	0.00	(6,162.45)	0.00	0.00	(6,162.45)
6210	TITLE I PART A ACCT ESSA IMPROV BASIC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6212	TITLE I PART A SUPPORT IMPROVEMENT	0.00	0.00	0.00	0.00	0.00	0.00	8,730.00	(8,730.00)
6310	TITLE II, PART A ESSA SUPP EFF INSTUCT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6401	6401	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6402	IDEA PART B(611) BASE ALLOC TRANS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6403	IDEA PART B(611) BASE ALLOC-SCHOOL AGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6404	IDEA PART B(611) BASE ALLOC BIRTH TO 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6406	IDEA PRESCHOOL(619) BASE ALLOC	0.00	332.44	332.44	0.00	(332.44)	0.00	0.00	(332.44)
6408	IDEA PTB 611 BASE	0.00	6,442.06	6,442.06	0.00	(6,442.06)	0.00	0.00	(6,442.06)
6410	IDEA ENROLLMENT/POVERTY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6412	IDEA PART B PROPORTIONATE SHARE	0.00	322.68	322.68	0.00	(322.68)	0.00	0.00	(322.68)
6421	IDEA PART-B ARP-BASE&ENROLLMENT POVERTY BIRTH-21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6422	IDEA PRESCHOOL (619) ARP-BASE/ENROLLMENT POVERTY (619)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6455	6455	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6500	6500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6590	6590	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6610	6610	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6630	6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6700	FED VOC & APP TECH ED (CARL PERKINS)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6810	6810	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6960	6960	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6985	6985	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6990	OTHER FED CATEGORICAL RECEIPTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6992	REAP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6996	6996	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6997	ESSER II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Expenditure Report by Function/Object - Summary

Regular; Processing Month 09/2025

Function Number		Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
6998	ESSER III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8000	TRANSFERS (OUTGOING)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8002	XFER FROM G/F TO DEPRECIATION FD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8010	TRANSFER FROM G/F TO COOP FD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9000	NON-PROGRAM EXPENDITURES	0.00	948.09	948.09	0.00	(948.09)	0.00	0.00	(948.09)
01	GENERAL FUND	0.00	551,907.67	551,907.67	0.00	(551,907.67)	0.00	47,641.23	(599,548.90)

Expenditure Report by Function/Object - Summary

Regular; Processing Month 09/2025

Function Number		Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
02	DEPRECIATION FUND								
4700	BUILDING IMPROVEMENTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
02	DEPRECIATION FUND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Function Number		Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
03	EMPLOYEE BENEFIT FUND								
0101	0101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	REGULAR INSTRUCTIONAL PROGRAMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2900	OTHER SUPPORT SERIVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9000	NON-PROGRAM EXPENDITURES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9999	9999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
03	EMPLOYEE BENEFIT FUND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Function Number		Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
05	ACTIVITY FUND								
0500	0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	REGULAR INSTRUCTIONAL PROGRAMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2900	OTHER SUPPORT SERIVICES	0.00	0.00	0.00	0.00	0.00	0.00	22,578.95	(22,578.95)
05	ACTIVITY FUND	0.00	0.00	0.00	0.00	0.00	0.00	22,578.95	(22,578.95)

Expenditure Report by Function/Object - Summary

Regular; Processing Month 09/2025

Function Number		Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
06	NUTRITION FUND								
0500	0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	REGULAR INSTRUCTIONAL PROGRAMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300	2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3000	3000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3100	FOOD SERVICE OPERATIONS	0.00	11,100.91	11,100.91	0.00	(11,100.91)	0.00	0.00	(11,100.91)
4000	4000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5000	DEBT SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06	NUTRITION FUND	0.00	11,100.91	11,100.91	0.00	(11,100.91)	0.00	0.00	(11,100.91)

Function Number		Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
08	BUILDING FUND								
0500	0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2620	SUPPORT SERVICES-MAINT OF BUILDING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2670	SAFETY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3552	SAFETY & SECURITY GRANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4200	LAND IMPROVEMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4300	ARCHITECTURE & ENGINEERING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4600	SITE IMPROVEMENT	0.00	0.00	0.00	0.00	0.00	0.00	8,900.00	(8,900.00)
4700	BUILDING IMPROVEMENTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9000	NON-PROGRAM EXPENDITURES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9999	9999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08	BUILDING FUND	0.00	0.00	0.00	0.00	0.00	0.00	8,900.00	(8,900.00)

Function Number		Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
09	QCPUF								
1100	REGULAR INSTRUCTIONAL PROGRAMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2670	SAFETY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9999	9999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
09	QCPUF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Function Number		Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
10	COOPERATIVE FUND								
1100	REGULAR INSTRUCTIONAL PROGRAMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3512	DISTANCE EDUCATION INCENTIVE PAYMENTS	0.00	8,378.16	8,378.16	0.00	(8,378.16)	0.00	0.00	(8,378.16)
10	COOPERATIVE FUND	0.00	8,378.16	8,378.16	0.00	(8,378.16)	0.00	0.00	(8,378.16)

Expenditure Report by Function/Object - Summary

Regular; Processing Month 09/2025

Function Number	Revised Budget	Expended During Month	Expenditures to Date	% of Budget	Balance at EOM	A/ P Outstanding	P/ O Outstanding	Unencumbered Balance
Grand Total:	0.00	571,386.74	571,386.74	0.00	(571,386.74)	0.00	79,120.18	(650,506.92)

Activity Fund Balance Report - Summary - Exclude Encumbrances
08/2025 - 08/2025
Regular; Beginning Month 08/2025; Processing Month 08/2025; Accounts to Include Accounts with Activity; Fund Number 05

Fund: 05 ACTIVITY FUND

Chart of Account Number	Chart of Account Description	Beginning Balance	Expenses	Revenues	Balance Change	Balance
05 704	FUND BALANCE	0.00	0.00	125,000.00	(125,000.00)	0.00
05 704 1010	ATHLETICS / ACTIVITIES	29,904.24	3,806.93	2,340.00	13,000.00	41,437.31
05 704 1015	UNIFORMS	(6,206.59)	1,373.51	0.00	20,000.00	12,419.90
05 704 1020	ATHLETIC CLUB / CONCESSION STAND	8,062.82	3,251.19	735.60	0.00	5,547.23
05 704 1025	RANDOM DRUG TESTING	367.30	0.00	0.00	0.00	367.30
05 704 1030	CHEERLEADERS - FUNDRAISING	1,384.65	2,280.82	1,409.10	0.00	512.93
05 704 1035	FOOTBALL FUNDRAISING	5,755.21	0.00	515.00	0.00	6,270.21
05 704 1036	FOOTBALL	(7,581.82)	2,592.48	0.00	20,000.00	9,825.70
05 704 1040	VOLLEYBALL - FUNDRAISING	6,453.53	2,617.26	0.00	0.00	3,836.27
05 704 1041	VOLLEYBALL	(431.49)	867.27	0.00	3,000.00	1,701.24
05 704 1042	BOYS BASKETBALL FUNDRAISING	1,017.79	0.00	0.00	0.00	1,017.79
05 704 1043	BASKETBALL	(81.38)	0.00	0.00	1,000.00	918.62
05 704 1044	WRESTLING	(3,453.09)	(50.00)	0.00	8,000.00	4,596.91
05 704 1045	BOYS WRESTLING FUNDRAISER	4,431.25	0.00	0.00	0.00	4,431.25
05 704 1046	GIRLS WRESTLING FUNDRAISER	590.75	0.00	0.00	0.00	590.75
05 704 1050	XC FUNDRAISER	3,941.61	0.00	0.00	0.00	3,941.61
05 704 1051	XC	(249.14)	384.01	0.00	3,000.00	2,366.85
05 704 1052	GOLF	(2,339.41)	0.00	0.00	5,000.00	2,660.59
05 704 1053	GOLF FUNDRAISING	105.00	0.00	0.00	0.00	105.00
05 704 1054	TRACK	(8,308.84)	13,078.82	0.00	35,000.00	13,612.34
05 704 1055	TRACK FUNDRAISING	769.31	0.00	0.00	0.00	769.31
05 704 1056	GIRLS ATH FUNDRAISING	11,452.80	0.00	0.00	0.00	11,452.80
05 704 1057	GIRLS ON THE RUN	360.19	0.00	0.00	0.00	360.19
05 704 1060	UNIFIED BOWLING	82.31	0.00	0.00	2,000.00	2,082.31
05 704 1999	GRADUATED CLASSES	8,783.66	0.00	0.00	0.00	8,783.66
05 704 2023	CLASS OF 2023	69.81	0.00	0.00	0.00	69.81
05 704 2024	CLASS OF 2024	1,175.74	0.00	0.00	0.00	1,175.74
05 704 2025	CLASS OF 2025	2,180.89	0.00	0.00	0.00	2,180.89
05 704 2026	CLASS OF 2026	3,206.94	0.00	0.00	0.00	3,206.94
05 704 2027	CLASS OF 2027	3,148.14	0.00	0.00	0.00	3,148.14
05 704 2028	CLASS OF 2028	1,900.91	0.00	0.00	0.00	1,900.91
05 704 2029	CLASS OF 2029	710.14	0.00	514.50	0.00	1,224.64
05 704 2030	CLASS OF 2030	954.67	0.00	175.00	0.00	1,129.67
05 704 2031	FUND BALANCE	0.00	0.00	150.00	0.00	150.00
05 704 3010	WORLDSTRIDES	3,414.55	0.00	0.00	0.00	3,414.55
05 704 3012	ESPORTS	579.35	125.00	0.00	0.00	454.35

Regular; Beginning Month 08/2025; Processing Month 08/2025; Accounts to Include Accounts with Activity; Fund Number 05

Fund: 05 ACTIVITY FUND

Chart of Account Number	Chart of Account Description	Beginning Balance	Expenses	Revenues	Balance Change	Balance
05 704 3013	eSPORTS FUNDRAISING	330.68	0.00	0.00	0.00	330.68
05 704 3015	SPEECH	(739.07)	0.00	0.00	1,500.00	760.93
05 704 3016	SPEECH FUNDRAISING	60.03	0.00	0.00	0.00	60.03
05 704 3020	ONE ACT	475.93	0.00	0.00	2,000.00	2,475.93
05 704 3021	ONE ACT - FUNDRAISING	2,792.77	0.00	0.00	0.00	2,792.77
05 704 3030	FFA	27,546.52	1,437.57	2,162.00	0.00	28,270.95
05 704 3035	FFA - SHOP MATERIALS	10,500.34	0.00	0.00	0.00	10,500.34
05 704 3040	FCCLA	928.53	0.00	0.00	0.00	928.53
05 704 3050	NHS - HONOR SOCIETY	1,257.69	0.00	0.00	0.00	1,257.69
05 704 3070	MUSIC	4,676.49	0.00	0.00	0.00	4,676.49
05 704 3080	SCHOLARSHIPS	3,897.00	0.00	911.00	0.00	4,808.00
05 704 3090	STUCO - MIDDLE SCHOOL	3,886.98	0.00	0.00	0.00	3,886.98
05 704 3100	STUDENT COUNCIL - HS	2,061.66	0.00	0.00	0.00	2,061.66
05 704 3110	HEALTH PROFESSIONS CLUB	989.17	0.00	0.00	0.00	989.17
05 704 3120	YEARBOOK	1,735.10	5,447.79	0.00	9,000.00	5,287.31
05 704 3150	4TH GRADE - JESPERSEN	3,400.97	0.00	0.00	0.00	3,400.97
05 704 3151	4TH GRADE FUNDRAISING	622.14	0.00	0.00	0.00	622.14
05 704 3200	SCIENCE	1,256.07	0.00	0.00	0.00	1,256.07
05 704 3535	SCIENCE OLYMPIAD	2,519.90	0.00	101.00	0.00	2,620.90
05 704 4010	COURTESY FUND	2,500.13	0.00	350.00	0.00	2,850.13
05 704 4020	ELEMENTARY TEACHERS	8,955.70	0.00	0.00	0.00	8,955.70
05 704 4021	ELEM PRINCIPAL FUND	1,822.11	0.00	0.00	0.00	1,822.11
05 704 4025	HIGH SCHOOL TEACHERS	8,077.81	0.00	0.00	0.00	8,077.81
05 704 4026	HS PRINCIPAL FUND	1,550.78	0.00	0.00	0.00	1,550.78
05 704 4040	MISC/STUDENT OPPORTUNITIES	3,881.73	122.66	0.00	0.00	3,759.07
05 704 4045	BOOKFAIR	5,451.10	0.00	0.00	0.00	5,451.10
05 704 4050	FINE ARTS & CULTURE CLUB	2,530.18	0.00	0.00	0.00	2,530.18
05 704 4060	HOPE SQUAD	3,738.90	0.00	1,706.25	0.00	5,445.15
05 704 4070	BOBCAT CARES	788.23	0.00	0.00	0.00	788.23
05 704 4075	CULTURE & CLIMATE	(137.00)	572.45	0.00	2,500.00	1,790.55
	Fund Total: 05	179,510.37	37,907.76	136,069.45	0.00	277,672.06

Vendor Name			Description	Amount
Checking Account ID 1		Fund Number 01	GENERAL FUND	
21ST CENTURY EQUIPMENT			JD Utility Tractor; Loader	69,288.58
21ST CENTURY EQUIPMENT			PALLET FORK	1,217.70
Check Number	7930 Total	21ST CENTURY EQUIPMENT		70,506.28
ACTION COMMUNICATIONS INC./DBA C&R ELETRONICS			Belt Clips	51.00
Check Number	7933 Total	ACTION COMMUNICATIONS INC./DBA C&R ELETRONICS		51.00
AGEDNET.COM			Online Curriculum	465.00
Check Number	7963 Total	AGEDNET.COM		465.00
ALLIANCE TIMES HERALD			BOE LEGAL NOTICES	93.23
Check Number	7964 Total	ALLIANCE TIMES HERALD		93.23
AMAZON			COMMAND HOOKS	55.32
AMAZON			Classroom supplies	228.06
AMAZON			WELDING RODS	493.56
AMAZON			Who Are You Who Are So Wise - Book	102.68
AMAZON			AG ED REPAIR	47.49
AMAZON			Elem Office Supplies	368.64
AMAZON			CORDLESS IMPACT WRENCH	159.03
AMAZON			Classroom supplies	204.20
AMAZON			AG ED SUPPLIES	149.99
AMAZON			RSVP supplies	99.40
AMAZON			AG ED SUPPLY RETURN	(93.99)
AMAZON			Classroom supplies	186.70
AMAZON			End Table	80.99
AMAZON			Classroom Supplies for daily calendar.	25.78
AMAZON			School supplies	69.56
AMAZON			Classroom supplies	248.75
Check Number	275 Total	AMAZON		2,426.16
AMERICAN LEGION			Big Red Storage	100.00
Check Number	7927 Total	AMERICAN LEGION		100.00
ANGUS BURGERS & SHAKES			ADMIN DAYS	85.88
Check Number	276 Total	ANGUS BURGERS & SHAKES		85.88
AVI-SPL, LLC			Projector Mounts	378.00
Check Number	7932 Total	AVI-SPL, LLC		378.00
B & C STEEL CORP.			STEEL FOR AG ED	559.05
Check Number	7965 Total	B & C STEEL CORP.		559.05
BLACK HILLS ENERGY			GAS	316.89
Check Number	7934 Total	BLACK HILLS ENERGY		316.89
BLUUM USA, INC.			Display for Mrs. Staudenmaier	3,037.00
BLUUM USA, INC.			Interactive display for Mrs. Anderson	3,037.00
Check Number	7966 Total	BLUUM USA, INC.		6,074.00
BUCHHEIT PRECISION			FLOOR RECEPTACLE PLUG	95.00
Check Number	7967 Total	BUCHHEIT PRECISION		95.00

Vendor Name			Description	Amount
BUD'S PEST CONTROL			PEST CONTROL	175.00
Check Number	7968	Total	BUD'S PEST CONTROL	175.00
CHARACTER STRONG			BOOK	16.54
CHARACTER STRONG			PROGRAM RENEWAL	3,998.00
Check Number	7969	Total	CHARACTER STRONG	4,014.54
CHROMEBOOK PARTS.COM			Screen replacement.	19.99
Check Number	7970	Total	CHROMEBOOK PARTS.COM	19.99
CLASS INTERCOM			CLASS INTERCOM PLATFORM	1,495.00
Check Number	7971	Total	CLASS INTERCOM	1,495.00
COURTYARD TACOMA DOWNTOWN			Hotel - Character Strong Conference	1,557.30
Check Number	276	Total	COURTYARD TACOMA DOWNTOWN	1,557.30
CRABKING			CHARACTER STRONG CONFERENCE	41.71
Check Number	276	Total	CRABKING	41.71
CULLIGAN WATER CONDITIONING			REVERSE OSMOSIS RENTAL	29.95
CULLIGAN WATER CONDITIONING			WATER AND DELLIVERY	206.77
Check Number	7972	Total	CULLIGAN WATER CONDITIONING	236.72
CUNNIGHAMS JOURNAL			ADMIN DAYS	108.59
Check Number	276	Total	CUNNIGHAMS JOURNAL	108.59
DARREN'S CARQUEST AUTO PARTS			MAINTENANCE SUPPLY	94.00
DARREN'S CARQUEST AUTO PARTS			MAINTENANCE SUPPLY	247.74
Check Number	7973	Total	DARREN'S CARQUEST AUTO PARTS	341.74
DOCUSHRED			DOCUMENT SHREDDING	80.00
Check Number	7935	Total	DOCUSHRED	80.00
DOMINOS			CHARACTER STRONG CONFERENCE	33.71
Check Number	276	Total	DOMINOS	33.71
EAKES OFFICE SOLUTIONS			CUSTODIAL SUPPLIES	32.70
Check Number	7937	Total	EAKES OFFICE SOLUTIONS	32.70
ED PUZZLE			MONTHLY SUBSCRIPTION	11.50
Check Number	275	Total	ED PUZZLE	11.50
EDUCATIONAL SERVICE UNIT #13			DL;INTERNET;NEVA;PL	2,039.33
Check Number	7974	Total	EDUCATIONAL SERVICE UNIT #13	2,039.33
FLINN SCIENTIFIC INC.			AgEd supplies	205.95
Check Number	7938	Total	FLINN SCIENTIFIC INC.	205.95
FUEL TRIPS- ELAN			FUEL TRIPS	482.16
FUEL TRIPS- ELAN			FUEL	30.00
Check Number	275	Total	FUEL TRIPS- ELAN	512.16

Vendor Name			Description	Amount
GARBANZO			Online Reading Comprehension App	249.00
Check Number	7939	Total	GARBANZO	249.00
H & H SANITATION			MONTHLY ROLL OF BOX RENTAL;LANDFILL TIX	679.96
Check Number	7975	Total	H & H SANITATION	679.96
HEMINGFORD CO-OP TELEPHONE CO			TELEPHONE/INTERNET SERVICE	976.27
Check Number	7976	Total	HEMINGFORD CO-OP TELEPHONE CO	976.27
HEMINGFORD MUNICIPAL UTILITIE			UTILITIES	11,991.93
Check Number	7977	Total	HEMINGFORD MUNICIPAL UTILITIE	11,991.93
HOMETOWN LEASING			COPIER LEASE PYMT	365.83
HOMETOWN LEASING			COPIER LEASE PAYMENT	365.83
Check Number	7978	Total	HOMETOWN LEASING	731.66
HUHOT MONGOLIAN GRILL			A/P INSTITUTE @ UNO	29.01
Check Number	276	Total	HUHOT MONGOLIAN GRILL	29.01
HUSS AUTO REPAIR			OLD SUB REPAIR	1,503.95
Check Number	7979	Total	HUSS AUTO REPAIR	1,503.95
IDEAL LINEN AND UNIFORM			CUSTODIAL SUPPLIES	252.20
Check Number	7941	Total	IDEAL LINEN AND UNIFORM	252.20
IDEAL/BLUFFS FACILITY SOLUTIONS			CUSTODIAL/MAINT/TRANS SUPPLIES	2,929.25
IDEAL/BLUFFS FACILITY SOLUTIONS			CUSTODIAL SUPPLIES	624.76
Check Number	7980	Total	IDEAL/BLUFFS FACILITY SOLUTIONS	3,554.01
INNOVATIVE OFFICE SOLUTIONS, LLC			Toner	633.58
Check Number	7943	Total	INNOVATIVE OFFICE SOLUTIONS, LLC	633.58
JACKS REFRIGERATION SERVICE			Compressor and Motors (HVAC)	5,939.65
Check Number	7922	Total	JACKS REFRIGERATION SERVICE	5,939.65
JOHNSTON, BRIDGET			TUITION REIMBURSMENT	750.00
Check Number	7981	Total	JOHNSTON, BRIDGET	750.00
JW PEPPER & SON, INC			Textbooks & supplies	185.91
JW PEPPER & SON, INC			Textbooks & supplies	550.73
JW PEPPER & SON, INC			Band Books	22.98
JW PEPPER & SON, INC			Band Books	15.99
Check Number	7983	Total	JW PEPPER & SON, INC	775.61
KARLA MAPES			MILEAGE REIMBURSEMT	196.00
Check Number	7984	Total	KARLA MAPES	196.00
KIMBALL MIDWEST			MAINTENANCE RESTOCK	1,048.80
Check Number	7953	Total	KIMBALL MIDWEST	1,048.80
KOI, THE			CHARACTER STRONG CONFERENCE	58.33
KOI, THE			CHARACTER STRONG CONFERENCE	52.94
Check Number	276	Total	KOI, THE	111.27

Vendor Name			Description	Amount
KSB School Law PC, LLO			LEGAL SERVICES	80.00
Check Number	7985	Total	KSB School Law PC, LLO	80.00
LEGACY COOP			MAINTENANCE SUPPLY	26.46
LEGACY COOP			CREDIT MEMO	(43.42)
LEGACY COOP			CABLE TIES	3.69
LEGACY COOP			FERTILIZER	341.46
LEGACY COOP			MAINTENANCE GROUNDS SUPPLIES	777.10
LEGACY COOP			CREDIT MEMO	(23.85)
Check Number	7986	Total	LEGACY COOP	1,081.44
LINCOLN JOURNAL STAR			MONTHLY SUBSCRIPTION	31.99
Check Number	276	Total	LINCOLN JOURNAL STAR	31.99
LISA BRIGGS, OT, LLC				1,605.60
Check Number	7987	Total	LISA BRIGGS, OT, LLC	1,605.60
LORE, MIKAELA			MILEAGE REIMBURSEMENT-AUGUST	71.82
Check Number	7988	Total	LORE, MIKAELA	71.82
MAILCHIMP			MONTHLY SUBSCRIPTION	13.00
Check Number	276	Total	MAILCHIMP	13.00
MENARDS			Custodial Cabinet Storage	208.39
Check Number	276	Total	MENARDS	208.39
MID-AMERICAN RESEARCH CHEMICAL			CUSTODIAL SUPPLIES	1,040.57
Check Number	7952	Total	MID-AMERICAN RESEARCH CHEMICAL	1,040.57
MORAVA, LAUREN			24-25 TUITION REIMB	231.41
Check Number	7951	Total	MORAVA, LAUREN	231.41
MORFORD'S DECORATING CENTER			HS CARPET REPLACEMENT-DEDUCTIBLE	500.00
Check Number	7989	Total	MORFORD'S DECORATING CENTER	500.00
NASB			BOARD SURVEY	300.00
NASB			25-26 NAEP MEMBERSHIP	65.00
NASB			AREA MEMBERSHIP MTG	267.00
Check Number	7990	Total	NASB	632.00
NATIONAL BUSINESS FURNITURE, LLC			Bookshelf for classroom	779.08
Check Number	276	Total	NATIONAL BUSINESS FURNITURE, LLC	779.08
NE COUNCIL OF SCHOOL ADMINISTRATORS			LEGAL ISSUES WEBINAR	100.00
Check Number	7950	Total	NE COUNCIL OF SCHOOL ADMINISTRATORS	100.00
NE SAFETY CENTER			CLASS B ENDORSEMENTS - 2/INSERVICE	790.00
Check Number	7923	Total	NE SAFETY CENTER	790.00
OLIVE GARDEN			A/P INSTITUTE-UNO	31.32
Check Number	276	Total	OLIVE GARDEN	31.32

Vendor Name				Description	Amount
OMNIFY BENEFITS				PARTICIPATION FEE	82.60
Check Number	7991	Total	OMNIFY BENEFITS		82.60
ORGANIZATION OF AMERICAN KODALY EDUCATORS, INC				Kodaly Professional Membership	95.00
Check Number	7949	Total	ORGANIZATION OF AMERICAN KODALY EDUCATORS, INC		95.00
PRAIRIE STORAGE CONTAINERS				SEPT STORAGE RENT	150.00
Check Number	7948	Total	PRAIRIE STORAGE CONTAINERS		150.00
PRO ED, INC				development charts	84.70
Check Number	7992	Total	PRO ED, INC		84.70
PROTEX CENTRAL INC.				FIRE ALARM INSPECTIONS	1,071.20
PROTEX CENTRAL INC.				FIRE EXTINGUISHER MAINTENACE	337.41
PROTEX CENTRAL INC.				SPRINKLER SYSTEM INSPECTION	1,200.00
PROTEX CENTRAL INC.				INTERNAL PIPE INSPECTION-5YR	886.08
Check Number	7993	Total	PROTEX CENTRAL INC.		3,494.69
QUILL CORPORATION				Whiteboard for K. Failor room	809.58
QUILL CORPORATION				Whiteboards	779.58
QUILL CORPORATION				Chair Mat for under HS Sec desk	71.99
Check Number	276	Total	QUILL CORPORATION		1,661.15
RA13 LEGACY CONSULTING LLC				Mark Adler - Guest Speaker	1,000.00
Check Number	7928	Total	RA13 LEGACY CONSULTING LLC		1,000.00
RABEN'S MARKET				JANITORIAL / OFFICE STMT	130.93
RABEN'S MARKET				FCS FOOD SUPPLIES	222.17
RABEN'S MARKET				CUSTODIAL SUPPLIES	4.95
Check Number	7994	Total	RABEN'S MARKET		358.05
REIF ENTERPRISE				SPRINKLER SUPPLIES	120.00
Check Number	7995	Total	REIF ENTERPRISE		120.00
REMIND101, INC				25-26 SUBSCRIPTION RENEWAL	1,975.00
Check Number	7996	Total	REMIND101, INC		1,975.00
ROCKY MOUNTAIN AIR SOLUTIONS				AG ED GAS RENTAL	38.15
Check Number	7946	Total	ROCKY MOUNTAIN AIR SOLUTIONS		38.15
RUNZA				A/P INSTITUTE - UNO	12.83
Check Number	276	Total	RUNZA		12.83
RUSH MOUNTAIN ADVENTURES				Summer School field trip	204.08
Check Number	276	Total	RUSH MOUNTAIN ADVENTURES		204.08
SAMS CLUB				Summer school snacks/prizes	82.67
Check Number	276	Total	SAMS CLUB		82.67
SCHOMER, CASEY				Modular Toolbox System	550.00
Check Number	7931	Total	SCHOMER, CASEY		550.00

Vendor Name				Description	Amount
SCHOOL SPECIALTY LLC				daily memo books	163.00
Check Number	7924	Total	SCHOOL SPECIALTY LLC		163.00
SELECTBLINDS.COM				Blinds for east modular (Wood)	556.56
Check Number	276	Total	SELECTBLINDS.COM		556.56
START 2 SEW				7th grade quarter 1 Sewing projects	185.02
Check Number	7997	Total	START 2 SEW		185.02
TCI				US through industrialism 3rd edition	336.00
Check Number	7998	Total	TCI		336.00
TRITLE PLUMBING				New Hot Water Heater	6,420.00
TRITLE PLUMBING				SINKS/TODDLER STOOLS	4,775.00
Check Number	7947	Total	TRITLE PLUMBING		11,195.00
VALENTINOS				ADMIN DAYS	17.62
Check Number	276	Total	VALENTINOS		17.62
WALMART				Summer school snacks/prizes	174.11
Check Number	276	Total	WALMART		174.11
WESTCO				FUEL	2,871.23
WESTCO				NEW PLAT MAPS	135.16
Check Number	276	Total	WESTCO		3,006.39
WEVIDEO				SUBSCRIPTION RENEWAL	660.00
Check Number	8000	Total	WEVIDEO		660.00
WNCC				CNA COURSE BOOKS	278.28
Check Number	8001	Total	WNCC		278.28
WPCI				DOT TESTING	38.00
Check Number	8002	Total	WPCI		38.00
Fund Number 01					155,194.85
Checking Account ID 1					155,194.85

Vendor Name			Description	Amount
Checking Account ID 8			Fund Number 08 BUILDING FUND	
LEVRACK LLC			Storage for Art Room	15,545.00
Check Number	1563	Total	LEVRACK LLC	15,545.00
PANHANDLE GEOTECHNICAL AND ENVIROMENTAL, INC			ASBESTOS INSPECTION;SAMPLING	1,188.00
Check Number	1562	Total	PANHANDLE GEOTECHNICAL AND ENVIROMENTAL, INC	1,188.00
R&J INDUSTRIES			CONCRETE - NORTH SIDE/SOUTH CAMPUS	43,838.00
Check Number	1564	Total	R&J INDUSTRIES	43,838.00
WOOD CONSTRUCTION			MODULAR WINDOW;JANITOR CLOSET;EL DOOR	2,848.78
Check Number	1565	Total	WOOD CONSTRUCTION	2,848.78
Fund Number 08				63,419.78
Checking Account ID 8				63,419.78

Vendor Name			Description	Amount
Checking Account ID 6			Fund Number 06 NUTRITION FUND	
ANDERSON, KAYLA			LUNCH ACCT REFUND	10.10
Check Number	7256	Total	ANDERSON, KAYLA	10.10
CASH-WA DISTRIBUTING			FOOD SUPPLIES	1,769.32
CASH-WA DISTRIBUTING			FOOD SUPPLIES	2,824.09
CASH-WA DISTRIBUTING			CREDIT MEMO-FOOD SUPPLIES	(51.44)
Check Number	7257	Total	CASH-WA DISTRIBUTING	4,541.97
CENTRAL RESTAURANT PRODUCTS			Kitchen oven blower motor	1,213.45
Check Number	7258	Total	CENTRAL RESTAURANT PRODUCTS	1,213.45
RABEN'S MARKET			FOOD SUPPLIES	21.58
Check Number	7260	Total	RABEN'S MARKET	21.58
US FOODS			FOOD SUPPLIES	6,949.80
Check Number	7259	Total	US FOODS	6,949.80
Fund Number 06				12,736.90
Checking Account ID 6				12,736.90

UPGRADE QUOTE

IXL Learning
777 Mariners Island Blvd., Suite 600
San Mateo, CA 94404

QUOTE # 1493419-1
DATE: AUGUST 29, 2025

TO:
Jackie Davies
Hemingford Junior Senior High School
PO BOX 217
HEMINGFORD, NE 69348

COMMENTS OR SPECIAL INSTRUCTIONS

SALESPERSON	ACCOUNT #	UPGRADE DURATION	QUOTE VALID UNTIL
Carey Harris	A25-6835927	Through June 2, 2026	September 28, 2025

SUBSCRIPTIONS	QUANTITY	LIST UNIT PRICE	NET PRICE
Add students to IXL site license: Grades 5-6 Subjects: Math and ELA	75	$16.88	$1,266.00
		Total Price	$1,266.00

TOTALS	
Total Subscriptions List Price	$1,266.00
Grand Total	$1,266.00

Ordering instructions

We accept payment by purchase order, check, or credit card. To submit a purchase order for this quote, click here or go to https://www.ixl.com/po-upload and enter quote # 1493419-1. For international accounts, we can accept wire transfers for an additional fee.

FOR REFERENCE ONLY

Once this order is processed, your subscription will include the following access.

POST-UPGRADE SUBSCRIPTIONS	QUANTITY
IXL site license, including:	
Grades PK-12 Subjects: Math and ELA	100
Grades 5-6 Subjects: Math and ELA	75
Grades 10-11 Subject: ELA	75

SALES CONTRACT

CONTRACT #1493419-1
August 29, 2025

IXL Learning
777 Mariners Island Blvd., Suite 600
San Mateo, CA 94404

CUSTOMER
Jackie Davies
Hemingford Junior Senior High School
PO BOX 217
HEMINGFORD, NE 69348

UPGRADE INFO

Salesperson	Account #	Quote #	Upgrade duration
Carey Harris	**A25-6835927**	**1493419-1**	**Through June 2, 2026**

PAYMENT PLAN

Amount	Invoice date
$1,266	**September 12, 2025**
TOTAL	**$1,266**

Price valid until September 28, 2025

ACCEPTANCE OF SALES CONTRACT
This is a binding agreement of payment between IXL Learning and the Purchaser. Your signature indicates that you have received, reviewed and accepted the attached Terms and Conditions of Sale and that you agree to pay the full upgrade price listed above within 60 days of the invoice date. Without a signature, your order may not be processed.

Acknowledged and agreed to:

AUTHORIZED SIGNATURE _____ **DATE** _____

TERMS AND CONDITIONS OF SALE

THIS IS A LEGAL DOCUMENT ("SALES CONTRACT") BETWEEN THE PURCHASER SHOWN ABOVE ("YOU") AND IXL LEARNING ("SELLER"). PLEASE READ THIS AGREEMENT CAREFULLY. YOU AGREE TO BE BOUND BY ALL OF THE TERMS AND CONDITIONS OF THE AGREEMENT, AS WELL AS BY THE WEBSITE TERMS OF SERVICE, WHICH ARE INCORPORATED BY REFERENCE. NO VARIATION OF THESE TERMS AND CONDITIONS ARE BINDING ON SELLER UNLESS AGREED TO IN WRITING SIGNED BY AN AUTHORIZED REPRESENTATIVE OF IXL LEARNING.

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   All checks should be mailed to:
   IXL Learning
   777 Mariners Island Blvd., Suite 600
   San Mateo, CA 94404

   Credit card payments may be made by phone at (855) 255-8800.

   Any late payment will incur interest at the rate of the lesser of 1% a month or the maximum permissible by law.
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6. **DISCLAIMER OF WARRANTIES. YOU EXPRESSLY UNDERSTAND AND AGREE THAT:**
   a. YOUR USE OF THE SERVICE IS AT YOUR SOLE RISK. THE SERVICE IS PROVIDED "AS IS," "AS AVAILABLE," AND WITH ALL FAULTS. IXL EXPRESSLY DISCLAIMS ALL WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT.
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d. NO ADVICE OR INFORMATION, WHETHER ORAL OR WRITTEN, OBTAINED BY YOU FROM IXL OR THROUGH OR FROM THE SERVICE SHALL CREATE ANY WARRANTY NOT EXPRESSLY STATED IN THE TOS.

Some states do not allow certain limitations on warranties, so certain of the above limitations may not apply to you.

7. **LIMITATION OF LIABILITY:** YOU EXPRESSLY UNDERSTAND AND AGREE THAT IXL SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, INCLUDING BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFITS, GOODWILL, USE, DATA, OR OTHER INTANGIBLE LOSSES RESULTING FROM THE USE OR INABILITY TO USE THIS SERVICE. IN ALL INSTANCES, DAMAGES SHALL BE CAPPED AT ONE MONTH'S FEES.
8. **SEVERABILITY:** If any provision of this agreement is deemed invalid, illegal, or unenforceable, then that provision shall be deemed severable from these terms and shall not affect the validity and enforceability of any remaining provisions of this Sales Contract, which shall remain in full force and effect.
9. **ARBITRATION:** You agree that any dispute or claim you may have against IXL arising out of or related to this Sales Contract or the use of Services must be submitted to arbitration, before a single arbitrator appointed by JAMS/Endispute and conducted according to their rules in San Francisco, CA, USA, and that the determination of any such arbitrator shall be binding. The courts located in San Francisco, CA, USA, have exclusive jurisdiction over any judicial proceedings related to this agreement, and you waive any claim that such a court is an improper venue, inconvenient, or lacks jurisdiction over you.
10. **GOVERNING LAW:** The Sales Contract and the relationship between you and IXL are governed by the laws of the State of California without regard to conflict of law provisions.
11. **ENTIRE AGREEMENT:** This Sales Contract, which incorporates the Terms of Service by reference, is the final expression of the agreement between Purchaser and Seller and supersedes all prior representations, understandings, and agreements between the Purchaser and Seller relating to its subject matter. This Sales Contract cannot be modified, amended, or changed except in writing and signed by IXL.

Please contact IXL Learning with any questions regarding this sales contract:
Toll-free **(855) 255-8800** | Direct **(650) 372-4300** | E-mail **orders@ixl.com**
Completed sales contracts should be emailed to your sales consultant.



5th/6th Grade IXL Interventions

Why:

We need a program that we can use across 5th and 6th grade that focuses on Math and Reading. We want to utilize IXL because the 7-12 grade students are currently using it and plan to use it going forward. Additionally, we have not had a functioning intervention program for Math or Reading.

How:

We would like to ask the Board to consider purchasing IXL for the 5th and 6th graders. Jackie Davies, as well as the High School English department, have been using it and have been seeing some awesome growth in students.

IXL is a fantastic Tier 1 intervention program for closing learning gaps.

IXL provides personalized practice, allowing students to work at their own pace or in a small group to build on skills they need to master. This proactive approach can prevent students from falling further behind and can reduce the need for more intensive, individualized interventions later on.

IXL is not just for remediation. It's a tool that can challenge on track and high-ability students and keep them engaged.

IXL can also work with our ELA and Math curriculum for extra practice in what they learn in class as well as do pre-teaching for the next lessons.

The Numbers:

(Based on Spring 2024 NSCAS data)

5th graders in the Gen. Ed classroom below the 40th percentile in Math: 10

5th graders in the Gen. Ed classroom below the 40th percentile in ELA: 3

6th graders in Gen. Ed classroom below the 40th percentile in Math: 11

6th graders in Gen. Ed classroom below the 40th percentile in ELA: 3

Cost:

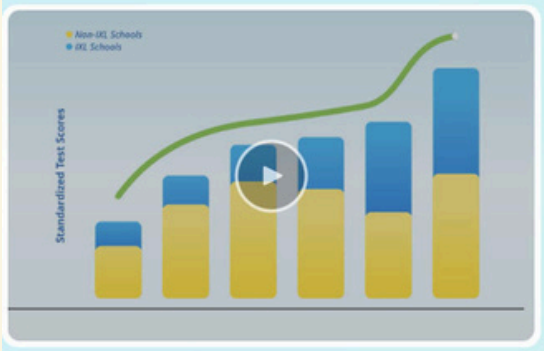
5th & 6th Grade Math and Reading Licensing (75) at $16.88 each for a total of $1,266.00 for the year.

(Quote expires 9/28/25)

IXL research information on pages that follow!

Research shows that IXL accelerates learning

Studies have found that IXL:



Leads to higher test scores

IXL schools score as much as 15 percentile points higher in math and 17 percentile points higher in language arts on state assessments.

Predicts success

Validity research shows that IXL's Diagnostic is an accurate measure of student achievement and a strong predictor of performance on standardized assessments including NWEA MAP, Star, FAST/B.E.S.T., PSSA, and over a dozen other state assessments.

Benefits all students

ELLs, special education students, Title I schools, and urban and rural schools experience similar or even greater gains with IXL.

ESSA Tier 1 evidence

Independent research from Johns Hopkins University has verified that IXL meets the ESSA Tier 1 standards for evidence-based efficacy.

Read the research >



IXL is grounded in research

IXL's product is based on best practices from learning science research, and has been awarded the Research-Based Design Product Certification from Digital Promise.

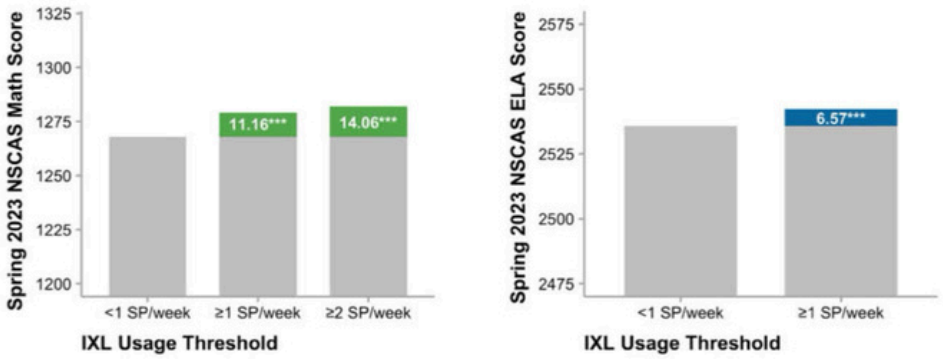
Learn more about IXL's design principles >



Executive Summary

IXL is an end-to-end teaching and learning solution that engages learners in grades Pre-K through 12 with a comprehensive curriculum and personalized recommendations for meeting learning goals. Previous research has shown that IXL can have a significant positive impact on students' academic performance (Bashkov, 2021; Copeland et al., 2023; Empirical Education, 2013). The goal of this study was to examine IXL usage among third- through fifth-grade students in a large, urban school district in Nebraska and its impact on math and English language arts (ELA) achievement, as measured by the Nebraska Student-Centered Assessment System (NSCAS) Growth assessments. Using a pretest-posttest design, we found[1]:

- **IXL implementation improves student achievement.** Students who reached proficiency in 1 or 2 IXL skills per week (SP/week[2]) performed better on NSCAS Growth than students who did not meet those thresholds. Specifically, Spring 2023 NSCAS scores were about 11-14 points higher for IXL Math students and about 6.5 points higher for IXL ELA students, relative to students not using IXL with fidelity (see figure below).
    - Higher IXL usage was associated with better NSCAS performance in both subjects.



- **All students benefit from IXL.** Subgroup analyses showed that students enrolled in special education services, low-achieving students, and high-achieving students who used IXL all outperformed their peers who had access but did not meet the 1 or 2 SP/week usage threshold.
    - High-achieving students in particular benefited from reaching mastery[3] in IXL skills.

[1] *In all figures, * indicates statistical significance at the p < .05 level; ** indicates p < .01; and *** indicates p < .001.*
[2] *SP/week = skills proficient (i.e., SmartScore ≥ 80) per week.*
[3] *Skill mastery is defined as reaching a SmartScore of 100 in an IXL skill.*

https://www.ixl.com/materials/us/research/The_Impact_of_IXL_on_NSCAS_Performance_in_a_Nebraska_School_District.pdf

RESEARCH REPORT

January 2024

The Impact of IXL on Math and ELA Learning in a Nebraska School District as Measured by NSCAS

Christina Schonberg, Ph.D.
Mary B. Hargis, Ph.D.

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650-372-4040 | www.ixl.com

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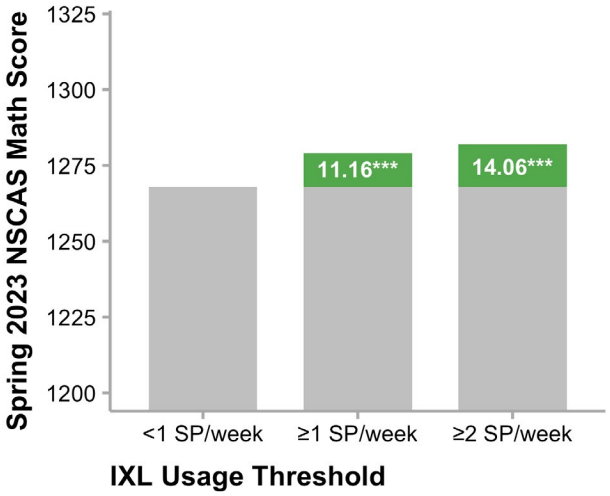
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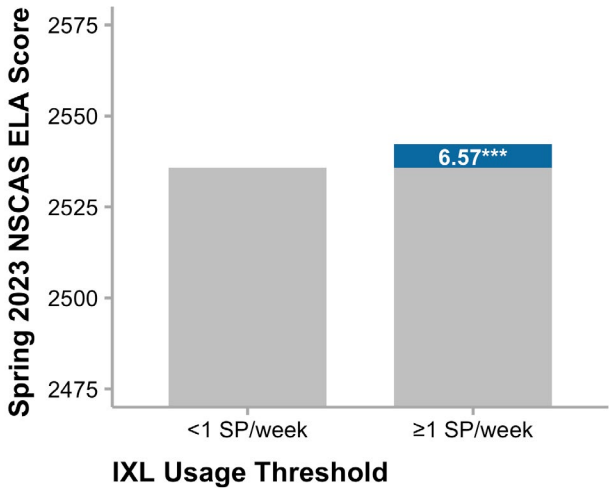
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Executive Summary

IXL is an end-to-end teaching and learning solution that engages learners in grades Pre-K through 12 with a comprehensive curriculum and personalized recommendations for meeting learning goals. Previous research has shown that IXL can have a significant positive impact on students' academic performance (Bashkov, 2021; Copeland et al., 2023; Empirical Education, 2013). The goal of this study was to examine IXL usage among third- through fifth-grade students in a large, urban school district in Nebraska and its impact on math and English language arts (ELA) achievement, as measured by the Nebraska Student-Centered Assessment System (NSCAS) Growth assessments. Using a pretest-posttest design, we found[1]:

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    - Higher IXL usage was associated with better NSCAS performance in both subjects.





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    - High-achieving students in particular benefited from reaching mastery[3] in IXL skills.

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[2] SP/week = skills proficient (i.e., SmartScore ≥ 80) per week.
[3] Skill mastery is defined as reaching a SmartScore of 100 in an IXL skill.

The Impact of IXL on Math and ELA Learning in a Nebraska School District as Measured by NSCAS

Background

IXL is an end-to-end teaching and learning solution that engages learners in grades Pre-K through 12 with a comprehensive curriculum and personalized recommendations for meeting learning goals. It covers four main subject areas: mathematics, English language arts (ELA), science, and social studies. As of this writing, IXL is used by 1 in 4 students in the U.S. and by 15 million students worldwide. IXL is deeply rooted in learning sciences research (see Bashkov et al., 2021) and engages each student in a personalized learning experience tailored to their working level. As a result, students work through problems that are neither too easy nor too difficult, which in turn supports their self-efficacy and motivation for continued learning.

Prior research has consistently reported significant, positive effects of IXL on student learning, including in an independent randomized control trial (Copeland et al., 2023). The goal of the present study was to examine the effects of IXL Math and IXL ELA on academic achievement in grades 3-5 in a large, urban school district in Nebraska, both overall and for specific student subgroups. Academic achievement was measured using the Nebraska Student-Centered Assessment System (NSCAS) Growth assessment. For math and ELA separately, we specifically aimed to answer the following research questions:

1. **Overall efficacy of IXL:**
    a. Are higher levels of IXL usage associated with higher student academic achievement, as measured by the Spring 2023 NSCAS Growth assessment?
    b. Did students who used IXL with moderate (1 SP/week) or high (2 SP/week) fidelity outperform students who did not use IXL with fidelity?
2. **IXL efficacy by subgroup:**
    a. To what extent do the analyses above hold for students enrolled in special education services, low-achieving students, and high-achieving students?
    b. Does perseverance on IXL skills (i.e., going beyond skill proficiency to reach skill mastery) benefit students? Do low-achieving and high-achieving students benefit from reaching mastery to the same degree?

Methodology

DATA SOURCES

Assessment and Demographic Data

All assessment and demographic data were provided by the participating school district. Math and ELA performance at *pretest* (Fall 2022) was measured using the NWEA MAP Growth assessments; the *posttest* measure was the NSCAS Growth assessment (Spring 2023), with students' scale scores in each subject serving as the outcome. More information about MAP Growth in Nebraska can be found at https://www.nwea.org/state-solutions/nebraska/, and more information about NSCAS Growth can be found at https://www.education.ne.gov/assessment/nscas-growth/.

IXL Usage Data

IXL usage data were obtained from IXL's database. When students use IXL, they practice problems organized within "skills," or specific topic areas within a subject. IXL uses a proprietary *SmartScore* to measure a student's proficiency within a skill and recommends that students aim to reach proficiency in at least two skills per week (SP/week) within each subject (An et al., 2022). While the 2 SP/week skill proficiency threshold indicates high-fidelity IXL usage, a 1 SP/week threshold still indicates meaningful usage of IXL (and was achieved by a large number of students in the current sample, especially in ELA). Thus, this moderate-fidelity threshold was also considered in this study.

PARTICIPANTS

We included data from any students with non-missing pretest, posttest, and demographic data. The base sample size was 4,888 students in the math analysis and 4,885 students in the ELA analysis. Overall, the sample was 52.2% male, < 1% English language learners, and 14.8% students eligible for or receiving special education services. The racial and ethnic makeup of the sample was as follows: 6.0% Asian, 3.3% Black, 10.2% Hispanic, < 1% Native American, 5.6% multiracial/other, and 74.4% White (non-Hispanic). Because analyses differed slightly in their inclusion criteria, analysis-specific sample sizes are reported in the appendices.

In addition to the overall analyses of all students, we also analyzed the impact of IXL on NSCAS performance among the following student subgroups: students eligible for or receiving special education services, low-achieving students, and high-achieving students. Students were classified as low- or high-achieving based on their Fall 2022 MAP percentile, such that students below the 50th percentile were classified as low-achieving, and students at or above the 50th percentile were classified as high-achieving.

DESIGN SUMMARY

We used a range of quasi-experimental pretest-posttest designs to examine the effects of IXL usage during the 2022-23 school year on Spring 2023 NSCAS scores. In the analyses for Research Question 1, we examined the linear relationship between the number of skills in which students reached proficiency and their expected NSCAS score gains, controlling for Fall 2022 MAP performance and key demographics. In addition, we tested the effect of meeting IXL's recommended high-fidelity usage criterion of 2 SP/week in math, as well as a moderate-fidelity usage criterion of 1 SP/week in both subjects. In Research Question 2, we conducted these analyses by student subgroup (special education, low-achieving, and high-achieving). We also analyzed the relative benefit of working beyond proficiency and reaching mastery for low-achieving and high-achieving students in math and ELA. See Appendices A and B for details.

Results

RESEARCH QUESTION 1A: USAGE EFFECTS OF IXL

IXL Math

We found that IXL Math usage (SP/week) was positively and significantly associated with Spring 2023 NSCAS scores in math (b = 8.54, p < .001, β = .11). That is, a typical student's NSCAS score would be expected to increase by about 8.5 points for each additional IXL Math skill they reached proficiency in each week. Full model results are reported in Table C1 (Appendix C).

IXL ELA

As in the IXL Math analysis, we found that IXL ELA usage (SP/week) was positively and significantly associated with Spring 2023 NSCAS scores in ELA (b = 5.69, p < .001, β = .06). That is, a typical student's NSCAS score would be expected to increase by nearly 6 points for each additional IXL ELA skill they reached proficiency in each week. Full model results are reported in Table C2 (Appendix C).

RESEARCH QUESTION 1B: IMPLEMENTATION FIDELITY

IXL Math

We found that at both the 1 SP/week (moderate-fidelity) and 2 SP/week (high-fidelity) usage thresholds in IXL Math, students who met or exceeded the given threshold outperformed students who did not (Figure 1). The estimated treatment effect for meeting each usage threshold was positive and statistically significant. Controlling for baseline performance and covariates, students who met the 1 SP/week threshold (n = 2,175) scored about 11 points higher, on average, than students who did not meet this threshold (n = 2,713) [b = 11.16, p < .001]; the effect size (Hedges' g) was .13. Students who met the 2 SP/week threshold (n = 1,038) scored about 14 points higher, on average, than students who did not meet this threshold (n = 3,850) [b = 14.06, p < .001]; the effect size was .17. Full results for each model are reported in Tables C3 and C4 (Appendix C).

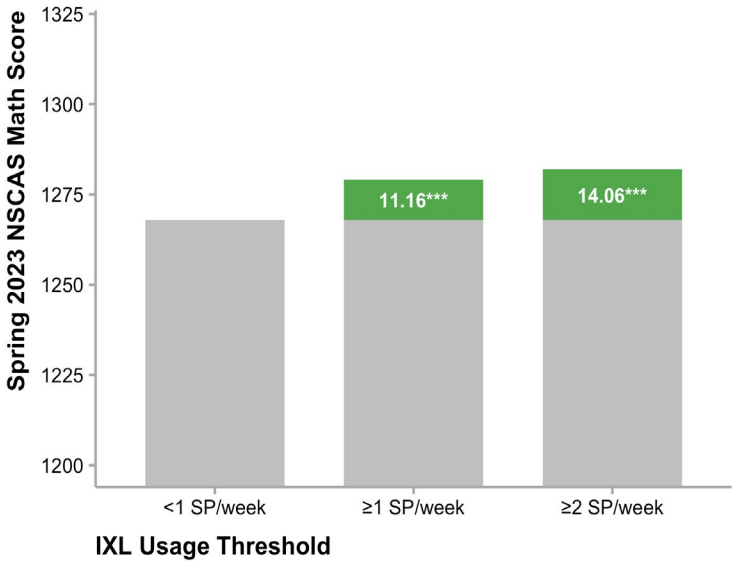


Figure 1. Effects of IXL Math when implemented at < 1 SP/week, ≥ 1 SP/week, or ≥ 2 SP/week

Note: SP/week = skills proficient per week

IXL ELA

Similar to IXL Math, we found that students who met the 1 SP/week usage threshold in IXL ELA outperformed students who may have used IXL ELA but did not meet this threshold (Figure 2). Specifically, students who met the 1 SP/week threshold (n = 1,630) scored about 6.5 points higher, on average, than students who did not meet this threshold (n = 3,255) [b = 6.57, p < .001]; the effect size (Hedges' g) was .08. Full model results are reported in Table C5 (Appendix C).

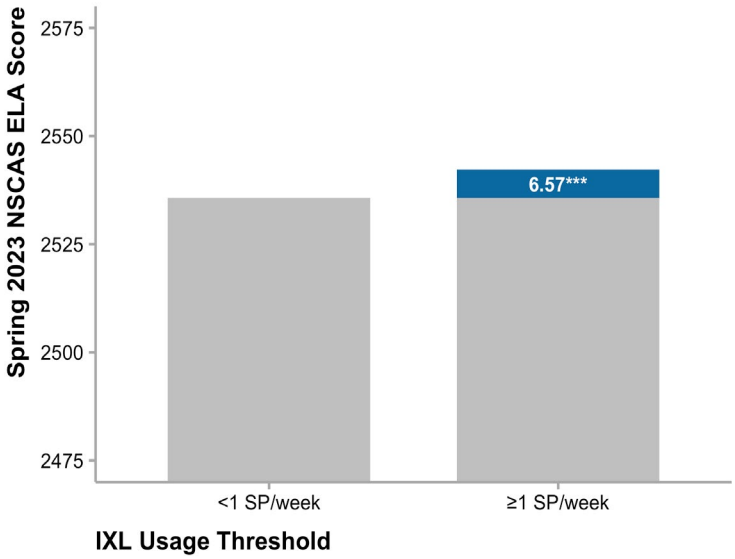


Figure 2. Effects of IXL ELA when implemented at < 1 SP/week or ≥ 1 SP/week

Note: SP/week = skills proficient per week

RESEARCH QUESTION 2A: EFFICACY AMONG SUBGROUPS

Usage

As in the overall analyses, we found positive, statistically significant effects of IXL usage (SP/week) within each student subgroup. Effects of IXL Math SP/week among student subgroups ranged from b = 7.93 to b = 11.57, and effects of IXL ELA SP/week among student subgroups ranged from b = 5.43 to b = 7.71. Detailed results are reported in Tables D1 and D2 (Appendix D).

Implementation Fidelity

Within each student subgroup, we found similar effects of implementation fidelity as in the overall analyses: students who used IXL with high fidelity (≥ 2 SP/week) or moderate fidelity (≥ 1 SP/week) outperformed those who did not. In math, effect sizes ranged from .14 to .28 (see Figure 3); in ELA, effect sizes ranged from .11 to .13 (see Figure 4). Detailed results are reported in Tables D3 and D4 (Appendix D).

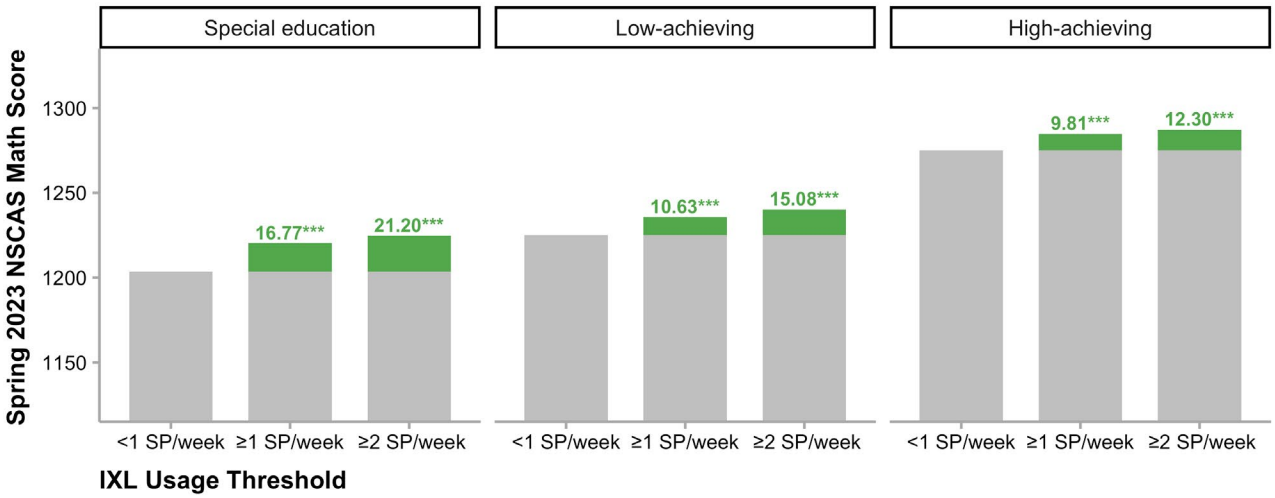


Figure 3. The efficacy of IXL Math among student subgroups

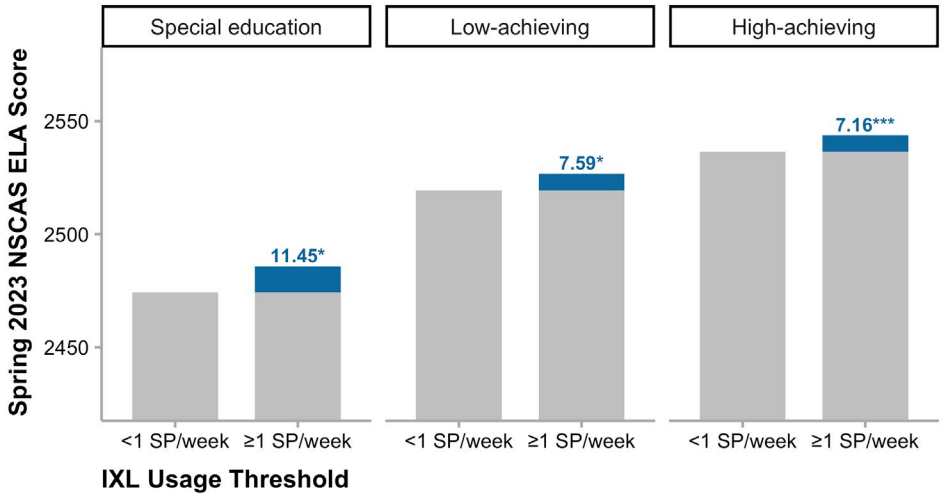


Figure 4. The efficacy of IXL ELA among student subgroups

RESEARCH QUESTION 2B: ADDED BENEFIT OF SKILL MASTERY

In both the math and ELA analyses, we found a significant two-way interaction between achievement status and the ratio between skills mastered and skills proficient (Figure 5). For high-achieving students, Spring 2023 NSCAS scores were positively associated with the extent to which students persevered (i.e., by achieving skill mastery) while practicing on IXL Math ($p < .001$) and IXL ELA ($p = .02$). However, for low-achieving students, Spring 2023 NSCAS scores in math were not affected by the extent to which they practiced beyond proficiency to reach mastery ($p = .96$); that is, low-achieving students benefited similarly from reaching proficiency *or* mastery in more math skills. In ELA, Spring 2023 NSCAS scores were positively associated with the extent to which low-achieving students stopped practicing after achieving proficiency (rather than progressing to mastery; $p = .03$). All model results are reported in Appendix D (Tables D5-D6).

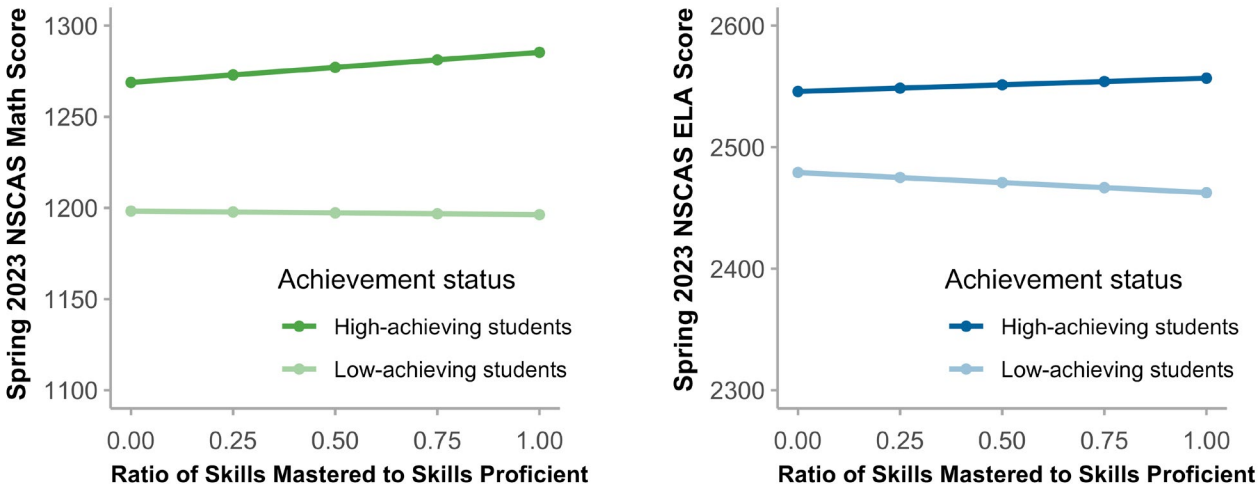


Figure 5. The effects of attaining skill mastery on IXL. A ratio of skills mastered to skills proficient closer to 0 indicates that a student more often stopped practicing after reaching proficiency, while a ratio closer to 1 indicates that a student worked to reach mastery in more of the skills in which they already reached proficiency.

Discussion and Recommendations

In this study, we investigated the impact of IXL Math and IXL ELA on academic achievement in a large, urban school district in Nebraska. Overall, increased IXL usage was associated with larger achievement gains (as measured by the Spring 2023 NSCAS assessments), controlling for baseline performance and key demographics. We also found that, on the Spring 2023 NSCAS assessments, students who used IXL Math or IXL ELA with high or moderate fidelity outperformed students who did not meet either IXL usage fidelity threshold. The impact of IXL was consistent across student subgroups, including students receiving special education services, low-achieving students, and high-achieving students. In addition, we found that persistent effort on skills to achieve mastery (beyond proficiency) further benefitted high-achieving students' performance on NSCAS assessments in both math and ELA. These results add to the large body of work showing that IXL is a highly effective way to boost student learning (e.g., An, 2022a, 2022b; Hargis, 2023; IXL Learning, 2017; Schonberg, 2022; Xiong, 2022).

In this sample (i.e., grades 3-5), students' average usage of IXL was slightly lower than IXL's recommendation of reaching proficiency in two skills per week in each subject (An et al., 2022). Nevertheless, students who reached proficiency in at least one IXL skill per week per subject—that is, those who used IXL with moderate fidelity—performed better than students who did not reach this threshold. Furthermore, in math, the effect of meeting the 2 SP/week (high-fidelity) threshold was larger than the effect of meeting the 1 SP/week (moderate-fidelity) threshold. These results are consistent with other research showing that interventions are more effective when they are carried out with fidelity (see Finney et al., 2021; Noell et al., 2002). Given that students in this district are already reaching proficiency in approximately one skill per week in each subject (see Table A1), we

recommend that educators encourage students to raise the bar and strive for proficiency in at least two on-grade-level skills per week in each subject.

In addition to the overall benefit to achieving proficiency in IXL skills, continuing to practice skills beyond proficiency in order to achieve mastery was associated with even better performance for students who were high achievers at baseline. These findings suggest that teachers using IXL would likely serve high-performing students better by encouraging them to spend their time and effort achieving mastery to solidify their knowledge rather than stopping at proficiency. Lower-performing students, on the other hand, may benefit more from gaining proficiency in relatively more skills as opposed to mastery in fewer skills in a given amount of practice time.

Although the day-to-day educational disruptions caused by the COVID-19 pandemic have largely subsided, students will continue to recover from learning loss following the pandemic (NAEP, 2022). With its personalized guidance and first-of-its-kind assessment suite, IXL plays a key role in helping students and teachers close learning gaps. IXL recognizes content areas where students may be struggling and engages them with material at the appropriate level. By meeting students where they are, IXL can help students “catch up” by providing support for relearning missed or forgotten material. This combination of personalized learning and remediation has been suggested as a highly effective approach for both recovering from pandemic-related learning loss and boosting subsequent learning gains (Kaffenberger, 2021). The results of this study support this hypothesis: students who used IXL made significantly larger gains than students who did not use IXL, and the impact of IXL was especially high for low-achieving students and students receiving special education services. Thus, IXL continues to prove a powerful platform in supporting student learning, helping students to both recover from pandemic-related educational challenges and unlock their full academic potential.

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Appendix A: Detailed Methodology

RESEARCH QUESTION 1A: USAGE EFFECTS OF IXL

Participants

In these analyses, we included all students who had complete data and nonzero IXL usage during the study period. After removing students with no IXL usage (math *n* = 63; ELA *n* = 100) and outliers[4], the final sample consisted of 4,534 students for the IXL Math analysis and 4,396 students for the IXL ELA analysis; descriptive statistics for these students' IXL usage during the study period can be found in Table A1.

Table A1. IXL Math and IXL ELA Usage During the 2022-23 School Year

Weekly IXL usage	IXL Math (*n* = 4,534)				IXL ELA (*n* = 4,396)			
	M	*SD*	Min	Max	*M*	*SD*	Min	Max
Time spent (in minutes)	14.86	12.44	0.12	61.85	12.30	10.55	0.12	54.56
Questions answered	44.85	35.14	1.07	194.78	40.91	34.22	1.17	186.17
Skills proficient	1.20	1.05	0.05	5.68	0.92	0.85	0.05	4.39

Analysis

We specified and tested separate multilevel models for each subject (IXL Math and IXL ELA) to account for clustering at the school level (i.e., students within a school tend to be more similar to each other than students in other schools). We examined SP/week[5] as the IXL usage indicator of interest; further model specification details are presented in Appendix B.

RESEARCH QUESTION 1B: IMPLEMENTATION FIDELITY

Design

We used a quasi-experimental pretest-posttest design to compare the Spring 2023 NSCAS scores of students who reached 1 SP/week or 2 SP/week (on average) during the 2022-23 school year to the scores of students who used IXL but did not meet the tested threshold, controlling for baseline performance and demographic characteristics.

Analysis

We specified and tested separate multilevel models for each subject (IXL Math and IXL ELA) to

[4] Students who had IXL usage greater than 3 *SD* above the mean were identified as outliers and removed prior to analysis (IXL Math outlier *n* = 291, or 5.9% of the initial sample; IXL ELA outlier *n* = 389, or 8.0% of the initial sample).

[5] We also examined questions per week and time spent per week as usage indicators and found that they were significant predictors of Spring 2023 NSCAS performance, controlling for baseline and demographics. For simplicity, we report only the SP/week usage models in this report.

account for clustering at the school level (i.e., students within a school tend to be more similar to each other than students in other schools). In these analyses, the IXL predictor of interest was a binary variable indicating usage threshold status (e.g., 1 = reached 1 SP/week, 0 = did not reach 1 SP/week). Further model specification details are presented in Appendix B.

RESEARCH QUESTION 2A: IXL EFFICACY AMONG STUDENT SUBGROUPS

Participants

In these analyses, we used the same inclusion criteria as described in Research Questions 1a-1b. Each student subgroup (students eligible for or receiving special education services, low-achieving students, and high-achieving students) was analyzed separately; the sample size for each analysis is reported in the corresponding table in Appendix D.

Design and Analysis

For this research question, we used the same design and analyses reported for Research Questions 1a-1b. We conducted separate usage and implementation fidelity analyses in math and ELA for each of the following subgroups: students eligible for or receiving special education services, low-achieving students, and high-achieving students. Model specification details are presented in Appendix B.

RESEARCH QUESTION 2B: ADDED BENEFIT OF SKILL MASTERY

Participants

The goal of these analyses was to examine the extent to which students benefited from progressing beyond proficiency in a skill to achieve mastery, especially with respect to students' status as low- or high-achieving. In order to maximize the sample size, we included any students from the larger usage analysis (Research Question 1a) who mastered at least one skill during the study period. The final sample consisted of 4,511 students for the IXL Math analysis and 4,324 students for the IXL ELA analysis.

Analysis

We followed similar analytic procedures described previously, with the following changes. First, we calculated the ratio of skills mastered (SM) to skills proficient (SP)[6]. Including this ratio as a predictor allowed us to model the potential benefit of continuing beyond proficiency to reach mastery. In this analysis, a ratio closer to zero indicates that a student more often stopped practicing skills after reaching proficiency, whereas a ratio closer to one indicates that a student worked all the way to mastery (i.e., SmartScore of 100) in most of the skills in which they reached proficiency (i.e., SmartScore of 80). To assess whether the effect of progressing to mastery on assessment scores depended on a students' initial academic standing, we included an interaction term between achievement status (low-achieving or high-achieving based on being below vs. above the 50th percentile at baseline) and the ratio of SM to SP. Further model specification details are provided in Appendix B.

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[6] Analyzing both skills mastered and skills proficient as separate predictors was not possible in this model as reaching mastery requires first reaching proficiency.

Appendix B: Model Specification

For each analysis, we specified and tested separate multilevel models in each subject (IXL Math and IXL ELA) to account for clustering at the school level (i.e., students within a school tend to be more similar to each other than students in other schools). In each model, we regressed Spring 2023 NSCAS score on the IXL predictor variable of interest (which varied by analysis) and covariates. Specifically, we controlled for the following covariates: baseline performance (Fall 2022 MAP score), grade level, gender, race, special education status[7], and gifted (High-Ability Learner, or HAL) status. In addition, the models for Research Question 2b controlled for SP/week as a measure of students' overall usage of the IXL platform.

The IXL predictor variable of interest for each analysis was as follows:

- Research Question 1a (usage): SP/week
- Research Question 1b (implementation fidelity): binary-coded IXL student status (i.e., 1 = reached tested usage threshold, 0 = did not reach tested usage threshold)
- Research Question 2a (subgroup efficacy): same predictors as Research Questions 1a-1b
- Research Question 2b (added benefit of skill mastery): Achievement status * SM:SP ratio

Following What Works Clearinghouse guidelines (WWC, 2022), each effect is accompanied by a test of statistical significance using a probability (*p*) value and a measure of effect size. The *p*-value is the probability of observing the current or more extreme data, assuming the effect is zero (Cohen, 1994). The smaller the *p*-value, the less likely it is that the result occurred at random; *p*-values less than .05 are considered statistically significant. In analyses that use a continuous IXL predictor variable (e.g., SP/week in Research Question 1a), we report a standardized regression coefficient (β) to gauge the practical significance of IXL usage relative to the effects of the covariates. In analyses using a categorical IXL predictor (e.g., usage threshold status in Research Question 1b), we report Hedges' *g* as the measure of effect size. For broad-scope educational assessments, moderate effect sizes range from about 0.10–0.20, and effect sizes of about 0.20 or higher are considered large (Kraft, 2020; Lipsey et al., 2012).

[7] This covariate was not included in the special education subgroup analyses, as it was unnecessary given the sample.

Appendix C: Overall Analysis Results

Table C1. Full Model Predicting Spring 2023 NSCAS Math Score from IXL Math Skills Proficient and Covariates

Predictor	*b*	*SE*	95% CI	β	*t*	*p*
(Intercept)	1270.88	3.44	1264.11 – 1277.67	0.27	369.228	<.001
Grade 4[1]	-22.91	1.65	-26.15 – -19.67	-0.27	-13.865	<.001
Grade 5[1]	-41.39	2.00	-45.32 – -37.49	-0.49	-20.702	<.001
Race: White[2]	4.56	1.50	1.62 – 7.51	0.02	3.036	.002
Special education[3]	0.52	1.91	-3.21 – 4.26	0.00	0.272	.786
Gender: male[4]	4.75	1.28	2.26 – 7.25	0.03	3.726	<.001
Gifted[5]	27.53	1.97	23.66 – 31.39	0.12	13.955	<.001
BOY MAP math score[6]	4.30	0.06	4.18 – 4.41	0.82	71.221	<.001
IXL Math Skills Proficient[6,7]	**8.54**	**0.70**	**7.17 – 9.91**	**0.11**	**12.220**	**<.001**

Note. Dependent variable: Score on the Spring 2023 NSCAS assessment in math. *b* = unstandardized regression coefficient, *SE* = standard error, CI = confidence interval, β = standardized regression coefficient, BOY = beginning-of-year.

[1] Dummy coded; grade 3 as reference group.
[2] Dummy coded; non-White students as reference group.
[3] Dummy coded; non-special education students as reference group.
[4] Dummy coded; female students as reference group.
[5] Dummy coded; non-gifted students as reference group.
[6] Grand-mean centered.
[7] Weekly average amount.

Table C2. Full Model Predicting Spring 2023 NSCAS ELA Score from IXL ELA Skills Proficient and Covariates

Predictor	*b*	*SE*	95% CI	β	*t*	*p*
(Intercept)	2538.42	2.71	2533.11 – 2543.72	0.15	936.369	<.001
Grade 4[1]	-10.77	1.89	-14.47 – -7.07	-0.13	-5.700	<.001
Grade 5[1]	-25.06	2.16	-29.31 – -20.85	-0.31	-11.614	<.001
Race: White[2]	4.61	1.76	1.15 – 8.05	0.02	2.613	.009
Special education[3]	-3.00	2.30	-7.50 – 1.52	-0.01	-1.301	.193
Gender: male[4]	-2.71	1.48	-5.61 – 0.20	-0.02	-1.827	.068
Gifted[5]	23.26	2.20	18.96 – 27.57	0.11	10.582	<.001
BOY MAP ELA score[6]	3.78	0.06	3.66 – 3.90	0.76	60.149	<.001
IXL ELA Skills Proficient[6,7]	**5.69**	**1.01**	**3.71 – 7.66**	**0.06**	**5.643**	**<.001**

Note. Dependent variable: Score on the Spring 2023 NSCAS assessment in ELA. *b* = unstandardized regression coefficient, *SE* = standard error, CI = confidence interval, β = standardized regression coefficient, BOY = beginning-of-year.

[1] Dummy coded; grade 3 as reference group.
[2] Dummy coded; non-White students as reference group.
[3] Dummy coded; non-special education students as reference group.
[4] Dummy coded; female students as reference group.
[5] Dummy coded; non-gifted students as reference group.
[6] Grand-mean centered.
[7] Weekly average amount.

Table C3. Full Model Predicting Spring 2023 NSCAS Math Score from Use of IXL Math with Fidelity and Covariates

Predictor	*b*	*SE*	95% CI	β	*t*	*p*
(Intercept)	1273.95	3.35	1267.34 – 1280.56	0.29	379.977	<.001
Grade 4[1]	-24.39	1.63	-27.59 – -21.19	-0.28	-14.929	<.001
Grade 5[1]	-50.73	1.90	-54.45 – -47.02	-0.59	-26.726	<.001
Race: White[2]	4.18	1.48	1.29 – 7.08	0.02	2.829	.005
Special education	-0.40	1.89	-4.10 – 3.30	0.00	-0.214	.831
Gender: male[4]	4.97	1.26	2.50 – 7.44	0.03	3.943	<.001
Gifted[5]	29.12	1.95	25.29 – 32.94	0.13	14.905	<.001
BOY MAP math score[6]	4.48	0.06	4.36 – 4.59	0.85	77.261	<.001
≥ 1 SP/week[7,8]	**11.16**	**1.43**	**8.36 – 13.96**	**0.06**	**7.805**	**<.001**
≥ 2 SP/week[9,10]	**14.06**	**1.69**	**10.76 – 17.37**	**0.07**	**8.324**	**<.001**

Note. Dependent variable: score on the Spring 2023 NSCAS assessment in math. *b* = unstandardized regression coefficient, *SE* = standard error, CI = confidence interval, β = standardized regression coefficient, BOY = beginning-of-year.

[1] Dummy coded; grade 3 as reference group.
[2] Dummy coded; non-White students as reference group.
[3] Dummy coded; non-special education students as reference group.
[4] Dummy coded; female students as reference group.
[5] Dummy coded; non-gifted students as reference group.
[6] Grand-mean centered.
[7] Dummy coded; students reaching < 1 SP/week as reference group.
[8] Treatment *n* = 2,175; comparison *n* = 2,713.
[9] Dummy coded; students reaching < 2 SP/week as reference group.
[10] Treatment *n* = 1,038; comparison *n* = 3,225.

Table C4. Full Model Predicting Spring 2023 NSCAS ELA Score from Use of IXL ELA with Fidelity and Covariates

Predictor	*b*	*SE*	95% CI			β	*t*	*p*
(Intercept)	2535.69	2.66	2530.49	–	2540.90	0.17	952.523	<.001
Grade 4[1]	-12.52	1.79	-16.03	–	-9.01	-0.15	-6.989	<.001
Grade 5[1]	-28.15	2.01	-32.09	–	-24.22	-0.34	-14.008	<.001
Race: White[2]	5.36	1.66	2.11	–	8.61	0.03	3.232	.001
Special education[3]	-5.40	2.16	-9.63	–	-1.16	-0.02	-2.494	.013
Gender: male[4]	-2.95	1.41	-5.72	–	-0.18	-0.02	-2.089	.037
Gifted[5]	24.04	2.10	19.93	–	28.16	0.11	11.435	<.001
BOY MAP ELA score[6]	3.83	0.06	3.72	–	3.95	0.77	65.410	<.001
≥ 1 SP/week[7,8]	**6.57**	**1.69**	**3.27**	**–**	**9.87**	**0.04**	**3.895**	**<.001**

Note. Dependent variable: score on the Spring 2023 NSCAS assessment in ELA. *b* = unstandardized regression coefficient, *SE* = standard error, CI = confidence interval, β = standardized regression coefficient, BOY = beginning-of-year.

[1] Dummy coded; grade 3 as reference group.
[2] Dummy coded; non-White students as reference group.
[3] Dummy coded; non-special education students as reference group.
[4] Dummy coded; female students as reference group.
[5] Dummy coded; non-gifted students as reference group.
[6] Grand-mean centered.
[7] Dummy coded; students reaching < 1 SP/week as reference group.
[8] Treatment *n* = 1,630; comparison *n* = 3,255.

Appendix D: Subgroup Analysis Results

Table D1. Summary of Student Subgroup Models Predicting Spring 2023 NSCAS Math Score from IXL Math Skills Proficient and Covariates

Predictor	*b*	*SE*	95% CI	β	*t*	*p*
Special education						
IXL Math Skills Proficient[1,2,3]	11.57	2.18	7.33 – 15.82	0.12	5.314	<.001
Low-achieving						
IXL Math Skills Proficient[1,2,4]	8.46	1.72	5.10 – 11.82	0.12	4.918	<.001
High-achieving						
IXL Math Skills Proficient[1,2,5]	7.93	0.76	6.43 – 9.42	0.12	10.389	<.001

Note. Dependent variable: Score on the Spring 2023 NSCAS assessment in math. *b* = unstandardized regression coefficient, *SE* = standard error, CI = confidence interval, β = standardized regression coefficient. This table summarizes the estimates for usage effects of IXL in each student subgroup, controlling for baseline performance and all other covariates.

[1] Grand-mean centered.
[2] Weekly average amount.
[3] n = 660.
[4] n = 1,172.
[5] n = 3,362.

Table D2. Summary of Student Subgroup Models Predicting Spring 2023 NSCAS ELA Score from IXL ELA Skills Proficient and Covariates

Predictor	*b*	*SE*	95% CI	β	*t*	*p*
Special education						
IXL ELA Skills Proficient[1,2,3]	7.27	3.32	0.80 – 13.73	0.06	2.190	.029
Low-achieving						
IXL ELA Skills Proficient[1,2,4]	7.46	2.58	2.40 – 12.49	0.08	2.887	.004
High-achieving						
IXL ELA Skills Proficient[1,2,5]	5.43	1.05	3.37 – 7.47	0.08	5.185	<.001

Note. Dependent variable: Score on the Spring 2023 NSCAS assessment in ELA. *b* = unstandardized regression coefficient, *SE* = standard error, CI = confidence interval, β = standardized regression coefficient. This table summarizes the estimates for usage effects of IXL in each student subgroup, controlling for baseline performance and all other covariates.

[1] Grand-mean centered.
[2] Weekly average amount.
[3] n = 624.
[4] n = 1,170.
[5] n = 3,226.

Table D3. Summary of Student Subgroup Models Predicting Spring 2023 NSCAS Math Score from Use of IXL Math with Fidelity and Covariates

Predictor	*b*	*SE*	95% CI	β	*t*	*p*
Special education						
≥ 1 SP/week[1]	16.77	4.06	8.86 – 24.73	0.09	4.127	<.001
≥ 2 SP/week[2]	21.20	5.66	10.16 – 32.39	0.08	3.744	<.001
Low-achieving						
≥ 1 SP/week[3]	10.63	2.94	4.90 – 16.40	0.08	3.618	<.001
≥ 2 SP/week[4]	15.08	4.31	6.66 – 23.55	0.08	3.494	<.001
High-achieving						
≥ 1 SP/week[5]	9.81	1.62	6.64 – 12.99	0.07	6.052	<.001
≥ 2 SP/week[6]	12.30	1.84	8.71 – 15.91	0.08	6.692	<.001

Note. Dependent variable: score on the Spring 2023 NSCAS assessment in math. *b* = unstandardized regression coefficient, *SE* = standard error, CI = confidence interval, β = standardized regression coefficient. This table summarizes the estimates for the effect of IXL usage with moderate (≥ 1 SP/week) or high (≥ 2 SP/week) fidelity in each student subgroup, controlling for baseline performance and all other covariates.

[1] Treatment *n* = 231; comparison *n* = 490.
[2] Treatment *n* = 89; comparison *n* = 632.
[3] Treatment *n* = 318; comparison *n* = 960.
[4] Treatment *n* = 112; comparison *n* = 1,166.
[5] Treatment *n* = 1,857; comparison *n* = 1,753.
[6] Treatment *n* = 926; comparison *n* = 2,684.

Table D4. Summary of Student Subgroup Models Predicting Spring 2023 NSCAS ELA Score from Use of IXL ELA with Fidelity and Covariates

Predictor	*b*	*SE*	95% CI	β	*t*	*p*
Special education						
≥ 1 SP/week[1]	11.45	5.18	1.38 – 21.58	0.05	2.211	.027
Low-achieving						
≥ 1 SP/week[2]	7.59	3.97	-0.17 – 15.35	0.05	1.909	.056
High-achieving						
≥ 1 SP/week[3]	7.16	1.79	3.66 – 10.65	0.05	4.005	<.001

Note. Dependent variable: score on the Spring 2023 NSCAS assessment in ELA. *b* = unstandardized regression coefficient, *SE* = standard error, CI = confidence interval, β = standardized regression coefficient. This table summarizes the estimates for the effect of IXL usage with moderate (≥ 1 SP/week) fidelity in each student subgroup, controlling for baseline performance and all other covariates.

[1] Treatment *n* = 167; comparison *n* = 553.
[2] Treatment *n* = 302; comparison *n* = 1,051.
[3] Treatment *n* = 1,328; comparison *n* = 2,204.

Table D5. Full Model Predicting Spring 2023 NSCAS Math Score from IXL Math Skills Mastered: Skills Proficient, Achievement Status, and Covariates

Predictor	*b*	*SE*	95% CI	β	*t*	*p*
(Intercept)	1150.56	7.06	1136.77 – 1164.35	0.02	162.94	<.001
Grade 4[1]	22.93	1.91	19.20 – 26.67	0.13	12.03	<.001
Grade 5[1]	47.66	1.99	43.76 – 51.57	0.26	23.90	<.001
Race: White[2]	8.62	1.85	5.00 – 12.26	0.04	4.65	<.001
Special education[3]	-16.06	2.32	-20.59 – -11.52	-0.07	-6.94	<.001
Gender: male[4]	12.04	1.57	8.98 – 15.11	0.07	7.69	<.001
Gifted[5]	80.87	2.14	76.68 – 85.08	0.36	37.73	<.001
IXL Math Skills Proficient[6,7]	12.92	0.86	11.23 – 14.60	0.16	15.03	<.001
High-achieving[8]	70.59	6.25	58.35 – 82.82	0.43	11.30	<.001
SM/SP ratio	-1.97	7.26	-16.20 – 12.22	0.04	-0.27	.786
High-achieving * SM:SP ratio	**18.46**	**7.77**	**3.26 – 33.69**	**0.02**	**2.38**	**.018**

Note. Dependent variable: score on the Spring 2023 NSCAS assessment in Math. *b* = unstandardized regression coefficient, *SE* = standard error, CI = confidence interval, β = standardized regression coefficient, SM = skills mastered, SP = skills proficient.

[1] Dummy coded; grade 3 as reference group.
[2] Dummy coded; non-White students as reference group.
[3] Dummy coded; non-special education students as reference group.
[4] Dummy coded; female students as reference group.
[5] Dummy coded; non-gifted students as reference group.
[6] Grand-mean centered.
[7] Weekly average amount.
[8] Dummy coded; low-achieving students as reference group.

Table D6. Full Model Predicting Spring 2023 NSCAS ELA Score from IXL ELA Skills Mastered:Skills Proficient, Achievement Status, and Covariates

Predictor	*b*	*SE*	95% CI			β	*t*	*p*
(Intercept)	2449.22	5.98	2473.52	–	2460.90	0.01	409.58	<.001
Grade 4[1]	21.47	2.12	17.33	–	25.63	0.12	10.13	<.001
Grade 5[1]	36.43	2.32	31.89	–	40.96	0.21	15.72	<.001
Race: White[2]	7.81	2.07	3.74	–	11.86	0.04	3.77	<.001
Special education[3]	-21.99	2.66	-27.19	–	-16.78	-0.09	-8.27	<.001
Gender: male[4]	-4.92	1.74	-8.33	–	-1.51	-0.03	-2.83	<.001
Gifted[5]	61.60	2.39	56.93	–	66.30	0.29	25.77	<.001
IXL ELA Skills Proficient[6,7]	9.95	1.21	7.59	–	12.31	0.10	8.25	<.001
High-achieving[8]	66.65	5.49	55.91	–	77.40	0.45	12.15	<.001
SM/SP ratio	-16.62	6.59	-29.51	–	-3.72	0.01	-2.52	.012
High-achieving * SM:SP ratio	**27.54**	**7.14**	**13.58**	**–**	**41.55**	**0.04**	**3.86**	**<.001**

Note. Dependent variable: score on the Spring 2023 NSCAS assessment in ELA. *b* = unstandardized regression coefficient, *SE* = standard error, CI = confidence interval, β = standardized regression coefficient, SM = skills mastered, SP = skills proficient.

[1] Dummy coded; grade 3 as reference group.
[2] Dummy coded; non-White students as reference group.
[3] Dummy coded; non-special education students as reference group.
[4] Dummy coded; female students as reference group.
[5] Dummy coded; non-gifted students as reference group.
[6] Grand-mean centered.
[7] Weekly average amount.
[8] Dummy coded; low-achieving students as reference group.

August 21, 2025

Hemingford Public School

Board of Education

911 Niobrara

Hemingford, NE 69348

Dear Negotiations Committee,

The Hemingford Education Association requests that the school board of the Hemingford Public Schools District take action to recognize Hemingford Education Association as exclusive bargaining agent for the district's non-supervisory certificated staff to begin bargaining next fall for the 2026-2027 contract year.

Please direct your response to the undersigned.

Sincerely,

Kaitlin Failor

Kaitlin Failor

President

Hemingford Education Association

USEFUL INFORMATION

Note to MAC Users:
You can use a MAC to input information but there have been issues noted in printing from the MAC. The only solution that is known is to print via a PC.

MUST COMPLETE THIS PAGE - Basic Data Input Area
The Basic Data Input Area is designed to help common information flow throughout the Budget Form.

Cover Page - Page 1
The Total Property Tax Requirement is carried forward from Page 2; however, you will need to input how much of that tax request is for Principal and Interest on Bonds.

Outstanding Bonded Indebtedness - if you complete the worksheet pages this will fill in automatically. If you do not you will need to indicate your balances as of September 1.

Pages 2 through 4 (If you utilize the Worksheet Pages - Begin Inputting on Worksheet Pages)
These pages are currently completed with formulas which pull from the Worksheet Pages. **If you utilize the Worksheet Pages, Pages 2 through 4 will be completed automatically for you.** If you do not wish to utilize the worksheet pages you can simply type in your numbers on Pages 2 through 4. The only cells with formulas that cannot be over-written are those that provide an essential calculation (example - Total Resources Available).

A complete and accurate budget should have the prior year Balance Forward **equal** Total of Beginning Balances. We have built into the spreadsheet a comparison between these two numbers. If these two numbers **do not agree** a statement will appear indicating it must equal prior year balance forward.

We have also built in a comparison between the Total Requirement and Total Resources Available. If these two numbers **do not agree** in the budget you will receive the message "Budget Not Balanced".

Worksheet Pages - *FOR YOUR USE ONLY* - NOT TO BE SUBMITTED TO THE STATE
The last sheets of this file are worksheet (individual fund) pages. These pages are provided for your use; however, you do not have to use them. For more information about the worksheets, see the Budget Guidelines. ***If you do utilize the Worksheet Pages, Pages 2 through 4 will be completed automatically for you.***

Moving From Page to Page:
There are several ways to move around your budget form. You can hold down the CTRL and hit either Page Down (Moves you ahead a sheet) or Page Up (Moves you to previous sheet). The other option is to use your mouse to click on the different sheet tabs.

I Want to See Descriptions on Left When Inputting Numbers in Budget Column:
On the "View" ribbon in the Window area there is an item called Freeze Panes. Freeze Panes allows you to tell the computer what columns and/or rows you wish to see at all times. Freeze Panes will freeze whatever rows are above your active cell and also whatever columns are to the left of your active cell. By choosing the option again it will turn the option off.

The Cell Is Locked:
UNDER NO CIRCUMSTANCES WILL PASSWORDS BE GIVEN OUT. Either the cell is locked because it contains a formula or you are trying to input information in the wrong cell.

You Note Any Errors Or Have Any Problems:
We have tested this spreadsheet through various methods to help identify any problem areas and to ensure formulas are correct. However, we cannot account for all the variables that occur with each individual budget. If you feel there is an error in a formula please contact us immediately so we can go over the problem(s) and if necessary correct the situation.

All of your comments or ideas to better the budget form are taken into consideration. Please feel free to contact us at (402) 471-2111 with these items. We make this available to you to HELP in the budget process and wish to make any improvements that would make the spreadsheet more user friendly.

Checklist of Items to be Completed and Submitted

The following items must be submitted to the State Auditor and are due by September 30th:

- [ ] Budget Form (page 1 - 6)
- [ ] Joint Public Agency & Interlocal Agreements is indicated by checking the box. If school district answers YES, the "Report of Joint Public Agency & Interlocal Agreements is due on or before September 30th and should be included with budget submission or filed seperately with the APA. This report should detail interlocal agreements the District was involved in during the 2024-2025 year.
- [ ] Schedules A, B, and D
- [ ] Property Tax Request Resolution
- [ ] Notice of Budget Hearing
- [ ] Notice of Special Hearing to Set the Final Tax Request
- [ ] Proof of Publication for: 1) Notice of Budget Hearing; 2) Notice of Special Hearing to Set the Final Tax Request (if applicable); and 3) Notice of Property Tax Authority, Board Vote to Access the Additional Property Tax Authority
- [ ] Certificate of Valuation(s) from County Assessor. Total Certified Valuation was completed on Page 1.
- [ ] Board minutes showing the School Board's approval of the budget
- [ ] Board minutes showing 70% board approval to request more property taxes than the certified authority amount (if applicable)
- [ ] Election Ballot and Certification of Election Results for a successful election to exceed the Property Tax Authority (if applicable)
- [ ] Election Ballot and Certification of Election Results for a successful election to override the levy limitation (if applicable)
- [ ] Election Ballot and Certification of Election Results for a successful election to exceed the expenditure limitation (if applicable)
- [ ] Printout of LC-2 and the Special Grant Fund List (if applicable)

Checklist of items to ensure budget forms properly completed:

- [ ] Page 2, Total Resources Available (Column 4) agrees to Total Requirements (Column 9).
- [ ] Page 2, Total Beginning Balance (Column 1) agrees to Page 3 Total Ending Balance (Column 8).
- [ ] Page 3, Total Beginning Balance (Column 1) agrees to Page 4 Total Ending Balance (Column 8).
- [ ] Page 4, Total Beginning Balance (Column 1) agrees to the prior School District Budget Form, Page 4, Total Ending Balance (Column 8). If it does not agree, please provide explanation.
- [ ] Page 6 - Real Growth Value per Assessor agrees to Certification from County Assessor
- [ ] Page 6 - Prior Year Total Real Property Valuation agrees to Certification from County Assessor
- [ ] Page 6 - Current tax request (line 7) agrees to total non-bond tax request on cover page
- [ ] Page 6 - Prior year tax request (line 1) agrees to non-bond tax request on cover page of last year's budget
- [ ] Page 6 - If Line 7 is greater than Line 6, political subdivision participated in Joint Public Hearing, and was included on Postcard notification
- [ ] Schedule B, shows the District is in compliance with State Statutes

Please Complete this **Basic Data Input** -It will put information consistently throughc

INPUT ↓

County-District #:	07-0010	
Name of School:	Hemingford Public Schools	
Name of County:	Box Butte	*Do not include the word "County"*
Class:	II	
Current School District Taxable Value	868,502,082	*From County Assessor Certifi*
Prior School District Taxable Value	742,686,756	*From Prior Year Budget, Cove*
Prior Year TOTAL Property Tax Request	6,691,919.00	*From Prior Year Budget, Cove*
Prior Year Property Tax Request - All Other Purposes ONLY	6,691,919.00	*From Prior Year Budget, Cove*
Prior Year Levy Rate	0.901043	*Prior Year total levy set by Cc*
School District Real Growth Value	7,034,245.00	*From County Assessor Certifi*
School District Prior Year Total Real Property Valuation	742,686,756.00	*From County Assessor Certifi*
Hearing Held On:		
Day of month:	15	
Month:	September	
Year:	2025	
Time:	7:00	
A.M. or P.M.:	P.M.	
Location of Hearing:	South Campus (816 Niobrara Avenue, Hemingford, Nebraska)	
Special Hearing to Set Final Tax Request Held On:		
Day of month:	15	
Month:	September	
Year:	2025	
Time:	7:15	
A.M. or P.M.:	P.M.	
Location of Hearing:	South Campus (816 Niobrara Avenue, Hemingford, Nebraska)	

REPORT OF JOINT PUBLIC AGENCY AND INTERLOCAL AGREEMENTS

REPORTING PERIOD JULY 1, 2024 THROUGH JUNE 30, 2025

Hemingford Public Schools — SUBDIVISION NAME

Box Butte — COUNTY

Parties to Agreement (Column 1)	Agreement Period (Column 2)	Description (Column 3)
ESU#13	8/1/24 - 7/31/25	Day Treatment Program
ESU#13	7/1/24 - 6/30/25	Interactive Video and Audio (Distance Learning Classes)
Box Butte County Agricultural Society	7/1/24 - 6/30/25	Shared Barn at Fairgrounds. Hemingford Public Schools utilizes as a bus barn during the year. Ag Soeicety uses for large animal shows, etc.
Crawford Public Schools	6/1/24 - 5/31/25	Student transportation to curricular and extra-curricular school activities.
Nebraska PowerSchool Cooperative	10/1/24 - 9/1/25	Service and support for Student Information System and State Reporting (ADVISER)

REPORT OF TRADE NAMES, CORPORATE NAMES, BUSINESS NAMES

REPORTING PERIOD JULY 1, 2024 THROUGH JUNE 30, 2025

Hemingford Public Schools	**Box Butte**
SUBDIVISION NAME	COUNTY

List all Trade Names, Corporate Names and Business Names under which the political subdivision conducted business.

2025-2026
STATE OF NEBRASKA
SCHOOL DISTRICT BUDGET FORM

County-District #: 07-0010 **Class #: II**

Hemingford Public Schools

TO THE COUNTY BOARD AND COUNTY CLERK OF

Box Butte County

This budget is for the Period SEPTEMBER 1, 2025 through AUGUST 31, 2026

Upon Filing, The School Certifies the Information Submitted on this Form to be Correct:

AMOUNT OF PERSONAL AND REAL PROPERTY TAX REQUIRED FOR:	Principal and Interest on Bonds	All Other Purposes	TOTAL
General Fund	$ -	$ 6,060,606.00	$ 6,060,606.00
Bond Fund(s) *[If More Than 1 Bond Fund - Total All Together]*	$ -		$ -
Special Building Fund	$ -	$ 752,966.00	$ 752,966.00
Qualified Capital Purpose Undertaking Fund	$ -	$ 75,758.00	$ 75,758.00
Total All Funds	$ -	$ 6,889,330.00	$ 6,889,330.00

Outstanding Bonded Indebtedness as of September 1, 2025

(Include Bond Fund(s) and Qualified Capital Purpose Undertaking Fund)

$ -	Principal
$ -	Interest
$ -	**Total Outstanding Bonded Indebtedness**

Total Certified Valuation (All Counties) $ 868,502,082

*(Certification of Valuation(s) from County Assessor **MUST** be attached)*

Report of Joint Public Agency & Interlocal Agreements

Was this Subdivision involved in any Interlocal Agreements or Joint Public Agencies for the reporting period of July 1, 2024 through June 30, 2025?

[X] YES [ ] NO

*If **YES**, Please submit Interlocal Agreement Report by September 30th.*

County Clerk's Use Only

Report of Trade Names, Corporate Names & Business Names

Did the subdivision operate under a separate Trade Name, Corporate Name, or other Business Name during the period of July 1, 2024 through June 30, 2025?

[ ] YES [X] NO

*If **YES**, Please submit Trade Name Report by September 30th.*

Has your School District held a successful election to override the levy limits provided in Statute 77-3442, which is in effect for 2024-2025 school fiscal year?

[ ] YES [X] NO

APA Contact Information

Auditor of Public Accounts
PO Box 98917
Lincoln, NE 68509

Telephone: (402) 471-2111 **FAX:** (402) 471-3301

Website: auditors.nebraska.gov

Questions - E-Mail: Jeff.Schreier@nebraska.gov

Submission Information

Budget Due by 9-30-2025

Submit budget to:

1. Auditor of Public Accounts -Electronically on Website or Mail
2. County Board (SEC. 13-508), C/O County Clerk
3. Nebraska Dept. of Education -Upload to NDE Portal only

BUDGET STATEMENT AND CERTIFICATION OF TAX

County-District # 07-0010
Hemingford Public Schools

2025-2026 BUDGET ADOPTED									
	TOTAL BEGINNING BALANCE (Column 1)	**TOTAL AVAILABLE RESOURCES BEFORE PROPERTY TAXES** (Including Beginning Balances) (Column 2)	**PERSONAL AND REAL PROPERTY TAXES** (Column 3)	**TOTAL RESOURCES AVAILABLE** (Col 2 + Col 3) (Column 4)	**TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS - SPECIAL EDUCATION** (Column 5)	**TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS - NON-SPECIAL EDUCATION** (Column 6)	**TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS** (Col 5 + Col 6) (Column 7)	**NECESSARY CASH RESERVE** (Column 8)	**TOTAL REQUIREMENTS** (Col 7 + Col 8) (Column 9)
General	4,541,786.00	6,573,995.00	6,000,000.00	12,573,995.00	1,250,000.00	7,652,899.00	8,902,899.00	3,671,096.00	12,573,995.00
Depreciation	301,838.00	326,838.00		326,838.00			326,838.00		326,838.00
Employee Benefit	87,546.00	107,546.00		107,546.00			107,546.00	-	107,546.00
Contingency	-	-		-			-		-
Activities	245,823.00	595,823.00		595,823.00			595,823.00	-	595,823.00
School Nutrition	101,370.00	447,370.00		447,370.00			447,370.00	-	447,370.00
Bond	-	-	-	-			-	-	-
Special Building	2,897,695.00	2,898,195.00	745,436.00	3,643,631.00			3,643,631.00		3,643,631.00
Qualified Capital Purpose Undertaking	55,975.00	55,975.00	75,000.00	130,975.00			130,975.00	-	130,975.00
Cooperative	72,187.00	177,321.00		177,321.00			105,712.00	71,609.00	177,321.00
Student Fee	-	-		-			-	-	-
				-					-
TOTAL ALL FUNDS	8,304,220.00	11,183,063.00	6,820,436.00	18,003,499.00	1,250,000.00	7,652,899.00	14,260,794.00	3,742,705.00	18,003,499.00

PERSONAL AND REAL PROPERTY TAX RECAP	**General Fund**	**Bond Fund(s)** [Total Of All Bond Funds]	**Special Building Fund**	**Qualified Capital Purpose Undertaking Fund**
PERSONAL AND REAL PROPERTY TAXES FROM COLUMN 3 (Line A)	6,000,000.00	-	745,436.00	75,000.00
COUNTY TREASURER'S COMMISSION 1% OF TAXES COLLECTED (Line B)	60,606.00	-	7,530.00	758.00
TOTAL PERSONAL AND REAL PROPERTY TAXES (Line A + Line B) (Line C)	6,060,606.00	-	752,966.00	75,758.00

CERTIFIED STATE AID	**MOTOR VEHICLE TAXES**
$ 1,223,985.00	**$ 165,000.00**

COUNTY TREASURER'S BALANCE, 9-1-2025			
800,000.00	-	50,000.00	5,000.00

2024-2025 ACTUAL/ESTIMATED								
	TOTAL BEGINNING BALANCE (Column 1)	**TOTAL AVAILABLE RESOURCES BEFORE PROPERTY TAXES** (Including Beginning Balances) (Column 2)	**PERSONAL AND REAL PROPERTY TAXES** (Column 3)	**TOTAL RESOURCES AVAILABLE** (Col 2 + Col 3) (Column 4)	**TOTAL DISBURSEMENTS & TRANSFERS - SPECIAL EDUCATION** (Column 5)	**TOTAL DISBURSEMENTS & TRANSFERS - NON-SPECIAL EDUCATION** (Column 6)	**TOTAL DISBURSEMENTS & TRANSFERS** (Col 5 + Col 6) (Column 7)	**TOTAL ENDING BALANCE** (Col 4 - Col 7) (Column 8)
General	3,846,892.00	8,269,651.00	4,546,538.00	12,816,189.00	851,901.00	7,422,502.00	8,274,403.00	4,541,786.00
Depreciation	100,692.00	301,838.00		301,838.00			-	301,838.00
Employee Benefit	57,051.00	107,207.00		107,207.00			19,661.00	87,546.00
Contingency	-	-		-			-	-
Activities	301,202.00	635,229.00		635,229.00			389,406.00	245,823.00
School Nutrition	50,864.00	424,485.00		424,485.00			323,115.00	101,370.00
Bond	-	-	-	-			-	-
Special Building	2,824,062.00	2,970,066.00	219,460.00	3,189,526.00			291,831.00	2,897,695.00
Qualified Capital Purpose Undertaking	-	26,250.00	29,725.00	55,975.00			-	55,975.00
Cooperative	40,793.00	172,192.00		172,192.00			100,005.00	72,187.00
Student Fee	-	-		-			-	-
				-				-
TOTAL ALL FUNDS	7,221,556.00	12,906,918.00	4,795,723.00	17,702,641.00	851,901.00	7,422,502.00	9,398,421.00	8,304,220.00

NOTE: Total Disbursements and Transfers (Column 7) is the sum of Column 5 and Column 6 for the General Fund only. For all other funds, numbers will pull automatically from the Worksheets

MOTOR VEHICLE TAXES	
$	**164,026.00**

County-District # 07-0010

Hemingford Public Schools

2023-2024 ACTUAL								
	TOTAL BEGINNING BALANCE (Column 1)	**TOTAL AVAILABLE RESOURCES BEFORE PROPERTY TAXES** (Including Beginning Balances) (Column 2)	**PERSONAL AND REAL PROPERTY TAXES** (Column 3)	**TOTAL RESOURCES AVAILABLE** (Col 2 + Col 3) (Column 4)	**TOTAL DISBURSEMENTS & TRANSFERS - SPECIAL EDUCATION** (Column 5)	**TOTAL DISBURSEMENTS & TRANSFERS - NON-SPECIAL EDUCATION** (Column 6)	**TOTAL DISBURSEMENTS & TRANSFERS** (Col 5 + Col 6) (Column 7)	**TOTAL ENDING BALANCE** (Col 4 - Col 7) (Column 8)
General	2,692,752.00	5,601,505.00	5,808,825.00	11,410,330.00	689,365.00	6,874,073.00	7,563,438.00	3,846,892.00
Depreciation	50,005.00	100,692.00		100,692.00			-	100,692.00
Employee Benefit	36,546.00	76,712.00		76,712.00			19,661.00	57,051.00
Contingency	-	-		-			-	-
Activities	292,853.00	625,787.00		625,787.00			324,585.00	301,202.00
School Lunch	36,231.00	349,371.00		349,371.00			298,507.00	50,864.00
Bond	-	-	-	-			-	-
Special Building	2,522,606.00	2,713,157.00	282,953.00	2,996,110.00			172,048.00	2,824,062.00
Qualified Capital Purpose Undertaking	-	-	-	-			-	-
Cooperative	50,005.00	136,953.00		136,953.00			96,160.00	40,793.00
Student Fee	-	-		-			-	-
				-				-
TOTAL ALL FUNDS	$ 5,680,998.00	9,604,177.00	6,091,778.00	15,695,955.00	689,365.00	6,874,073.00	8,474,399.00	7,221,556.00

NOTE: Total Disbursements and Transfers (Column 7) is the sum of Column 5 and Column 6 for the General Fund only. For all other funds, numbers will pull automatically from the Worksheets

MOTOR VEHICLE TAXES
$ 211,286.00

CORRESPONDENCE INFORMATION

ENTITY OFFICIAL ADDRESS

If no official address, please provide address where correspondence should be sent

NAME	**Hemingford Public Schools**
ADDRESS	**913 Niobrara Avenue**
CITY & ZIP CODE	**Hemingford 69348**
TELEPHONE	**308-487-3328**
WEBSITE	

	BOARD CHAIRPERSON	CLERK/TREASURER/SUPERINTENDENT/OTHER	PREPARER
NAME	Justin Ansley	Dr. Travis Miller	Dr. Travis Miller
TITLE /FIRM NAME	Board President	Superintendent	Superintendent
TELEPHONE	308-760-7004	308-487-3328	308-487-3328
EMAIL ADDRESS	justin.ansley@gubn.org	tmiller@gubn.org	tmiller@gubn.org

For Questions on this form, who should we contact (please √ one): Contact will be via email if supplied.

- [ ] Board Chairperson
- [ ] Clerk / Treasurer / Superintendent / Other
- [X] Preparer

Hemingford Public Schools

2025-2026 ALLOWABLE GROWTH PERCENTAGE COMPUTATION FORM

CALCULATION OF ALLOWABLE GROWTH PERCENTAGE

Prior Year Non-Bond Property Tax Request (1) $ 6,691,919.00
*(Total Personal and Real Property Tax Required for All Other Purposes from **prior year** budget - Cover Page)*

Base Limitation Percentage Increase (2%) 2.00 % (2)

Real Growth Percentage Increase

2025 Real Growth Value per Assessor	/	Prior Year Total Real Property Valuation per Assessor	=		
7,034,245.00	/	742,686,756.00	=	0.95 %	(3)

Total Allowable Growth Percentage Increase (Line 2 + Line 3) (4) 2.95 %

Allowable Dollar Amount of Increase to Property Tax Request (Line 1 x Line 4) (5) $ 197,411.61

TOTAL PROPERTY TAX REQUEST (Line 1 + Line 5) (6) **$ 6,889,330.61**
(Without needing to attend Joint Public Hearing, or be included on postcard notification)

ACTUAL PROPERTY TAX REQUEST

2025-2026 ACTUAL Non-Bond Property Tax Request (7) $ 6,889,330.00
(Total Personal and Real Property Tax Required for All Other Purposes from Cover Page)

Property Tax Request is within allowable growth percentage. Political subdivision is NOT required to complete postcard notification requirements, or participate in the joint public hearing.

If line (7) is **greater than** line (6), your political subdivision **is required** to participate in the joint public hearing, and complete the postcard notification requirements of §77-1633. You must provide the required information to the County Assessor electronically by September 4th. You are not required to hold the Special Hearing to Set the Final Tax Request outlined in §77-1632. The joint public hearing is completed in lieu of this hearing.

If line (7) is **less than** line (6), your political subdivision **is not required** to participate in the joint public hearing, or complete the postcard notification requirements of §77-1633. You are required to hold the Special Hearing to Set the Final Tax Request outlined in §77-1632.

SCHEDULE A GENERAL FUND LID EXCLUSIONS

County-District # 07-0010

Hemingford Public Schools

Line No.		2025-2026 Amount Budgeted To Spend
1	Repairs to Infrastructure Damaged by a Natural Disaster: (List repair)	
2		
3		
4		
5		
6		
7		
8		
9	**Total Repairs to Infrastructure Damaged by a Natural Disaster** (Lines 1 through 8)	$ -
10	**Judgments:** (List the types of judgments obtained against your School District to the extent such judgment is not paid by liability insurance)	
11		
12		
13		
14		
15		
16		
17	**Total Judgments** (Lines 11 through 16)	$ -
18	**Distance Education Courses**	
19	**Amounts eligible as exclusion for Voluntary Termination Agreements**	
20	**Retirement Contribution Increase**	$ 148,263.00
21	**Native American Impact Aid**	
22	**Total General Fund Lid Exclusions - To LC-2 Form** (Line 9 + Line 17 to 21)	$ 148,263.00

Hemingford Public Schools

Schedule B - Levies

Levy Limit Compliance

NOTE: The Schedule portion below is to determine if the School District has met the levy limitations.

Line No.		General Fund (Column A)	Bond Funds (Column B)	Special Building Funds (Column C)	Qualified Capital Purpose Undertaking Funds (Column D)
1	Total Personal and Real Property Taxes -Cover Page	6,060,606.00	-	752,966.00	75,758.00
2	**Exclusions:**				
3	Bonded indebtedness secured by a levy on property (Includes Co. Treasurer Comm.)	-	-		-
4	Judgments not paid by liability insurance	-			
5					
6	Voluntary termination agreements with certificated Teachers 9/1/17 and after	-			
7					
8					
9					
10					
11					
12	**Total Exclusions (Line 3 + Line 11)**	-	-	-	-
13	Total Personal and Real Property Tax Requirement Subject to the Levy Limitation (Line 1 minus Line 12)	6,060,606.00	-	752,966.00	75,758.00
14	Assessed Valuation	868,502,082	868,502,082	868,502,082	868,502,082
15	Levy Subject to Limitation ((Line 13 / Line 14) x 100)	0.697823	0.000000	0.086697	0.008723
16	Total Levy for Compliance	0.793243			

Levies Expected to be Set by County

NOTE: The Schedule portion below is to assist with the Levy setting process.

Fund	Property Taxes	Valuation	Expected Levy
General Fund	$ 6,060,606.00	$ 868,502,082	0.697823
Special Building Fund	$ 752,966.00	$ 868,502,082	0.086697
Bond Fund	$ -	$ 868,502,082	0.000000
Bond Fund	$ -	$ 868,502,082	0.000000
Bond Fund	$ -	$ 868,502,082	0.000000
QCPUF Fund	$ 75,758.00	$ 868,502,082	0.008723
QCPUF Fund	$ -	$ 868,502,082	0.000000
	$ -	$ 868,502,082	0.000000
	$ -	$ 868,502,082	0.000000
	$ -	$ 868,502,082	0.000000
	$ -	$ 868,502,082	0.000000
	$ -	$ 868,502,082	0.000000
	$ -	$ 868,502,082	0.000000
Total	$ 6,889,330.00		$ 0.793243

Must agree to Cover

Property Tax Request MUST also be within the School District's Property Tax Request Authority.

If the **total** levy on Line 16 is $1.05, or less, the levy limitation per State Statute Section 77-3442 has been met.

If Total of Line 16 is greater than $1.05 and you **did not** hold a successful election to override the levy, you are in violation of the levy lid. The school district **must reduce property taxes** to meet the levy limitation.

If Total of Line 16 is greater than $1.05 and you **held** a successful election to override the levy, which is in effect for the you must **attach a copy of the election ballot and the certified election returns** to your budget.

Qualified Capital Purpose Undertaking Fund levy. A district may only exceed the maximum levy of five and one-fifth cents per one hundred dollars of taxable valuation in any year if (i) the taxable valuation of the district is lower than the taxable valuation in the year in which the district last issued capital purpose undertaking bonds or (ii) such maximum levy is insufficient to meet the annual principal and interest obligations for all capital purpose undertaking bonds. Projects beginning after April 19, 2016 can only have a maximum levy of three cents per one hundred dollars of taxable valuation in any year. (Statute 79-10,110 & 79-10,110.02).

Special Building Fund levy. Limit on Building Fund levy of 14 cents (Statute 79-10,120)

REMINDER: School districts that have combined levies greater than $1.20 or the combined levies that exceeded the maximum levy approved at a special election may be subject to petitions for the free holding of territory. Combined levies do not include levies for bonded indebtedness approved by the voters of a school district or levies for the refinancing of such bonded indebtedness.

Voluntary Termination Exclusions

Line 6 Amount levied by school district at maximum levy to pay for current and future qualified voluntary termination incentives for certificated teachers pursuant to statute. Payments cannot exceed $35,000, must be paid within 5 years, will result in savings to the school, were not included in a collective bargaining agreement

Line 7 Amounts levied by school district at maximum levy to pay for 50% of the current and future sums agreed to be paid to certificated employees in exchange for voluntary termination between 9/1/18 to 8/31/19 as a result of collective bargaining agreement in force on 9/1/17

Superintendent Pay Transparency Notice—Proposed Contract (*Name of current or new superintendent)*

Notice is hereby given that _____Schools has approval of a proposed superintendent employment contract/contract amendment on its agenda for the board meeting to be held on _____, 20___ at ___ am/pm at the _____ Room in _____, Nebraska.

After the 2025/26 school year, how many years remain on the contract:
(Column F must be completed if additional years remain on contract.) 1

The estimated costs to the district for the 2025/26 year and future years are listed below:

	2025/26 Base Pay, Additional Compensation & Benefits	Future Base Pay, Additional Compensation & Benefits per Contract	TOTAL CONTRACT COST
Base Pay for the Total FTE	$ 157,013.00	$ 157,013.00	**$ 314,026.00**
Compensation for activities outside of the regular salary:			
• *Extended contracts / Activities outside of regular salary*			$ -
• *Bonus/Incentive/Performance Pay*			$ -
• *Stipends*			$ -
• *All other costs not mentioned above*			**$ -**
Benefits and Payroll Costs Paid by district:			
• *Insurances (Health, Dental, Life, Long Term Disability)*			$ -
• *Cafeteria Plan Stipend*			$ -
• *Cash in lieu of insurance*			$ -
• *Employee's share of retirement, deferred compensation, FICA and Medicare **if paid by the district***			$ -
• *District's share of retirement, FICA and Medicare*	$ 24,698.00	$ 24,698.00	$ 49,396.00
• *IRS value of housing allowance*			$ -
• *IRS value of vehicle allowance*			$ -
• *Additional leave days*			$ -
• *Annuities*			$ -
• *Service credit purchase*			$ -
• *Association / Membership dues*	$ 1,500.00	$ 1,500.00	$ 3,000.00
• *Cell Phone/Internet reimbursement*	$ 1,200.00	$ 1,200.00	$ 2,400.00
• *Relocation reimbursement*			$ -
• *Travel allowance/reimbursement*			$ -
• *Mileage Allowance*			$ -
• *Educational tuition assistance*			$ -
• *All other benefit costs not mentioned above*	$ 33,000.00	$ 33,000.00	$ 66,000.00
Totals:	**$ 217,411.00**	**$ 217,411.00**	**$ 434,822.00**

Schedule D

RESOLUTION SETTING THE PROPERTY TAX REQUEST

RESOLUTION NO. 2025-01

WHEREAS, Nebraska Revised Statute 77-1632 and 77-1633 provides that the Governing Body of Hemingford Public Schools passes by a majority vote a resolution or ordinance setting the tax request; and

WHEREAS, a special public hearing was held as required by law to hear and consider comments concerning the property tax request;

NOW, THEREFORE, the Governing Body of Hemingford Public Schools resolves that:

1. The 2025-2026 property tax request be set at:

General Fund:	$	6,060,606.00
Bond Fund:	$	-
Special Building Fund:	$	752,966.00
Qualified Capital Purpose Undertaking Fund:	$	75,758.00

2. The total assessed value of property differs from last year's total assessed value by 16.94 percent.

3. The tax rate which would levy the same amount of property taxes as last year, when multiplied by the new total assessed value of property would be 0.770513 per $100 of assessed value.

4. Hemingford Public Schools proposes to adopt a property tax request that will cause its tax rate to be 0.793243 per $100 of assessed value.

5. Based on the proposed property tax request and changes in other revenue, the total operating budget of Hemingford Public Schools will increase (decrease) last year's budget by 6.56 percent.

6. A copy of this resolution be certified and forwarded to the County Clerk on or before October 15, 2025.

Motion by _____, seconded by _____ to adopt Resolution #_____.

Voting yes were:	Voting no were:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Dated this _____ day of _____, 2025

NOTICE OF BUDGET HEARING AND BUDGET SUMMARY

Hemingford Public Schools (07-0010) in Box Butte County, Nebraska

PUBLIC NOTICE is hereby given, in compliance with the provisions of State Statute Sections 13-501 to 13-513, that the governing body will meet on the 15 day of September, 2025 at 7:00 o'clock, P.M., at South Campus (816 Niobrara Avenue, Hemingford, Nebraska) for the purpose of hearing support, opposition, criticism, suggestions or observations of taxpayers relating to the following proposed budget and to consider amendments relative thereto. The budget detail is available at the office of the Clerk/Secretary during regular business hours. For more information on statewide receipts and expenditures, and to compare cost per pupil and performance to other school districts, go to: https://nep.education.ne.gov

FUNDS	Actual Disbursements & Transfers 2023-2024 (1)	Actual/Estimated Disbursements & Transfers 2024-2025 (2)	Budgeted Disbursements & Transfers 2025-2026 (3)	Necessary Cash Reserve (4)	Total Available Resources Before Property Taxes (5)	Total Personal and Real Property Tax Requirement (7)
General	$ 7,563,438.00	$ 8,274,403.00	$ 8,902,899.00	$ 3,671,096.00	$ 6,573,995.00	$ 6,060,606.00
Depreciation	$ -	$ -	$ 326,838.00		$ 326,838.00	
Employee Benefit	$ 19,661.00	$ 19,661.00	$ 107,546.00	$ -	$ 107,546.00	
Contingency	$ -	$ -	$ -		$ -	
Activities	$ 324,585.00	$ 389,406.00	$ 595,823.00	$ -	$ 595,823.00	
School Nutrition	$ 298,507.00	$ 323,115.00	$ 447,370.00	$ -	$ 447,370.00	
Bond	$ -	$ -	$ -	$ -	$ -	$ -
Special Building	$ 172,048.00	$ 291,831.00	$ 3,643,631.00		$ 2,898,195.00	$ 752,966.00
Qualified Capital Purpose Undertaking	$ -	$ -	$ 130,975.00	$ -	$ 55,975.00	$ 75,758.00
Cooperative	$ 96,160.00	$ 100,005.00	$ 105,712.00	$ 71,609.00	$ 177,321.00	
Student Fee	$ -	$ -	$ -	$ -	$ -	
	$ -	$ -	$ -	$ -	$ -	
TOTALS	$ 8,474,399.00	$ 9,398,421.00	$ 14,260,794.00	$ 3,742,705.00	$ 11,183,063.00	$ 6,889,330.00

	Bond Purposes	Non-Bond Purposes	Total
Breakdown of Property Tax	$ -	$ 6,889,330.00	$ 6,889,330.00

Notice of Special Hearing To Set Final Tax Request

Hemingford Public Schools (07-0010) in Box Butte County, Nebraska

PUBLIC NOTICE is hereby given, in compliance with the provisions of State Statute Section 77-1632, that the governing body will meet on the 15 day of, September 2025 at 7:15 o'clock P.M., at South Campus (816 Niobrara Avenue, Hemingford, Nebraska) for the purpose of hearing support, opposition, criticism, suggestions or observations of taxpayers relating to setting the final tax request.

	2024-2025	2025-2026	Change
Property Valuations	742,686,756	868,502,082	17%

	2024-2025 Budget Information				***2025-2026 Budget Information***				
Fund	2024-2025 Operating Budget	2024-2025 Property Tax Request	2024 Tax Rate	Property Tax Rate (2023-2024 Request **Divided By** 2024 Valuation)	2025-2026 Operating Budget	2025-2026 Proposed Property Tax Request	Proposed 2025 Tax Rate	Change in Tax Rate	Change in Operating Budget
General Fund	8,721,930.00	6,313,131.00	0.850040	0.726899	8,902,899.00	6,060,606.00	0.697823	-18%	2%
Bond Fund(s) K - 12			0.000000	0.000000	-	-	0.000000	#DIV/0!	0
Bond Fund(s) K - 8			0.000000	0.000000			0.000000	#DIV/0!	0
Bond Fund(s) 9 - 12			0.000000	0.000000			0.000000	#DIV/0!	0
Bond Fund _____			0.000000	0.000000			0.000000	#DIV/0!	0
Special Building Fund	3,014,882.00	303,030.00	0.040802	0.034891	3,643,631.00	752,966.00	0.086697	112%	21%
Qualified Capital Purpose Undertaking Fund K - 12	75,000.00	75,758.00	0.010201	0.008723	130,975.00	75,758.00	0.008723	-14%	75%
Qualified Capital Purpose Undertaking Fund K - 8			0.000000	0.000000			0.000000	#DIV/0!	0
Qualified Capital Purpose Undertaking Fund 9 - 12			0.000000	0.000000			0.000000	#DIV/0!	0
Total	11,811,812.00	6,691,919.00	0.901042	0.770513	12,677,505.00	6,889,330.00	0.793243	-12%	7%

BUDGET STATEMENT AND CERTIFICATION OF TAX County-District # **07-0010**

Line No.	GENERAL FUND	Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS & TRANSFERS				
2	All Instruction Except Special Education Instructional Programs	1000's	3,570,707.00	3,744,626.00	4,202,899.00
3	Special Education Instructional Programs (Include Pre-School)	1200's	505,512.00	658,317.00	1,000,000.00
4	Support Services - Pupils (SPED Related)	2100's	183,853.00	193,584.00	250,000.00
5					
6	Support Services - Pupil (Non-SPED Related)	2100's	151,162.00	171,672.00	200,000.00
7	Support Services - Instructional	2200's	251,128.00	261,373.00	300,000.00
8					
9	Board of Education	2310	50,022.00	60,408.00	100,000.00
10	Executive Administration Services	2320	182,673.00	187,334.00	200,000.00
11	District Legal Services	2330	16,427.00	7,329.00	25,000.00
12	Office of the Principal	2410	407,791.00	307,052.00	450,000.00
13	General Administration - Business Services	2500	155,087.00	151,160.00	175,000.00
14	Maintenance and Operation of Building(s) & Site(s)	2600's	677,296.00	652,523.00	650,000.00
15	Vehicle Acquisition & Maintenance	2650		175,808.00	
16	Regular Pupil Transportation	2710 / 2720 / 2730 / 2790	628,236.00	696,719.00	700,000.00
17	Special Education Pupil Transportation (Include Pre-School)	2712 / 2713 / 2722 / 2723 / 2732 / 2733 / 2792 /			
18					
19	Community Services	3300			
20	Categorical Grant from Corporation	3400			
21	State Categorical Programs	3500's	42,828.00	49,460.00	50,000.00
22	Debt Services	5000			
23	Federal Programs	6000's	432,293.00	237,038.00	250,000.00
24		4000			
25	Transfers to _____ Fund	8000	301,165.00	595,000.00	350,000.00
26	Interfund Loan/Repayment to _____ Fund				
27	Summer School		7,258.00		
28	Estimated August Expenditures			125,000.00	
29					
30	Total Disbursements & Transfers (Including SPED)		7,563,438.00	8,274,403.00	
31	Total Special Education Disbursements	1200 + 2100 + 27X2	689,365.00	851,901.00	1,250,000.00
32	Total Non-Special Education Disbursements & Transfers		6,874,073.00	7,422,502.00	7,652,899.00
33	TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS (Including SPED)				8,902,899.00
34	NECESSARY CASH RESERVE				3,671,096.00
35	TOTAL REQUIREMENTS				12,573,995.00

36					
37	BEGINNING BALANCES				
38	Cash Balance, 9-1		1,439,690.00	2,367,857.00	3,741,786.00
39	Investments, 9-1				
40	County Treasurer's Balance, 9-1		1,253,062.00	1,479,035.00	800,000.00
41	Total Beginning Balance		2,692,752.00	3,846,892.00	4,541,786.00
42					
43	RECEIPTS, & TRANSFERS				
44	LOCAL SOURCES				
45	Carline Tax	1115	18,634.00	18,477.00	18,000.00
46	Public Power District Sales Tax	1120			
47	Motor Vehicle Taxes	1125	211,286.00	164,026.00	165,000.00
48	Tuition Received from Other Districts	1321 / 1323 / 1335			
49	Tuition Received from Individuals	1311-13 / 1370			
50	Other Tuition	1315 / 1320 / 1322 / 1330 / 1331 / 1340 / 1360			
51	Transportation Received from Individuals	1410-1411			
52	Transportation Received from Other Districts	1420-1440			
53	Interest	1510 / 1520	52,960.00	16,671.00	25,000.00
54	Community Service Activities	1800			
55	Other Local Receipts	1910 / 1920 / 1990	18,388.00	25,879.00	15,000.00
56	Local License Fees/Court Fines	1911 / 1921			
57	Nameplate Capacity Tax	3133			
58	Categorical Grants from Corporations / Private	1925	500.00	150.00	
59					
60					
61					
62					
63					
64	COUNTY AND ESU SOURCES				
65	Fines and License Fees	2110	14,408.00	14,046.00	14,000.00
66	Other County Sources	2130			
67	ESU Receipts	2210			
68					
69					
70	STATE SOURCES				
71	State Aid	3110	1,227,921.00	1,122,741.00	1,223,985.00
72	Special Education Programs	3120	510,582.00	266,536.00	250,000.00
73	Special Education Transportation	3125			
74	Homestead Exemption	3130	49,096.00	23,628.00	

75	Payments for Wards of the State or Court	3160 / 3161			
76	Pro-Rate Motor Vehicles	3180	17,911.00	13,907.00	10,000.00
77	Payments for High Ability Learners	3535			
78	Other State Appropriations				
79					
80					
81					
82					
83					
84	State Apportionment	3400	54,564.00	113,284.00	50,000.00
85	Other				
86	State Categorical Programs	3500's	38,842.00	29,775.00	25,000.00
87	Other State Receipts	3990			7,500.00
88	Property Tax Credit and Personal Property Tax Credit	3131 / 3132 / 3134	478,705.00	2,125,893.00	
89	FEDERAL SOURCES				
90	Title ESSA Programs (Includes ESSA Title I)	4500-4511	65,596.00	113,579.00	53,507.00
91		4526-4528, 4531			10,437.00
92					
93	CSI			2,822.00	10,000.00
94	IDEA Programs	4512-4523	17,579.00	260,568.00	82,280.00
95		4416-4418	16,652.00	3,238.00	
96	REAP			43,669.00	35,000.00
97	Medicaid in Public Schools	4708	23,687.00	18,282.00	25,000.00
98	Medicaid Administrative Activities in Public Schools	4709	5,926.00	2,296.00	5,000.00
99	Title 8 (Impact Aid)	4305			
100	Other Federal Non-Categorical Receipts	4524			
101					
102	Grazing		69.00	3.00	
103	Forest Reserve		1,073.00	213.00	7,500.00
104	Vocational Education (Carl Perkins)	4525	900.00		
105	Other Federal Categorical Receipts	4530			
106	ESSER III		71,071.00		
107	Grants from Corporations & Other Private Interests	4710			
108	Mental Health Grant			31,500.00	
109	NON-REVENUE SOURCES				
110	Tax Anticipation Notes	5150			
111	Long Term Loans	5400			
112	Insurance Adjustments	5301		2,941.00	
113	Sale of Property	5300		547.00	
114	Transfers from _____ Fund	5200			
115	Cash Balance from Dissolved/Merged Districts	5610			

116	Non-program receipts			8,088.00	
117	Other Non-Revenue Receipts	5690	12,403.00		
118	Learning Community Property Taxes				
119	Interfund Loan/Repayment From _____ Fund				
120	Total Available Resources Before Property Taxes		5,601,505.00	8,269,651.00	6,573,995.00
121	Personal and Real Property Taxes	1100	5,808,825.00	4,546,538.00	6,000,000.00
122	TOTAL RESOURCES AVAILABLE		11,410,330.00	12,816,189.00	12,573,995.00
123	Less: Disbursements & Transfers		7,563,438.00	8,274,403.00	
124	BALANCE FORWARD		3,846,892.00	4,541,786.00	

PROPERTY TAX RECAP

1. Tax from Line 121	6,000,000.00
2. Compute County Treasurer's Commission at 1% of tax collections.	60,606.00
3. Total Personal and Real Property Tax Requirement	6,060,606.00

Note: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 122 must agree with TOTAL REQUIREMENTS on line 35 in the Adopted Column.

BUDGET STATEMENT AND CERTIFICATION OF TAX County-District # **07-0010**

Line No.	DEPRECIATION FUND	Object/ Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS & TRANSFERS				
2	Re-Appropriated Funds				326,838.00
3					
4					
5					
6					
7					
8					
9					
10					
11	Transfers to General Fund	8000-911			
12	Total Disbursements & Transfers		-	-	
13	TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS				326,838.00
14	TOTAL REQUIREMENTS				326,838.00
15	BEGINNING BALANCES, RECEIPTS, & TRANSFERS				
16	Cash Balance, 9-1		50,005.00	100,692.00	301,838.00
17	Investments, 9-1				
18	Total Beginning Balance		50,005.00	100,692.00	301,838.00
19	LOCAL SOURCES				
20	Interest	1510	687.00	1,146.00	
21					
22	NON-REVENUE SOURCES				
23	Transfers from General Fund	5200	50,000.00	200,000.00	25,000.00
24					
25					
26					
27	TOTAL RESOURCES AVAILABLE		100,692.00	301,838.00	326,838.00
28	Less: Disbursements & Transfers		-	-	
29	BALANCE FORWARD		100,692.00	301,838.00	

NOTE: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 27 must agree with TOTAL REQUIREMENTS on line 14 in the Adopted Column.

BUDGET STATEMENT AND CERTIFICATION OF TAX County-District # **07-0010**

Line No.	EMPLOYEE BENEFIT FUND	Object/ Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS & TRANSFERS				
2	Re-Appropriated Funds		19,661.00	19,661.00	107,546.00
3					
4					
5					
6					
7					
8					
9					
10					
11	Transfers to General Fund	8000-911			
12	Total Disbursements & Transfers		19,661.00	19,661.00	
13	TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS				107,546.00
14	NECESSARY CASH RESERVE				
15	TOTAL REQUIREMENTS				107,546.00
16	BEGINNING BALANCES, RECEIPTS, & TRANSFERS				
17	Cash Balance, 9-1		36,546.00	57,051.00	87,546.00
18	Investments, 9-1				
19	Total Beginning Balance		36,546.00	57,051.00	87,546.00
20	LOCAL SOURCES				
21	Interest	1510	166.00	156.00	
22					
23	NON-REVENUE SOURCES				
24	Transfers from General Fund	5200	40,000.00	50,000.00	20,000.00
25					
26					
27					
28	TOTAL RESOURCES AVAILABLE		76,712.00	107,207.00	107,546.00
29	Less: Disbursements & Transfers		19,661.00	19,661.00	
30	BALANCE FORWARD		57,051.00	87,546.00	

Note: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 28 must agree with TOTAL REQUIREMENTS on line 15 in the Adopted Column.

BUDGET STATEMENT AND CERTIFICATION OF TAX

County-District # **07-0010**

Line No.	CONTINGENCY FUND	Object/ Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS & TRANSFERS				
2	Legal Services	2330			
3	Judgments/Settlements	820			
4					
5					
6					
7	Transfers to General Fund	8000-911			
8	Total Disbursements & Transfers		-	-	
9	TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS				-
10	TOTAL REQUIREMENTS				-
11	BEGINNING BALANCES, RECEIPTS, & TRANSFERS				
12	Cash Balance, 9-1				
13	Investments, 9-1				
14	Total Beginning Balance		-	-	-
15	LOCAL SOURCES				
16	Interest	1510			
17					
18	NON-REVENUE SOURCES				
19	Transfers from General Fund	5200			
20					
21	TOTAL RESOURCES AVAILABLE		-	-	-
22	Less: Disbursements & Transfers		-	-	
23	BALANCE FORWARD		-	-	

Budgeted Calculation of Maximum Total Disbursements & Transfers

$ 8,902,899.00 x .05 = 445,144.95

(Total Budget of Disbursements & Transfers-General Fund) (Column 3, Line 9 may not exceed this amount)

[From General Fund Line 33]

Note: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 21 must agree with TOTAL REQUIREMENTS on line 10 in the Adopted Column.

BUDGET STATEMENT AND CERTIFICATION OF TAX County-District # **07-0010**

Line No.	ACTIVITIES FUND	Object/ Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS & TRANSFERS				
2	Activity Disbursements		324,585.00	389,406.00	595,823.00
3					
4					
5					
6					
7					
8					
9					
10					
11	Transfers to General Fund	8000-911			
12	Total Disbursements & Transfers		324,585.00	389,406.00	
13	TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS				595,823.00
14	NECESSARY CASH RESERVE				
15	TOTAL REQUIREMENTS				595,823.00
16	BEGINNING BALANCES, RECEIPTS, & TRANSFERS				
17	Cash Balance, 9-1		292,853.00	301,202.00	245,823.00
18	Investments, 9-1				
19	Total Beginning Balance		292,853.00	301,202.00	245,823.00
20	LOCAL SOURCES				
21	Interest	1510			
22	Activities Receipts	1790	232,934.00	209,027.00	225,000.00
23	Admissions	1710			
24					
25	NON-REVENUE SOURCES				
26	Transfers from General Fund	5200	100,000.00	125,000.00	125,000.00
27					
28	TOTAL RESOURCES AVAILABLE		625,787.00	635,229.00	595,823.00
29	Less: Disbursements & Transfers		324,585.00	389,406.00	
30	BALANCE FORWARD		301,202.00	245,823.00	

NOTE: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 28 must agree with TOTAL REQUIREMENTS on line 15 in the Adopted Column.

BUDGET STATEMENT AND CERTIFICATION OF TAX County-District # **07-0010**

Line No.	SCHOOL NUTRITION FUND	Object/ Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS & TRANSFERS				
2	Salaries	100's	76,091.00	80,361.00	94,072.00
3	Employee Benefits	200's	26,494.00	43,351.00	57,963.00
4	Purchased Services	300 / 400	3,972.00	4,315.00	5,000.00
5	Supplies & Materials (Excluding Food)	610	7,950.00	2,807.00	10,000.00
6	Food	630	181,926.00	180,715.00	250,000.00
7	Capital Outlay (New & Replacement)	731, 733, 739		6,519.00	10,000.00
8	Professional Service		675.00		2,000.00
9	Other Disbursements		1,399.00	5,047.00	18,335.00
10					
11	Transfers to General Fund	8000-911			
12	Total Disbursements & Transfers		298,507.00	323,115.00	
13	TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS				447,370.00
14	NECESSARY CASH RESERVE				
15	TOTAL REQUIREMENTS				447,370.00
16	BEGINNING BALANCES, RECEIPTS, & TRANSFERS				
17	Cash Balance, 9-1		36,231.00	50,864.00	101,370.00
18	Investments, 9-1				
19	Total Beginning Balance		36,231.00	50,864.00	101,370.00
20	LOCAL SOURCES				
21	Interest	1510			
22	Sale of Lunches/Milk	1610-1650	125,744.00	118,557.00	120,000.00
23	Commoditties Received		21,884.00		
24	STATE SOURCES				
25	State Reimbursement	3150		1,051.00	1,000.00
26					
27	FEDERAL SOURCES				
28	Federal Reimbursement	4210 / 4211	97,086.00	83,762.00	75,000.00
29					
30	NON-REVENUE SOURCES				
31	Transfers from General Fund	5200	62,874.00	165,000.00	150,000.00
32	Other Receipts		5,552.00	5,251.00	
33	TOTAL RESOURCES AVAILABLE		349,371.00	424,485.00	447,370.00
34	Less: Disbursements & Transfers		298,507.00	323,115.00	
35	BALANCE FORWARD		50,864.00	101,370.00	

NOTE: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 33 must agree with TOTAL REQUIREMENTS on line 15 in the Adopted Column.

BUDGET STATEMENT AND CERTIFICATION OF TAX County-District # **07-0010**

Line No.	BOND FUND	Object/ Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS & TRANSFERS				
2	Bond - Refunded	831			
3	Bond - Principal	831			
4	Bond - Interest	832			
5					
6	Transfers to General Fund	8000-911			
7	Interfund Loan/Repayment To _____ Fund				
8	Total Disbursements & Transfers		-	-	
9	TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS				-
10	NECESSARY CASH RESERVE				
11	TOTAL REQUIREMENTS				-
12	BEGINNING BALANCES, RECEIPTS, & TRANSFERS				
13	Cash Balance, 9-1				
14	Investments, 9-1				
15	County Treasurers Balance, 9-1				
16	Total Beginning Balance		-	-	-
17	LOCAL SOURCES				
18	Carline Tax	1115			
19	Interest	1510			
20					
21					
22	STATE SOURCES				
23	Homestead Exemption	3130			
24	Pro-Rate Motor Vehicle	3180			
25					
26	Property Tax Credit				
27	NON-REVENUE SOURCES				
28	Sales of Bonds (Re-funding)	5101			
29	Transfers from General Fund	5200			
30					
31	Interfund Loan/Repayment From _____ Fund				
32	Total Available Resources Before Property Taxes		-	-	-
33	Personal and Real Property Taxes	1100			
34	TOTAL RESOURCES AVAILABLE		-	-	-
35	Less: Disbursements & Transfers		-	-	
36	BALANCE FORWARD		-	-	

PROPERTY TAX RECAP

1. Tax From Line 33	-
2. Compute County Treasurer's Commission at 1% of tax requirement.	-
3. Total Personal and Real Property Tax Requirement.	-

Note: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 34 must agree with TOTAL REQUIREMENTS on line 11 in the Adopted Column.

Bond Fund

School District Total Debt Outstanding as of September 1, 2025

The district officers of any school district in Nebraska shall have power, on the terms and conditions set forth in sections 10-702 to 10-716, to issue the bonds of the district for the purpose of (1) purchasing a site for and erecting thereon a schoolhouse or schoolhouses or a teacherage or teacherages, or for such purchase or erection, or purchasing an existing building or buildings for use as a schoolhouse or schoolhouses, including the site or sites upon which such building or buildings are located, and furnishing the same, in such district, (2) retiring registered warrants, and (3) paying for additions to or repairs for a schoolhouse or schoolhouses or a teacherage or teacherages.

School districts also have the ability to issue bonds as set forth in State Statute Section 79-10,110 for the purpose of paying amounts necessary for the abatement of environmental hazards, accessibility barrier elimination, or modifications for life safety code violations, indoor air quality, or mold abatement and prevention.

The District has the following debt outstanding as of September 1, 2025:
(Include Bond fund(s) and Qualified Capital Purpose Undertaking Fund)

Fiscal Year	Principal	Interest	Total
2025-2026			$ -
2026-2027			$ -
2027-2028			$ -
2028-2029 and thereafter			$ -
Total All Years	**$ -**	**$ -**	**$ -**

BUDGET STATEMENT AND CERTIFICATION OF TAX County-District # **07-0010**

Line No.	SPECIAL BUILDING FUND	Object/ Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS & TRANSFERS				
2	Purchased Services	400	15,504.00	291,831.00	3,643,631.00
3	Supplies	600			
4	Capital Outlay (New Only)	700's			
5	Site Acquisition & Improvements	710	120,095.00		
6	Building Acquisition & Improvement	720			
7	Loan Repayment	831 / 832			
8	Safety and Security Grant		36,449.00		
9	Interfund Loan/Repayment To _____ Fund				
10	Total Disbursements & Transfers		172,048.00	291,831.00	
11	TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS				3,643,631.00
12	TOTAL REQUIREMENTS				3,643,631.00
13	BEGINNING BALANCES & RECEIPTS				
14	Cash Balance, 9-1		2,461,180.00	2,752,845.00	2,847,695.00
15	Investments, 9-1				
16	County Treasurer's Balance, 9-1		61,426.00	71,217.00	50,000.00
17	Total Beginning Balance		2,522,606.00	2,824,062.00	2,897,695.00
18	LOCAL SOURCES				
19	Carlline Tax	1115	905.00	890.00	500.00
20	Interest	1510	105,324.00	40,000.00	
21			906.00	834.00	
22	School Safety and Security Grant (State - $47400) and Insurance Adjustment ($9500)		56,900.00		
23	STATE SOURCES				
24	Homestead Exemption	3130	2,385.00	1,133.00	
25	Pro-Rate Motor Vehicles	3180	875.00	671.00	
26					
27	Property Tax Credit	3131	23,256.00	102,476.00	
28	FEDERAL SOURCES				
29	Total Federal Receipts	4000's			
30	NON-REVENUE SOURCES				
31	Sale of Bonds	5101			
32	Long Term Loans	5400			
33	Sale of Property	5300			
34	Learning Community Property Taxes				
35	Interfund Loan/Repayment From _____ Fund				
36	Total Available Resources Before Property Taxes		2,713,157.00	2,970,066.00	2,898,195.00
37	Personal and Real Property Taxes	1100	282,953.00	219,460.00	745,436.00
38	TOTAL RESOURCES AVAILABLE		2,996,110.00	3,189,526.00	3,643,631.00
39	Less: Disbursements & Transfers		172,048.00	291,831.00	
40	BALANCE FORWARD		2,824,062.00	2,897,695.00	

PROPERTY TAX RECAP	
1. Tax From Line 37	745,436.00
2. Compute County Treasurer's Commission at 1% of tax requirement.	7,530.00
3. Total Personal and Real Property Tax Requirement.	752,966.00

Note: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 38 must agree with TOTAL REQUIREMENTS on line 12 in the Adopted Column.

BUDGET STATEMENT AND CERTIFICATION OF TAX County-District # **07-0010**

Line No.	QUALIFIED CAPITAL PURPOSE UNDERTAKING FUND	Object/ Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS & TRANSFERS				
2	Building & Site Improvement	720			130,975.00
3	Bond - Refunded	831			
4	Bond - Principal	831			
5	Bond - Interest	832			
6					
7	Interfund Loan/Repayment To _____ Fund				
8	Total Disbursements & Transfers		-	-	
9	TOTAL BUDGET OF DISBURSEMENTS & TRANSFERS				130,975.00
10	NECESSARY CASH RESERVE				
11	TOTAL REQUIREMENTS				130,975.00
12	BEGINNING BALANCES & RECEIPTS				
13	Cash Balance, 9-1			-	50,975.00
14	Investments, 9-1				
15	County Treasurers Balance, 9-1				5,000.00
16	Total Beginning Balance		-	-	55,975.00
17	LOCAL SOURCES				
18	Carline Tax	1115		198.00	
18	Interest	1510		55.00	
20					
21	STATE SOURCES				
22	Homestead Exemption	3130		285.00	
23	Pro-Rate Motor Vehicle	3180		92.00	
24					
25	Property Tax Credit	3131		25,620.00	
26	FEDERAL SOURCES				
27	Total Federal Receipts	4000's			
28	NON-REVENUE SOURCES				
29	Qualified School Construction Bonds	5301			
30	Long Term Loans	5400			
31	Interfund Loan/Repayment From _____ Fund				
32	Total Available Resources Before Property Taxes		-	26,250.00	55,975.00
33	Personal and Real Property Taxes	1100		29,725.00	75,000.00
34	TOTAL RESOURCES AVAILABLE		-	55,975.00	130,975.00
35	Less: Disbursements & Transfers		-	-	
36	BALANCE FORWARD		-	55,975.00	

PROPERTY TAX RECAP

1. Tax From Line 33	75,000.00
2. Compute County Treasurer's Commission at 1% of tax requirement.	758.00
3. Total Personal and Real Property Tax Requirement.	75,758.00

Note: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 34 must agree with TOTAL REQUIREMENTS on line 11 in the Adopted Column.

Qualified Capital Purpose Undertaking Fund

BUDGET STATEMENT AND CERTIFICATION OF TAX County-District # **07-0010**

Line No.	COOPERATIVE FUND	Function/ Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS				
2	All Instruction	1000's / 1200's	96,160.00	100,005.00	105,712.00
3	Support Services - Pupils (SPED and Non-SPED Related)	2100's			
4	Support Services - Staff	2200's			
5	Executive Administration Services	2320			
6	Office of the Principal	2410			
7	General Administration - Business Services	2500			
8	Community Services	3300			
9	State Categorical Programs	3500's			
10	Federal Programs	6000's			
11					
12					
13					
14	Total Disbursements		96,160.00	100,005.00	
15	TOTAL BUDGET OF DISBURSEMENTS				105,712.00
16	NECESSARY CASH RESERVE				71,609.00
17	TOTAL REQUIREMENTS				177,321.00
18	BEGINNING BALANCES, RECEIPTS, & TRANSFERS				
19	Cash Balance, 9-1		50,005.00	40,793.00	72,187.00
20	Investments, 9-1				
21	Total Beginning Balance		50,005.00	40,793.00	72,187.00
22	LOCAL SOURCES				
23	Tuition Received from Districts	1321	51,707.00	51,276.00	75,134.00
24	Interest		241.00	123.00	
25	STATE SOURCES				
26	State Non-Categorical Programs				
27	State Categorical Programs	3500			
28					
29	FEDERAL SOURCES				
30	Federal Programs	4000's			
31					
32					
33	NON-REVENUE SOURCES				
34	Transfers from General Fund	5200	35,000.00	80,000.00	30,000.00
35					
36	TOTAL RESOURCES AVAILABLE		136,953.00	172,192.00	177,321.00
37	Less: Disbursements		96,160.00	100,005.00	
38	BALANCE FORWARD		40,793.00	72,187.00	

NOTE: Pages should only be filled out by the school acting as the fiscal agent for the Cooperative. All schools show payment for services in the General Fund.

Note: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 36 must agree with TOTAL REQUIREMENTS on line 17 in the Adopted Column.

BUDGET STATEMENT AND CERTIFICATION OF TAX County-District # **07-0010**

Line No.	STUDENT FEE FUND	Function/ Source Number	ACTUAL 9-1-2023 to 8-31-2024 (Column 1)	ACTUAL/ESTIMATED 9-1-2024 to 8-31-2025 (Column 2)	ADOPTED 9-1-2025 to 8-31-2026 (Column 3)
1	DISBURSEMENTS				
2	Extracurricular Activities				
3	Postsecondary Education				
4	Summer or Night School				
5					
6					
7					
8					
9					
10					
11					
12					
13					
14	Total Disbursements		-	-	
15	TOTAL BUDGET OF DISBURSEMENTS				-
16	NECESSARY CASH RESERVE				
17	TOTAL REQUIREMENTS				-
18	BEGINNING BALANCES & RECEIPTS				
19	Cash Balance, 9-1				
20	Investments, 9-1				
21	Total Beginning Balance		-	-	-
22	LOCAL SOURCES				
23	Interest	1510			
24	Extracurricular Activities Fees	1741			
25	Postsecondary Education Fees	1742			
26	Summer or Night School Fees	1743			
27					
28					
29					
30	NON-REVENUE SOURCES				
31					
32					
33					
34	TOTAL RESOURCES AVAILABLE		-	-	-
35	Less: Disbursements		-	-	
36	BALANCE FORWARD		-	-	

Note: To present a balanced budget, TOTAL RESOURCES AVAILABLE on line 34 must agree with TOTAL REQUIREMENTS on line 17 in the Adopted Column.

RESOLUTION SETTING THE PROPERTY TAX REQUEST

RESOLUTION NO. 2025-01

WHEREAS, Nebraska Revised Statute 77-1632 and 77-1633 provides that the Governing Body of Hemingford Public Schools passes by a majority vote a resolution or ordinance setting the tax request; and

WHEREAS, a special public hearing was held as required by law to hear and consider comments concerning the property tax request;

NOW, THEREFORE, the Governing Body of Hemingford Public Schools resolves that:

1. The 2025-2026 property tax request be set at:

General Fund:	$	6,060,606.00
Bond Fund:	$	-
Special Building Fund:	$	752,966.00
Qualified Capital Purpose Undertaking Fund:	$	75,758.00

2. The total assessed value of property differs from last year's total assessed value by 16.94 percent.

3. The tax rate which would levy the same amount of property taxes as last year, when multiplied by the new total assessed value of property would be 0.770513 per $100 of assessed value.

4. Hemingford Public Schools proposes to adopt a property tax request that will cause its tax rate to be 0.793243 per $100 of assessed value.

5. Based on the proposed property tax request and changes in other revenue, the total operating budget of Hemingford Public Schools will increase (decrease) last year's budget by 6.56 percent.

6. A copy of this resolution be certified and forwarded to the County Clerk on or before October 15, 2025.

Motion by _____, seconded by _____ to adopt Resolution #_____.

Voting yes were:	Voting no were:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Dated this _____ day of _____, 2025

REGION 23
EMERGENCY MANAGEMENT AGENCY

2025 HAZARD MITIGATION PLAN

Plan developed for Region 23 EMA by JEO Consulting Group.

Regional Planning Team

Name	Title	Jurisdiction
Nan Gould	Emergency Manager	Region 23 EMA
Glen Spaugh	City Manager	City of Gordon
James Krotz	Commissioner	Sheridan County
Samantha Orr	City Clerk	City of Hay Springs
Shauna Smith	City Clerk	City of Rushville
Tom Menke	City Manager	City of Chadron
Lynn Webster	Assistant General Manager	Upper Niobrara White NRD
*Phil Luebbert	Project Manager	JEO Consulting Group Inc.
*Anthony Kohel	Planner	JEO Consulting Group Inc.
*Marisa Alvares	Hazard Mitigation Program Specialist	NEMA
*Stephanie Drake	Community Planner	FEMA

**Served in an advisory or consultant role.*

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Section One: Introduction

Hazard Mitigation Planning

Hazard mitigation planning is a process in which hazards are identified and profiled; people and facilities at-risk are identified and assessed for threats and potential vulnerabilities; and strategies and mitigation measures are identified. Hazard mitigation planning increases the ability of communities and other governmental entities to effectively function in the face of natural disasters. The goal of the process is to reduce risk and vulnerability, in order to lessen impacts on life, the economy, and infrastructure.

Severe weather and hazardous events are occurring more frequently in our daily lives. Pursuing mitigation strategies reduces risk and is socially and economically responsible to prevent long-term risks from natural and human-caused hazard events.

FEMA definition of Hazard Mitigation

"Any sustained action taken to reduce or eliminate the long-term risk to human life and property from [natural] hazards."

Hazards, such as severe winter storms, drought, severe thunderstorms, terrorism and cyber security, tornadoes and high winds, floods, and grass/wildfires are part of the world around us. These hazard events can occur as a part of normal operation or because of human error. All jurisdictions participating in this planning process are vulnerable to a wide range of hazards that threaten the safety of residents and have the potential to damage or destroy both public and private property, cause environmental degradation, or disrupt the local economy and overall quality of life.

This plan is an update to the Region 23 EMA Hazard Mitigation Plan approved in 2020. The plan update was developed in compliance with the requirements of the Disaster Mitigation Act of 2000 (DMA 2000). By preparing this plan, Region 23 has demonstrated a commitment to reducing risks from hazards and to helping decision makers establish mitigation activities and resources.

Hazard Mitigation Assistance

On June 1, 2009, FEMA initiated the Hazard Mitigation Assistance (HMA) program integration, which aligned certain policies and timelines of the various mitigation programs. These HMA programs present a critical opportunity to minimize the risk to individuals and property from hazards while simultaneously reducing the reliance on federal disaster funds.

Mitigation is the cornerstone of emergency management. Mitigation focuses on breaking the cycle of disaster damage, reconstruction, and repeated damage. Mitigation lessens the impact disasters have on people's lives and property through damage prevention, appropriate development standards, and affordable flood insurance. Through measures such as avoiding building in damage-prone areas, stringent building codes, and floodplain management regulations, the impact on lives and communities is lessened.
- FEMA Mitigation Directorate

Each HMA program was authorized by separate legislative actions, and as such, each program differs slightly in scope and intent.

- **HMGP:** To qualify for post-disaster mitigation funds, local jurisdictions must adopt a mitigation plan that is approved by FEMA. HMGP provides funds to states, territories, Indian tribal governments, local governments, and eligible private non-profits following a

presidential disaster declaration. The DMA 2000 authorizes up to seven percent of HMGP funds available to a state after a disaster to be used for the development or update of state, tribal, and local mitigation plans.

- **FMA:** This program provides grant funds to implement projects such as acquisition or elevation of flood-prone homes. Jurisdictions must be participating communities in the National Flood Insurance Program (NFIP) to qualify for this grant. The goal of FMA is to reduce or eliminate claims under the NFIP.

- **PDM:** The PDM grant program makes federal funds available to state, local, tribal, and territorial governments to implement measures designed to reduce the risk to individuals and property from future natural hazards. The Consolidated Appropriations Act of 2023 authorizes funding for 100 projects with total funds of $233,043,782 in 2023.

- **FMAG:** Section 404 of the Stafford Act allows FEMA to provide HMGP grants to any area that received a Fire Management Assistance Grant declaration even if no major Presidential declaration was made. FMAG aids communities in implementing long-term mitigation measures after a wildfire event.

For more information about these grant programs and other funding opportunities to help implement identified mitigation actions see *Appendix E: Hazard Mitigation Project Funding Guidebook*.

Summary of Changes

The hazard mitigation planning process undergoes several changes during each plan update to best accommodate the planning area and specific conditions. Changes from the 2020 Hazard Mitigation Plan and planning process in this update included: an updated plan layout, greater efforts to reach and include stakeholder groups, greater effort to include all taxing authorities as participants; a more in-depth funding guidebook; and changes to meet updated FEMA hazard mitigation plan policies. The plan was also updated to reflect changing priorities for each participating jurisdiction. Prioritized hazards of concern were identified by each local planning team along with a review of mitigation actions. Each local planning team reviewed the mitigation actions from 2020 and updated the timeline, priority (high, medium, low), and status. Local planning teams were also able to add new mitigation actions to better fit any changing priorities and concerns. The 2020 Region 23 Hazard Mitigation Plan Review Tool was reviewed for possible changes to incorporate into this plan update and were addressed where applicable.

Goals and Objectives

The potential for disaster losses and the probability of occurrence of natural and man-made hazards present a significant concern for the jurisdictions participating in this plan. The driving motivation behind this hazard mitigation plan is to reduce vulnerability and the likelihood of impacts to the health, safety, and welfare of all citizens in the planning area. To this end, the Regional Planning Team reviewed and approved goals which helped guide the process of identifying both broad-based and jurisdictional-specific mitigation strategies and projects that will, if implemented, reduce their vulnerability and help build stronger, more resilient communities.

Goals from the 2020 hazard mitigation plan were reviewed, and the Regional Planning Team agreed that they are still relevant and applicable for this plan update, with some slight changes in wording. The updated goals and objectives for this plan update are as follows.

Goal 1: Protect the Health and Safety of Residents

Objective 1.1: Reduce or prevent damage to property and prevent loss of life or serious injury (overall intent of the plan).

Goal 2: Reduce Future Losses from Hazard Events

Objective 2.1: Provide protection for existing structures, future development, community lifelines, services, utilities, and trees to the greatest extent possible.

Objective 2.2: Develop hazard specific plans, conduct studies or assessments, and retrofit jurisdiction to mitigate hazards and minimize their impact.

Objective 2.3: Minimize and control the impact of hazard events through enacting or updating ordinances, permits, laws, or regulations.

Goal 3: Increase Public Awareness and Education Regarding Vulnerabilities to Hazards

Objective 3.1: Develop and provide information to residents, businesses, and visitors about the types of hazards they are exposed to, what the effects may be, where they occur, and what they can do to be better prepared.

Goal 4: Improve Emergency Management Capabilities

Objective 4.1: Develop or improve Emergency Response Plan and procedures and abilities.

Objective 4.2: Develop or improve Evacuation Plan and procedures.

Objective 4.3: Improve warning systems and ability to communicate with residents, businesses, and visitors before, during, and following a disaster or emergency.

Objective 4.4: Increase regional EOC capacity

Objective 4.5: Provide shelters for the public

Goal 6: Enhance Overall Resilience and Promote Sustainability

Objective 6.1: Incorporate hazard mitigation and adaptation into updating other local planning endeavors (e.g., comprehensive plans, zoning ordinance, subdivision regulation, etc.).

Objective 6.2: Integrate the Community Wildfire Protection Plan to align with Hazard Mitigation Plan goals and actions

Participating Jurisdictions

Jurisdictions that participated in the Region 23 Hazard Mitigation Plan are listed in the table below. These jurisdictions met all the requirements for participation by attending required meetings, assisting in data collection, identifying mitigation actions, reviewing plan drafts, and either adopting the plan by resolution or planning to adopt the plan by resolution.

Table 1: Participating Jurisdictions

Participating Jurisdictions		
City of Alliance	City of Hay Springs	Upper Niobrara White NRD
Box Butte County	Village of Harrison	Chadron Public Schools
City of Chadron	Village of Hemingford	Crawford Public Schools
Village of Clinton	City of Rushville	Gordon-Rushville Public Schools
City of Crawford	Sheridan County	Hemingford Public Schools
Dawes County	Sioux County	Hay Springs Fire District
City of Gordon	Region 23 Emergency Management	Hemingford Fire District

Section Two: How to Use This Hazard Mitigation Plan

Introduction

This hazard mitigation plan was developed for anyone that lives, works, owns a business, owns land, or visits Box Butte, Dawes, Sheridan, or Sioux Counties. Different sections of the plan will be helpful to different people. This section is designed to help guide readers to the most relevant information.

How to Use This Document

Jurisdiction that Participated in the Plan

I am a governing official from a participating jurisdiction and want to learn more about the hazards that could impact my jurisdiction, identified strategies to reduce vulnerability to those hazards, how to secure funding for those strategies, and how to keep the plan up to date. I would review:

- **Section Three: Planning Area Overview, Participant Profile Appendices, and Appendix C: Planning Area Profile:** To learn about demographics, at-risk populations, housing, employment, economics, social vulnerability, rural capacity index, and historical sites.

- **Section Five: Risk Assessment Summary and Appendix A: Full Risk Assessment:** To learn about the hazards that could impact the planning area, where those hazards are likely to occur, how often they are likely to occur, the possible extent of the hazards, how climate change will impact the hazards, and regional vulnerabilities.

- **Section Seven: Plan Implementation and Maintenance and Appendix F: Guide to Review and Update the Hazard Mitigation Plan:** To learn about plan maintenance and how to update your participant section.

- **Section Eight: Participant Profiles, Participant Profile Appendices, and Special Districts Appendix:** To learn jurisdictional specific information about the three counties, local communities, and other local jurisdictions. Each participant section contains information about prioritized hazards, community lifelines, and mitigation action and strategies.

- **Appendix E: Hazard Mitigation Funding Guidebook:** To learn about various federal, state, and other funding sources to help pay for identified mitigation strategies.

Resident, Landowner, Visitor, or Business

I am a resident, landowner, visitor, or business and want to learn about my county, my community, and protecting my family, home, and property from natural and man-made hazards. I would review:

- **Section Three: Planning Area Overview, Participant Profile Appendices, and Appendix C: Planning Area Profile:** To learn about demographics, at-risk populations, housing, employment, economics, social vulnerability, rural capacity index, and historical sites.

- **Section Five: Risk Assessment Summary and Appendix A: Full Risk Assessment:** To learn about the hazards that could impact the planning area, where those hazards are likely to occur, how often they are likely to occur, the possible extent of the hazards, how climate change will impact the hazards, and regional vulnerabilities.

- **Section Eight: Participant Profiles and Participant Profile Appendices:** To learn jurisdictional specific information about the three counties, local communities, and other local jurisdictions. Each participant section contains information about prioritized hazards, community lifelines, and mitigation action and strategies.

State or Federal Agency

I am with a state or federal agency and want to learn more about the planning process, hazard risks, and mitigation strategies across all jurisdictions in Box Butte, Dawes, Sheridan, and Sioux Counties. I would review:

- **Section One: Introduction:** To learn about the goals and objectives of the Region 23 Mitigation Plan.

- **Section Three: Planning Area Overview, Participant Profile Appendices, and Appendix C: Planning Area Profile:** To learn about demographics, at-risk populations, housing, employment, economics, social vulnerability, rural capacity index, and historical sites.

- **Section Four: Planning Process Summary and Appendix B: Planning Process Documentation:** To learn about the planning process, who attended meetings, and who was invited to participate.

- **Section Five: Risk Assessment Summary and Appendix A: Full Risk Assessment:** To learn about the hazards that could impact the planning area, where those hazards are likely to occur, how often they are likely to occur, the possible extent of the hazards, how climate change will impact the hazards, and regional vulnerabilities.

- **Appendix D: Mitigation Strategy, Participant Profile Appendices:** To learn about the mitigation strategies identified by each participating jurisdiction.

Section Three: Planning Area Overview

Introduction

To identify jurisdictional vulnerabilities, it is vitally important to understand the people and built environment of the planning area. The following section provides a summary of characteristics for Box Butte County, Dawes County, Sheridan County, and Sioux County. A more detailed profile broken down by community is covered in *Appendix C: Planning Area Profile*, including demographics, at-risk populations, employment, economics, and housing.

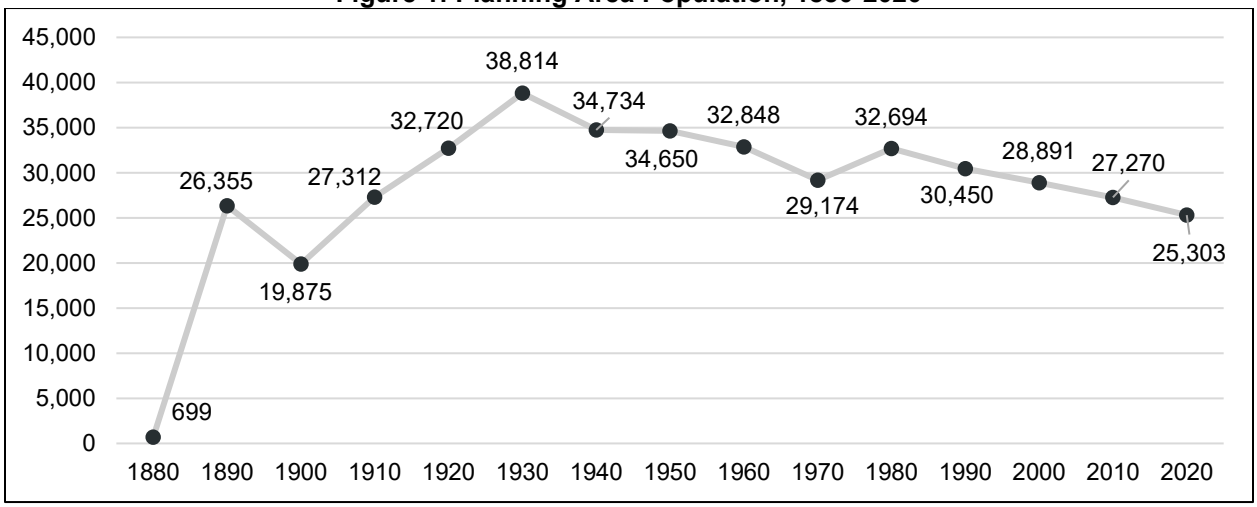
Location and Geography

The Region 23 hazard mitigation planning area is located in northwest Nebraska. It includes all of Box Butte, Dawes, Sheridan, and Sioux Counties, and covers 7,016 square miles. There are 10 incorporated communities in the planning area. Major transportation routes include U.S. Highways 20 and 385, and State Highways 2, 27, 29, 71, 87, and 250. The region resides in the White River Watershed and the Niobrara River Watershed. Main waterways in the planning area include White River and the Niobrara River. The White River flows into South Dakota where it joins with the Missouri River. The Niobrara River Watershed is comprised of the river as it comes out of Wyoming and flows into Box Butte Reservoir. After it exits the region the Niobrara River is joined by the Snake River. Figure 2 shows the planning area, incorporated communities, major transportation routes, major waterways, and location within the state.

Demographics

The U.S. Census Bureau collects specific demographic information for the four counties. The estimated population of the four-county planning area is 25,303.[1]

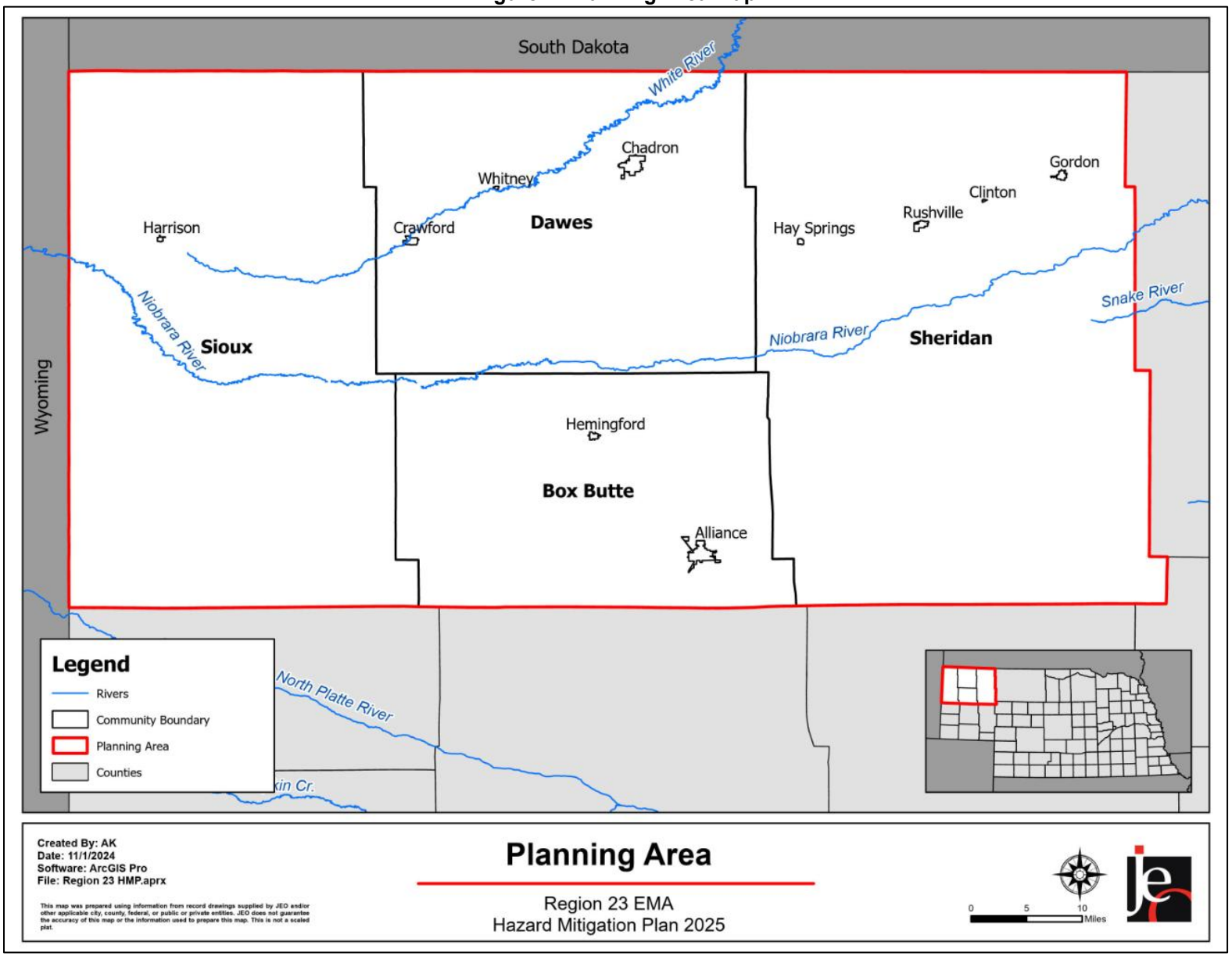
Figure 1: Planning Area Population, 1880-2020



Source: U.S. Census Bureau

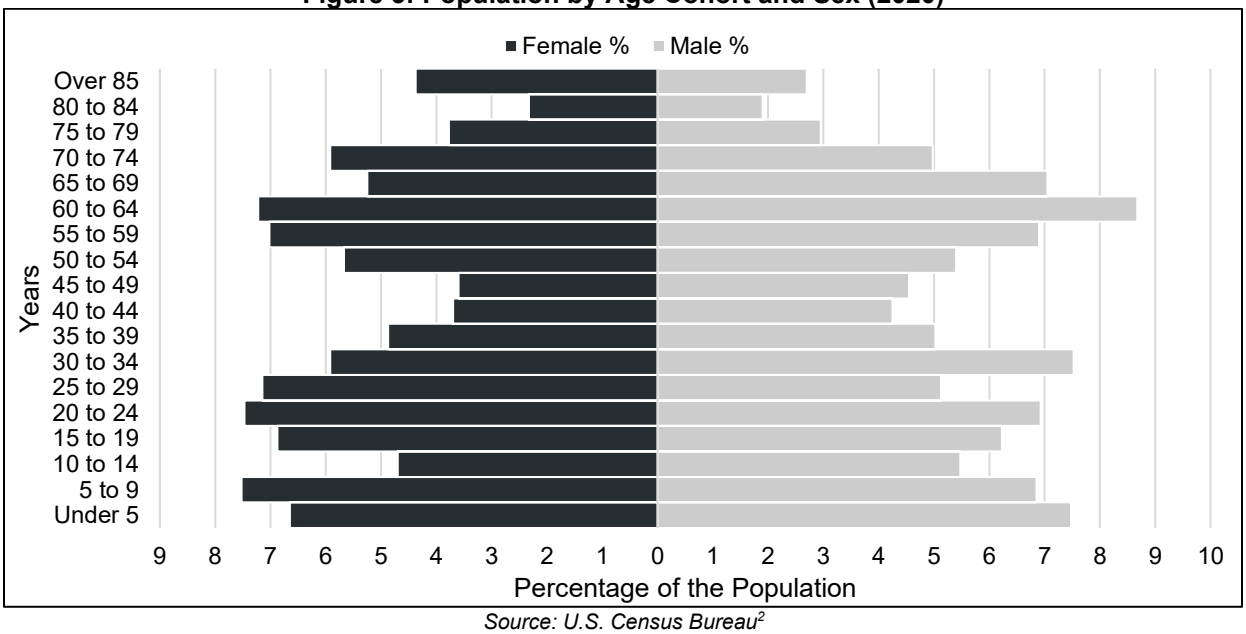
1 United States Census Bureau. "2020 Census Bureau Decennial Census: P1: Race." https://data.census.gov/.

Figure 2: Planning Area Map



Community and regional vulnerability are impacted by growing or declining populations. The planning area has decreased slowly since its high point in 1930, with one decade of growth in the 1970s. Looking at the age cohort breakdown of the planning area, the population is spread out fairly evenly among age groups. This suggests a steady population and a need for elderly care, childcare, and schools in the future. Additional population vulnerability information can be found in *Appendix C: Planning Area Profile*.

Figure 3: Population by Age Cohort and Sex (2020)



Source: U.S. Census Bureau[2]

In general, certain populations may have increased vulnerability due to difficulty with medical issues, extremes in age, and communication issues due to language barriers. Several at-risk populations have been identified in the planning area. These include:

- Schools
- Medical/Elderly Care Facilities
- Racial Minorities

The tables on the next page list the at-risk populations by county. For addition information about at-risk populations see *Appendix C: Planning Area Profile.*

2 United States Census Bureau. “2020 Census Bureau Decennial Census: P1: Race.” https://data.census.gov/.

Table 2: School Inventory

School District	Total Enrollment
Alliance Public Schools	1,345
Chadron Public Schools	941
Crawford Public Schools	174
Gordon-Rushville Public Schools	550
Hay Springs Public Schools	201
Hemingford Public Schools	395
Sioux County Public Schools	89

Source: Nebraska Department of Education[3]

Table 3: Planning Area Inventory of Care Facilities

County	Hospitals	Adult Care Homes	Assisted Living Homes
Box Butte County	1	2	2
Dawes County	1	2	2
Sheridan County	1	3	2
Sioux County	0	0	0
Total	**3**	**7**	**6**

Source: Nebraska Department of Health and Human Services[4]

Table 4: Racial Composition Trends

Race	2010		2020		% Change
	Number	% of Total	Number	% of Total	
White, Not Hispanic	24,251	88.93%	21,339	84.33%	-4.59%
Black	207	0.76%	244	0.97%	0.21%
American Indian and Alaskan Native	1,386	5.08%	1,278	5.06%	-0.02%
Asian	143	0.53%	160	0.63%	0.11%
Native Hawaiian and Other Pacific Islander	52	0.19%	10	0.04%	-0.15%
Other Races	540	1.98%	640	2.53%	0.55%
Two or More Races	691	2.53%	1,631	6.44%	3.91%
Total Population	**27,270**	-	**25,303**	-	-

Source: U.S. Census Bureau[5,6]

Housing

The U.S. Census Bureau provides information related to housing units and potential areas of vulnerability. Potentially vulnerable housing characteristics include vacant housing, rental properties, mobile homes, older housing, those with no internet, and homes with no vehicles available. The tables below show vulnerable housing characteristics in the planning area. Additional housing vulnerability information can be found in *Appendix C: Planning Area Profile*.

3 Nebraska Department of Education. May 2024. "Nebraska Education Profile". https://nep.education.ne.gov/.
4 Nebraska Department of Health and Human Services. May 2024. "Rosters of Facilities And Services". https://dhhs.ne.gov/licensure/Pages/Rosters-of-Facilities-and-Services.aspx.
5 United States Census Bureau. "2010 Census Redistricting Data (Public Law 94-171): P1: Race." https://data.census.gov.
6 United States Census Bureau. "2020 Census Bureau Decennial Census: P1: Race." https://data.census.gov.

Table 5: Occupied, Vacant, Owner, and Renter Housing

Total Housing Units					Occupied Housing Units			
Occupied		Vacant			Owner		Renter	
#	%	#	%		#	%	#	%
10,569	**83.6%**	**2,071**	**16.4%**		**7,174**	**67.9%**	**3,395**	**32.1%**

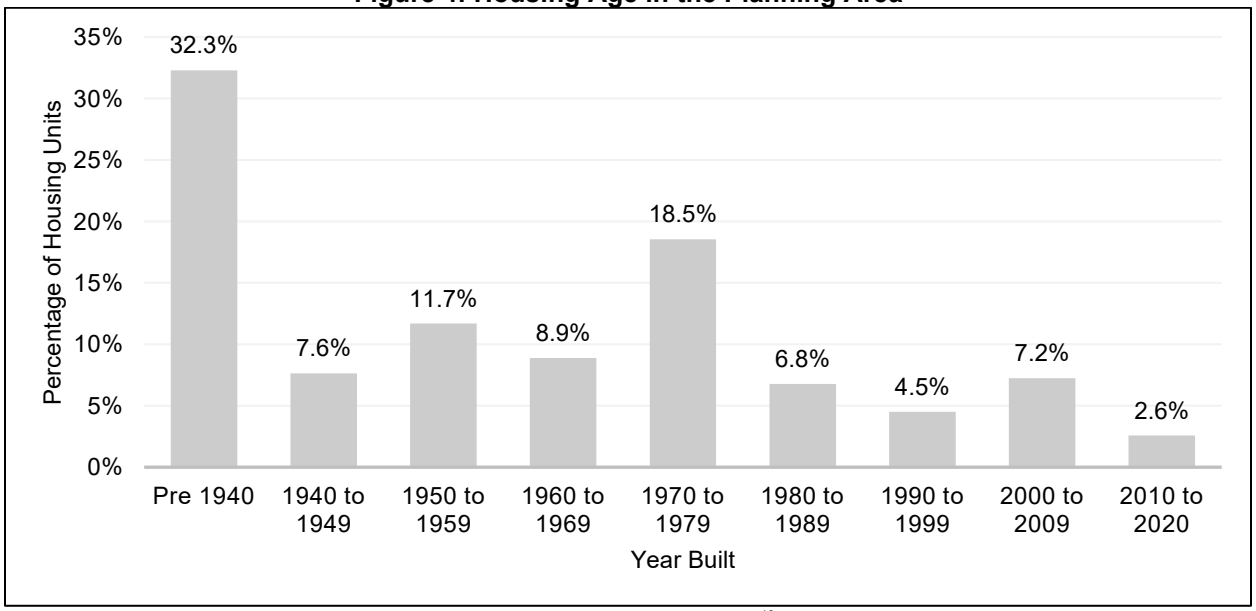
Source: U.S. Census Bureau[7]

Table 6: Selected Housing Vulnerabilities

Housing Characteristics	Box Butte County	Dawes County	Sheridan County	Sioux County	Total
Occupied Housing Units	4,566 (87%)	3,325 (83%)	2,163 (80%)	515 (73%)	**10,569**
Lacking Complete Plumbing Facilities	0.4%	0.2%	0%	0%	**25 (0.2%)**
Lacking Complete Kitchen Facilities	1.3%	0.3%	1.7%	0%	**106 (1%)**
Broadband Internet Subscription	89.7%	86.1%	82.2%	70.7%	**9,101 (86.1%)**
No Vehicles Available	5.4%	3.5%	4.5%	5.3%	**488 (4.6%)**
Mobile Homes	4.9%	6.8%	9%	8.5%	**688 (6.5%)**

Source: U.S. Census Bureau[8,9]

Figure 4: Housing Age in the Planning Area



Source: U.S. Census Bureau[10]

7 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." https://data.census.gov/.
8 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." https://data.census.gov/.
9 United States Census Bureau. "2022 Census Bureau American Community Survey: DP02: Selected Social Characteristics in the United States." https://data.census.gov/.
10 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics". https://data.census.gov/.

Employment and Economics

The U.S. Census Bureau provides information related to employment and economic indicators. Low-income populations and the unemployed may be more vulnerable to certain hazards like flooding and severe winter weather. Additional employment and economic vulnerability information can be found in *Appendix C: Planning Area Profile*.

Vulnerable Employment and Economic Characteristics

Employment and Economic Characteristics	Box Butte County	Dawes County	Sheridan County	Sioux County	Total
Percent of People Living Below the Poverty Line	12%	13%	10.8%	17.4%	**13.3%**
Median Household Income	$67,893	$53,760	$53,609	$50,833	**$56,524**
Unemployment Rate	4.0%	1.5%	2.2%	3.9%	**2.8%**

Source: U.S. Census Bureau[11]

11 United States Census Bureau. "2022 Census Bureau American Community Survey: DP03: Selected Economic Characteristics." https://data.census.gov/.

Section Four: Planning Process Summary

Introduction

The process utilized to develop a hazard mitigation plan is often as important as the final planning document. For this planning process, Region 23 adapted the four-step hazard mitigation planning process outlined by FEMA to fit the needs of the participating jurisdictions. The following pages give a summary of the planning process that took place during the plan update.

Requirement §201.6(b): Planning process. An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
(2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

Requirement §201.6(c)(1): The plan shall document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

Plan Update Process

Once Region 23 was awarded a FEMA grant for their hazard mitigation plan update, JEO Consulting Group, Inc. (JEO) was contracted to assist, guide, and facilitate the planning process and plan assembly.

To be a participant in the development of this plan update, jurisdictions were required to attend required meetings or have meetings with the Regional Planning Team, assist in data collection, identify mitigation actions, review plan drafts, and either adopt the plan by resolution or plan to adopt the plan by resolution.

Kick Off Meeting

To start the project, a meeting was held between Region 23 Emergency Management staff, a regional planning team consisting of municipal officials and stakeholders, and JEO to discuss the planning process and a general schedule for the plan update (Figure 5). Key takeaways from the meeting include the following.

- Clarification of potential participants in the plan.
- Identification of hazards for the plan.
- Discussion of vulnerable populations.

Figure 5: Project Timeline



Round 1 Meeting: Hazard Identification & Plan Integration

The intent of the Round 1 Meeting was to familiarize jurisdictional representatives (i.e., the local planning teams), stakeholders, and the public with the plan update process, expected actions for the coming months, the responsibilities of being a participant, and to collect preliminary information to update the plan. After the meeting the attendees conducted risk and vulnerability assessments based on local capabilities, previous occurrences of hazards, and potential exposure. In addition, local planning team members evaluated potential integration of the hazard mitigation plan alongside other local planning mechanisms.

The Round 1 Meeting was held as a hybrid meeting where participants, stakeholders, and the public could either join in-person or online via Zoom. Meeting date, time, and location are given below. The sign-in sheet can be found in *Appendix B: Planning Process Documentation*.

- Monday, August 26, 6:00 pm at the Region 23 EMA Office, 250 Main St, Chadron, Nebraska

Round 2 Meeting: Mitigation Strategies, NFIP, & Plan Maintenance

The Round 2 Meeting is designed to identify and prioritize new mitigation measures, update previous mitigation actions from the 2020 hazard mitigation plan, update NFIP information, and identify when the plan would be reviewed and by whom. Attendees were also asked to review the information collected from the Round 1 meeting related to their jurisdiction through this planning process for accuracy.

The Round 2 Meeting was held as a hybrid meeting where participants, stakeholders, and the public could either join in-person or online via Zoom. Meeting date, time, and location are listed below. The sign-in sheet can be found in *Appendix B: Planning Process Documentation*.

- Monday, January 6, 6:00 pm at the Region 23 EMA Office, 250 Main St, Chadron, Nebraska

Figure 6: Round 2 Public Meeting



Public Review

Once the hazard mitigation plan draft was completed, a public review period was opened to allow local planning teams, stakeholders, and community members at large to review the plan, provide comments, and request changes. The public review period was open from May 5, 2025, through May 19, 2025. Participating jurisdictions were emailed a letter notifying them of this public review period. The draft plan was also made available on the project website (https://jeo.com/region-23-hazard-mitigation-plan-update/) to download the document. Jurisdictions, stakeholders, and the public could provide comments via mail or email. A review of the comments and who they were from can be found in *Appendix B: Planning Process Documentation*. All changes and comments were reviewed and incorporated into the plan as applicable.

Plan Adoption

Based on FEMA requirements, this multi-jurisdictional hazard mitigation plan must be formally adopted by each participant through approval of a resolution. This approval will create individual ownership of the plan by each participant. Formal adoption provides evidence of a participant's full commitment to implement the plan's goals, objectives, and action items. A copy of the resolution draft provided to participating jurisdictions is located in *Appendix B: Planning Area Documentation* along with any copies adoption resolutions that have already been received.

Requirement §201.6(c)(5): For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

Public Involvement and Outreach

To notify and engage the public in the planning process, a wide range of stakeholder groups, State of Nebraska agencies, neighboring jurisdictions, and the general public were contacted and encouraged to participate in the plan update. Lists of the notified stakeholders, agencies, and neighboring jurisdictions can be found in *Appendix B: Planning Area Documentation*.

The Regional Planning Team was asked to identify any underserved communities or vulnerable populations in the planning area not already identified in the stakeholder list, so they could have the opportunity to be involved in the planning process. None were identified by the Regional Planning Team or during the planning process.

Stakeholder Groups

There were 39 stakeholder groups that were identified and emailed invitations to participate in the planning process by attending meetings. Representatives from Dawes County Extension, the National Weather Service, NEMA, FEMA, and the Panhandle Public Health Department attended meetings and/or provided input for their respective participant profiles.

Neighboring Jurisdictions

Neighboring jurisdictions were notified and invited to participate in the planning process by attending meetings. Representatives from Cherry County, Nebraska and Goshen County, Wyoming attended the Round 1 Meeting. No comments or revisions were received from any neighboring jurisdictions.

Public Survey

The general public was encouraged to participate in the planning process through a public survey that was available online and by hard copy. The survey was shared with the public by the local planning teams, Region 23 press release and social media, county social media, and county emails. Copies of the survey along with outreach documentation can be found in *Appendix B: Planning Process Documentation*. The purpose of the survey was to collect specific concerns related to hazards and projects the public have a vested interest in. It was available beginning before the Round 1 meeting and closed after the Round 2 meeting. In total there were 23 responses to the survey from members of the public.

Due to the low number of responses, the results could only be used by a few communities to help influence hazard prioritization and mitigation actions selected by local planning teams.

The most commonly experienced hazard events for residents included severe thunderstorms, severe winter storms, tornadoes and high winds, extreme temperature, drought, and grass/wildfire. This was similar to the ranked level of concern for hazard events, with only a difference in order. The top hazards of concern were grass/wildfire, extreme temperatures, severe winter storms, tornadoes and high winds, severe thunderstorms, and drought. Alert sirens, utility protective measures, backup generators, wildfire fuels reduction/fuel break creation, safe room/storm shelter, and CPR/AED training were the most popular mitigation projects of importance for the public. The full results of the public survey can be found in *Appendix B: Planning Process Documentation*.

Section Five: Risk Assessment Summary

Introduction

The ultimate purpose of this hazard mitigation plan is to minimize the loss of life and property across the planning area due to natural and man-made hazards. The basis for the planning process is the regional and local risk assessment. This section contains a summary of potential hazards, regional vulnerabilities and exposures, probability of future occurrences, and potential impacts and losses. By conducting a regional and local risk assessment, participating jurisdictions can develop specific strategies to address areas of concern identified through this process. This section is meant to provide a summary of the risk assessment for the planning area. The full risk assessment can be found in *Appendix A: Full Risk Assessment*.

Hazard Identification

The identification of relevant hazards for the region began with a review of the 2021 Nebraska State Hazard Mitigation Plan. The Regional Planning Team reviewed, discussed, and determined the list of hazards to be profiled in this hazard mitigation plan update. The hazards for which a risk assessment was completed are listed below.

Table 7: Hazards Addressed in the Plan

Hazards Addressed in the Plan		
Animal and Plant Disease	Flooding	Severe Thunderstorms
Dam Failure	Grass/Wildfire	Severe Winter Storms
Drought	Hazardous Materials Release	Terrorism and Cyber Attack
Extreme Temperatures	Human Infectious Disease	Tornadoes and High Winds

Hazards identified in the 2021 Nebraska State Hazard Mitigation Plan that were not identified in the Region 23 Hazard Mitigation Plan update include Levee Failure and Power Failure.[12] These hazards were reviewed by the Regional Planning Team and were chosen to not be included in this plan due to a variety of reasons. Levee Failure was not included due to the absence of levees in the planning area. Power failure is discussed within the hazards that may cause the failure.

Hazard Assessment Summary Tables

Table 8 and Table 9 provide an overview of the data contained in the hazard profiles. These tables are intended to be a quick reference for people using the plan and do not contain full source information. Source information and a full discussion of individual hazards are included in *Appendix A: Full Risk Assessment*. There are five main pieces of data used within these tables.

- **Property and Crop Damage in Dollars:** This is the total dollar amount of all property damage and crop damage as recorded in federal, state, and local data sources. The limitation to these data sources is that dollar figures usually are estimates and often do

12 Nebraska Emergency Management Agency. January 2021. "2021 Nebraska State Hazard Mitigation Plan". https://nema.nebraska.gov/assets/files/hazard-mitigation/hazmitplan2021.pdf.

not include all damages from every event, but only officially recorded damages from reported events.

- **Total Years of Record:** This is the span of years there is data available for recorded events.

- **Number of Hazard Events:** This shows how often an event occurs. The frequency of a hazard event will affect how a community responds. Severe winter storms may not cause much damage each time, but multiple storms can have an incremental effect on housing and utilities. In contrast, tornadoes and high winds can have a widespread effect on a community.

- **Historical probability:** This can be calculated based on the total years of record and the total number of years in which an event occurred. An example of the annual historical probability estimate is found below:

- **Future Likelihood:** This is the probability that a hazard will occur in the future. Future likelihood takes into account historical probability, climate change, and future development. It is broken down into the four categories listed below.

  Very Unlikely = Hazard is expected to occur once every 50+ years.

  Unlikely = Hazard is expected to occur once every 10+ to 50 years.

  Likely = Hazard is expected to occur once every 5+ to 10 years.

  Very Likely = Hazard is expected to occur once every 1 to 5 years.

The following table provides loss estimates for hazards with sufficient data. Detailed descriptions of major events are included in *Appendix A: Full Risk Assessment* and *Participant Profile Appendices*. It should be noted that NCEI data are not all inclusive and the database provides very limited information on crop losses. To provide a better picture of the crop losses associated with the hazards within the planning area, crop loss information provided by the United States Department of Agriculture (USDA) Risk Management Agency (RMA) was utilized for this update of the plan. Data for all the hazards are not always available, so only those with an available dataset are included in the loss estimation.

Table 8: Loss Estimation for the Planning Area

Hazard Type		Count	Property Damage	Crop Damage[2]
Animal and Plant Disease	Animal Disease[1]	84	750 Animals	N/A
	Plant Disease[2]	113	N/A	$2,062,635
Dam Failure[5]		9	$0	N/A
Drought[6]		574 out of 1,548 Months	$10,000,000	$32,835,082
Extreme Temperatures[7]	Extreme Cold	Avg. 4 Days a Year	$0	$19,637,114
	Extreme Heat	Avg. 5 Days a Year	$0	$8,671,302
Flooding[8]	Flash Flood	23	$22,000	$185,314
	Flood	4	$0	
Grass/Wildfire[9]		1,748	364,986 acres burned	$232,397
Hazardous Materials Release	Fixed Site[3]	13	N/A	N/A
	Transportation[4]	44	$266,139	N/A
Human Infectious Disease[12]		5,292 covid cases	N/A	N/A
Severe Thunderstorms[8]	Hail Range: 0.75-4.3 Inches Average: 1.24 Inches	1,150	$2,302,200	$118,861,116
	Thunderstorm Wind Range:58-103 mph Average: 64 mph	361	$1,215,400	$6,336,120
	Heavy Rain	19	$0	
	Lightning	5	$1,467,00	
Severe Winter Storms[8]	Blizzard	68	$74,000	$12,384,890
	Heavy Snow	97	$0	
	Ice Storm	0	$0	
	Winter Storm	189	$85,000	
	Winter Weather	59	$15,000	
Terrorism And Cyber Attack[10, 13]		1	N/A	N/A
Tornadoes and High Winds[8]	High Winds Range:40-60 mph Average: 56 mph	192	$129,000	$15,511,163
	Tornadoes Range: EF0-EF2 Average: EF0	77	$1,355,000	$0
Total		**10,131**	**$16,930,739**	**$216,717,133**

N/A: Data not available
1 – NDA, 2014 – 2023
2 - USDA RMA, 2000 –2023
3 – NRC, 1990 –2023
4 – PHMSA, 1971 – June 2024
5 – Stanford University NPDP, 2024
6 – NOAA, 1895 – 2023
7 – NOAA Regional Climate Center, 1893 – 2024
8 – NCEI, 1996 - 2023
9 – NFS, 2000 - 2023
10 – University of Maryland, 1970 – 2020
11 – USGS, 1900 – April 2024
12 – The New York Times, as of 3/23/2023
13 – Local Planning Team

Table 9: Hazard Occurrences

Hazard	Previous Occurrence Events/Years of Record	Historical Probability*	Future Likelihood	Likely Extent
Animal and Plant Disease[1, 2]	Animal Disease: 84/10	100%	Very Likely	Range: 1-160 animals
	Plant Disease: 113/24	83%	Very Likely	Crop damage or loss
Dam Failure[5]	9/135	5%	Very Unlikely	Varies by structure and event
Drought[6]	574/1,548 months	30%	Very Likely	D1-D4
Extreme Temperatures[7]	Cold: Avg 4 days a year	98%	Very Likely	Max Temp ≤10°F
	Heat: Avg 5 days a year	90%	Very Likely	Max Temp ≥100°F
Flooding[8]	27/28	54%	Very Likely	Some inundation of structures and roads near streams. Some evacuations of people may be necessary
Grass/Wildfire[9]	1,748/24	100%	Very Likely	Avg: 209 acres burned; Some homes and structures threatened or lost
Hazardous Materials Release[3, 4]	Fixed Site Release: 13/33	33%	Likely	Range: 1-66,000 gallons
	Transportation Release: 44/53	60%	Very Likely	Range: 1-7,700 gallons
Human Infectious Disease[12]	5,292 Covid cases	N/A	Very Likely	N/A
Severe Thunderstorms[8]	1,535/28	100%	Very Likely	Avg: 64 mph winds Avg: 1.2-inch hailstones Range: 58-104 mph winds Range: 0.75-4.3-inch hail
Severe Winter Storms[8]	413/28	100%	Very Likely	Snowfall: 1-18 inches snow Wind: 1-65 mph
Terrorism and Cyber-Attack[10, 13]	1/51	2%	Likely	Varies by event
Tornadoes and High Winds[8]	High Winds: 192/28	100%	Very Likely	Avg: 56 mph Range: 40-79 mph
	Tornadoes: 77/28	100%	Very Likely	Avg: EF0 Range: EF0-EF2

** Historical Probability = Total Years with an Event Occurrence / Total Years of Record*

FEMA National Risk Index

FEMA's National Risk Index is an online tool that analyzes natural hazard and community risk factors to develop a risk measurement for each county in the United States. Eighteen natural hazards are given a score from very high to very low. The table below gives the National Risk Index ratings for Box Butte County, Dawes County, Sheridan County, and Sioux County. Risk Index scores are calculated using an equation that combines scores for expected annual loss, social vulnerability, and community resilience. All values fall between 0 (lowest possible value) and 100 (highest possible value).

Table 10: National Risk Index

Hazard	Box Butte County	Dawes County	Sheridan County	Sioux County
Avalanche	N/A	N/A	N/A	N/A
Coastal Flooding	N/A	N/A	N/A	N/A
Cold Wave	Relatively High (94)	Relatively High (83.6)	Relatively High (94.4)	Relatively High (90.5)
Drought	Relatively Low (66.1)	Very Low (40.6)	Relatively Low (56.7)	Very Low (44.9)
Earthquake	Very Low (25.6)	Very Low (22)	Very Low (19.3)	Very Low (6.2)
Hail	Relatively Low (57.2)	Relatively Low (52.8)	Relatively Low (69.2)	Very Low (21.2)
Heat Wave	No Rating (0)	No Rating (0)	Very Low (17.5)	No Rating (0)
Hurricane	N/A	N/A	N/A	N/A
Ice Storm	Relatively Low (33.4)	Very Low (15.9)	Very Low (12.7)	Very Low (2.3)
Landslide	Very Low (5.9)	Relatively Low (30.1)	Relatively Low (54.7)	Very Low (11.2)
Lightning	Very Low (26.6)	Very Low (25.9)	Very Low (24.9)	Very Low (1.4)
Riverine Flooding	Very Low (7.3)	Very Low (9.2)	Very Low (24.8)	No Rating (0)
Strong Wind	Relatively Low (28)	Very Low (20.1)	Very Low (20.6)	Very Low (3.3)
Tornado	Relatively Low (35.2)	Very Low (25.7)	Very Low (23.6)	Very Low (12.8)
Tsunami	N/A	N/A	N/A	N/A
Volcanic Activity	N/A	N/A	N/A	N/A
Wildfire	Very Low (42.8)	Relatively Low (77.9)	Relatively Low (79.9)	Relatively Low (67.9)
Winter Weather	Relatively Moderate (85.2)	Relatively Low (57.3)	Very Low (19.7)	Relatively Low (37.2)
Overall Score	**Very Low (20.36)**	**Very Low (10.63)**	**Very Low (20.22)**	**Very Low (6.33)**

Source: FEMA[13]

13 FEMA. March 2025. "The National Risk Index". https://hazards.fema.gov/nri/map.

Historical Disaster Declarations

Presidential Disaster Declarations

Presidential disaster declarations by county are available via FEMA from 1960 to March 2025. The following table describes the presidential disaster declarations within the planning area for the period of record. There have been 16 presidential disaster declarations in the planning area.

Table 11: Presidential Disaster Declarations

Disaster Declaration Number	Declaration Date	Title	County
908	05/28/1991	Severe Storms & Flooding	Dawes, Sioux
1373	05/16/2001	Severe Winter Storms, Flooding and Tornadoes	Box Butte, Sioux
1853	07/31/2009	Severe Storms, Flooding, and Tornadoes	Box Butte
1924	07/15/2010	Severe Storms and Flooding	Dawes, Sheridan, Sioux
2660	07/28/2006	Dawes County Fire Complex	Dawes
2661	07/29/2006	Sioux County Fire Complex	Sioux
3245	09/13/2005	Hurricane Katrina Evacuees	Box Butte, Dawes, Sheridan, Sioux
3483	03/13/2020	Covid-19	Box Butte, Dawes, Sheridan, Sioux
4156	11/26/2013	Severe Storms, Winter Storms, Tornadoes and Flooding	Dawes, Sheridan, Sioux
4225	06/25/2015	Severe Storms, Tornadoes, Straight-Line Winds, and Flooding	Box Butte, Dawes, Sioux
4325	08/01/2017	Severe Storms, Tornadoes, and Straight-Line Winds	Box Butte, Sheridan, Sioux
4420	03/21/2019	Severe Winter Storm, Straight-Line Winds, and Flooding	Box Butte, Dawes, Sheridan, Sioux
4521	04/04/2020	Covid-19 Pandemic	Box Butte, Dawes, Sheridan, Sioux
4616	09/06/2021	Severe Storms and Straight-Line Winds	Box Butte, Sheridan
4786	05/24/2024	Severe Winter Storm and Straight-Line Winds	Dawes, Sioux
5009	08/30/2012	Region 23 Fire Complex	Dawes, Sheridan, Sioux

Source: Federal Emergency Management Agency, 1960-March 2025[14]

USDA Secretarial Disasters

Several USDA Secretarial Disasters for the planning area have occurred since 2012. Table 12 lists these disaster events. Most of the disasters were caused by drought.

Table 12: USDA Secretarial Disasters (2012- 2024)

Year	Type	Declaration Number	County
2012	Drought	S3315	Box Butte, Dawes, Sheridan, Sioux
2012	Drought	S3317	Dawes, Sheridan, Sioux
2012	Drought	S3319	Sioux

14 Federal Emergency Management Agency. March 2025. "Disaster Declarations". https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v2.

Year	Type	Declaration Number	County
2012	Combined Effects of Excessive, Heat, High Winds, Drought, Wildfires, and Freezes	S3350	Sioux
2013	Drought	S3505	Box Butte, Dawes, Sheridan, Sioux
2013	Drought	S3508	Sioux
2013	Drought	S3522	Dawes, Sheridan, Sioux
2013	Drought	S3549	Sheridan
2014	Drought	S3703	Sheridan
2015	Severe Flooding and Hail	S3842	Sioux
2016	Drought	S4002	Sioux
2016	Drought	S4039	Dawes, Sioux
2017	Drought	S4233	Sheridan
2017	Drought	S4247	Dawes, Sheridan
2019	Snow and Freeze	S4620	Box Butte, Sioux
2019	Snow and Freeze	S4621	Box Butte, Sioux
2019	Excessive Moisture and Flooding	S4664	Dawes, Sheridan, Sioux
2020	Drought	S4764	Sioux
2020	Drought	S4778	Box Butte, Dawes, Sioux
2020	Drought	S4782	Dawes, Sioux
2020	Drought	S4799	Box Butte, Dawes, Sheridan, Sioux
2020	Drought	S4802	Sioux
2020	Drought	S4807	Box Butte, Dawes, Sheridan
2020	Drought	S4809	Dawes, Sheridan
2020	Drought	S4816	Box Butte, Dawes, Sheridan, Sioux
2020	Drought	S4856	Sheridan
2022	Drought	S5207	Box Butte, Sheridan
2022	Drought	S5223	Sioux
2022	Drought	S5256	Box Butte, Dawes, Sioux
2022	Drought	S5304	Box Butte, Dawes, Sheridan, Sioux
2022	Drought	S5307	Dawes, Sheridan, Sioux
2022	Drought	S5320	Sheridan
2023	Drought	S5392	Box Butte, Sheridan, Sioux
2023	Drought	S5407	Sioux
2023	Drought	S5410	Sheridan
2023	Drought	S5422	Box Butte, Dawes, Sheridan, Sioux
2024	Drought	S5754	Sioux
2024	Drought	S5771	Box Butte, Dawes, Sheridan, Sioux
2024	Drought	S5774	Dawes, Sioux
2024	Drought	S5779	Box Butte, Sioux
2024	Drought	S5784	Sioux
2024	Drought	S5801	Dawes, Sheridan
2024	Drought	S5823	Box Butte, Sheridan
2024	Wildfires	S5835	Sioux

Source: USDA, 2012- 2024[15]
**2021 data not available at time of data collection*

15 U.S Department of Agriculture. 2025. "Disaster Designation Information" https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/disaster-designation-information/index.

State Emergency Declarations

While there is no comprehensive database of State Emergency Declarations for Nebraska, a press release archive for the current governor is available online which includes these declarations. State emergency declarations are proclaimed by the governor and are available from November 2022. The following table lists the three emergency declarations for counties in the planning area for the period of record.

Table 13: State Emergency Declarations

Declaration Date	Title	County
06/21/2024	Gov. Pillen Declares State of Emergency for Panhandle Wildfire	Box Butte
09/24/2024	Gov. Pillen Declares State of Emergency for Sioux County 'Bronco Fire'	Sioux
02/27/2025	Gov. Pillen Declares State of Emergency for Fires in Custer and Dawes Counties	Dawes

Source: Office of the Governor, November 2022-August 2025[16]

Hazard Profiles

Information from participating jurisdictions was collected and reviewed alongside hazard occurrence, magnitude, and event narratives as provided by local, state, and federal databases. Profiles for each identified hazard in the plan were created to examine their risk and potential impact in the planning area. These full profiles can be found in *Appendix A: Full Risk Assessment*. Hazards of local concern or events which have deviated from the norm are discussed in greater detail in each respective participant profile (see *Participant Profile Appendices* of this plan).

Local planning teams prioritized hazards of concern from the hazard list based on historical hazard occurrences, potential impacts, and local capabilities. The table below lists the participants along with their prioritized hazards of concern. It is important to note that while a jurisdiction may not have selected a specific hazard as prioritized, hazard events can impact any jurisdiction at any time and their selection is not a full indication of risk.

16 Office of the Governor: Governor Jim Pillen. August 2025. “Press Release Archive”. https://governor.nebraska.gov/press-releases-archive.

Table 14: Prioritized Hazards of Concern by Jurisdiction

Jurisdiction	Animal & Plant Disease	Dam Failure	Drought	Extreme Temperatures	Flooding	Grass/Wildfires	Hazardous Materials Release	Human Infectious Disease	Severe Thunderstorms	Severe Winter Storms	Terrorism & Cyber Attack	Tornadoes & High Winds
Region 23 Emergency Management						X			X	X		X
Upper Niobrara White NRD		X	X		X	X			X	X		X
Box Butte County			X			X	X		X	X		X
Alliance						X			X	X		X
Hemingford						X			X	X		X
Dawes County						X			X	X	X	X
Chadron						X			X	X		X
Crawford						X			X		X	X
Sheridan County		X	X	X		X			X	X		
Clinton										X		X
Gordon						X			X	X		X
Hay Springs			X			X			X			X
Rushville			X			X			X	X		X
Sioux County			X	X		X			X	X		
Harrison			X			X			X	X		X
Chadron Public Schools								X			X	X
Crawford Public Schools									X	X	X	X
Gordon-Rushville Public Schools				X					X	X		X
Hemingford Public Schools				X	X	X	X	X	X	X	X	X
Hemingford Fire District						X	X			X		X
Hay Springs Fire District						X				X		X

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Section Six: Mitigation Strategy

Introduction

The primary focus of the mitigation strategy is to identify action items to reduce the effects of hazards on existing infrastructure and property based on the established goals and objectives of the hazard mitigation plan. These actions should consider the most cost effective and technically feasible options to address risk.

FEMA Mitigation Strategy Requirements

Requirement §201.6(c)(3)(i): [The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

Requirement §201.6(c)(3)(ii): [The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

Requirement: §201.6(c)(3)(ii): [The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program, and continued compliance with NFIP requirements, as appropriate.

Requirement: §201.6(c)(3)(iii): [The mitigation strategy section shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

Requirement §201.6(c)(3)(iv): For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

Summary of Changes

The development of the mitigation strategy for this plan update includes the addition of new mitigation actions, updated status or removal of past mitigation actions, and revisions to descriptions for consistency across the planning area.

Selected Mitigation and Strategic Actions

After establishing the goals, the local planning teams evaluated mitigation and strategic actions. These actions included: the mitigation and strategic actions identified by each participating jurisdiction in the previous plan and additional actions discussed during the update planning process. The Regional Planning Team provided each participant a link to the FEMA Mitigation Ideas document to be used as a starting point to review a wide range of potential mitigation actions. Participants were also encouraged to think of actions that may need FEMA grant assistance and to review their hazard prioritization section for potential mitigation and strategic actions. Members of the Regional County Planning Team were also available to help local jurisdictions identify additional action alternatives. These suggestions helped participants

determine which actions would best assist their respective jurisdiction in alleviating damage in the event of a disaster.

During the update of previous identified actions and the identification of new actions, local planning teams prioritized each identified mitigation and strategic action as high, medium, or low. The listed priority rating does not indicate which actions will be implemented first. Generally, high priority actions either address a major concern for the jurisdiction, have few to no challenges in implementation, and/or garner large support from the public and administration. Low priority actions either address a minor concern for the jurisdiction, have many challenges in implementation, and/or may not have support from the public or administration at this time. Medium priority actions may only have one or two of the items listed above. A mitigation and strategic action's priority may change very quickly as circumstances change.

The mitigation and strategic actions are the core of a hazard mitigation plan. The local planning teams were instructed that each hazard identified in the plan must have an action that addresses it. Mitigation and strategic actions were evaluated based on referencing the community's risk assessment and capability assessment. Jurisdictions were encouraged to choose actions that were realistic and relevant to the concerns identified.

It is important to note that not all the mitigation and strategic actions identified by a jurisdiction may ultimately be implemented due to limited capabilities, prohibitive costs, low benefit-cost ratio, or other concerns. These factors may not be identified during this planning process.

Participant Mitigation and Strategic Actions

Mitigation and strategic actions identified by participants of the HMP are found in the Mitigation and Strategic Actions Matrix in *Appendix D: Mitigation Strategy*. Additional information about selected actions can be found in the participant profiles in the *Participant Profile Appendices.* Each action includes the following information in the respective community profile.

- **Action:** General title of the action item.
- **Description & Location:** Brief summary of what the action item(s) will accomplish and the location of the project where applicable.
- **Hazard(s) Addressed:** Which hazard the mitigation action aims to address.
- **Estimated Cost:** General cost estimate for implementing the mitigation action for the appropriate jurisdiction.
- **Local Funding:** A list of any potential local funding mechanisms to fund the action.
- **Timeline:** General timeline as established by the local planning teams.
- **Priority:** General description of the importance and workability in which an action may be implemented (high/medium/low).
- **Lead Agency:** Listing of agencies or departments which may lead or oversee the implementation of the action item.
- **Status:** A description of what has been done, if anything, to implement the action item.

Implementation of the actions will vary between individual plan participants based upon the availability of existing information; funding opportunities and limitations; and administrative capabilities of communities. Establishing a cost-benefit analysis is beyond the scope of this plan and could potentially be completed prior to submittal of a project grant application or as part of a five-year update. Completed, removed, kept, and new mitigation actions for each participating jurisdiction can be found in the *Participant Profile Appendices*.

Section Seven: Plan Implementation and Maintenance

Monitoring, Evaluating, and Updating the Plan

Each participating jurisdiction in the Region 23 Hazard Mitigation Plan will be responsible for monitoring, evaluating, and updating the plan during its five-year lifespan. Hazard mitigation projects will be prioritized by each participant's governing body with support and suggestions from the public and business owners. Each local planning team will be responsible for plan maintenance, the frequency of review, and how the public will be involved. This information can be found in each participant's profile under the Local Planning Team section. During the review, the local planning team can report on the status of projects and include which implementation processes worked well, any difficulties encountered, how coordination efforts are proceeding, and which strategies should be revised.

In addition, each local planning team will be responsible for ensuring that the plan's goals are incorporated into applicable revisions of their jurisdiction's relevant planning documents. The hazard mitigation plan will also consider any changes in planning documents and incorporate the information accordingly in its next update. *Appendix F: Guide to Review and Update the Hazard Mitigation Plan* may also be used to assist with plan updates.

The FEMA-required update of this plan will occur at least every five years, to reduce the risk of the plan expiring. Updates may be incorporated more frequently, especially in the event of a major hazard. Region 23 will start meetings to discuss mitigation plan updates at least nine months prior to the deadline for completing the plan update. Region 23 staff will review the goals and objectives of the previous plan and evaluate them to determine whether they are still pertinent and current. Among other questions, they may want to consider the following.

Requirement §201.6(c)(4)(i): [The plan maintenance process shall include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

Requirement §201.6(c)(4)(ii): [The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

Requirement §201.6(c)(4)(iii): [The plan maintenance process shall include a] discussion on how the community will continue public participation in the plan maintenance process.

- Do the goals and objectives address current and expected conditions?
- If any of the recommended projects have been completed, did they have the desired impact on the goal for which they were identified? If not, what was the reason it was not successful (lack of funds/resources, lack of political/popular support, underestimation of the amount of time needed, etc.)?
- Have either the nature, magnitude, and/or type of risks changed?

- Are there implementation problems?
- Are current resources appropriate to implement the plan?
- Were the outcomes as expected?
- Did the plan partners participate as originally planned?
- Are there other agencies which should be included in the revision process?

If deemed necessary, a private consulting firm or individual will be hired to help facilitate the plan update process.

Continued Public Involvement

To ensure continued plan support and input from the public and stakeholders, public involvement should remain a top priority for each participating jurisdiction. Every participant identified ways the public will be involved in the update process including the following.

- Social Media
- Websites
- Board/Council Meetings
- Newsletters
- Letters

Unforeseen Opportunities

If new, innovative mitigation options arise that could impact the planning area or elements of this plan, which are determined to be of importance, a plan amendment may be proposed and considered separate from the annual review and other proposed plan amendments. Region 23 EMA, as the plan sponsor, provides an opportunity for jurisdictions to compile proposed amendments and send them to NEMA, and subsequently to FEMA, for a plan amendment. Such amendments should include all applicable information for each proposal including description of changes, identified funding, responsible agencies, etc.

Incorporation into Existing Planning Mechanisms

The Regional Planning Team utilized a variety of plan integration tools to help communities determine how their existing planning mechanisms were related to the Hazard Mitigation Plan. Utilizing FEMA's *Integrating the Local Natural Hazard Mitigation Plan into a Community's Comprehensive Plan*[17] guidance, as well as FEMA's *2015 Plan Integration*[18] guide, each jurisdiction engaged in a plan integration discussion. This discussion was facilitated by a Plan Integration Worksheet or set of questions, created by the Regional Planning Team. This offered an easy way for participants to notify the Regional Planning Team of existing planning mechanisms, and if they interface with the hazard mitigation plan.

Each jurisdiction referenced all relevant existing planning mechanisms and provided information on how these did or did not address hazards and vulnerability. Summaries of plan integration are found in each individual participant profile. For jurisdictions that lack existing planning mechanisms, especially smaller communities, the plan may be used as a guide for future activity and development in the jurisdiction.

17 Federal Emergency Management Agency. November 2013. "FEMA Region X Integrating the Local Natural Hazard Mitigation Plan into a Community's Comprehensive Plan". https://www.fema.gov/sites/default/files/2020-07/integrating-hazard-mitigation-local-plan.pdf.

18 Federal Emergency Management Agency. July 2015. "Plan Integration: Linking Local Planning Efforts." https://www.fema.gov/sites/default/files/2020-06/fema-plan-integration_7-1-2015.pdf.

Section Eight: Participant Profiles

Purpose of Participant Profiles

Participant profiles contain information specific to jurisdictions participating in the Region 23 Hazard Mitigation Plan planning effort. Participant profiles were developed with the intention of highlighting each jurisdiction's unique characteristics that affect its vulnerability to hazards. These profiles may serve as a short reference of identified vulnerabilities and mitigation actions for a jurisdiction as they implement the mitigation plan. Information from individual jurisdictions was collected at public and one-on-one meetings and used to establish their section of the plan. Participant profiles may include the following elements:

- Community Fact Sheet
- Local Planning Team
- Capability Assessment
- Plans and Studies
- Future Development Trends
- Community Lifelines
- Hazard Prioritization and Mitigation Strategy

Community Fact Sheets

Community fact sheets were added at the beginning of the participant profiles for all counties and communities. These fact sheets provide demographic, housing, economic, and employment information specific to that community or county. To learn more about how these factors can impact vulnerability see *Appendix C: Planning Area Profile*.

Participant Profile Appendices

Individual participant profiles can be found in the *Box Butte County Appendix, Dawes County Appendix, Sheridan County Appendix, Sioux County Appendix, or Special Jurisdictions Appendix*. The location of the profiles is given below.

Box Butte County Appendix
- City of Alliance
- Village of Hemingford

Dawes County Appendix
- City of Chadron
- City of Crawford

Sheridan County Appendix
- Village of Clinton
- City of Gordon
- City of Hay Springs
- City of Rushville

Sioux County Appendix
- Village of Harrison

Special Districtricts Appendix
- Region 23 EMA
- Upper Niobrara White NRD
- Chadron Public Schools
- Crawford Public Schools
- Hemingford Public Schools
- Hay Springs Fire District
- Hemingford Fire District

Box Butte County Appendix

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County Profile

Box Butte County

Region 23 EMA
Hazard Mitigation Plan 2025

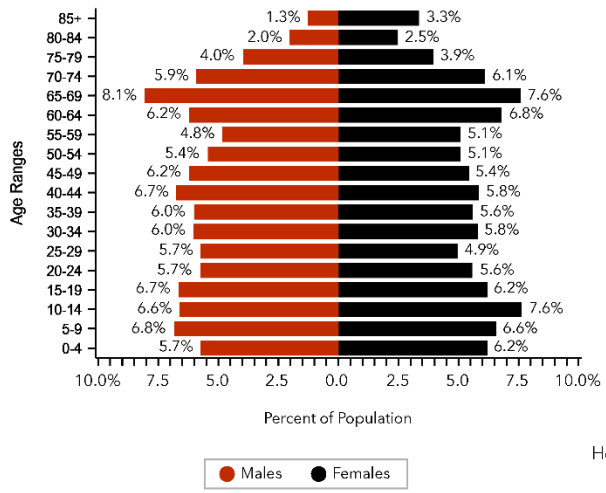
County Fact Sheet

Community Summary Fact Sheet

Box Butte County, NE
Region 23 EMA Hazard Mitigation Plan 2025

10,580	40.9	4,448	2.35	$185,533	$67,368
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



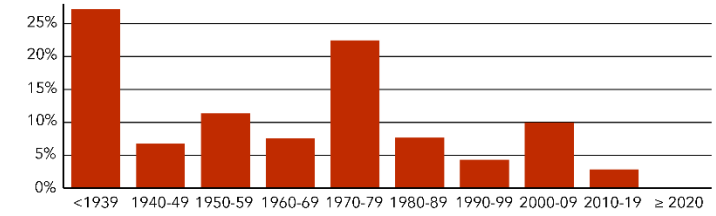
TOTAL POPULATION

2024 Total Population (Estimate)	10,580
2020 Total Population (U.S. Census)	10,842
2010 Total Population (U.S. Census)	11,308
2000 Total Population (U.S. Census)	12,158

AT RISK POPULATIONS

1,242	2,361	246	14%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

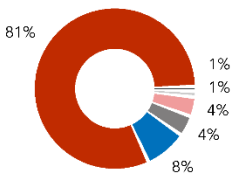
HOUSING: YEAR BUILT



EMPLOYMENT

532	2.5%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Asian Population
- Black Population
- American Indian Population
- Other Race Population
- Population of 2+ Races
- White Population

13% **of the Total Population is Hispanic**

HOUSING

653	5%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

County Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Barbara Keegan	Highway Superintendent	Box Butte County	Attended	Attended
Brett Ditsch	Commissioner	Box Butte County	-	-
Michael Sautter	Commissioner	Box Butte County	-	-
Steve Burke	Commissioner	Box Butte County	-	-
Marissa Curtiss	Attorney	Box Butte County	-	-
Ryan Dannar	Chief Deputy	Box Butte County	-	Attended

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The County Attorney, County Commissioner (assigned to Region 23), and County Highway Superintendent will review and update this participant profile outside of the five-year update. The County will review the plan bi-annually, and the public will be notified via board meetings and the county website.

Capability Assessment

The planning team assessed Box Butte County's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	No
	Building Codes	No
	If yes:	Year Adopted: N/A
		IBC Edition: N/A
	Wellhead Protection Plan	No
	Water System Emergency Response Plan	No

Capability/Planning Mechanism		Yes/No
	National Flood Insurance Program	No
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Other (if any)	
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	No
	GIS Capabilities	Yes
	Chief Building Official	No
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	No
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	Yes
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	Yes
	StormReady Certification	Yes
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Limited

National Flood Insurance Program (NFIP)

Box Butte County has chosen not to participate in the NFIP at this time due to the low flood risk to county structures and because of the minimal impacts from historical flooding. NFIP participation will be reevaluated if the county's flood risk changes. The current effective flood map date is 8/23/1977. The county was sanctioned on 8/23/1978. Box Butte County does not currently have any repetitive loss or severe repetitive loss structures.

County NFIP Information

NFIP Overview	
Date of NFIP Participation:	N/A
Floodplain Administrator:	None
Is Floodplain Administrator a Certified Floodplain Manager?	N/A
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	0
Total NFIP Premium ($):	N/A
Total NFIP Coverage ($):	N/A
Number of Claims Paid Out:	N/A
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the County Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	Sanctioned 08/23/1978; not a participating community
FIRMs Digital or Paper?	Paper
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table. Several structures in Box Butte County have been removed from the floodplain via LOMA. A summary of LOMAs identified for Box Butte County can be found in the flood map products table below.

County Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
5,033	$785,677,559	455	$63,794,816	9%

Source: County Assessor, 2024

County Flood Map **Products**

Type of Product	Product ID	Effective Date	Details
LOMA	04-07-477A-310011	3/19/2004	Property removed from SFHA
LOMA	09-07-0823A-310011	6/15/2009	Portion of property removed from SFHA
LOMA	09-07-1104A-310416	7/2/2009	Structure (residence) removed from SFHA
LOMA	12-07-2861A-310011	8/2/2012	Structure (residence) removed from SFHA
LOMA	15-07-0603A-310011	1/29/2015	Structure removed from SFHA
LOMA	16-07-1415A-310011	6/30/2016	Property removed from SFHA
LOMA	18-07-0364A-310011	12/12/2017	Structure (residence) removed from SFHA
FIRM Panel	310416IND0	8/23/1977	Current FIRM Panel
FIRM Panel	310011IND0	7/16/1987	Current FIRM Panel
FIRM Panel	3104160001A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160002A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160003A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160004A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160005A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160006A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160007A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160008A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160009A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160010A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160011A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160012A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160013A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160014A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160015A	8/23/1977	Current FIRM Panel
FIRM Panel	3104160016A	8/23/1977	Current FIRM Panel
FIRM Panel	3100110005A	7/16/1987	Current FIRM Panel
FIRM Panel	3100110015A	7/16/1987	Current FIRM Panel

Source: FEMA[1]

Plans and Studies

Box Butte County has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the county updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Box Butte County Local Emergency Operations Plan (2023)

The Box Butte County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective

[1] Federal Emergency Management Agency. February 2025. “FEMA Flood Map Service Center”. http://msc.fema.gov/portal/advanceSearch.

shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan.

Comprehensive Plan (2001)

The comprehensive plan is designed to guide the future actions and growth of the county. In future updates to the plan, the county would like to include the following: goals/objectives aimed at Safe Growth, direct development away from the floodplain, direct housing away from chemical storage facilities, direct housing and vulnerable populations away from major transportation routes, encourage infill development, encourage elevation of structures located in the floodplain, and identify areas that need emergency shelters. The county plans to incorporate information from the hazard mitigation plan into its next comprehensive plan update by June 2025.

Zoning Ordinance (2004), and Subdivision Regulations (2004)

The county's, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. In future updates, the county would like to include the following: restrict development in hazard prone areas, prohibit some development within the floodplain, discourage development in the floodplain, limit populations density in the floodplain, require more than one foot of elevations above Base Flood Elevation in the floodplain, discourage housing and vulnerable populations near chemical storage sites, consider wildlife and the wildland urban interface, restrict subdivision of land within or near the floodplain, include well setback requirements, and include the ability to implement water restrictions. The Hazard Mitigation Plan has been incorporated within these plans, and the county plans to update these documents in 2026 following the Comprehensive Plan.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Future Development Trends

According to the local planning team, the county has increased farm storage, introduced new business complexes, solar farms and farmland. W Otoe Road, that runs through the county, has been resurfaced recently.

Community Lifelines

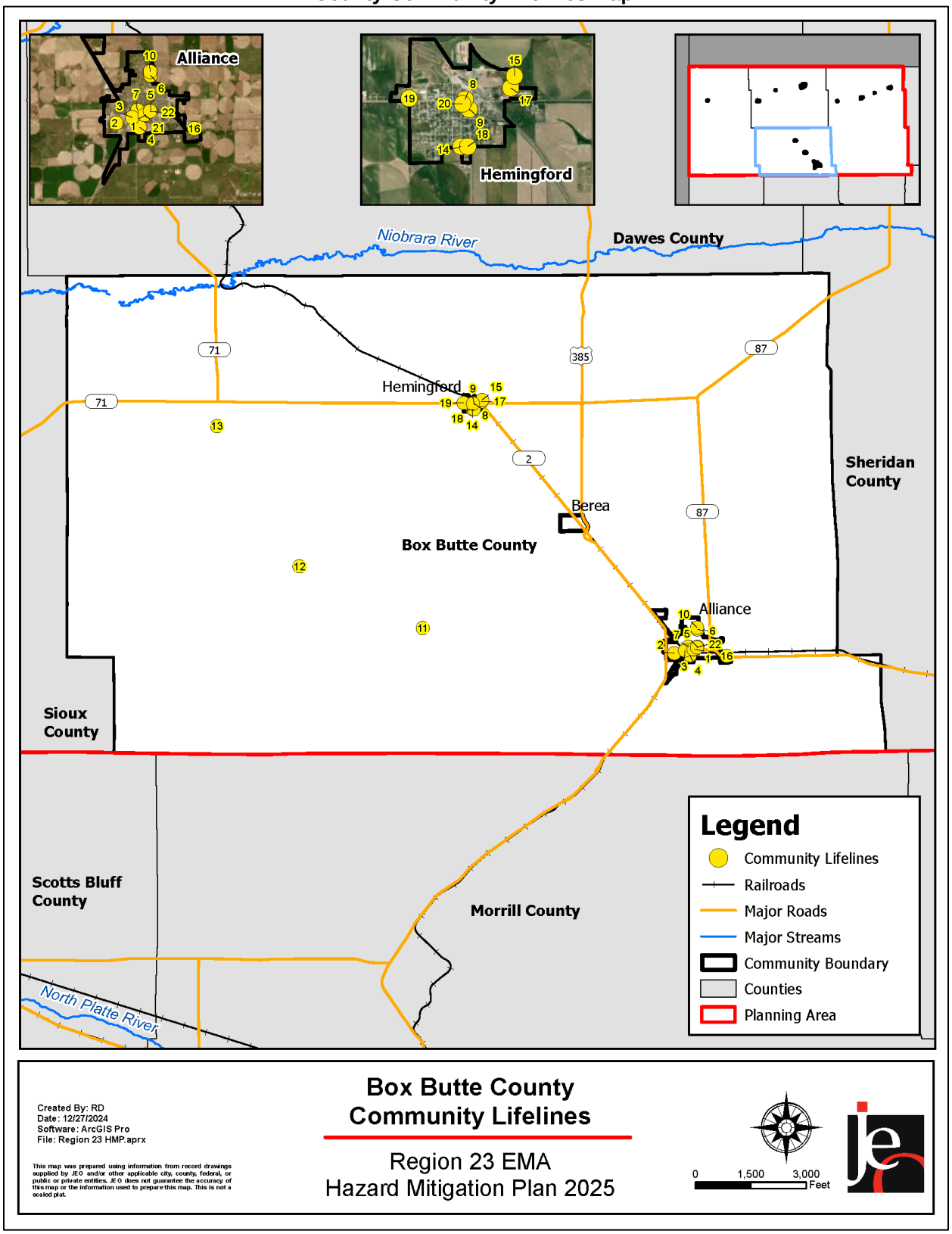
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



County Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Alliance Municipal Building	Safety & Security	G	N
2	Alliance Public Works	Safety & Security	G	N
3	Black Hills Energy	Energy	-	N
4	BNSF Railroad Facilities/Viaduct	Transportation	-	N
5	Box Butte County Courthouse	Safety & Security	-	N
6	Box Butte General Hospital	Health & Medical	G	N
7	First Presbyterian Church – Alliance	Food, Hydration, Shelter	S	N
8	Hemingford Co-op Telephone Company	Communications	G	N
9	Hemingford Village Office/Utilities	Safety & Security	-	N
10	Radio Tower – Alliance	Communications	-	N
11	Radio Tower – CR72	Communications	-	N
12	Radio Tower – CR78	Communications	-	N
13	Radio Tower – CR82	Communications	-	N
14	Radio Tower – Hemingford #1	Communications	-	N
15	Radio Tower – Hemingford #2	Communications	-	Y
16	State Roads Dept Shop – Alliance	Transportation	-	N
17	State Roads Dept Shop – Hemingford	Transportation	-	N
18	County Maintenance Shop	Transportation	-	N
19	County Fairgrounds	Food, Hydration, Shelter	-	N
20	Hemingford Fire Department	Safety & Security	G	N
21	Alliance Fire Department	Safety & Security	G	N
22	Regional Law Enforcement Center	Safety & Security	G	N

County Community Lifelines Map



Box Butte County Hazard Loss History

Hazard Type		Count	Property Damage	Crop Damage[2]
Agricultural Disease	Animal Disease[1]	12	39 animals	N/A
	Plant Disease[2]	57	N/A	$1,424,362
Dam Failure	Dam Failure[5]	1	$0	N/A
Drought[6]		574 out of 1548 months	$0	$10,810,361
Extreme Temperatures[7]	Heat	Avg. 2 days/year	0	$3,625,030
	Extreme Cold / Wind Chill	Avg 3 days/year	$0	$11,646,681
Flooding[8]	Flash Flood	5	$0	$108,344
	Flood	0	$0	
Grass/Wildfires[9]		417	7,052 Acres Burned	$92,450
Hazardous Materials Release	Fixed Site[3]	7	$0	N/A
	Transportation[4]	29	$9,505	N/A
Human Infectious Disease[12]		2,535 covid cases	N/A	N/A
Severe Thunderstorms[8]	Hail Range: 0.75-4.3 Inches Average: 1.16 Inches	261	$348,700	$74,691,153
	Thunderstorm Wind Range: 58 – 96 mph Average: 67 mph	84	$427,200	$2,714,681
	Heavy Rain	9	$0	
	Lightning	2	$17,000	
Severe Winter Storms[8]	Blizzard	17	$2,000	$17,225,298
	Heavy Snow	23	$0	
	Ice Storm	0	$0	
	Winter Storm	34	$45,000	
	Winter Weather	16	$15,000	
Terrorism and Cyber Attack[10]		0	N/A	N/A
Tornadoes and High Winds[8]	High Winds Range: 40-79 mph Average: 56 mph	59	$66,500	$8,742,312
	Tornadoes Range: EF0 Average: EF0	15	$1,000,000	$0
Total		**4,157**	**$1,930,905**	**$131,080,672**

N/A: Data not available
1 – NDA, 2014 – 2023
2 - USDA RMA, 2000 – 2023
3 – NRC, 1990 –2023
4 – PHMSA, 1971 – June 2024
5 – Stanford University NPDP, 2024
6 – NOAA, 1895 – 2023
7 – NOAA Regional Climate Center, 1893 – 2024
8 – NCEI, 1996 - 2023
9 – NFS, 2000 - 2023
10 – University of Maryland, 1970 – 2020
11 – USGS, 1900 – April 2024
12 – The New York Times, as of 3/23/2023

Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Box Butte County which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Box Butte County. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Drought

Drought was identified as a hazard of top concern for the county. Drought is generally a regional event, with impacts from a single drought event impacting multiple communities, counties, and even states. A large portion of the workforce relies on agriculturally based income which could be affected during severe drought. Drought impacts are not always as visible as impacts of other natural hazards and are hard to quantify. In addition, drought can exacerbate the effects felt by wildfires and impact the local economy by decreasing agriculture and grazing land for ranchers. The RMA reported $10,810,361 in crop losses from drought from 2000-2003.

Grass/Wildfires

The local planning team identified grass/wildfire as the greatest threat to Box Butte County. The entire county falls within the WUI as defined in the CWPP. According to the Nebraska Forestry Department, there were 417 reported fires by Alliance and Hemingford Fire Departments from 2000 to 2023. These consumed a total of 7,052 acres and resulted in $92,450 in crop damages. The largest reported fire in the county occurred in August 2012 when a BNSF rail line-sparked fire burned 1,000 acres in southwest northwest Box Butte County. Specific concerns for wildfire include the BNSF rail corridor and areas surrounding communities for wildfire encroachment. In recent years, both county fire departments have entered the Scottsbluff County Mutual Aid Association. The county has also improved its radio communication capability to mitigate the risk of wildfires.

Hazardous Materials Release

The county planning team identified hazardous materials release as a hazard of top concern for the county. According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are 24 chemical storage sites throughout Box Butte County which house hazardous materials. The National Response Center indicates that seven fixed site chemical spills occurred in the county from 1990-2023. 29 transportation-related chemical spills occurred from 1971 to June 2024, according to PHMSA. Those spills resulted in a total of $9,505 in damages.

The planning team indicated that there have been several instances of sulfur explosions and fertilizer leaks. These issues are alarming because of the county's limited response capabilities and the proximity of the Ogallala Aquifer. In the event of a large spill, local volunteer fire departments would respond as they are trained to the awareness level of HazMat and have some spill resources. The fire departments and law enforcement would maintain the event, following the most recent emergency response guidebook. Communication with the next level of spill response (operations and technicians) would be made after a scene size-up was completed.

Severe Thunderstorms

Severe thunderstorms are likely to occur annually across the planning area. The NCEI reported a total of 356 thunderstorm events between 1996 and 2023. These include hail, heavy rain, lighting, and thunderstorm wind. The storm events resulted in $792,900 in property damages, according to the NCEI. The USDA RMA reported $79,283,111 in crop damages (between 2000 and 2023). Property damages include downed trees and tree limbs. Hail in the unincorporated areas of the county is most likely to impact the agricultural areas of the county and lightning strikes are the leading cause of wildfires in the planning area. There are more than 337,000 acres devoted to crops; primarily corn. Hailstorms can have devastating impacts on crops, causing up to a 100 percent loss and lightning strikes are a leading cause of wildfires which can devastate local farming operations. In recent years, the county has improved its radio communication capabilities to mitigate the risk of thunderstorms.

Severe Winter Storms

Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. Severe winter storms are likely to occur annually across the planning area. The NCEI reported 107 severe winter storm events in Box Butte County from 1996 to 2023. These events resulted in $62,000 in property damage, two injuries, and one death. The USDA RMA reported $17,225,298 in crop damages (between 2000 and 2023). Most recorded events included a combination of factors including snow, wind, and ice. The local planning team noted extreme low temperature events in Box Butte County recorded wind chills between 20 and 50 degrees below zero. In recent years, the county has improved its radio communication capabilities to mitigate the risk of severe winter storms.

Tornadoes and High Winds

The county planning team identified high winds and tornadoes as a significant concern for the county. According to the NCEI, there were 59 high wind events and 15 tornadic events from 1996 to 2023. These events caused a total of $1,066,500 in property damage. The RMA reported $8,742,312 in crop damage from 2000 to 2023. There are no FEMA certified safe rooms in the county; however, several churches and community centers in Alliance and Hemingford have been identified as shelter locations for residents in those communities. Sirens are located in each community and are managed by the county and Region 23 EMA. In recent years, the county has improved its radio communication capabilities to mitigate the risk of tornadoes and high winds.

Completed Mitigation and Strategic Actions

Action	Comprehensive County Disaster and Emergency Response/Rescue Plan
Description & Location	Update comprehensive county disaster and emergency response /rescue plan.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Status	This has been completed.

Action	Develop Continuity Plans for Critical Community Services
Description & Location	Continuity planning helps to ensure that services can be maintained during and after a disaster.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Status	This has been completed.

Action	Drainage Study/Storm Water Master Plan
Description & Location	Drainage studies can be conducted to identify and prioritize improvements to address site specific localized flooding/drainage problems. Storm water master plans can be conducted to perform a community-wide storm water evaluation, identifying multiple problem areas, and potentially multiple drainage improvements for each.
Hazard(s) Addressed	Flooding
Status	This has been completed.

Action	Evacuation Plan
Description & Location	Establish a plan to effectively evacuate residents during storm events and major flooding.
Hazard(s) Addressed	Dam Failure, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Status	This has been completed.

Action	Floodplain Mapping
Description & Location	Many communities may have outdated floodplain maps, or no floodplain map. Floodplain mapping efforts can be updated for communities/counties that participate in the NFIP. Improved data and analysis methods will provide more accurate floodplain delineations, allowing communities to better identify their flood threats.
Hazard(s) Addressed	Flooding
Status	This has been completed.

Continued Mitigation and Strategic Actions

Action	Adopt a "No Adverse Impact" Approach to Floodplain Management
Description & Location	"No Adverse Impact" floodplain management reduces cumulative impacts to floodplain development on flood heights.
Hazard(s) Addressed	Flooding
Estimated Cost	$15,000 - $30,000 per generator
Local Funding	County General Fund, HMGP, BRIC
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Assessor, County Commissioners
Status	Work has been ongoing as Box Butte County has been working with the Upper Niobrara White NRD to secure grants in the northeastern portion of Box Butte County

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000 per generator
Local Funding	County General Fund, HMGP, BRIC
Timeline	2-5 Years
Priority	Medium
Lead Agency	Emergency Management, Utilities Departments
Status	The County has been working with Region 23 EM to secure a grant to update the generator at the Law Enforcement Center (possibly adding some auxiliary power to the courthouse). The application process has been completed.

Action	Civil Service Improvements
Description & Location	Improve emergency rescue and response equipment and facilities by updating existing emergency response equipment or providing additional equipment. This can include fire trucks, ATVs, water tanks/trucks, snow removal equipment, etc. This would also include developing backup systems for emergency vehicles and identifying and training additional personnel for emergency response.
Hazard(s) Addressed	Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$5,000 - $400,000 per vehicle, varies depending on equipment needed
Local Funding	County General Fund, HMGP, BRIC, Roads Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Emergency Management, Roads Department, Utilities Departments
Status	Each department is responsible for training of the membership and improving rescue and emergency equipment as needed.

Action	Educate Businesses on the Value of Continuity Planning and Mitigation
Description & Location	Educate local businesses on the value of continuity planning and mitigation.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	Staff Time
Local Funding	County General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Region 23 Emergency Management Agency, County Clerk
Status	A formal education program has not been developed. Currently, the Box Butte Development Corporation and the Chambers of Commerce assist local businesses.

Action	Emergency Communication
Description & Location	Establish an action plan to improve communication between agencies to better assist residents and businesses during and following emergencies. Establish inter-operable communications.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$10,000+
Local Funding	County General Fund, Region 23
Timeline	2-5 Years
Priority	Medium
Lead Agency	Sheriff's Office, Region 23 EMA
Status	Box Butte County uses the Code Red alert system that is provided by Region 23 EMA. Emergency communications are evaluated regularly, and improvements are made accordingly.

Action	Fire Wise Community
Description & Location	Work to become a Fire Wise Community USA participant though the NFS and USFS in order to educate homeowners, community leaders, planners, developers, and others in the effort to protect people, property, and natural resources from the risk of wildland fire. The Fire Wise Community approach emphasizes community responsibility for planning in the design of a safe community as well as effective emergency response, and individual responsibility for safer home construction and design, landscaping and maintenance.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	Staff Time
Local Funding	County General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Planning and Zoning Office, Region 23 EMA
Status	Not started.

Action	First Aid Training
Description & Location	Promote first aid training for all residents.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	County General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Region 23 EMA, County Administration, Sheriff's Office
Status	This is an ongoing project. Region 23 EMA promotes this project as do local pharmacies, Box Butte General Hospital and the Panhandle Public Health District.

Action	Groundwater/Irrigation/Water Conservation and Management Practices
Description & Location	Develop and implement a plan/ best management practices to conserve water use and reduce total use (high water use to low water use) and consumption of groundwater resources by citizens and irrigators of agricultural land during elongated periods of drought. Identify water-saving irrigation projects or improvements such as sprinklers of soil moisture monitoring. Potential restrictions on water could include limitation on lawn watering, car washing, farm irrigation restrictions, or water sold to outside sources. Implement BMPs through water conservation practices such as changes in irrigation management, education on no-till agriculture and use of xeriscaping in communities.
Hazard(s) Addressed	Drought
Estimated Cost	$10,000
Local Funding	County General Fund, Upper Niobrara White NRD, NDEE
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Commissioners, Region 23 EMA
Status	This action is in progress. The Upper Niobrara White NRD monitors groundwater levels and makes recommendations to producers while local municipalities monitor their resources

Action	Hail Resistant Roofing
Description & Location	Encourage the use of hail resistant roofing for any new construction.
Hazard(s) Addressed	Severe Thunderstorms (including hail)
Estimated Cost	Staff Time
Local Funding	County General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Assessor, County Clerk, County Commissioners
Status	This project is ongoing. Hail resistant roofing is encouraged for new construction

Action	Hazardous Tree Removal
Description & Location	Identify and remove hazardous limbs and/or trees.
Hazard(s) Addressed	Grass/Wildfire, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$20,000
Local Funding	County General Fund, Roads Fund
Timeline	1 Year
Priority	Low
Lead Agency	County Department of Roads
Status	As hazardous trees are identified to have an adverse impact on local infrastructure, they are trimmed or removed.

Action	Implement Low Impact Development Practices
Description & Location	Low impact development practices and green infrastructure can reduce runoff and result in a reduction in stormwater related flooding.
Hazard(s) Addressed	Flooding
Estimated Cost	Varies
Local Funding	County General Fund
Timeline	2-5 Years
Priority	Low
Lead Agency	County Planning and Zoning Office
Status	Box Butte County encourages low impact development practices for new construction.

Action	Improve Snow/Ice Removal Programs
Description & Location	Improve the snow routes and snow/ice removal procedures for streets. Improvements should address plowing snow, ice removal, parking during snow and ice removal, and removal of associated storm debris.
Hazard(s) Addressed	Severe Winter Storms
Estimated Cost	$20,000+
Local Funding	County General Funds
Timeline	1 Year
Priority	High
Lead Agency	County Department of Roads
Status	Local agencies monitor snow routes and evaluate their respective snow/ice removal policies as needed.

Action	Install Vehicular Barriers
Description & Location	Install vehicular barriers to protect critical facilities and key infrastructure where possible.
Hazard(s) Addressed	Hazardous Materials Release, Terrorism and Cyber Attack
Estimated Cost	$2,000+
Local Funding	County General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Sheriff's Office
Status	As new facilities are being constructed and older facilities being improved industry to standards, more protection is being built in to prevent terrorism

Action	Evaluate Building Codes
Description & Location	Evaluate implementation of building codes as deemed appropriate to reduce potential damage from hazard events to new and existing structures, especially mobile home parks and other highly vulnerable populations such as nursing home facilities.
Hazard(s) Addressed	Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	Staff Time
Local Funding	County General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	County Planning and Zoning
Status	In progress

Action	Public Education/Awareness
Description & Location	Through activities such as outreach projects, distribution of maps, and environmental education, increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchase equipment such as overhead projectors and laptops.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	County General Fund
Timeline	2-5 Years
Priority	Low
Lead Agency	County Clerk/Administration, Region 23 EMA
Status	There is an ongoing effort to reach residents and businesses. The Upper Niobrara White NRD, Panhandle Public Health District, Keep Alliance Beautiful, Law Enforcement Agencies and Fire Departments (to name a few) provide information to assist the public.

Action	Safe Rooms
Description & Location	Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, schools, and other areas.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$200-$300/sf stand-alone; $150-$200/sf addition/retrofit
Local Funding	County General Fund, BRIC, HMGP
Timeline	2-5 Years
Priority	Low
Lead Agency	County Commissioners
Status	Not started. County support to municipalities is ongoing in highly vulnerable areas.

Action	Stabilize/Anchor Fertilizer, Fuels, and Propane Tanks
Description & Location	Anchor fuel tanks to prevent movement. If left unanchored, tanks could present a major threat to property and safety during or after a hazard event.
Hazard(s) Addressed	Flooding, Hazardous Materials Release, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$1,000
Local Funding	County General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Planning and Zoning, County Department of Roads
Status	This project is ongoing. All new construction must comply with the NFPA codes and be approved by the State Fire Marshall.

Action	Stormwater System and Drainage Improvements
Description & Location	Smaller communities may utilize storm water systems comprising ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout, and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other storm water system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacement or modification of bridges may be necessary to provide greater capacity, maintain or improve structural integrity during flood events, and eliminate flooding threats and damages.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000 - $100,000+
Local Funding	County General Fund, CDBG, UNW NRD
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Department of Roads
Status	Coordination with the UNW NRD is ongoing.

Action	Warning Systems
Description & Location	Improve city cable TV interrupt warning system and implement telephone interrupt system such as Reverse 911, emergency text messaging warning system, etc.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$5,000
Local Funding	County General Fund, HMGP, BRIC
Timeline	1 Year
Priority	Low
Lead Agency	Sheriff's Office, Region 23 EMA
Status	This project is ongoing. Warning systems are checked and updated as needed. With more broadband communication capabilities, it is anticipated this project will be enhanced.

Removed Mitigation and Strategic Actions

Action	Windbreaks/Living Snow Fence
Description & Location	Installation of windbreaks and/or living snow fences to increase water storage capacity in soil and reduce blowing snow/soil.
Hazard(s) Addressed	Severe Winter Storms
Reason for Removal	The UNW NRD performs this type of project.

Community Profile

City of Alliance

Region 23 EMA
Hazard Mitigation Plan 2025

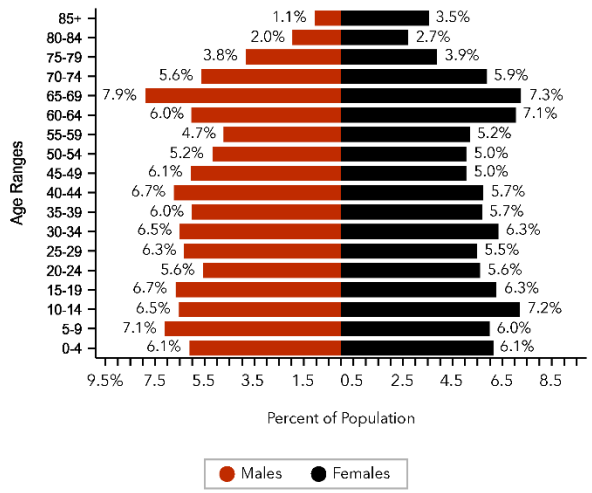
Community Fact Sheet

Community Summary Fact Sheet

Alliance, NE
Region 23 EMA Hazard Mitigation Plan 2025

7,919	40.2	3,359	2.33	$176,570	$66,875
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



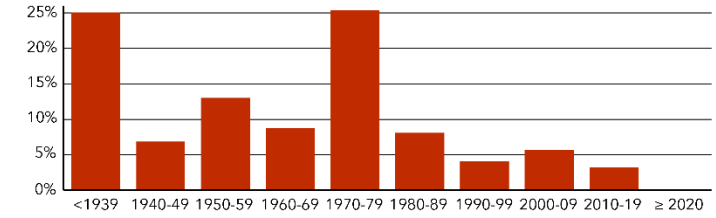
TOTAL POPULATION

2024 Total Population (Estimate)	7,919
2020 Total Population (U.S. Census)	8,136
2010 Total Population (U.S. Census)	8,471
2000 Total Population (U.S. Census)	8,966

AT RISK POPULATIONS

1,036	1,726	194	16%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

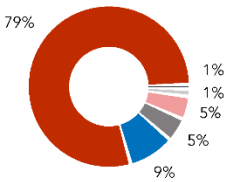
HOUSING: YEAR BUILT



EMPLOYMENT

375	2.9%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Asian Population
- Black Population
- American Indian Population
- Other Race Population
- Population of 2+ Races
- White Population

15% **of the Total Population is Hispanic**

HOUSING

469	3%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Troy Shoemaker	Fire Chief	City of Alliance	Attended	Attended
Brent Kusek	Community Development Director/ Floodplain Administrator	City of Alliance	Attended	-
David Leavitt	Chief of Police	City of Alliance	Attended	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The City Manager, Community Development Director, and Fire Chief will review and update this participant profile outside of the five-year update. The City of Alliance will review the plan annually, and the public will be notified via council meetings.

Capability Assessment

The planning team assessed the City of Alliance's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes
	Floodplain Management Plan	Yes
	Storm Water Management Plan	Yes
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	If yes:	Year Adopted: 2021
		ICC Edition: 2018
	Water System Emergency Response Plan	Yes
	Wellhead Protection Plan	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No

Capability/Planning Mechanism		Yes/No
	Community Wildfire Protection Plan	Yes
	Other (if any)	
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	Yes
	Storm Water Service Fees	No
	Development Impact Fees	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	Yes
	Firewise Communities Certification	No
	Tree City USA	Yes
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

National Flood Insurance Program (NFIP)

Alliance is a member of the NFIP, having joined on 07/16/1987, and the city's Floodplain Administrator oversees the commitments and requirements of the NFIP. The floodplain administrator uses the Nebraska DNR Interactive map, GIS Floodplain maps, and Nebraska Floodplain Management Interactive Map to determine if a development will be located in the floodplain. A floodplain permit is required for small projects while larger projects require elevation certificates, and engineered drawings for flood proofing the improvement and to prove it will not raise upstream flood levels. Enforcement is done using the city's permitting and project review process. After a flood event, the community implements substantial improvement and substantial damage provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDAHandbook_FINAL.pdf. The city's floodplain regulations meet the State of Nebraska requirements. The city would work with the Nebraska Department of Natural Resources and FEMA on any Letters of Map Change.

The local planning team has stated that Alliance will remain in good standing and be involved with the NFIP. Currently, the city has no barriers when running the NFIP program. There are no known areas in the community with limited NFIP coverage. The city presently uses no educational materials for the floodplain, as only a few structures exist in the floodplain. Additional NFIP information is given in the table below.

NFIP Information

NFIP Overview	
Date of NFIP Participation:	07/16/1987
Floodplain Administrator:	Brent Kusek
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	4
Total NFIP Premium ($):	$1,539
Total NFIP Coverage ($):	$963,000
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	N/A
Number of Severe Repetitive Loss Structures:	N/A
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Paper
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table. Several structures in Alliance have been removed from the floodplain via LOMA. A summary of LOMAs identified for Alliance can be found in the flood map products table below.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
3,412	$508,567,214	224	$33,985,425	6.6%

Source: County Assessor, 2024

Flood Map Products

Type of Product	Product ID	Effective Date	Details
LOMA	04-07-477A-310011	3/19/2004	Property removed from SFHA
LOMA	09-07-0823A-310011	6/15/2009	Portion of property removed from SFHA
LOMA	12-07-2861A-310011	8/2/2012	Structure (residence) removed from SFHA
LOMA	15-07-0603A-310011	1/29/2015	Structure removed from SFHA
LOMA	16-07-1415A-310011	6/30/2016	Property removed from SFHA
LOMA	18-07-0364A-310011	12/12/2017	Structure (residence) removed from SFHA
FIRM Panel	310011IND0	07/16/1987	Current FIRM Panel
FIRM Panel	3100110005A	07/16/1987	Current FIRM Panel
FIRM Panel	3100110015A	07/16/1987	Current FIRM Panel

Source: FEMA[2]

Plans and Studies

The City of Alliance has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the city updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Building Code (2021)

The building code sets standards for constructed buildings and structures. Alliance's building codes are based on the 2018 International Code Council. These codes regulate and govern the conditions and maintenance of all property, buildings, and structures by providing the standards for supplied utilities, facilities, and other physical things and conditions essential to ensure that structures are safe, sanitary, and fit for occupation and use. Enforcement of the zoning code is done prior to building permits being issued, while building code inspection is done by city officials during construction. There have been two amendments to the Residential code. The first made sprinklers optional on housing covered by the respective code. The second amended the Fuel Gas Code making natural gas hookups on lots adjacent to utility and disallowed large propane tanks. The hazard mitigation plan has not been integrated with the city building code.

Capital Improvement Plan

The purpose of the capital improvement plan is for the city to strategize how to budget for nonrecurring physical or digital purchases. A capital improvement plan typically spans multiple years and includes financing plans. The plan includes radio communication upgrades, municipal wells, upsizing of culverts and drainage structures, installing water meters for residential

[2] Federal Emergency Management Agency. February 2025. "FEMA Flood Map Service Center". http://msc.fema.gov/portal/advanceSearch.

structures, and updating the electrical distribution system. The city plans to update the capital improvement plan to a 10-year CIP process.

Comprehensive Plan (2023)

The comprehensive plan is designed to guide the future actions and growth of the city. The plan directs development away from the floodplain, directs housing away from chemical storage facilities, directs housing and vulnerable populations away from major transportation routes, and encourages infill development. The city plans to incorporate information from the hazard mitigation plan into its next comprehensive plan update. The plan is reviewed annually and heavily updated every ten years to reflect changes. The plan includes the following: directing development away from the floodplain, directing housing away from chemical storage facilities, directing housing and vulnerable populations away from major transportation routes and encouraging infill development. The comprehensive plan gets reviewed annually and is updated heavily every ten years to reflect changes, goals accomplished, and future goals.

Floodplain Regulation Ordinance (2023), Zoning Ordinance (2023), and Subdivision Regulations (2023)

The city's floodplain regulations, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. These documents include the ability to implement redistrict development in hazard prone areas, discourage development in the floodplain, and discourage housing and vulnerable populations near chemical storage sites. The city reviews these documents annually to make sure it complies with local needs and requirements from State and Federal jurisdictions. The documents include the following: restricting development in hazard prone areas, discouraging development within the floodplain and discouraging housing and vulnerable populations near chemical storage sites. The hazard mitigation plan has been integrated into the documents through the floodplain regulations and storm water drainage requirements.

Box Butte County Local Emergency Operations Plan (2023)

The Box Butte County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Water System Emergency Response Plan (2022)

The water system emergency response plan serves as a guideline for water operators and city officials to minimize the disruption of normal services to consumers and to provide public health

protection during an emergency event. The document identifies several natural and human-caused events and discusses the water system's response during those events.

Future Development Trends

The following are new businesses that have been developed within the city:

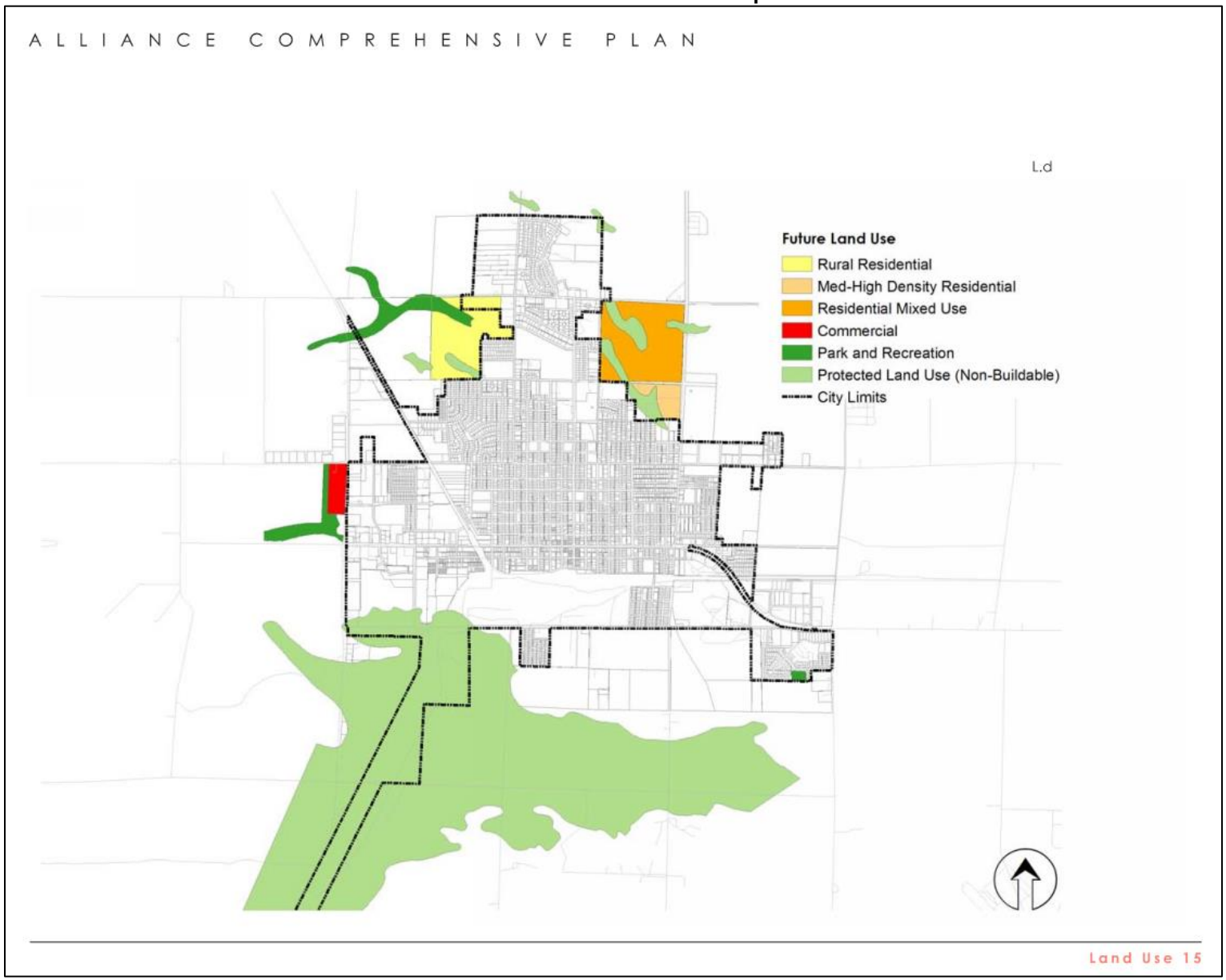
- Runza, 2461 S Hwy 385
- WESTCO Tire Shop, 1630 West 10th Street
- WESTCO Agronomy, 2377 Highway 2
- WESTCO Agronomy Storage, 2381 Highway 2
- WESTCO Bulk Fertilizer Warehouse, 2371-3 Highway 2
- Holiday Inn Express, 1630 Holsten Drive
- Heartland Flats, 2465 S Hwy 385
- Platte Valley Bank,
- City of Alliance Public Works/Public Transit, 106 S Cody Avenue
- Alliance Fire Department Training Facility, 1408 West 1st Street
- WNCC Lineman School Addition, 1621 East Kansas
- Consumers Co-op Credit Union, 1301 West 3rd Street
- Pizza Hut, 1239 East 3rd Street
- Scooters Coffee, 1439 West 3rd
- Oreilly Auto Parts, 1242 West 3rd
- Dollar General, 1229 West 3rd

The following are buildings that have been demolished within the city:

- WESTCO Tire and Automotive, 3rd and Big Horn
- 716 Big Horn
- 123 Box Butte Avenue
- 640 Belmont
- 321 West 6th Street
- 207 Sweetwater Avenue
- 310 East 3rd Street
- 610 East 7th Street
- 100 Big Horn (City of Alliance Warehouse #3)
- 105 Big Horn Avenue (City of Alliance Parks Building)
- City of Alliance Old Swimming Pool house, 16th Street and Cheyenne Avenue
- Alliance Animal Clinic, 903 Flack Avenue
- 1811 Nebrado Street
- BNSF Terminal Building and Yard Tower, 800 West Kansas Street

None of the new development projects have occurred near the floodplain or other hazardous areas and no new businesses are planned or anticipated in the near future.

Alliance Future Land Use Map



Community Lifelines

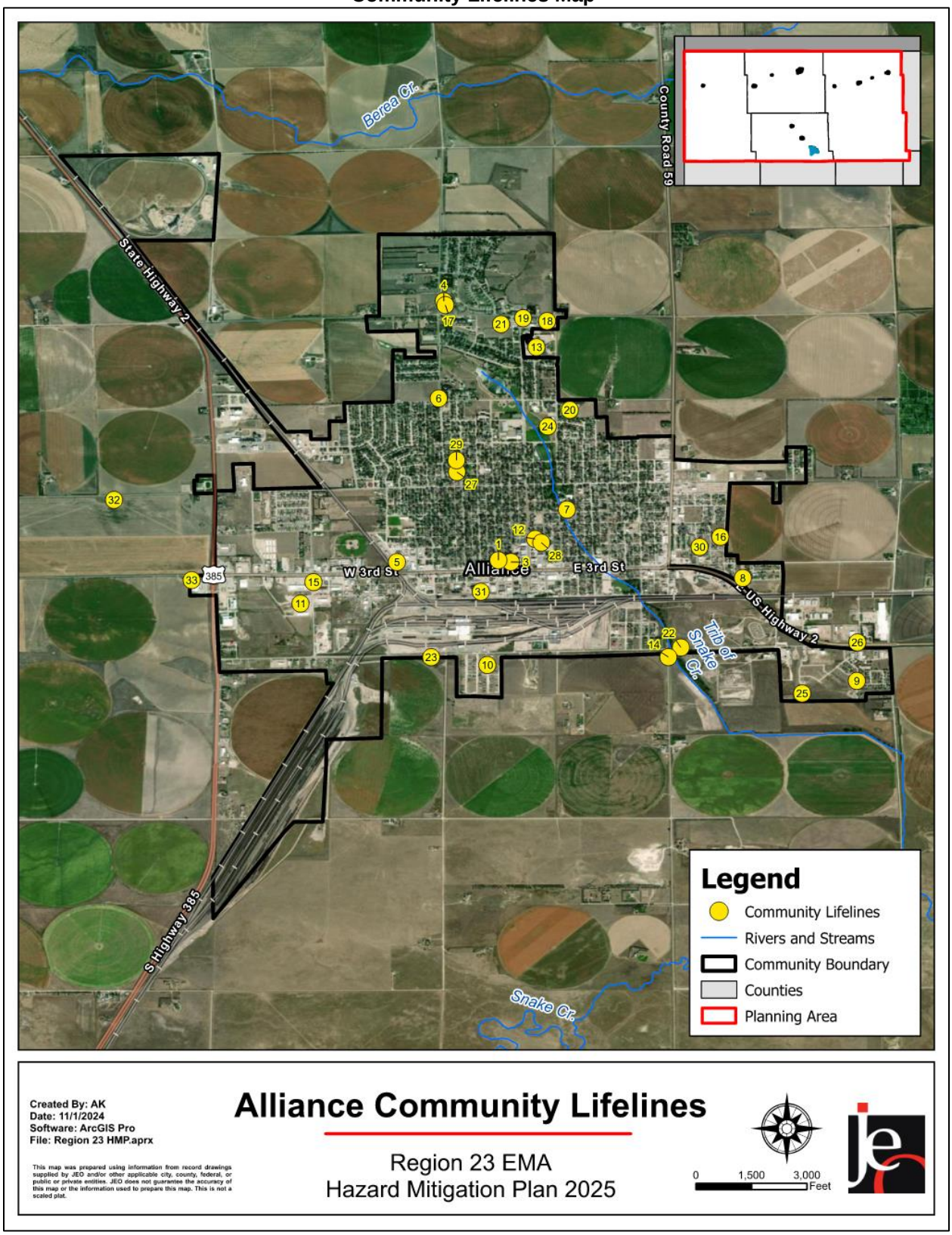
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Alliance Fire Department	Safety & Security	G	N
2	Alliance Municipal Airport*	Transportation	G	N
3	Alliance Municipal Building (City Manager, City Clerk)	Safety & Security	G	N
4	Alliance Outdoor Warning Siren #1	Safety & Security	-	N
5	Alliance Outdoor Warning Siren #2	Safety & Security	-	N
6	Alliance Outdoor Warning Siren #3	Safety & Security	-	N
7	Alliance Outdoor Warning Siren #4	Safety & Security	-	Y
8	Alliance Outdoor Warning Siren #5	Safety & Security	-	N
9	Alliance Outdoor Warning Siren #6	Safety & Security	-	N
10	Alliance Outdoor Warning Siren #7	Safety & Security	-	N
11	Alliance Public Works (Water, Sewer, Electric, Public Transit)	Safety & Security	G	N
12	Box Butte County Courthouse/Sheriff's Office	Safety & Security	-	N
13	Box Butte Hospital	Health & Medical	G	N
14	Broadwater Substation	Energy	-	Y
15	Cody Substation	Energy	-	N
16	Elkhorn Water Tower	Water Systems	-	N
17	Emerson Substation	Energy	-	N
18	Good Samaritan Society-The Sandhills	Health & Medical	-	N
19	Good Samaritan Society-Wildflower Terrace Senior Living	Health & Medical	-	N
20	Highland Park Care Center	Health & Medical	G	N
21	Highland Park-Cross Roads Assisted Living	Health & Medical	-	N
22	Lift Station A	Water Systems	-	Y
23	Lift Station B	Water Systems	-	N
24	Lift Station C	Water Systems	-	N
25	Lift Station D	Water Systems	-	N
26	Lift Station E	Water Systems	-	N
27	Marian Residence	Health & Medical	-	N
28	Regional Law Enforcement Center	Safety & Security	G	N
29	Toluca Water Tower	Water Systems	-	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Alliance which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the City of Alliance. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

The local planning team identified grass/wildfire as a significant threat for the city. According to the Nebraska Forestry Service there were 353 reported fires by the Alliance Fire Department from 2000 to 2023 which consumed a total of 6,479 acres. Of the reported events, one fire in August of 2012 consumed approximately 1,000 acres. The City of Alliance participates in the Pine Ridge Area Community Wildfire Protection Plan (CWPP). According to the CWPP, Alliance is located within the WUI. The Alliance Fire Department has mutual aid agreements with the fire departments in the surrounding areas, but during large scale events it is possible nearby fire department would be unable to lend assistance due to addressing the needs of their respective community/protection area.

Severe Thunderstorms

Severe thunderstorms are a regular part of the climate for Box Butte County and Alliance. The NCEI recorded 95 severe thunderstorm events from 1996 to 2023, with $431,100 in damages to property and $0 in crop damage. Severe thunderstorms and hail can result in the loss of electricity, blocked roadways, damage to trees, and flooding. Blocked roadways present life safety concerns to those needing evacuation or immediate medical attention.

Severe Winter Storms

Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. The planning teams estimated that severe winter storms were highly probable in the future for Alliance. According to the NCEI, there were 107 severe winter storms in Box Butte County from 1996 to 2023. These storms resulted in $62,000 in property damage and $1,000 in crop damage. A winter storm in 1997 caused significant damage by downing power poles and lines and up to a foot of snow blocked major transportation routes. A semi-trailer tipped and crashed in Alliance while north of town approximately 55 cattle escaped enclosures and were killed on the railroad tracks when struck by a BNSF train in near-zero visibility conditions.

Since the storm event is zonal in nature, the number that impacted Alliance is unknown. Major local concerns regarding severe winter storms include blocked transportation routes and the safety of residents. The city is responsible for clearing snow from local roads and snow removal plans and resources are reviewed or updated annually as needed.

Tornadoes and High Winds

The local planning team identified tornadoes and high winds as a significant concern for the City of Alliance. According to the NCEI data, there were seven tornadoes that passed near Alliance from 1996 to 2023. All tornados were either EF/F0 with all but one having no reported damages.

A June 2017 tornado caused $1,000,000 in property damage when 65 train cars were blown over and the roof of a large building was damaged near the Alliance Airport. There are no FEMA certified safe rooms located in the City of Alliance. High winds have also caused significant tree damage in Alliance which have blocked roads, downed powerlines, and caused some property damage. Tree debris removal is the responsibility of the city and hazardous trees are removed as needed. As a strong agricultural community, numerous fertilizers, fuel, and propane tanks are located in town and the surrounding areas. The city has adopted codes which require such tanks to be anchored to prevent tipping during high wind events.

New Mitigation and Strategic Actions

Action	Vacant/Dilapidated Structures
Description & Location	Pass a Vacant Property Registration Ordinance and develop and update a property list.
Hazard(s) Addressed	Human Infectious Disease
Estimated Cost	$100,000+
Local Funding	City General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	City Administration/Community Development/Fire Department
Status	Not started

Action	Electrical Feed Line Study
Description & Location	Electrical Feed Line Study. Have an Alternate Feed Line Feasibility Study conducted for redundant electric service to the community. The largest concern with the City of Alliance electric system is the fact that there is only one transmission source feeding the whole system. Currently the only source is located on west 10th street. In the event of a major catastrophe, and we were to lose this one source, our entire electric grid would be left de-energized. Looking at the "big" picture, a second alternate feed source would be extremely beneficial to maintain our system's reliability and resilience.
Hazard(s) Addressed	Dam Failure, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	TBD
Local Funding	Electrical Enterprise Fund
Timeline	2-5 Years
Priority	High
Lead Agency	City of Alliance Electric Department
Status	Not started

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Dam Failure, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+ per generator
Local Funding	City general Fund, HMGP, BRIC
Timeline	2-5 Years
Priority	Low
Lead Agency	City of Alliance Electrical Department
Status	Not started

Action	Civil Service Improvements
Description & Location	Improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment. This can include fire trucks, ATV's, water tanks/trucks, snow removal equipment, etc. This would also include developing backup systems for emergency vehicles and identifying and training additional personnel for emergency response.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	Varies by need
Local Funding	City general fund, Box Butte County, BRIC, HMGP
Timeline	2-5 Years
Priority	High
Lead Agency	City Clerk, Utilities Department
Status	In progress

Action	Complete/Update Community Wildfire Protection Plan
Description & Location	Complete and/or update a CWPP. A CWPP enables a community to plan how it will reduce the risk of wildfire.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	$25,000
Local Funding	HMGP, BRIC, Region 23 Cost Share, Fire Department
Timeline	2-5 Years
Priority	Medium
Lead Agency	Region 23 Emergency Management Agency, Fire Department
Status	Plan update not started.

Action	Comprehensive City Disaster/Emergency Response/Rescue Plan
Description & Location	Update comprehensive city/village disaster and emergency response/ rescue plan
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$6,000+
Local Funding	City General Fund, Box Butte County, HMGP, BRIC
Timeline	2-5 Years
Priority	Medium
Lead Agency	City Commissioners, Police Department, Region 23 Emergency Management Agency
Status	Not started

Action	Drainage Study/Stormwater Management Plan
Description & Location	Drainage studies and assessments can be conducted to identify and prioritize design improvements to address site specific localized flooding/drainage issues to reduce and/or alleviate flooding. Stormwater master plans can be conducted to perform a community- wide stormwater evaluation, identifying multiple problem areas and potential drainage improvements. Update the current Stormwater Management Plan.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000 - $15,000
Local Funding	City General Fund, CDBG, Upper Niobrara White NRD
Timeline	2-5 Years
Priority	Low
Lead Agency	City of Alliance Public Works, Floodplain Administrator
Status	Not Started

Action	Emergency Communications
Description & Location	Establish a county-wide inter-operable communication system that ties the City of Alliance Public Safety Answering Point (PSAP) to the South-Central 911 System for the sharing of 911 equipment to strengthen regionalization efforts. Establish a county-wide emergency radio communication system that connects to Nebraska's Statewide Radio System (SRS).
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$1,500,000 - $2,000,000
Local Funding	Genera Fund, HMGP, Emergency Communications Grants, Partnerships with Village of Hemingford and Box Butte County
Timeline	2-5 Years
Priority	Medium
Lead Agency	Alliance Fire Department, City of Alliance
Status	In progress

Action	Evacuation Plan
Description & Location	Establish a plan to effectively evacuate residents during storm events and major flooding.
Hazard(s) Addressed	Dam Failure, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$2,000+
Local Funding	Region 23 EMA, DHS
Timeline	2-5 Years
Priority	Low
Lead Agency	Region 23 Emergency Management, Alliance Fire Department
Status	Not Started

Action	Expand Water Storage Capacity
Description & Location	Evaluate the need to expand water storage capacity through a new water tower, standpipe, etc. to provide a safe water supply for the community and additional water for fire protection. Establish emergency water supplies such as dry hydrants and individual or community cisterns for defending structures from wildland fires.
Hazard(s) Addressed	Drought, Extreme Temperatures, Grass/Wildfire
Estimated Cost	$30,000+
Local Funding	CDBG, UNWNRD, City General Fund
Timeline	2-5 Years
Priority	Low
Lead Agency	Alliance Public Works Department
Status	Not started, but an underground water reservoir may be moved to do possible building project.

Action	Groundwater/Irrigation/Water Conservation Management Plan and Practices
Description & Location	Develop and implement a plan/best management practices to conserve water use and reduce total use (high water use to low water use) and consumption of groundwater resources by citizens and irrigators of agricultural land during elongated periods of drought Identify water saving irrigation projects of improvements such as sprinklers of soil moisture monitoring. Potential restrictions on water could include limitation on lawn watering, car washing, farm irrigation restrictions, or water sold to outside sources. Implement BMPs through water conservation practices such as changes in irrigation management, education on no-till agriculture and use of xeriscaping in communities.
Hazard(s) Addressed	Drought, Grass/Wildfire
Estimated Cost	$10,000+
Local Funding	City General Fund, UNWNRD, NDEE, HMGP, BRIC
Timeline	2-5 Years
Priority	Medium
Lead Agency	Alliance Public Works Department
Status	In progress

Action	Public Awareness/Education
Description & Location	Considerations for activities include outreach projects and the distribution of maps and environmental education materials to increase public awareness of natural hazards to public and private property owners, property renters, businesses, and local officials. Other activities include providing education to citizens on water conservation methods. Purchasing and using equipment such as overhead projectors and laptops can allow for easier ways to educate the public during meetings
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	City General Fund, HMGP, BRIC
Timeline	2-5 Years
Priority	Low
Lead Agency	City Administration, Region 23 EMA
Status	In progress

Action	Safe Rooms
Description & Location	Design and construct fully supplied safe rooms in highly vulnerable urban and rural areas such as mobile home parks, campgrounds, schools, and other such areas throughout the planning area.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$200-$300/sf stand-alone; $150-$200/sf addition/retrofit
Local Funding	City General Fund, HMGP, BRIC
Timeline	2-5 Years
Priority	Low
Lead Agency	Alliance Fire Department, Region 23 EMA
Status	Not Started

Action	Stormwater System and Drainage Improvements
Description & Location	Smaller communities may utilize stormwater systems comprising of ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacement or modification of bridges may be necessary to provide greater capacity, maintain or improve structural integrity during flood events, and eliminate flooding threats and damages.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000-$100,000+
Local Funding	City General Fund, Upper Niobrara White NRD
Timeline	2-5 Years
Priority	Medium
Lead Agency	City of Alliance Public Works, Floodplain Manager
Status	Not Started

Removed Mitigation and Strategic Actions

Action	Improve Snow/Ice Removal Programs
Description & Location	Improve the snow routes and snow/ice removal procedures for streets. Improvements should address plowing snow, ice removal, parking during snow and ice removal, and removal of associated storm debris.
Hazard(s) Addressed	Severe Winter Storms
Reason For Removal	No longer a priority for the community

Community Profile

Village of Hemingford

Region 23 EMA
Hazard Mitigation Plan 2025

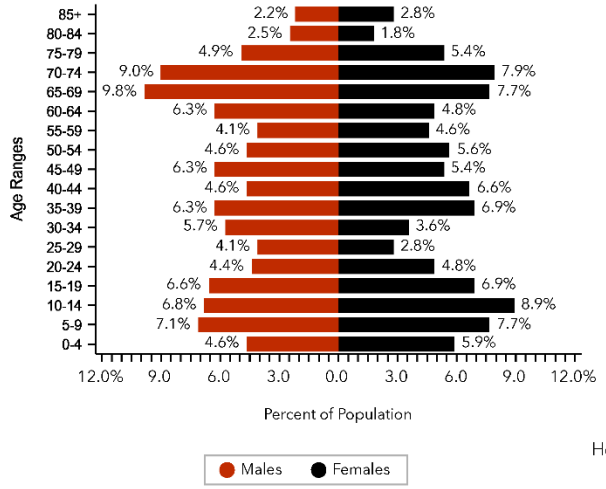
Community Fact Sheet

Community Summary Fact Sheet

Hemingford, NE
Region 23 EMA Hazard Mitigation Plan 2025

Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income
758	43.0	315	2.35	$192,105	$68,458

AGE PYRAMID



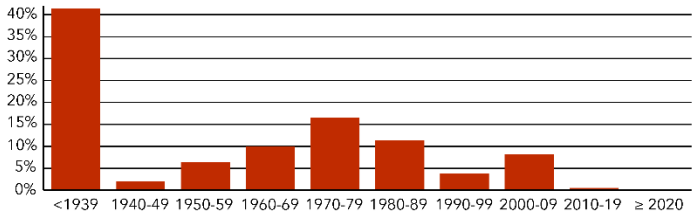
TOTAL POPULATION

2024 Total Population (Estimate)	758
2020 Total Population (U.S. Census)	787
2010 Total Population (U.S. Census)	803
2000 Total Population (U.S. Census)	993

AT RISK POPULATIONS

69	204	28	14%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

HOUSING: YEAR BUILT



EMPLOYMENT

59	0.0%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Asian Population
- Black Population
- American Indian Population
- Other Race Population
- Population of 2+ Races
- White Population

5% **of the Total Population is Hispanic**

HOUSING

74	9%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Barb Straub	Village Clerk	Village of Hemingford	Recording	Recording
Kyle Huss	Utilities Superintendent	Village of Hemingford	-	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Administrator, Utilities Superintendent, and Fire Chief will review and update this participant profile outside of the five-year update. The Village of Hemingford will review the plan bi-annually, and the public will be notified via board meetings.

Capability Assessment

The planning team assessed the Village of Hemingford's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes (County)
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	No
	Building Codes	No
	If yes:	Year Adopted: N/A
		IBC Edition: N/A
	Water System Emergency Response Plan	No
	Wellhead Protection Plan	Yes
	National Flood Insurance Program	No
	Community Rating System	No
	Community Wildfire Protection Plan	Yes

Capability/Planning Mechanism		Yes/No
	Other (if any)	
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	No
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	No
	Grant Manager	Yes
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	Yes
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	No
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

National Flood Insurance Program (NFIP)

The Village of Hemingford has chosen not to participate in the NFIP at this time due to the low flood risk to village structures and because of the minimal impacts from historical flooding. NFIP participation will be reevaluated if the village's flood risk changes. The village does not currently have any repetitive loss or severe repetitive loss structures.

NFIP Information

NFIP Overview	
Date of NFIP Participation:	N/A
Floodplain Administrator:	N/A
Is Floodplain Administrator a Certified Floodplain Manager?	N/A
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	N/A
Total NFIP Premium ($):	N/A
Total NFIP Coverage ($):	N/A
Number of Claims Paid Out:	N/A
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	N/A
Number of Severe Repetitive Loss Structures:	N/A
Is the Community Currently Suspended from the NFIP?	N/A
Any Outstanding Compliance Issues?	N/A
FIRMs Digital or Paper?	Paper
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
446	$52,797,073	0	$0	0%

Source: County Assessor, 2024

Plans and Studies

The Village of Hemingford has limited planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the village updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Comprehensive Plan (2020)

The comprehensive plan is designed to guide the future actions and growth of the village. The plan contains goals/objectives aimed at Safe Growth, directs development away from the

floodplain, encourages infill development, and identifies areas that need emergency shelters. Th village intends to update the comprehensive plan in late 2025.

Box Butte County Local Emergency Operations Plan (2023)

The Box Butte County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

Zoning Ordinance, Subdivision Regulations (2020)

The city's zoning ordinance and subdivision regulations outline where and how development should occur in the future. The regulations prohibit development within the floodplain, include well setback requirements, and include the ability to implement water restrictions. In future updates, the village would like to add the following: limit population density in the floodplain, require more than one foot of elevation above base flood elevation in the floodplain, and restrict subdivision of land within or adjacent to the floodplain. The hazard mitigation plan has not been integrated into these regulations.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

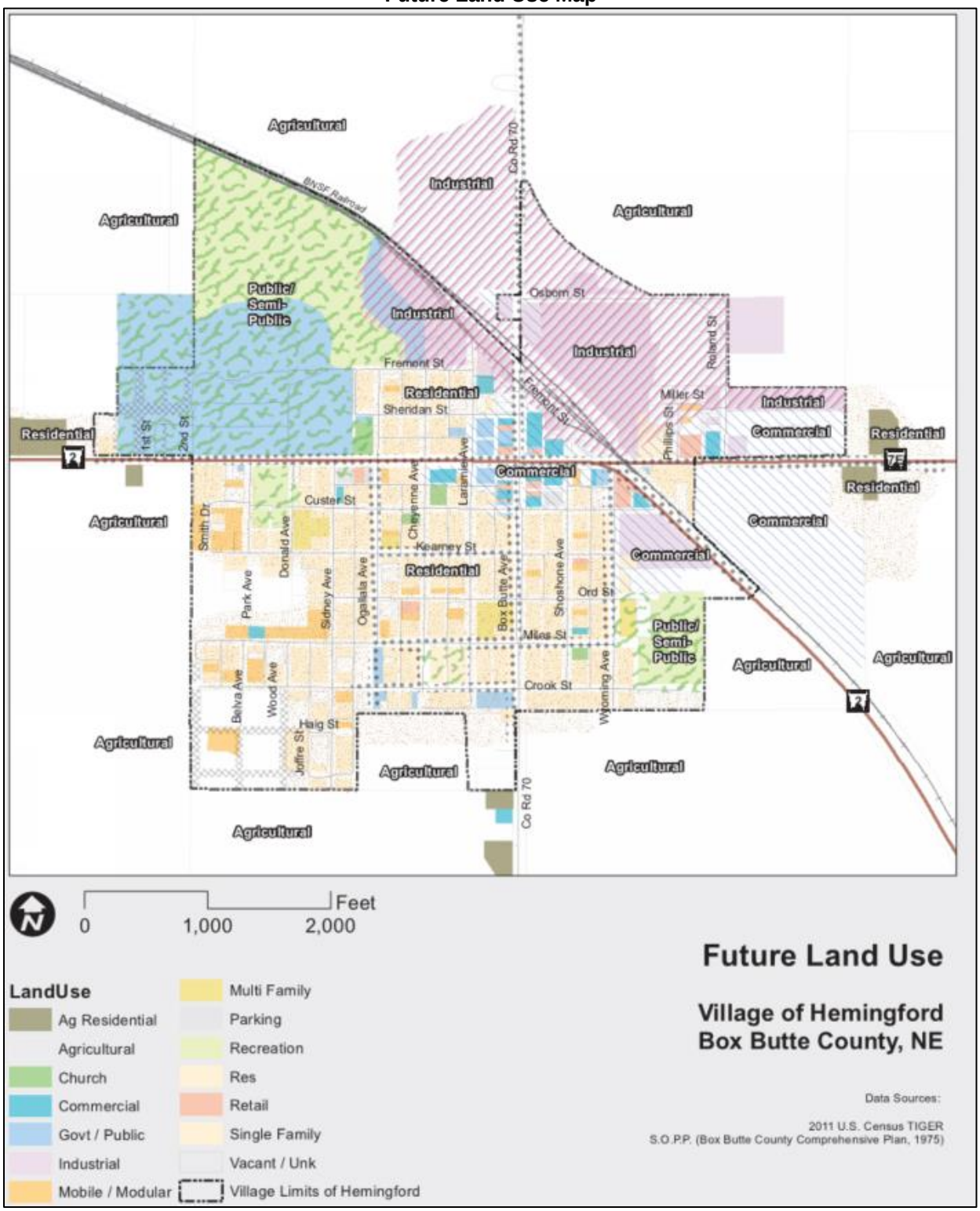
Wellhead Protection Plan (2019)

The purpose of wellhead protection plans is to protect the public drinking water supply wells from contamination. It includes identifying potential sources of groundwater contamination in the area.

Future Development Trends

According to the local planning team, there has been limited development in the last five years. One new business was added and one business built an addition, both east of the village. There are currently no plans for development in the next five years. The future land use map for the village is shown on the next page.

Future Land Use Map



Community Lifelines

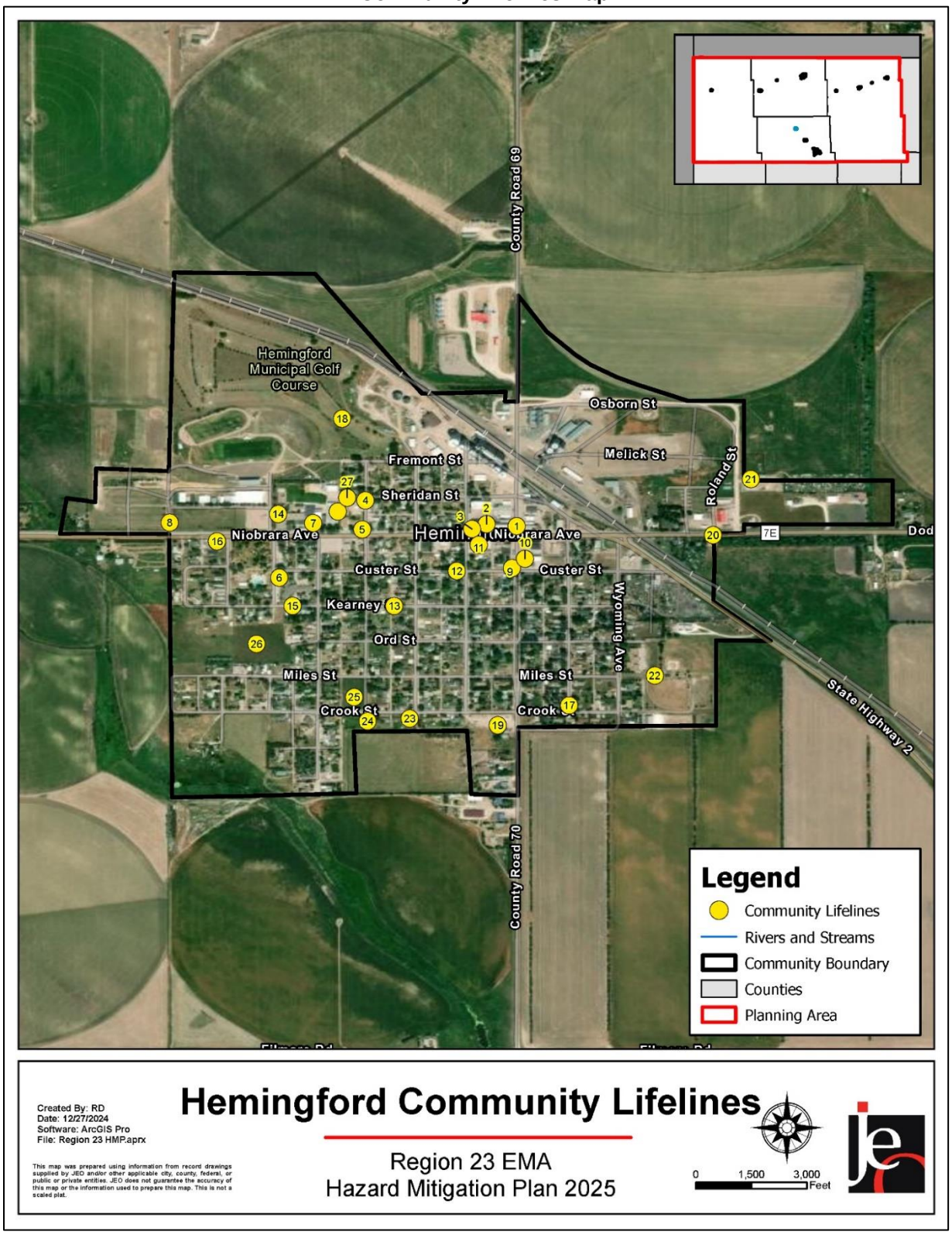
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Panhandle Public Health District	Health and Medical	-	N
2	CO-OP Telephone Service	Communications	G	N
3	Clinic	Health and Medical	-	N
4	Water Tower	Water Systems	G	N
5	St. Bridget's Catholic Church	Food, Water, Shelter	S	N
6	Community Center	Food, Water, Shelter	S	N
7	Elementary School	Other	G, S	N
8	County Fairgrounds	Other	-	N
9	Village Office	Safety and Security	-	N
10	American Legion	Food, Water, Shelter	S	N
11	Hemingford Fire Department	Safety and Security	G	N
12	United Methodist Church	Food, Water, Shelter	S	N
13	Nazarene Church	Food, Water, Shelter	S	N
14	High School	Other	G, S	N
15	Community Care and Assisted Living	Health and Medical	G	N
16	Sub Station	Energy	G	N
17	7th Adventist Day Church	Food, Water, Shelter	S	N
18	Village Maintenance Shop	Other	-	N
19	County Maintenance Shop	Other	-	N
20	Natural Gas Substation	Energy	G	N
21	State Road Department Shop	Transportation	-	N
22	Well 1	Water Systems	G	N
23	Well 2	Water Systems	G	N
24	Well 3	Water Systems	G	N
25	Well 4	Water Systems	G	N
26	Well 5	Water Systems	G	N
27	Well 6	Water Systems	G	N
28	Lagoons	Water Systems	-	Y

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Hemingford which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the Village of Hemingford. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

The community is vulnerable to grass/wildfires due to the high winds and being surrounded by drought-stricken farmland. According to the Nebraska Forestry Department there were 61 reported fires by the Hemingford Fire Department from 2000 to 2023 which consumed a total of 573 acres. The fires also resulted in $27,760 in crop damages and $645 in damages to structures. The Belmont fire burned a portion of the Pine Ridge just off the northwest corner of the community in 1989, and the 2012 West Ash fire threatened the community. The Village of Hemingford is located within the WUI according to the CWPP. The Hemingford Fire Department has mutual aid agreements with the fire departments in the surrounding areas, but during large scale events it is possible nearby fire departments would be unable to lend assistance due to addressing the needs of their respective community/protection area. The Hemingford volunteer fire department has the following equipment: 2 pumpers, 3 tankers, 3 grass rigs, 2 ambulances, and 2 utility vehicles.

Severe Thunderstorms

The local planning team identified severe thunderstorms as a threat for the Village of Hemingford. The NCEI recorded 97 events from 1996 to 2023 with $267,100 in property damages. Severe thunderstorms commonly include heavy rain, strong winds, lightning, and hail events. Lightning strikes are the leading cause of wildfire in the planning area. Severe thunderstorms can result in loss of electricity, blocked roadways, damages to trees and flooding. Blocked roadways present life safety concerns to those needing immediate evacuation or medical attention. Heavy rain events can cause localized flooding of roads and major transportation routes. The community has experienced significant hail events with hail up to three inches in diameter.

Severe Winter Storms

Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. According to the NCEI there were 90 severe winter storm events between 1996 and 2023 in Box Butte County. These events resulted in $62,000 in property damage, two injuries and one death. Windchills reports in the village ranged from -20 to -40° F. The village is responsible for snow removal in town and reviews and updates their snow removal and response plan annually. Trees have been planted around town to act as a living snow fence; however, many dead or dying trees and shrubs need to be removed and replaced.

Tornadoes and High Winds

The local planning team identified high winds and tornadoes as a significant concern for the village. In total there were 74 high wind events reported in Box Butte County. Recent high wind events damaged several roofs in June 2024 and during winter/spring 2025. Four tornado events also occurred near Hemingford which were all E/F0 and had no reported damages. Tornadic events are particularly concerning due to their potential for catastrophic damage. Common

damages from high winds and tornadoes include downed trees, power lines, damage to buildings and infrastructure, and potential injury or fatalities. There are currently no safe rooms located in the village, but community churches and school facilities can be used as sheltering locations or gathering locations post event.

Completed Mitigation and Strategic Actions

Action	Improve Snow/Ice Removal Programs
Description & Location	Improve the snow routes and snow/ice removal procedures for the streets. Improvements should address plowing snow, ice removal, parking during snow and ice removal, and removal of associated storm debris.
Hazard(s) Addressed	Severe Winter Storms
Status	Completed.

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+
Local Funding	General Funds
Timeline	5+ Years
Priority	Low
Lead Agency	Utilities Department
Status	One generator is being leased currently.

Action	Civil Service Improvements
Description & Location	Improve emergency rescue and response equipment and facilities by providing additional or updating existing emergency response equipment. This can include fire trucks, ATV's, water tanks/trucks, snow removal equipment, etc. This would also include developing backup systems for emergency vehicles and identifying and training additional personnel for emergency response.
Hazard(s) Addressed	Dam Failure, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$5,000 - $450,000+ per vehicle, depending on equipment needs
Local Funding	General Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board
Status	Waiting on a new ambulance

Action	Comprehensive City Disaster/Emergency Response Rescue Plan
Description & Location	Update comprehensive city/village disaster and emergency response /rescue plan.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$6,000+
Local Funding	General Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board, Region 23 EMA
Status	In progress

Action	Develop Continuity Plans for Critical Community Services
Description & Location	Continuity planning helps to ensure that services can be maintained during and after a disaster.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$2,000+
Local Funding	General Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	Utilities Department
Status	Not started

Action	Drainage Study/Stormwater Master Plan
Description & Location	Drainage studies can be conducted to identify and prioritize improvements to address site specific localized flooding/drainage problems. Storm water evaluation, identifying multiple problem areas, and potentially multiple drainage improvements for each.
Hazard(s) Addressed	Flooding, Grass/Wildfire
Estimated Cost	$10,000 - $100,000+
Local Funding	General Funds, NRD, CDBG
Timeline	2-5 Years
Priority	Medium
Lead Agency	Utilities Department
Status	In progress

Action	Electrical System Looped Distribution/Redundancies
Description & Location	Provide looped distribution service and other redundancies in the electrical system as a backup power supply in the event the primary system is destroyed or fails.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$50,000+ per mile
Local Funding	NPPD, General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board, Utilities Department
Status	In progress.

Action	Hazardous Tree Removal
Description & Location	Identify and remove hazardous limbs and/or trees.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$20,000
Local Funding	General Fund, HMGP, USFS
Timeline	2-5 Years
Priority	Medium
Lead Agency	Utilities Department
Status	In progress. Trees inspected if privately owned. Property owner is notified if removal needed.

Action	New Municipal Well
Description & Location	Evaluate the need to install a new well to provide a safe backup water supply for the community, replace existing wells affected by drought, and additional water for fire protection.
Hazard(s) Addressed	Drought, Grass/Wildfire, Human Infectious Disease
Estimated Cost	$450,000
Local Funding	CDBG, SRF
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board, Utilities Department
Status	In progress. An Emergency well has been recommissioned for daily use but village is still searching for appropriate place for a new well.

Action	Power and Service Lines
Description & Location	Communities can work with their local Public Power District or Electricity Department to identify vulnerable transmission and distribution lines and plan to bury lines underground or retrofit existing structures to be less vulnerable to storm events. Electrical utilities shall be required to use underground construction methods where possible for future installation of power lines. The village is looking to upgrade their substation.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$1,000,000 per mile
Local Funding	Utilities Fund, PPD
Timeline	5+ Years
Priority	Medium
Lead Agency	Utilities Department
Status	In progress. Replacing line as necessary and moving power lines underground when feasible.

Action	Public Education/Awareness
Description & Location	Considerations for activities include outreach projects and the distribution of maps and environmental education materials to increase public awareness of natural hazards to public and private property owners, property renters, businesses, and local officials. Other activities include providing education to citizens on water conservation methods. Purchasing and using equipment such as overhead projectors and laptops can allow for easier ways to educate the public during meetings.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board
Status	Not started

Action	Safe Rooms
Description & Location	Design and construct fully supplied safe rooms in highly vulnerable urban and rural areas such as mobile home parks, campgrounds, schools, and other such areas throughout the planning area.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$200 – 300/ Stand alone; $150 – 200/ retrofit
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board, Region 23 EMA
Status	Not started

Action	Source Water Contingency Plan
Description & Location	Villages and cities can evaluate and locate new sources of groundwater to ensure adequate supplies to support the existing community and any additional growth which may occur. Also, identify or develop water sources for fire protection.
Hazard(s) Addressed	Drought, Grass/Wildfire, Human Infectious Disease
Estimated Cost	$5,000+
Local Funding	General Fund, CDBG, SRF, NDEE
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board
Status	Not started

Action	Stormwater System and Drainage Improvements
Description & Location	Smaller communities may utilize stormwater systems comprising of ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacement or modification of bridges may be necessary to provide greater capacity, maintain or improve structural integrity during flood events, and eliminate flooding threats and damages.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000 - $100,000
Local Funding	General Fund, HMGP, BRIC
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board, Utilities Department
Status	Not started

Action	Warning Systems
Description & Location	Improve city cable TV interrupt warning system and implement telephone interrupt system such as Reverse 911, emergency text messaging warning system, etc.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$5,000+
Local Funding	General Fund, Region 23 EMA
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board
Status	Not started

Action	Windbreaks/Living Snow Fence
Description & Location	Installation of windbreaks and/or living snow fences to increase water storage capacity in soil and reduce blowing snow. Installation on the South side of BNSF railroad tracks to reduce wind and noise.
Hazard(s) Addressed	Flooding, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$2,000+
Local Funding	General Fund, NRD cost share
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board
Status	In progress. About a third of the village has had dead or dying trees/shrubs removed and replaced in wind breaks.

Removed Mitigation and Strategic Actions

Action	Emergency Communications
Description & Location	Establish an action plan to improve communication between agencies to better assist residents and businesses during and following emergencies. Establish inner- operable communications. Combining 911 center for county and Box Butte Agencies.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Status	All departments are now dispatched by Box Butte County or Alliance PD.

Dawes County Appendix

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County Profile

Dawes County

Region 23 EMA
Hazard Mitigation Plan 2025

County Fact Sheet

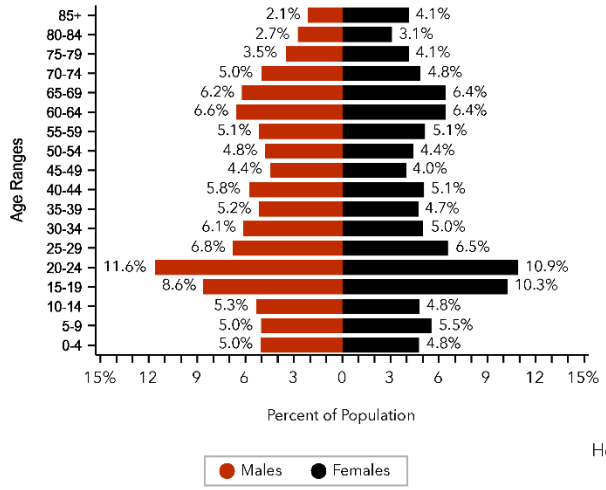
Community Summary Fact Sheet

Dawes County, NE

Region 23 EMA Hazard Mitigation Plan 2025

8,097	36.9	3,291	2.23	$162,847	$56,741
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



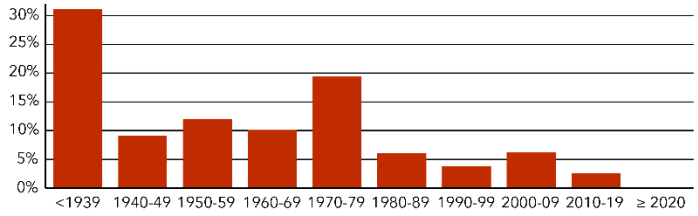
TOTAL POPULATION

2024 Total Population (Estimate)	8,097
2020 Total Population (U.S. Census)	8,199
2010 Total Population (U.S. Census)	9,182
2000 Total Population (U.S. Census)	9,060

AT RISK POPULATIONS

876	1,708	123	14%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

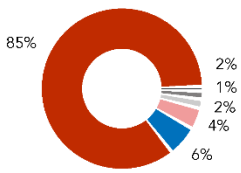
HOUSING: YEAR BUILT



EMPLOYMENT

494	1.6%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Asian Population
- Other Race Population
- Black Population
- American Indian Population
- Population of 2+ Races
- White Population

5% **of the Total Population is Hispanic**

HOUSING

540	7%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

County Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Jake Stewart	Commissioner	Dawes County	Attended	Attended
Wade Yada	Highway Superintendent	Dawes County	Attended	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The County Board, Region 23 director, and Zoning Admin will review and update this participant profile outside of the five-year update. Dawes County will review the plan annually, and the public will be notified via board meetings and the county's social media.

Capability Assessment

The planning team assessed Dawes County's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	Yes
	Building Codes	No
	If yes:	Year Adopted: N/A
		IBC Edition: N/A
	Wellhead Protection Plan	Yes
	Water System Emergency Response Plan	No
	National Flood Insurance Program	Yes
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Other (if any)	

Capability/Planning Mechanism		Yes/No
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	No
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	No
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	Yes
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	Yes
	StormReady Certification	Yes
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

National Flood Insurance Program (NFIP)

Dawes County is a member of the NFIP, having joined on 06/16/2011, and the county's Floodplain Administrator oversees the commitments and requirements of the NFIP. The floodplain administrator uses GIS to determine if a development will be located in the floodplain. A floodplain permit is only valid if outside of city limits of Chadron and Crawford. If the building site is in the floodplain, no permit is issued. Enforcement is done using the county's floodplain ordinance. After a flood event, the county implements substantial improvement and substantial damage provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA Handbook_FINAL.pdf. The county's floodplain regulations do not exceed the State of Nebraska requirements. The county would work with the Nebraska Department of Natural Resources and FEMA on any Letters of Map Change.

The local planning team has stated that Dawes County will remain in good standing and be involved with the NFIP. Currently, the county has no barriers when running the NFIP program. There are no known areas in the county with limited NFIP coverage. The county presently uses no educational materials for the floodplain, as only a few structures exist in the floodplain. Additional NFIP information is given in the table below.

County NFIP Information

NFIP Overview	
Date of NFIP Participation:	06/16/2011
Floodplain Administrator:	Lindy Coleman
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	15
Total NFIP Premium ($):	$9,159
Total NFIP Coverage ($):	$1,303,000
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the County Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Digital
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table. Several structures in Dawes County have been removed from the floodplain via LOMA. A summary of LOMAs identified for Dawes County can be found in the flood map products table below.

County Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
4,038	$635,989,985	754	$122,904,370	18.7%

Source: County Assessor, 2024

County Flood Map Products

Type of Product	Product ID	Effective Date	Details
LOMA	12-07-0255A-310357	12/8/2011	Structure (residence) removed from SFHA
LOMA	12-07-0271A-310055	12/8/2011	Structure (residence) removed from SFHA
LOMA	12-07-0316A-310055	12/8/2011	Structure (residence) removed from SFHA
LOMA	12-07-1661A-310055	3/29/2012	Structure removed from SFHA
LOMA	12-07-1721A-310055	4/26/2012	Structure removed from SFHA
LOMA	12-07-3115A-310357	9/18/2012	Structure removed from SFHA
LOMA	13-07-0213A-310357	12/18/2012	Structure removed from SFHA
LOMA	13-07-0711A-310055	2/21/2013	Structure (residence) not removed from SFHA
LOMA	13-07-0753A-310055	2/26/2013	Structure (residence) removed from SFHA
LOMA	13-07-1621A-310055	5/30/2013	Structure (residence) outside of SFHA
LOMA	13-07-1640X-310055	5/16/2013	Structure (residence) not removed from SFHA
LOMA	14-07-1187A-310055	3/25/2014	Structure removed from SFHA
LOMA	16-07-1528A-310357	7/11/2016	Portion of property removed from SFHA
LOMA	18-07-1023A-310357	3/16/2018	Structure (residence) removed from SFHA
LOMA	19-07-0709A-310055	4/26/2019	Property removed from SFHA
LOMA	19-07-1614A-310055	8/27/2019	Structure (residence) removed from SFHA
LOMA	20-07-1272A-310055	8/31/2020	Structure (garage) removed from SFHA
LOMA	21-07-0804A-310055	5/11/2021	Structure removed from SFHA
LOMA	23-07-0495A-310055	5/9/2023	Structure (barn) removed from SFHA
LOMA	23-07-0915A-310055	11/7/2023	Structure (Building 3) removed from SFHA
LOMA	25-07-0181A-310357	1/22/2025	Structure (residence) removed from SFHA
LOMA	25-07-0296X-310357	1/29/2025	Structure (residence) removed from SFHA
FIRM Panel	31045C0025C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0050C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0075C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0125C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0150C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0200C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0225C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0250C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0275C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0300C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0325C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0350C	6/16/2011	Current FIRM Panel

Type of Product	Product ID	Effective Date	Details
FIRM Panel	31045C0375C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0400C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0420C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0425C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0450C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0460C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0475C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0480C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0500C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0525C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0530C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0535C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0540C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0545C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0575C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0600C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0625C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0650C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0675C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0700C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0725C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0750C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0775C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0800C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0825C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0850C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0875C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0900C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0925C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0950C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0975C	6/16/2011	Current FIRM Panel
FIRM Panel	31045CIND0A	6/16/2011	Current FIRM Panel

Source: FEMA[1]

Plans and Studies

Dawes County has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the county updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Capital Improvement Plan

The purpose of the capital improvement plan is for the county to strategize how to budget for nonrecurring physical or digital purchases. A capital improvement plan typically spans multiple years and includes financing plans. The plan includes the upsizing of culverts and drainage structures, radio communication upgrades, bridge improvements and the installation of

[1] Federal Emergency Management Agency. February 2025. “FEMA Flood Map Service Center”. http://msc.fema.gov/portal/advanceSearch.

emergency generators in critical care facilities. The county plans to include the installation of new municipal wells, burying powerlines, and emergency operations center/emergency coordination center construction upgrades in a future update.

Comprehensive Plan

The comprehensive plan is designed to guide the future actions and growth of the county. The plan directs development away from the floodplain, directs housing away from chemical storage facilities, and identifies areas that need emergency shelters. The county's comprehensive plan includes goals/objectives aimed at Safe Growth, direct development away from the floodplain, encouraging elevation of structures located in the floodplain, and identifies areas that need emergency shelters. The county plans to update the comprehensive plan within the next 1-2 years.

Dawes County Local Emergency Operations Plan (2023)

The Dawes County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan.

Floodplain Regulations and Zoning Ordinance

The county's floodplain regulations and zoning ordinance outline where and how development should occur in the future. These documents include the ability to implement water restrictions. The document includes well setback requirements and the ability to implement water restrictions. In future updates, the county plans to consider wildfire and the wildland urban interface and to restrict subdivision of land within or adjacent to the floodplain in a future update.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Wellhead Protection Plan

The purpose of wellhead protection plans is to protect the public drinking water supply wells from contamination. It includes identifying potential sources of groundwater contamination in the area.

Future Development Trends

According to the local planning team, there has been no development or demolition of buildings in the last five years. There are currently no plans for development in the next five years.

Community Lifelines

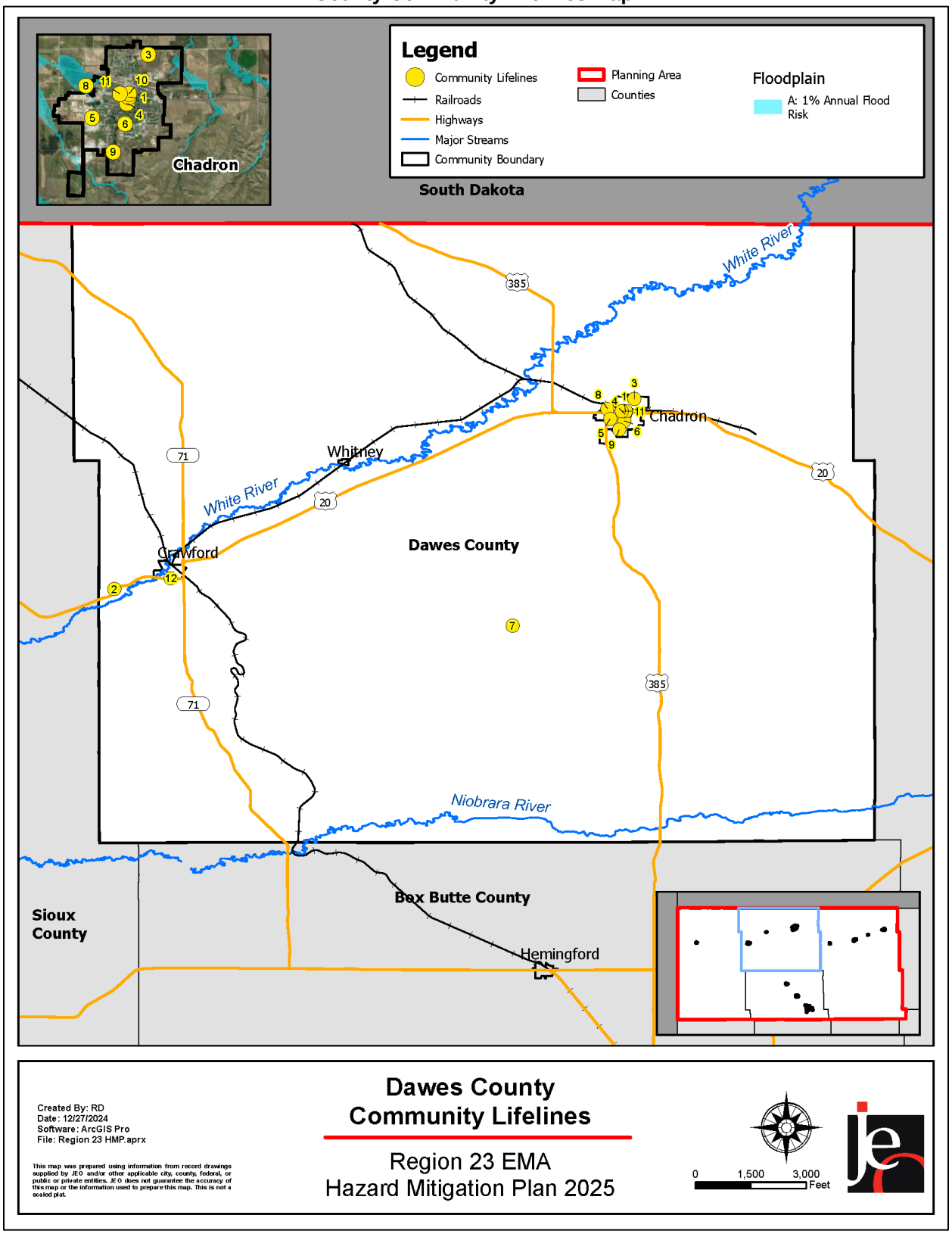
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



County Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Nebraska State Patrol	Safety & Security	-	N
2	Fort Robinson State Park	Other	-	N
3	Dawes County Fairgrounds	Safety & Security	-	N
4	Dawes County Courthouse	Safety & Security	G	N
5	Community Hospital	Health & Medical	G	N
6	Chadron State College	Food, Hydration, Shelter	G	N
7	Radio Tower	Communications	-	N
8	Radio Tower	Communications	-	Y
9	Radio Tower	Communications	-	N
10	Region 23 EMA Office	Safety & Security	-	N
11	Chadron Fire Dept	Safety & Security	G	N
12	Crawford Rural Fire Dept	Safety & Security	G	N

County Community Lifelines Map



Dawes County Hazard Loss History

Hazard Type		Count	Property Damage	Crop Damage[2]
Agricultural Disease	Animal Disease[1]	7	12 Animals	N/A
	Plant Disease[2]	19	N/A	$290,080
Dam Failure	Dam Failure[5]	6	$0	N/A
Drought[6]		574 out of 1548 months	$0	$5,959,203
Extreme Temperatures[7]	Heat	Avg. 6 Days a Year	$0	$1,635,536
	Extreme Cold / Wind Chill	Avg. 4 Days a Year	$0	1,081,729
Flooding[8]	Flash Flood	5	$1,000	$54,232
	Flood	3	$0	
Grass/Wildfires[9]		677	101,306 Acres Burned	$43,337
Hazardous Materials Release	Fixed Site[3]	5	$0	N/A
	Transportation[4]	10	$256,634	N/A
Human Infectious Disease[12]		1,515 covid cases	N/A	N/A
Severe Thunderstorms[8]	Hail Range: 0.75-3 In. Average: 1.2 In.	226	$366,500	$7,571,937
	Thunderstorm Wind Range: 58-104 mph Average: 64 mph	84	$405,000	
	Heavy Rain	6	$0	
	Lightning	2	$450,000	
Severe Winter Storms[8]	Blizzard	20	$2,000	$2,554,132
	Heavy Snow	29	$0	
	Ice Storm	0	$0	
	Winter Storm	43	$25,000	
	Winter Weather	21	$0	
Terrorism and Cyber Attack[10, 13]		1	N/A	N/A
Tornadoes and High Winds[8]	High Winds Range: 40-78 mph Average: 57.5 mph	20	$0	$1,689,299
	Tornadoes Range: EF0-EF2 Average: F0	17	$1,555,000	$5,691
Total		**3,331**	**$3,061,134**	**$21,671,498**

N/A: Data not available
1 – NDA, 2014 – 2023
2 - USDA RMA, 2000 –2023
3 – NRC, 1990 –2023
4 – PHMSA, 1971 – June 2024
5 – Stanford University NPDP, 2024
6 – NOAA, 1895 – 2023
7 – NOAA Regional Climate Center, 1893 – 2024
8 – NCEI, 1996 - 2023
9 – NFS, 2000 - 2023
10 – University of Maryland, 1970 – 2020
11 – USGS, 1900 – April 2024
12 – The New York Times, as of 3/23/2023
13 – Local Planning Team

Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Dawes County which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Dawes County. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

The local planning team identified grass and wildfire as the greatest threat to Dawes County. The entire county falls within the WUI as defined in the CWPP. According to the Nebraska Forestry Department there were 677 reported fires by Chadron and Crawford Fire Departments from 2000 to 2023 which consumed a total of 101,306 total acres. The county has seen numerous large-scale fires including the Fort Robinson Fire complex (1989, 49,000 acres burned), the Spotted Trail fire (2006, 69,000 acres burned), and the Region 23 Complex fire (2012, 58,450 acres burned). More recent fires include the Post Fire (2021, 5,400 acres burned) and the Bronco Fire (2024, 1,069 acres burned). Past fires also resulted in $43,337 in damages to crops, destroyed at least six homes, and destroyed 15 other structures. Of the reported fires the most frequent cause is lightning, followed by burning debris. The local planning teams indicated greatest concerns regarding wildfire include the presence of forested areas in the county (high fuel loads for wildfire events), impacts to the local economy from burned rangeland, resource availability to combat wildfires, and the terrain and distance between resources and events. Local officials have also identified the Pine Ridge and the Niobrara River as being at high risk. The communities of Chadron, Crawford, and Marsland and the Fort Robinson State Park all lie within areas of concern. Crown Butte Resources, a uranium mining operation in the Squaw Creek watershed, sits near the forested Pine Ridge and lies within the area of concern.

To mitigate risk to wildfire, the county provides mutual aid to local volunteer fire departments during wildfires to build fire lines and access roads, as well as providing water tenders and trained personnel. County Roads personnel are also Red Card certified. Continued training and maintenance of mutual aid agreements are necessary, as are public education and outreach activities.

Severe Thunderstorms

Severe thunderstorms are likely to occur annually across the planning area; however, the planning team indicated that due to their frequency, residents are likely well prepared to cope with such events. According to the local planning team, numerous hailstorms and high wind events occur through the county on an annual basis, resulting in power outages, crop damage, and other property damage. Between 1996 and 2023, the NCEI reported a total of 318 thunderstorm events, which included hail, heavy rain, lightning, and thunderstorm wind. These events totaled $1,221,500 in property damages and $8,358,259 in crop damages. A summary of the events with recorded damages can be found in the participant sections where they occurred. Property damages include downed trees and tree limbs. One thunderstorm wind event in 2001 reported one injury and loss of power in Crawford. To mitigate risk to this hazard, the county uses CodeRed Emergency Notification to inform and educate the public. Storm Spotter trainings are also provided to responders and the public by the NWS.

Severe Winter Storms

Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. Severe winter storms are likely to occur annually across the planning area; however, the planning team indicated that due to their frequency, residents are likely well prepared to cope with such events. The NCEI reported 113 severe winter storm events in Dawes County from 1996 to 2023. These events resulted in $27,000 in property damage and $2,554,132 in crop damage. Most recorded events included a combination of factors including snow, wind, and ice. Blizzards in March 2021 and December 2022 significantly impacted the county. The 2021 event closed numerous roads for several days, while the 2022 event resulted in widespread power outages, road closures cutting off emergency routes, and closing Highways 20 and 385 for several days. To mitigate the risk to this hazard, the county uses CodeRed Emergency Notification to inform and educate the public. Storm Spotter training is also provided to responders and the public by the NWS.

Tornadoes and High Winds

The county planning team identified high winds as a significant concern for the county. According to the NCEI, there were 61 high wind events and 13 tornadic events from 1996 to 2023. These resulted in a total of $45,500 in property damage and $1,908,151 in crop damage. High winds and tornadoes can cause significant damage to critical facilities, down power lines and trees, and block transportation routes with debris. According to the local planning team, numerous high wind events have occurred in the past several years throughout the county, resulting in widespread power outages, power pole damage, and tree damage. There are several shelter locations identified throughout the county which can be used by residents seeking shelter during tornado events. Storm sirens are located throughout the county. To mitigate risk to this hazard, the county uses CodeRed Emergency Notification to inform and educate the public. Storm Spotter trainings are also provided to responders and the public by the NWS.

Terrorism and Cyber Attack

Terrorism and Cyber Attack was selected as a top hazard of concern for the county primarily due to the growing and on-going concern of cyber security. According to the local planning team, numerous phishing attempts have been blocked by firewalls on county computers; however, hackers and scammers are becoming more sophisticated. To mitigate risk to this hazard, county personnel participate in annual cyber security and best practices training. In the future the county needs ongoing education and assessments for county offices.

New Mitigation and Strategic Actions

Action	Vacant/Dilapidated Structures
Description & Location	Pass a Vacant Property Registration Ordinance and develop and update a property list. Both Crawford and Chadron have numerous vacant buildings.
Hazard(s) Addressed	Human Infectious Disease, Grass/Wildfire
Estimated Cost	$1,900,000+
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	City/County
Status	Not Started

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to Dawes County Courthouse, Dawes County Office building, and Dawes County Road shop.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$30,000+ per generator
Local Funding	Tax dollars, General Fund, Region 23 EMA, HMGP, BRIC
Timeline	2-5 Years
Priority	Medium
Lead Agency	Dawes County Commissioners, Dawes County Sheriff
Status	Not started

Action	Cybersecurity Assessment
Description & Location	Perform cyber security assessment on the county computer system and network.
Hazard(s) Addressed	Terrorism and Cyber Attack
Estimated Cost	TBD
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Dawes County Commissioners
Status	Not started

Action	Database of Vulnerable Populations
Description & Location	Work with stakeholders to develop a database of vulnerable populations and the organizations which support them.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	Staff Time
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	Dawes County Roads Department, County Sheriff
Status	In progress

Action	Develop Continuity Plans for Critical Community Services
Description & Location	Continuity planning helps to ensure that services can be maintained during and after a disaster.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	Staff Time
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	Dawes County Roads Department
Status	Not started

Action	Hail Resistant Roofing
Description & Location	Encourage the use of hail resistant roofing for any new construction
Hazard(s) Addressed	Severe Thunderstorms
Estimated Cost	Staff Time
Local Funding	General Fund
Timeline	5+ Years
Priority	Loew
Lead Agency	Dawes County Roads Department
Status	Not Started

Action	Hazardous Tree Removal
Description & Location	Identify and remove hazardous limbs and or trees
Hazard(s) Addressed	Grass/Wildfire, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High winds
Estimated Cost	$20,000
Local Funding	County Budget
Timeline	2-5 Years
Priority	High
Lead Agency	Dawes County Roads Department
Status	Ongoing

Action	Public Awareness/Education
Description & Location	Considerations for activities include outreach projects and the distribution of maps and environmental education materials to increase public awareness of natural hazards to public and private property owners, property renters, businesses, and local officials. Other activities include providing education to citizens on water conservation methods. Purchasing and using equipment such as overhead projectors and laptops can allow for easier ways to educate the public during meetings.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	Dawes County Commissioners
Status	In progress

Action	Warning Systems
Description & Location	Improve city cable TV interrupt warning system and implement telephone interrupt systems such as Reverse 911, emergency text messaging warning system, etc.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$5,000+
Local Funding	General Fund, Region 23 EMA, BRIC, HMGP
Timeline	1 Year
Priority	High
Lead Agency	Dawes County Roads Department, Region 23 EMA
Status	Not started

Action	Weather Radios
Description & Location	Conduct an inventory of weather radios at schools and other critical facilities and provide new radios as needed
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$50 per radio
Local Funding	Region 23 EMA, Dawes County General Fund, Taxes, BRIC, HMGP
Timeline	2-5 Years
Priority	Medium
Lead Agency	Dawes County Sheriff
Status	Not started

Community Profile

City of Chadron

Region 23 EMA
Hazard Mitigation Plan 2025

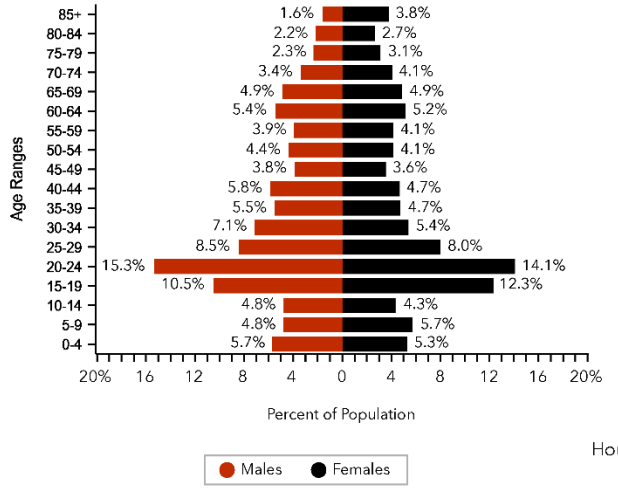
Community Fact Sheet

Community Summary Fact Sheet

Chadron, NE
Region 23 EMA Hazard Mitigation Plan 2025

5,081	30.3	2,007	2.18	$157,083	$53,457
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID

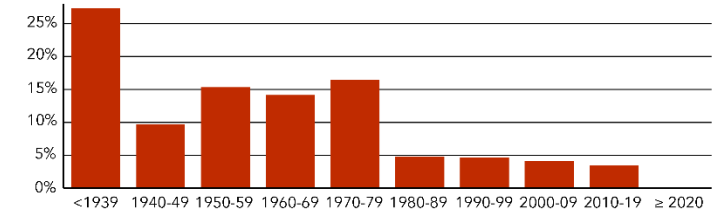


TOTAL POPULATION	
2024 Total Population (Estimate)	5,081
2020 Total Population (U.S. Census)	5,206
2010 Total Population (U.S. Census)	5,851
2000 Total Population (U.S. Census)	5,644

AT RISK POPULATIONS

506	836	65	12%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

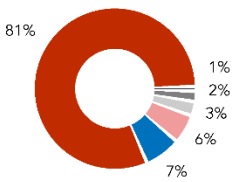
HOUSING: YEAR BUILT



EMPLOYMENT

352	1.7%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Asian Population
- Other Race Population
- Black Population
- American Indian Population
- Population of 2+ Races
- White Population

5% **of the Total Population is Hispanic**

HOUSING

288	5%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Janet Johnson	Zoning/Building Official	City of Chadron	Attended	Recording
Tom Menke	City Manager	City of Chadron	Attended	Recording
Rick Hickstein	Police Chief	City of Chadron	Attended	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The City Manager, Building & Zoning Official, and Police Chief will review and update this participant profile outside of the five-year update. The City of Chadron will review the plan bi-annually, and the public will be notified via council meetings and the city website.

Capability Assessment

The planning team assessed the City of Chadron's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes
	Floodplain Management Plan	Yes
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	If yes:	Year Adopted: 2021
		IBC Edition: ICC 2018
	Water System Emergency Response Plan	Yes
	Wellhead Protection Plan	Yes
	National Flood Insurance Program	Yes
	Community Rating System	Yes
	Community Wildfire Protection Plan	Yes

Capability/Planning Mechanism		Yes/No
	Other (if any)	
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	Contracted
	Grant Manager	Yes
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	Yes
	Storm Water Service Fees	No
	Development Impact Fees	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	Yes
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	Yes
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Limited
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

National Flood Insurance Program (NFIP)

Chadron is a member of the NFIP, having joined on 03/05/2009, and the village's Floodplain Administrator oversees the commitments and requirements of the NFIP. The floodplain administrator uses the FEMA Map Service Center to determine if a development will be located in the floodplain. A floodplain permit is required for any new construction or substantial improvements in the floodplain. Enforcement is done using the city's floodplain ordinance. After a flood event, the community implements substantial improvement and substantial damage provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA Handbook_FINAL.pdf. The city's floodplain regulations do not exceed the State of Nebraska requirements. The city would work with the Nebraska Department of Natural Resources and FEMA on any Letters of Map Change.

The local planning team has stated that Chadron will remain in good standing and be involved with the NFIP. Currently, the city has no barriers when running the NFIP program. There are no known areas in the community with limited NFIP coverage. The city presently uses no educational materials for the floodplain, as only a few structures exist in the floodplain. Additional NFIP information is given in the table below.

NFIP Information

NFIP Overview	
Date of NFIP Participation:	03/05/2009
Floodplain Administrator:	Janet Johnson
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	2
Total NFIP Premium ($):	2,031
Total NFIP Coverage ($):	600,000
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Digital
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table. Several structures in Chadron have been removed from the floodplain via LOMA. A summary of LOMAs identified for Chadron can be found in the flood map products table below.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
2,019	$389,362,820	7	$5,604,790	0.3%

Source: County Assessor, 2024

Flood Map Products

Type of Product	Product ID	Effective Date	Details
LOMA	12-07-0255A-310357	12/8/2011	Structure (residence) removed from SFHA
LOMA	12-07-3115A-310357	9/18/2012	Structure removed from SFHA
LOMA	13-07-0213A-310357	12/18/2012	Structure removed from SFHA
LOMA	16-07-1528A-310357	7/11/2016	Portion of property removed from SFHA
LOMA	18-07-1023A-310357	3/16/2018	Structure (residence) removed from SFHA
LOMA	25-07-0181A-310357	1/22/2025	Structure (residence) removed from SFHA
LOMA	25-07-0296X-310357	1/29/2025	Structure (residence) removed from SFHA
FIRM Panel	31045C0460C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0475C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0480C	6/16/2011	Current FIRM Panel
FIRM Panel	31045C0500C	6/16/2011	Current FIRM Panel
FIRM Panel	31045CIND0A	6/16/2011	Current FIRM Panel

Source: FEMA[2]

Plans and Studies

The City of Chadron has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the city updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Comprehensive Plan (2015)

The comprehensive plan is designed to guide the future actions and growth of the city. The plan contains goals and objectives aimed at Safe Growth, directs development away from the floodplain, encourages infill development, and identifies areas that need emergency shelters. The city plans to incorporate information from the hazard mitigation plan into its next comprehensive plan by 2025.

Zoning Ordinance (1997), Subdivision Regulations (1997), and Floodplain Regulations (2009)

The city's floodplain regulations, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. These documents include the ability to restrict development in hazard prone areas, prohibit development within the floodplain, discourage development in the floodplain, limit population density in the floodplain, require more than one

[2] Federal Emergency Management Agency. February 2025. "FEMA Flood Map Service Center". http://msc.fema.gov/portal/advanceSearch.

foot of elevation above Base Flood Elevation in the floodplain, discourage housing and vulnerable populations near chemical storage sites, restrict subdivision of land within or adjacent to the floodplain, include well setback requirements, and include the ability to implement water restrictions.

Building Code (2021)

The building code sets standards for constructed buildings and structures. Chadron's building codes are based on the 2018 International Building Code. These codes regulate and govern the conditions and maintenance of all property, buildings, and structures by providing the standards for supplied utilities, facilities, and other physical things and conditions essential to ensure that structures are safe, sanitary, and fit for occupation and use. The city amended the code to not adopt fire sprinklers in one and two family dwellings. Enforcement of the building codes is done by code officials. The hazard mitigation plan has not been integrated with the city building code.

Capital Improvement Plan

The capital improvements plan outlines projects the community would like to pursue and provides a planning schedule and financing options. Projects identified include stormwater improvements, upsizing of culverts and drainage structures, radio communication upgrades, upsizing of water distribution pipes, installing water meters for residential structures, burying power lines, and emergency operations center construction/upgrades. The capital improvements plan is updated annually and projects from the hazard mitigation plan will be incorporated.

Dawes County Local Emergency Operations Plan (2023)

The Dawes County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Water System Emergency Response Plan

The water system emergency response plan serves as a guideline for water operators and city officials to minimize the disruption of normal services to consumers and to provide public health protection during an emergency event. The document identifies several natural and human-caused events and discusses the water system's response during those events.

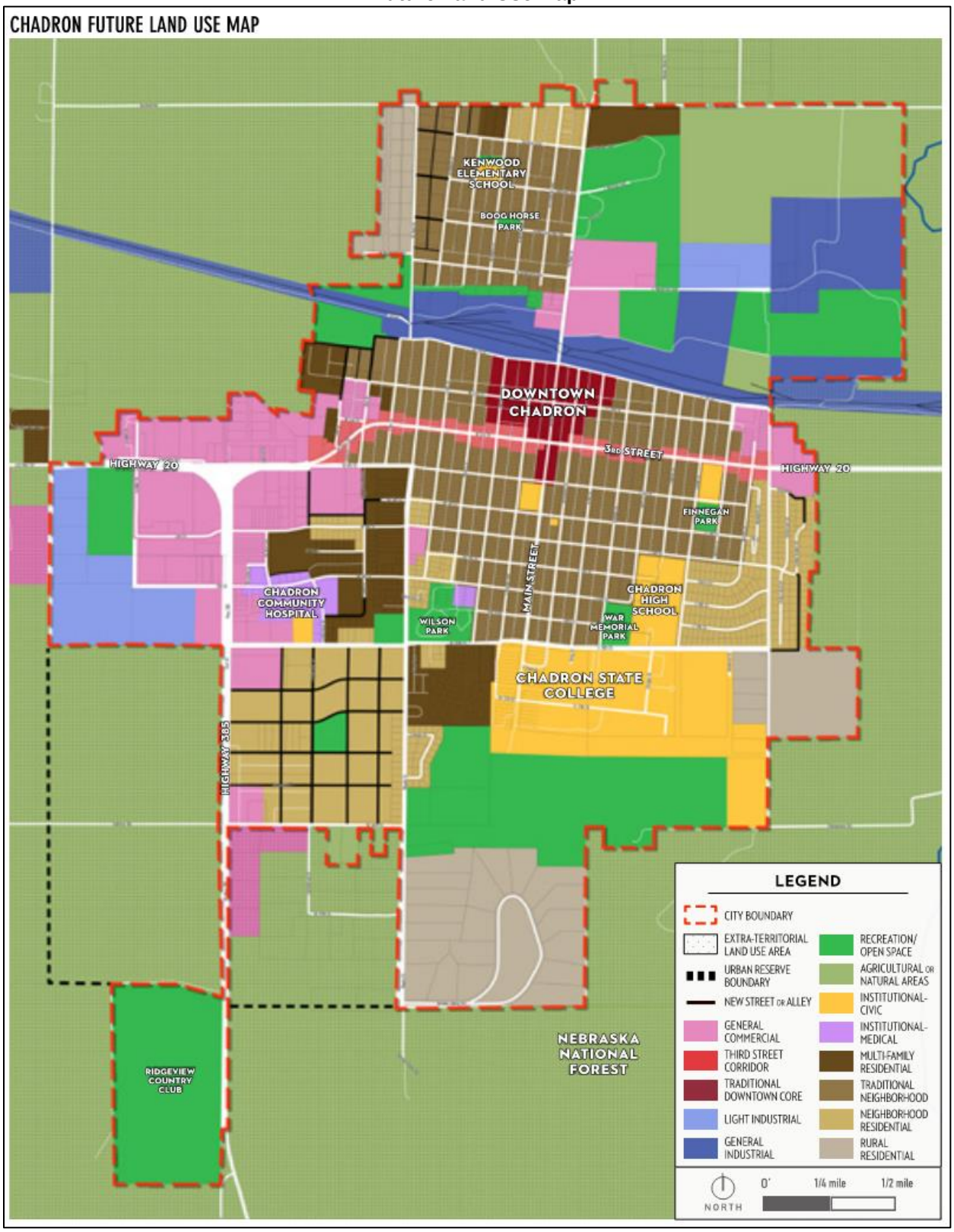
Wellhead Protection Plan (2007)

The purpose of wellhead protection plans is to protect the public drinking water supply wells from contamination. It includes identifying potential sources of groundwater contamination in the area.

Future Development Trends

According to the local planning team, there have been several development projects within the last five years. These developments include: a new retail district including a Dollar Tree, improvements to 8th St and W 8th St, the U-Store-Its and Eagle Storage facilities, new warehousing units, and a new Math and Sciences Building for Chadron State College. There are two new projects set to be developed within the near future. The first is a 78-unit housing project located at 8th and Maple St, outside of the floodplain. The second is another housing project located at West 2nd and Elm St, also outside of the floodplain.

Future Land Use Map



Community Lifelines

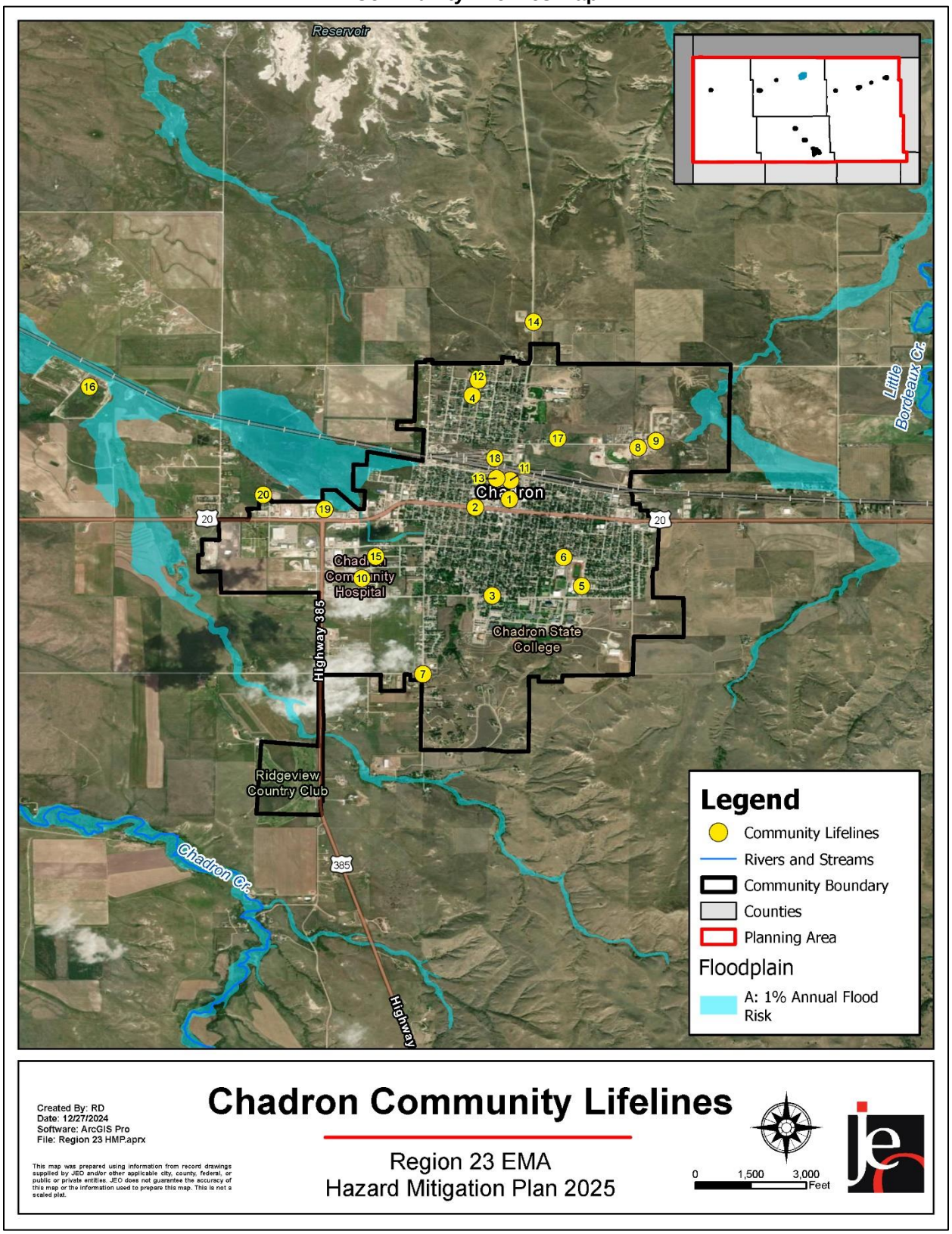
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	City Hall	Safety and Security	S	N
2	Fire Hall	Safety and Security	G,S	N
3	Chadron State College	Food, Hydration, Shelter	G,S	N
4	Chadron Intermediate School	Other	S	N
5	Chadron Senior High School	Other	S	N
6	Chadron Middle School	Other	S	N
7	Water Treatment Plant	Water Systems	G	N
8	Street Department	Transportation	G	N
9	SWANN Sanitation	Other	-	N
10	Community Hospital	Health and Medical	S	N
11	Crestview Care Facility Center	Health and Medical	S	N
12	Police Department	Safety and Security	G	N
13	NPPD	Energy	S	N
14	NPPD Sub Station	Energy	-	N
15	Prairie Pine Lodge	Health and Medical	S	N
16	Wastewater Treatment Plant	Water Systems	G	N
17	Lift Station 1	Water Systems	-	N
18	Lift Station 2	Water Systems	-	N
19	Lift Station 3	Water Systems	-	N
20	Lift Station 4	Water Systems	-	Y

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Chadron which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the City of Chadron. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

Wildfire is a top hazard of concern for the city and the planning area as a whole. According to the Nebraska Forestry Department there were 219 reported fires by the Chadron Fire Department from 2000 to 2023 which consumed a total of 32,772 acres. The most significant fire to impact the city was the 2006 Spotted Tail Fire. This event threatened the southern portion of Chadron and much of the city evacuated. According to the Rapid City Journal, “Some 68,000 acres of Pine Ridge forest in Dawes and Sioux counties burned following a string of intense lightning fires on July 26. At least four homes and several other structures along with about 500 miles of fences were destroyed. One of the fires, the Spotted Tail Fire, began about 12 miles south of Chadron and burned to the edge of the Chadron State College campus. At least 1,000 firemen from 20 states helped battle the blazes. Temperatures of more than 100 degrees added to the misery.”

The City of Chadron lies within the WUI according to the CWPP. The Chadron Fire Department has mutual aid agreements with the fire departments in the surrounding areas, but during large scale events it is possible nearby fire department would be unable to lend assistance due to addressing the needs of their respective community/protection area. The Nebraska Forest Service has worked on reducing fire fuel loads in the area.

Severe Thunderstorms

Severe thunderstorms are a common occurrence across the planning area and include impacts from heavy rain, thunderstorm winds, lightning strikes, and hail. The local planning team has identified it as a hazard of top concern for the city. According to the NCEI, 192 severe thunderstorm events occurred in Chadron from 1996 to 2023, with property damages totaling $642,000. To reduce risk, local building code has updated requirements for residential homes, city facilities, and infrastructure.

Severe Winter Storms

Severe winter storms are a regular part of the climate for Chadron. Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. The planning team estimated that severe winter storms were highly probable in the future but given the frequency of occurrence, residents are prepared for the events and able to effectively cope with their occurrences. According to the NCEI, there were 113 severe winter storm events in Dawes County from 1996 to 2023. These events resulted in $27,000 in property damage but no injuries or fatalities. The city removes snow from local roads, but current resources are not sufficient to meet local needs.

Tornadoes and High Winds

The local planning team identified Tornadoes and High Winds as a significant concern for the community. According to the NCEI, there were 49 high wind events in Dawes County and four tornadoes which passed near Chadron since 1996. All tornadoes were either EF/F 0 with no reported damages, injuries, or fatalities. High wind events report between 60 and 75 miles per hour. Winds of this magnitude, according to the Beaufort Wind Force Ranking, can cause trees to uproot, considerable structure damage, and overturning of improperly anchored mobile homes. The city has removed several hazardous buildings at risk to tornadoes and high winds and has been working to reduce the overall number of vacant and dilapidated mobile homes in town. The city also follows and enforces the local building code for wind speed.

Continued Mitigation and Strategic Actions

Action	Alert/Warning Sirens
Description & Location	Perform an evaluation of existing alert sirens in order to determine which sirens should be replaced or upgraded. Install new sirens where lacking.
Hazard(s) Addressed	Tornado and High Winds
Estimated Cost	$15,000+
Local Funding	Tax Revenue, CDBG, BRIC, HMGP
Timeline	2-5 Years
Priority	High
Lead Agency	City Clerk, City Administrator
Status	Currently looking for contractors and working on bid phase. Going out for bid in fall 2025. To be located at public library.

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$30,000+ per generator
Local Funding	Tax Revenue, BRIC, HMGP
Timeline	2-5 Years
Priority	Medium
Lead Agency	Water Department
Status	A backup generator was installed at the water plant. Generators at the fire department training center and wellfield are in the planning process.

Action	Drainage Study/Stormwater Master Plan
Description & Location	Drainage studies can be conducted to identify and prioritize improvements to address site specific localized flooding/drainage problems. Storm water master plans can be conducted to perform a community-wide storm water evaluation, identifying multiple problem areas, and potentially multiple drainage improvements for each.
Hazard(s) Addressed	Flooding, Human Infectious Disease
Estimated Cost	$10,000
Local Funding	Cost share with USDA
Timeline	5+ Years
Priority	Low
Lead Agency	Streets Department
Status	In planning stage

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education, increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchase equipment such as overhead projectors and laptops.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$3,000+
Local Funding	Tax Revenue
Timeline	5+ Years
Priority	Low
Lead Agency	City Clerk, Water/Wastewater Departments, Streets Department
Status	In planning state

Action	Stormwater System and Drainage Improvements
Description & Location	Smaller communities may utilize storm water systems comprising ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other storm water system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacement or modification of bridges may be necessary to provide greater capacity, maintain or improve structural integrity during flood events, and eliminate flooding threats and damages.
Hazard(s) Addressed	Flooding, Human Infectious Disease
Estimated Cost	$10,000 - $100,000+
Local Funding	Tax Revenue, Loans, HMGP, BRIC
Timeline	5+ Years
Priority	Low
Lead Agency	City Council, Water/Wastewater Departments
Status	Not started

Action	Vacant/Dilapidated Homes
Description & Location	Reduce number of vacant/dilapidated homes
Hazard(s) Addressed	Grass/Wildfire, Human Infectious Diseases, Tornadoes and High Winds
Estimated Cost	TBD
Local Funding	City General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	Mayor
Status	In progress

Removed Mitigation and Strategic Actions

Action	Safe Rooms
Description & Location	Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, school, and other areas.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Reason for Removal	Not a priority for the city at this time.

Community Profile

City of Crawford

Region 23 EMA
Hazard Mitigation Plan 2025

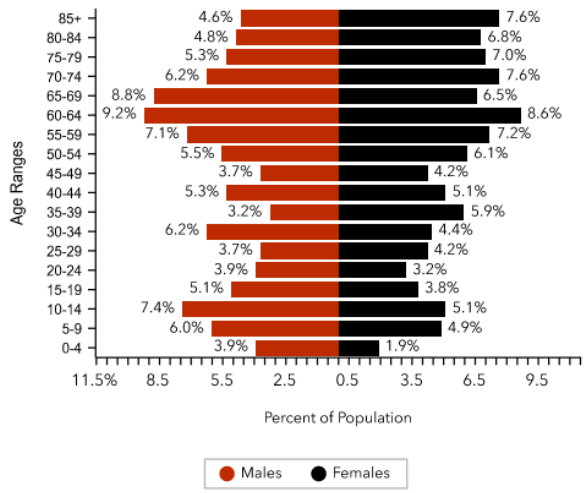
Community Fact Sheet

Community Summary Fact Sheet

Crawford, NE
Region 23 EMA Hazard Mitigation Plan 2025

908	54.0	395	2.22	$78,982	$53,094
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID

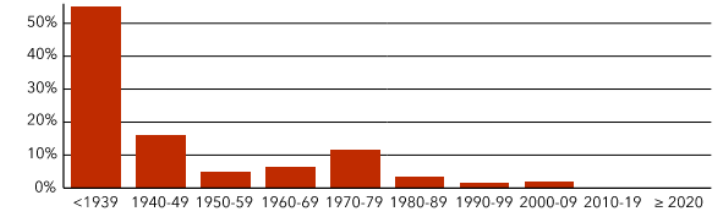


TOTAL POPULATION	
2024 Total Population (Estimate)	908
2020 Total Population (U.S. Census)	840
2010 Total Population (U.S. Census)	997
2000 Total Population (U.S. Census)	1,107

AT RISK POPULATIONS

102	297	48	13%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

HOUSING: YEAR BUILT



EMPLOYMENT

65	1.2%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Black Population
- Asian Population
- Other Race Population
- American Indian Population
- Population of 2+ Races
- White Population

6% **of the Total Population is Hispanic**

HOUSING

163	5%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Shane Norman	Mayor	Crawford	-	Recording
April Grant	City Council President	Crawford	-	Recording
Teri Miller	Clerk/Treasurer	Crawford	-	Recording
Dan Brien	Street Supervisor	Crawford	Attended	-
Julia Butler	City Clerk	Crawford	Attended	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Mayor, City Council President, and City Clerk Treasurer will review and update this participant profile outside of the five-year update. The City of Crawford will review the plan bi-annually, and the public will be notified via council meetings, social media, and the community website.

Capability Assessment

The planning team assessed the City of Crawford's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	No
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	If yes:	Year Adopted: 2004
		IBC Edition: 2000
	Water System Emergency Response Plan	Yes
	Wellhead Protection Plan	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No

Capability/Planning Mechanism		Yes/No
	Community Wildfire Protection Plan	Yes
	Other (if any)	
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	No
	Chief Building Official	No
	Civil Engineering	Yes
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	No
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	Yes
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Limited

National Flood Insurance Program (NFIP)

Crawford is a member of the NFIP, having joined on 08/01/1986, and the community's Floodplain Administrator oversees the commitments and requirements of the NFIP. The floodplain administrator uses GIS maps to determine if a development will be located in the floodplain. A floodplain permit is only valid if located outside of Chadron and Crawford area, and is required for any new construction or substantial improvements in the floodplain. Enforcement is done using the city's floodplain ordinance. After a flood event, the community implements substantial improvement and substantial damage provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA Handbook_FINAL.pdf. The city's floodplain regulations do not exceed the State of Nebraska requirements. The city would work with the Nebraska Department of Natural Resources and FEMA on any Letters of Map Change.

The local planning team has stated that Crawford will remain in good standing and be involved with the NFIP. Currently, the city has no barriers when running the NFIP program. There are no known areas in the community with limited NFIP coverage. The city presently uses no educational materials for the floodplain, as only a few structures exist in the floodplain. Additional NFIP information is given in the table below.

NFIP Information

NFIP Overview	
Date of NFIP Participation:	8/1/1986
Floodplain Administrator:	Shane Norman
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	0
Total NFIP Premium ($):	N/A
Total NFIP Coverage ($):	N/A
Number of Claims Paid Out:	N/A
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Digital
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table. A table of flood map products for the city is also provided below.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
634	$38,009,105	5	$1,165,350	0.8%

Source: County Assessor, 2024

Flood Map Products

Type of Product	Product ID	Effective Date	Details
FIRM Panel	31045C0535C	06/16/2011	Current FIRM Panel
FIRM Panel	31045C0545C	06/16/2011	Current FIRM Panel
FIRM Panel	31045CIND0A	06/16/2011	Current FIRM Panel

Source: FEMA[3]

Plans and Studies

The City of Crawford has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the city updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Building Code (2004)

The building code sets standards for constructed buildings and structures. Crawford's building codes are based on the 2000 International Building Code. These codes regulate and govern the conditions and maintenance of all property, buildings, and structures by providing the standards for supplied utilities, facilities, and other physical things and conditions essential to ensure that structures are safe, sanitary, and fit for occupation and use. Enforcement of the building codes is done by city officials. The hazard mitigation plan has not been integrated with the city building code.

Capital Improvement Plan (2024)

The purpose of the capital improvement plan is for the city to strategize how to budget for nonrecurring physical or digital purchases. A capital improvement plan typically spans multiple years and includes financing plans. The plan includes storm water projects, upsizing of culverts and drainage structures, and widening roadways that would improve evacuations. The city plans to update the capital improvement plan in 2025.

[3] Federal Emergency Management Agency. February 2025. "FEMA Flood Map Service Center". http://msc.fema.gov/portal/advanceSearch.

Comprehensive Plan (2017)
The comprehensive plan is designed to guide the future actions and growth of the city. The plan directs development away from the floodplain, directs housing away from chemical storage facilities, and identifies areas that need emergency shelters. The city plans to incorporate information from the hazard mitigation plan into its next comprehensive plan update. Currently there is no plan or timeline for the next update of the city's comprehensive plan.

Dawes County Local Emergency Operations Plan (2023)
The Dawes County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

Drought Ordinance
Crawford's drought ordinance outlines the conservation management plan to minimize the effects of water shortage and control the municipal water supply during periods of high demand. The city will enact action depending on the severity of the circumstance. The city council is responsible for implementing, declaring, and enforcing the ordinance.

Floodplain Regulations (2011), Zoning Ordinance (2021), and Subdivision Regulations (2021)
The city's floodplain regulations, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. These documents include the ability to implement water restrictions. In future updates, the city would like to include the following: restrict development in hazard prone areas, prohibit some development within the floodplain, discourage development in the floodplain, limit populations density in the floodplain, require more than one foot of elevations above Base Flood Elevation in the floodplain, discourage housing and vulnerable populations near chemical storage sites, restrict subdivision of land within or near the floodplain, and include well setback requirements. The city plans to update these documents in 2026.

Pine Ridge Area Community Wildfire Protection Plan (2020)
The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

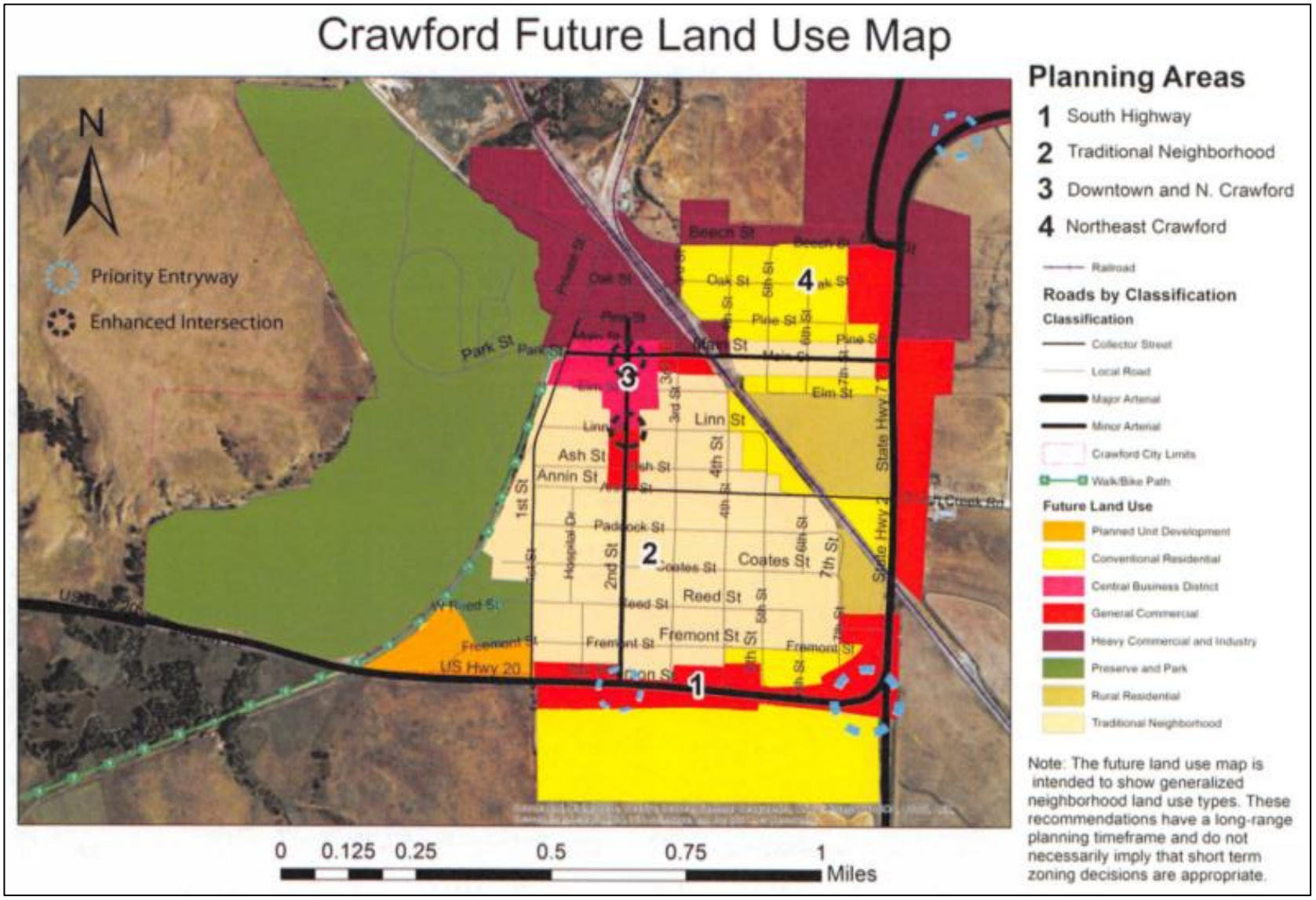
Water System Emergency Response Plan
The water system emergency response plan serves as a guideline for water operators and city officials to minimize the disruption of normal services to consumers and to provide public health protection during an emergency event. The document identifies several natural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

Wellhead Protection Plan

The purpose of wellhead protection plans is to protect the public drinking water supply wells from contamination. It includes identifying potential sources of groundwater contamination in the area.

Future Development Trends

According to the local planning team, there has been no development or demolition of buildings in the last five years. There are currently no plans for development in the next five years. The future land use map for the city is shown on the next page.


Crawford Future Land Use Map
N
Priority Entryway
Enhanced Intersection
Park St
Beech St
Oak St
Pine St
Main St
Elm St
Linn St
Ash St
Annin St
Paddock St
Coates St
Reed St
Fremont St
US Hwy 20
State Hwy 71
1st St
2nd St
3rd St
4th St
6th St
7th St
1
2
3
4
0 0.125 0.25 0.5 0.75 1 Miles
Planning Areas
1 South Highway
2 Traditional Neighborhood
3 Downtown and N. Crawford
4 Northeast Crawford
Railroad
Roads by Classification
Classification
Collector Street
Local Road
Major Arterial
Minor Arterial
Crawford City Limits
Walk/Bike Path
Future Land Use
Planned Unit Development
Conventional Residential
Central Business District
General Commercial
Heavy Commercial and Industry
Preserve and Park
Rural Residential
Traditional Neighborhood
Note: The future land use map is intended to show generalized neighborhood land use types. These recommendations have a long-range planning timeframe and do not necessarily imply that short term zoning decisions are appropriate.

Community Lifelines

As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.

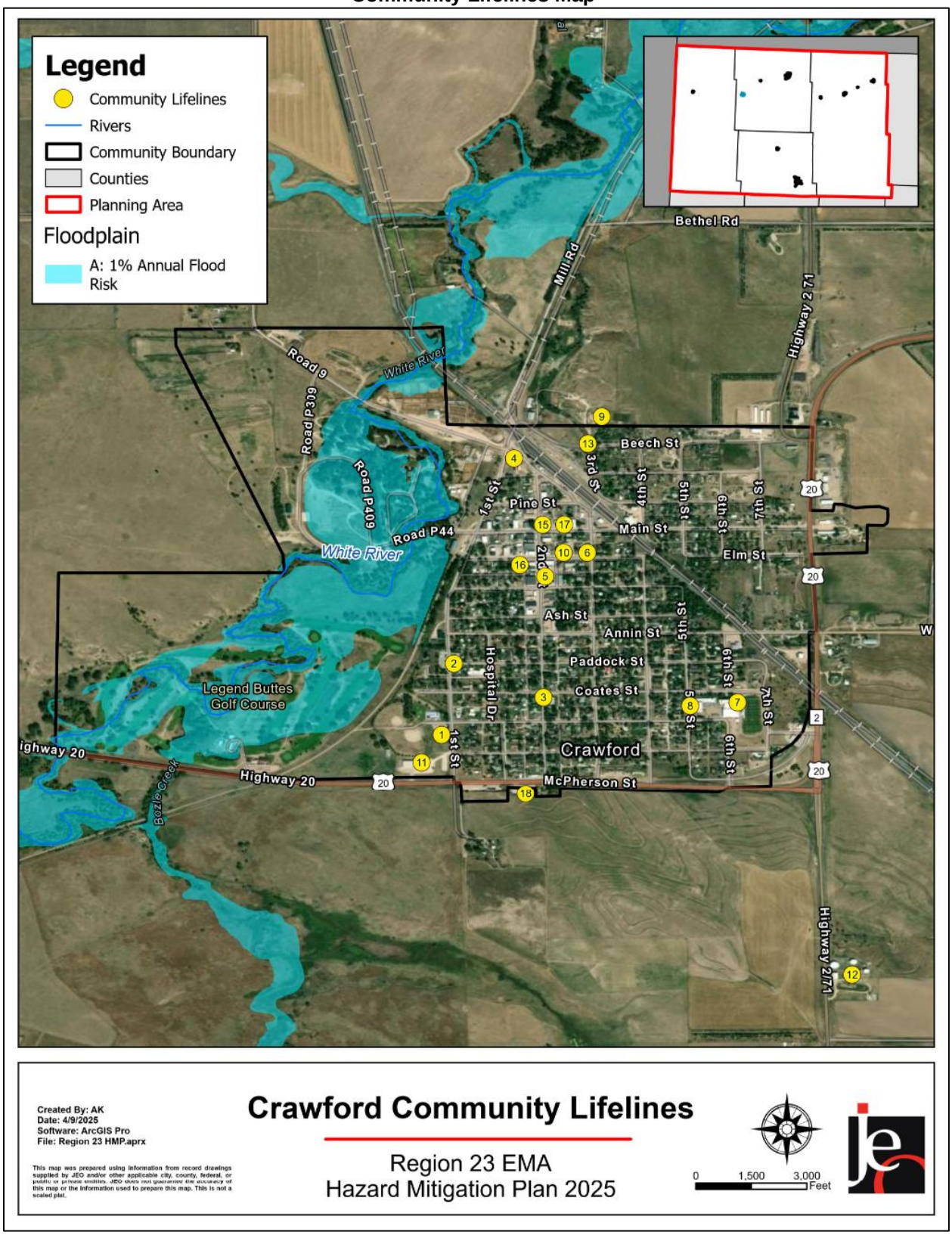


Crawford Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Crawford Community Building	Safety and Security	S	N
2	Legend Buttes Health Services	Health and Medical	-	N
3	Bethlehem Lutheran Church	Food, Hydration, Shelter	S	N
4	NPPD Sub Station	Energy	-	N
5	Senior Center	Food, Hydration, Shelter	S	N
6	Methodist Church	Food, Hydration, Shelter	S	N
7	Crawford High School	Safety and Security	-	N
8	Crawford Elementary School	Safety and Security	-	N
9	Sewer Plant	Water Systems	G	N
10	Warning Siren	Communications	-	N
11	Crawford Rural Fire Dept	Safety and Security	-	N
12	Water Treatment Plant	Water Systems	G	N
13	Sewer Lift Station	Water Systems	G	N
14	Cell Phone Tower*	Communications	-	N
15	Pharmacy Store	Food, Hydration, Shelter	-	N
16	City Hall	Safety and Security	-	N
17	Dawes County Sheriff - Crawford Station	Safety and Security	-	N
18	Dollar General	Food, Hydration, Shelter	-	N

**Community Lifeline not displayed on map viewing area*

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Crawford which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the City of Crawford. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

The local planning team identified grass/wildfire as a significant threat for the city. According to the Nebraska Forestry Department there were 458 reported fires by the Crawford Fire Department from 2000 to 2023 which consumed a total of 68,534 acres. The Crawford Fire Department received a USDA grant in 2016 to relocate and construct a new fire hall. The old fire hall was insufficient to meet local needs including equipment storage. However, the new fire hall does not have a backup generator. According to the Pine Ridge Community Wildfire Protection Plan (CWPP), there have been five major fires since 1984. The City of Crawford lies within the WUI as defined by the CWPP. The Crawford Fire Department has mutual aid agreements with the fire departments in the surrounding areas, but during large scale events it is possible nearby fire department would be unable to lend assistance due to addressing the needs of their respective community/protection area. Wildfire awareness within the community is needed.

Severe Thunderstorms

Severe thunderstorms are a regular part of the climate for Dawes County and Crawford. The local planning team identified severe thunderstorms as a top hazard for the community. Severe thunderstorms and hail can result in loss of electricity, blocked roadways, damages to trees, and flooding. Blocked roadways, as a result of downed trees, may also present life safety concerns to those needing immediate medical attention and prevent emergency response vehicles from reaching residents.

The NCEI recorded 57 thunderstorm events with one injury and $506,500 in damages to property. Of these events, hail is a top threat and accounts for 50 reported events. The local planning team indicated that a storm event in 2022 caused flooding at the Crawford Livestock Auction facility which introduced livestock waste into the White River waterway.

Local concerns include lack of stormwater management infrastructure and the frequency of flooding in those areas. The city has a swale and roadside grading to divert water, but it has been deemed inadequate. The city is working on funding for a stormwater study. Needed projects include a generator at the fire hall and the installation of stormwater catch basins and drainage swales. Road construction, stormwater inlets and piping are also needed to reduce vulnerability to this hazard. The city removes hazardous trees as needed and replaces trees as part of the Nebraska Statewide Arboretum.

Terrorism and Cyber Attack

Although no events have occurred in the past, the local planning team is concerned about this hazard due to probably vulnerabilities and lack of safeguards in place. No projects have been completed to reduce risk to this hazard. Needed safeguards include security cameras, surveillance, and vegetation mitigation.

Tornadoes and High Winds

The local planning team identified tornadoes and high winds as a significant concern for the community. In total there were 61 high wind events in Dawes County reported to the NCEI between 1996 and 2023. Additionally, there were two tornadoes that passed near Crawford. Both tornadoes were either EF/F0 and reported no damages. The current warning siren in Crawford needs to be replaced and the city is currently awaiting funding. There are currently no FEMA certified safe rooms located within Crawford; however, the local planning team indicated the community center and local churches would be used as shelters or emergency supply depots if needed. Shelter signage for these locations is needed. Many residents have basements in the community.

Completed Mitigation and Strategic Actions

Action	Alert/Warning Sirens
Description & Location	Perform an evaluation of existing alert sirens in order to determine which sirens should be replaced or upgraded. Install new sirens where lacking.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Status	Sirens are installed and in working order

New Mitigation and Strategic Actions

Action	Water Infiltration Gallery
Description & Location	Improve water infiltration gallery which had a washed out/undermined drainage pipe. Address erosion of dirt receding near foundation of building.
Hazard(s) Addressed	Drought, Flooding, Human Infectious Disease
Estimated Cost	$110,000-$120,000
Local Funding	Tax Revenue
Timeline	1 year
Priority	High
Lead Agency	Water/Wastewater Department
Status	In progress

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+
Local Funding	Tax Revenue
Timeline	5+ Years
Priority	Low
Lead Agency	City Council
Status	Not started. The fire hall has been identified as one of the places needing a backup generator.

Action	Become a Tree City USA
Description & Location	Work to become a Tree City USA through the National Arbor Day Foundation in order to receive direction, technical assistance, and public education on how to establish a hazardous tree identification and removal program in order to limit potential tree damage and damages caused by trees in a community when a storm event occurs.
Hazard(s) Addressed	Drought, Extreme Temperatures, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$1,000+
Local Funding	Tax Revenue
Timeline	2-5 Years
Priority	Low
Lead Agency	Park Board
Status	Not started

Action	Drainage Study/Stormwater Master Plan
Description & Location	Drainage studies can be conducted to identify and prioritize improvements to address site specific localized flooding/drainage problems. Storm water evaluation, identifying multiple problem areas, and potentially multiple drainage improvements for each
Hazard(s) Addressed	Flooding, Grass/Wildfire
Estimated Cost	$3,000+
Local Funding	Tax Revenue
Timeline	5+ Years
Priority	Low
Lead Agency	City Clerk, Water/Wastewater Departments, Street Department
Status	Ongoing

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	Tax Revenue
Timeline	2-5 Years
Priority	Medium
Lead Agency	City Clerk, Water/Wastewater Departments, Streets Department
Status	Ongoing

Action	Safe Rooms
Description & Location	Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, school, and other areas.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	Tax Revenue
Timeline	2-5 Years
Priority	Medium
Lead Agency	City Clerk, Water/Wastewater Departments, Streets Department
Status	Ongoing

Action	Security Upgrades
Description & Location	Install security cameras, improve overall surveillance, and perform vegetation mitigation.
Hazard(s) Addressed	Terrorism and Cyber Attack
Estimated Cost	TBD
Local Funding	Tax Revenue
Timeline	2-5 Years
Priority	Medium
Lead Agency	City Clerk
Status	Ongoing

Action	Stormwater System and Drainage Improvements
Description & Location	Smaller communities may utilize storm water systems comprising ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other storm water system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacement or modification of bridges may be necessary to provide greater capacity, maintain or improve structural integrity during flood events, and eliminate flooding threats and damages.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000 - $100,000+
Local Funding	Tax Revenue, Loans, HMGP, BRIC
Timeline	2-5 Years
Priority	High
Lead Agency	City Council, Water/Wastewater Departments
Status	Some improvements were made recently, including a drainage study north of Main Street regarding offsite flows to Crawford Livestock Market, and a raised berm from the south side of Crawford Livestock Market to the bridge west of live the Market to aid in run-off prevention. Additional improvements are still needed in the city.

Sheridan County Appendix

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County Profile

Sheridan County

Region 23 EMA
Hazard Mitigation Plan 2025

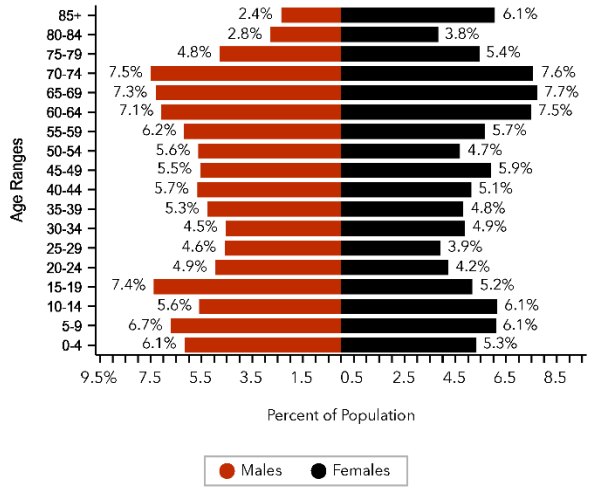
County Fact Sheet

Community Summary Fact Sheet

Sheridan County, NE
Region 23 EMA Hazard Mitigation Plan 2025

4,966	46.5	2,111	2.28	$115,517	$57,752
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



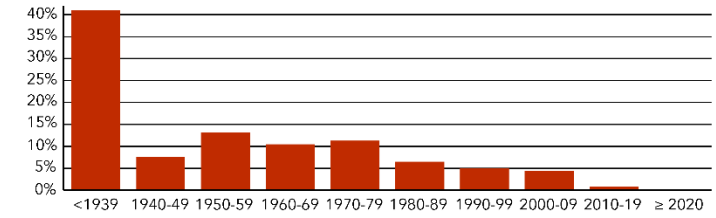
TOTAL POPULATION

2024 Total Population (Estimate)	4,966
2020 Total Population (U.S. Census)	5,127
2010 Total Population (U.S. Census)	5,469
2000 Total Population (U.S. Census)	6,198

AT RISK POPULATIONS

741	1,373	94	11%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

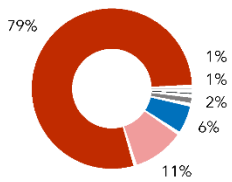
HOUSING: YEAR BUILT



EMPLOYMENT

361	1.4%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Black Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- American Indian Population
- White Population

5% **of the Total Population is Hispanic**

HOUSING

623	9%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

County Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
James Krotz	Commissioner	Sheridan County	Attended	Attended
Thomas Price	Asst Road Supt	Sheridan County	Attended	-
Everette Langford	Chief Deputy	Sheridan County	Attended	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The County Commissioners will review and update this participant profile outside of the five-year update. Sheridan County will review the plan bi-annually, and the public will be notified via board meetings and the county website.

Capability Assessment

The planning team assessed Sheridan County's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	No
	If yes:	Year Adopted: N/A
		IBC Edition: N/A
	Wellhead Protection Plan	No
	Water System Emergency Response Plan	No
	National Flood Insurance Program	Yes
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Other (if any)	

Capability/Planning Mechanism		Yes/No
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	No
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	No
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	No
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	No
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	No
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	Yes
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Limited

National Flood Insurance Program (NFIP)

Sheridan County is a member of the NFIP, having joined on 12/01/2008, and the county's Floodplain Administrator oversees the commitments and requirements of the NFIP. The floodplain administrator uses the FEMA Map Service Center to determine if a development will be located in the floodplain. A floodplain permit is required for any new construction or substantial improvements in the floodplain. The permitting process includes submission of an application to the floodplain administrator who either approves or denies the permit. If there is uncertainty, the application is reviewed by the Board of Commissioners. Enforcement is done by the floodplain administrator, who ensures regulations are followed. After a flood event, the county implements substantial improvement and substantial damage provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA Handbook_FINAL.pdf. The county's floodplain regulations do not exceed the State of Nebraska requirements. The county would work with the Nebraska Department of Natural Resources and FEMA on any Letters of Map Change.

The local planning team has stated that Sheridan County will remain in good standing and be involved with the NFIP. Currently, the county has no barriers when running the NFIP program. There are no known areas in the county with limited NFIP coverage. The county informs both the community and property owners through statements and reports from the Floodplain Administrator and Board of Commissioners Additional NFIP information is given in the table below.

County NFIP Information

NFIP Overview	
Date of NFIP Participation:	12/1/2008
Floodplain Administrator:	James Krotz
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	2
Total NFIP Premium ($):	$710
Total NFIP Coverage ($):	$229,000
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the County Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Paper
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table. A table of flood map products for the county is also provided below.

County Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
3,298	$297,815,613	712	$74,511,572	21.6%

Source: County Assessor, 2024

County Flood Map Products

Type of Product	Product ID	Effective Date	Details
FIRM Panel	310475IND0A	12/1/2008	Current FIRM Panel
FIRM Panel	3102139999B	2/1/1993	Current FIRM Panel
FIRM Panel	3104759999A	12/1/2008	Current FIRM Panel
FIRM Panel	310214A	4/2/1976	Current FIRM Panel
FIRM Panel	310213B	2/1/1993	Current FIRM Panel
FIRM Panel	3104750001B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750002B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750003B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750004B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750005B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750006B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750007B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750008B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750009B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750010B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750011B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750012B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750013B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750014B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750015B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750016B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750017B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750018B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750019B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750020B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750021B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750022B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750023B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750024B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750025B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750026B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750027B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750028B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750029B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750030B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750031B	12/1/2008	Current FIRM Panel
FIRM Panel	3104750032B	12/1/2008	Current FIRM Panel

Source: FEMA[1]

[1] Federal Emergency Management Agency. February 2025. "FEMA Flood Map Service Center". http://msc.fema.gov/portal/advanceSearch.

Plans and Studies

Sheridan County has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the county updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Comprehensive Plan (2014)

The comprehensive plan is designed to guide the future actions and growth of the county. The county's plan does not discuss natural hazards.

Floodplain Regulations and Zoning Ordinance

The county's floodplain regulations (2024) and zoning ordinance outline where and how development should occur in the future.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Sheridan County Local Emergency Operations Plan (2023)

The Sheridan County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan.

Future Development Trends

According to the county, little has changed over the past five years. There have been no new structures developed in the floodplain or other hazardous areas and there are no new housing developments or new business/industry planned in the near future.

Community Lifelines

As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.

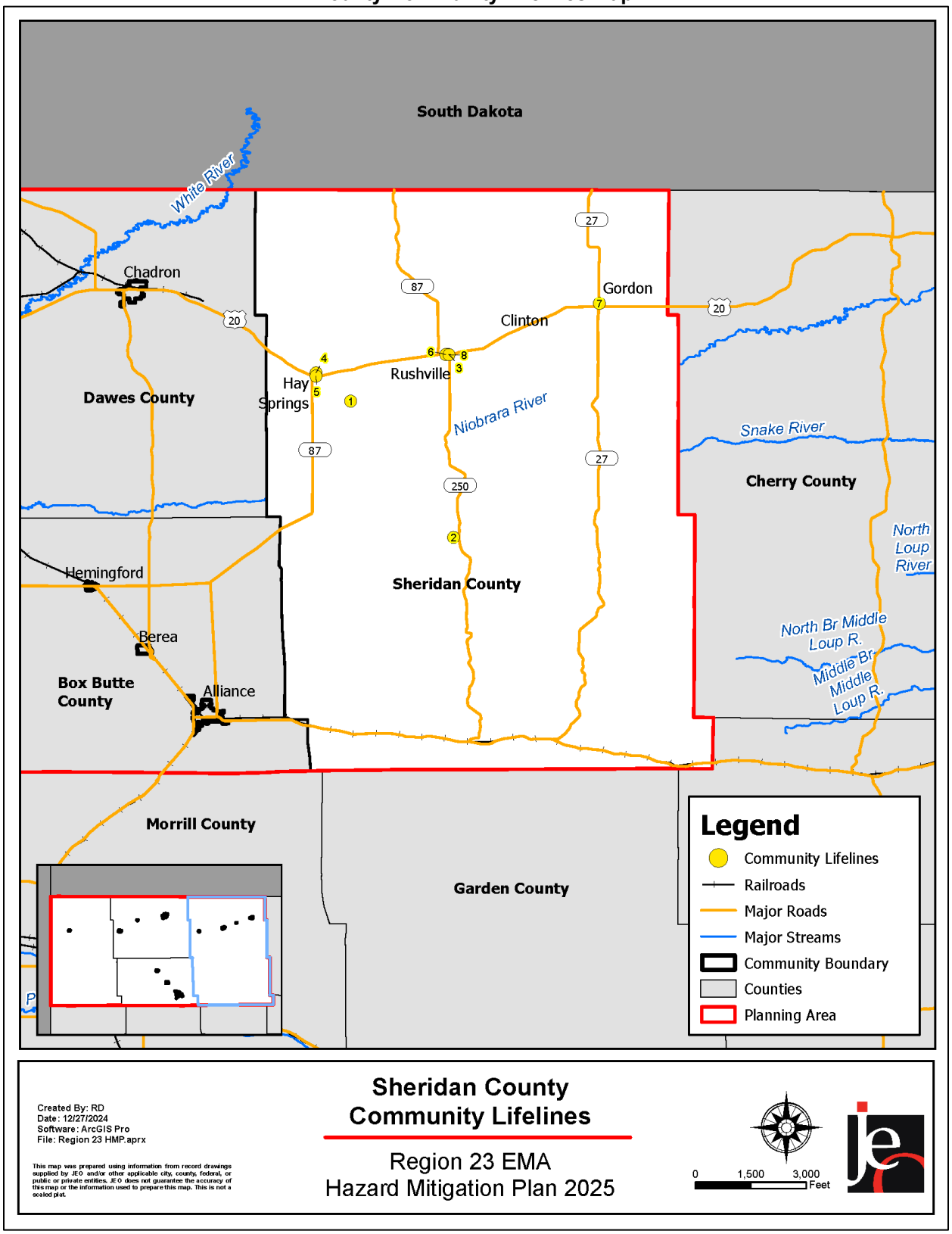


County Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Walgren Lake SRA	Other	-	Y
2	Smith Lake SRA	Other	-	Y
3	Courthouse	Safety and Security	S	N
4	Lister-Sage Community Center (Hay Springs)	Food, Hydration, Shelter	S	N
5	Hay Springs Volunteer Fire Department	Safety and Security	S	N
6	Rushville Volunteer Fire Department	Safety and Security	S	N
7	Gordon Volunteer Fire Department	Safety and Security	S	N
8	Sheriff's Office	Safety and Security	G,S	N

.

County Community Lifelines Map



Sheridan County Hazard Loss History

Hazard Type		Count	Property Damage	Crop Damage[2]
Agricultural Disease	Animal Disease[1]	60	693 animals	N/A
	Plant Disease[2]	26	N/A	$265,768
Dam Failure	Dam Failure[5]	0	$0	N/A
Drought[6]		574 out of 1,548 Months	$10,000,000	$15,321,326
Extreme Temperatures[7]	Heat	Avg. 6 Days a Year	$0	$2,546,077
	Extreme Cold / Wind Chill	Avg. 5 Days a Year	$0	$4,636,193
Flooding[8]	Flash Flood	7	$21,000	$2,306
	Flood	1	$0	
Grass/Wildfires[9]		496	182,981 acres burned	$68,310
Hazardous Materials Release	Fixed Site[3]	0	N/A	N/A
	Transportation[4]	3	$0	N/A
Human Infectious Disease[12]		1,160 covid cases	N/A	N/A
Severe Thunderstorms[8]	Hail Range: 0.75-4.3 In. Average: 1.24 In.	486	$1,514,000	$29,199,878
	Thunderstorm Wind Range: 58-91 mph Average: 64 mph	155	$377,200	$2,721,942
	Heavy Rain	1	$0	
	Lightning	1	$1,000,000	
Severe Winter Storms[8]	Blizzard	15	$70,000	$1,778,234
	Heavy Snow	5	$0	
	Ice Storm	0	$0	
	Winter Storm	52	$15,000	
	Winter Weather	0	$0	
Terrorism and Cyber Attack[10]		0	N/A	N/A
Tornadoes and High Winds[8]	High Winds Range: 40-84 mph Average: 60 mph	26	$17,000	$3,266,449
	Tornadoes Range: EF0-EF2 Average: F0	32	$349,000	0
Total		**3,085**	**$13,363,200**	**$59,806,483**

N/A: Data not available
1 – NDA, 2014 – 2023
2 - USDA RMA, 2000 –2023
3 – NRC, 1990 –2023
4 – PHMSA, 1971 – June 2024
5 – Stanford University NPDP, 2024
6 – NOAA, 1895 – 2023
7 – NOAA Regional Climate Center, 1893 – 2024
8 – NCEI, 1996 - 2023
9 – NFS, 2000 - 2023
10 – University of Maryland, 1970 – 2020
11 – USGS, 1900 – April 2024
12 – The New York Times, as of 3/23/2023

Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Sheridan County which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the county. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Dam Failure

There are two high hazard dams in Sheridan County: Antelope Creek 20-A and Antelope Creek 40-B, which are located west and northwest of the City of Gordon respectively. Both dams are owned and maintained by the City of Gordon. While the county local planning team did not note any concerns for failure of these structures, Region 23 EMA and county emergency managers would assist in emergency response if a failure event were to occur. Antelope Creek 20-A's inundation area includes portions of the City of Gordon and could significantly impact residential homes and commercial buildings.

According to the Nebraska Dam Inventory, there are a total of 28 dams located within Sheridan County, with classifications ranging from minimal to high hazard.[2] The figure on the next page maps the location of these dams within the county.

Dams in Sheridan County

Minimal Hazard	Low Hazard	Significant Hazard	High Hazard
2	21	3	2

Source: NeDNR

Dams classified with high hazard potential require the creation of an Emergency Action Plan (EAP). The EAP defines responsibilities and provides procedures designed to identify unusual and unlikely conditions which may endanger the structural integrity of the dam within sufficient time to take mitigating actions and to notify the appropriate emergency management officials of possible, impending, or actual failure of the dam. The EAP may also be used to provide notification when flood releases will create major flooding. An emergency can occur at any time; however, emergencies are more likely to happen when extreme conditions are present. There are two high hazard dams located in Sheridan County.

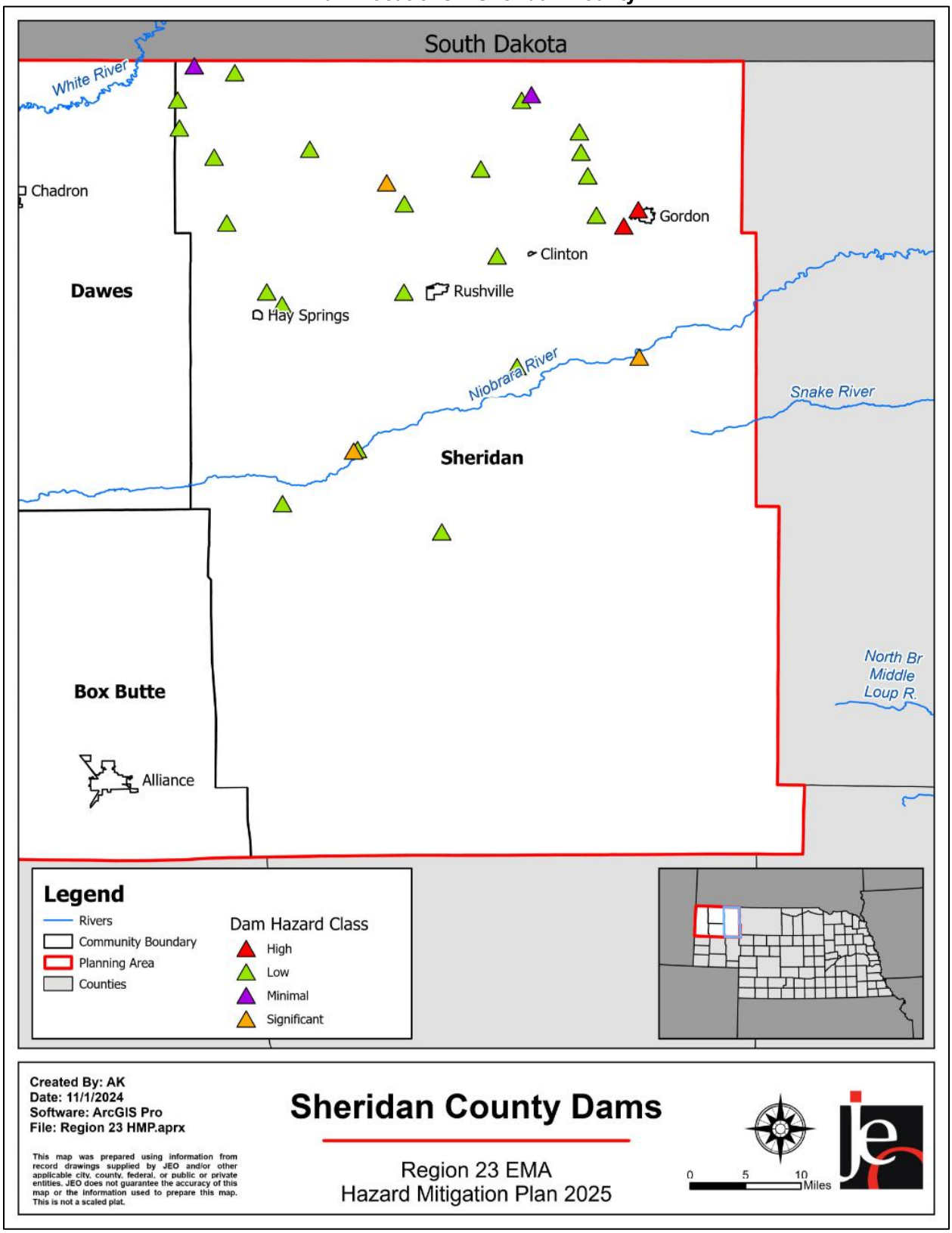
High Hazard Dams in Sheridan County

Dam Name	NID ID	Dam Height (Feet)	Max Storage (Acre Ft)	Last Inspection Rating
Antelope Creek 20-A	NE00793	24	450	6/7/2023
Antelope Creek 40-B	NE00795	32	8,655	6/7/2023

Source: NeDNR

[2] Nebraska Department of Natural Resources. May 2024. "Nebraska Dam Inventory". https://gis.ne.gov/portal/apps/webappviewer/index.html?id=2aab04a13817421992dc5398ad462e22.

Dam Locations – Sheridan County



Drought
The local planning team ranked drought as a top threat for the county. Drought is generally a regional event, with impacts from a single drought event impacting multiple communities, counties, and even states. A large portion of the workforce relies on agriculturally based income which could be affected during severe drought. Drought impacts are not always as visible as impacts of other natural hazards and are hard to quantify. In addition, drought can exacerbate the effects felt by wildfires and impact the local economy by decreasing agriculture and grazing land for ranchers. The RMA reported $15,321,326 in crop losses from drought from 2000-2003.

Extreme Temperatures
The local planning team ranked extreme temperatures as a top concern as they are a natural part of the climate in Sheridan County. Across the county the median age is just over 46 years, and more than a quarter of the population is aged 65 or greater. An aging population will be more vulnerable to the impacts resulting from extreme temperatures.

Grass/Wildfires
The local planning team identified grass/wildfire as the greatest threat to Sheridan County. The entire county falls within the Wildland Urban Interface (WUI) as defined in the CWPP. According to the Nebraska Forestry Department, there were 496 reported fires by Gordon, Rushville, Hays Springs, and Heart of the Hills (Lakeside) Fire Departments from 2000 to 2023 which consumed a total of 182,981 acres. The fires also resulted in $68,310 in damages to crops. Of the reported fires the most frequent cause is lightning (38 percent) followed by equipment malfunctions and other miscellaneous accidents. The largest fire within the county, the Wellnitz Fire in 2012, burned nearly 49,000 acres in the Hay Springs and Rushville fire department district areas. Local concerns for wildfire events include the impact on the local economy, distance from available resources, exacerbated impacts felt from drought (such as seen during 2012), and lack of available transportation corridors or access for emergency response.

Severe Thunderstorms
The county planning team identified thunderstorm events and hailstorms as a threat for Sheridan County. NCEI data reports a total of 643 events with a total of $2,891,200 in property damages and $2,721,942 in crop damage. Hail in the unincorporated areas of the county is most likely to impact the agricultural areas of the county. There are more than 301,000 acres devoted to cropland in the county. Hailstorms can have devastating impacts on crops, causing up to a 100 percent loss. Additionally, heavy rain events can cause localized flooding concerns throughout the county and wash out necessary transportation routes in the rural county, while lightning strikes are the leading cause of wildfire events in the planning area.

Severe Winter Storms
Severe winter storms are a regular part of the climate for Sheridan County. Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. The planning team identified severe winter storms as a threat in the future, but given the frequency of occurrence, residents across the county are prepared for the events and able to effectively cope with their occurrences. The NCEI reports 94 severe winter storms in Sheridan County from 1996 through 2023. These events resulted in $85,000 in property damage. Most recorded severe winter events include snow, wind, and ice as the main contributors to damage in Sheridan County.

Continued Mitigation and Strategic Actions

Action	Electrical System Looped Distribution Redundancies
Description & Location	Provide looped distribution service and other redundancies in the electrical system as a backup power supply in the event the primary system is destroyed or fails.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$40,000+
Local Funding	Rate-payer fees
Timeline	2-5 Years
Priority	Medium
Lead Agency	Utilities Department, NPPD, Northwest Rural Power District
Status	In progress.

Action	Emergency Exercise: Dam Failure
Description & Location	Conduct tabletop exercises to determine the response scenarios in the event of a dam failure
Hazard(s) Addressed	Dam Failure
Estimated Cost	$3,000+
Local Funding	Tax Revenue
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD, Region 23 EMA, City of Gordon
Status	Not started

Action	Floodplain Regulation Enforcements and Updates
Description & Location	Continue to enforce local floodplain regulations for structures located in the 1% annual floodplain – update where needed. Strict enforcement of the type of development and elevations of structures should be considered through issuance of building permits by Sheridan County. Continue education of Certified Floodplain Managers.
Hazard(s) Addressed	Flooding
Estimated Cost	$4,000+
Local Funding	County Tax Revenue, HMGP
Timeline	2-5 Years
Priority	Medium
Lead Agency	Floodplain and Zoning Administrator
Status	In progress

Action	Groundwater/Irrigation/Water Conservation and Management Practices
Description & Location	Develop and implement a plan or best management practice to conserve water use and reduce total use (high water use to low water use) and consumption of groundwater resources by citizens and irrigators of agricultural land during elongated periods of drought Identify water saving irrigation projects of improvements such as sprinklers of soil moisture monitoring. Potential restrictions on water could include limitation on lawn watering, car washing, farm irrigation restrictions, or water sold to outside sources. Implement BMPs through water conservation practices such as changes in irrigation management, education on no-till agriculture and use of xeriscaping in communities.
Hazard(s) Addressed	Drought
Estimated Cost	$10,000+
Local Funding	County Tax Revenue
Timeline	5+ years
Priority	Low
Lead Agency	UNWNRD, County Commissioners
Status	Not started

Action	Hazardous Fuels Reduction
Description & Location	The NFS Forest Fuels Reduction Program creates strategically located corridors of thinned forests across the landscape reduces fire intensity, improves fire suppression effectiveness, increases firefighters' safety, and better protects lives and property.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	$3000 per acre
Local Funding	Cost share, HMGP, BRIC
Timeline	2-5 Years
Priority	Medium
Lead Agency	Nebraska Forest Service, County Commissioners
Status	Not started

Action	Power and Service Lines
Description & Location	Communities can work with their local Public Power District or Electricity Department to identify vulnerable transmission and distribution lines and plan to bury lines underground or retrofit existing structures to be less vulnerable to storm events. Electrical utilities shall be required to use underground construction methods where possible for future installation of power lines.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes & High Winds
Estimated Cost	$1,000,000 per mile
Local Funding	Public Power Districts, HMGP, BRIC
Timeline	2-5 Years
Priority	Medium
Lead Agency	PPDs, Sheridan County Planning and Zoning
Status	Not started

Action	Public Education/Awareness
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD, Region 23 Emergency Management, County Administration
Status	Not started

Action	Stormwater System and Drainage Improvements
Description & Location	Smaller communities may utilize storm water systems comprising ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacement or modification of bridges may be necessary to provide greater capacity, maintain or improve structural integrity during flood events, and eliminate flooding threats and damages.
Hazard(s) Addressed	Flooding, Severe Thunderstorms
Estimated Cost	$100,000
Local Funding	County Tax Revenue
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Roads Department
Status	Ongoing

Action	Wildfire Hazard Identification and Mitigation System
Description & Location	Develop a hazard rating system using GIS to identify and rate areas of the county for their relative wildfire hazard.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	$5,000
Local Funding	County Tax Revenue
Timeline	2-5 Years
Priority	Medium
Lead Agency	Rural Fire Districts, Region 23 EMA
Status	Not started

Action	Windbreaks/Living Snow Fence
Description & Location	Installation of windbreaks and/or living snow fences to increase water storage capacity in soil and reduce blowing snow.
Hazard(s) Addressed	Drought and Extreme Heat, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$2,000+
Local Funding	County Tax Revenue
Timeline	5+ Years
Priority	Medium
Lead Agency	County Roads Department
Status	Annual basis

Community Profile

Village of Clinton

Region 23 EMA
Hazard Mitigation Plan 2025

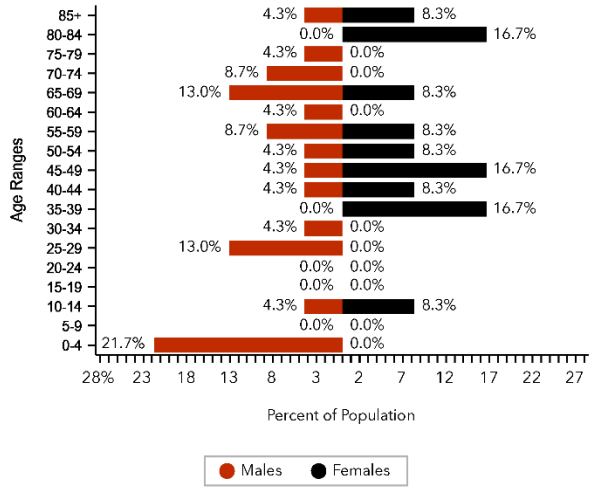
Community Fact Sheet

Community Summary Fact Sheet

Clinton, NE
Region 23 EMA Hazard Mitigation Plan 2025

Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income
35	49.2	16	2.19	$157,143	$59,689

AGE PYRAMID

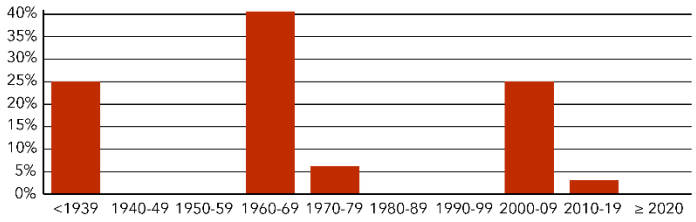


TOTAL POPULATION	
2024 Total Population (Estimate)	35
2020 Total Population (U.S. Census)	38
2010 Total Population (U.S. Census)	41
2000 Total Population (U.S. Census)	30

AT RISK POPULATIONS

5	11	0	0%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

HOUSING: YEAR BUILT



EMPLOYMENT

0	0.0%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Asian Population
- Other Race Population
- Black Population
- American Indian Population
- Population of 2+ Races
- White Population

3% **of the Total Population is Hispanic**

HOUSING

1	13%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Roy Retzlaff	Chairman	Village of Clinton	Attended	Attended
Rex Retzlaff	Clerk	Village of Clinton	Attended	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Board Chair and the village clerk will review and update this participant profile outside of the five-year update. The Village of Clinton will review the plan bi-annually, and the public will be notified via board meetings.

Capability Assessment

The planning team assessed the Village of Clinton's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	No
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operations Plan	No
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	No
	Building Codes	No
	Water System Emergency Response Plan	No
	Wellhead Protection Plan	No
	National Flood Insurance Program	No
	Community Rating System	No
	Community Wildfire Protection Plan	Yes (Regional)
	Other (if any)	
Administrative & Technical	Planning Commission	No
	Floodplain Administrator	No
	GIS Capabilities	No

Capability/Planning Mechanism		Yes/No
Capability	Chief Building Official	No
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	No
	Applied for Grants in the Past	No
	Awarded a Grant in the Past	No
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	No
	Gas/Electric/Water/Sewer Service Fees	Yes
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	No
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Limited
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Limited

National Flood Insurance Program (NFIP)

The Village of Clinton has chosen not to participate in the NFIP at this time due to the low flood risk to village structures and because of the minimal impacts from historical flooding. NFIP participation will be reevaluated if the village's flood risk changes. The village does not currently have any repetitive loss or severe repetitive loss structures.

NFIP Information

NFIP Overview	
Date of NFIP Participation:	N/A
Floodplain Administrator:	N/A
Is Floodplain Administrator a Certified Floodplain Manager?	N/A
Is Floodplain Management an Auxiliary Function?	N/A
Number of NFIP Policies In-Force:	N/A
Total NFIP Premium ($):	N/A
Total NFIP Coverage ($):	N/A
Number of Claims Paid Out:	N/A
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Paper
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
31	$1,884,881	0	$0	0%

Source: County Assessor, 2024

Plans and Studies

Clinton has limited planning documents that discuss or relate to hazard mitigation. The plans are described below. If the village initiates other planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan.

Sheridan County Local Emergency Operations Plan (2023)

The Sheridan County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Future Development Trends

According to the local planning team, there has been no development or demolition of buildings in the last five years. There are currently no plans for development in the next five years.

Community Lifelines

As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Clinton Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
-	U.S Highway 20*	Transportation	-	N

Community Lifelines Map



*U.S. Highway 20 was the only Community Lifeline identified in Clinton

Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Clinton which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the Village of Clinton. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Severe Winter Storms

Severe winter storms are a regular part of the climate in Clinton. Severe winter storms include blizzards, ice accumulation, extreme cold, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. According to the local planning team, blizzard events during the winters of 2022 and 2023 impacted the community. A concern for the community is the lack of emergency response service during a severe winter storm event. To reduce the community's risk to this hazard, the community purchased a snowplow and blower; however, this was several years ago. The community indicated that updated equipment is needed.

Tornadoes and High Winds

Tornadoes and high winds have the potential to cause significant property damages, power outages, and loss of life. According to the NCEI, there have been two recorded tornadoes in Clinton between 1996 and 2023. An EF2 tornado impacted the village in July 2016, resulting in $25,000 in property damage. An EF0 in July 2021 also hit the village; however, no damages were reported. For both tornadoes, no fatalities or injuries were reported to have occurred. Tornadic and high wind events are a concern to the local planning team due to the long distance to emergency services and the long electrical feed line that serves the community.

New Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+ per generator
Local Funding	City General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Village Board
Status	Not started

Action	Elevate Utilities and Critical Systems
Description & Location	Elevate utilities and critical systems to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels for critical buildings.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Village Board
Status	Not started

Action	Snow Removal Equipment
Description & Location	Purchase a snow blower and tractor
Hazard(s) Addressed	Severe Winter Storms
Estimated Cost	$150,000
Local Funding	City General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board
Status	Not started

Community Profile

City of Gordon

Region 23 EMA
Hazard Mitigation Plan 2025

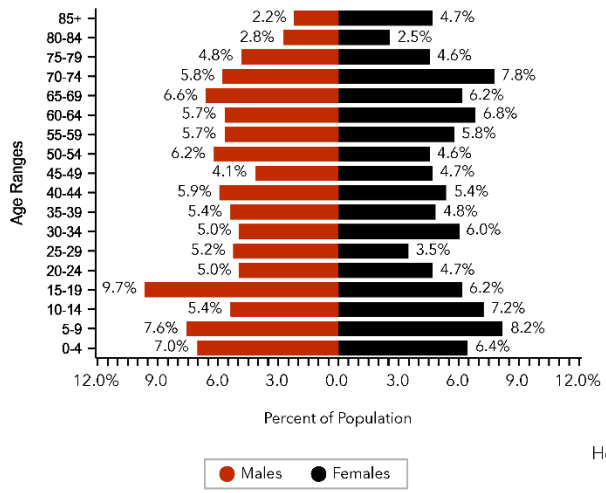
Community Fact Sheet

Community Summary Fact Sheet

Gordon, NE
Region 23 EMA Hazard Mitigation Plan 2025

1,471	41.2	596	2.42	$97,741	$57,888
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



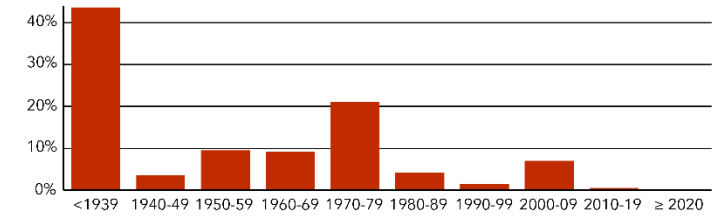
TOTAL POPULATION

2024 Total Population (Estimate)	1,471
2020 Total Population (U.S. Census)	1,497
2010 Total Population (U.S. Census)	1,605
2000 Total Population (U.S. Census)	1,738

AT RISK POPULATIONS

185	353	20	11%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

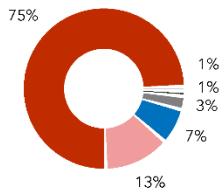
HOUSING: YEAR BUILT



EMPLOYMENT

139	1.7%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Black Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- American Indian Population
- White Population

7% **of the Total Population is Hispanic**

HOUSING

108	8%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
John Reed	City Manager	City of Gordon	-	Recording
Glen Spaugh	City Representative	City of Gordon	Attended	Recording

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The City manager and Floodplain administrator will review and update this participant profile outside of the five-year update. The City of Chadron will review the plan annually, and the public will be notified via city council meetings.

Capability Assessment

The planning team assessed the City of Gordon's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Drought Ordinance	Yes
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Water System Emergency Response Plan	Yes
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	If yes:	Year Adopted: 2012
		IBC Edition: 2012
	Water System Emergency Response Plan	Yes
	Wellhead Protection Plan	No
	National Flood Insurance Program	Yes

Capability/Planning Mechanism		Yes/No
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Other (if any): Emergency Action Plan for Dams	Yes
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	Yes
	Grant Manager	Yes
	Mutual Aid Agreement	Yes, Highway 20 Interlocal
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	Yes
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	No
	Natural Disaster or Safety Related School Programs	Yes
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	Yes
	Other (if any)	

Overall Capability

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

Capability	Limited/Moderate/High
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

National Flood Insurance Program (NFIP)

The City of Gordon is a member of the NFIP, having joined on 09/13/2007, and the village's Floodplain Administrator oversees the commitments and requirements of the NFIP. The floodplain administrator uses the Nebraska Department of Natural Resources Flood Mitigation and Floodplain Maps to determine if a development will be located in the floodplain. A floodplain permit is required for any new construction or substantial improvements in the floodplain. Enforcement is done using the city's floodplain ordinance. After a flood event, the community implements substantial improvement and substantial damage provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA Handbook_FINAL.pdf. The city's floodplain regulations do not exceed the State of Nebraska requirements. The city would work with the Nebraska Department of Natural Resources and FEMA on any Letters of Map Change.

The local planning team has stated that The City of Gordon will remain in good standing and be involved with the NFIP. Currently, the city's only barriers revolve around inadequate training regarding running and understanding the NFIP program. There are no known areas in the community with limited NFIP coverage. The city presently uses no educational materials for the floodplain, as only a few structures exist in the floodplain. Additional NFIP information is given in the table below.

NFIP Information

NFIP Overview	
Date of NFIP Participation:	09/13/2007
Floodplain Administrator:	John Reed
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	0
Total NFIP Premium ($):	N/A
Total NFIP Coverage ($):	N/A
Number of Claims Paid Out:	N/A
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Paper
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
824	$71,259,423	0	$0	0%

Source: County Assessor, 2024

Flood Map Products

Type of Product	Product ID	Effective Date	Details
FIRM Panel*	3104750007A	06/16/2011	Historical FIRM Panel (Sheridan County)

Source: FEMA[3]
**The City of Gordon adopted Panel 3104750007A of Sheridan County FHBM dated November 22, 1977, to use in determining those areas of special flood hazard within the 1-mile extra territorial jurisdiction.*

Plans and Studies

The City of Gordon has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the city updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Building Code (2012)

The building code sets standards for constructed buildings and structures. Gordon's building codes are based on the 2000 International Building Code. These codes regulate and govern the conditions and maintenance of all property, buildings, and structures by providing the standards for supplied utilities, facilities, and other physical things and conditions essential to ensure that structures are safe, sanitary, and fit for occupation and use. Enforcement of the building codes is done by city officials.

Comprehensive Plan (2018)

The comprehensive plan is designed to guide the future actions and growth of the city. The plan directs development away from the floodplain, directs housing away from chemical storage facilities, and identifies areas that need emergency shelters. The city plans to incorporate information from the hazard mitigation plan into its next comprehensive plan update. Currently there is no plan or timeline for the next update of the city's comprehensive plan.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

[3] Federal Emergency Management Agency. February 2025. "FEMA Flood Map Service Center". http://msc.fema.gov/portal/advanceSearch.

Drought Ordinance
Gordon's drought ordinance outlines the conservation management plan to minimize the effects of water shortage and control the municipal water supply during periods of high demand. The city will enact action depending on the severity of the circumstance. The city council is responsible for implementing, declaring, and enforcing the ordinance.

Emergency Action Plan for Dams (2023)
The Antelope Creek Dam has an emergency action plan as is required for any high hazard dam. The plan was last updated in 2024 and is required to be updated every five years. Inundation maps and a notification flowchart are included in the plan. It also identifies evacuation routes, assigns individual responsibilities, and identifies scenarios that would require an evacuation

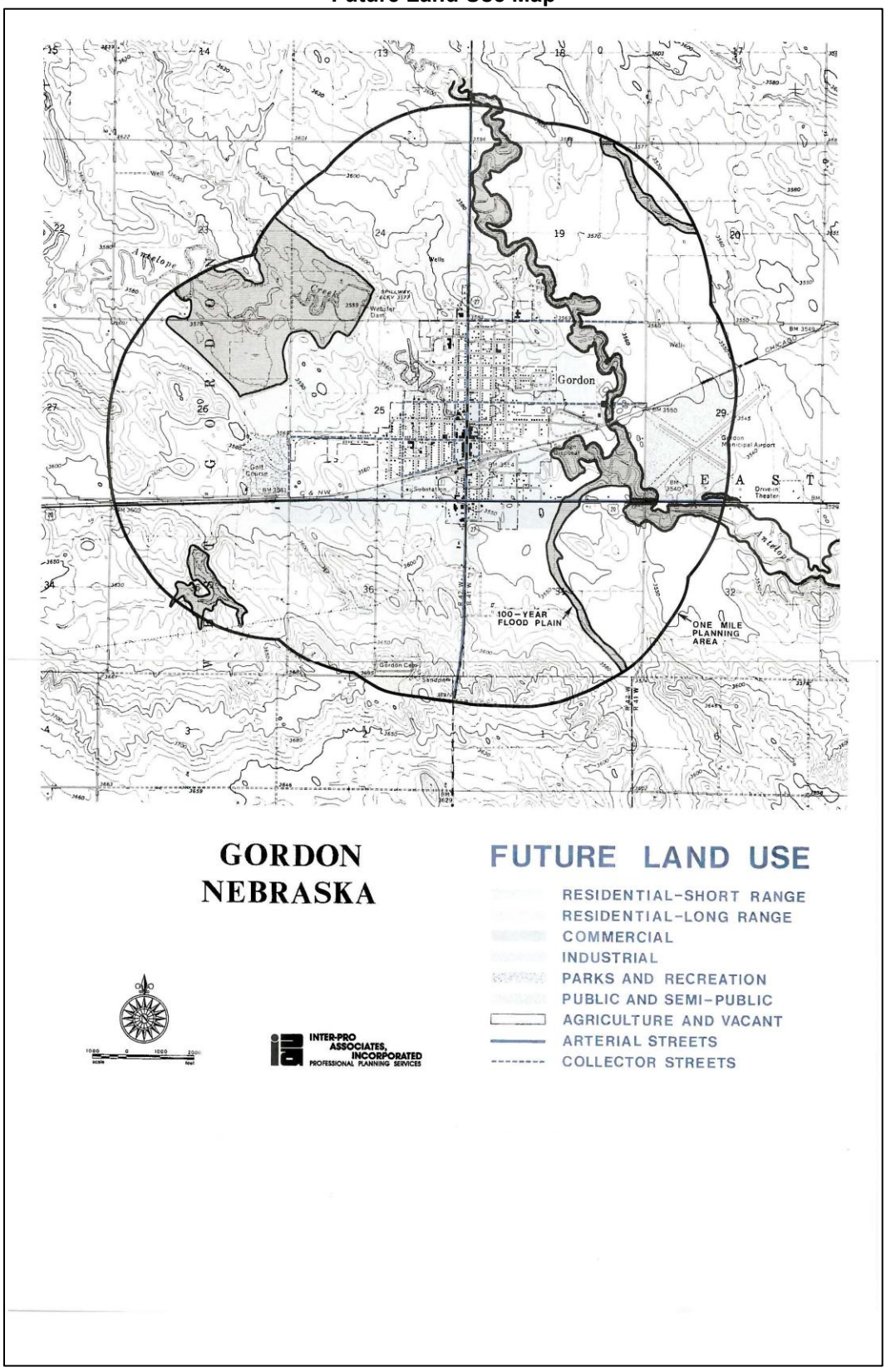
Floodplain Ordinance, Zoning Ordinance (2019), and Subdivision Regulations
The city's floodplain ordinance, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. These documents include the ability to implement water restrictions.

Sheridan County Local Emergency Operations Plan (2023)
The Sheridan County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan.

Water System Emergency Response Plan (2022)
The water system emergency response plan serves as a guideline for water operators and city officials to minimize the disruption of normal services to consumers and to provide public health protection during an emergency event. The document identifies several natural and human-caused events and discusses the water system's response during those events

Future Development Trends
In the past five years, Open Range Beef has reopened, and a $1.7 million street improvement project has begun with an estimated completion date of October 31, 2024. This involves the intersection of 1st & Elm, 2nd & Elm, Spruce Street from 3rd to 4th, and 1st Street from Oak to Sheridan. No new structures have been developed in the floodplain or other hazardous areas. There are currently no new housing developments or new businesses planned in the near future. The City of Gordon has applied for a Community Development Block Grant for Downtown Revitalization, but this project will not involve construction or demolition, only improvements to existing infrastructure.

Future Land Use Map



Community Lifelines

As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.

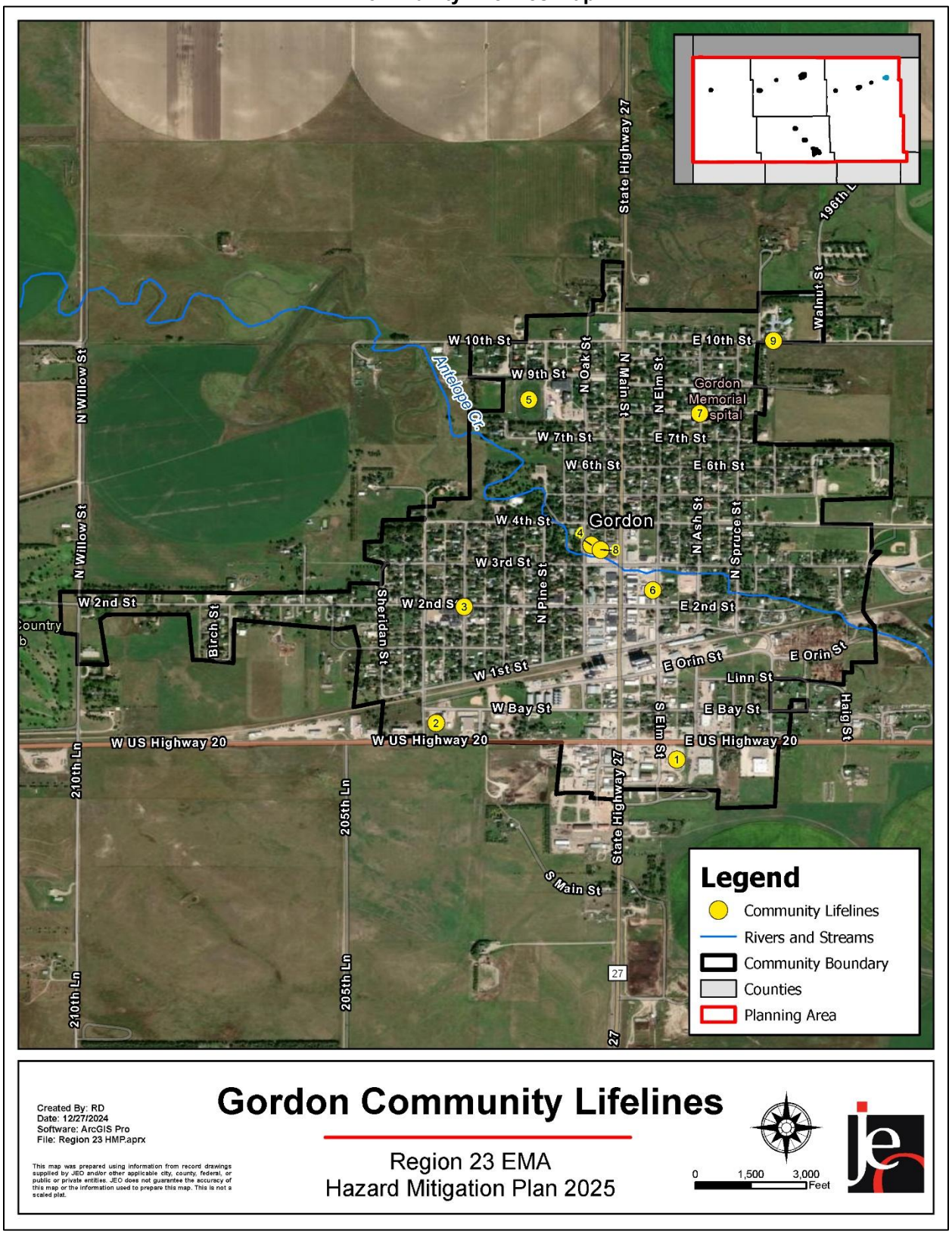


Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	American Legion	Other	-	N
2	NPPD Substation	Energy	-	N
3	Elementary School	Other	S	N
4	Community Building	Food, Hydration, Shelter	S	N
5	High School	Other	S	N
6	Gordon Volunteer Fire Department	Safety and Security	S	N
7	Gordon Memorial Hospital	Health and Medical	S	N
8	Police Department	Safety and Security	S	N
9	Gordon Countryside Care	Health and Medical	S	N
10	Water Storage	Water Systems	-	N
11*	Lift Station	Water Systems	G	Y
12*	Wastewater Lagoons	Water Systems	-	N

*Community Lifelines outside of map viewing area.

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Gordon which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the City of Gordon. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

The local planning team identified grass/wildfires as a significant threat to the city. According to the Nebraska Forestry Department there were 242 reported fires by the Gordon Rural Fire Protection District from 2000 to 2023 which consumed a total of 41,732 acres. The Gordon Rural Fire District has mutual aid agreements with the fire departments in the surrounding areas, but during large scale events it is possible nearby fire departments would be unable to lend assistance due to addressing the needs of their respective community/protection area. To reduce the risk of wildfires, the City of Gordon plans to communicate with the public about the risks for fires that can be prevented. For fires that are a result of nature, steps may be limited.

Severe Thunderstorms

The local planning team identified severe thunderstorms, and hail in particular, as a top threat for the City of Gordon. The NCEI records 93 hail events with a total of $1,087,000 in property damages. Severe thunderstorm wind events caused an additional $48,000 in property damages. Severe thunderstorm events have the potential to down trees and power lines, cause localized flooding issues, damage property, cause injuries, and wash out roads. Additionally, lightning strikes during severe storms have the potential to spark wildfire events in the surrounding areas. The city has identified several locations in need of stormwater system improvements to accommodate heavy rain events.

Severe Winter Storms

Severe winter storms are a regular part of the climate for Gordon and are a major concern for the community. Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. According to the NCEI there were 79 severe winter storms between 1996 through December 2019. These events resulted in $85,000 in property damage. Severe winter storms are a concern due to the potential to down trees or limbs, block major transportation routes, cause a loss of power, and extreme cold temperatures put vulnerable populations at risk.

Tornadoes and High Winds

The local planning team identified tornadoes and high winds as significant concerns for the community. In total there were 26 wind events reported in Sheridan County that had winds reported between 60 and 85 miles per hour. Winds of this magnitude, according to the Beaufort Wind Force Ranking, can cause trees to uproot, considerable structure damage, and overturning of improperly anchored mobile homes. According to the NCEI, there were 11 tornadoes which passed nearby Gordon. Ten tornadoes were either EF/F0 and one tornado was an F1. Two of the EF/F0 tornadoes caused $110,000 in property damage and $260,000 in crop damage. No tornado events reported any injuries or fatalities.

Completed Mitigation and Strategic Actions

Action	Become a Tree City USA
Description & Location	Tree City USA certification through the National Arbor Day Foundation in order to receive direction, technical assistance, and public education on how to establish a hazardous tree identification and removal program in order to limit potential tree damage and damages caused by trees in a community when a storm event occurs.
Hazard(s) Addressed	Extreme Temperatures, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Reason for Removal	Completed

Continued Mitigation and Strategic Actions

Action	Adopt a "No Adverse Impact" Approach to Floodplain Management
Description & Location	No Adverse Impact floodplain management reduces the cumulative impacts of floodplain development on flood heights
Hazard(s) Addressed	Flooding
Estimated Cost	Staff Time
Local Funding	Local Taxes and Revenue
Timeline	2-5 Years
Priority	High
Lead Agency	Floodplain Administrator, City Council and Administrator
Status	Not started

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $40,000+ per generator
Local Funding	Local Taxes and Revenues
Timeline	2-5 Years
Priority	Medium
Lead Agency	Public Works Department
Status	Not started

Action	Civil Service Improvements
Description & Location	Improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment. This can include fire trucks, ATV's, water tanks/trucks, snow removal equipment, etc. This would also include developing backup systems for emergency vehicles and identifying and training additional personnel for emergency response.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$50,000+, varies by need
Local Funding	Local Taxes and Revenues, HMGP, BRIC
Timeline	1 Year
Priority	High
Lead Agency	Fire Department, Rescue Squad and Administrator
Status	In progress

Action	Dam Engineering Analysis/Repairs and Reinforcement
Description & Location	Conduct a preliminary engineering analysis for dam repairs and reinforcement. Dams serve to provide flood protection to businesses and residents during large storm events. Improvements to existing dams will increase flood protection. The Emergency Action Plan, Dam Breach, Analysis, and/or inspection/ safety equipment training may need to be updated along with improvements.
Hazard(s) Addressed	Flooding
Estimated Cost	$500,000+
Local Funding	Local Taxes and Revenue
Timeline	1 Year
Priority	High
Lead Agency	Public Works Department and City Administrator
Status	In progress

Action	Develop Continuity Plans for Critical Community Services
Description & Location	Continuity planning helps to ensure that services can be maintained during and after a disaster.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$2,000+
Local Funding	Local Taxes and Revenues
Timeline	2-5 Years
Priority	Medium
Lead Agency	Public Works Department, City Council and Administrator
Status	In progress

Action	Drainage Study/Storm Water Master Plan
Description & Location	Drainage studies can be conducted to identify and prioritize improvements to address site specific localized flooding/drainage problems. Storm water master plans can be conducted to perform a community-wide storm water evaluation, identifying multiple problem areas, and potentially multiple drainage improvements for each.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000
Local Funding	Local Taxes, HMGP, BRIC
Timeline	5+ Years
Priority	Medium
Lead Agency	Public Works Department, City Council
Status	Ongoing

Action	Emergency Communications
Description & Location	Establish an action plan to improve communication between agencies to better assist residents and businesses during and following emergencies. Establish inter- operable communications.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000+
Local Funding	Region 23 EMA
Timeline	2-5 Years
Priority	High
Lead Agency	Police Department, Fire and Rescue Department
Status	In progress. Alert sirens are located in three locations in the city. All residents are encouraged to sign up for the CodeRed alerts which is offered free-of-charge for anyone subscribing.

Action	Fire Prevention Programs
Description & Location	The Nebraska Forest Service Wildland Fire Protection Program provides services in wildfire suppression training, equipment, pre-suppression planning, wildfire preventions, and aerial fire suppression.
Hazard(s) Addressed	Wildfire
Estimated Cost	Varies by need
Local Funding	Local Taxes and Revenues
Timeline	2-5 Years
Priority	Medium
Lead Agency	Fire and Rescue Department
Status	Not Started

Action	Floodplain Regulation Enforcement and Updates
Description & Location	Continue to enforce local floodplain regulations for structures located in the 1% annual. Strict enforcement of the type of development and elevations of structures should be considered through issuance of building permits by the city of Gordon. Continue education of building inspectors or Certified Floodplain Managers.
Hazard(s) Addressed	Flooding
Estimated Cost	$4,000+
Local Funding	Local Taxes and Revenues
Timeline	5+ Years
Priority	Low
Lead Agency	Public Works Department
Status	In progress. Regulations and codes are updated on an as-needed basis.

Action	Groundwater/Irrigation/Water Conservation and Management Practices
Description & Location	Develop and implement a plan/ best management practices to conserve water use and reduce total use (high water use to low water use) and consumption of groundwater resources by citizens and irrigators of agricultural land during elongated periods of drought Identify water saving irrigation projects of improvements such as sprinklers of soil moisture monitoring. Potential restrictions on water could include limitation on lawn watering, car washing, farm irrigation restrictions, or water sold to outside sources. Implement BMPs through water conservation practices such as changes in irrigation management, education on no-till agriculture and use of xeriscaping in communities.
Hazard(s) Addressed	Drought, Extreme Temperatures, Flooding
Estimated Cost	$10,000
Local Funding	Local Taxes
Timeline	5+ Years
Priority	Low
Lead Agency	Public Works Department
Status	Not started

Action	Hazardous Tree Removal
Description & Location	Identify and remove hazardous limbs and/or trees.
Hazard(s) Addressed	Drought, Grass/Wildfire, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$25,000
Local Funding	Local taxes and revenues
Timeline	1 Year
Priority	High
Lead Agency	Public Works Department
Status	City currently has a $25,000 grant for tree removal on public property, which allows for reimbursement of costs through December 31, 2025.

Action	Improve Snow/Ice Removal Programs
Description & Location	Improve the snow routes and snow/ice removal procedures for streets. Improvements should address plowing snow, ice removal, parking during snow and ice removal, and removal of associated storm debris.
Hazard(s) Addressed	Severe Winter Storms
Estimated Cost	$30,000+
Local Funding	Local Taxes
Timeline	1 Year
Priority	High
Lead Agency	Public Works Department
Status	In progress

Action	Power and Service Lines
Description & Location	Communities can work with their local Public Power District or Electricity Department to identify vulnerable transmission and distribution lines and plan to bury lines underground or retrofit existing structures to be less vulnerable to storm events. Electrical utilities shall be required to use underground construction methods where possible for future installation of power lines. Electrical utilities shall be required to use underground construction methods where possible for future installation of power lines.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$1,000,000 per mile
Local Funding	General Funds
Timeline	1 Year
Priority	High
Lead Agency	Public Works Department
Status	In progress

Action	Preserve Natural and Beneficial Functions of a Floodplain
Description & Location	Preserve natural and beneficial functions of floodplain land through measures such as: retaining natural vegetation, restoring streambeds, and preserving open space in the floodplain.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	Local Taxes
Timeline	2-5 Years
Priority	Medium
Lead Agency	Public Works Department
Status	In progress

Action	Public Education/Awareness
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	Local Taxes
Timeline	2-5 Years
Priority	Medium
Lead Agency	City Administration
Status	In progress

Action	Safe Rooms
Description & Location	Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, school, and other areas
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$200/sf retrofit, $300/sf new
Local Funding	Local Taxes
Timeline	2-5 Years
Priority	Medium
Lead Agency	Police and Fire Department
Status	City has identified storm shelter locations for the public at three locations : City Hall, Gordon-Rushville High School, and Gordon Memorial Hospital - (some of the churches are also available). Construction of new safe rooms or retrofits are needed.

Action	Stormwater System and Drainage Improvements
Description & Location	Smaller communities may utilize storm water systems comprising ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other storm water system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacement or modification of bridges may be necessary to provide greater capacity, maintain or improve structural integrity during flood events, and eliminate flooding threats and damages.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000 - $100,000
Local Funding	Local Taxes and Revenue
Timeline	2-5 Years
Priority	Medium
Lead Agency	Public Works Department
Status	In progress

Action	Streambank Stabilization
Description & Location	Stream bank degradation has occurred along many rivers and creeks. Stabilization improvements including rock rip rap, vegetative cover, j-hooks, boulder vanes, etc. can be implemented to reestablish the channel banks. Channel stabilization can protect structures, increase conveyance and provide flooding benefits.
Hazard(s) Addressed	Flooding
Estimated Cost	$40,000+
Local Funding	Local Taxes and Revenues
Timeline	2-5 Years
Priority	Medium
Lead Agency	Public Works Department
Status	Continuing with repairs as needed. In 2024, the city worked on an area of Antelope which was within the city limits and needed clearance of trees/vegetation.

Action	Vulnerable Population Housing
Description & Location	Ensure that facilities which will house vulnerable populations are placed in the least vulnerable areas of the community
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$50,000+
Local Funding	General Fund, BRIC, HMGP
Timeline	2-5 Years
Priority	Medium
Lead Agency	City Council
Status	In progress

Action	Wildfire Hazard Identification and Mitigation System
Description & Location	Develop a hazard rating system with GIS to identify and rate areas for their relative wildfire hazard.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	$20,000
Local Funding	General Fund, BRIC, HMGP, NFS
Timeline	5+ Years
Priority	Low
Lead Agency	Fire and Rescue Department
Status	Not started. This would be a cooperative effort between Gordon VFD, Gordon Rural Fire District, Rushville VFD, and Sheridan County.

Action	Windbreaks/Living Snow Fence
Description & Location	Installation of windbreaks and/or living snow fences to increase water storage capacity in soil and reduce blowing snow/ soil.
Hazard(s) Addressed	Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$5,000+
Local Funding	General Funds
Timeline	1 Year
Priority	Medium
Lead Agency	Public Works Department
Status	In progress

Removed Mitigation and Strategic Actions

Action	Weather Radios
Description & Location	Conduct an inventory of weather radios at schools and other critical facilities and provide new radios as needed.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Reason for Removal	Mobile phones reduce the need for weather radios

Community Profile

City of Hay Springs

Region 23 EMA
Hazard Mitigation Plan 2025

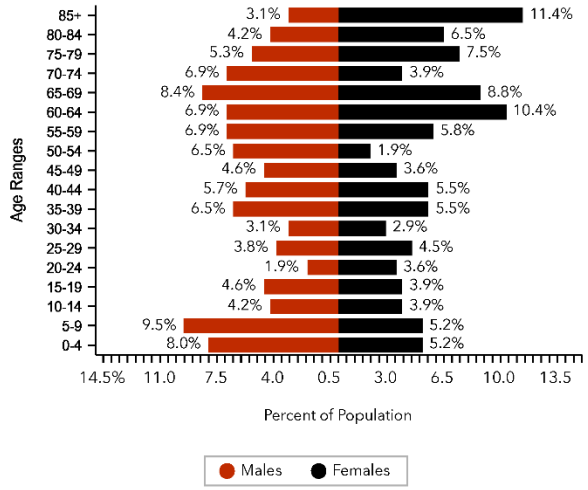
Community Fact Sheet

Community Summary Fact Sheet

Hay Springs, NE
Region 23 EMA Hazard Mitigation Plan 2025

570	53.0	258	2.00	$110,938	$55,103
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



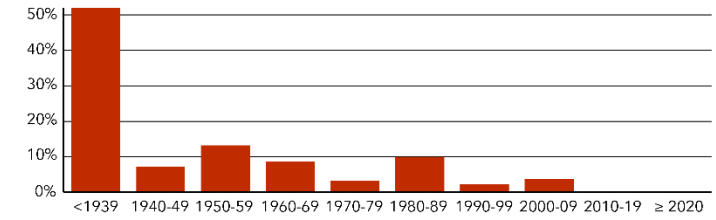
TOTAL POPULATION

2024 Total Population (Estimate)	570
2020 Total Population (U.S. Census)	599
2010 Total Population (U.S. Census)	570
2000 Total Population (U.S. Census)	652

AT RISK POPULATIONS

105	190	19	7%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

HOUSING: YEAR BUILT



EMPLOYMENT

46	0.0%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Black Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- American Indian Population
- White Population

2% **of the Total Population is Hispanic**

HOUSING

84	7%
Vacant Housing Units	Mobile Homes

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Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Samantha Orr	City Clerk	Hay Springs	Recording	Attended

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The City Clerk will review and update this participant profile outside of the five-year update. The City of Chadron will review the plan annually, and the public will be notified via council meetings, the city website, and social media.

Capability Assessment

The planning team assessed the City of Hay Springs' hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operations Plan	Yes (County)
	Floodplain Management Plan	Yes
	Storm Water Management Plan	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	Yes
	Building Codes	No
	If yes:	Year Adopted: N/A
		IBC Edition: N/A
	Water System Emergency Response Plan	No
	Wellhead Protection Plan	No
	National Flood Insurance Program	Yes
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Other (if any)	
Administrative &	Planning Commission	Yes
	Floodplain Administrator	Yes

Capability/Planning Mechanism		Yes/No
Technical Capability	GIS Capabilities	No
	Chief Building Official	No
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	No
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	Yes
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	No
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Limited

National Flood Insurance Program (NFIP)

The City of Hay Springs is a member of the NFIP, having joined on 02/01/1993, and the village's Floodplain Administrator oversees the commitments and requirements of the NFIP. The floodplain administrator uses the National Flood Hazard Layer on GIS maps to determine if a development will be located in the floodplain. A floodplain permit is required for any new construction or substantial improvements in the floodplain. Enforcement is done using the city's floodplain ordinance. After a flood event, the community implements substantial improvement and substantial damage provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA Handbook_FINAL.pdf. The city's floodplain regulations do not exceed the State of Nebraska requirements. The city would work with the Nebraska Department of Natural Resources and FEMA on any Letters of Map Change.

The local planning team has stated that Hay Springs will remain in good standing and be involved with the NFIP. Currently, the city's only barriers currently are knowledge and experience in regard to running the NFIP program. There are no known areas in the community with limited NFIP coverage. The city presently uses flyers and pamphlets within the city hall to educate the community and property owners. Only a few structures exist in the floodplain. Additional NFIP information is given in the table below.

NFIP Information

NFIP Overview	
Date of NFIP Participation:	02/01/1993
Floodplain Administrator:	Samantha Orr
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	3
Total NFIP Premium ($):	$1,604
Total NFIP Coverage ($):	$499,000
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	N/A
Number of Severe Repetitive Loss Structures:	N/A
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Paper
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table. A table of flood map products for the city is also provided below.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
365	$22,836,745	125	$8,025,021	34.2%

Source: County Assessor, 2024

Flood Map Products

Type of Product	Product ID	Effective Date	Details
FIRM Panel	3102139999B	02/01/1993	Current FIRM Panel
FIRM Panel	310213B	02/01/1993	Current FIRM Panel

Source: FEMA[4]

Plans and Studies

The City of Hay Springs has limited planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the city updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Comprehensive Plan (2016)

The comprehensive plan is designed to guide the future actions and growth of the city. The comprehensive plan discusses natural hazards such as fire. The plan contains goals/objectives aimed at smart growth, directs development away from the floodplain, directs housing away from chemical storage facilities, direct housing and vulnerable populations away from major transportation routes, and encourages elevation of structures located in the floodplain. The city plans to incorporate information from the hazard mitigation plan into its next comprehensive plan update. Currently there is no plan or timeline for the next update of the city's comprehensive plan.

Sheridan County Local Emergency Operations Plan (2023)

The Sheridan County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

Floodplain Regulations (2024)

The city's floodplain regulations outline where and how development should occur in the future. These regulations discourage development within the floodplain. There is no timeline to update these regulations.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations

[4] Federal Emergency Management Agency. February 2025. "FEMA Flood Map Service Center". http://msc.fema.gov/portal/advanceSearch.

who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Future Development Trends

In the last five years, no new housing projects or demolitions have occurred. Some businesses have changed ownership and there have been no new roads or areas of improvement. No new structures have been developed in the floodplain or other hazardous areas. No new housing developments or new businesses are planned in the near future.

Community Lifelines

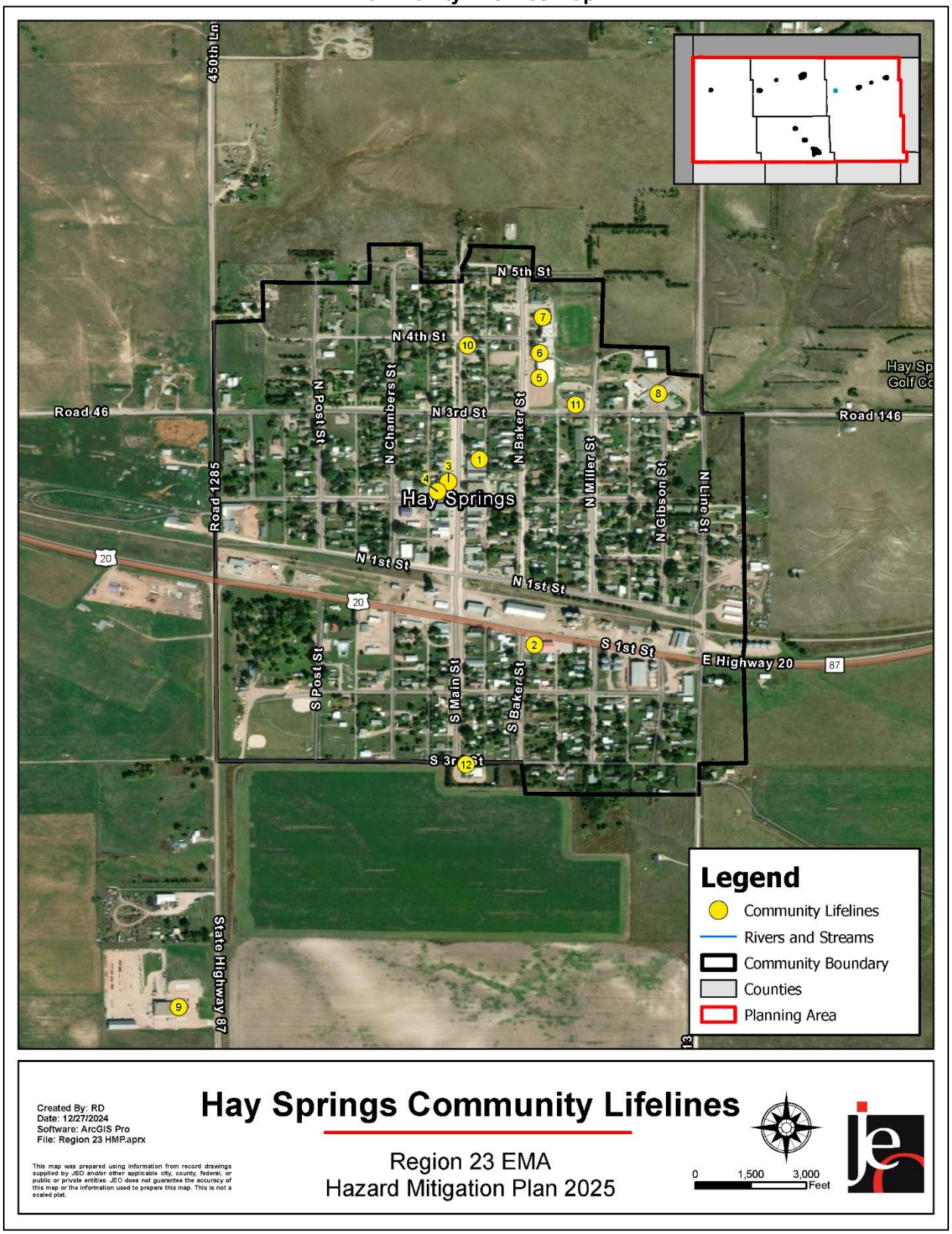
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Community Hall	Other	-	N
2	Hay Springs Fire Department	Safety and Security	-	N
3	City Hall	Safety and Security	-	N
4	Medical Clinic	Health and Medical	-	N
5	Lister-Sage Community Center	Other	S	N
6	Hay Springs Elementary School	Other	-	N
7	Hay Springs High School	Other	-	N
8	Pioneer Manor Senior Center	Health and Medical	-	N
9	NWRPPD	Energy	-	N
10	St. Columbkille Catholic Church	Food, Hydration, Shelter	S	N
11	United Methodist Church	Food, Hydration, Shelter	S	N
12	Zion Lutheran Church	Food, Hydration, Shelter	S	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Hay Springs which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the City of Hay Springs. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Drought

The local planning team identified drought as a top concern to the community. Drought is generally a regional event, with impacts from a single drought event impacting multiple communities, counties, and even states. Based on historic records, drought has an annual probability of 15 percent. The community's economy is closely tied to the agricultural sector which may be significantly impacted by drought events. Additionally, drought impacts significantly exacerbate wildfire events. The 2012 drought was the most recent significant event which created noticeable impacts on the community, specifically on the local economy. The city can implement water restrictions if needed.

Grass/Wildfires

As discussed above, a lightning sparked wildfire event caused significant damage to Hay Springs. According to the CWPP, the community is entirely within the WUI. The Hay Springs Fire Department reported 147 wildfire events which burned 82,303 acres between 2000 and 2023. The fire department has mutual aid agreements with the fire departments in the surrounding areas, but during large scale events it is possible nearby fire department would be unable to lend assistance due to addressing the needs of their respective community/protection area. To ensure the fire departments have enough water during times of drought, water restrictions may be implemented.

Severe Thunderstorms

The local planning team identified Severe Thunderstorms as a top concern for the City of Hay Springs. The NCEI reported 107 events with a total of over $1,114,000 in property damages from 1996 to 2023. One thunderstorm lightning event in 2012 caused injuries to three individuals. The NCEI reported, "Lightning ignited a wildfire on August 29th that spread quickly north across grassland and timbers across northwest Sheridan County. The wildfire burned approximately 44,159 acres in Nebraska and moved north into South Dakota. Initial assessments showed the wildfire burned approximately 100 power poles. The Rushville Sheriff requested an Evacuate Immediate (NWEM) message as the fire spread into parks and alert homeowners and campers in the area. The fire statistics showed 50 to 60 outbuildings were destroyed, and approximately 10 homes damaged. The wildfire continued into September." The city has mutual aid agreements with surrounding communities.

Tornadoes and High Winds

The local planning team identified tornadoes and high winds as a top concern for the community. According to the NCEI, there were three tornadoes which passed nearby Hay Springs. All three were E/F0 tornadoes which caused no property damages, injuries, or fatalities. In total there were 26 storms reported across Sheridan County that had winds between 60 and 85 miles per hour. Winds of this magnitude, according to the Beaufort Wind Force Ranking, can cause trees to

uproot, considerable structure damage, and overturning of improperly anchored mobile homes. The local planning team indicated a need for a list of emergency shelter locations in the community. Additionally, the community should establish routes for emergency evacuation for residents. The planning team also indicated that buildings and homes should be reinforced to reduce risk from this hazard.

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+ per generator
Local Funding	General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	City Council
Status	Not started

Action	Drought Education/Awareness Program
Description & Location	Through activities such as outreach projects, water conservation education, and other methods, increase public awareness of drought to both public and private property owners, renters, businesses, and local officials about drought and ways to protect people and property during drought.
Hazard(s) Addressed	Drought
Estimated Cost	$1,000
Local Funding	General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	City Clerk
Status	Not started

Action	Expand Water Storage Capacity
Description & Location	Evaluate the need to expand water storage capacity to provide a safe water supply for the community and additional water for fire protection. Establish emergency water supplies such as dry hydrants and individual or community cisterns for defending structures from wildland fires.
Hazard(s) Addressed	Drought, Extreme Temperatures, Grass/Wildfire
Estimated Cost	$30,000+
Local Funding	General Fund, CDBG, UNWNRD
Timeline	2-5 Years
Priority	Low
Lead Agency	City Council
Status	Not started

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education, increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchase equipment such as overhead projectors and laptops.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	General Fund, HMGP, BRIC
Timeline	5+ Years
Priority	Low
Lead Agency	City Clerk
Status	In progress

Action	Re-Evaluate Flood Zones
Description & Location	Re-evaluate and correct flood zones due to relocation of dams north of town.
Hazard(s) Addressed	Flooding
Estimated Cost	N/A
Local Funding	General Fund, HMGP, BRIC
Timeline	2-5 Years
Priority	Medium
Lead Agency	Floodplain Administrator
Status	In progress

Action	Stormwater System and Drainage Improvements
Description & Location	Smaller communities may utilize storm water systems comprising ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other storm water system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacement or modification of bridges may be necessary to provide greater capacity, maintain or improve structural integrity during flood events, and eliminate flooding threats and damages.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000+
Local Funding	General Funds, HMGP, BRIC
Timeline	2-5 Years
Priority	High
Lead Agency	Streets Department
Status	In progress

Community Profile

City of Rushville

Region 23 EMA
Hazard Mitigation Plan 2025

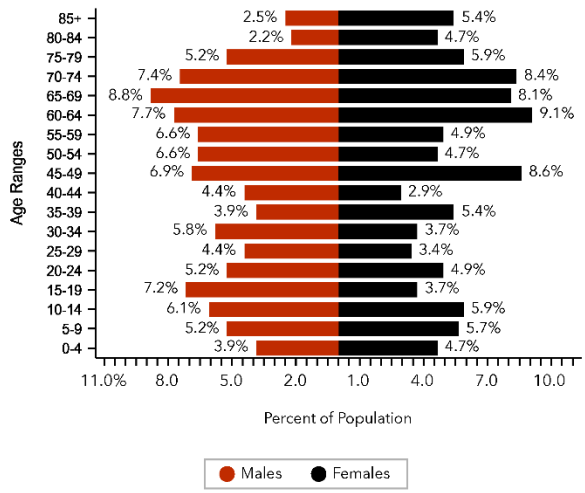
Community Fact Sheet

Community Summary Fact Sheet

Rushville, NE
Region 23 EMA Hazard Mitigation Plan 2025

770	49.5	352	2.10	$85,385	$44,890
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



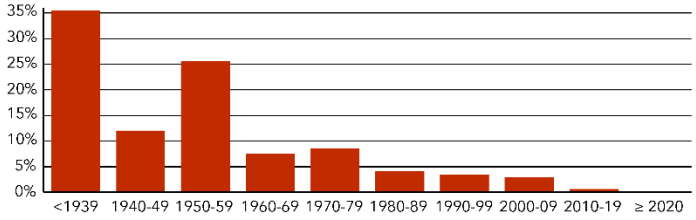
TOTAL POPULATION

2024 Total Population (Estimate)	770
2020 Total Population (U.S. Census)	816
2010 Total Population (U.S. Census)	890
2000 Total Population (U.S. Census)	1,003

AT RISK POPULATIONS

189	227	21	14%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

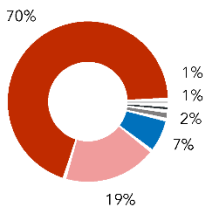
HOUSING: YEAR BUILT



EMPLOYMENT

72	4.5%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Black Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- American Indian Population
- White Population

8% **of the Total Population is Hispanic**

HOUSING

99	5%
Vacant Housing Units	Mobile Homes

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Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Amanda Haller	Mayor	City of Rushville	Recording	-
Shauna Smith	Clerk	City of Rushville	Recording	Attended
Ronald Kirk Beguin	Utilities Superintendent	City of Rushville	Recording	Recording

Plan Maintenance

The Mayor, City Clerk, and Utilities Superintendent will review and update this participant profile outside of the five-year update. The City of Rushville will review the plan bi-annually, and the public will be notified via council meetings.

Capability Assessment

The planning team assessed the City of Rushville's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	No
	Emergency Operations Plan	Yes (County)
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	If yes:	Year Adopted: 2024
		IBC Edition: 2000
	Water System Emergency Response Plan	Yes
	Wellhead Protection Plan	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Other (if any)	
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	No
	Chief Building Official	No

Capability/Planning Mechanism		Yes/No
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	Yes
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	No
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Limited
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

National Flood Insurance Program (NFIP)

Rushville is a member of the NFIP, having joined on 12/29/2000, and the city's Floodplain Administrator oversees the commitments and requirements of the NFIP. The building inspector currently determines if a development will be located in the floodplain and notifies the floodplain administrator. A floodplain permit is required for any new construction or substantial improvements in the floodplain. Currently there are no means of enforcement of the city's

floodplain ordinance. After a flood event, the community implements substantial improvement and substantial damage provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA Handbook_FINAL.pdf. The city's floodplain regulations do not exceed the State of Nebraska requirements. The city would work with the Nebraska Department of Natural Resources and FEMA on any Letters of Map Change.

The local planning team has stated that Rushville will remain in good standing and be involved with the NFIP. Barriers to running the NFIP program include internal knowledge gaps. There are no known areas in the community with limited NFIP coverage. The city presently uses no educational materials for the floodplain, as only a few structures exist in the floodplain. Additional NFIP information is given in the table below.

NFIP Information

NFIP Overview	
Date of NFIP Participation:	12/29/2000
Floodplain Administrator:	Amanda Haller
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	0
Total NFIP Premium ($):	N/A
Total NFIP Coverage ($):	N/A
Number of Claims Paid Out:	N/A
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Paper
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table. A table of flood map products for the city is also provided below.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
512	$34,744,265	4	$781,503	0.8%

Source: County Assessor, 2024

Flood Map Products

Type of Product	Product ID	Effective Date	Details
FIRM Panel	310214A	04/02/1976	Current FIRM Panel

Source: FEMA[5]

Plans and Studies

The City of Rushville has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the city updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Building Code (2024)

The building code sets standards for constructed buildings and structures. Rushville's building codes are based on the 2000 International Building Code. These codes regulate and govern the conditions and maintenance of all property, buildings, and structures by providing the standards for supplied utilities, facilities, and other physical things and conditions essential to ensure that structures are safe, sanitary, and fit for occupation and use. Enforcement of the building codes is done by city officials.

Comprehensive Plan (1985)

The comprehensive plan is designed to guide the future actions and growth of the city. The plan directs development away from the floodplain, directs housing away from chemical storage facilities, and identifies areas that need emergency shelters.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Sheridan County Local Emergency Operations Plan (2023)

The Sheridan County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

[5] Federal Emergency Management Agency. February 2025. "FEMA Flood Map Service Center". http://msc.fema.gov/portal/advanceSearch.

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

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

Zoning Ordinance and Subdivision Regulations (1985)
The city's zoning ordinance and subdivision regulations outline where and how development should occur in the future. These documents include well setback requirements and the ability to implement water restrictions.

Future Development Trends
Over the past five years there's been no new residential or commercial development in Rushville, nor were any buildings demolished. There are no new housing developments or new businesses/industry planned for the near future. The city of Rushville does not have a future land use map.

Community Lifelines

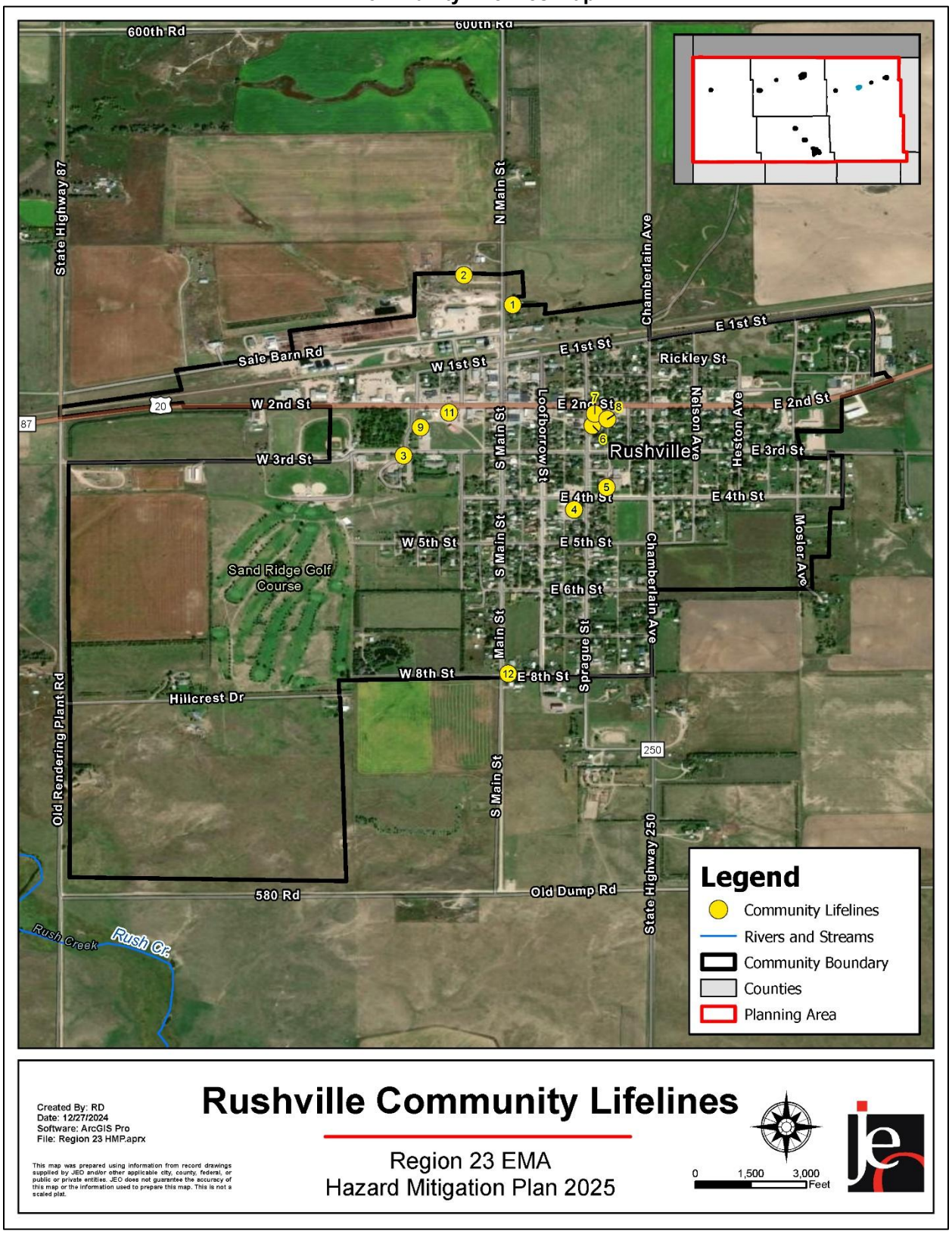
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Water Tower	Water Systems	G	N
2	NPPD Substation	Energy	-	N
3	Parkview Lodge Assisted Living	Health and Medical	G,S	N
4	Rushville Elementary School	Other	G,S	N
5	Gordon-Rushville Elementary School	Other	G,S	N
6	American Legion	Other	-	N
7	County Courthouse	Safety and Security	S	N
8	Sheriff's Office	Safety and Security	S	N
9	City Office	Safety and Security	S	N
10	Sewer Plant	Water Systems	G	N
11	Rushville Volunteer Fire Department	Safety and Security	S	N
12	Well #2	Water Systems	G	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Rushville which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the City of Rushville. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Drought

The local planning team identified drought as a top concern to the community. Drought is generally a regional event, with impacts from a single drought event impacting multiple communities, counties, and even states. Rushville relies heavily on the agricultural sector and drought impacts can significantly impact the industry. Wildfire is also of greater concern during times of drought with reduced water supplies and highly flammable landcover.

Grass/Wildfires

Wildfire is a top concern for the city and across the entire planning area. A major fire in 2012 ran across the county and spanned between Hay Springs and Pine Ridge. The Rushville Fire Department has mutual aid agreements across the planning area. According to the Rushville Fire Department, there were 166 reported fire events which burned 59,377 acres between 2000 and 2023. There are also concerns about high winds on the plains pushing wildfire across swaths of land and towards or around communities. To mitigate the risk of this hazard, the City of Rushville has invested in additional firefighting equipment.

Severe Thunderstorms

Severe thunderstorms are a regular part of the climate for Sheridan County and Rushville. The local planning team identified severe thunderstorms as a significant threat for Rushville. The NCEI recorded 101 thunderstorm events (heavy rain, thunderstorm wind, lightning strikes, and hail) between 1996 and 2023 with $340,000 in damages to property in the city and over $9 million in crop damages across the county, including Rushville. The local airport has experienced severe damage from both hail and high wind events.

Severe Winter Storms

Severe winter storms are a regular occurrence for Rushville. Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. The planning team identified severe winter storms as the greatest threat in the future, but given the frequency of occurrence, residents across the county are prepared for the events and able to effectively cope with their occurrences. According to the NCEI there were 94 severe winter storms in Sheridan County which includes Rushville from 1996 through December 2023. These events resulted in $85,000 in property damage.

Tornadoes and High Winds

The local planning team identified tornadoes and high winds as a significant concern for the community. According to the NCEI, there were ten tornadoes located within Sheridan County and passed near Rushville between 1996 and 2019. Nine tornadoes were rated an EF/F0 and caused

$1,000 property damage and $1,000 in crop damage. There was also one tornado in 2006 that was rated an F1 and caused $150,000 in property damage.

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $35,000+
Local Funding	General Fund, HMGP, BRIC
Timeline	5+ Years
Priority	Medium
Lead Agency	City Clerk, City Administrator
Status	Not started

Action	Drainage Study/Stormwater Master Plan
Description & Location	Drainage studies can be conducted to identify and prioritize improvements to address site specific localized flooding/drainage problems. Stormwater master plans can be conducted to perform a community-wide stormwater evaluation, identifying multiple problem areas, and potentially multiple drainage improvements for each.
Hazard(s) Addressed	Flooding
Estimated Cost	+10,000 - $100,000+
Local Funding	General Fund, UNWNRD, CDBG
Timeline	5+ Years
Priority	Medium
Lead Agency	Rushville City Council, Clerk, Floodplain Administrator
Status	Not started

Action	Drought Education/Awareness Program
Description & Location	Through activities such as outreach projects, water conservation education, and other methods, increase public awareness of drought to both public and private property owners, renters, businesses, and local officials about drought and ways to protect people and property during drought.
Hazard(s) Addressed	Drought
Estimated Cost	$1,000
Local Funding	General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	City Clerk
Status	Not started

Action	Expand Water Storage Capacity
Description & Location	Evaluate the need to expand water storage capacity to provide a safe water supply for the community and additional water for fire protection. Establish emergency water supplies such as dry hydrants and individual or community cisterns for defending structures from wildland fires.
Hazard(s) Addressed	Drought, Extreme Temperatures, Grass/Wildfire
Estimated Cost	$30,000+
Local Funding	General Fund, CDBG, UNWNRD
Timeline	2-5 Years
Priority	Low
Lead Agency	City Council
Status	Not started

Action	Stormwater System and Drainage Improvements
Description & Location	Smaller communities may utilize storm water systems comprising of ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other storm water system improvements. Bridges typically serve as flow restrictions along streams and rivers.
Hazard(s) Addressed	Flooding
Estimated Cost	$50,000+
Local Funding	General Fund, CDBG, UNWNRD
Timeline	5+ Years
Priority	Low
Lead Agency	City Council, City Clerk
Status	Not started

Removed Mitigation and Strategic Actions

Action	Weather Radios
Description & Location	Conduct an inventory of weather radios at schools and other critical facilities and provide new radios as needed.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Reason for Removal	Mobile devices and instant alerts remove the need for weather radios

Sioux County Appendix

Table of Contents

Sioux County Appendix 1
Sioux County 2
Village of Harrison 16

County Profile

Sioux County

Region 23 EMA
Hazard Mitigation Plan 2025

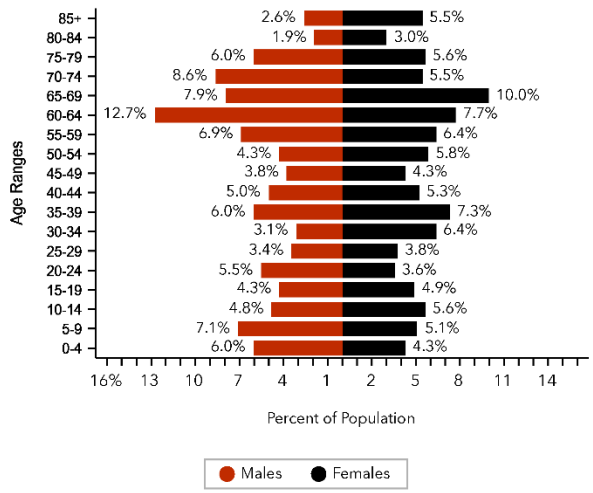
County Fact Sheet

Community Summary Fact Sheet

Sioux County, NE
Region 23 EMA Hazard Mitigation Plan 2025

1,113	50.2	509	2.19	$215,441	$52,666
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



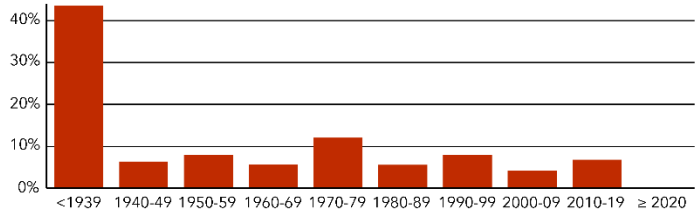
TOTAL POPULATION

2024 Total Population (Estimate)	1,113
2020 Total Population (U.S. Census)	1,135
2010 Total Population (U.S. Census)	1,311
2000 Total Population (U.S. Census)	1,475

AT RISK POPULATIONS

137	314	24	12%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

HOUSING: YEAR BUILT



EMPLOYMENT

65	2.5%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Black Population
- American Indian Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- White Population

5% **of the Total Population is Hispanic**

HOUSING

241	9%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

County Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
JW Geiser	Commissioner	Sioux County	-	-
Nan Gould	Emergency Manager	Region 23 EMA	Attended	Attended

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The County Board and Region 23 Emergency Manager will review and update this participant profile outside of the five-year update. The county will review the plan bi-annually, and the public will be notified via board meetings.

Capability Assessment

The planning team assessed Sioux County's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	No
	Building Codes	No
	If yes:	Year Adopted: N/A
		IBC Edition: N/A
	Wellhead Protection Plan	No
	Water System Emergency Response Plan	No
	National Flood Insurance Program	No
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Other (if any)	

Capability/Planning Mechanism		Yes/No
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	No
	GIS Capabilities	Yes
	Chief Building Official	No
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	No
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	No
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	No
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	Yes
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Limited

National Flood Insurance Program (NFIP)

Sioux County has chosen not to participate in the NFIP at this time due to the low flood risk to county structures and because of the minimal impacts from historical flooding. NFIP participation will be reevaluated if the county's flood risk changes. The county does not currently have any repetitive loss or severe repetitive loss structures.

County NFIP Information

NFIP Overview	
Date of NFIP Participation:	N/A
Floodplain Administrator:	N/A
Is Floodplain Administrator a Certified Floodplain Manager?	N/A
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	0
Total NFIP Premium ($):	N/A
Total NFIP Coverage ($):	N/A
Number of Claims Paid Out:	N/A
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the County Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	N/A
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

County Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
996	$66,298,890	N/A	N/A	N/A

Source: County Assessor, 2024

Plans and Studies

Comprehensive Plan (1997)

The comprehensive plan is designed to guide the future actions and growth of the county. The county's plan does not discuss natural hazards.

Zoning Regulations (2022)

The county's zoning regulations (2022) and outline where and how development should occur in the future.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Sioux County Local Emergency Operations Plan (2023)

The Sioux County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan.

Future Development Trends

Very little development has occurred over the past five years. No developments are currently planned for the next five years.

Community Lifelines

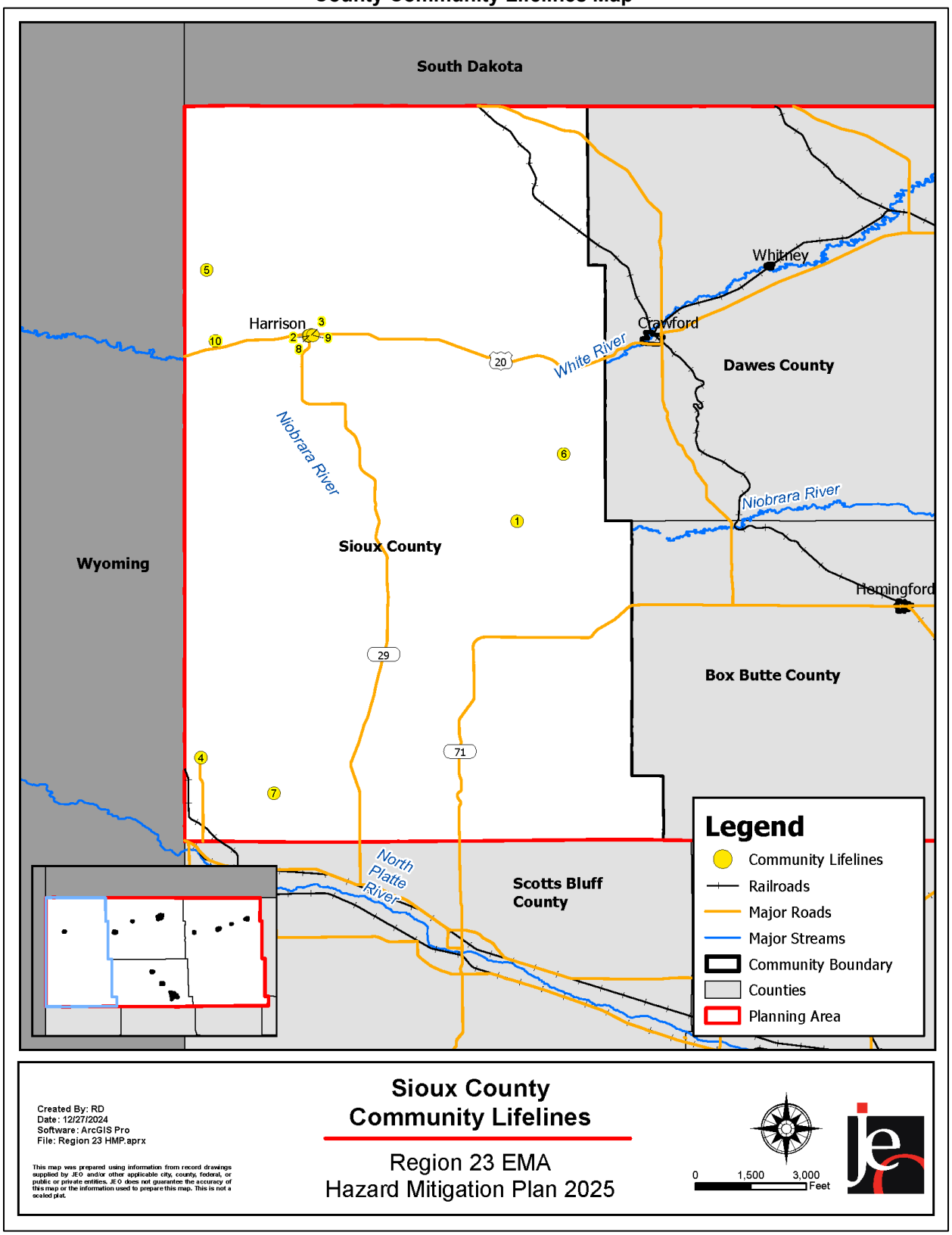
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



County Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Pink School	Other	S	N
2	Harrison Elementary School	Other	S	N
3	Sioux County High School	Other	S	N
4	Chalk Butte School	Other	S	N
5	Radio Tower 1	Communications	-	N
6	Radio Tower 2	Communications	-	N
7	Cell Phone Towers	Communications	-	N
8	County Courthouse/Sheriff's Office	Safety and Security	-	N
9	Harrison Fire Department/EOC	Safety and Security	G	N
10	NEA Substation	Energy	-	N

County Community Lifelines Map



Sioux County Hazard Loss History

Hazard Type		Count	Property Damage	Crop Damage[2]
Agricultural Disease	Animal Disease[1]	5	6 animals	N/A
	Plant Disease[2]	11	N/A	$82,425
Dam Failure	Dam Failure[5]	2	$0	N/A
Drought[6]		574 out of 1,548 Months	$0	$744,192
Extreme Temperatures[7]	Heat	Avg. 5 Days a Year	$0	$864,659
	Extreme Cold / Wind Chill	Avg. 3 Days a Year	$0	$2,269,511
Flooding[8]	Flash Flood	6	$0	$20,432
	Flood	0	$0	
Grass/Wildfires[9]		123	73,647 Acres Burned	$28,300
Hazardous Materials Release	Fixed Site[3]	1	$0	N/A
	Transportation[4]	2	$0	N/A
Human Infectious Disease[12]		82 covid cases	N/A	N/A
Severe Thunderstorms[8]	Hail Range: 0.75-4 In. Average: 1.37 In.	195	$73,000	$7,398,148
	Thunderstorm Wind Range: 58-70 mph Average: 60 mph	38	$6,000	$113,175
	Heavy Rain	3	$0	
	Lightning	0	$0	
Severe Winter Storms[8]	Blizzard	16	$0	$9,062,082
	Heavy Snow	40	$0	
	Ice Storm	0	$0	
	Winter Storm	60	$0	
	Winter Weather	22	$0	
Terrorism and Cyber Attack[10]		0	N/A	N/A
Tornadoes and High Winds[8]	High Winds Range: 40-75 mph Average: 51 mph	46	$0	$1,594,252
	Tornadoes Range: EF0-EF2 Average: F0	17	$6,000	$0
Total		**1,243**	**$85,000**	**$22,177,176**

N/A: Data not available
1 – NDA, 2014 – 2023
2 - USDA RMA, 2000 –2023
3 – NRC, 1990 –2023
4 – PHMSA, 1971 – June 2024
5 – Stanford University NPDP, 2024
6 – NOAA, 1895 – 2023
7 – NOAA Regional Climate Center, 1893 – 2024
8 – NCEI, 1996 - 2023
9 – NFS, 2000 - 2023
10 – University of Maryland, 1970 – 2020
11 – USGS, 1900 – April 2024
12 – The New York Times, as of 3/23/2023

Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Sioux County which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Sioux County. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Drought

The local planning team ranked drought as a top concern due to the potential impacts to the local agricultural economy. Drought is a common occurrence in the State of Nebraska. For the county, much of the workforce relies on agriculturally based income and the local economy could be significantly affected during severe droughts. Drought impacts are not always as visible as impacts of other natural hazards and are hard to quantify. Drought caused $744,192 in crop damages from 2000 to 2023 according to the RMA.

Extreme Temperatures

The local planning team ranked extreme temperatures as a top concern as more than a quarter of the county's population is over the age of 65. Elderly residents are at greater risk to health impacts during periods of extreme temperatures. Due to the highly rural landscape of the county, elderly residents may not have access to adequate cooling and warming centers or medical facilities. Prolonged extreme temperature impacts are not always as visible as impacts of other natural hazards and are difficult to quantify.

Grass/Wildfires

The local planning team identified grass/wildfire as a significant threat to Sioux County. The entire county falls within the Wildland Urban Interface (WUI) as defined in the CWPP. According to the Nebraska Forestry Department, there were 123 reported fires by the Harrison and Sioux County Fire Districts from 2000 to 2023 which consumed a total of 73,647 acres. The fires also resulted in $28,300 in damages to crops. In September 2024 a fire (called the Bronco Fire) broke out approximately 11 miles northwest of Crawford, Nebraska, in Sioux County. The Bronco Fire was deemed to be of a natural cause and burned 1,069 acres of grassland and brush, with much of it affecting the Oglala National Grassland. Federal, state, and local resources worked to combat the fire – a challenge due to the rough terrain and hot and dry weather conditions. Local concerns for wildfire events include the impact on the local economy, distance from available resources, exacerbated impacts felt from drought (such as seen during 2012), and lack of available transportation corridors or access for emergency response.

Severe Thunderstorms

The planning team estimated that severe thunderstorms are the most common hazard event to impact the county annually. NCEI data recorded 190 thunderstorm events from 1996 to 2023 with a total of $79,000 in property damages and 7,511,323 in crop damages. Past events have caused damages to trees, power lines, and buildings. It should be noted that no lightning events were reported via the NCEI; however, this does not indicate they do not occur. Lightning is the leading cause of wildfires in the planning area and Sioux County experiences subsequent damages annually. Hail in the unincorporated areas of the county is most likely to impact agriculture. There are more than a million acres devoted to agriculture, primarily corn. Hailstorms can have devastating impacts on crops, causing up to a 100 percent loss. There are no FEMA certified safe

rooms in the county, but outdoor warning sirens are located in Harrison. The county uses CodeRed alerts through Region 23 EMA.

Severe Winter Storms

Severe winter storms are a regular part of the climate across Region 23 and Sioux County is no exception. According to the NCEI there were 138 severe winter storm events in Sioux County from 1996 through 2023 including blizzards, heavy snow, ice storms, and winter storms. There were no reported property damages from these events; however, that does not indicate if damages occurred and were covered by individual residents or insurance. These storm events resulted in over $9 million in crop loss damages. The county is responsible for clearing snow on county roads while the state clears snow from the major highways. Extreme winter events can block many rural roads and hinder transportation access for emergency services, residents needing medical attention, or motorists traveling through the county.

Continued Mitigation and Strategic Actions

Action	Alert/Warning Sirens
Description & Location	Perform an evaluation of existing alert sirens to determine which sirens should be replaced or upgraded. Install new sirens where lacking.
Hazard(s) Addressed	Dam Failure, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+ per generator
Local Funding	General Fund, Fire Department Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Commissioners, Harrison VFD
Status	Not started

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+ per generator
Local Funding	General Fund, Fire Department Funds
Timeline	2-5 Years
Priority	Low
Lead Agency	County Commissioners, Harrison VFD
Status	Generator needed at the courthouse.

Action	Evacuation Plan
Description & Location	Establish a plan to effectively evacuate residents during hazard events.
Hazard(s) Addressed	Dam Failure, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$5,000+
Local Funding	Region 23 EMA, DHS
Timeline	2-5 Years
Priority	Low
Lead Agency	County Commissioners, Region 23 EMA
Status	Not Started

Action	Groundwater/Irrigation/Water Conservation Management Plan and Practices
Description & Location	Develop and implement a plan/best management practices to conserve water use and reduce total use (high water use to low water use) and consumption of groundwater resources by citizens and irrigators of agricultural land during elongated periods of drought Identify water saving irrigation projects of improvements such as sprinklers of soil moisture monitoring. Potential restrictions on water could include limitation on lawn watering, car washing, farm irrigation restrictions, or water sold to outside sources. Implement BMPs through water conservation practices such as changes in irrigation management, education on no-till agriculture and use of xeriscaping in communities.
Hazard(s) Addressed	Drought, Extreme Temperatures, Grass/Wildfire
Estimated Cost	$10,000+
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Commissioners, Region 23 EMA, UNWNRD
Status	Not started

Action	Hazardous Fuels Reduction
Description & Location	The NFS Forest Fuels Reduction Program creates strategically located corridors of thinned forests across the landscape, reduces fire intensity, improves fire suppression effectiveness, increases firefighters' safety, and better protects lives and property.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	$3,000 per acre
Local Funding	General Fund, NFS
Timeline	2-5 Years
Priority	Medium
Lead Agency	Harrison VFD, Nebraska Forest Service
Status	Not started

Action	Participate in the National Flood Insurance Program
Description & Location	Work to become a member in good standing with the National Flood Insurance Program.
Hazard(s) Addressed	Flooding
Estimated Cost	Staff Time
Local Funding	General Fund
Timeline	5+ years
Priority	Low
Lead Agency	County Commissioners
Status	Not started. Currently this project is a low priority as flooding is not a hazard of top concern for the county.

Action	Public Education/Awareness
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Clerk, UNWNRD, Region 23 EMA
Status	Not started

Action	Safe Rooms
Description & Location	Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, school, and other areas.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$200-$300/sf standalone/$150-$200/sf retrofit
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Sheriff, Schools, Region 23 EMA
Status	Not started

Action	Stormwater System and Drainage Improvements
Description & Location	Smaller communities may utilize storm water systems comprising ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacement or modification of bridges may be necessary to provide greater capacity, maintain or improve structural integrity during flood events, and eliminate flooding threats and damages.
Hazard(s) Addressed	Flooding, Severe Thunderstorms
Estimated Cost	$100,000
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Roads Department
Status	Not started

Action	Weather Radios
Description & Location	Conduct an inventory of weather radios at schools and other critical facilities and provide new radios as needed.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$50+ per radio
Local Funding	General Fund
Timeline	5+ years
Priority	Low
Lead Agency	Region 23 EMA
Status	Not started

Community Profile

Village of Harrison

Region 23 EMA
Hazard Mitigation Plan 2025

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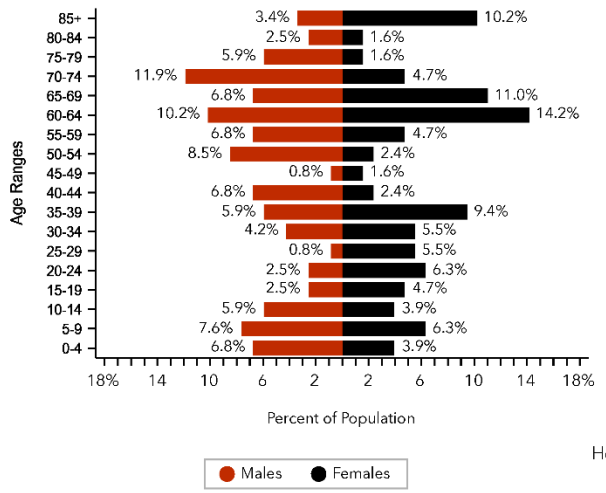
Community Fact Sheet

Community Summary Fact Sheet

Harrison, NE
Region 23 EMA Hazard Mitigation Plan 2025

245	52.9	114	2.15	$171,429	$49,019
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



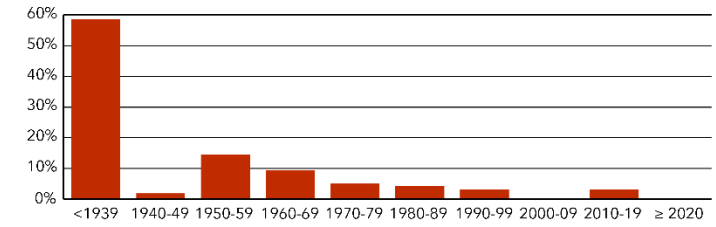
TOTAL POPULATION

2024 Total Population (Estimate)	245
2020 Total Population (U.S. Census)	239
2010 Total Population (U.S. Census)	251
2000 Total Population (U.S. Census)	279

AT RISK POPULATIONS

44	73	8	10%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

HOUSING: YEAR BUILT



EMPLOYMENT

44	9.8%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Black Population
- American Indian Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- White Population

6% **of the Total Population is Hispanic**

HOUSING

48	3%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Dashiell Rohan	Board Chair	Harrison	-	Recording
Dennelle Fischer	Village Clerk	Harrison	-	Recording
Jesse Vance	Board Member	Harrison	Attended	Recording

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Board Trustee, Utilities Superintendent and Village Clerk will review and update this participant profile outside of the five-year update. The City of Harrison will review the plan annually, and the public will be notified via council meetings.

Capability Assessment

The planning team assessed the Village of Harrison's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	No
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	No
	Building Codes	Yes
	If yes:	Year Adopted: 2000
		IBC Edition: N/A
	Water System Emergency Response Plan	Yes
	Wellhead Protection Plan	Yes
	National Flood Insurance Program	No
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Other (if any)	

Capability/Planning Mechanism		Yes/No
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	No
	GIS Capabilities	Yes
	Chief Building Official	(County)
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	No
	Gas/Electric/Water/Sewer Service Fees	Gas/Electric – No Water/Sewer - Yes
	Storm Water Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	Yes
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	Yes
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Limited
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Limited

National Flood Insurance Program (NFIP)

The Village of Harrison has chosen not to participate in the NFIP at this time due to the low flood risk to village structures and because of the minimal impacts from historical flooding. NFIP participation will be reevaluated if the village's flood risk changes. The village does not currently have any repetitive loss or severe repetitive loss structures.

NFIP Information

NFIP Overview	
Date of NFIP Participation:	N/A
Floodplain Administrator:	N/A
Is Floodplain Administrator a Certified Floodplain Manager?	-
Is Floodplain Management an Auxiliary Function?	-
Number of NFIP Policies In-Force:	0
Total NFIP Premium ($):	N/A
Total NFIP Coverage ($):	N/A
Number of Claims Paid Out:	N/A
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	N/A
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following tables.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
238	$9,366,974	N/A	N/A	N/A

Source: County Assessor, 2024

Plans and Studies

The Village of Harrison has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the city updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Building Code (2000)

The building code sets standards for constructed buildings and structures. These codes regulate and govern the conditions and maintenance of all property, buildings, and structures by providing the standards for supplied utilities, facilities, and other physical things and conditions essential to

ensure that structures are safe, sanitary, and fit for occupation and use. Enforcement of the building codes is done by the planning commission committee.

Capital Improvement Plan (2024)

The purpose of the capital improvement plan is for the village to strategize how to budget for nonrecurring physical or digital purchases. A capital improvement plan typically spans multiple years and includes financing plans. There are currently no plans to update the capital improvement plan. The document includes radio communication upgrade and installing water meters for residential structures.

Comprehensive Plan

The comprehensive plan is designed to guide the future actions and growth of the village. The plan directs development away from the floodplain, directs housing away from chemical storage facilities, and identifies areas that need emergency shelters. The document does not discuss natural hazards. The village plans to include the following in future updates: goals/objectives aimed at safe growth, direct development away from the floodplain, direct housing away from chemical storage facilities, direct housing and vulnerable populations away from major transportation routes, encouraging infill development, encouraging elevation of structures located within the floodplain, and to identify areas that need emergency shelters. The hazard mitigation plan has been integrated with the comprehensive plan and the village intends to update the document in 2025.

Drought Ordinance (2024)

Harrison's drought ordinance outlines the conservation management plan to minimize the effects of water shortage and control the municipal water supply during periods of high demand. The village will take action depending on the severity of the circumstance.

Pine Ridge Area Community Wildfire Protection Plan (2024)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Sioux County Local Emergency Operations Plan (2023)

The Sioux County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan.

Water System Emergency Response Plan (2024)

The water system emergency response plan serves as a guideline for water operators and city officials to minimize the disruption of normal services to consumers and to provide public health

protection during an emergency event. The document identifies several natural and human-caused events and discusses the water system's response during those events.

Wellhead Protection Plan (2024)

The purpose of wellhead protection plans is to protect the public drinking water supply wells from contamination. It includes identifying potential sources of groundwater contamination in the area.

Zoning Ordinance (2000) and Subdivision Regulations (2000)

The city's zoning ordinance and subdivision regulations outline where and how development should occur in the future. These documents include the ability to implement water restrictions. There is currently no plan to update the zoning ordinance and subdivision regulations. The documents include: restricting development in hazard prone areas, prohibiting development within the floodplain, discouraging development within the floodplain, limiting population density within the floodplain, requiring more than one foot of elevation above Base Flood Elevation within the floodplain, discouraging hosing and vulnerable populations near chemical storage sites, considering both wildfire and wildland urban interfaces, restricting the subdivision of land within or adjacent to the floodplain, well setback requirements, and the ability to implement water restrictions.

Future Development Trends

Over the past five years there's been no new residential or commercial development in Harrison, nor were any buildings demolished. There are no new housing developments or new businesses/industry planned for the near future. The village of Harrison does not have a future land use map.

Community Lifelines

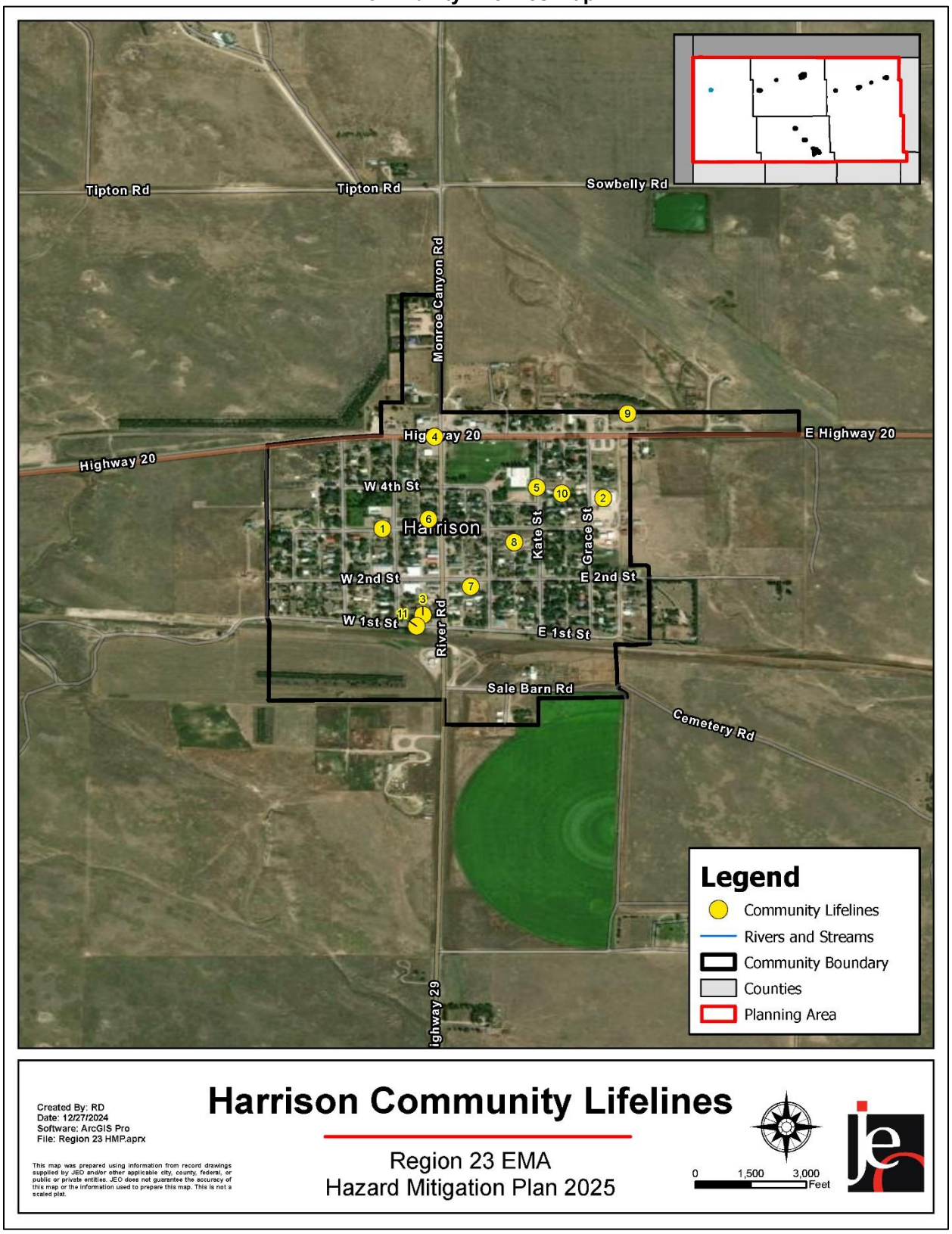
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Harrison Elementary School	Other	G,S	N
2	Harrison Rural Fire District	Safety and Security	G,S	N
3	Light and Water Power Plant	Energy/Water Systems	G	N
4	Senior Citizens Center	Other	G,S	N
5	Sioux County High School	Other	G,S	N
6	County Courthouse/Village Office	Safety and Security	G,S	N
7	VFW Hall	Food, Hydration, Shelter	G,S	N
8	Water Tower	Water Systems	G	N
9	Sewer Lift Station	Water Systems	G	N
10	Pump	Water Systems	G	N
11	Electric Generator	Energy	G	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Harrison which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the Village of Harrison's. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Drought

The local planning team ranked drought as a top threat for the community. Drought is a high concern as agriculture and rangeland are strong economic drivers in the county and for Harrison. Early drought impacts are not always as visual as impacts of other natural hazards and are hard to quantify. Wildfire is also of greater concern during periods of drought as there may be reduced water supplies and highly flammable landcover. The community recently upgraded the water system and included a generator to supply water to the entire village to increase capacity during events.

Grass/Wildfires

The local planning team identified wildfire as a top concern for the village. According to the Nebraska Forestry Department there were 123 reported fires by the Harrison Fire Department from 2000 to 2023 which consumed a total of 73,647 acres. The fires also resulted in $28,300 in damages to crops. According to the CWPP there have been seven major fires since the late 1950s. The Village of Harrison lies within the WUI as defined by the CWPP. The Harrison Fire Department has mutual aid agreements with the fire departments in the surrounding areas, but during large scale events it is possible nearby fire department would be unable to lend assistance due to addressing the needs of their respective community/protection area. The Village of Harrison has a new fire hall which is now fully owned by the village. The new fire hall is larger for more equipment storage and has a generator.

Severe Thunderstorms

Severe thunderstorms are a regular part of the climate for Sioux County and Harrison and can include heavy rain, hail, lightning strikes, and damaging winds. The local planning team identified severe thunderstorms as the greatest threat for the village. The NCEI recorded 41 severe thunderstorm events with $6,000 in damages to property. Severe thunderstorms and hail can result in loss of electricity, blocked roadways, damages to trees, and localized flooding from heavy rain. Blocked roadways, as a result of downed trees, may also present life safety concerns to those needing immediate medical attention. Lightning is the leading cause of wildfires in the planning area.

Severe Winter Storms

Severe winter storms are a regular part of the climate and occur annually in Harrison. Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. According to the NCEI there were 54 severe winter storm events in Sioux County which may have impacted Harrison from 2009 through 2023. These events resulted in no reported damages to property or resident safety. Major concerns related to severe winter storms include loss of power, cold temperatures, blocked transportation routes, and cattle mortality for residents working the

surrounding areas and impacts to the local economy. There are no windbreaks or snow fences located in the village.

Tornadoes and High Winds

The local planning team identified tornadoes and high winds significant concern for the community. Tornadoes are a concern due to their potential for catastrophic damage to a community. According to the NCEI, there were nine tornadoes which passed near Harrison. All tornados were either EF/F0 with no reported damages. There are no FEMA certified safe rooms in the community; however, sirens are located in Harrison and residents are able to sign up for CodeRed alerts through Region 23 EMA.

New Mitigation and Strategic Actions

Action	Elevate Utilities and Critical Systems
Description & Location	Elevate utilities and critical systems to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels for critical buildings.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Village Board
Status	Not started

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000
Local Funding	General Fund, BRIC, HMGP
Timeline	5+ Years
Priority	Low
Lead Agency	Village Board, Region 23 EMA
Status	Not started

Action	Drought Education/Awareness Program
Description & Location	Through activities such as outreach projects, water conservation education, and other methods, increase public awareness of drought to both public and private property owners, renters, businesses, and local officials about drought and ways to protect people and property during drought.
Hazard(s) Addressed	Drought
Estimated Cost	$1,000
Local Funding	General Funds
Timeline	5+ Years
Priority	Medium
Lead Agency	Village Clerk
Status	Not started

Action	Fire Prevention Program
Description & Location	The Nebraska Forest Service Wildland Fire Protection Program provides services in wildfire suppression training, equipment, pre-suppression planning, wildfire preventions, and aerial fire suppression.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	Varies
Local Funding	General Funds, NFS
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board, Harrison Rural Fire District, NFS
Status	In progress

Action	Public Education/Awareness
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$5,000
Local Funding	General Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Clerk
Status	In progress

Special Districts Appendix

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School District Profile

Chadron Public Schools

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Ginger Meyer	Superintendent	Chadron Public Schools	-	-
Josh Stadler	Maintenance Supervisor	Chadron Public Schools	Attended	Attended

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

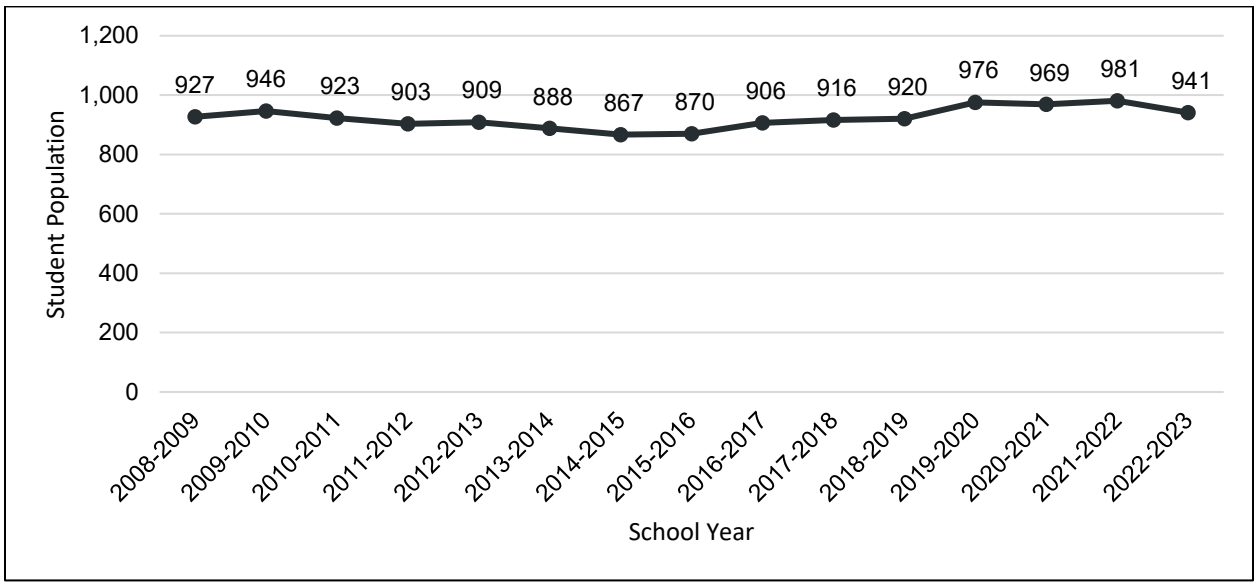
The School Administrators will review and update this participant profile outside of the five-year update. Chadron Public Schools will review the plan annually, and the public will be notified via the school district website.

Demographics

The following figure displays the historical student population trend starting with the 2008-09 school year and ending with the 2022-2023 year. It indicates that the student population has declined recently. There are 941 students enrolled in the district.[1] A declining student population can mean there is a decreasing tax revenue for the school district, which could make implementation of mitigation projects more fiscally challenging. The school district anticipates little change in student population.

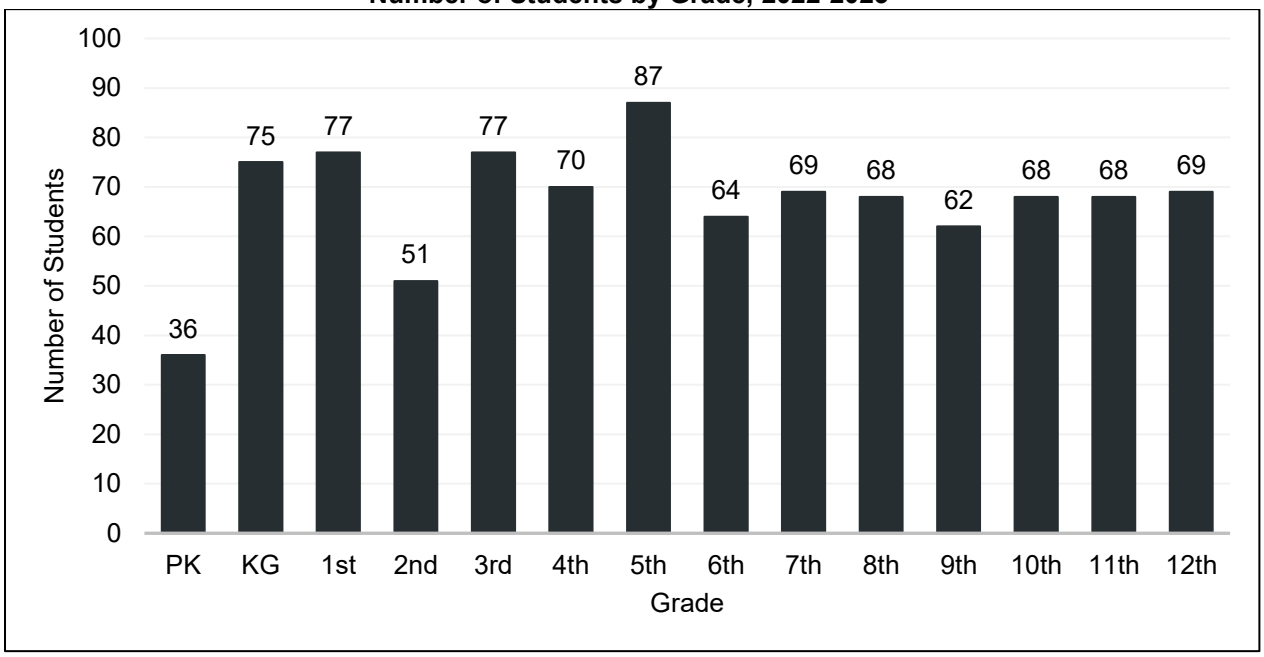
1 Nebraska Department of Education. July 2024. “Nebraska Education Profile.” https://nep.education.ne.gov/.

Student Population 2008-2023



Source: Nebraska Department of Education

Number of Students by Grade, 2022-2023



Source: Nebraska Department of Education

The figure above indicates that the largest number of students are in the 5th, 3rd, and 1st grades. The lowest population of students are in Pre-K and 2nd grades. According to the Nebraska Department of Education (NDE), 43% of students receive either free or reduced priced meals at school. This is lower than the state average of 50%. Additionally, 14% of students are in the Special Education Program. The school mobility rate is 6%, while the number of English Language Learners is unavailable.. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Student Statistics, 2022-2023

	School District	State of Nebraska
Free/Reduced Priced Meals	43%	50%
School Mobility Rate	6%	4%
English Language Learners	N/A	8%
Special Education Students	14%	16%

Source: Nebraska Department of Education

Capability Assessment

The planning team assessed Chadron Public Schools' hazard mitigation capabilities by reviewing the district's planning capability, administration and technical capability, fiscal capability, education and outreach capability, drills, and overall capability. New staff is trained on emergency procedures at orientation, and there are monthly and bi-annual emergency drills. Parents and students are educated about the emergency procedures via informational meetings and documentation. The district is also partnered with the local police and fire departments regarding the emergency procedures.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning Capability	Facility Improvements Plan	Yes
	Continuity of Operations Plan	Yes
	Crisis Response Plan	Yes
	Strategic Plan	Yes
	Other (if any)	Reunification & Building Specific Plans
Administration & Technical Capability	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	No
Fiscal Capability	Applied for Grants in the Past	Yes
	Awarded Grants in the Past	Yes
	Authority to Levy Taxes for Specific Purposes Such as Mitigation Projects	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved Bonds in the Past	No
	Flood Insurance	
	Other (if any)	
Education & Outreach Capability	Natural Disaster or Safety Related School Programs	Yes
	Hazard Education or Information Program	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 / year
	Tornado	2 / year
	Intruder	2 / year
	Bus evacuation	2 / year
	Evacuation	10 / year
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	High
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

Chadron Public Schools has multiple planning documents that discuss or relate to hazard mitigation. The plans are listed below along with a short description of how they are integrated with the hazard mitigation plan or how they contain hazard mitigation principles. When the school district updates these or other planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Emergency Operations Plan (2024)

The purpose of the Emergency Operations Plan is to identify and respond to incidents by outlining the responsibilities and duties of Chadron Public Schools and its employees. It outlines the expectations of staff, roles and responsibilities, direction and control systems, internal and external communications, training and sustainability, common and specialized procedures, and response to specific hazards and vulnerabilities. High priority hazards discussed in the plan include severe storms, fire, chemical, intruder, and terrorism. A crisis response plan and continuity of operations plan are also included in this document. The Emergency Operations Plan has not been integrated with the hazard mitigation plan. All staff are aware of the plan, and it gets reviewed and updated as needed.

Facility Improvements Plan

Chadron Public School's facility improvements plan outlines projects to be undertaken at school owned facilities and buildings. Projects include a description of the work to be completed, a rough cost estimate if available, and a timeline of when the project will likely be completed. The facility improvements plan is regularly updated.

Strategic Plan

The strategic plan for the school district outlines goals and objectives for the next several years. Included in these goals and objectives is keeping students and staff safe during hazardous events. This plan is updated and reviewed prior to each school year. It has not been integrated with the hazard mitigation plan.

Future Development Trends

The district has experienced minimal changes over the last five years. There are staff changes annually, and the building has had some facility upgrades, however, no new developments are currently planned.

Community Lifelines

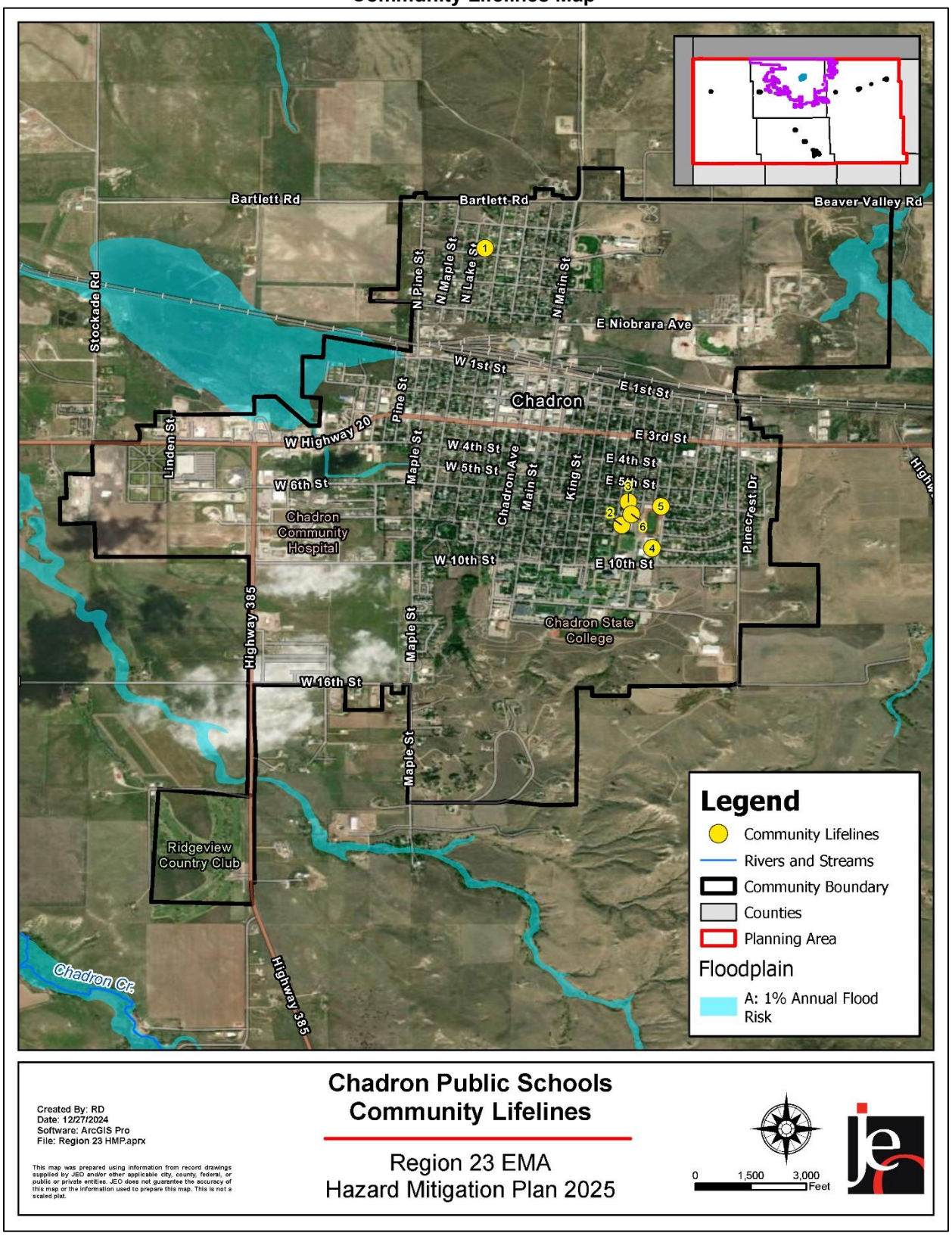
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Chadron Intermediate	Other	S	N
2	Chadron Primary	Other	S	N
3	Chadron Middle School	Other	S	N
4	Chadron Senior High School	Other	S	N
5	Bus Barn	Transportation	-	N
6	Skills for Living House	Other	-	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Chadron Public Schools which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Chadron Public Schools. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Human Infectious Diseases

Following the COVID-19 pandemic outbreak, the district has identified human infectious diseases as a top concern. The school district has prioritized the issue due to the proximity of students and teachers. Since the pandemic, a pandemic plan has been created, however, better communication between staff, students, parents and the health department has been identified as an area for improvement.

Tornadoes and High Winds

Tornadoes and high winds have the potential to cause extensive catastrophic damage to property and can endanger the lives of students and staff. During a high windstorm event in 2012 the school district experienced significant damage to the High School's gymnasium roof while an event was taking place. The district also experiences several tornado events annually during the school year or while events are taking place. Tornado sirens are located throughout the City of Chadron for early outdoor warnings, but none are located on school grounds. The local planning team identified a need for improved communication resources and capabilities during hazard events, including two-way battery powered radios in case of power outages. Sheltering locations are located in windowless basements or the lowest level of rooms per building, but there are no FEMA certified safe rooms in the schools. Middle and high schools are also used for community shelter locations in the event of a community wide disaster event, but neither facility have backup generators. School staff conduct training through various national and state safety conferences and the school safety plan is updated as needed. Since the previous HMP was completed, there has been extensive work on the Emergency Operations Plan. There have also been radios installed for district communication and new roofing has been installed on select portions of the buildings. An indoor dismissal plan has been introduced and communication plans have been improved, however, the district recognizes the need to continue these efforts in the future.

Terrorism and Cyber Attack

In February of 1994 an active shooter event occurred at Chadron Middle School, the first school shooting to occur in Nebraska. A seventh-grade student shot and injured one teacher. The school district has prioritized and emphasized the need for effective safety procedures since this event. All doors in the facilities have secure key-less locking mechanisms on interior doors and visitors are required to have door identification cards to enter the buildings. Safety buckets, which house materials such as a blanket, hammer, and first aid materials, are found in every classroom and are used during drills. Students and staff practice lockdown and active shooter drills annually. Staff continue training through national and state safety conferences regularly. The school safety plan is updated as needed and all standards meet or exceed established standards. The local planning team indicated a need for two-way radios as a backup communication method in the case of incident or power outages. Since the last update, the district has updated the Emergency Operations Plan and increased active shooter training and communication with staff. The district recognizes the need for additional communication efforts and staff training.

In recent years, there have been numerous attacks against the school district IT system, as identified by the district planning team. These attacks can negatively affect district computers, leak the information of staff and students, and can initiate an expensive and time-consuming repair process. In the wake of these attacks, the school has introduced two-step verification, cloud-backup software, and updated its cyber security programs. The district has also identified the need for future funding into combatting this hazard, as well as better training for staff and students.

New Mitigation and Strategic Actions

Action	Backup Communication Equipment
Description & Location	Acquire backup communication equipment, such as two-way radios, in the case of terrorist/cyber attack incident or power outage.
Hazard(s) Addressed	Terrorism and Cyber Attack
Estimated Cost	$2,000
Local Funding	School funds, Community taxes
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Action	Elevate Utilities and Critical Systems
Description & Location	Elevate utilities and critical systems to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	School funds, Community taxes
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

Action	Human Disease Outbreak Communication Plan
Description & Location	Develop a communication plan/protocol in the event of a human disease outbreak.
Hazard(s) Addressed	Human Infectious Disease
Estimated Cost	TBD
Local Funding	School funds, Community taxes
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps, and environmental education, increase student and staff awareness of natural and manmade hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$3,000+
Local Funding	School Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	In progress

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and school facilities
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000 per generator
Local Funding	School funds, Community taxes
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Removed Mitigation and Strategic Actions

Action	Alert/Warning Sirens
Description & Location	Perform an evaluation of existing alert sirens in order to determine which sirens should be replaced or upgraded. Install new sirens where lacking.
Hazard(s) Addressed	Tornado and High Winds
Reason for Removal	Completed

School District Profile

Crawford Public Schools

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Eugene "Mo" Hanks	Superintendent	Crawford Public Schools	Attended	Recording

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

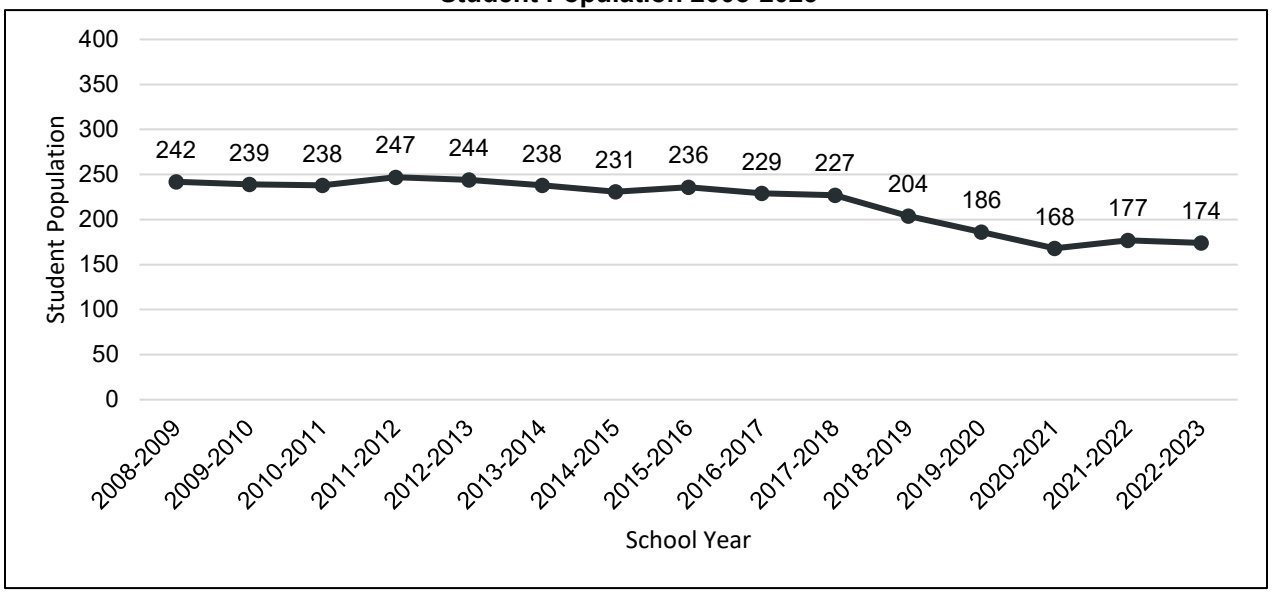
The Superintendent, Principal, and BOE Safety Committee will review and update this participant profile outside of the five-year update. Crawford Public School will review the plan annually, and the public will be notified via board meetings and the school website.

Demographics

The following figure displays the historical student population trend starting with the 2008-09 school year and ending with the 2022-2023 year. It indicates that the student population has generally declined since 2017. There are 174 students enrolled in the district.[2] A declining student population can mean there is a decreasing tax revenue for the school district, which could make implementation of mitigation projects more fiscally challenging. The school district anticipates little change in the student population.

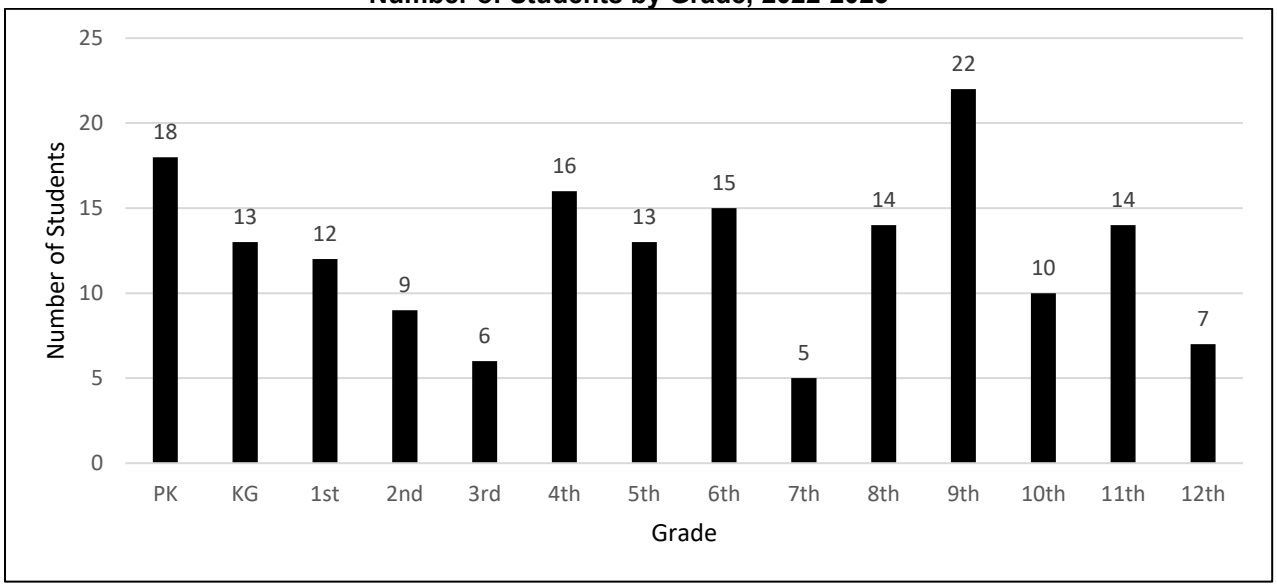
2 Nebraska Department of Education. July 2024. "Nebraska Education Profile." https://nep.education.ne.gov/.

Student Population 2008-2023



Source: Nebraska Department of Education

Number of Students by Grade, 2022-2023



Source: Nebraska Department of Education

The figure above indicates that the largest number of students are in Pre-K, 4th, and 9th grades. The lowest population of students are in 3rd and 7th grades. According to the Nebraska Department of Education (NDE), 67% of students receive either free or reduced priced meals at school. This is higher than the state average of 50%. Additionally, 16% of students are in the Special Education Program. The school mobility rate is 6% statewide, while the number of English Language Learners is unavailable. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Student Statistics, 2022-2023

	School District	State of Nebraska
Free/Reduced Priced Meals	67%	50%
School Mobility Rate	6%	N/A
English Language Learners	N/A	8%
Special Education Students	17%	16%

Source: Nebraska Department of Education

Capability Assessment

The planning team assessed Crawford Public Schools' hazard mitigation capabilities by reviewing the district's planning capability, administration and technical capability, fiscal capability, education and outreach capability, drills, and overall capability. Every staff member has access to the Emergency Operations Plan (EOP). The district also utilizes Staff Professional Development to train staff regarding emergency procedures. The district educates students and families about emergency procedures by conducting drills and practice with the students. They communicate with families using REMIND and social media. They also post information on their school website. The district partners with the Dawes County Sheriff's Deputies that patrol the school and come on school grounds when needed. They have lock boxes with keys to the school located by the main entrance to both buildings. They also have local fire and police walk through the facilities each year before school begins. The district has a large exterior numbers on the doors and windows and a map of the buildings with corresponding numbers for first responders. The Fire Chief is a contact person for Perma Security if the fire alarm goes off. Whenever an evacuation drill is activated, both the local fire department and Dawes County are notified so they can be on-site to observe and offer recommendations for the future.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning Capability	Facility Improvements Plan	Yes
	Continuity of Operations Plan	Yes
	Crisis Response Plan	Yes
	Strategic Plan	Yes
	Other (if any)	
Administration & Technical Capability	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	Applied for Grants in the Past	Yes
	Awarded Grants in the Past	Yes
	Authority to Levy Taxes for Specific Purposes Such as Mitigation Projects	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved Bonds in the Past	Yes
	Flood Insurance	Yes
	Other (if any)	
Education & Outreach Capability	Natural Disaster or Safety Related School Programs	Yes
	Hazard Education or Information Program	Yes
	StormReady Certification	
	Other (if any)	
Drills	Fire	10 / year
	Tornado	2 / year
	Intruder	1 or 2 / year
	Bus evacuation	2 / year

Capability/Planning Mechanism		Yes/No
	Evacuation	1 or 2 / year
	Other (if any) Hold and Secure Drills	2/ year

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	High
Public Support to Implement Projects	High
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	High

Plans and Studies

Crawford Public Schools has multiple planning documents that discuss or relate to hazard mitigation. The plans are listed below along with a short description of how they are integrated with the hazard mitigation plan or how they contain hazard mitigation principles. When the school district updates these or other planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Emergency Operations Plan (2024)

The purpose of the Emergency Operations Plan is to identify and respond to incidents by outlining the responsibilities and duties of Crawford Public Schools and its employees. It outlines the expectations of staff, roles and responsibilities, direction and control systems, internal and external communications, training and sustainability, common and specialized procedures, and response to specific hazards and vulnerabilities. High priority hazards discussed in the plan include severe storms, fire, chemical, intruder, and terrorism. A crisis response plan and continuity of operations plan are also included in this document. The plan also identifies areas that need emergency shelters. The plan is comprehensive, however there are hazard scenarios that have not yet been addressed. The plan is updated every spring, and the Board of Education approves these updates every summer.

Future Development Trends

In the last five years, the school district has had a slight drop in student population, but the faculty has remained about the same. According to the local planning team, there have been several development projects within the last five years. These developments include: new roofs on all buildings, new stands for the football field, replacement of a bus and two smaller vehicles, the addition of new intercom speakers to high school classrooms, an upgraded phone system, and upgraded entrance camera and buzzer systems at both the elementary and high school. There are no expected changes in student demographics, student population, staff, or buildings. The school district plans to upgrade the security system by adding additional cameras.

Community Lifelines

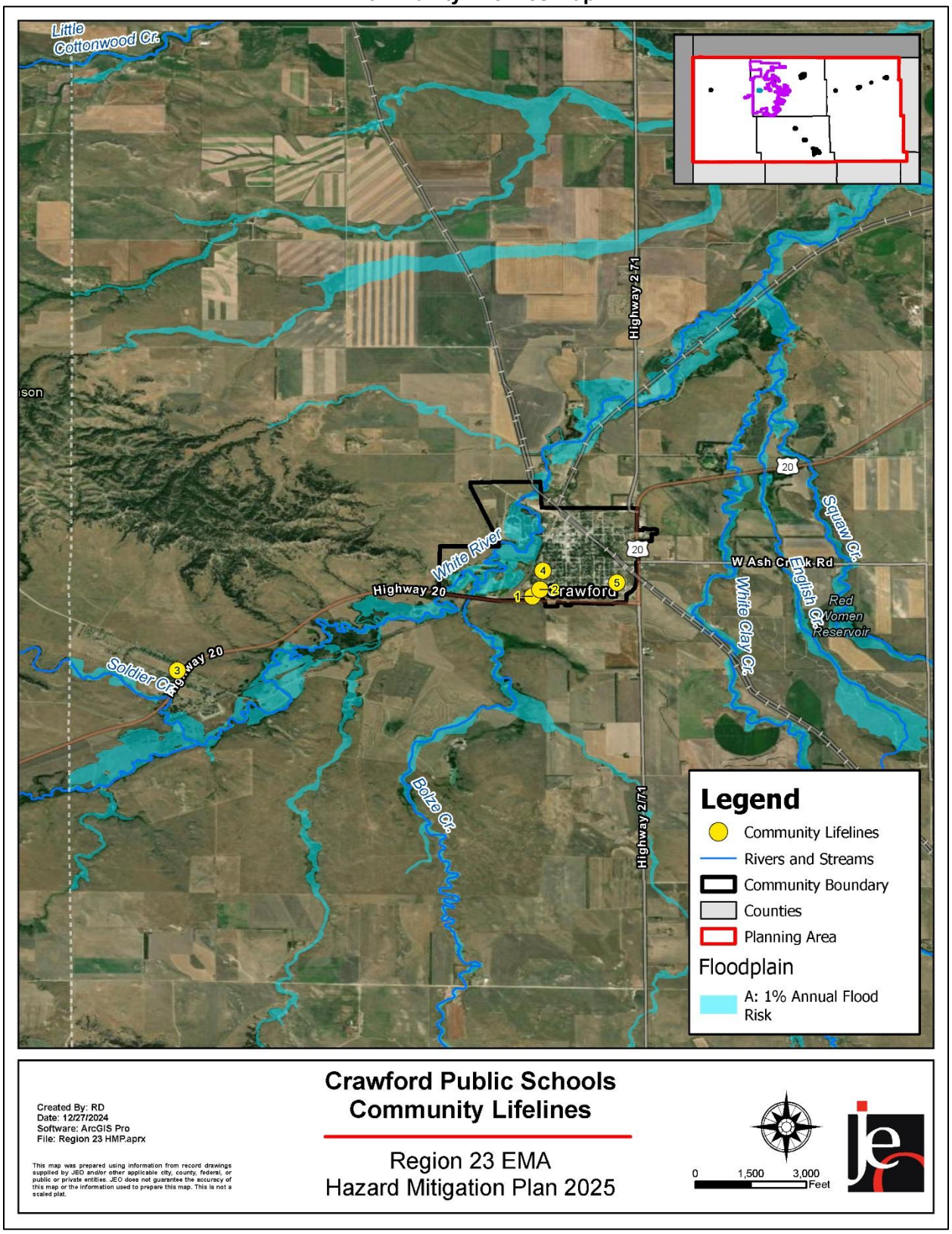
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Crawford Fire Department	Safety and Security	-	N
2	Crawford Community Center	Food, Hydration, Shelter	S	N
3	Fort Robinson State Park	Other	-	N
4	Legend Buttes Health Services	Health and Medical	-	N
5	Crawford Public Schools	Other	S	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Crawford Public Schools which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Crawford Public Schools. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Severe Thunderstorms

Severe thunderstorms are a regular part of the climate for Dawes County and Crawford. The local planning team identified severe thunderstorms as a top hazard for the district. Severe thunderstorms and hail can result in loss of electricity, blocked roadways, damage to trees, and flooding. Blocked roadways, as a result of downed trees, may also present life safety concerns to those needing immediate medical attention and prevent emergency response vehicles from reaching residents. Severe thunderstorms have caused damage to technology infrastructure and to specific devices because of power surges. In June of 2020 a major storm caused half a million dollars' worth of damage to the facilities and transportation. The district has upgraded their infrastructure over the past four years through the use of ESSER and REAP funds. All the roofs have been worked on since the last major storm. For the future, the district would like a Bus Barn to be built to protect their transportation.

Severe Winter Storms

Severe Winter Storms have also been identified as a threat to the district. Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. If the weather is life threatening, the district will call off classes and keep the school closed. At least half of the staff drive ten or more miles to school and many students walk. The district has utilized technology to keep track of the weather and projected storms. They have access to both the North Platte and Cheyenne Regional Weather Service.

Terrorism and Cyber Attack

The district experienced a cyber-attack on their firewall in Spring of 2024. Although they caught it in time and no damage was done, for the future, this hazard is identified as a high-priority concern for the district. They have updated their cyber security measures, phone system, intercom system, and door locks/entrance cameras. The district requires all visitors to wear a visitor badge while on school grounds and have all staff wear identification lanyards while on school grounds. Practice fire drills, bus evacuation drills, tornado drills, lockdown drills, and evacuation drills are held throughout the school year. The district plans to continually update their Emergency Operations Plan (EOP) and to continue to practice and communicate with staff and students in the case of a terrorism/cyber-attack.

Tornadoes and High Winds

The local planning team identified tornadoes and high winds as a significant concern for the district. Although there have not been many tornadoes in the recent past, high winds have been a concern. Both tornadoes and high winds can cause major issues for the school. If electricity is lost, classes are affected. Downed trees and limbs can also cause major damage. The school practices tornado drills twice a year and staff trim tree limbs annually to mitigate the risk of damage from high winds.

New Mitigation and Strategic Actions

Action	Backup Power Generator
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and school facilities
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000 per generator
Local Funding	School funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Action	Elevate Utilities and Critical Systems
Description & Location	Elevate utilities and critical systems to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	School funds, Community taxes
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

Action	Upgrade and Add Additional Security Cameras
Description & Location	Interior and Exterior Cameras for the Elementary, High School, Gym, and parking areas. We will also add a server and accessories to accommodate the new and additional cameras.
Hazard(s) Addressed	Terrorism and Cyber Attack
Estimated Cost	$50,000 ($41,000 for cameras; $8,000 for server; & $1,000 for license and accessories).
Local Funding	Qualified Capital Purpose Undertaking Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Planning Stages

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps, and environmental education, increase student and staff awareness hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$3,000+
Local Funding	School Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	In progress

School District Profile

Gordon-Rushville Public Schools

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Nathan Livingston	Superintendent	Gordon-Rushville School District	Recording	Attended
Alton Archibald	Technology Director	Gordon-Rushville School District	-	-
Chad Allison	Head of Maintenance	Gordon-Rushville School District	-	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Superintendent, Technology Director, and Head of Maintenance will review and update the profile outside of the five-year update. The Gordon-Rushville School District will review the plan bi-annually, and the public will be notified via social media and website updates.

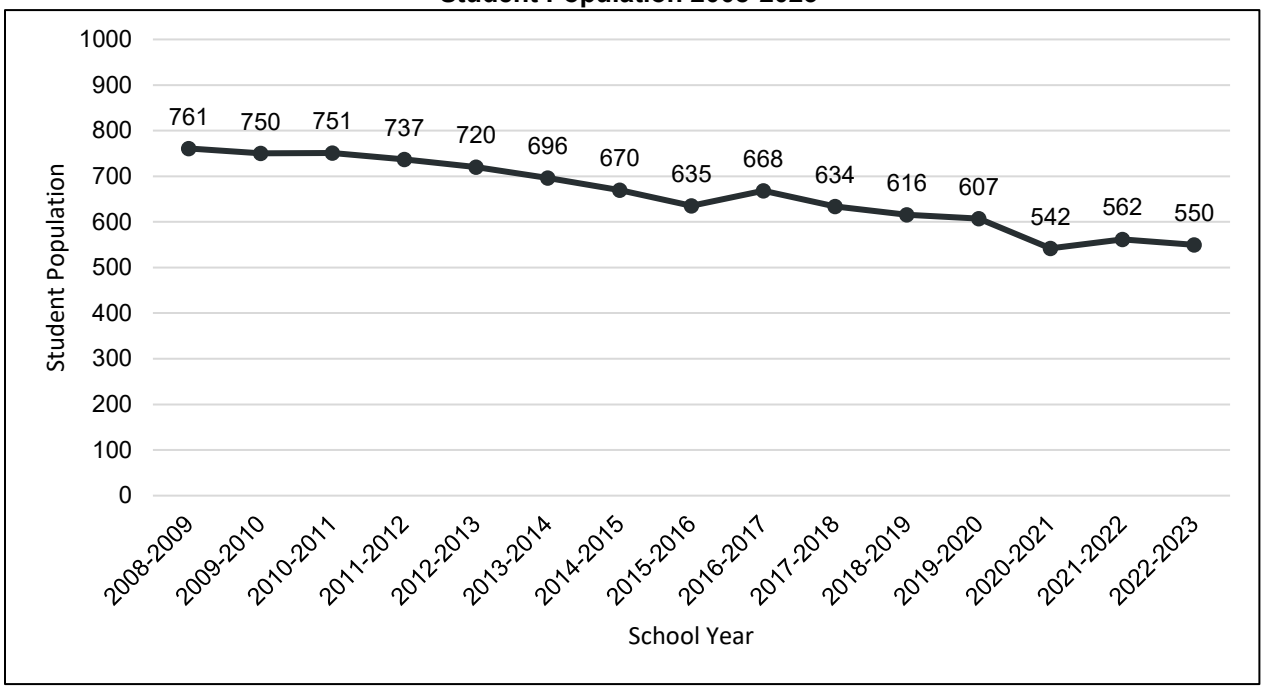
Demographics

The following figure displays the historical student population trend starting with the 2008-09 school year and ending with the 2022-2023 year. It indicates that the student population has been generally declining since 2008. There are 550 students enrolled in the district.[3] A declining student population can mean there is a decreasing tax revenue for the school district, which could make implementation of mitigation projects more fiscally challenging.

The district anticipates roughly the same number of students and potentially a slight decrease over the next five years due to rural residents moving to more urban areas and family farms decreasing in numbers. The district has a few Spanish speaking students. At this time, emergency instructions are not all available in both English and Spanish.

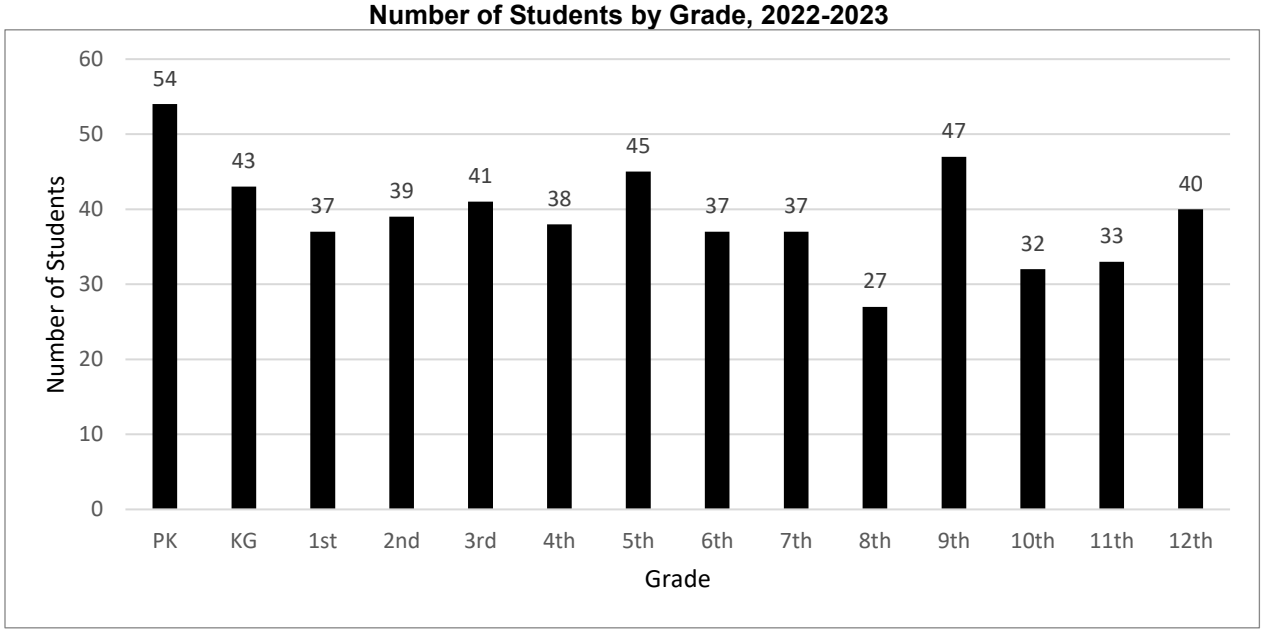
3 Nebraska Department of Education. July 2024. “Nebraska Education Profile.” https://nep.education.ne.gov/.

Student Population 2008-2023



Source: Nebraska Department of Education

Number of Students by Grade, 2022-2023



Source: Nebraska Department of Education

The figure above indicates that the largest number of students are in Pre-K, 9th, and 5th grades. The lowest population of students are in 8th, 10th, and 11th grades. According to the Nebraska Department of Education (NDE), 78% of students receive either free or reduced priced meals at school. This is lower than the state average of 52%. Additionally, 17% of students are in the Special Education Program. The school mobility rate is 6%, while the number of English Language Learners is unavailable.. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Student Statistics, 2023-2024

	School District	State of Nebraska
Free/Reduced Priced Meals	78%	52%
School Mobility Rate	6%	6%
English Language Learners	N/A	9%
Special Education Students	17%	17%

Source: Nebraska Department of Education

Capability Assessment

The planning team assessed Gordon-Rushville Public Schools' hazard mitigation capabilities by reviewing the district's planning capability, administration and technical capability, fiscal capability, education and outreach capability, drills, and overall capability.

The planning team indicated that each building conducts staff meetings at the beginning of the year where emergency procedures and protocols and the Standard Response Protocol (SRP) are covered. Staff practice various procedures throughout the year with fire drills, severe weather drills, lockdown drills, and evacuation drills.

Each building conducts student assemblies at the beginning of the year where emergency procedures and protocols and the Standard Response Protocol (SRP) are covered. Students practice various procedures throughout the year with fire drills, severe weather drills, lockdown drills, and evacuation drills. The Standard Response Protocol (SRP) is also available in signage throughout each building, informational packets are sent home to all families at the beginning of the year that goes over the SRP, and the SRP is available on district and building websites.

Local fire departments regularly visit Gordon Elementary and Rushville Elementary to educate and train the students regarding fire emergencies. The School Resource Officer speaks at various times to students regarding emergency procedures. At least once a year, local law enforcement are invited to attend a district safety and security meeting where emergency response procedures are discussed.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning Capability	Facility Improvements Plan	Yes
	Continuity of Operations Plan	No
	Crisis Response Plan	Yes
	Strategic Plan	Yes
	Other (if any)	
Administration & Technical Capability	Grant Manager	Yes
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	Applied for Grants in the Past	Yes
	Awarded Grants in the Past	Yes
	Authority to Levy Taxes for Specific Purposes Such as Mitigation Projects	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved Bonds in the Past	Yes
	Flood Insurance	No
	Other (if any)	

Capability/Planning Mechanism		Yes/No
Education & Outreach Capability	Natural Disaster or Safety Related School Programs	No
	Hazard Education or Information Program	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 / year
	Tornado	2 / year
	Intruder	1 / year
	Bus evacuation	2 / year
	Evacuation	11 / year
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

Gordon-Rushville Public Schools has multiple planning documents that discuss or relate to hazard mitigation. The plans are listed below along with a short description of how they are integrated with the hazard mitigation plan or how they contain hazard mitigation principles. When the school district updates these or other planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Emergency Response Guide (2024)

The purpose of the Emergency Response Guide is to identify and respond to incidents by outlining the responsibilities and duties of Gordon-Rushville Public Schools and its employees. It outlines the expectations of staff, roles and responsibilities, direction and control systems, internal and external communications, training and sustainability, common and specialized procedures, and response to specific hazards and vulnerabilities. High priority hazards discussed in the plan include severe storms, fire, chemical, intruder, and terrorism. The Emergency Response Guide has not been integrated with the hazard mitigation plan. All staff are aware of the plan, and it gets reviewed and updated annually.

Standard Response Protocol

The Standard Response Protocol (SRP) is a system of consistent actions and language used by the school district, staff, and first responders during emergencies. It provides a shared vocabulary and framework for responding to all types of hazards, promoting quick and coordinated action. The SRP is not a replacement for a school's existing safety plan but rather an enhancement that clarifies and standardizes responses

Facility Improvements Plan (Initial)

Gordon-Rushville's Public School's facility improvements plan outlines projects to be undertaken at school owned facilities and buildings. Projects include a description of the work to be

completed, a rough cost estimate if available, and a timeline of when the project will likely be completed. The facility improvements plan is regularly updated.

Strategic Plan

The strategic plan for the school district outlines goals and objectives for the next several years. Included in these goals and objectives is keeping students and staff safe during hazardous events. This plan is updated and reviewed prior to each school year. It has not been integrated with the hazard mitigation plan.

Future Development Trends

Over the past five years, the district has experienced steady population decline. New roofs were recently installed on the high school, Gordon Elementary, and part of the middle school building. Over the next several years, the planning team anticipates moderate population decline for the district. District buildings are increasing in age, and a facility assessment of all buildings is currently being conducted with JEO. After the assessment is completed, the district will look at prioritizing items for repair/replacement and develop a plan regarding such.

Community Lifelines

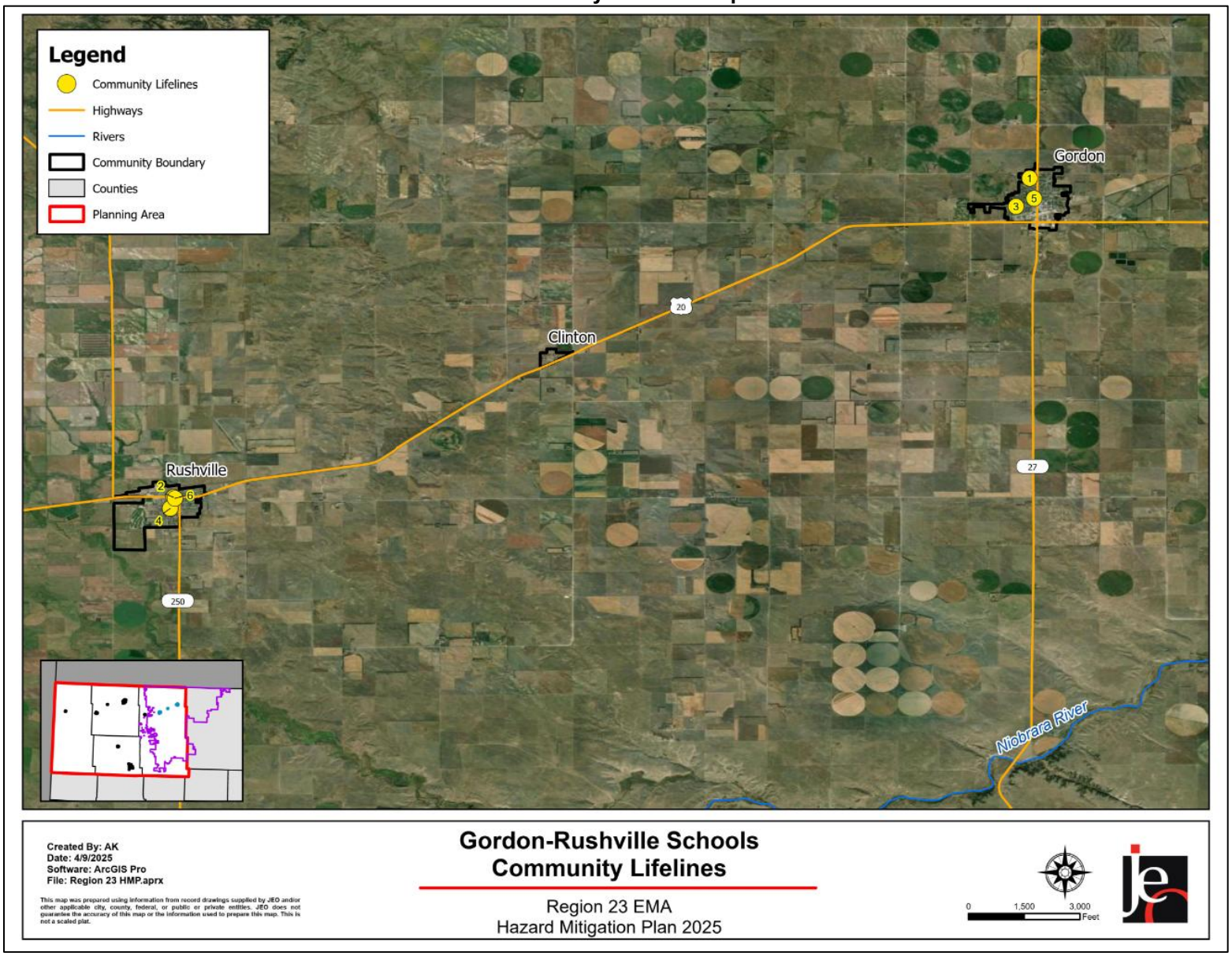
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Gordon-Rushville High School	Other	S	N
2	Gordon-Rushville Middle School	Other	S	N
3	Gordon Elementary	Other	S	N
4	Rushville Elementary	Other	S	N
5	Gordon City Auditorium	Food, Hydration, Shelter	S	N
6	Sheridan County Courthouse	Safety and Security	-	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Gordon-Rushville Public Schools which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Gordon-Rushville Public Schools. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Extreme Temperatures

The planning team has observed multiple instances in which extreme temperatures impacted the school district. Extreme cold and eating unit failures have forced cancellations of school activities. Extreme temperatures pose a risk to students and staff, as transportation vehicles can be affected, creating the potential for commuters to be stranded in frigid temperatures. In recent years, new HVAC units were installed to reduce risk of heating/cooling failure. The district also may need backup generators in the future to prevent adverse effects during a power outage.

Severe Thunderstorms

Severe thunderstorms are typically associated with heavy rain, lightning, high winds, and hail. Severe events can flood facilities and damage trees or school property. The district has experienced flooding in the high school basement, cafeteria, woods classroom, and leaking roofs at the high school. Storms have also broken windows, leaked water through windows, and blown large windowpane coverings off. Building damage, flooding, and window leaks have occurred at all district buildings at various times over the years.

Concerns for this hazard include frequency of storm events, cost and timeliness of repairs, availability of qualified repair companies in the area, and general maintenance and upkeep needed due to frequent storm impacts. In recent years, the district has installed new roofing at the high school, middle school, and Gordon Elementary. Drainage improvements were also completed to prevent flooding during storm events. In the future, additional drainage improvements and groundwork may be needed to improve slope and mitigate settling to prevent flooding. Additional roofs are needed on one part of the middle school.

Severe Winter Storms

Severe winter storms include snow, ice accumulation, blizzards, and other winter weather. They can cause power outages from downed power lines, damage to buildings or school vehicles, hinder transportation, and risk injuries for students and staff. The local planning team noted that past impacts include icy sidewalks from poor drainage, flooding/leaking roofs, heat/furnace issues, frozen pipes in bathrooms, damaged fencing during third-party snow removal, and cancellation of school and/or school activities. The planning team is primarily concerned about the safety of students traveling to school or events, as well as damage to buildings and grounds.

Projects completed to reduce risk to this hazard include heat/furnace repairs, re-roofing at the elementary school to prevent leaking, and new roofing at the high school, middle school, and Gordon Elementary. Projects needed in the future to reduce risk include possible dirt work to improve drainage and minimize melted snow on sidewalks turning into ice.

Tornadoes and High Winds

Tornadoes and high winds have the potential to cause extensive or catastrophic damage to property and can endanger the lives of students and staff. Past impacts include damaged buildings, sheet metal, and roofs from high winds. Buses have also been prevented from travel during periods of high winds, resulting in school delay and/or cancellation. The largest concerns for this hazard include damage to siding, roofs, and windows, as well as transportation issues and power outages. Projects needed in the future include potential replacement of siding and/or metal sheeting to better withstand high winds.

New Mitigation and Strategic Actions

Action	Infrastructure Hardening
Description & Location	Harden critical facilities to withstand high winds, hail, heavy snow, etc. by: hardening roofs, hail resistant barriers to HVAC systems, shatter-proofing windows, building tie-downs and anchors, flood walls, and other architectural designs that reduce damage. --A higher rated roof is needed at Gordon-Rushville Middle School.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Wind
Estimated Cost	$200,000
Local Funding	Depreciation Fund, Special Building Fund
Timeline	2-5 Years
Priority	High
Lead Agency	School Administration
Status	Planning stage

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and school facilities
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000 per generator
Local Funding	School Funds
Timeline	5+ Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Action	Elevate Utilities and Critical Systems
Description & Location	Elevate utilities and critical systems to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	School funds, Community taxes
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps, and environmental education, increase student and staff awareness of natural and manmade hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$3,000+
Local Funding	School Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	In progress

Fire District Profile

Hay Springs Fire District

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Fire District	Round 1 Meeting	Round 2 Meeting
Everette Langford	Representative	Hay Springs Fire District	Recording	Recording

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Fire Chief will review and update this participant profile outside of the five-year update. The Hay Springs Fire District will review the plan annually, and the public will be notified via social media.

Demographics

Fire districts do not collect demographic information of their population, nor does the U.S. Census Bureau recognize fire districts as a distinct unit. As a result, there is no demographic data generated specifically for each fire district. For information regarding population data, please refer to *Section 3 and Appendix C*. The fire district serves approximately 1,000 people

Capability Assessment

Due to the unique structure of fire districts, the typical capability assessment table was not used. The following table summarizes the fire district's response vehicles, special teams, and special equipment. In addition, the fire district can utilize mutual aid, county, and state resources if needed during large-scale events.

Response Vehicles, Special Teams, and Special Equipment

Participating Fire District	Aerial	Pumper	Tanker	Pumper / Tanker	Grass-Weed Truck	Utility Truck	Rescue Units	Special Teams	Special Equipment
Hay Springs Fire District	-	1	2	1	3	1	2	-	1

Mutual Aid Agreements

Participating Fire District	Mutual Aid Partnerships
Hay Springs Fire District	Rushville, Gordon, Chadron, Alliance, Hemingford, Merriman, Pine Ridge, Crawford, Harrison

Plans and Studies

County Local Emergency Operations Plans (2023)

The County Local Emergency Operations Plans (LEOPs) for Dawes and Sheridan Counties establish standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. They contain information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. These plans are updated every five years. The hazard mitigation plan has not been integrated with these plans.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Standard Operating Procedures

The standard operating procedures outline the department's response to a variety of different calls that could be received. These procedures are unlikely to be further integrated with the hazard mitigation plan as they deal directly with response efforts.

Future Development Trends

In the past five years, fire truck refill locations have been established. No large developments are expected in the next five years.

Community Lifelines

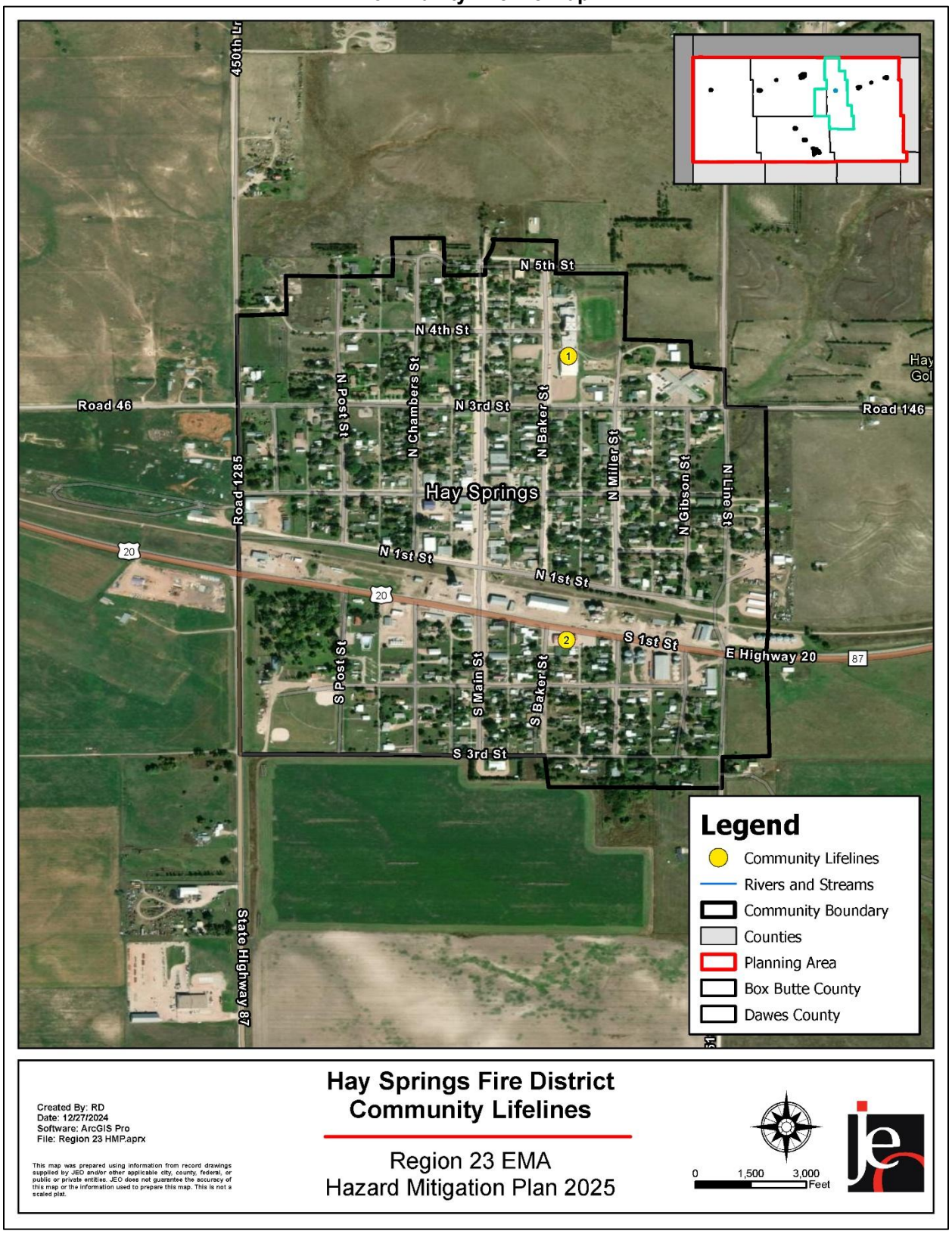
As listed in the tables below, the fire district identified community lifelines that are vital for disaster response and essential for returning the districts' functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Hydration, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Lister Sage Community Center	Food, Hydration, Shelter		N
2	Hay Springs Fire Hall	Safety and Security		N

Community Lifeline Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning teams prioritized specific hazards of top concern for the fire districts which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by each fire district. Based on this analysis, the local planning teams determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfire

The district has identified grass/wildfires as a top concern. In 2012, there was a massive wildfire event that damaged many fences, farm buildings, pastures, and crops. This is a top concern for the district because combating this hazard requires more manpower and resources than the district currently has. The district has continued to educate residents on ownership of land and how to prepare for grass/wildfires. They also provided education on the thinning of timber and brush.

Severe Winter Storms

Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. In April 2022, the district experienced a massive winter storm that shut down highways for several days which led to people being stranded. This hazard is a top concern for the district because of the importance of the roadways. The county has bought snowplows to combat this hazard, but more resources are needed for the future.

Tornadoes and High Winds

There was a major tornado event in the 1990s and severe windstorms that caused damage to many buildings and trees. This hazard is a top priority for the district because of the amount of damage these hazards caused, the manpower needed for cleanup, and the lack of equipment in combating these events. The district has dedicated resources and manpower to clean up areas around the town to limit items that can blow over and damage properties during storm events.

New Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+
Local Funding	Fire District Budget
Timeline	2-5 Years
Priority	Low
Lead Agency	Hay Springs Fire District
Status	Not Started

Action	Elevate Utilities and Critical Equipment
Description & Location	Elevate utilities and critical equipment to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	Fire District Budget
Timeline	5+ Years
Priority	Low
Lead Agency	Hay Springs Fire District
Status	Not started

Fire District Profile

Hemingford Fire District

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Fire District	Round 1 Meeting	Round 2 Meeting
Jim Keegan	Captain	Hemingford Fire District	Attended	Attended
Shad Bryner	Fire Chief	Hemingford Fire District	Attended	Attended

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Fire Chief, Assistant Chief, Fire Captains, and other members will review and update this profile outside of the five-year update. The district will review the plan bi-annually, and the public will be notified via social media and board meetings.

Demographics

Fire districts do not collect demographic information of their population, nor does the U.S. Census Bureau recognize fire districts as a distinct unit. As a result, there is no demographic data generated specifically for each fire district. For information regarding population data, please refer to *Section 3 and Appendix C*. The fire district serves approximately 2,000 people

Capability Assessment

Due to the unique structure of fire districts, the typical capability assessment table was not used. The following table summarizes the fire district's response vehicles, special teams, and special equipment. In addition, the fire district can utilize mutual aid, county, and state resources if needed during large-scale events.

Response Vehicles, Special Teams, and Special Equipment

Participating Fire District	Aerial	Pumper	Tanker	Pumper / Tanker	Grass-Weed Truck	Utility Truck	Rescue Units	Special Teams	Special Equipment
Hemingford Fire District	-	2	3	-	3	2	2	-	-

Mutual Aid Agreements

Participating Fire District	Mutual Aid Partnerships
Hemingford Fire District	Pine Ridge Mutual Aid, Scottsbluff Co. Mutual Aid

Plans and Studies

County Local Emergency Operations Plans (2023)

The County Local Emergency Operations Plans (LEOPs) for Box Butte, Dawes, and Sioux Counties establish standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. They contain information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. These plans are updated every five years. The hazard mitigation plan has not been integrated with these plans.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Standard Operating Procedures

The standard operating procedures outline the department's response to a variety of different calls that could be received. These procedures are unlikely to be further integrated with the hazard mitigation plan as they deal directly with response efforts.

Future Development Trends

Over the past five years, the fire district has updated some apparatuses, added an apparatus, and added equipment to those apparatuses. In the future, the fire district plans to upgrade and add apparatuses as they can, as well as add more equipment.

Community Lifelines

As listed in the tables below, the fire district identified community lifelines that are vital for disaster response and essential for returning the districts' functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Hydration, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Hemingford Vol. Fire Dept	Safety and Security	G	N
2	Water Tower/Repeater	Water Systems	G	N
3	Water Wells*	Water Systems		N

*Not displayed on map

Community Lifeline Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning teams prioritized specific hazards of top concern for the fire districts which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by each fire district. Based on this analysis, the local planning teams determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

The local planning team identified grass/wildfire as a significant threat for the district. According to the Nebraska Forestry Department there were 61 reported fires by the Hemingford Fire Department from 2000 to 2023 which consumed a total of 572 acres. In 2021, Hemingford experienced several grass fires that all burnt into one large fire with large losses to pastureland and fences. In 2019, there were two fire instances with high winds—one was a structure fire that started a wildland fire, and the other was a wildland fire that started during the first fire. Wildland fires are the highest frequency call the district has, being a large rural district has led to longer times to reach fires. Manpower has also been a challenge as the fire department is volunteer led. The district has partnered with mutual aid organizations. At times, the district relies heavily on the mutual aid partnerships to get the number of resources needed to combat fires. To reduce the wildfire risks, the district has updated some equipment and added additional equipment. They continue to train more people as they can.

Hazardous Materials Release

The district has identified hazardous materials release as a major concern. In 2019, Co-op has a large release of fertilizer, and the district has responded to numerous calls for natural gas and propane leaks, as well as sulfur fires at a fertilizer plant. They have also responded to vehicle accidents that have had hazardous materials, like propane, gun powder, agricultural chemicals, and fuels. The district has continued to train for hazardous material calls frequently. With BNSF, highway systems, and several agricultural facilities in the district, there are a lot of hazardous materials frequently being transported. The district has had five district members complete certifications for training for hazardous materials operations and have updated their hazardous monitors.

Severe Winter Storms

The district experiences severe winter storms annually that impact travel and power lines. In 2020, there was a series of severe winter storms that closed many roads through the district. This year, the fire department has had to utilize county road equipment to get to medical calls. When severe winter storms occur, there is major potential for power disruption and isolation due to closed/inaccessible roads. Trying to get to an emergency can be time consuming and challenging. Also, power disruption can affect citizens who are on oxygen and may lead to challenges in getting supplies. The district has worked with road departments for assistance in addressing this hazard.

Tornadoes and High Winds

The district identifies tornadoes and high winds as a major risk annually. Much of the concern with these events is the loss of power. With that loss of power, there is concern with people who need medical devices and assistance. There is also the potential for fires with down power lines. In 2020, the district experienced a major tornado in a rural area that caused damage to trees and powerlines. The district plans to continue training and awareness on this hazard in the future.

New Mitigation and Strategic Actions

Action	Alert/Warning Sirens
Description & Location	Perform an evaluation of existing alert sirens in order to determine which sirens should be replaced or upgraded. Install new sirens where lacking. The alert siren in Hemingford is aging and it is unknown how long the equipment has been in use. It also utilizes underground copper lines for communication that are owned by the telephone company, they switched over to fiber optic lines now. As the copper lines get older as well that could cause a problem.
Hazard(s) Addressed	Severe Thunderstorms, Tornadoes and High Winds
Estimated Cost	$50,000
Local Funding	Village of Hemingford
Timeline	2-5 Years
Priority	Medium
Lead Agency	Hemingford Fire District
Status	Not started.

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+ per generator
Local Funding	Fire District Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Hemingford Fire District
Status	Not started

Action	Elevate Utilities and Critical Equipment
Description & Location	Elevate utilities & critical equipment to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	Fire District Budget
Timeline	5+ Years
Priority	Low
Lead Agency	Hay Springs Fire District
Status	Not started

Action	Training Exercise – Hazardous Material Release
Description & Location	Conduct training exercises for personnel to respond to a hazard material release.
Hazard(s) Addressed	Hazardous Materials Release
Estimated Cost	$2,000+
Local Funding	Fire District Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Hemingford Fire District
Status	In progress

School District Profile

Hemingford Public Schools

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Eric Arneson	Principal	Hemingford Public Schools	Yes	Recording
Jim Miles	Maintenance	Hemingford Public Schools	Yes	-
Dr. Travis Miller	Superintendent	Hemingford Public Schools	-	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

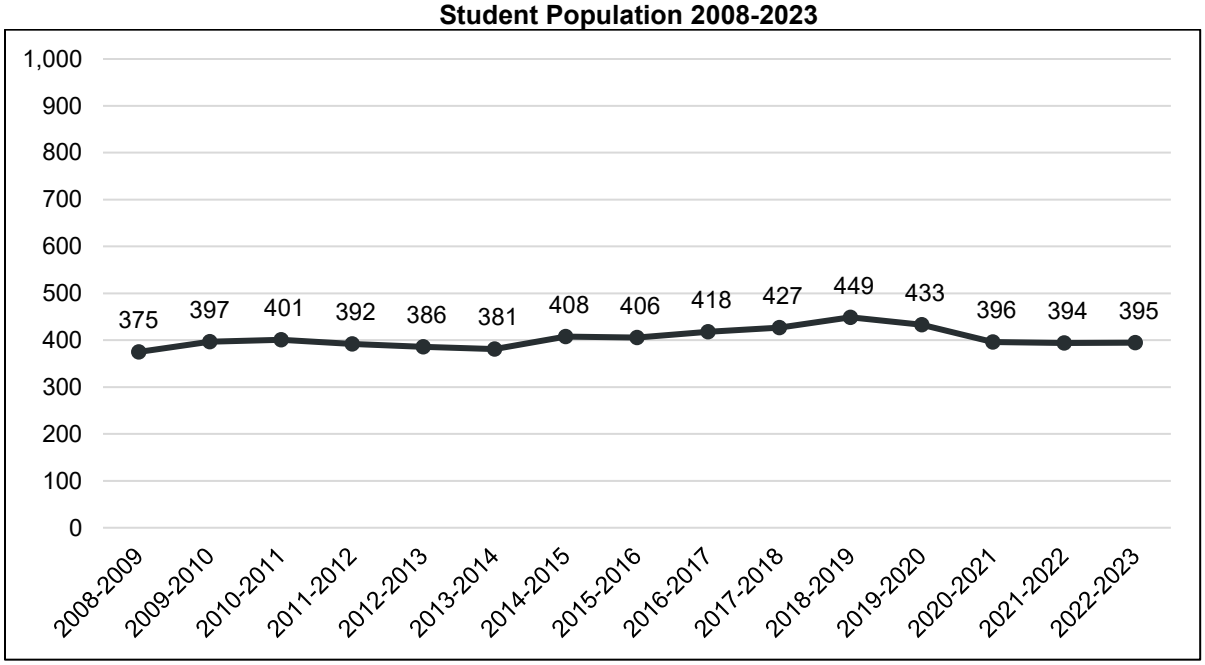
The Superintendent, Principal, and Head of Maintenance will review and update the profile outside of the five-year update. The district will review the plan bi-annually, and the public will be notified via social media and website updates.

Demographics

The following figure displays the historical student population trend starting with the 2008-2009 school year and ending with the 2022-2023 year. It indicates that the student population has generally declined since 2018. There are 395 students enrolled in the district.[4] A declining student population can mean there is a decreasing tax revenue for the school district, which could make implementation of mitigation projects more fiscally challenging. The school district anticipates little change to slight decrease to the student population within the next five years. All students utilize English as their primary language.

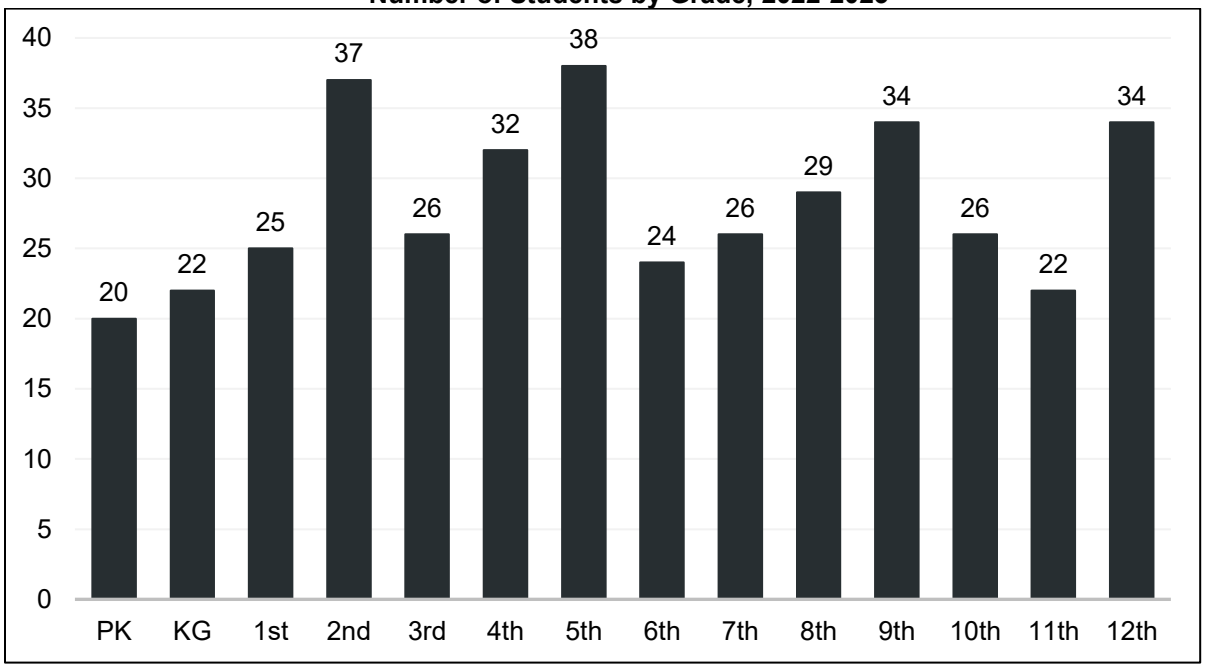
4 Nebraska Department of Education. July 2024. “Nebraska Education Profile.” https://nep.education.ne.gov/.

Student Population 2008-2023



Source: Nebraska Department of Education

Number of Students by Grade, 2022-2023



Source: Nebraska Department of Education

The figure above indicates that the largest number of students are in the 5th and 2nd grades. The lowest population of students are in Pre-K, Kindergarten and 11th grades. According to the Nebraska Department of Education (NDE), 35% of students receive either free or reduced priced meals at school. This is lower than the state average of 50%. Additionally, 18% of students are in the Special Education Program. The district has a 2% mobility rate, while the number of English Language Learners is unavailable. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Student Statistics, 2022-2023

	School District	State of Nebraska
Free/Reduced Priced Meals	35%	50%
School Mobility Rate	2%	4%
English Language Learners	N/A	8%
Special Education Students	18%	16%

Source: Nebraska Department of Education

Capability Assessment

The planning team assessed Hemingford Public School's hazard mitigation capabilities by reviewing the district's planning capability, administration and technical capability, fiscal capability, education and outreach capability, drills, and overall capability. The district utilizes and practices a Standard Response Protocol multiple times annually to train staff for any potential hazards or threats. Parents and community members are kept informed through newsletters that contain a series of flyers and explanations of drills. The school district has also partnered with the county sheriff for lockdown drills, and the local fire department for fire drills and fire prevention seminars.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning Capability	Facility Improvements Plan	In Progress
	Continuity of Operations Plan	Yes
	Crisis Response Plan	Yes
	Strategic Plan	Yes
	Other (if any)	
Administration & Technical Capability	Grant Manager	Yes
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	Applied for Grants in the Past	Yes
	Awarded Grants in the Past	Yes
	Authority to Levy Taxes for Specific Purposes Such as Mitigation Projects	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved Bonds in the Past	Yes
	Flood Insurance	No
	Other (if any)	
Education & Outreach Capability	Natural Disaster or Safety Related School Programs	No
	Hazard Education or Information Program	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 / year
	Tornado	2 / year
	Intruder	1 / year
	Bus evacuation	2 / year
	Evacuation	10 / year
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

Hemingford Public Schools has multiple planning documents that discuss or relate to hazard mitigation. The plans are listed below along with a short description of how they are integrated with the hazard mitigation plan or how they contain hazard mitigation principles. When the school district updates these or other planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Emergency Operations Plan (2024)

The purpose of the Emergency Operations Plan is to identify and respond to incidents by outlining the responsibilities and duties of Hemingford Public Schools and its employees. It outlines the expectations of staff, roles and responsibilities, direction and control systems, internal and external communications, training and sustainability, common and specialized procedures, and response to specific hazards and vulnerabilities. High priority hazards discussed in the plan include severe storms, fire, chemical, intruder, and terrorism. A crisis response plan and continuity of operations plan are also included in this document. The Emergency Operations Plan has not been integrated with the hazard mitigation plan. All staff are aware of the plan, and it gets reviewed and updated as needed.

Facility Improvements Plan (2024)

Hemingford Public School's facility improvements plan outlines projects to be undertaken at school owned facilities and buildings. Projects include a description of the work to be completed, a rough cost estimate if available, and a timeline of when the project will likely be completed. The facility improvements plan is regularly updated.

Strategic Plan (2022)

The strategic plan for the school district outlines goals and objectives for the next several years. Included in these goals and objectives is keeping students and staff safe during hazardous events. This plan is updated and reviewed prior to each school year. It has not been integrated with the hazard mitigation plan.

Future Development Trends

The school district has continually worked to upgrade the safety measures of their facilities. Within the last five years, security vestibules and electronic door access have been added to the school building. The district is also preparing a bond proposal for a school addition and remodeling. One area of concern is continual staffing changes and keeping this staff up to date on training.

Community Lifelines

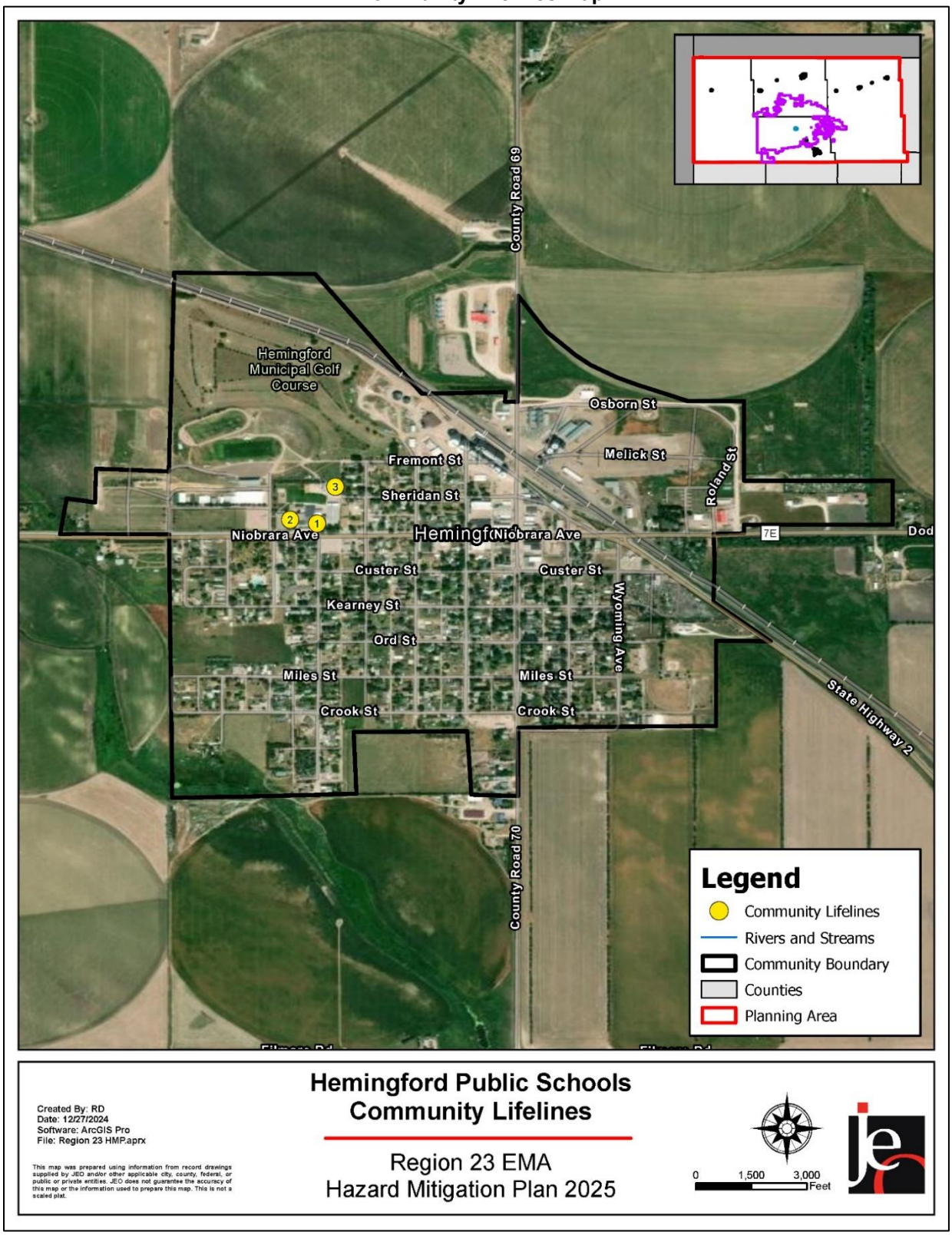
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Hemingford Elementary	Other	S	N
2	Hemingford High School	Other	S	N
3	Maintenance Building/ Ag Shop	Other	S	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Hemingford Public Schools which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Hemingford Public Schools. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Extreme Temperatures

In the past, the school district has observed multiple instances in which extreme temperatures mandated the cancellation of school activities. These temperatures pose a risk to students and staff, as transportation vehicles can be affected, creating the potential for commuters to be stranded in frigid temperatures. The district also does not have access to emergency generators. This creates the possibility of students and staff being stranded within school facilities without heat. The school district has arranged for special fuel to be used in transportation vehicles to mitigate the risk of buses breaking down, however this requires fuel trucks to deliver the product to the site. A fuel storage tank would allow cold weather fuel to be stored permanently, eliminating the need for a special order of the fuel truck.

Flooding

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

Grass/Wildfires

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

Hazard Materials Release

The district notes that they have not had direct issues with the release of hazardous materials, but that they are within close proximity to a federal highway, a high-usage rail line, and chemical storage facilities. They have identified on their emergency evacuation and shelter maps where to shelter in the case of a hazmat emergency. To mitigate the impact of hazardous materials, the district would need additional locations for hazmat shelters, training about how to seal doorways and windows, and potentially different HVAC systems.

Human Infectious Disease

During the COVID-19 pandemic, the district was impacted severely, as they were not allowed to have school by instruction from the state. Once they were allowed to have school again, instruction was impacted due to students missing and impacting their classmates. This is a top concern as the district works with people almost exclusively. They note that if they are not allowed to have school, instructing students is very challenging. The district has provided access to technology devices to students where they can do virtual learning. To reduce risk to the district, the internet would need to be fast enough for video chatting and cheap enough for families to afford access. They note that they are limited as they do not have control over households that do not have reliable internet access. They are able to provide Wi-Fi at school, but because of them being within a rural area, it would be a great hardship for some families to travel to town to access the internet.

Severe Thunderstorms

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

Severe Winter Storms

Severe winter storms include snow, ice accumulation, blizzards, and other winter weather. They can cause power outages from downed power lines, damage to buildings or school vehicles, hinder transportation, and risk injuries for students and staff. The school experiences closures due to winter weather annually. In the case of school closures, the district uses Remind, Facebook, and Twitter to share information, and will typically cancel any school activities if the weather is extreme. Past winter storms have also caused roof damage and concrete heaving. The district has identified the need for emergency generators in the event of a loss of power due to severe weather events.

Terrorism and Cyber Attacks

Although there have not been any major disruptions due to terrorism or cyber-attacks, the district has still identified this hazard as a top concern for the future. More of the teaching and learning are done online. If there was a major outage either to the internet or services, it would have substantial impacts on daily activities. The district has tried to have equipment that would mitigate the risk of outside attackers getting into their systems but note that they cannot control internet access or outside systems. Many of the district's documents are stored on servers off campus and outside of their control. They have backups of information stored on these servers.

Tornadoes and High Winds

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

or tornado events have occurred which have directly damaged or endangered school district properties.

New Mitigation and Strategic Actions

Action	Internet Access Points
Description & Location	Provide cellular Wi-Fi access points for students who require internet connectivity.
Hazard(s) Addressed	Human Infectious Disease
Estimated Cost	$12,000
Local Funding	General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

Action	Flood Control Measures
Description & Location	Perform flood control measures and acquire sandbags for diverting water during flood events.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000
Local Funding	General Fund, Building Funds
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

Action	Digital Data Protection
Description & Location	Firewall to prevent cyber-attacks on our local server. Most of district's data is stored on off-site 3rd party servers.
Hazard(s) Addressed	Terrorism and Cyber Attack
Estimated Cost	$19,500
Local Funding	General Fund, Building Funds
Timeline	1 Year
Priority	High
Lead Agency	School Administration
Status	In Progress

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps, and environmental education, increase student and staff awareness of natural and manmade hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$3,000+
Local Funding	School Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	In progress

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and school facilities.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+ per generators
Local Funding	General Fund, Building Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Action	Safe Rooms/Storm Shelters
Description & Location	Design and construct storm shelters or safe rooms in school facilities.
Hazard(s) Addressed	High Winds and Tornadoes, Severe Thunderstorms, Severe Winter Storms, Hazard Materials Release
Estimated Cost	$250-$300/sf
Local Funding	General Fund, Building Funds
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

EMA Profile

Region 23 Emergency Management Agency

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Nan Gould	Coordinator	Region 23	Attended	Attended
Brett Ditsch	Commissioner	Box Butte County	-	-
James Krotz	Commissioner	Sheridan County	Attended	Attended
Jake Stewart	Commissioner	Dawes County	Attended	-
JW Geiser	Commissioner	Sioux County	-	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Emergency Manager will review and update this participant profile outside of the five-year update. Region 23 EMA will review the plan bi-annually, and the public will be notified in conjunction with LEPC meetings.

Capability Assessment

Region 23 Emergency Management Agency has the authority to issue general obligation bonds to finance certain projects. The Agency also regularly engages in public education and information programs related to hazard mitigation in the area, and routinely works with other counties, cities, and villages within their jurisdictional boundaries. Due to the unique structure of the Emergency Management Agency (EMA), the typical capability assessment table was not used. The following table summarizes the EMA's overall capabilities.

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	High
Time to Devote to Hazard Mitigation	Moderate
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

Region 23 has several plans which emphasize hazard mitigation efforts across the district. The Region assists with the development of emergency plans for each community and utilizes the HMP as a resource in the plan update process. Region 23 leads the development and update process for county Local Emergency Operation Plans (LEOPs). LEOPs identify roles and responsibilities of emergency responders and describe hazards of concern for the area.

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

Future Development Trends

In the last five years, new outdoor warning systems have been installed in Crawford and Whitney. New generators were installed at Dawes County Courthouse and Harrison Fire Department. No new structures have been developed in the floodplain or other hazardous areas. The region plans to continue replacing old outdoor warning sirens as needed and install generators as appropriate.

Community Lifelines

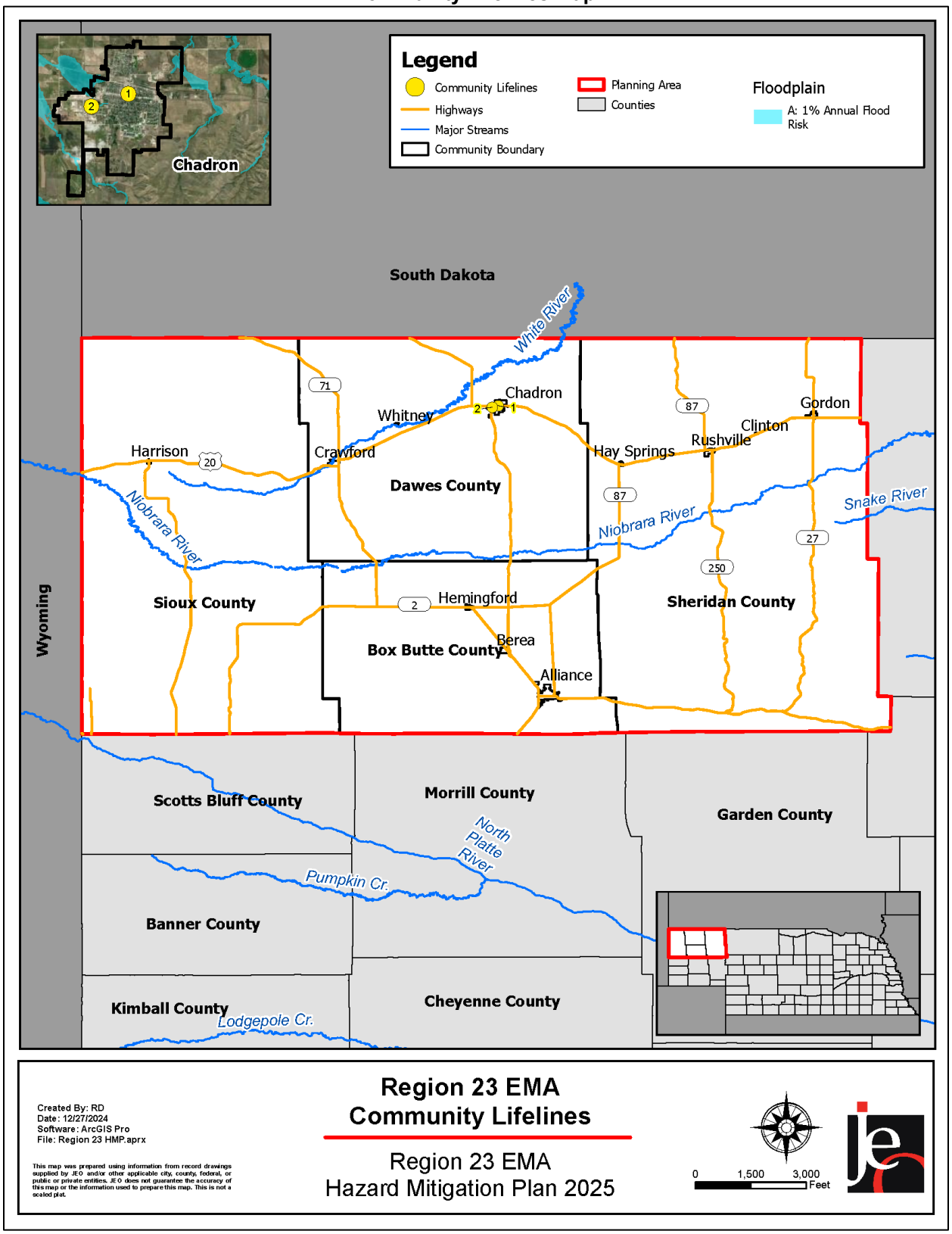
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Region 23 EMA Office	Safety and Security	S	N
2	Chadron VFD Training Building	Safety and Security	S	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Region 23 which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the EMA. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

Wildfire is the top hazard of concern for the planning area and for the Region 23 EMA. As defined in the Pine Ridge Community Wildfire Protection Plan (CWPP), the entire four-county region is located within the WUI. The Pine Ridge Area in the northern portion of the district is a top concern for wildfire events due to high potential fuel load and rural area, while grass fires are of concern for private property. There have been 1,748 wildfire events reported in the Pine Ridge CWPP area by the Nebraska Forest Service. These wildfire events have burned nearly 400,000 acres and caused significant damage to agricultural land, recreation sites, and local infrastructure. The NFS reported $232,397 in crop damage. A postfire southwest of Crawford occurred in 2021 consuming approximately 5400 acres, resulting in a State Disaster Declaration.

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

Severe Thunderstorms

Severe thunderstorms are a common occurrence across the entire district. Heavy rain, thunderstorm wind, lightning, and hail are all associated with severe thunderstorms. Hail events cause the majority of damage to infrastructure and crops. According to NCEI, severe thunderstorm property damages have exceeded $4.9 million and crop damages have exceeded $1.8 million in the region. Hail can cause up to 100% crop loss for local producers which directly impacts the local economy and tax base of the EMA. Region 23 actively shares and promotes education efforts and information from the National Weather Service for severe storms, general safety information, and school materials. Many communities across the district are transitioning to hail resistant roofing, including Chadron where the EMA is located. All four counties in the planning area participate in the NWS Storm Ready program, which the EMA provides support and guidance as needed.

Severe Winter Storms

Severe winter storms are a hazard of top concern as they occur annually and have a high potential of significant damages. Severe winter storms in the planning area are commonly associated with heavy snowfall, extreme cold temperatures, and high winds. A blizzard in 2009 caused over $70,000 in property damages and occurred during calving season, significantly impacting the local agricultural community and economy. A blizzard in 2022 resulted in more than 25 inches of snow in the region causing disruptions to travel, emergency response, and power outages throughout

the region for several days and resulted in a State Disaster Declaration. Specific concerns also exist for road and bridge damage, blocked transportation routes, and springtime flooding from melting snowpack. Region 23 assists local emergency responders to coordinate resources and response. The region plans to continue outreach activities using CodeRed Emergency Notification system and other available media outlets.

Tornadoes and High Winds

Due to the location of the district within the high plains, straight-line and high wind events are the largest concern for the district. Damage from high wind events primarily impacts power lines and trees and windbreaks. Winds up to 60 mph are common across the region. The Nebraska Rural Public Power District provides power to the region. The district actively repairs and reinforces power line infrastructure throughout the region and works with the EMA to manage power outages. High wind events have caused over $129,000 in property damage and $25,000 in damage to crops in the four-county district. The most significant tornado events included two EF2 tornadoes in 2016 and 2017 and an EF0 in 2017 which caused $1,000,000 in damage and knocked over 65 train cars south of Alliance. The region is served by NPPD, NWRPPD, PREMA, and Niobrara Electric Association. In April 2024 there was a winter storm, along with excessive straight-line winds causing widespread power pole damages, power outages, and travel disruptions, resulting in a Federal Disaster Declaration. The region plans to assist local jurisdiction to obtain grant funding to replace outdated siren systems.

Continued Mitigation and Strategic Actions

Action	Alert/Warning Sirens
Description & Location	Reduce the risk of death/injury associated with severe weather promoting awareness, and ensures people take shelter when needed.
Hazard(s) Addressed	High Winds and Tornadoes, Severe Thunderstorms, Severe Winter Storms
Estimated Cost	$5,000+ per siren, varies by scope
Local Funding	General Fund, local match from communities pursuing projects
Timeline	2-5 Years
Priority	Medium
Lead Agency	Individual jurisdictions, Region 23 Emergency Management
Status	City of Chadron is currently seeking funding for siren system replacement. Siren projects were completed in Crawford and Whitney in the last five years.

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+
Local Funding	General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Region 23 Emergency Management
Status	Not Started

Action	Comprehensive Disaster/Emergency Response/Rescue Plan
Description & Location	Update comprehensive city/village disaster and emergency response /rescue plan. Assist communities in updating plans.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	Staff Time
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Region 23 Emergency Management
Status	In progress

Action	Education/Awareness Outreach Regarding Severe Thunderstorms and Severe Winter Storms
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education, increase public awareness of severe thunderstorms and severe winter storms.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms
Estimated Cost	$500+
Local Funding	General Fund
Timeline	2--5 Years
Priority	Medium
Lead Agency	Region 23 Emergency Management
Status	In progress

Action	Elevate and/or Harden Utilities and Critical Equipment
Description & Location	Elevate and/or harden critical equipment to mitigate potential flooding impacts at Emergency Operations Center and other potential locations. This can include elevating or hardening HVAC units, data storage, fuel tanks, or electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	Region 23 Emergency Management
Status	Not started

Action	Hazardous Fuels Reduction
Description & Location	The Nebraska Forest Service (NFS) Forest Fuels Reduction Program creates strategically located corridors of thinned forests across the landscape reduces fire intensity, improves fire suppression effectiveness, increases firefighters' safety, and better protects lives and property.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	Varies by scale
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Nebraska Forest Service, Region 23 Emergency Management
Status	In progress

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education, increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchase equipment such as overhead projectors and laptops.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	General Fund
Timeline	2--5 Years
Priority	Medium
Lead Agency	Region 23 Emergency Management
Status	In progress

NRD Profile

Upper Niobrara White NRD

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Lynn Webster	Assistant Manager	Upper Niobrara White NRD	-	-
Patrick O'Brien	General Manager	Upper Niobrara White NRD	Recording	Recording

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The General Manager and Assistant manager will review and update this participant profile outside of the five-year update. The NRD will review the plan annually, and the public will be notified via board meetings.

Capability Assessment

The NRD has the authority to levy taxes for specific purposes and to issue general obligation bonds to finance certain projects. The NRD also regularly engages in public education and information programs related to hazard mitigation in the area, and routinely works with other counties, cities, and villages within their jurisdictional boundaries. Due to the unique structure of the NRD, the typical capability assessment table was not used. The following table summarizes the district's overall capabilities.

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

The Upper Niobrara White NRD has both a comprehensive plan and an annual long-range plan of operation. These documents discuss flood control, sediment management, and forest management. The NRD is also a stakeholder in the Local Emergency Operations Plans for Box Butte, Dawes, Sheridan, and Sioux Counties, as well as a stakeholder in the Pine Ridge Area Community Wildfire Protection Plan. These planning documents discuss or relate to hazard mitigation. Plans are listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the NRD updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

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

The NRD developed an Integrated Water Management Plan in May 2009, which was then updated in 2011. The goals of the plan include minimizing ground water depletions and having a sustained aquifer. The IMP was created for the portion of the district deemed fully appropriated by NeDNR. Currently the district and NeDNR are developing a Voluntary IMP for portions of the district that are not fully appropriated.

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

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

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

County Local Emergency Operations Plans (2023)

The County Local Emergency Operations Plans (LEOPs) for Box Butte, Dawes, Sheridan, and Sioux Counties establish standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. They contain information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. These plans are updated every five years. The hazard mitigation plan has not been integrated with these plans.

Future Development Trends

Over the past five years, damaged roads and structures have been repaired. Two water shed structures were repaired due to 2019 flood damage. A watershed and flood prevention operation plan is being finalized for Box Butte creek in 2026.

Community Lifelines

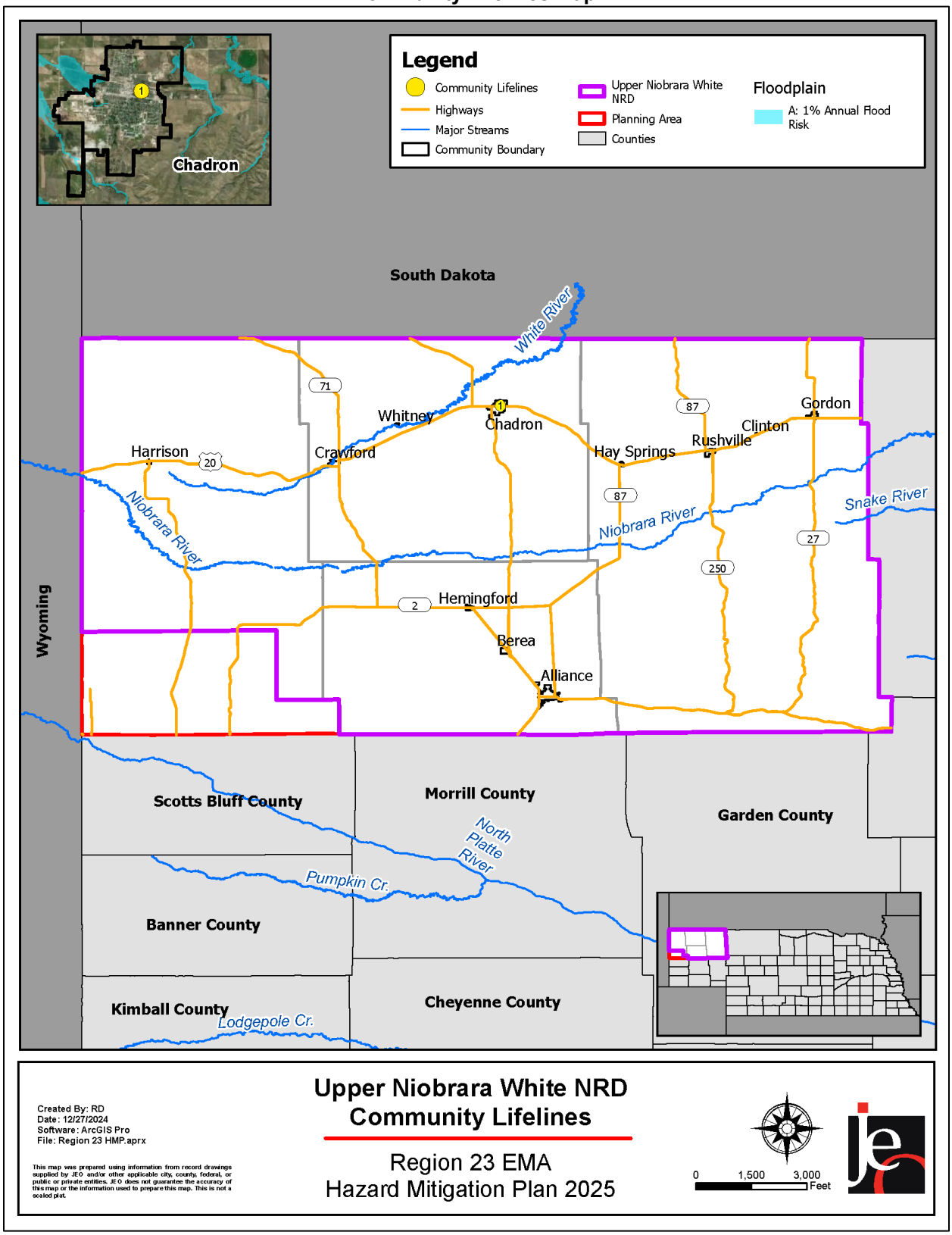
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Upper Niobrara White NRD Office	Other	S	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for the NRD which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the NRD. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Dam Failure

The NRD has identified dam failure as a major concern because of the importance of dams in protecting critical infrastructures. According to the Nebraska Dam Inventory, there are a total of 166 dams located within the NRD boundaries, with classifications ranging from minimal to high hazard.[5] The figure on the next page maps the location of these dams within the NRD.

Dams in the NRD

County	Minimal Hazard	Low Hazard	Significant Hazard	High Hazard
Box Butte	5	5	0	0
Dawes	11	42	3	1
Sheridan	2	21	3	2
Sioux	15	52	3	1
Total	**33**	**120**	**9**	**4**

Source: NeDNR

Dams classified with high hazard potential require the creation of an Emergency Action Plan (EAP). The EAP defines responsibilities and provides procedures designed to identify unusual and unlikely conditions which may endanger the structural integrity of the dam within sufficient time to take mitigating actions and to notify the appropriate emergency management officials of possible, impending, or actual failure of the dam. The EAP may also be used to provide notification when flood releases will create major flooding. An emergency can occur at any time; however, emergencies are more likely to happen when extreme conditions are present. There are four high hazard dams located within the NRD, two located in Sheridan County, one located in Dawes County, and one in Sioux County.

High Hazard Dams within the NRD

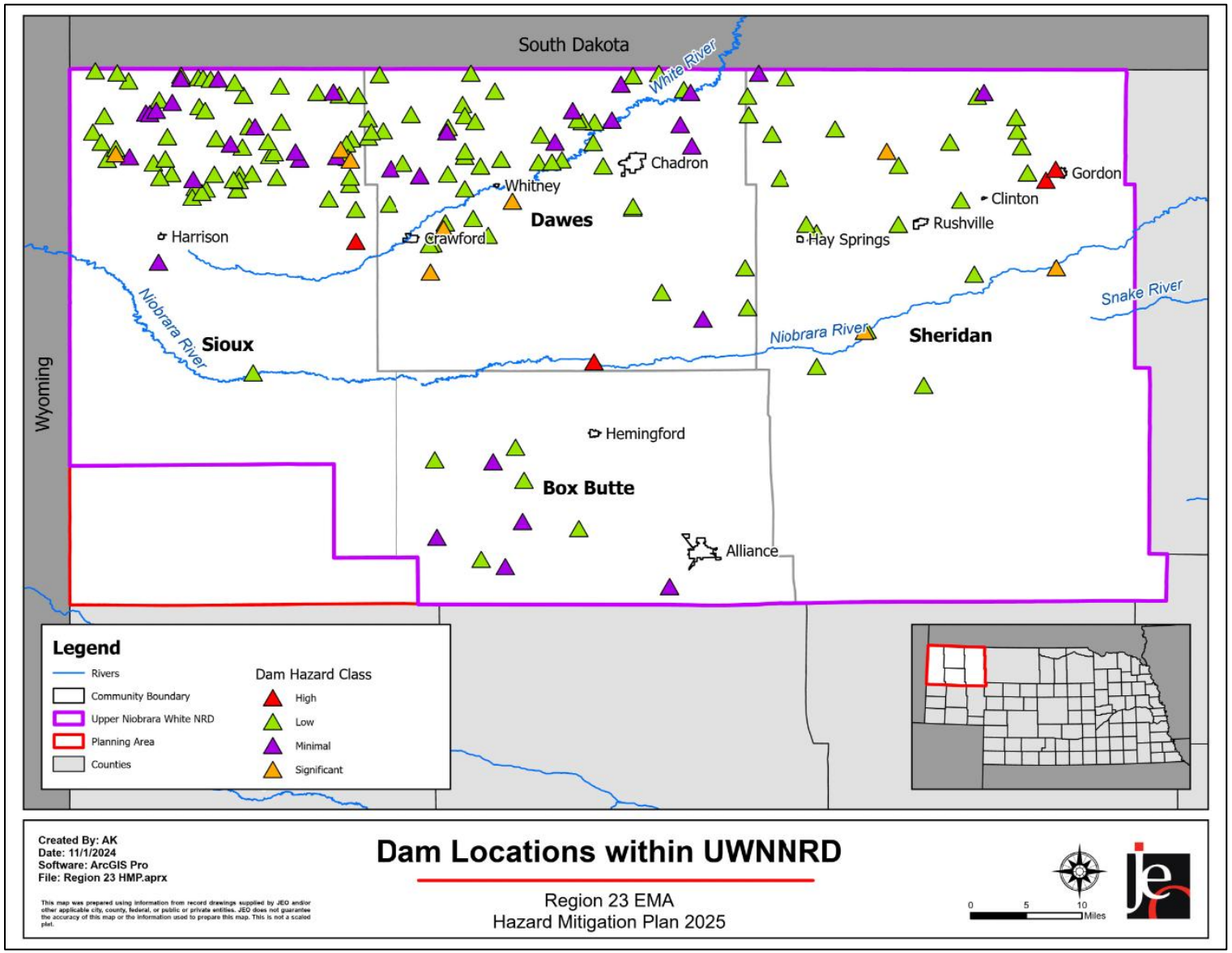
Dam Name	NID ID	Dam Height (Feet)	Max Storage (Acre Ft)	Last Inspection Rating
Box Butte Dam	NE01069	69	64,406	5/1/2024
Antelope Creek 20-A	NE00793	24	450	6/7/2023
Antelope Creek 40-B	NE00795	32	8,655	6/7/2023
Carter P Johnson Dam	NE01124	35	202	6/8/2023

Source: NeDNR

During 2019, two dams were damaged during spring flooding. The NRD worked to repair these dams. To reduce the risk of dam failure, the NRD would like to implement the WFPO plan.

[5] Nebraska Department of Natural Resources. May 2024. "Nebraska Dam Inventory". https://gis.ne.gov/portal/apps/webappviewer/index.html?id=2aab04a13817421992dc5398ad462e22.

Dam Locations in the NRD



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

Flooding
Flooding was identified as a hazard of concern due to its potential for property damage and risk to human safety. The district is located in a very rural area of the state with few roads interconnecting communities. Flooding events have the potential to wash out major transportation routes, delaying travel and access to emergency services for residents. Due to the topography of the district, flash flooding is a major concern. According to the NCEI, 23 flash flood events resulted in $22,000 in property damage within the four-county region, while 4 riverine flood events resulted in $0 in property damage in the planning area from 1996 to 2023. The total crop loss according to the RMA is $185,314 for the four-county region. No flood events reported damages to NRD owned properties.

Grass/Wildfires
The local planning team identified grass/wildfire as a significant threat for the district. According to the Nebraska Forestry Department there were 1,748 reported fires from 2000 to 2023 which consumed a total of 364,986 acres. The NRD identifies this hazard as a top concern because when vegetation is removed, the potential for wind and water erosion increases.

Severe Thunderstorms
Severe thunderstorms occur regularly across the planning area and the state. They often span large areas and often include hail, high winds, heavy rain, and lightning strikes which can cause significant damage to homes, businesses, facilities, trees, and agriculture across the district. The local planning team stated that severe storms occur annually, and major concerns exist over damage to crops and livestock or from localized flooding issues which can wash out transportation routes. The NCEI reports a total of 361 thunderstorm wind, 19 heavy rain, 5 lightning, and 1,150 hail events across the four-county area from 1996 to 2023. In total these events were responsible for $4,984,600 in property damage, and $125,197,236 in crop damage according to the USDA RMA. Eight injuries and no fatalities were reported in association with these storms.

Severe Winter Storms
The widespread nature of this hazard and the potential of significant damages make severe winter storms a hazard of top concern. Severe winter storms can include extreme cold, blizzards, ice storms, and general winter weather storms. The NCEI reported 413 severe winter storm events in the district's area between 1996 and 2023. These recorded events caused a total of $174,000 in reported property damage and $12,384,890 in crop damage. The following impacts are of concern from severe winter storms: power outages; injuries or fatalities to residents and travelers; cut off access to food, water, or fuel; blocked transportation routes; damage to sandhills topography from heavy snow; and economic loss due to winter weather impacts on livestock and agriculture.

Tornadoes and High Winds

High winds can cause widespread damages to crops, trees, infrastructure, and personal property and tornadoes are a concern due to their potential to cause catastrophic damage to property. The NCEI reported 192 high wind events and 77 tornadoes across the four-county area between 1996 and 2023. High winds are common across the entire planning area and often occur in conjunction with other hazards, such as severe thunderstorms and severe winter storms. The Upper Niobrara White NRD works with Region 23 to send CodeRed messages to residents during severe weather events.

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $40,000+ per generator
Local Funding	General Fund, BRIC, HMGP
Timeline	5+ Years
Priority	Low
Lead Agency	UNWNRD
Status	Not started

Action	Dam Engineering Analysis/Repairs and Reinforcement
Description & Location	Conduct a preliminary engineering analysis for dam repairs and reinforcement. Dams serve to provide flood protection to businesses and residents during large storm events. Improvements to existing dams will increase flood protection. The Emergency Action Plan, Dam Breach, Analysis, and/or inspection/ safety equipment training may need to be updated along with improvements.
Hazard(s) Addressed	Dam Failure, Flooding
Estimated Cost	$500,000
Local Funding	General Fund, BRIC, HMGP, USACE
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD, dam owners
Status	In progress

Action	Evaluate Flood Risk
Description & Location	Evaluate flood risk potential in watersheds throughout the district and identify potential projects to reduce flood risk via both structural and non-structural options.
Hazard(s) Addressed	Flooding
Estimated Cost	$660,0000
Local Funding	USDA-NRCS grant, General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD
Status	WFPO plan is in progress

Action	Fire Prevention Program
Description & Location	The Nebraska Forest Service Wildland Fire Protection Program provides services in wildfire suppression training, equipment, pre-suppression planning, wildfire preventions, and aerial fire suppression.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	Varies
Local Funding	General Fund, NFS
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD, Coordinator/Natural Resources Coordinator, NFS
Status	In progress

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$5,000
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD
Status	In progress

Action	Source Water Contingency Plan
Description & Location	Villages and cities can evaluate and locate new sources of groundwater to ensure adequate supplies to support the existing community and any additional growth which may occur. Also, identify develop water sources for fire protection.
Hazard(s) Addressed	Drought, Grass/Wildfire
Estimated Cost	$5,000
Local Funding	General Fund, BRIC, HMGP, CDBG, NDEE
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD, General Manager and Assistant Manager
Status	In progress

Removed Mitigation and Strategic Actions

Action	Expand Water Storage Capacity
Description & Location	Evaluate the need to expand water storage capacity to provide a safe water supply for the community and additional water for fire protection. Establish emergency water supplies such as dry hydrants and individual or community cisterns for defending structures from wildland fires.
Hazard(s) Addressed	Drought, Extreme Temperatures, Grass/Wildfire
Reason for Removal	Not a priority at this time.

Appendix A: Full Risk Assessment

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Hazard Mitigation Planning

The following table defines terms that will be used throughout the Full Risk Assessment Appendix.

Risk Assessment Definitions

Term	Definition
Hazard	A potential source of injury, death, or damages
Asset	People, structures, facilities, and systems that have value to the community
Risk	The potential for damages, loss, or other impacts created by the interaction of hazards and assets
Vulnerability	Susceptibility to injury, death, or damages to a specific hazard
Impact	The consequence or effect of a hazard on the community or assets
Historical Occurrence	The number of hazard events reported during a defined period of time
Extent	The strength or magnitude relative to a specific hazard
Historical Probability	Likelihood of a hazard occurring based on historical occurrences
Future Likelihood	The probability of a hazard occurring based on historical occurrences, climate change, and future development

Methodology

The risk assessment methodology utilized for this appendix follows the same methodology as outlined in the FEMA Local Mitigation Planning Handbook. This process consists of four primary steps: 1) Describe the hazard; 2) Identify vulnerable community assets; 3) Analyze risk; and 4) Summarize vulnerability.

When describing the hazard, this appendix will examine the following items: previous occurrences of the hazard within the planning area; locations where the hazard has occurred in the past or is likely to occur in the future; extent of past events and likely extent for future occurrences; and probability of future occurrences. While the identification of vulnerable assets will be conducted across the entire planning area, *Section Eight* will discuss jurisdictional-specific assets at risk for relevant hazards. Analysis for planning area risk will examine historic impacts and losses and what is possible should the hazard occur in the future. Risk analysis will include both qualitative (i.e., description of historic or potential impacts) and quantitative data (i.e., assigning values and measurements for potential loss of assets).

For each of the hazards profiled, the best and most current appropriate data available has been considered. Further discussion related to each hazard is discussed in the hazard profile portion of this appendix. Unless specifically stated otherwise, each hazard's extent scale(s) apply to all jurisdictions within the planning area.

Hazard Identification

The identification of relevant hazards for the planning area began with a review of the 2021 Nebraska State Hazard Mitigation Plan. The Regional Planning Team reviewed, discussed, and determined the list of hazards to be profiled in this hazard mitigation plan update. The hazards for which a risk assessment was completed are listed below.

Hazards Addressed in the Plan

Hazards Addressed in the Plan		
Animal & Plant Disease	Flooding	Severe Thunderstorms
Dam Failure	Grass/Wildfires	Severe Winter Storms
Drought	Hazardous Materials Release	Terrorism and Cyber Attack
Extreme Temperatures	Human Infectious Disease	Tornadoes & High Winds

FEMA Risk Assessment Requirements

Requirement §201.6(c)(2): Risk assessment. The plan shall include a risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.

Requirement §201.6(c)(2)(i): The risk assessment shall include a] description of the type … of all natural hazards that can affect the jurisdiction.

Requirement §201.6(c)(2)(i): The risk assessment shall include a] description of the … location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

Requirement §201.6(c)(2)(ii): The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community.

Requirement §201.6(c)(2)(ii): The risk assessment] must also address National Flood Insurance Program insured structures that have been repetitively damaged floods.

Requirement §201.6(c)(2)(ii)(A): The plan should describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area.

Requirement §201.6(c)(2)(iii): For multi-jurisdictional plans, the risk assessment must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

Average Annual Damages, Historical Probability, & Future Likelihood

Average Annual Damages

FEMA *Requirement §201.6(c)(2)(ii) (B)* suggests that when the appropriate data is available, hazard mitigation plans should also provide an estimate of potential dollar losses for structures in vulnerable areas. This risk assessment methodology includes an overview of assets at risk and provides historic average annual dollar losses for all hazards for which historic event data are available. Additional loss estimates are provided separately for those hazards for which sufficient data is available. These estimates can be found within the relevant hazard profiles.

Average annual losses from historical occurrences can be calculated for those hazards which there is a robust historic record and for which monetary damages are recorded. There are two main pieces of data used for this formula.

- **Total Damages in Dollars:** This is the total dollar amount of all property damages and crop damages as recorded in federal, state, and local data sources. The limitation to these

data sources is that dollar figures usually are estimates and often do not include all damages from every event, but only officially recorded damages from reported events.

- **Total Years of Record:** This is the span of years there is data available for recorded events.

An example of the Event Damage Estimate is found below:

$$\textbf{Annual Damages } (\$) = \frac{Total\ Damages\ in\ Dollars\ (\$)}{Total\ Years\ Recorded\ (\#)}$$

FEMA Standard Economic Values

As part of FEMA's Benefit-Cost Analysis Toolkit, standard economic values were developed to help better estimate the avoided loss of services when implementing a hazard mitigation project. These standard economic values can also be used to help estimate potential future economic impacts from a hazard event. The table below gives the economic value for traffic delays for roads and bridges, loss of electric services, loss of wastewater services, loss of potable water services, and loss of communications/IT services. The assumed damages do not consider physical damage to utility equipment and infrastructure but do consider the impact on economic activity and impact on residential customers. To learn more about how these values were calculated visit https://www.fema.gov/sites/default/files/documents/fema_standard-economic-values-methodology-report_092022.pdf.

FEMA Standard Economic Values

Service Lost	Economic Value
Traffic Delays on Roads and Bridges	$35.60/Vehicle/Hour
Loss of Electric Services	$182/Person/Day
Loss of Wastewater Services	$60/Person/Day
Loss of Potable Water Services	$116/Person/Day
Loss of Communications/IT Services	$130/Person/Day

Source: FEMA, 2022[1]

FEMA's standard economic values will not be used to determine average annual damages and average damage per event estimates for each hazard profile. Past hazard events do not list the total number of people or vehicles impacted, and thus it is impossible to retroactively calculate the total economic impact using these values. The values are provided in this plan so that participants can better estimate potential losses and determine the benefits of potential future mitigation actions.

Historical Probability

Historical probability can be calculated based on the total years of record and the total number of years in which an event occurred. It is important to note for this formula that the number of total events is not used because multiple events may take place in a single year. This would skew the historical probability higher than it actually is. An example of the historical probability estimate is found below:

$$\textbf{Historical Probability } (\%) = \frac{Total\ Years\ with\ an\ Event\ Occuring\ (\#)}{Total\ Years\ of\ Record\ (\#)}\ x\ 100$$

1 FEMA. September 2022. "Benefit-Cost Analysis Sustainment and Enhancement". https://www.fema.gov/sites/default/files/documents/fema_standard-economic-values-methodology-report_092022.pdf.

Future Likelihood

Future likelihood is the probability that a hazard will occur in the future. While historical probability tells us how often a hazard occurred in the past, it does not provide a full picture of what could happen in the future. Future conditions are likely to change the probability of hazard events. Climate change and future changes in development will bring changes probability, risk, and vulnerability. For this hazard mitigation plan historical probability, climate change, and future development will be taken into account when determining the future likelihood of a hazard event occurring. Because future conditions are difficult to quantify with percentages, future likelihood is broken down into the four categories below.

Very Unlikely = Hazard is expected to occur once every 50+ years.

Unlikely = Hazard is expected to occur once every 10+ to 50 years.

Likely = Hazard is expected to occur once every 5+ to 10 years.

Very Likely = Hazard is expected to occur once every 1 to 5 years.

Climate Adaptation

Long-term climate trends have shifted throughout the 21st century and have created significant changes in precipitation and temperature which have altered the severity and subsequent impacts from severe weather events. Changes in the regional climate can impact communities, residents, local economies, and infrastructure throughout the planning area.

The planning area is located in the Northern Great Plains Region of the United States, which includes Montana, Wyoming, North Dakota, South Dakota, and Nebraska. The Fifth National Climate Assessment has provided an overview of potential impacts within the Northern Great Plains Region.[2]

- **Climate Change is Compounding the Impacts of Extreme Events**: The Northern Great Plains region is experiencing unprecedented extremes related to changes in climate, including severe droughts, increases in hail frequency and size, floods, and wildfire. Rising temperatures across the region are expected to lead to increased evapotranspiration, as well as greater variability in precipitation.

- **Human and Ecological Health Face Rising Threats from Climate-Related Hazards:** Climate-related hazards, such as drought, wildfire, and flooding, are already harming the physical, mental, and spiritual health of Northern Great Plains region residents, as well as the ecology of the region. As the climate continues to change, it is expected to have increasing and cascading negative effects on human health and on the lands, waters, and species on which people depend.

- **Resource and Land-Based Livelihoods Are at Risk:** The Northern Great Plains region is heavily reliant on agriculture and resource-based economies, placing livelihoods at risk from the impacts of climate change and related policy. Agriculture and recreation will see some positive effects, but primarily negative effects related to changing temperature and precipitation regimes. Energy-sector livelihoods will be affected as emissions-reductions policies drive shifts away from fossil fuel sources. Climate change is expected to test the

2 U.S. Global Change Research Program. 2023. “Fifth National Climate Assessment”. https://nca2023.globalchange.gov/.

adaptive resilience of the region's residents, in particular rural, Indigenous, and low-income immigrant populations.

- **Climate Response Involves Navigating Complex Trade-Offs and Tensions:** Climate change is creating new, and exacerbating existing, tensions and trade-offs between land use, water availability, ecosystem services, and other considerations in the region, leading to decisions that are expected to benefit some and set back others. Decision-makers are navigating a complicated landscape of shifting demographics, policy and regulatory tensions, and barriers to action. Changes in temperature and precipitation averages, extremes, and seasonality will alter the productivity of working lands, resulting in land-use shifts to alternative crops or conversion to grasslands. Shifts in energy demand, production, and policy will change land-use needs for energy infrastructure.

- **Communities Are Building the Capacity to Adapt and Transform:** Adaptation is underway in the Northern Great Plains to address the effects of climate change. Agricultural communities are shifting toward climate adaptation measures such as innovative soil practices, new drought-management tools, and water-use partnerships. Several Tribal Nations are leading efforts to incorporate Traditional Knowledge and governance into their adaptation plans. Resource managers are increasingly relying on tools such as scenario planning to improve the adaptive capacity of natural ecosystems.

Nebraska's Changing Climate

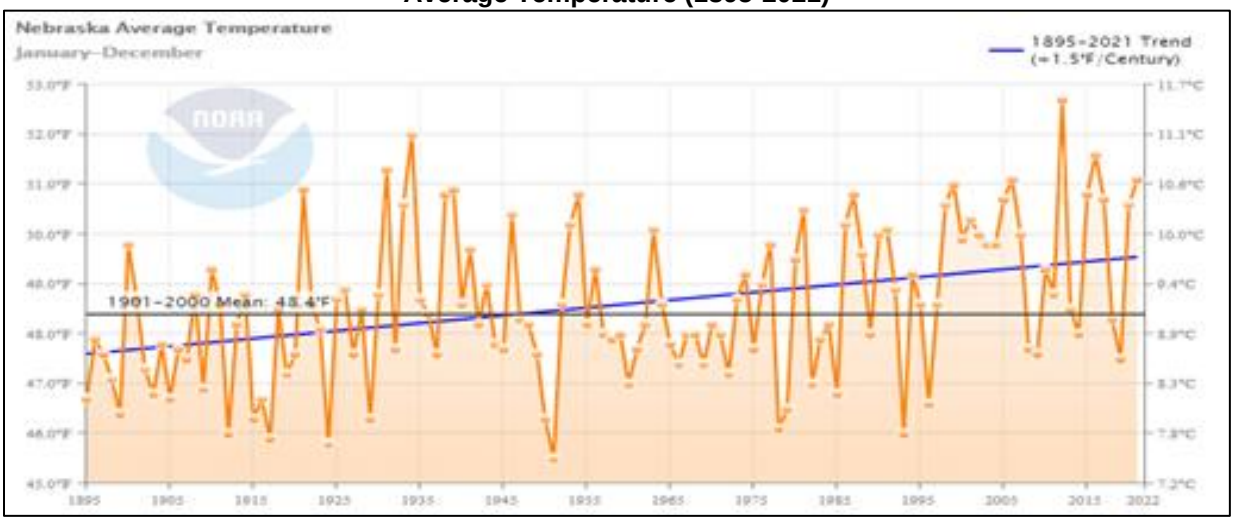
Nebraska and the United States are experiencing significant changes in temperature, precipitation, and severe weather events resulting from climate change. How individual hazards are affected by climate change will be further discussed in each individual hazard profile.

Changes in Temperature

Since 1895 Nebraska's overall average temperature has increased by almost 1.5°F (figure on the next page). Climate modeling suggests warmer temperature conditions will continue in the coming decades and rise steadily into the mid-century. Warming has increased the most in winter and spring months with winter minimum temperatures rising 2-4°F. In addition, there is greater warming for nighttime lows than for daytime highs. Since 1985, the length of the frost season has increased by an average of more than one week across Nebraska, with the length likely to continue to increase in the future. Projected temperature changes range from 2-11°F by 2100 depending on emissions projects (figure on the next page).[3]

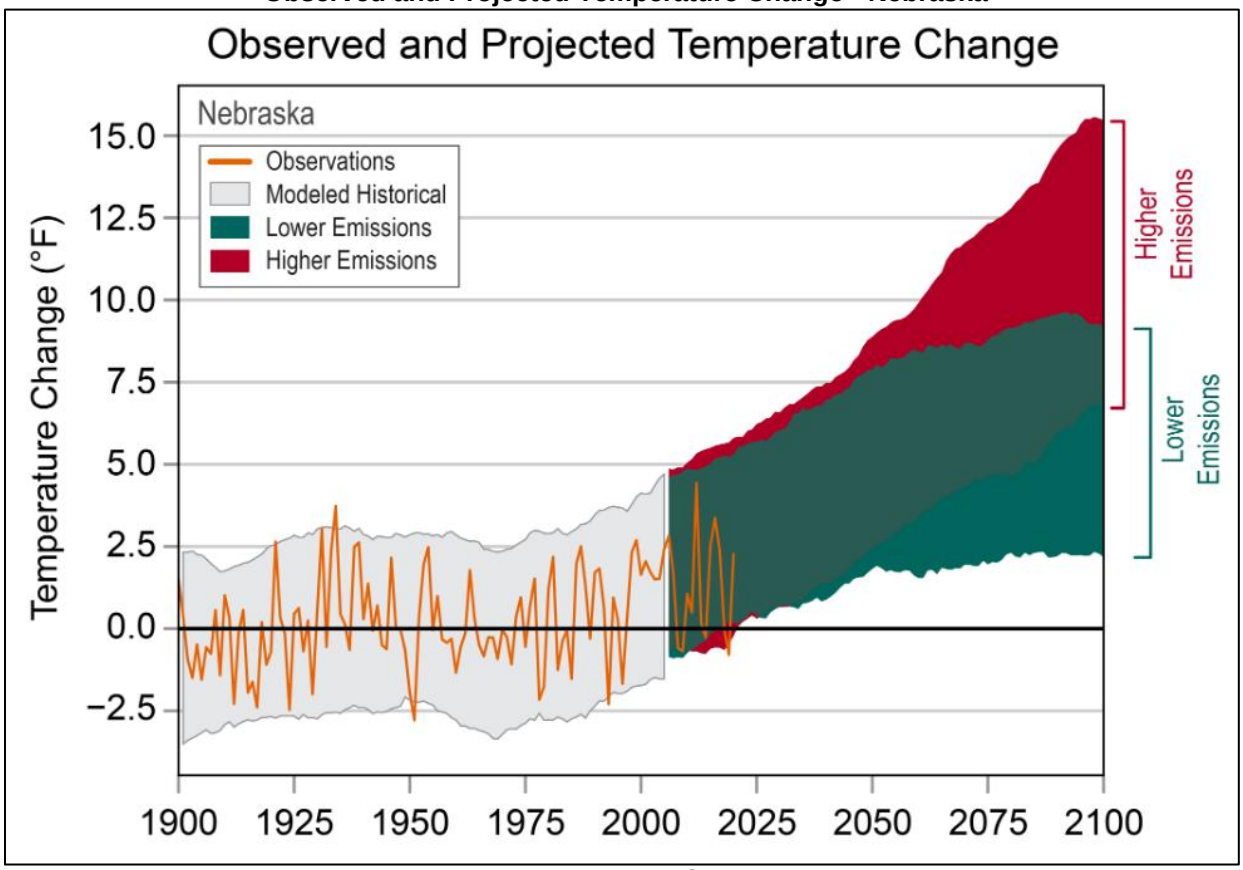
3 NCEI. 2022. "State Climate Summaries – Nebraska". https://statesummaries.ncics.org/chapter/ne/#:~:text=The%20state%20is%20located%20far,(1895%E2%80%932020)%20averag.

Average Temperature (1895-2021)



Source: NOAA, 2021[4]

Observed and Projected Temperature Change - Nebraska



Source: NCEI[5]

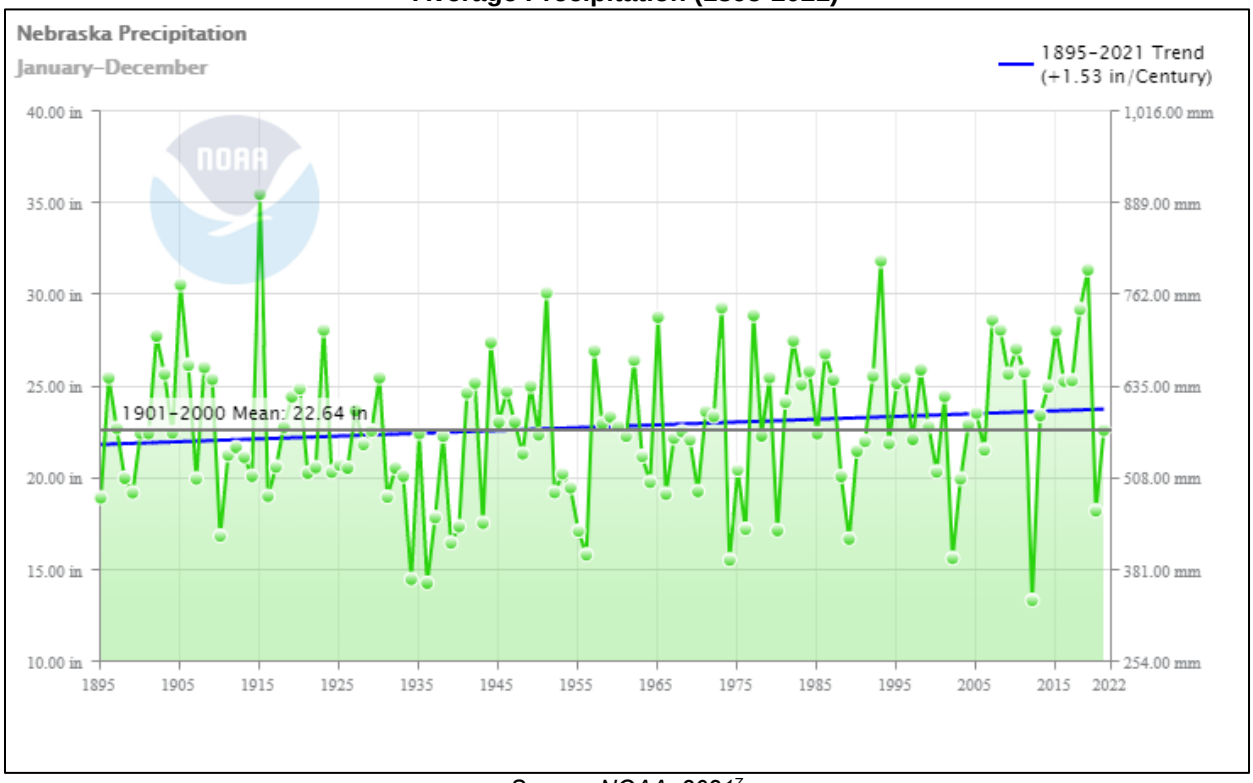
4 NOAA. 2021. "Climate at a Glance: Statewide Time Series.". Accessed March 2022. https://www.ncdc.noaa.gov/cag/statewide/time-series/25/tavg/12/12/1895-2020?base_prd=true&begbaseyear=1901&endbaseyear=2000&trend=true&trend_base=100&begtrendyear=1895&endtrendyear=2021.

5 NCEI. 2022. "State Climate Summaries – Nebraska". https://statesummaries.ncics.org/chapter/ne/#:~:text=The%20state%20is%20located%20far,(1895%E2%80%932020)%20averag.

Changes in Precipitation

Changing extremes in precipitation are anticipated in the coming decades, with more significant rain and snowfall events and more intense drought periods. Seasonal variations will be heightened, with more frequent and more significant rainfall expected in the spring and winter and hotter, drier periods in the summer. Since 1895, yearly annual precipitation for Nebraska has increased slightly (figure on the next page). This trend is expected to continue as the impacts of climate change continue to be felt. Climate modeling may show only moderate precipitation and streamflow changes; however, the state is already at risk of large annual and seasonable variability as seen by flooding and drought events occurring in concurrent years. There will likely be more days with a heavy precipitation event (rainfall of greater than one inch per day) across the state.[6]

Average Precipitation (1895-2021)



Source: NOAA, 2021[7]

Impacts from Climate Change

Observed changes in the intensity and frequency of extreme events are a significant concern now and in the future because of the social, environmental, and economic costs associated with their impacts. Challenges that are expected to affect communities, environments, and residents because of climate change include:

- Developing and maintaining sustainable agricultural systems.
- Resolving increasing competition among land, water, and energy resources.

6 North Central Climate Collaborative. January 2020. "NC3 Nebraska Climate Summary". https://northcentralclimate.org/files/2020/01/nc3-Nebraska-Climate-Summary-FINAL_2.12.pdf?x24082.

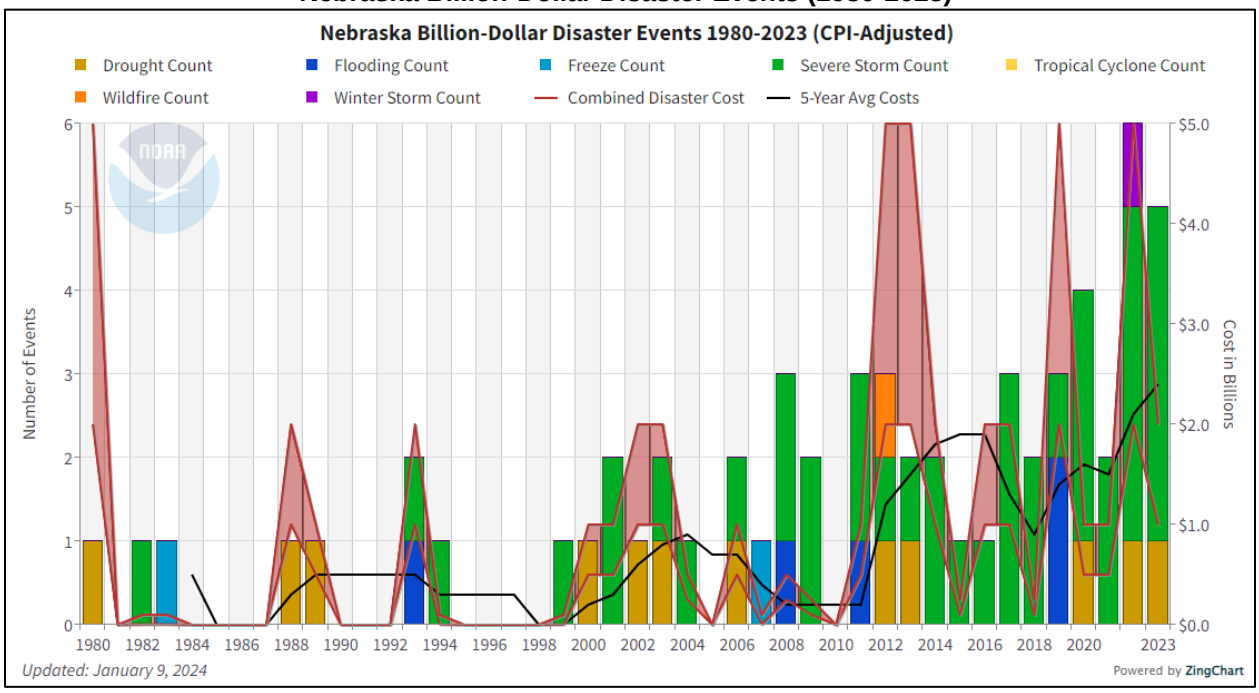
7 NOAA. 2021. "Climate at a Glance: Statewide Time Series". Accessed March 2022. https://www.ncdc.noaa.gov/cag/statewide/time-series/25/pcp/12/12/1895-2022?base_prd=true&begbaseyear=1901&endbaseyear=2000&trend=true&trend_base=100&begtrendyear=1895&endtrendyear=2022.

- Conserving vibrant and diverse ecological systems.
- Enhancing the resilience of the region's people to the impacts of climatic extremes.

Certain groups of people may face greater difficulty when dealing with the impacts of a changing climate. Older adults, immigrant communities, and those living in poverty are particularly susceptible. Additionally, specific industries and professions tied to weather and climate, like outdoor tourism, commerce, and agriculture, are especially vulnerable.[8]

As seen in the figure below, Nebraska is experiencing an increase in the number of billion-dollar natural disasters due to increases in development and climate change.

Nebraska Billion-Dollar Disaster Events (1980-2023)



Source: NOAA[9]

Agriculture

The agricultural sector will experience an increase in droughts, an increase in grass and wildfire events, changes in the growth cycle as winters warm, an influx of new and damaging agricultural diseases or pests, and changes in the timing and magnitude of rainfall. As described in the Plant Hardiness Zone map on the next page, these changes have shifted the annual growing season and expected agricultural production conditions. Nebraska is vulnerable to changes in growing season duration and growing season conditions as a heavy agriculturally dependent state. These added stressors on agriculture could have devastating economic effects if new agricultural and livestock management practices are not adopted.

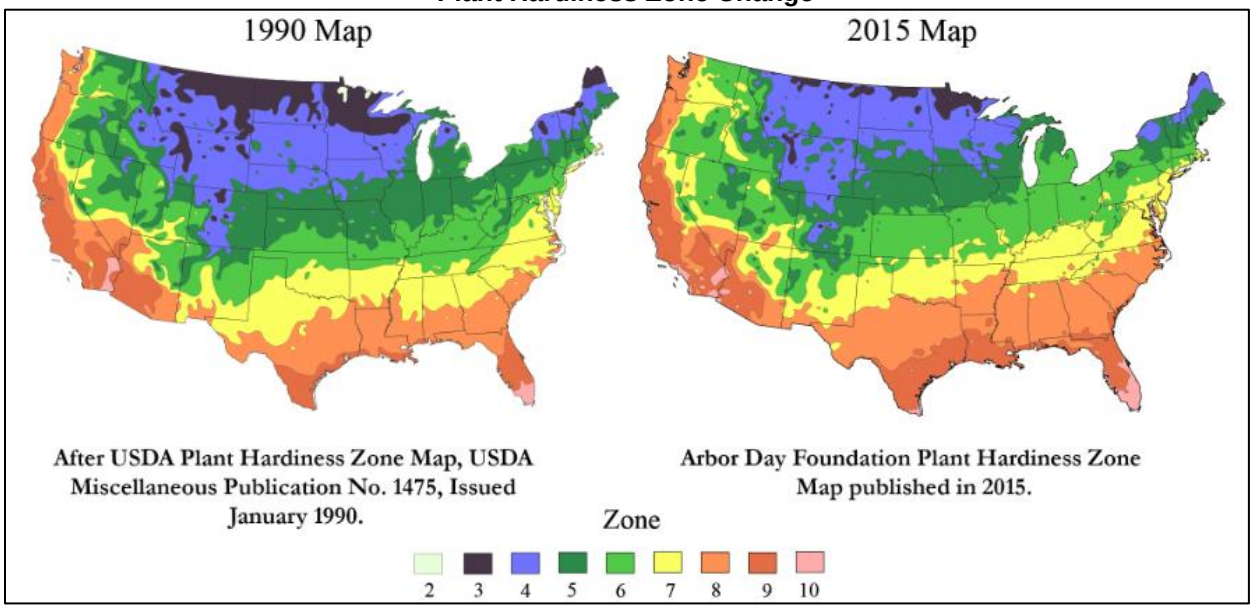
8 U.S. Environmental Protection Agency. "Climate Impacts on Society". Accessed March 2022. https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-society_.html.

9 NOAA National Centers for Environmental Information. January 2024. "Nebraska Billion-Dollar Weather and Climate Disasters". https://www.ncei.noaa.gov/access/billions/time-series/NE.

Air Quality

Rising temperatures will also impact air quality. Harmful air pollutants and allergens increase as temperatures increase. More extended periods of warmth contribute to longer pollen seasons that allow plant spores to travel farther and increase exposure to allergens. More prolonged exposure to allergens can increase the risk and severity of asthma attacks and worsen existing allergies in individuals.[10] An increase in air pollutants can occur from the increased number of grass/wildfires. The public can be exposed to harmful particulate matter from smoke and ash that can cause various health issues. Depending on the length of exposure, age, and individual susceptibility, effects from wildfire smoke can range from eye and respiratory irritation to severe disorders like bronchitis, asthma, and aggravation of pre-existing respiratory and cardiovascular diseases.[11]

Plant Hardiness Zone Change



Source: Arbor Day Foundation[12]

Water Quality

Increasing temperatures, shifting precipitation patterns, and extreme weather events impact water quality throughout the state. With the increasing intensity and frequency of extreme precipitation events, impacts to water systems ultimately threaten human health. Events can lead to flooding and stormwater runoff that can carry pollutants across landscapes and threaten human health by contaminating water wells, groundwater, and other bodies of water. Common pollutants include pesticides, bacteria, nutrients, sediment, animal waste, oil, and hazardous waste.

As average temperatures increase, water temperatures also rise and put water bodies at risk for eutrophication and excess algal growth that reduce water quality. In agricultural landscapes this can be exacerbated from major storm events that cause sediment and nutrients such as phosphorous and nitrogen to runoff into nearby water sources. The runoff can contribute to the buildup of nutrients in the water, increasing plant and algae growth that can deplete oxygen and kill aquatic life. Nutrient enrichment can lead to toxic cyanobacterial harmful algae blooms (cyanoHABs), which can be harmful to animal and human health. CyanoHABs can cause

10 Asthma and Allergy Foundation of America. 2010. "Extreme Allergies and Climate Change." https://www.aafa.org/extreme-allergies-and-climate-change/.

11 AirNow. 2019. "Wildfire Smoke: A Guide for Healthcare Professionals". https://www.airnow.gov/wildfire-smoke-guide-publications/.

12 Arbor Day Foundation. 2015. "Hardiness Zones." https://www.arborday.org/media/map_change.cfm.

economic damage such as decreasing property values, reducing recreational revenue, and increasing the costs for treating drinking water.[13]

Energy and Infrastructure

As the number of 100°F days increases, along with warming nights, the stress placed on the energy grid will likely increase and possibly lead to more power outages. Severe weather events also stress emergency production, infrastructure transmission, and transportation. Roads, pipelines, and rail lines are all at risk of damages from flooding, extreme heat, erosion, or added stress from increased residential demands.[14] Community lifelines and vulnerable populations that are not prepared to handle periods of power outages, particularly during heat waves, will be at risk.

Future Adaptation and Mitigation

The planning area will have to adapt to a changing climate and its impacts or experience an increase in economic losses, property damage, agricultural damage, and loss of life. Past events have typically informed HMPs to be more resilient to future events. This HMP includes strategies for the planning area to address these changes and increase resilience. Jurisdictions in the planning area considered past and future climate changes and impacts when incorporating mitigation actions into local planning processes.

Hazard Profiles

Information from participating jurisdictions was collected and reviewed alongside hazard occurrence, magnitude, and event narratives as provided by local, state, and federal databases. Based on this information, profiled hazards were determined to either have a historical record of occurrence or the potential for occurrence in the future. The following profiles will broadly examine the identified hazards across the planning area. Hazards of local concern or events which have deviated from the norm are discussed in greater detail in each respective jurisdictional profile (see *Section Eight*).

13 USGS. “Nutrients and Eutrophication”. Accessed 2022. https://www.usgs.gov/mission-areas/water-resources/science/nutrients-and-eutrophication?qt-science_center_objects=0#qt-science_center_objects.

14 USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II: Report-in-Brief [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 186 pp.

Animal and Plant Disease

Agriculture disease is any biological disease or infection that can reduce the quality or quantity of either livestock or vegetative crops. This section looks at both animal disease and plant disease, as both make up a significant portion of Nebraska's and the planning area's economy. An outbreak of animal-to-animal disease would have significant economic implications that could result in a serious public health risk. Some diseases may be easily contained geographically, while others, due to longer incubation times, may spread due to transfer and sale of livestock between facilities.[15]

The State of Nebraska's economy is heavily invested in both livestock and crop sales. According to the 2022 Census of Agriculture, the market value of agricultural products sold in Nebraska was estimated at over $29 billion; this total is split between crops (estimated $14 billion) and livestock (estimated $15 billion). For the planning area, the market value of agricultural products sold was over $650 million.[16] The table below shows the population of livestock within the planning area. This count does not include wild populations that are also at risk from animal diseases.

Livestock Inventory

County	Market Value of 2022 Livestock Sales	Cattle and Calves	Hogs and Pigs	Poultry Egg Layers	Sheep and Lambs
Box Butte	$74,090,000	54,930	187	518	657
Dawes	$60,190,000	67,843	(D)	1254	3424
Sheridan	$89,815,000	105,776	123	694	(D)
Sioux	149,890,000	91,679	0	441	354
Total	**$650,322,000**	**320,228**	**310**	**2,907**	**4,435**

Source: U.S. Census of Agriculture, 2022
**(D) Withheld to avoid disclosing data for individual farms.*

The following tables provide the value and acres of land in farms for the planning area. Box Butte County has the highest number of farms, while Sheridan County has the largest number of farm acres in the planning area. Corn is the most prevalent crop type in the region followed by wheat.

Land and Value of Farms in the Planning Area

County	Number of Farms	Land in Farms (acres)	Market Value of 2022 Crop Sales
Box Butte	170	544,606	$165,028,000
Dawes	84	363,410	$18,022,000
Sheridan	116	604,573	$75,297,000
Sioux	90	571,896	$17,989,000
Total	**460**	**2,084,485**	**276,336,000**

Source: U.S. Census of Agriculture, 2022

15 Nebraska Emergency Management Agency. 2021. "2021 Nebraska State Hazard Mitigation Plan". https://nema.nebraska.gov/sites/nema.nebraska.gov/files/doc/hazmitplan2021.pdf.
16 US Department of Agriculture, National Agricultural Statistics Service. 2022. "2022 Census of Agriculture". https://www.nass.usda.gov/Publications/AgCensus/2022/.

Crop Values

County	Corn		Soybeans		Wheat	
	Acres Planted	Value (2022)	Acres Planted	Value (2022)	Acres Planted	Value (2022)
Box Butte	95,156	$78,648,000	(D)	(D)	62,604	$18,404,000
Dawes	8,516	$6,933,000	0	0	18,476	$4,646,000
Sheridan	28,073	$28,791,000	1,838	$1,020,000	23,980	$6,658,000
Sioux	11,134	$13,121,000	0	0	703	$202,000
Total	**142,879**	**$127,493,000**	**1,838**	**$1,020,000**	**105,763**	**$29,910,000**

Source: U.S. Census of Agriculture, 2022

Location

Given the strong agricultural presence in the planning area, animal and plant diseases have the potential to occur across the planning area. If a major outbreak were to occur, the economy in the entire planning area would be affected. The primary land uses where animal and plant disease will be observed include agricultural lands, range or pasture lands, and feedlots.

There are four cattle feeders in the Region. Two feeders are in Sheridan County, one near Gordon, and one near Lakeside. Combined they have nearly 9,200 head of cattle. In Sioux County there is one cattle feeders, near Mitchell, which has 15,500 head of cattle. One cattle feeder is located in Box Butte County, near Alliance, which has 2,750 head of cattle.[17]

Extent

There is no standard for measuring the magnitude of animal and plant disease. Historical events have impacted livestock ranging from a single animal to 311 animals. The planning area is heavily dependent on the agricultural economy. Any severe plant or animal disease outbreak which may impact this sector would negatively impact the local economy.

Historical Occurrences

Animal Disease

The NDA provides reports on diseases occurring in the planning area. There were 84 instances of animal disease reported between 2014 and 2023 by the NDA. These outbreaks affected 750 animals.

Livestock Diseases Reported in the Planning Area

Disease	Year	County	Population Impacted
Highly Pathogenic Avian Influenza	2022	Box Butte	1
		Dawes	1
	2023	Sheridan	1
Bovine Anaplasmosis	2014	Box Butte	1
	2017	Dawes	1
	2019	Sheridan	13
	2020	Sheridan	9
	2022	Box Butte	1
	2023	Sheridan	1
Bovine Viral Diarrhea	2014	Sheridan	2

17 Nebraska Department of Agriculture. 2020. "2019-2020 Cattle Feeders Directory". https://nda.nebraska.gov/publications/promotion/cattle_feeders/cattle_feeders.pdf.

Disease	Year	County	Population Impacted
	2017	Sheridan	1
	2018	Box Butte	1
		Sheridan	1
	2019	Box Butte	25
		Sheridan	160
	2020	Sheridan	62
	2022	Box Butte	1
	2023	Sheridan	1
Bovine Paratuberculosis	2014	Sheridan	7
		Sioux	2
	2015	Sheridan	1
	2016	Box Butte	1
		Sheridan	5
	2017	Box Butte	1
		Sheridan	8
	2018	Box Butte	3
		Sheridan	2
	2019	Dawes	2
		Sheridan	1
	2020	Dawes	3
		Sheridan	4
	2022	Box Butte	1
		Sheridan	2
		Sioux	1
	2023	Box Butte	2
		Dawes	3
		Sheridan	3
Infectious Bovine Rhinotracheitis	2014	Sheridan	2
	2015	Sheridan	60
		Sioux	1
	2023	Sheridan	1
Bovine Leptospirosis	2014	Sheridan	9
	2015	Sheridan	1
	2016	Sheridan	12
	2017	Sheridan	15
	2018	Sheridan	‘6
	2019	Box Butte	1
		Sheridan	18
	2020	Sheridan	21
	2022	Sheridan	,.1
	2023	Sheridan	5
Bovine Vesticularstomasis	2015	Sheridan	1
Bovine Trichomoniasis	2015	Dawes	1
		Sheridan	1
	2016	Sheridan	1
Bovine Epizootic Hemorrhagic Disease	2018	Sheridan	2
	2019	Sheridan	45
	2022	Sheridan	1
	2023	Sheridan	4
Bovine Rabies	2014	Sheridan	1
Bovine Bluetongue	2014	Sheridan	7

Disease	Year	County	Population Impacted
	2015	Sheridan	1
	2016	Sheridan	6
	2017	Sheridan	6
	2018	Sheridan	11
	2019	Sheridan	63
	2020	Sheridan	59
	2021	Sheridan	1
	2022	Sheridan	6
	2023	Sheridan	5
Bovine Genital Campylobacterosis	2015	Sheridan	1
Enzootic Bovine Leukosis	2014	Sheridan	6
	2015	Sheridan	1
	2016	Sheridan	4
	2017	Sheridan	6
	2018	Sheridan	3
	2019	Sheridan	11
	2020	Sheridan	2
	2022	Sheridan	2
	2023	Sheridan	3
Porcine Reproductive & Respiratory Syndrome	2022	Box Butte	1
Equine Vesicular Stomasis	2015	Sioux	1
	2019	Dawes	1
Equine West Nile	2023	Sioux	1

Source: Nebraska Department of Agriculture, 2014- 2023[18]

Plant Disease

A variety of diseases can impact crops and often vary from year to year. The NDA provides information on some of the most common plant diseases, which are listed below.

Common Crop Diseases in Nebraska by Crop Types

Crop Diseases		
Corn	Anthracnose	Southern Rust
	Bacterial Stalk Rot	Stewart's Wilt
	Common Rust	Common Smut
	Fusarium Stalk Rot	Gross's Wilt
	Fusarium Root Rot	Head Smut
	Gray Leaf Spot	Physoderma
	Maize Chlorotic Mottle Virus	
Soybeans	Anthracnose	Pod and Stem Blight
	Bacterial Blight	Purple Seed Stain
	Bean Pod Mottle	Rhizoctonia Root Rot
	Brown Spot	Sclerotinia Stem Rot
	Brown Stem Rot	Soybean Mosaic Virus
	Charcoal Rot	Soybean Rust

18 Nebraska Department of Agriculture. 2023. "Livestock Disease Reporting". http://www.nda.nebraska.gov/animal/reporting/index.html.

Crop Diseases		
	Frogeye Leaf Spot	Stem Canker
	Phytophthora Root and Stem Rot	Sudden Death Syndrome
Wheat	Barley Yellow Dwarf	Leaf Rust
	Black Chaff	Tan Spot
	Crown and Root Rot	Wheat Soy-borne Mosaic
	Fusarium Head Blight	Wheat Streak Mosaic
Sorghum	Ergot	Zonate Leaf Spot
	Sooty Stripe	
Trees	Burr Oak Blight	Dutch Elm Disease
	Powdery Mildew	Leaf Spot and Blight
	Canker (various types)	Root Rot
	Pine Wilt Disease	Crown Gall

In addition to the viral and bacterial diseases that could impact crops, pests can also result in crop loss or detract from crop quality. Possible pests include the following.

- Japanese Beetles
- Grasshoppers
- Western Bean Cutwork
- European Corn Borer
- Corn Rootworm
- Corn Nematodes
- Soybean Aphids
- Rootworm Beetles
- Emerald Ash Borer

The RMA provides data on plant disease events and plant losses in the planning area. There were 113 instances of plant diseases reported from 2000-2023 by the RMA. These outbreaks caused $2,062,635 in crop losses.[19]

Emerald Ash Borer

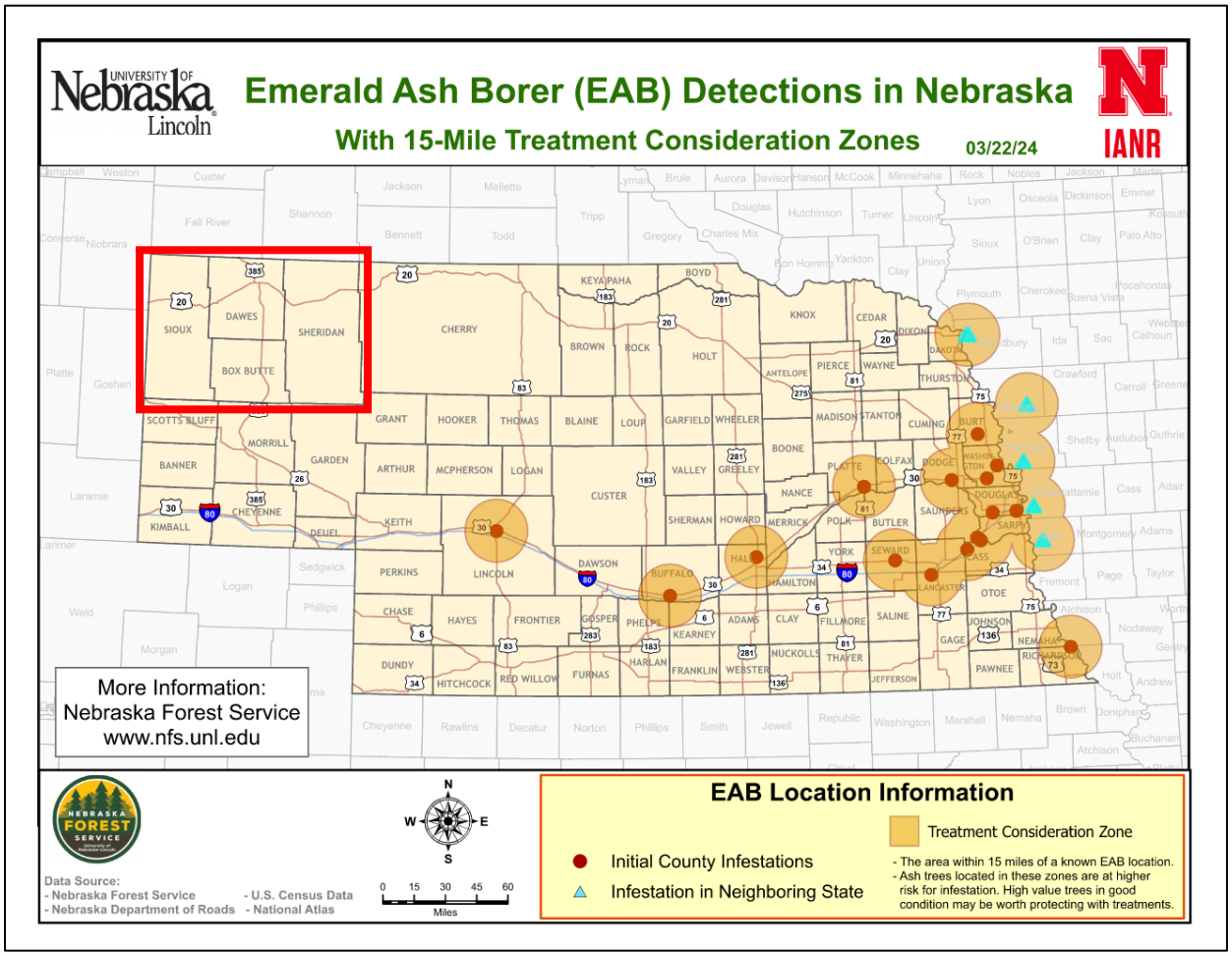
The spread and presence of the Emerald Ash Borer (EAB) have become a rising concern for many Nebraskan communities in recent years. The beetle spreads through transport of infected ash trees, lumber, and firewood. All species of North American ash trees are vulnerable to infestation. Confirmed cases of EAB have been found in 45 US states, primarily in the eastern, southern, and midwestern regions. Nebraska's first confirmed cases occurred on private land in Omaha and Greenwood in 2016.[20]

The figure on the next page shows the locations of Nebraska's confirmed EAB cases as of March 2024. Additional confirmed cases have likely occurred and many communities across the state are prioritizing the removal of ash trees to help curb potential infestations and tree mortality. There are no reported confirmed cases of EAB within the planning area. The Nebraska Department of Agriculture regulates and monitors the sale and distribution of firewood in the state to restrict the flow of firewood from outside the state.

19 U.S. Department of Agriculture. 2023. "Cause of Loss Historical Data Files: 2000-2023". https://www.rma.usda.gov/data/cause.html.
20 Emerald Ash Borer Information Network. April 2018. "Emerald Ash Borer." http://www.emeraldashborer.info/.

While adult beetles cause little damage, larvae damage trees by feeding on the inner bark of mature and growing trees, causing tunnels. Effects of EAB infestation include extensive damage to trees by birds, canopy dieback, bark splitting, and water sprout growth at the tree base, and eventual tree mortality. EAB has impacted millions of trees across North America, killing young trees one to two years after infestation and mature trees three to four years after infestation.[21] Estimated economic impacts to Nebraska's 44 million ash trees exceed $981 million.[22] Dead or dying trees affected by EAB are also more likely to cause damage during high winds, severe thunderstorms, or severe winter storms from weakened or hazardous limbs and can contribute a significant fuel load to grass/wildfire events.

EAB Detections in Nebraska



Source: Nebraska Forest Service[23]

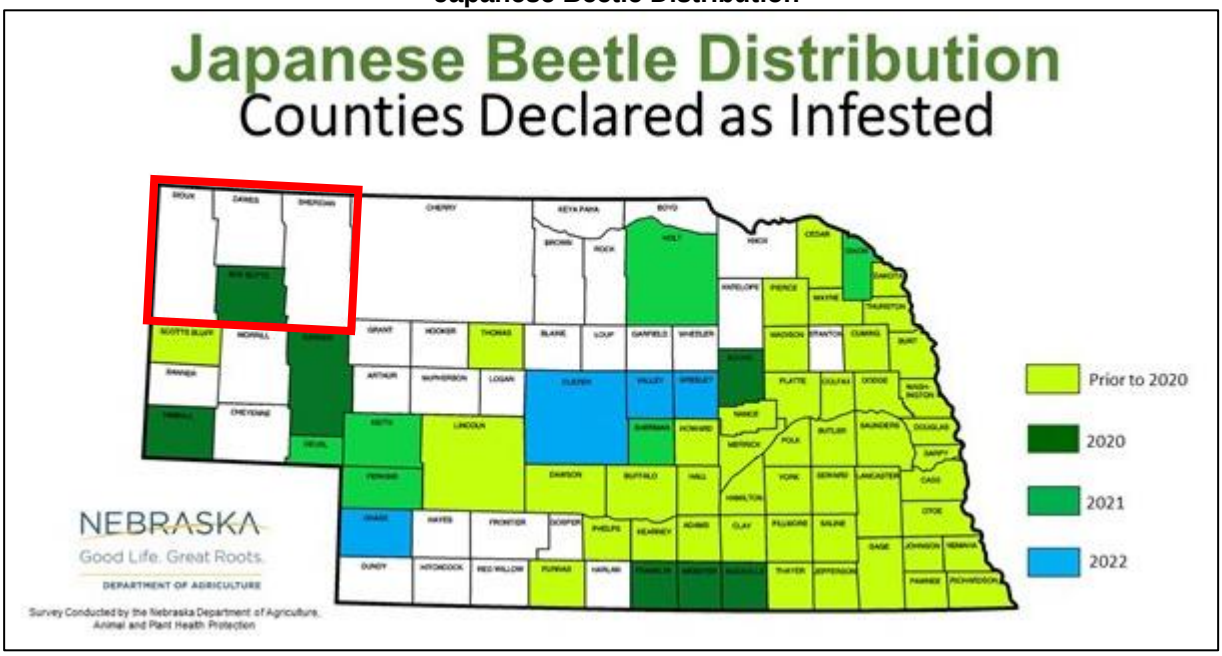
<u>Japanese Beetles</u>

Japanese beetles are a rising concern in Nebraska. Japanese beetles are highly destructive invasive pests found in many counties across Nebraska. The figure on the next page shows counties declared as infested by the beetles. Box Butte County was declared infested in 2020.

21 Arbor Day Foundation. 2015. "Emerald Ash Borer." https://www.arborday.org/trees/health/pests/emerald-ash-borer.cfm.
22 "Nebraska Emerald Ash Borer Response Plan." May 2015. https://nfs.unl.edu/NebraskaEABResponsePlan.pdf.
23 Nebraska Forest Service. March 2024. "Emerald Ash Borer (EAB) Detections in Nebraska". https://nda.nebraska.gov/plant/entomology/eab/EABmap_03-22-24-1.pdf.

These beetles cause damage in the larval state (root damage) and adult stage (defoliation). Adult Japanese beetles can defoliate a tree quickly as other beetles are attracted to feeding sites by both the scent of the plant and pheromones sent out by other beetles. Chemical pesticides provide temporary protection however there are no long-range protection measures.

Japanese Beetle Distribution



Source: Nebraska Department of Agriculture[24]

Average Annual Losses

According to the USDA RMA (2000-2023) there were 113 plant disease events in the planning area. While the RMA does not track losses for livestock, annual crop losses from plant disease can be estimated. Agricultural livestock disease losses are determined from the Nebraska Department of Agriculture.

Plant Disease Losses

Hazard Type	Number of Events	Events per Year	Total Crop Loss	Average Annual Crop Loss
Plant Disease	113	4.7	$2,062,635	$85,943

Source: USDA, 2000-2023[25]

Animal Disease Losses

Hazard Type	Number of Events	Events per Year	Total Animal Losses	Average Annual Animal Losses
Animal Disease	84	8.4	750	75

Source: NDA, 2014-2023[26]

24 Nebraska Department of Agriculture. 2022. "Japanese Beetle Distribution". https://nda.nebraska.gov/plant/entomology/pest_survey/index.html#:~:text=NDA%20continues%20to%20track%20the,the%20results%20of%202022%20survey.&text=Karnal%20Bunt%20sampling%20occurred%20in%20July%202022.

25 U.S. Department of Agriculture. 2023. "Cause of Loss Historical Data Files: 2000-2023". https://www.rma.usda.gov/data/cause.html.

26 Nebraska Department of Agriculture. 2023. "Livestock Disease Reporting". http://www.nda.nebraska.gov/animal/reporting/index.html.

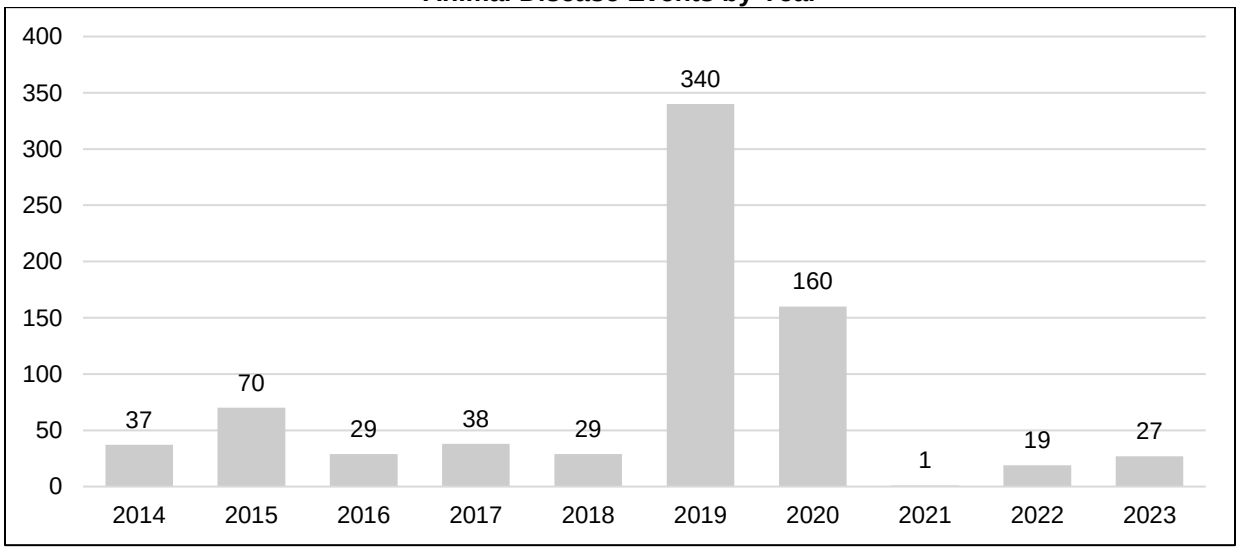
Historical Probability & Future Likelihood

Given the historic record of occurrence for animal disease as shown in the figure below (ten out of ten years), for the purposes of this plan, the historical probability of animal disease occurrence is 100 percent. Given the historical record of occurrence for agricultural plant disease events as shown in the figure below (20 out of 24 years with a reported event), for the purposes of this plan, the historical probability of agricultural plant disease occurrence is 83%. Due to the anticipated impacts from climate change and future development, the future likelihood of an agricultural disease event is very likely.

Historical Probability & Future Likelihood – Agricultural Disease

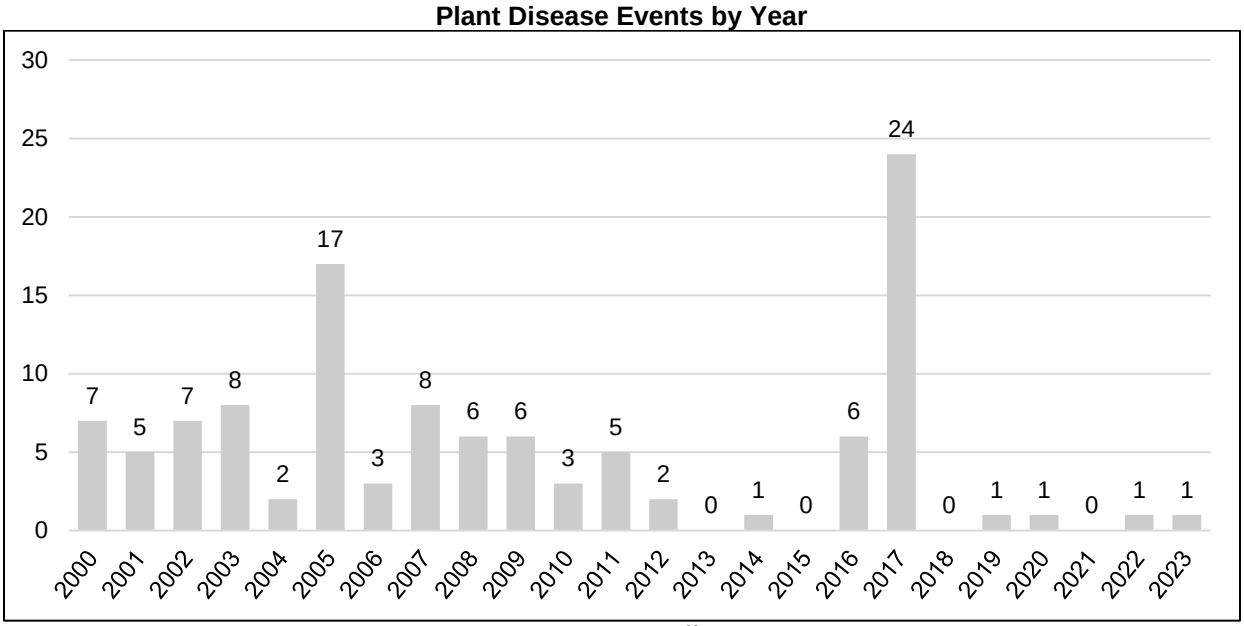
Hazard	Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
Animal Disease	100%	Increase in Frequency and Extent	Increase in Frequency	**Very Likely**
Plant Disease	83%	Increase in Frequency and Extent	Increase in Frequency	**Very Likely**

Animal Disease Events by Year



Source: NDA[27]

27 Nebraska Department of Agriculture. 2023. "Livestock Disease Reporting". http://www.nda.nebraska.gov/animal/reporting/index.html.



Source: USDA[28]

28 U.S. Department of Agriculture. 2023. "Cause of Loss Historical Data Files: 2000-2023". https://www.rma.usda.gov/data/cause.html.

Climate Change

The distribution and severity of animal and plant disease outbreaks will likely increase alongside climate change impacts. Shifting climatic conditions will stress existing agricultural populations and plant species, creating vulnerability for new diseases to take hold. The trend toward higher average temperatures and increased periods of drought[29] increases the stress levels on animal populations, increasing the risk of disease taking hold. Additionally, uncommon diseases may return at higher numbers as changes in the environment cause the release of previously contained diseases or promote the mutation of diseases.

Future Development

The likelihood of agricultural disease outbreaks is likely to remain consistent or increase as future development occurs; particularly if agricultural production remains the driving economic sector in the planning area. Higher production demand will lead farmers, ranchers, or other producers to increase population densities of livestock and crops. For communities, diversification of trees and other landscape vegetation will help reduce the impacts and likelihood of invasive species and plant disease outbreaks. Communities can require new developments to only have a certain percentage of trees from one specific species.

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Eight*.

Regional Animal and Plant Disease Vulnerabilities

Sector	Vulnerability
People	-Those in direct contact with infected livestock -Potential food shortage during prolonged events -Residents in poverty if food prices increase
Economic	-Local and regional economy is reliant on the agricultural industry -Large scale or prolonged events may impact tax revenues and local capabilities -Land value may largely drive population changes within the planning area
Built Environment	- Loss of trees and other vegetation
Community Lifelines	-Transportation routes can be closed during quarantine

Jurisdictions Ranking Animal and Plant Disease as a Prioritized Hazard of Concern

No jurisdictions identified animal and plant disease as a prioritized hazard of concern.

29 NCEI. 2022. “State Climate Summaries – Nebraska”. https://statesummaries.ncics.org/chapter/ne/#:~:text=The%20state%20is%20located%20far,(1895%E2%80%932020)%20averag.

Dam Failure

According to the Nebraska Administrative Code, dams are “any artificial barrier, including appurtenant works, with the ability to impound water, wastewater, or liquid-borne materials and which have one of the following elements.

- Twenty-five feet or more in height from the natural bed of the stream or watercourse measured at the downstream toe of the barrier, or from the lowest elevation of the outside limit of the barrier if it is not across a stream channel or watercourse, to the maximum storage elevation.

- Has an impounding capacity at maximum storage elevation of fifty acre-feet or more, except that any barrier described in this subsection which is not in excess of six feet in height or which has an impounding capacity at maximum storage elevation of not greater than fifteen acre-feet shall be exempt, unless such barrier, due to its location or other physical characteristics, is classified as a high hazard potential dam.

Dams do not include the following.

- An obstruction in a canal used to raise or lower water.

- A fill or structure for highway or railroad use, but if such structure serves, either primarily or secondarily, additional purposes commonly associated with dams it shall be subject to review by the department.

- Canals, including the diversion structure, and levees.

- Water storage or evaporation ponds regulated by the United States Nuclear Regulatory Commission.[30]

Dam failure, as a hazard, is described as a structural failure of a water-impounding structure. Structural failure can occur during extreme conditions, which include, but are not limited to the following list.

- Reservoir inflows in excess of design flows
- Flood pools higher than previously attained
- Unexpected drop in pool level
- Pool near maximum level and rising
- Excessive rainfall or snowmelt
- Large discharge through spillway
- Erosion, landslide, seepage, settlement, and cracks in the dam or area
- Earthquakes
- Vandalism/Terrorism

30 Nebraska Department of Natural Resources. “Department of Natural Resources Rules for Safety of Dam and Reservoirs.” Nebraska Administrative Code, Title 458, Chapter 1, Part 001.09.

NeDNR regulates dam safety in Nebraska. Dams are classified by the potential hazard each poses to human life and economic loss. The following are classifications and descriptions for each hazard class:

- **Minimal Hazard Potential:** Failure of the dam would likely result in no economic loss beyond the cost of the dam itself and losses principally limited to the owner's property.

- **Low Hazard Potential**: Failure of the dam expected to result in no probable loss of human life and in low economic loss. Failure may damage storage buildings, agricultural land, and county roads.

- **Significant Hazard Potential**: Failure of the dam expected to result in no probable loss of human life but could result in major economic loss, environmental damage, or disruption of lifeline facilities. Failure may result in shallow flooding of homes and commercial buildings or damage to main highways, minor railroads, or important public utilities.

- **High Hazard Potential**: Failure of the dam expected to result in loss of human life is probable. Failure may cause serious damage to homes, industrial or commercial buildings, four-lane highways, or major railroads. Failure may cause shallow flooding of hospitals, nursing homes, or schools.

Location

According to the Nebraska Dam Inventory, there are a total of 167 dams located within the planning area, with classifications ranging from minimal to high hazard.[31] The figure on the next page maps the location of these dams in the planning area.

Dams in the Planning Area

County	Minimal Hazard	Low Hazard	Significant Hazard	High Hazard
Box Butte	5	5	0	0
Dawes	11	42	3	1
Sheridan	2	21	3	2
Sioux	15	52	4	1
Total	**33**	**120**	**10**	**4**

Source: NeDNR

Dams classified with high hazard potential require the creation of an Emergency Action Plan (EAP). The EAP defines responsibilities and provides procedures designed to identify unusual and unlikely conditions which may endanger the structural integrity of the dam within sufficient time to take mitigating actions and to notify the appropriate emergency management officials of possible, impending, or actual failure of the dam. The EAP may also be used to provide notification when flood releases will create major flooding. An emergency can occur at any time; however, emergencies are more likely to happen when extreme conditions are present. There are four high hazard dams located within the planning area, two located in Sheridan County, one located in Dawes County, and one in Sioux County.

High Hazard Dams in the Planning Area

Dam Name	NID ID	Dam Height (Feet)	Max Storage (Acre Ft)	Last Inspection Rating
Box Butte Dam	NE01069	69	64,406	5/1/2024
Antelope Creek 20-A	NE00793	24	450	6/7/2023
Antelope Creek 40-B	NE00795	32	8,655	6/7/2023
Carter P Johnson Dam	NE01124	35	202	6/8/2023

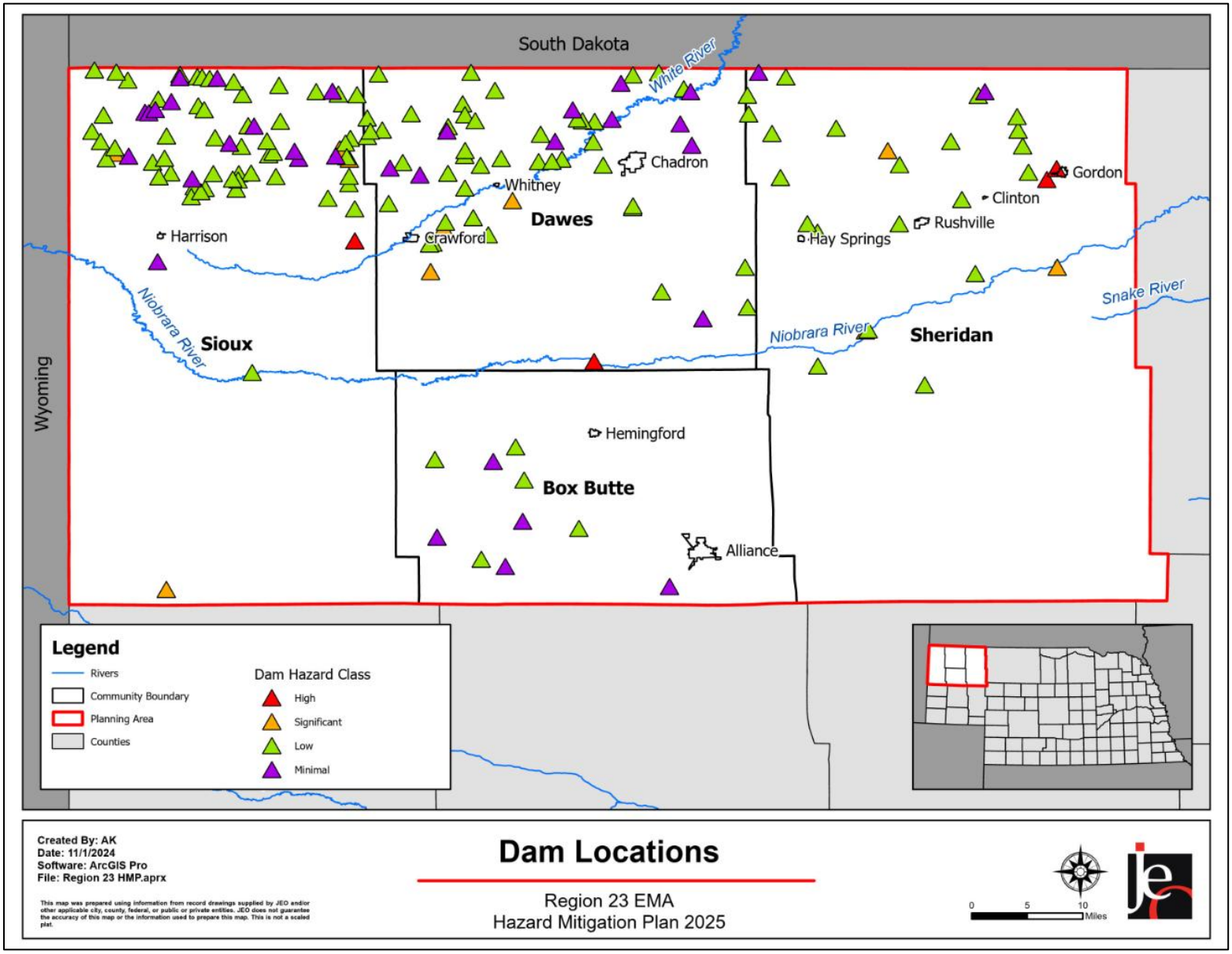
Source: NeDNR

Upstream Dams Outside the Planning Area

According to the Box Butte, Dawes, Sheridan, and Sioux Counties' Local Emergency Operations Plans, there are no listed upstream dams that could impact the planning area.[32,33,34,35]

31 Nebraska Department of Natural Resources. May 2024. "Nebraska Dam Inventory". https://gis.ne.gov/portal/apps/webappviewer/index.html?id=2aab04a13817421992dc5398ad462e22.
32 Box Butte County Emergency Management Agency. 2023. "Box Butte County Local Emergency Operations Plan."
33 Dawes County Emergency Management Agency. 2023. "Dawes County Local Emergency Operations Plan."
34 Sheridan County Emergency Management Agency. 2023. "Sheridan County Local Emergency Operations Plan."
35 Sioux County Emergency Management Agency. 2023. "Sioux County Local Emergency Operations Plan."

Dam Locations



Extent

Areas (e.g., agricultural land, out buildings, county roads, and communities) directly downstream of dams are at greatest risk in the case of dam failure. The potential for damage following dam failure is indicated by its hazard classification and is dependent on the dam's size and location. Note that hazard classification does not indicate the likelihood of a dam failure event to occur, but rather the extent of potential damage that may occur in case of a failure. Thus, the high hazard dams in the planning area would have the greatest impact if they were to fail. Inundation maps are not publicly available due to concerns of vandalism and terrorism but can be requested from County Emergency Management. Key facilities located in inundation areas are discussed in each county's LEOP.

Historical Occurrences

According to the NeDNR, there were nine reported dam failures within the planning area. No damages from these events were recorded.

Dam Failures

Dam Name	Hazard Class	County	Failure Year	Failure Mode	Downstream Damage
Luce Dam	Low	Box Butte	2000	Spillway Erosion	No damages were reported
McDowell Dam No 4	N/A	Dawes	1970E	Unknown Breach	No damages were reported
Gobel Dam	Low	Dawes	1973E	Unknown Breach	No damages were reported
North Draw Dam 2	Low	Dawes	2015	Unknown Breach	Unknown
Lone Tree Dam	Low	Dawes	2015	Overtopped	Minor damage to pasture, may rebuild
Soester Caylor Dam	Low	Dawes	2019	Overtopping And Wave Erosion	No damages were reported
Dahlheimer Dam	Low	Dawes	2019E	Unknown Breach	No damages were reported
Dan Jordan Dam	Minimal	Sioux	1993E	Unknown Breach	No damages were reported
Mader Dam 1	Low	Sioux	2010E	Unknown Breach	No damage reported, may rebuild

Source: NeDNR, 2024
E= Indicates the year of failure was estimated from best available information

All dams should be inspected by the owner on a regular basis and after heavy rainfall events. If problems are found during an inspection, the dam should be repaired to ensure the structural integrity of the dam is preserved. NeDNR provides periodic inspections of dams and recommendations for repair to the dam owners.

Average Annual Losses

No damage was reported from the dam failure events. In general, dam failure events would be confined to damage in the inundation area. Residents in the planning area that wish to quantify and evaluate the threat of dam failure should contact their County Emergency Management, local NRD, or the NeDNR to view EAPs and breach inundation area maps.

Historical Probability & Future Likelihood

Based on the historical record of reported incidents, there is a five percent historical probability (7 out of 135 years with an occurrence) that dam failure will occur annually in the planning area. Due to the potential impacts from climate change and future development, the future likelihood of future dam failure events is very unlikely.

Historical Probability & Future Likelihood – Dam Failure

Hazard	Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
Dam Failure	5.2%	Increase in Frequency	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Very Unlikely**

Climate Change

While climate change does not directly affect dam failure events, changes in precipitation and temperature swings can affect them. Projected increased rainfall events, either in frequency or in magnitude[36], will lead to exacerbated stress on infrastructure systems including dams. Additionally, historical streamflow records are typically used to design or determine dam construction requirements and maintenance requirements. Climate change may impact these systems in the following ways.

- Drought: land subsidence, erosion, embankment settling, or foundation cracking.
- Flooding: increased embankment erosion, sloughing, overtopping risk, or damage from ice jams.

Future Development

Any future growth in dam inundation areas increases the impacts from these events. Additionally, any increase in development downstream of any existing dams may elevate these dams to a high hazard rating. As many dam inundation areas are also identified floodplain locations, developing outside these areas will reduce vulnerability to this hazard. Closer to the dam the breach inundation zone is frequently larger than the identified floodplain, so caution should be used when developing areas just downstream of a dam. Communities could implement requirements for any new development or substantial improvements in dam inundation areas like floodplain ordinances to minimize the number of people and property impacted during a failure event.

Regional Vulnerabilities

Regional vulnerabilities to dam failure vary based on surrounding development and other flood control measures. The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Eight*.

Dam Failure Vulnerabilities

Sector	Vulnerability
People	-Those living downstream of any dam -Those at recreational sites situated near dams -Evacuation needs likely with failure events

36 NCEI. 2022. "State Climate Summaries – Nebraska". https://statesummaries.ncics.org/chapter/ne/#:~:text=The%20state%20is%20located%20far,(1895%E2%80%932020)%20averag.

	-Hospitals, nursing homes, and the elderly at greater risk due to low mobility -Those without adequate notification may be at greater risk
Economic	-Businesses or recreation sites located in inundation areas would be impacted and closed for an extended period -Employees of closed businesses may be out of work for an extended period of time
Built Environment	-Damage to buildings, recreation areas, and roads
Community Lifelines	-Transportation routes could be closed for extended period -Any community lifelines in inundation area are vulnerable to damages

Jurisdictions Ranking Dam Failure as a Prioritized Hazard of Concern

The following jurisdictions identified dam failure as a prioritized hazard of concern.

- Upper Niobrara White NRD
- Sheridan County

Drought

Drought is generally defined as a natural hazard that results from a substantial period of below normal precipitation. Although many inaccurately consider drought a rare and random event, it is actually a normal, recurring feature of climate. Drought can occur in virtually all climatic zones, but its characteristics can vary significantly from one region to another. A drought often coexists with periods of extreme heat, which together can cause significant social stress, economic losses, and environmental degradation.

Drought is a normal, recurrent feature of climate, although many erroneously consider it a rare and random event. It occurs in virtually all climatic zones, but its characteristics vary significantly from one region to another.
~National Drought Mitigation Center

Drought is typically a slow onset, creeping phenomenon that can affect a wide range of people, vegetation, livestock, and industries. However, in some cases "flash droughts" can occur quickly and last for shorter periods of time. While many impacts of these hazards are non-structural, there is the potential that during prolonged drought events structural impacts like foundation cracking can occur from dry soil. Drought normally affects more people than other natural hazards, and its impacts are spread over a larger geographical area. Detection and early warning signs of drought conditions have improved recently but are still more difficult to identify than that of quick-onset natural hazards (e.g., flood, winter storms, tornadoes). According to the National Drought Mitigation Center (NDMC), droughts are classified into four major types.[37]

- **Meteorological Drought** is defined based on the degree of dryness and the duration of the dry period. Meteorological drought is often the first type of drought to be identified and should be defined regionally as precipitation rates, frequencies (norms), and winds vary.

- **Agricultural Drought** occurs when there is deficient moisture that hinders planting germination, leading to low plant population per hectare and a reduction of final yield. Agricultural drought is closely linked with meteorological and hydrological drought, as agricultural water supplies are contingent upon the two sectors.

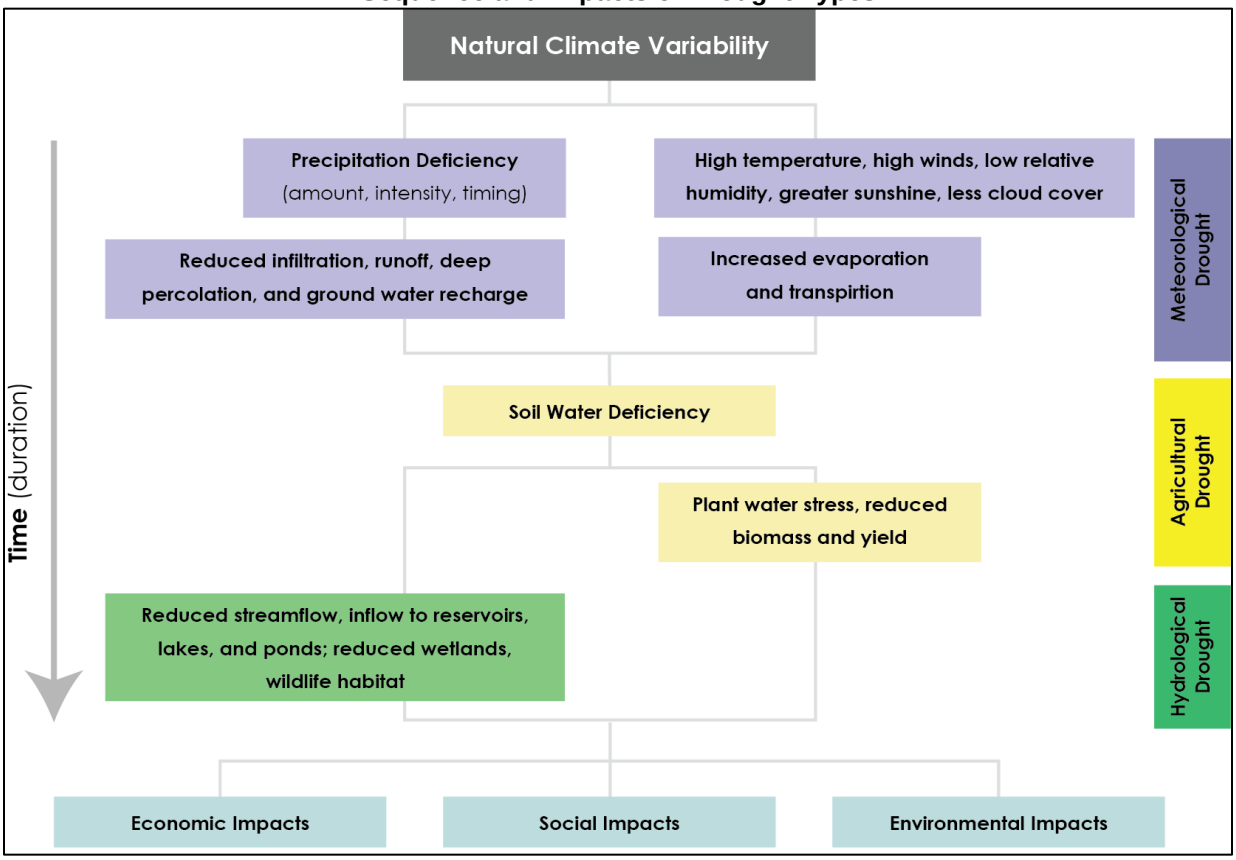
- **Hydrologic Drought** occurs when water available in aquifers, lakes, and reservoirs falls below the statistical average. This situation can arise even when the area of interest receives average precipitation. This is due to the reserves diminishing from increased water usage, usually from agricultural use or high levels of evapotranspiration, resulting from prolonged high temperatures. Hydrological drought often is identified later than meteorological and agricultural drought. Impacts from hydrological drought may manifest themselves in decreased hydropower production and loss of water-based recreation.

- **Socioeconomic Drought** occurs when the demand for an economic good exceeds supply due to a weather-related shortfall in water supply. The supply of many economic goods includes, but is not limited to, water, forage, food grains, fish, and hydroelectric power.

The figure on the next page presents the different types of droughts, their temporal sequence, and the various types of effects they can have.

37 National Drought Mitigation Center. 2017. "Drought Basics". https://drought.unl.edu/.

Sequence and Impacts of Drought Types



Source: National Drought Mitigation Center, University of Nebraska-Lincoln[38]

Location

The entire planning area is susceptible to drought impacts.

Extent

The Palmer Drought Severity Index (PDSI) is utilized by climatologists to standardize global long-term drought analysis. The table below shows the details of the Palmer classifications. The figure on the next page shows drought data from a station that covers the planning area. The negative Y axis represents the extent of a drought, for which '-2' indicates a moderate drought, '-3' a severe drought, and '-4' an extreme drought.

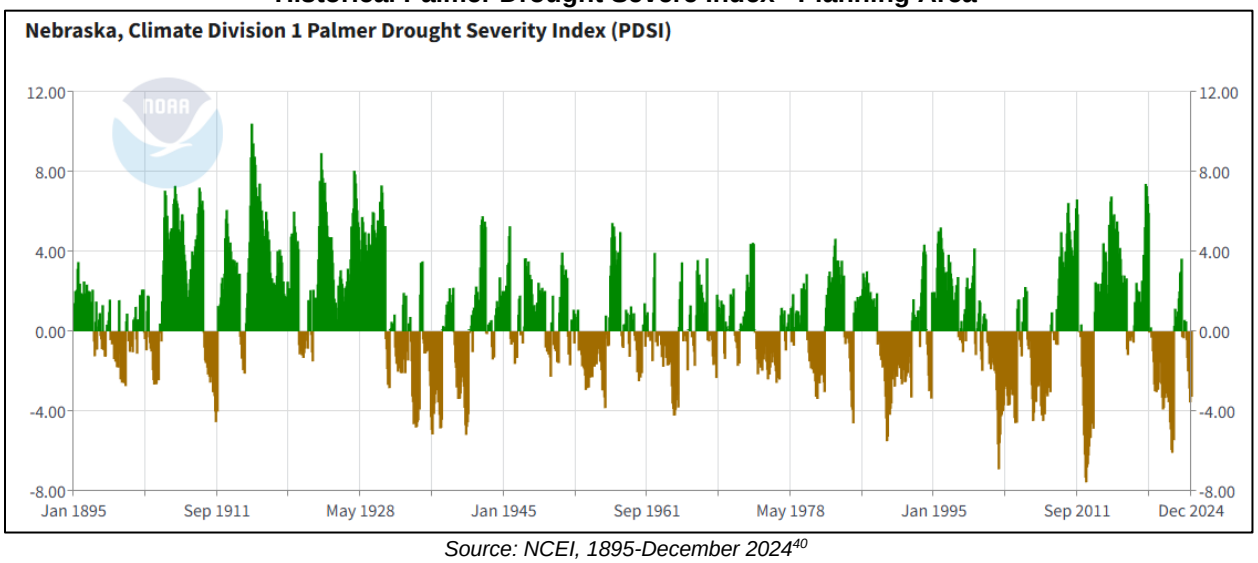
Palmer Drought Severity Index Classification

Numerical Value	Description		Numerical Value	Description
4.0 or more	Extremely wet		**-0.5 to -0.99**	Incipient dry spell
3.0 to 3.99	Very wet		**-1.0 to -1.99**	Mild drought
2.0 to 2.99	Moderately wet		**-2.0 to -2.99**	Moderate drought
1.0 to 1.99	Slightly wet		**-3.0 to -3.99**	Severe drought
0.5 to 0.99	Incipient wet spell		**-4.0 or less**	Extreme drought
0.49 to -0.49	Near Normal		--	--

Source: Climate Prediction Center[39]

38 National Drought Mitigation Center. 2017. "Types of Drought". https://drought.unl.edu/.
39 National Weather Service. 2017. "Climate Prediction Center". https://www.cpc.ncep.noaa.gov/.

Historical Palmer Drought Severe Index –Planning Area



Source: NCEI, 1895-December 2024[40]

The U.S. Drought Monitor (USDM) shows where drought is and its extent across the United States. The map uses six classifications shown in the table below. The USDM is produced jointly between the National Drought Mitigation Center, NOAA, and USDA. It uses physical data at multiple scales, drought impacts, and feedback from local experts.[41] Communities and jurisdictions across the planning area are likely to experience similar extent impacts from drought.

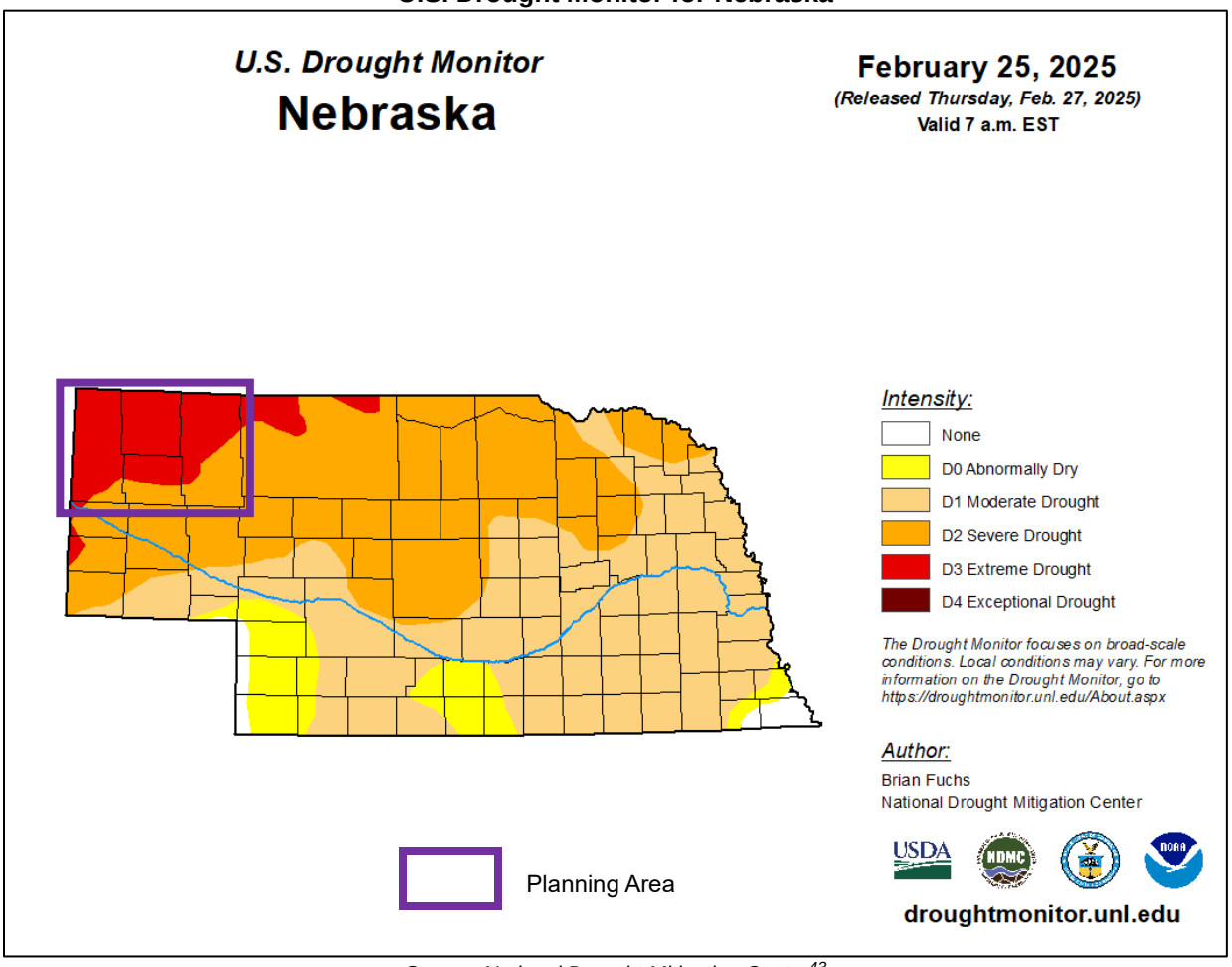
United States Drought Monitor Classification

Category	Description	PDSI Ranges	Possible Impacts
D0	Abnormally Dry	-1.0 to -1.9	Going into drought: short-term dryness slowing planting, growth of crops or pastures. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered.
D1	Moderate Drought	-2.0 to -2.9	Some damage to crops, pastures; streams, reservoirs, or wells low, some water shortages developing or imminent; voluntary water-use restrictions requested
D2	Severe Drought	-3.0 to -3.9	Crop or pasture losses likely, water shortages common; water restrictions imposed
D3	Extreme Drought	-4.0 to -4.9	Major crop/pasture losses; widespread water shortages or restrictions
D4	Exceptional Drought	-5.0 or less	Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams and wells creating water emergencies.

Source: NDMC, 2017[42]

40 NOAA National Centers for Environmental Information. 1895-December 2024. "Divisional Time Series". https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/divisional/time-series/2501/pdsi/1/0/1895-2024.
41 National Drought Mitigation Center. 2023. "What is the USDM?". https://droughtmonitor.unl.edu/About/WhatistheUSDM.aspx.
42 National Drought Mitigation Center. 2017. "Types of Drought." http://drought.unl.edu/DroughtBasics/TypesofDrought.aspx.

U.S. Drought Monitor for Nebraska



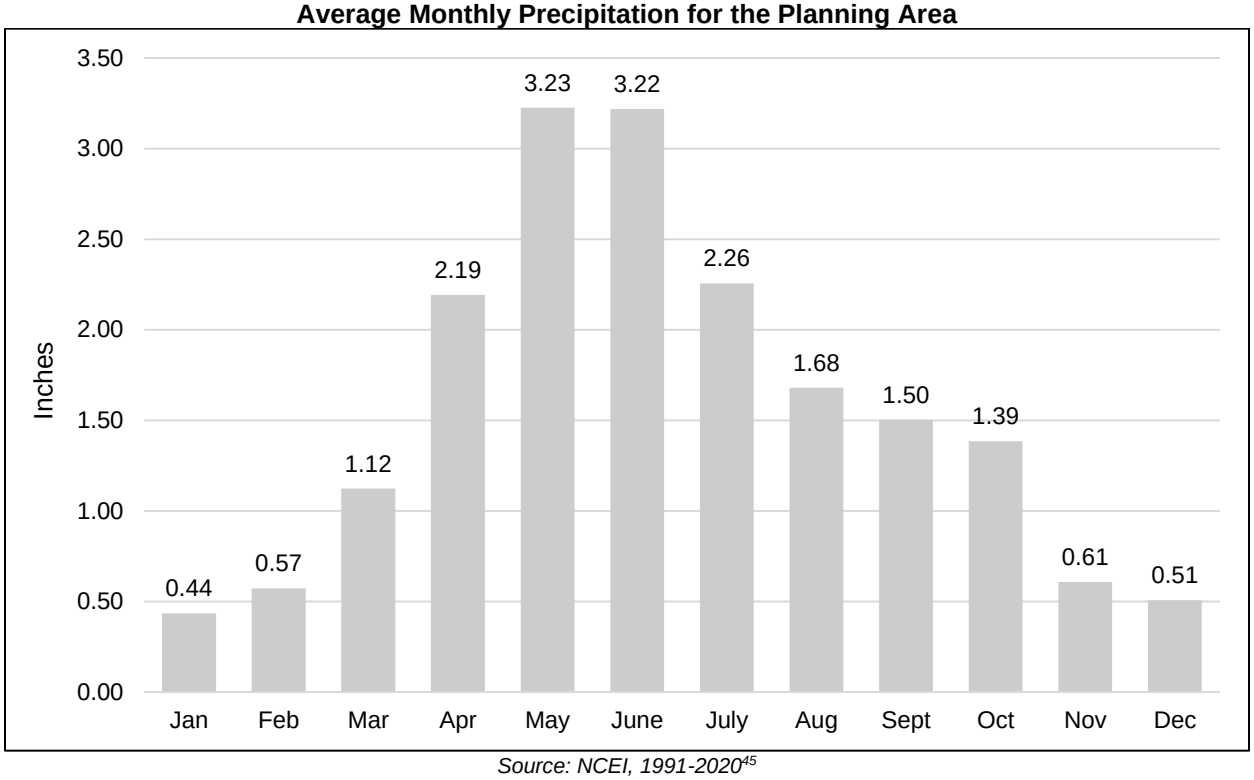
Source: National Drought Mitigation Center[43]

The figure on the next page shows the normal average monthly precipitation for the planning area, which is helpful in determining whether any given month is above, below, or near normal in precipitation. Prolonged negative deviations from the norm showcase possible drought conditions. The average precipitation for the planning area is approximately 18.7 inches according to the NCEI.[44]

43 National Drought Mitigation Center. June 2024. "U.S. Drought Monitor Nebraska". https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?NE.

44 NOAA National Centers for Environmental Information. 2023. "U.S. Climate Normals Quick Access". https://www.ncei.noaa.gov/access/us-climate-normals/.

Average Monthly Precipitation for the Planning Area



Source: NCEI, 1991-2020[45]

Historical Occurrences

The table below indicates it is reasonable to expect extreme drought to occur 4.6% of the time for at least some portion of the region (71 extreme drought months in 1,548 months). Severe drought occurred in 71 months of the 1,548 months of record (4.6% of months). Moderate drought occurred in 134 months of the 1,548 months of record (8.7% of months), and mild drought occurred in 188 of the 1,548 months of record (12.1% of months). Non-drought conditions occurred in 1,084 months, or 70% percent of months. These statistics show that the drought conditions of the region are highly variable.

Historical Droughts

Drought Magnitude	Total Months
-1 Magnitude (Mild)	188
-2 Magnitude (Moderate)	134
-3 Magnitude (Severe)	71
-4 Magnitude or Greater (Extreme)	71
Total Months in Drought	**464**
Total Months Not in Drought	**1,084**

Source: NCEI, 1895-2023[46]

The 2012 drought was one of the worst recent historical droughts for the planning area and Nebraska; however, it did not warrant a presidential disaster declaration. The whole state of Nebraska was in severe drought conditions from the middle of July in 2012 to the end of May in 2013 and over 70% of the state was in exceptional drought conditions for over eight months.

45 NOAA National Centers for Environmental Information. 2024. "U.S. Climate Normals Quick Access". https://www.ncei.noaa.gov/access/us-climate-normals/.
46 NOAA National Centers for Environmental Information. 1895-December 2024. “Divisional Time Series”. https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/divisional/time-series/2501/pdsi/1/0/1895-2024.

Numerous communities and water providers across the state implemented mandatory water restrictions, and some encouraged voluntarily water conservation during that timeframe. As many as 81 municipal water systems in the state experienced drought-related water supply issues in 2012 according to the Nebraska Department of Health and Human Services. The images below show a general timeline of worsening drought conditions from the 2012 drought in Nebraska from the state's 2012 Annual Report.[47]

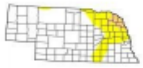
2012 Drought Timeline

Drought Severity

- D0 - Abnormally Dry
- D1 Drought – Moderate
- D2 Drought – Severe
- D3 Drought – Extreme
- D4 Drought - Exceptional



January 2012 -- 72% of the State had no drought conditions. Drought was evident in the Northeast ¼ of the state.



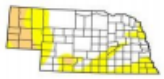
February 2012 – There was a slight improvement. 80% of the state had no signs of drought.



March 2012 -- Abnormally dry conditions appeared in the northeast ¼ and southwest portion of the state.



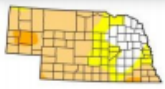
April 2012 -- Drought conditions increased to moderate in the northeast and west.



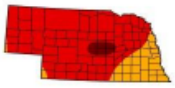
May 2012 -- The west and south parts of the state developed mostly moderate drought conditions.

47 Nebraska Department of Health and Human Services. 2012. "Nebraska's Public Water System Program 2012 Annual Report – January 1 to December 31, 2012". https://dhhs.ne.gov/Reports/Public%20Water%20System%20Annual%20Report%202012.pdf.

2012 Drought Timeline (cont.)



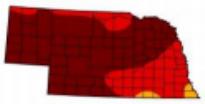
June 2012 -- Conditions continued to worsen to severe over 40% of the state, which involved the central and western parts of the state. About 7% of community water systems began asking consumers to voluntarily restrict their use of water.



July 2012 -- The entire state was under some degree of drought conditions. Throughout July, conditions deteriorated to 83% being under extreme conditions with 3.5% being defined as worst case conditions or exceptional drought. Water system restrictions showed a 65% increase. Most (78%) of those systems used voluntary restrictions while 22% went to mandatory restrictions. These restrictions ranged from allowing watering of lawns only on odd/even days to no lawn watering or vehicle washing.



August 2012 -- Exceptional drought conditions expanded to cover the central part of the state running east from Highway 281, west to Colorado and Wyoming. Another 15% of water systems began voluntary restrictions and another 12% began mandatory restrictions.



Sept 2012 -- Approximately 73% of the state experienced exceptional drought conditions. For the most part only the southeast corner of the state had severe to extreme conditions. No additional water systems were added to the list of those using restrictions.



Oct 2012 -- Exceptional drought conditions covered 77.5% of the state.

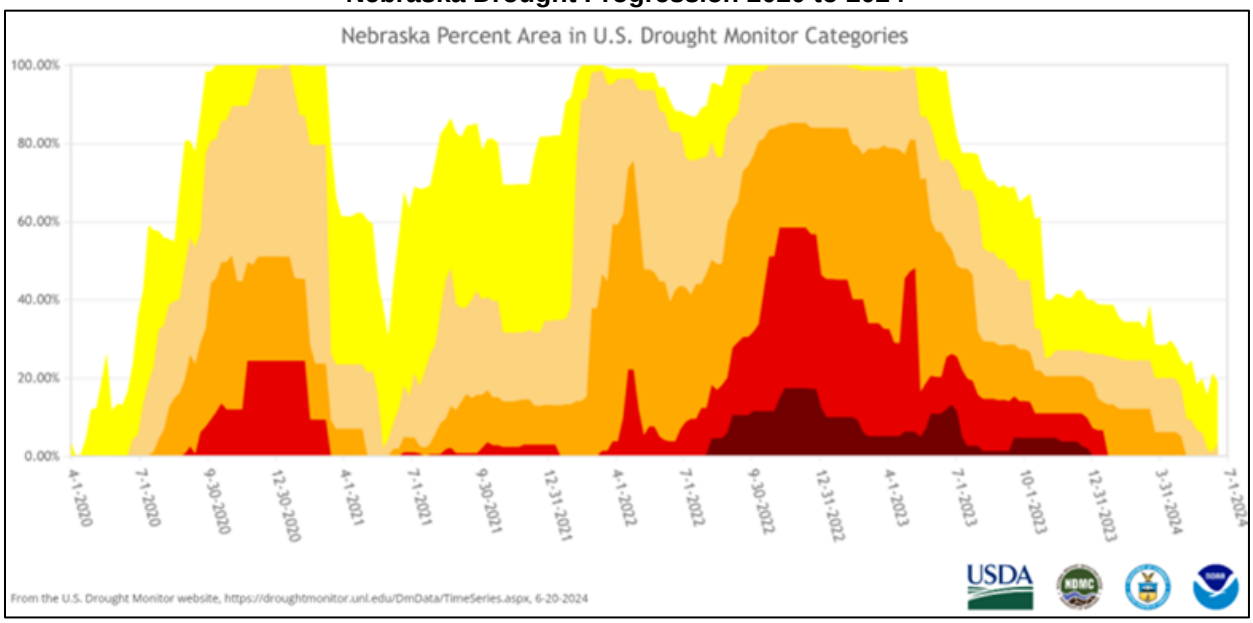


Nov & Dec 2012 – Conditions remained the same.

Source: Nebraska Department of Health and Human Services

The September 2020 - June 2024 drought was one of the worst droughts to impact Nebraska since the 2012 drought. From May 2023 parts of the planning area were in either D3 Extreme Drought or D4 Exceptional Drought until February 2024. The U.S. Drought Monitor progression from April 2020 to June 2024 in Nebraska is shown in the image below.

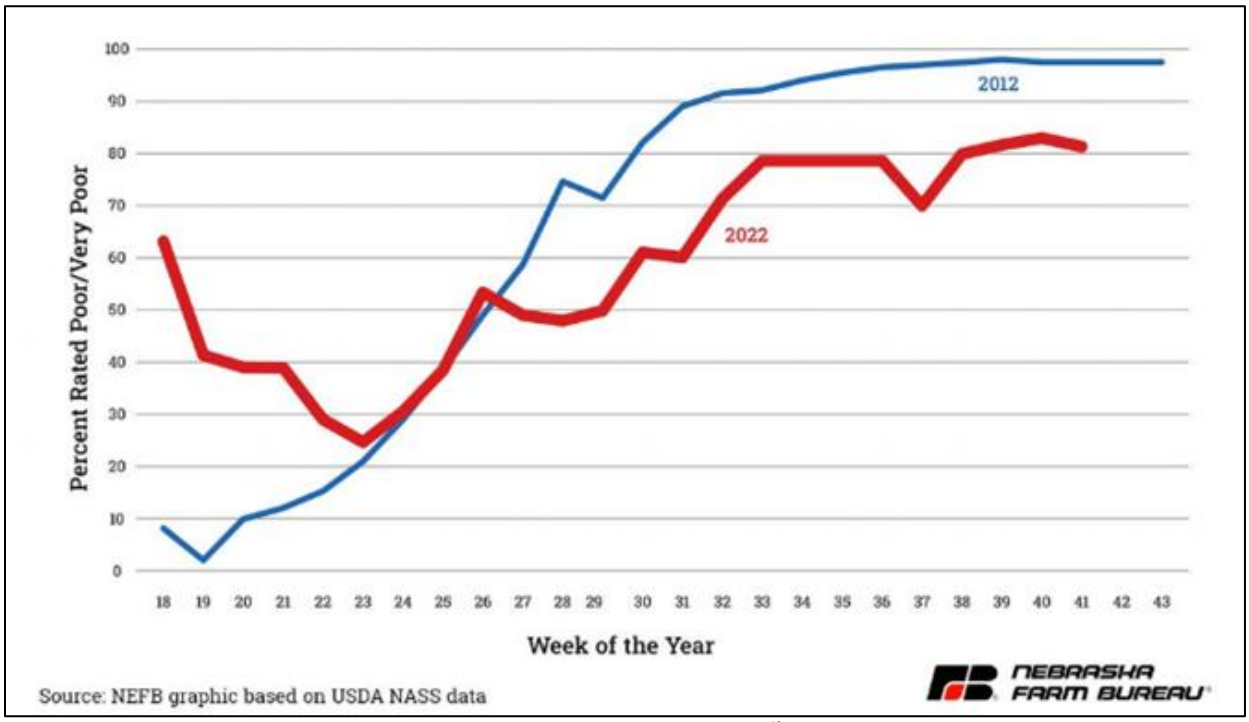
Nebraska Drought Progression 2020 to 2024



Source: National Drought Mitigation Center

As shown in the image above, the most extreme levels of drought can be traced to 2022 and 2023. In 2022, 12 Nebraska counties received a USDA Disaster Designation. When compared to the 2012 drought, this drought differed with cooler temperatures in the spring and early summer, helping alleviate and delay some of the drought impacts as shown in the figure below.

Nebraska Pasture Conditions 2012 & 2022

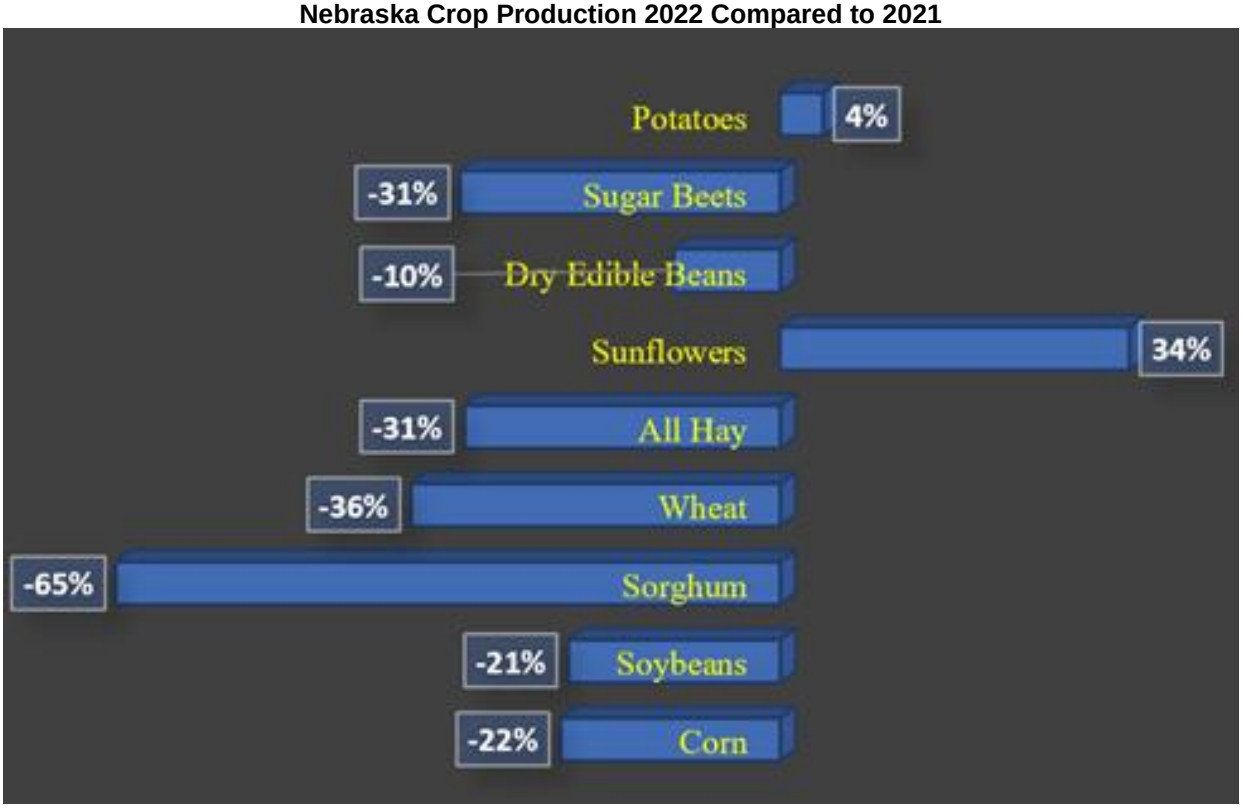


Source: Nebraska Farm Bureau[48]

48 Nebraska Farm Bureau. October 27, 2022. "Crop Input Costs, Drought, Top Concerns For Nebraska Farmers, Ranchers." https://www.nefb.org/10/27/2022/crop-input-costs-drought-top-concerns-for-nebraska-farmers-ranchers/.

Despite the cooler temperatures, 2022 was Nebraska's fourth driest year on record and was the driest state in the nation when compared to average annual precipitation, according to the NCEI Climate Monitoring database. The entire state was in a stage of drought from February to June and from August to December. In addition, over 50% of the state was in D4 (Exceptional Drought) for the last three months of 2022. The Nebraska Farm Bureau reported that, except for potatoes and sunflowers, all other crops produced in Nebraska were 10-65% lower than 2021 harvests.[49] Crop production in 2022 compared to 2021 is shown below, with sorghum having the largest drop of 65% and wheat 36%, despite the same number of acres being planted. Neither crop is typically irrigated and was heavily impacted by the drought.

Nebraska Crop Production 2022 Compared to 2021



Source: Nebraska Farm Bureau

According to Nebraska Public Media, in 2022 farmers have seen harvests drop by half and ranchers weaned calves early, relying on more hay and other feed for their cattle.[50] Along with significant impacts on the farming and ranching industries, the drought has also caused extremely dry vegetation leading to an increase in wildland fires. The 2022 wildfire season was Nebraska's second worst in terms of acres burned with 200,000 acres having been burned.[51]

As of February 25, 2025, the planning area is experiencing either D3 Extreme Drought or D2 Severe Drought according to the US Drought Monitor.

49 Nebraska Farm Bureau. 2023. "Nebraska Crop Production Off". https://www.nefb.org/01/23/2023/nebraska-crop-production-off/.
50 Nebraska Public Media. 2022. "Some of the worst I've ever seen, Nebraska ranchers, farmers struggle against 5th worst drought on record". https://nebraskapublicmedia.org/en/news/news-articles/some-of-the-worst-ive-ever-seen-nebraska-ranchers-farmers-struggle-against-5th-worst-drought-on-record/.
51 Omaha World-Herald. 2023. "Nebraska's drought among nation's billion-dollar weather disasters". https://omaha.com/news/state-and-regional/nebraskas-drought-among-nations-billion-dollar-weather-disasters/article_ba26ca52-8ddf-11ed-ac57-8b2fd8286d3d.html.

The Drought Impact Reporter is a database of drought impacts throughout the U.S. with data going back to 2000. The more impacts that are reported to the National Drought Mitigation Center the more severe the drought. Recent examples of reported drought impacts include the following.[52]

- Drought, other factors, reduced deer population in Nebraska (December 2024)
- Temporary campfire ban at Nebraska state park areas and wildlife management areas (October 2024)
- Drought contributed to falling groundwater levels in Nebraska (May 2024)

The Drought Impact Reporter has recorded a total of 54 drought-related impacts throughout the four counties. This is not a comprehensive list of droughts which may have impacted the planning area, but only those with reported impacts. The following are the categories and reported number of impacts. Note that some impacts have been assigned to more than one category.

- Agriculture: 25
- Fire: 15
- Plants & Wildlife: 6
- Relief, Response & Restrictions: 27
- Society & Public Health: 2
- Tourism & Recreation: 3
- Water Supply & Quality: 3

Some of these impacts are summarized in the following table:

Drought Impacts in the Planning Area

Category	Date	Title
Agriculture, Relief, Response, and Restrictions, Tourism & Recreation	10/8/2024	Temporary campfire ban at Nebraska state park areas and wildlife management areas
Fire & Relief, Response, and Restrictions	7/30/2024	Stage 1 fire restrictions for Nebraska national forests and grasslands
Agriculture & Plants and Wildlife	5/14/2021	Cattle producers in Nebraska Sandhills still buying, feeding hay
Agriculture & Plants and Wildlife	9/13/2020	Grass growth slowed in western Nebraska
Agriculture	10/17/2013	Cattle producers in Dawes and Sioux counties in the Nebraska panhandle have struggled to hang onto their cattle through a drought and wildfire

Source: NDMC, 2000- 2024[53]

Average Annual Losses

The direct and indirect effects of drought are difficult to quantify. Potential losses such as power outages could affect businesses, homes, and community lifelines. High demand and intense use of air conditioning or water pumps can overload the electrical systems and cause damage to infrastructure. The annual property estimates for the planning was determined based upon NCEI Storm Events Database from 1996 to 2023. Annual crop loss for the county was determined based upon the RMA Cause of Loss Historical Database from 2000 to 2023.

52 National Drought Mitigation Center. February 2025. "Drought Impact Reporter". https://droughtreporter.unl.edu/advancedsearch/impacts.aspx.
53 National Drought Mitigation Center. February 2025. "Drought Impact Reporter". https://droughtreporter.unl.edu/advancedsearch/impacts.aspx.

Loss Estimate for Drought

Hazard Type	Total Property Loss[1]	Average Annual Property Loss[1]	Total Crop Loss[2]	Average Annual Crop Loss[2]
Drought	$10,000,000	$357,143	$32,835,082	$1,368,128

Source: 1 Indicates data is from NCEI (1996 to 2023)[54]; 2 Indicates data is from RMA (2000 to 2023)[55]

Historical Probability & Future Likelihood

The following table summarizes the magnitude of drought and monthly historical probability of occurrence. Due to the anticipated impacts from climate change and future development, the future likelihood of drought events is very likely in the planning area.

Drought Probability

PDSI Value	Magnitude	Drought Occurrences by Month	Monthly Historical Probability
4 or more to -0.99	No Drought	1,084/1,548	70%
-1.0 to -1.99	Mild Drought	188/1,548	12.4%
-2.0 to -2.99	Moderate Drought	134/1,548	8.7%
-3.0 to -3.99	Severe Drought	71/1,548	4.6%
-4.0 or less	Extreme Drought	71/1,548	4.6%

Source: NCEI, 1895-2023[56]

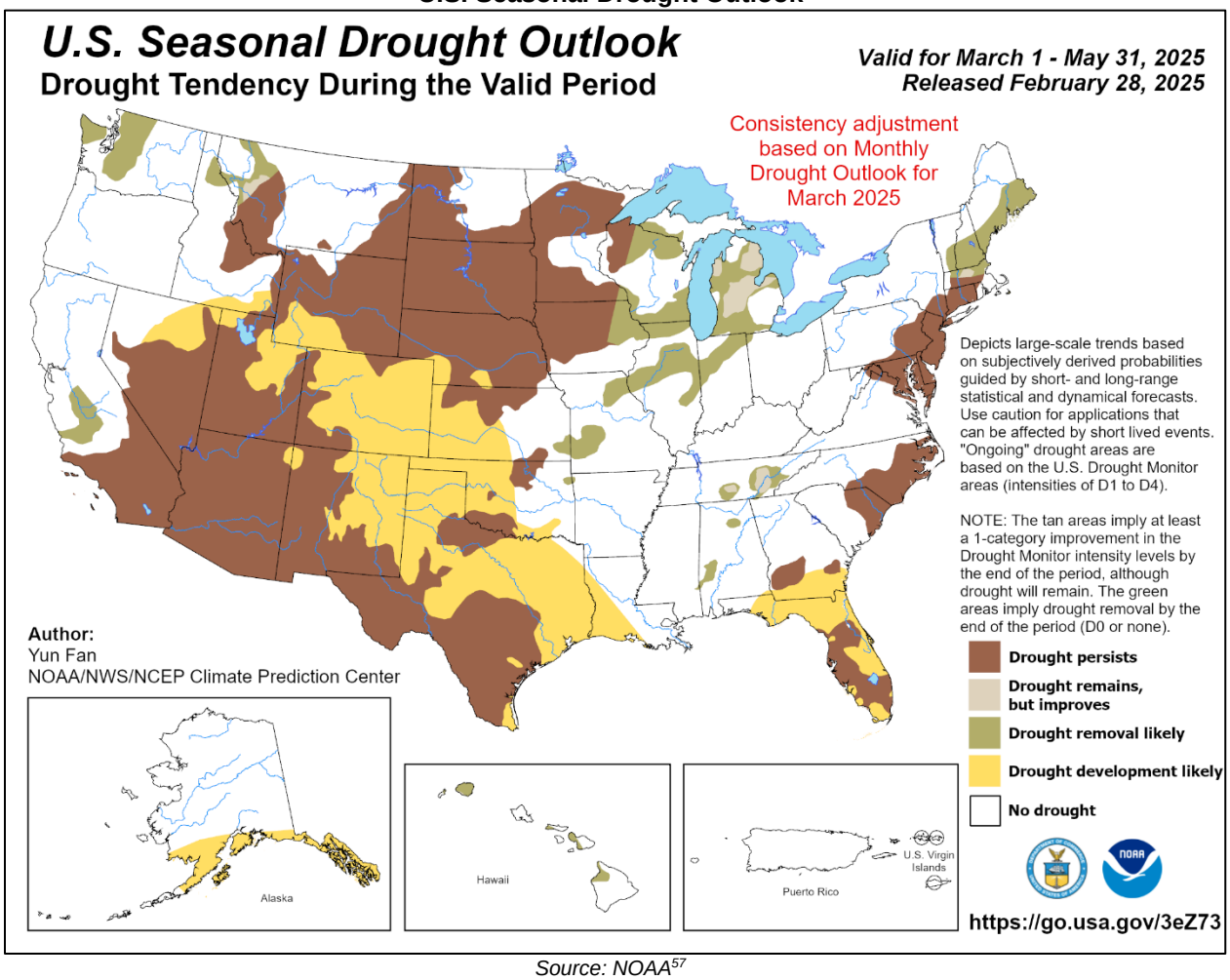
Historical Probability & Future Likelihood – Drought

Monthly Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
30%	Increase in Frequency and Extent	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Very Likely**

The U.S. Seasonal Drought Outlook provides a short- term drought forecast that can be utilized by local officials and residents to examine the likelihood of drought developing or continuing within three months as based on existing conditions. The drought outlook is updated consistently throughout the year and should be reviewed on an ongoing basis. The following figure provides the drought outlook from March 1, 2025, to May 31, 2025, as an example.

54 NOAA National Centers for Environmental Information. May 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.
55 U.S. Department of Agriculture Risk Management Agency. 2023. "Cause of Loss Historical Data Files: 2000-2023." https://www.rma.usda.gov/tools-reports/summary-business/cause-loss.
56 NOAA National Centers for Environmental Information. 1895-December 2024. “Divisional Time Series”. https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/divisional/time-series/2501/pdsi/1/0/1895-2024.

U.S. Seasonal Drought Outlook



Source: NOAA[57]

Climate Change

An increase in average temperatures and evaporation rates will likely contribute to the rise in the frequency and intensity of drought, especially during the summer months.[58] This will cause significant economic, social, and environmental impacts on farming and community water systems in the planning area. The increase in droughts will also lead to an increased risk of wildfire events as vegetation becomes drier. The table below shows the likelihood of a year-plus drought and year-plus extreme drought in the four-county region with different warming scenarios.

Likelihood of Drought with Different Warming Scenarios

	Warming Scenarios			
Likelihood of	0.5° C	1° C	2° C	3° C
Year-Plus Drought	11-33%	11-33%	11-50%	34-50%
Year-Plus Extreme Drought	0-10%	0-10%	0-20%	11-20%

Source: Probable Futures[59]

57 NOAA. March 2025. "U.S. Seasonal Drought Outlook". https://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php.

58 NCEI. 2022. "State Climate Summaries – Nebraska". https://statesummaries.ncics.org/chapter/ne/#:~:text=The%20state%20is%20located%20far,(1895%E2%80%932020)%20averag.

59 Probable Futures. "Maps of Dryness". February 2025. https://probablefutures.org/.

NOAA has created the Climate Mapping for Resilience and Adaptation tool that looks at how different emission scenarios affect climatological hazards. The table below shows that the annual number of dry days is projected to increase as time goes on in both the lower emissions and higher emissions scenario.

Annual Number of Dry Days

County	Emission Scenario	Historical (1976-2005)	Early Century (2015-2044)	Mid Century (2035-2064)	Late Century (2070-2099)
Box Butte	Lower Emissions (RCP 4.5)	239 Days	239 Days	240 Days	241 Days
	Higher Emissions (RCP 8.5)	239 Days	240 Days	240 Days	242 Days
Dawes	Lower Emissions (RCP 4.5)	241 Days	241 Days	242 Days	243 Days
	Higher Emissions (RCP 8.5)	241 Days	242 Days	242 Days	244 Days
Sheridan	Lower Emissions (RCP 4.5)	241 Days	241 Days	242 Days	243 Days
	Higher Emissions (RCP 8.5)	241 Days	242 Days	242 Days	244 Days
Sioux	Lower Emissions (RCP 4.5)	243 Days	243 Days	244 Days	244 Days
	Higher Emissions (RCP 8.5)	243 Days	244 Days	244 Days	246 Days

Source: NOAA, 2024[60]

Future Development

Any future developments are likely to increase water demand, increase travel on local transportation routes, and influence continued growth on economic sectors at risk from the impacts of drought. Growing communities will need to adapt and account for increased water demands for residential, commercial, and industrial development.

Regional Vulnerabilities

The four-county planning area is largely agriculturally based, and any type of drought is likely to have large impacts on the local economy. Although agriculture and ranching are the major sectors affected, impacts on rural and municipal water supplies, fish and wildlife, water-based recreation, water quality, soil erosion, mental health, and the incidence of wildland fires are also significant. Similarly, the indirect impacts of drought on personal and business incomes, tax revenues, unemployment, and other areas are also important. In general, drought produces a complex web of impacts that ripple through many sectors of the economy. This is largely due to the dependence of so many sectors on water for producing goods and providing services. The following table provides information related to regional vulnerabilities. For jurisdictional-specific vulnerabilities, refer to *Section Eight*.

60 NOAA. March 2025. "Climate Mapping for Resilience and Adaptation". https://livingatlas.arcgis.com/assessment-tool/explore/details.

Regional Drought Vulnerabilities

Sector	Vulnerability
People	-Insufficient water supply -Loss of jobs in agricultural sector -Residents in poverty if food prices increase
Economic	-Closure of water intensive businesses (carwashes, pools, etc.) -Short-term interruption of business -Decrease in cattle prices -Decrease of land prices→ jeopardizes educational funds -Decrease in recreational outdoor activities
Built Environment	-Cracking foundations (residential and commercial structures) -Damages to landscapes
Community Lifelines	-Damages to waterlines below ground -Damages to roadways (prolonged extreme events) -Loss of power

Jurisdictions Ranking Drought as a Prioritized Hazard of Concern

The following jurisdictions identified drought as a prioritized hazard of concern.

- Upper Niobrara White NRD
- Box Butte County
- Sheridan County
- City of Hay Springs
- City of Rushville
- Sioux County
- Village of Harrison

Extreme Temperatures

Extreme temperatures include durations of time at both the low and high ends of the thermometer. What constitutes extreme temperatures varies from region to region but is generally accepted as being temperatures that are significantly lower or higher than the average. For the purposes of this plan, extreme cold is defined as the high temperature being below 10°F, while extreme heat is defined as low temperatures being 100°F or higher.

Extreme cold can be dangerous to the well-being of people and animals as prolonged exposure to cold causes the human body to lose heat faster than it can be produced and use up the body's stored energy. As a result, abnormally low body temperature can lead to hypothermia and frostbite. Cold can cause fuel to congeal in storage tanks and supply lines, stopping electric generators, overpower a building's heating system, and cause water and sewer pipes to freeze and rupture. Extreme cold also increases the likelihood of ice jams on flat rivers or streams. When combined with high winds from winter storms, extreme cold becomes extreme wind chill, which is extremely hazardous to health and safety.

Extreme heat is often associated with periods of drought but can also be characterized by long periods of high temperatures in combination with high humidity. During these conditions, the human body has difficulty cooling through the normal method of the evaporation of perspiration. Health risks including heatstroke, sunstroke, cramps, exhaustion, and fatigue may arise when a person is overexposed to heat.

Extreme temperatures can also cause people to overuse furnaces and air conditioners, which can lead to power failures. Power outages for prolonged periods increase the risk of health events such as heat stroke or hypothermia and subsequent fatalities.

Along with humans, animals also can be affected by extreme temperatures and humidity. Cattle and other farm animals respond to heat by reducing feed intake, increasing their respiration rate, and increasing their body temperature. These responses assist the animal in cooling itself, but this is usually not sufficient. When animals overheat, they will begin to shut down body processes not vital to survival, such as milk production, reproduction, or muscle building.

Location

The entire planning area is susceptible to extreme temperature impacts.

Extent

The National Weather Service (NWS) is responsible for issuing excessive heat or cold temperature outlooks, forecasts, watches, or warnings. The NWS' definitions are provided below.[61,62]

- **Heat Advisories** are issued when temperatures of at least 100°F or Heat Index values of at least 105°F are expected generally within the next 24 hours.

61 National Weather Service. 2023. "Heat Information Page". https://www.weather.gov/dmx/dssheat.
62 National Weather Service. 2024. "Understanding Cold Weather Alerts". https://www.weather.gov/safety/cold-ww.

- **Cold Weather Advisory** is issued when seasonably cold air temperatures or wind child values, but not extremely cold values, are expected or occurring. Be sure to dress appropriately and cover exposed skin when outdoors.

- **Frost Advisory** means temperatures of 33 to 36°F with clear skies and light winds over a widespread area during growing season, promoting the development of frost.

- **Excessive Heat Watches** are issued when the Heat Index values are expected to reach or exceed 110°F and not fall below 75°F for at least a 48-hour period, beginning in the next 12 to 48 hours.

- **Extreme Cold Watch** means dangerously cold air temperatures or wind chill values are possible. Adjust plans to avoid being outside during the coldest parts of the day.

- **Freeze Watch** is issued when there is a potential for significant, widespread freezing temperatures in the next 24-36 hours.

- **Excessive Heat Warnings** are issued when Heat Index values are expected to reach or exceed 110°F and not fall below 75°F for at least a 48-hour period, beginning in the next 24 hours.

- **Extreme Cold Warning** means dangerously cold air temperatures or wind chill values are expected or occurring. Please refrain from any unnecessary outdoor activities and wear protective clothing if you must venture outdoors.

- **Freeze Warnings** are issued when temperatures are forecasted to go below 32°F for a long period of time during growing season. A **hard freeze** is when temperatures fall below 28°F.

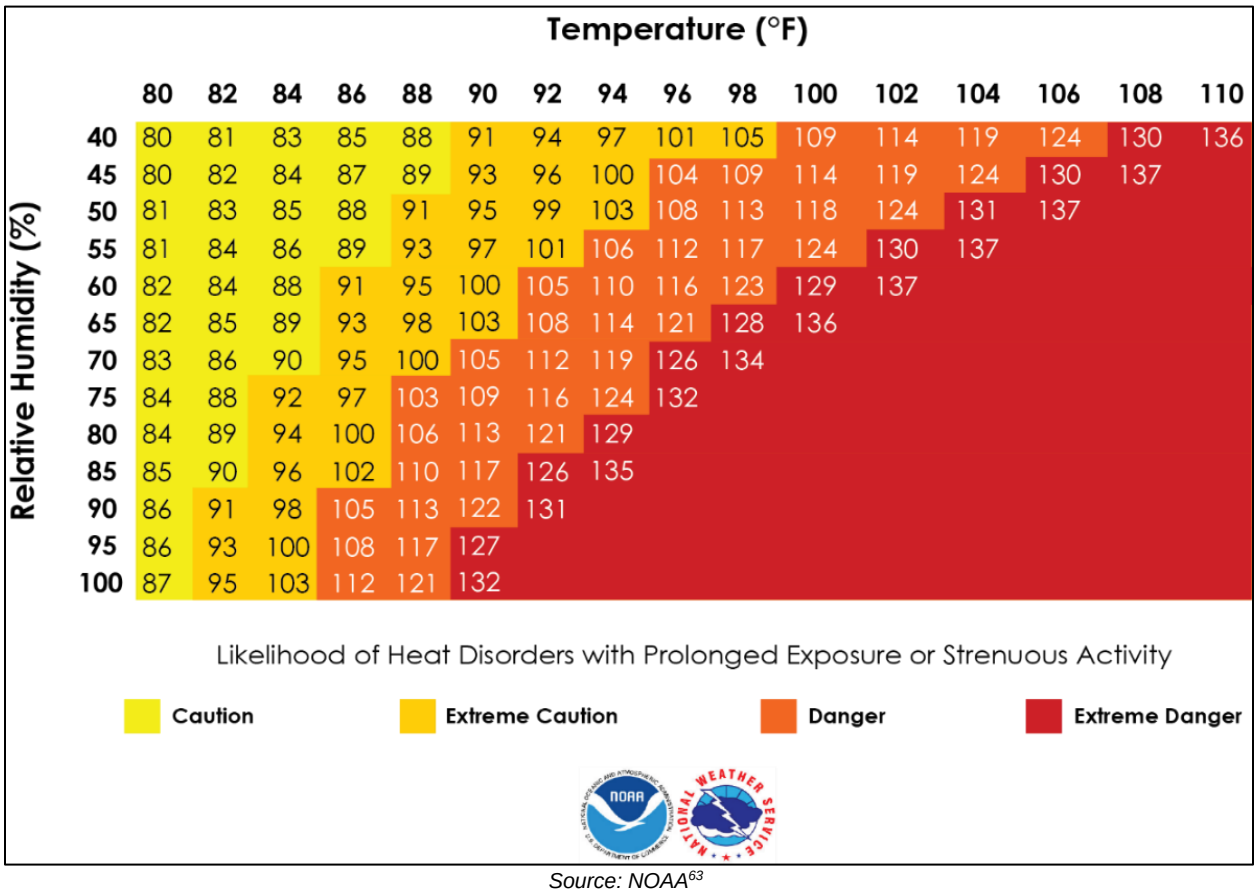
A key factor to consider regarding extreme heat situations is the humidity level relative to the temperature. As is indicated in the following figure from the National Oceanic and Atmospheric Administration, as the relative humidity increases, the temperature needed to cause a dangerous situation decreases. For example, for 100% relative humidity, dangerous levels of heat begin at 86°F whereas a relative humidity of 50% starts at 94°F. The figure below (NOAA Heat Index) is designed for shady and light wind conditions. Exposure to full sunshine or strong winds can increase hazardous conditions and raise heat index values by up to 15°F.

Wind chill is a key factor to consider regarding extreme cold situations. The Wind Chill Index was developed by the NWS to determine the decrease in air temperature felt by the body on exposed skin due to wind. The wind chill is always lower than the air temperature and can quicken the effects of hypothermia or frost bite as it gets lower. The figure on the next page shows the Wind Chill Index used by the NWS.

The impacts of extreme temperatures, specifically extreme heat, are exacerbated by other risk factors such as diabetes, obesity, heart disease, or other health equity concerns. Many vulnerable communities and populations at-risk face greater exposure to heat or cold, have fewer resources to respond or escape conditions, and are more likely to suffer severe consequences if left unassisted. Populations at highest risk are those without shelter or who are stranded, or who live in a home that is poorly insulated or without adequate HVAC systems. Other impacts of extreme temperatures include asphyxiation (unconsciousness or death from a lack of oxygen) from toxic

fumes from emergency heaters; household fires, which can be caused by fireplaces and emergency heaters; and frozen/burst pipes. Elderly populations are considered particularly vulnerable to the impacts of extreme temperatures events.

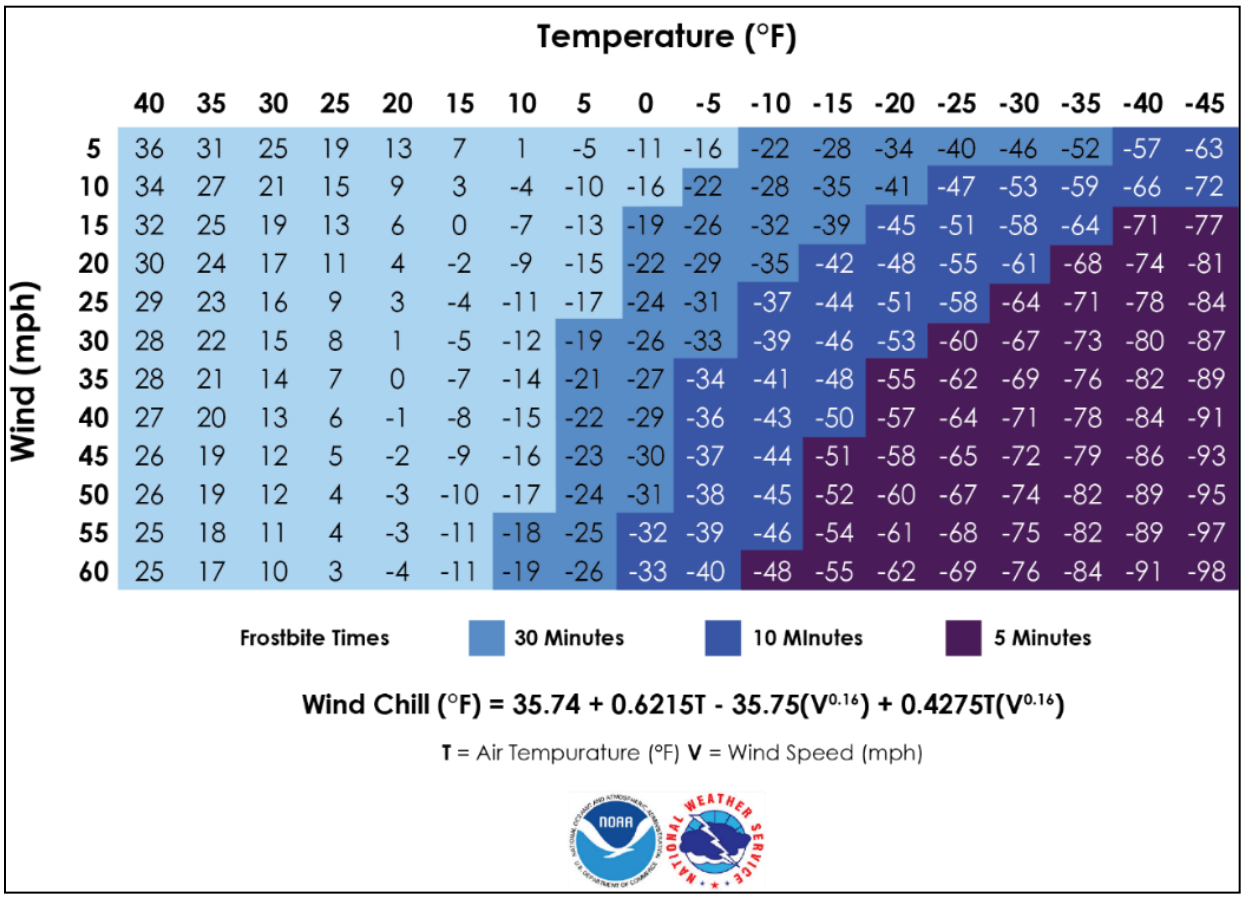
NOAA Heat Index



Source: NOAA[63]

63 National Oceanic and Atmospheric Administration, National Weather Service. 2020. "Heat Index". https://www.weather.gov/ama/heatindex.

Wind Chill Index Chart

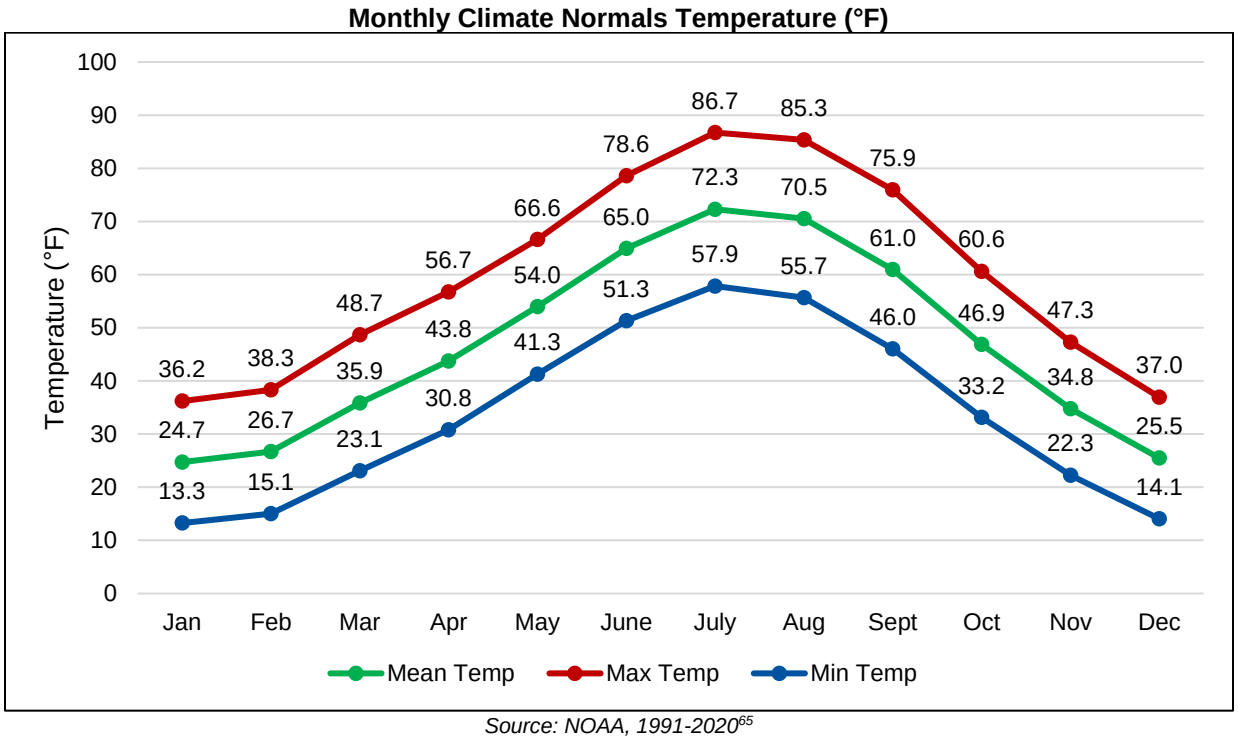


Wind (mph)	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-82	-89	-95
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98

Source: NWS[64]

For the planning area, the coldest months of the year are December, January, and February. The average low temperatures for these months are all below freezing (average low for the three months 14.1°F). The average high temperature for these months is 37.2°F. In the planning area, the months with the highest temperatures are June, July, and August. The average high temperature for these months is approximately 83.5°F while the average low temperature for these months is 55°F.

64 NOAA National Weather Service. 2001. "Wind Chill Chart". https://www.weather.gov/safety/cold-wind-chill-chart.



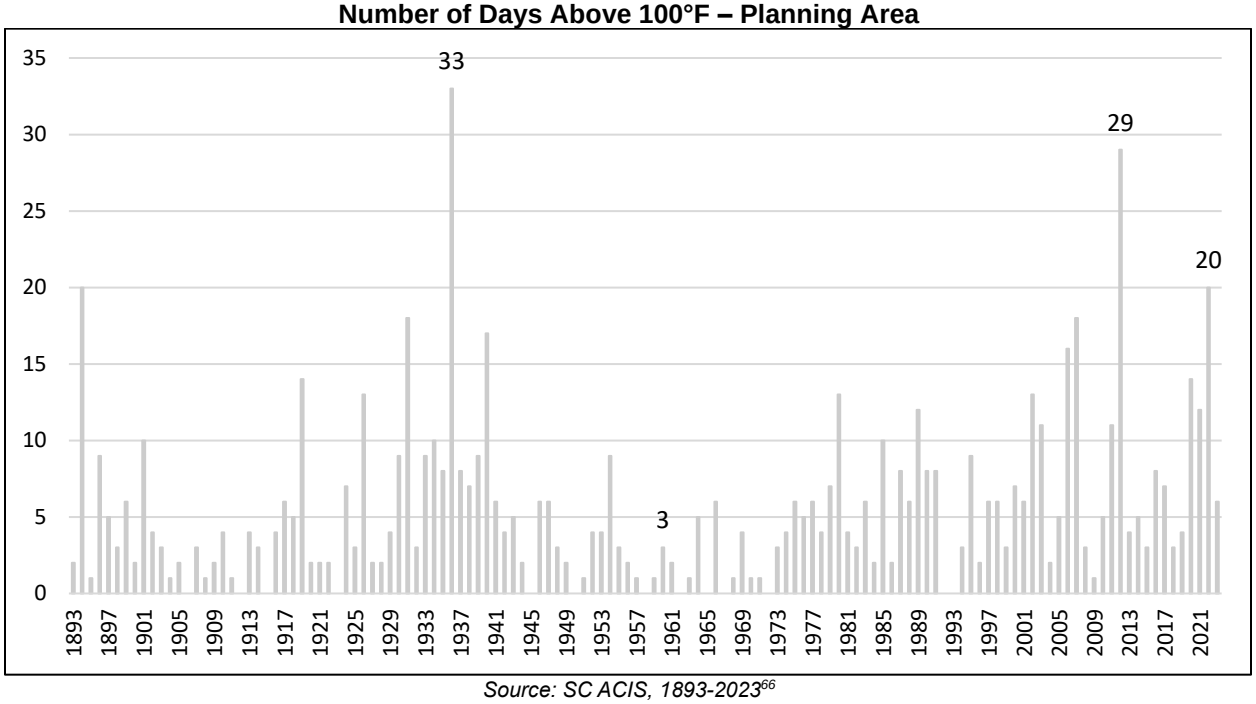
Source: NOAA, 1991-2020[65]

Historical Occurrences

According to the High Plains Regional Climate Center (HPRCC), on average, the planning area experiences five days above 100°F per year. The planning area experienced the most days on record above 100°F in 1936 with 33 days. On average, the planning area experiences four days with high temperatures below 10°F per year. The planning area experienced the most days on record below 10°F in 1996 with 15 days.

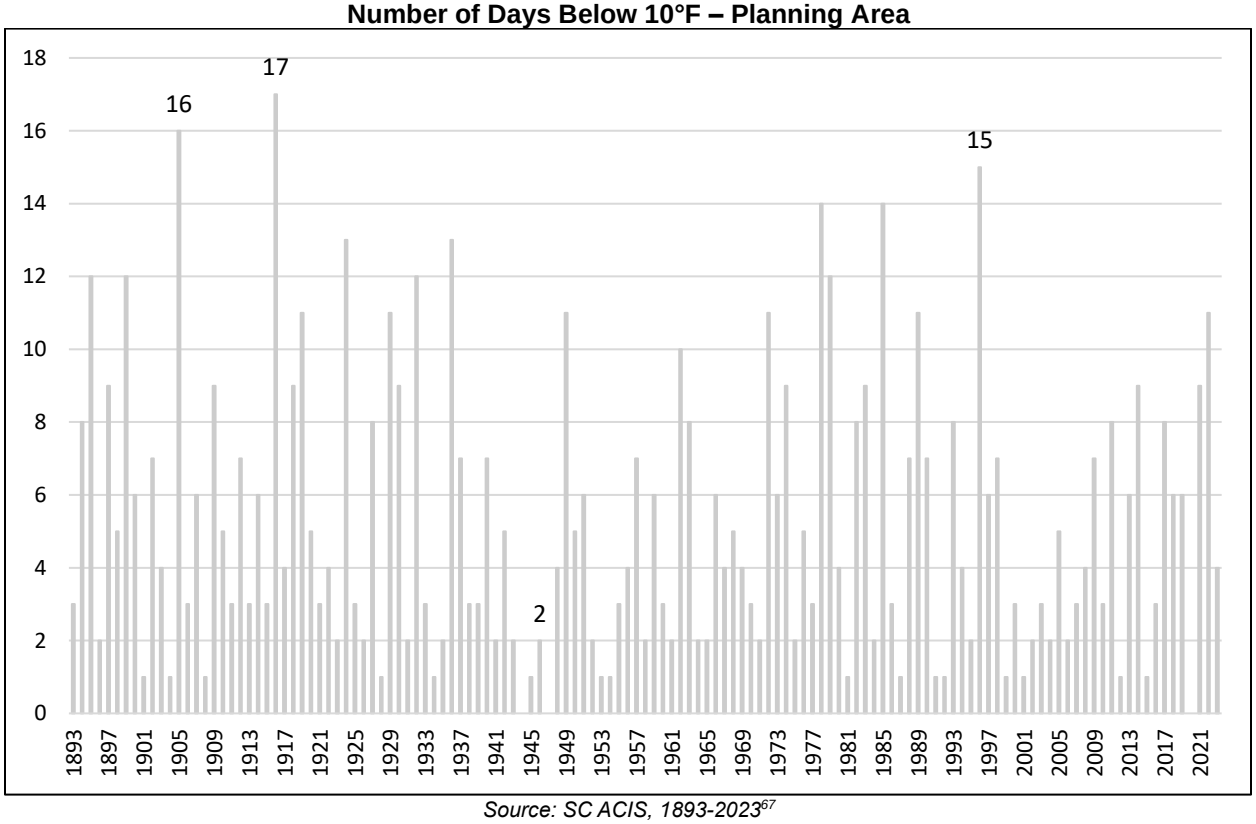
65 NOAA National Centers for Environmental Information. 2024. "U.S. Climate Normals Quick Access". https://www.ncei.noaa.gov/access/us-climate-normals/.

Number of Days Above 100°F – Planning Area



Source: SC ACIS, 1893-2023[66]

Number of Days Below 10°F – Planning Area



Source: SC ACIS, 1893-2023[67]

66 NOAA Northeast Regional Climate Center. 2024. "SC ACIS". https://scacis.rcc-acis.org/.
67 NOAA Northeast Regional Climate Center. 2024. "SC ACIS". https://scacis.rcc-acis.org/.

Average Annual Losses

Average annual property loss is not available through the NCEI Storm Events Database or other sources. The annual crop loss was determined based upon the RMA Cause of Loss Historical Database from 2000 to 2023. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. The direct and indirect effects of extreme temperatures are difficult to quantify. Potential losses such as power outages could affect businesses, homes, and community lifelines. High demand and intense use of air conditioning, heaters, and water pumps can overload the electrical systems and damage infrastructure.

Loss Estimate for Extreme Temperatures

Hazard Type	Avg. Number of Days Above 100°F or Below 10°F[1]	Total Crop Loss[2]	Average Annual Crop Loss[2]
Extreme Heat	5 days	$8,671,302	$66,193
Extreme Cold	4 days	$19,637,114	$149,902

Source: 1 SC ACIS (1893-2023)[68]; 2 Indicates data is from USDA RMA (2000 to 2023)[69]

Historical Probability & Future Likelihood

Extreme temperatures are a regular part of the climate for the planning area. With 118 years out of 131 having at least one day of 100°F temperatures, the historical probability for extreme heat is 90%. With 128 years out of 131 having at least one day of high temperatures less than 10°F temperatures, the historical probability for extreme cold is 98%. Due to the anticipated impacts from climate change and future development, the future likelihood of extreme temperature events is very likely in the planning area.

Historical Probability & Future Likelihood – Extreme Temperatures

Hazard	Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
Extreme Heat	90%	Increase in Frequency and Extent	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Very Likely**
Extreme Cold	98%	Decrease in Frequency and Extent	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Very Likely**

Climate Change

The Union for Concerned Scientists released a report in July 2019 titled *Killer Heat in the United States: Climate Choices and the Future of Dangerously Hot Days*[70] which included predictions for extreme heat events in the future dependent on future climate actions. The table below summarizes those findings for the planning area.

Extreme Heat Predictions for Days over 100°F

County	Midcentury Prediction 2036-2065 (Days per year)	Late Century Prediction 2070-2099 (Days per year)
Box Butte	4	20
Dawes	7	26
Sheridan	6	25
Sioux	3	17

Source: Union of Concerned Scientists[71]

68 NOAA Northeast Regional Climate Center. 2024. "SC ACIS". https://scacis.rcc-acis.org/.
69 U.S. Department of Agriculture Risk Management Agency. 2024. "Cause of Loss Historical Data Files: 2000-2023." https://www.rma.usda.gov/tools-reports/summary-business/cause-loss.
70 Union of Concerned Scientists. 2019. "Killer Heat in the United States: Climate Choices and the Future of Dangerously Hot Days". https://www.ucsusa.org/sites/default/files/attach/2019/07/killer-heat-analysis-full-report.pdf.
71 Union of Concerned Scientists. 2019. "Killer Heat Interactive Tool". https://www.ucsusa.org/resources/killer-heat-interactive-tool.

Impacts from climate change will significantly affect the prevalence and extent of extreme temperature conditions. The Fifth National Climate Assessment noted numerous impacts from extreme heat including higher rates of illness and death, infrastructure damage, and increased severe wildfire events with hot dry conditions.[72] Jurisdictions across the planning area may also experience more than one climate related impact simultaneously such as drought and extreme heat. The assessment found that overall cold extremes are becoming less frequent and milder with the number of days below freezing going down. However, some studies found that arctic warming results in the polar vortex spilling down over the United States, as seen in February 2021.

Future Development

Any increases in population and development will elevate exposure levels to extreme heat or cold. There are several ways for communities to minimize the impacts of extreme heat. Communities can plant trees and other vegetation to provide more natural shade and make green infrastructure improvements. Many of these options can be required during new development but can also be added to areas that are already developed. Facilities such as nursing homes, hospitals, clinics, and day cares should be designed with access to back up power generation. Public cooling or warming centers should be established across the planning area for residents.

Regional Vulnerabilities

The nonprofit First Street Foundation has developed a Risk Factor tool to help understand risks from a changing climate at the county or community level. The following table outlines key risk factors from heat risk for each county.

Heat Risk

Heat Risk Factors	Box Butte County	Dawes County	Sheridan County	Sioux County
Overall Heat Risk	Moderate Risk	Moderate Risk	Moderate Risk	Moderate Risk
Likelihood of 3+ Day Heat Wave (>100°F)	20% this year 54% in 30 years	53% this year 22% in 30 years	54% this year 21% in 30 years	21% this year 80% in 30 years
Health Caution Days	26 days this year 39 days in 30 years	31 days this year 42 days in 30 years	28 days this year 40 days in 30 years	22 days this year 35 days in 30 years
Dangerous Days	1 day this year 3 days in 30 years	1 day this year 4 days in 30 years	1 day this year 3 days in 30 years	0 days this year 1 day in 30 years
Hot Days	7 days this year 17 days in 30 years	7 days this year 18 days in 30 years	7 days this year 18 days in 30 years	7 days this year 18 days in 30 years
Number of Cooling Days (requiring AC)	144 days this year 154 days in 30 years	146 days this year 155 days in 30 years	143 days this year 153 days in 30 years	141 days this year 150 days in 30 years

Source: Risk Factor[73]
Note: Health Caution Days = days where "feels like" temperature exceeds 90°F-100°F; Dangerous Days = days where "feels like" temperature exceeds 100°F; Hot Days = days where "feels like" temperature exceeds 104°F.

72 U.S. Global Change Research Program. 2023. "Fifth National Climate Assessment". https://nca2023.globalchange.gov/.
73 Risk Factor. January 2024. "Risk Factor". https://riskfactor.com/.

The planning area is a mixture of rural farmland and small to medium sized communities, which presents an added vulnerability to extreme temperature events. In rural areas those suffering from an extreme temperature event may be farther away from medical resources causing dangerous situations for the elderly and those with preexisting conditions. The following table provides information related to regional vulnerabilities. For jurisdictional-specific vulnerabilities, refer to *Section Eight*.

Regional Extreme Temperature Vulnerabilities

Sector	Vulnerability
People	-Heat exhaustion -Heat stroke Vulnerable populations include: -People working outdoors -People without air conditioning or heating -Young children outdoors or without air conditioning or heating -Elderly outdoors or without air conditioning or heating
Economic	-Short-term interruption of business -Loss of power -Agricultural and livestock losses
Built Environment	-Damage to air conditioning and heating systems if overworked -Frozen and broken pipes -Fuel congealed
Community Lifelines	-Damages to roadways (prolonged extreme events) -Stressing electrical systems (brownouts during peak usage) -Loss of power

Jurisdictions Ranking Extreme Temperature as a Prioritized Hazard of Concern

The following jurisdictions identified extreme temperatures as a prioritized hazard of concern.

- Sheridan County
- Sioux County
- Gordon-Rushville Public Schools
- Hemingford Public Schools

Flooding

Flooding can occur on a local level, sometimes affecting only a few streets, but can also extend throughout a large area, affecting whole drainage basins and impacting property in multiple states. Heavy accumulations of ice or snow can also cause flooding during the melting and freezing stages. These events are complicated by the freeze/thaw cycles characterized by moisture thawing during the day and freezing at night. There are four main types of flooding in Nebraska: riverine flooding, flash flooding, stormwater flooding, and ice jam flooding.

Riverine Flooding

Riverine flooding, typically slower developing with a moderate to long warning time, is defined as the overflow of rivers, streams, drains, and lakes due to excessive rainfall, rapid snowmelt or ice melt. The areas adjacent to rivers and stream banks that carry excess floodwater are called floodplains. A floodplain or flood risk area is defined as the lowland and relatively flat area adjoining a river or stream. The terms “base flood” and “100-year floodplain” refer to the area in the floodplain that is subject to a one percent or greater chance of flooding in any given year. In some areas there may also be a “500-year floodplain” which refers to the area in the floodplain that is subject to a 0.2 percent chance of flooding in any given year. Floodplains are part of a larger entity called a basin or watershed, which is defined as all the land drained by a particular river and its tributaries.

Flash Flooding

Flash floods, typically rapidly developing with little to no warning time, result from convective precipitation usually due to intense thunderstorms or sudden releases due to a failure of an upstream impoundment created behind a dam, landslide, or levee. Flash floods are distinguished from regular floods by a timescale of fewer than six hours. Flash floods cause the most flood-related deaths because of this shorter timescale.

Stormwater Flooding

In some cases, flooding may not be directly attributable to a river, stream, or lake overflowing its banks. Rather, it may simply be the combination of excessive rainfall or snowmelt, saturated ground, and inadequate drainage capacity. With no place to go, the water will find the lowest elevations – areas that are often not in a floodplain. This type of flooding, often referred to as stormwater flooding, is becoming increasingly prevalent as development exceeds the capacity of drainage infrastructure, therefore limiting its ability to convey stormwater. Flooding also occurs due to combined storm and sanitary sewers being overwhelmed by the high flows that often accompany storm events. Typical impacts range from dangerously flooded roads to water backing up into homes or basements, which damages mechanical systems and can create serious public health and safety concerns.

Ice Jam Flooding

Ice jams occur when ice breaks up in moving waterways, and then stacks on itself where channels narrow, or human-made obstructions constrict the channel. This creates an ice dam, often causing flooding within minutes of the dam formation. The thickness of this ice sheet depends upon the degree and duration of cold weather in the area. This ice sheet can freeze to the bottom of the channel in places. During spring thaw or winter freezing, rivers frequently become clogged with this accumulation of ice. Because of relatively low stream banks and channels blocked with ice, rivers overtop existing banks and flow overland. This type of flooding tends to frequently occur on wide, shallow rivers, although other rivers can be impacted.

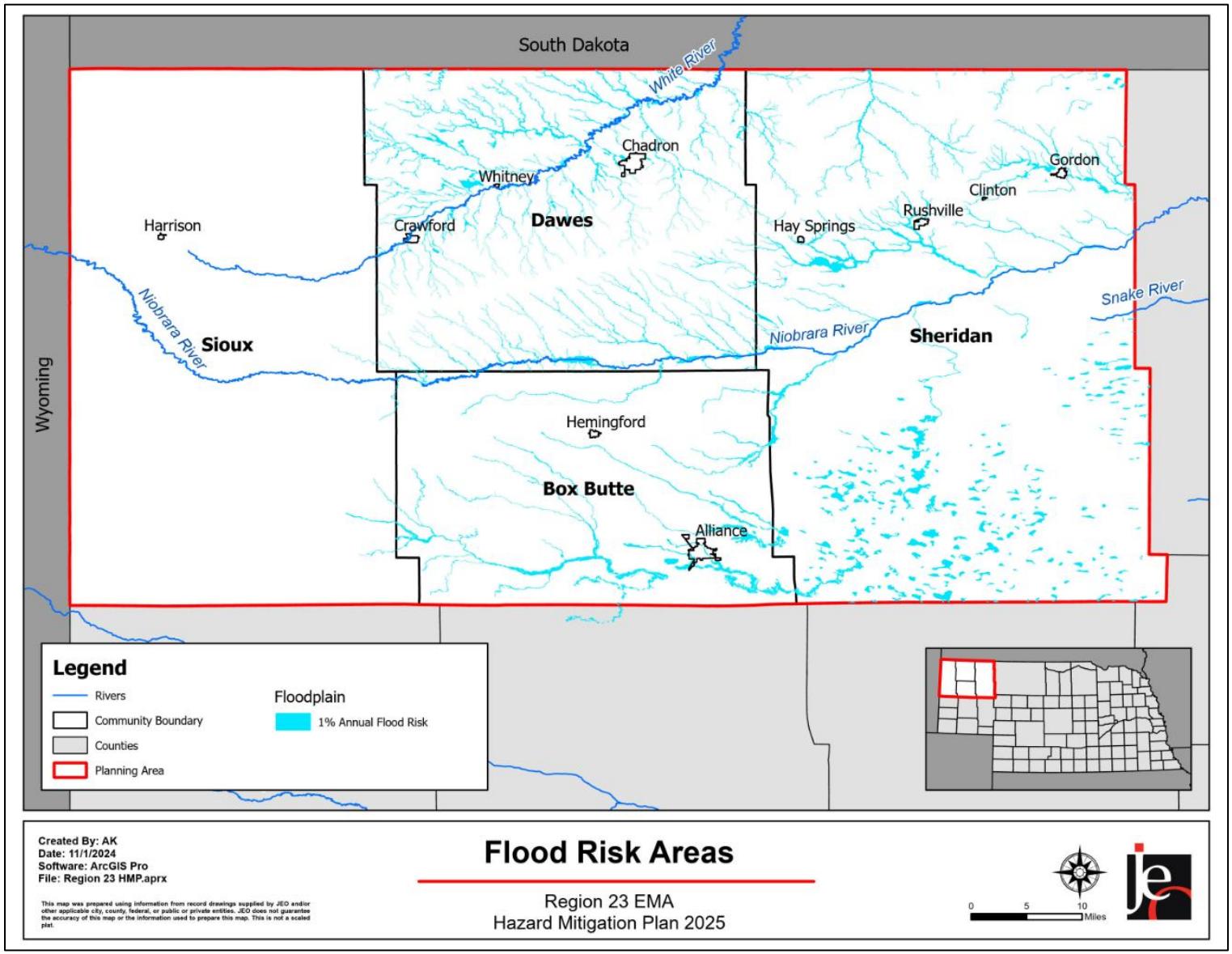
Location

Major waterways in the planning area include the Niobrara River and White River. These rivers, and the many creeks in the area, are potential locations for flooding to occur.

A map of flood risk areas within the planning area is shown on the following page. Dawes County has an available DFIRM as provided by FEMA; however, Box Butte County and Sheridan County have only paper FIRMS. Thus, for Box Butte and Sheridan Counties, flood hazard areas were rendered using HAZUS. Sioux County has neither DFIRM nor paper FIRM. Additionally, HAZUS flood hazard areas were not rendered for Sioux County due to a lack of publicly available depth grids.

For jurisdiction-specific maps, as well as an inventory of structures in the floodplain, please refer to *Section Eight.*

Flood Risk Areas



The table below shows the current status of FEMA Flood Insurance Rate Map (FIRM) panels. For additional details on localized flood risk such as flood zone types, please refer to the official FIRM available from FEMA's Flood Map Service Center.[74]

FEMA FIRM Panel Status

Jurisdiction	Panel Number	Effective Date
Box Butte County	310416IND0, 310011IND0, 3104160001A, 3104160002A, 3104160003A, 3104160004A, 3104160005A, 3104160006A, 3104160007A, 3104160008A, 3104160009A, 3104160010A, 3104160011A, 3104160012A, 3104160013A, 3104160014A, 3104160015A, 3104160016A, 3100110005A, 3100110015A	8/23/1977, 7/16/1987
Alliance	310011IND0, 3100110005A, 3100110015A	7/16/1987
Hemingford	-	-
Dawes County	31045CIND0A, 3104C0025C, 31045C0050C, 31045C0075C, 31045C0125C, 31045C0150C, 31045C0200C, 31045C0225C, 31045C0250C, 31045C0275C, 31045C0300C, 31045C0325C, 31045C0350C, 31045C0375C, 31045C0400C, 31045C0420C, 31045C0425C, 31045C0450C, 31045C0460C, 31045C0475C, 31045C0480C, 31045C0500C, 31045C0525C, 31045C0530C, 31045C0535C, 31045C0540C, 31045C0545C, 31045C0575C, 31045C0600C, 31045C0625C, 31045C0650C, 31045C0675C, 31045C0700C, 31045C0725C, 31045C0750C, 31045C0775C, 31045C0800C, 31045C0825C, 31045C0850C, 31045C0875C, 31045C0900C, 31045C0925C, 31045C0950C, 31045C0975C	6/16/2011
Chadron	31045CIND0A, 31045C0460C, 31045C0475C, 31045C0480C, 31045C0500C	6/16/2011
Crawford	31045CIND0A, 31045C0535C, 31045C0545C	6/16/2011
Whitney	31045CIND0A, 31045C0420C	6/16/2011
Sheridan County	310475IND0A, 3102139999B, 3104759999A, 310214A, 310213B, 3104750001B, 3104750002B, 3104750003B, 3104750004B, 3104750005B, 3104750006B, 3104750007B, 3104750008B, 3104750009B, 3104750010B, 3104750011B, 3104750012B, 3104750013B, 3104750014B, 3104750015B, 3104750016B, 3104750017B, 3104750018B, 3104750019B, 3104750020B, 3104750021B, 3104750022B, 3104750023B, 3104750024B, 3104750025B, 3104750026B, 3104750027B, 3104750028B, 3104750029B, 3104750030B, 3104750031B, 3104750032B	04/02/1976, 02/01/1993, 12/1/2008
Clinton	-	-
Gordon*	3104750007A	11/22/1977
Hay Springs	3102139999B, 310213B	2/1/1993
Rushville	310214A	4/2/1976
Sioux County	-	-
Harrison	-	-

Source: FEMA[75]
**The City of Gordon adopted Panel 0007A of Sheridan County FHBM dated November 22, 1977, to use in determining those areas of special flood hazard within the 1-mile extra territorial jurisdiction.*

74 Federal Emergency Management Agency. February 2025. "FEMA Flood Map Service Center". http://msc.fema.gov/portal/advanceSearch.
75 Federal Emergency Management Agency. February 2025. "FEMA Flood Map Service Center". http://msc.fema.gov/portal/advanceSearch.

Risk MAP Products

Risk Mapping, Assessment, and Planning (Risk MAP) is a FEMA program that provides communities with flood information and additional flood risk data (e.g., flood depth grids, percent chance grids, areas of mitigation interest, etc.) that can be used to better protect their citizens. As of 2025, portions of the planning area are undergoing mapping activities. Paper inventory reduction and preliminary map development projects have begun in Box Butte and Sheridan Counties, while 2D base level engineering and data development activities are slated to begin in 2025 for Sioux County. 2D base level engineering will also begin in Dawes County. As data becomes publicly available, NeDNR hosts the Risk Map products on an interactive web map, which can be viewed here: https://dnr.nebraska.gov/floodplain/interactive-maps.

Extent

The National Weather Service (NWS) has four flood severity categories as displayed in the table below. Actual impacts will vary by community depending on severity of flood event and local conditions such as total developed area in the floodplain or existing flood risk reduction structures.

Flooding Stages

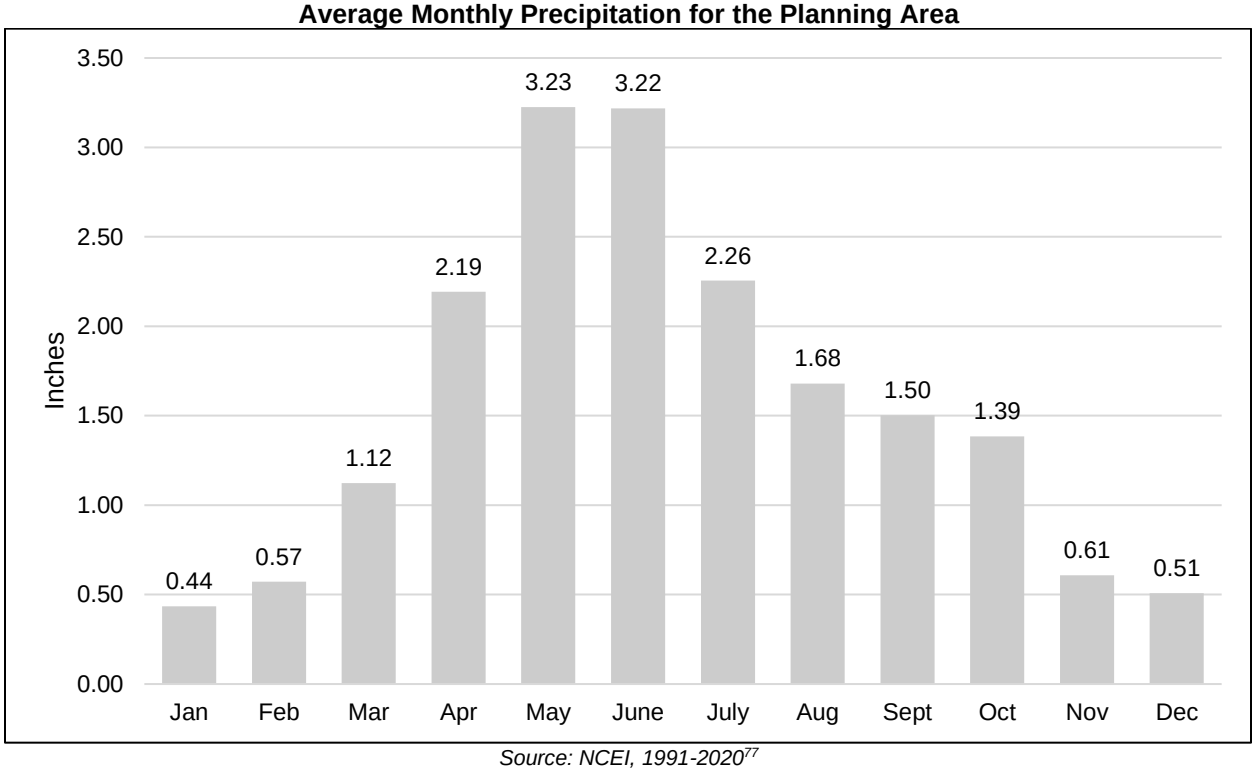
Flood Stage	Description of flood impacts
Action Stage	Water may cause minor impacts and be a nuisance to people near the stream. Local government or agencies may take actions to reduce property damage and danger to life.
Minor Flooding	Some property flooding and public threat may occur. Roadways, trails, park land, and private property near the stream may become flooded.
Moderate Flooding	Flooding of structures and main roadways may occur. Residences and numerous roadways near the stream may become flooded. Evacuations may be necessary. Disruptions to daily life.
Major Flooding	Extensive flooding of structures, main roadways, and other critical infrastructure may occur. Schools, hospitals, police stations, fire stations, residences, businesses, and roadways may become flooded. Evacuations may be necessary. Significant disruptions to daily life.

Source: NWS[76]

The figure below shows the normal average monthly precipitation for the planning area, which is helpful in determining whether any given month is above, below, or near normal in precipitation. The most common months for flooding in the planning area are in June, July, and August.

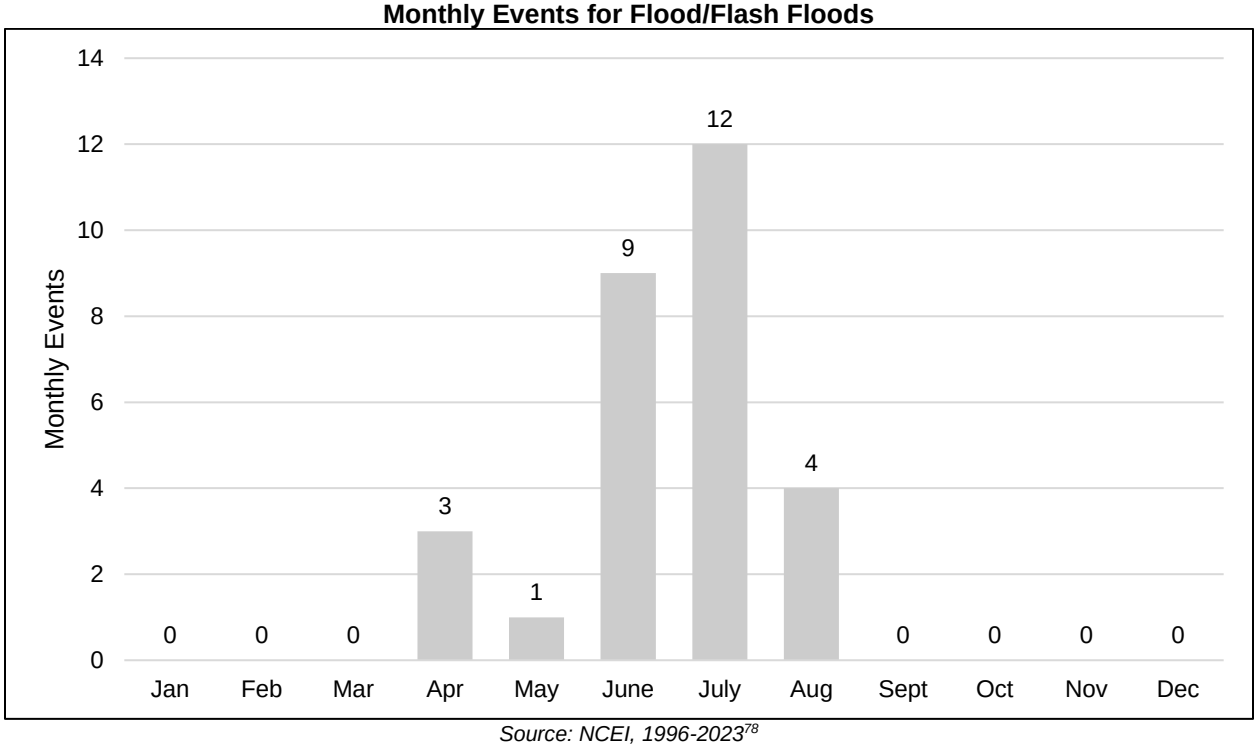
76 NOAA National Weather Service. January 2024. "Hydrology Terms and Definitions". https://www.weather.gov/lot/hydrology_definitions.

Average Monthly Precipitation for the Planning Area



Source: NCEI, 1991-2020[77]

Monthly Events for Flood/Flash Floods



Source: NCEI, 1996-2023[78]

77 NOAA National Centers for Environmental Information. 2024. "U.S. Climate Normals Quick Access". https://www.ncei.noaa.gov/access/us-climate-normals/.

78 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.

Historical Occurrences

The NCEI reports flood events as they occur in each community. A single flood event can affect multiple communities and counties at a time; the NCEI reports these large scale, multi-county events as separate events. The result is a single flood event covering a large portion of the planning area could be reported by the NCEI as several events. According to the NCEI, 23 flash flood events resulted in $22,000 in property damage, while 4 riverine flood events resulted in $0 in property damage in the planning area from 1996 to 2023. USDA RMA data does not distinguish the difference between riverine flood damage and flash flood damage. The total crop loss according to the RMA is $185,314.[79] Descriptions of the most damaging flood events from the NCEI and planning team are listed below.

- **August 3, 1996 – Flash Flood:** Rush creek bridge washed out 3 miles south of Rushville. Five feet of water in basement 6 miles north of Rushville. Rainfall of 5 to 6 inches in and around Rushville.[80]

- **July 10, 2005 – Flash Flood:** Over 2 inches of rain fell in 45 minutes to produce lowland flooding with at least one road washed out.[81]

- **May 11, 2023 – Flood:** A slow moving, upper level low, situated over Colorado, led to the development of thunderstorms across the high plains of eastern Colorado, western Kansas and western Nebraska during the afternoon and evening hours of May 11th. Thunderstorms, some severe with strong wind gusts, and heavy rain was reported over a large portion of western and southwestern Nebraska. Thunderstorm wind gusts to 60 MPH in the Valentine and Imperial areas, along with flash flooding in Sheridan County was reported.[82]

Average Annual Damages

The average damage per event estimate was determined based upon NCEI Storm Events Database since 1996 and the number of historical occurrences. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. Floods caused an average of $786 in property damage and $7,721 in crop losses per year for the planning area.

Floods Loss Estimate

Hazard Type	Number of Events[1]	Average Events Per Year	Total Property Loss[1]	Average Annual Property Loss [1]	Total Crop Loss[2]	Average Annual Crop Loss [2]
Flooding	27	1	$22,000	$786	$185,314	$7,721

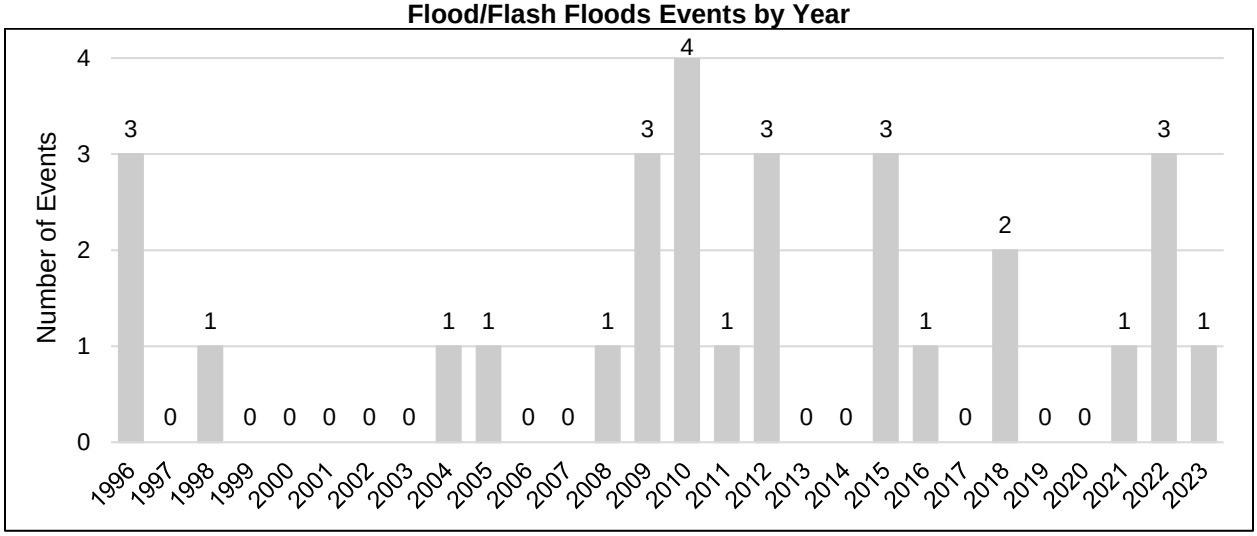
Source: 1 Indicates data is from NCEI (1996 to 2023)[83]; 2 Indicates data is from USDA RMA (2000 to 2023)[84]

79 U.S. Department of Agriculture Risk Management Agency. 2024. "Cause of Loss Historical Data Files: 2000-2023." https://www.rma.usda.gov/tools-reports/summary-business/cause-loss.
80 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.
81 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.
82 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.
83 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.
84 U.S. Department of Agriculture Risk Management Agency. 2024. "Cause of Loss Historical Data Files: 2000-2023." https://www.rma.usda.gov/tools-reports/summary-business/cause-loss.

Historical Probability & Future Likelihood

The NCEI reports 23 flash floods and 4 riverine flood events for a total of 27 events from 1996 to 2023. Some years had multiple flood events. The figure below shows the events broken down by year. Based on the historic record, there is a 54% historical probability that floods will occur annually in the planning area. Due to the anticipated impacts from climate change and future development, the future likelihood of flooding events is very likely.

Flood/Flash Floods Events by Year



Source: NCEI, 1996- 2023

Historical Probability & Future Likelihood – Flooding

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
54%	Increase in Frequency and Intensity	Increase in Frequency. Increase in Exposure	**Very Likely**

Climate Change

In the warmer months, convective storms are common and include flash flood-producing rainstorms. As temperatures continue to rise, more water vapor evaporates into the atmosphere, creating increased humidity, which can increase the frequency and intensity of these storms. An increase in heavy rain events will lead to more flooding and larger magnitude flood events. NOAA has created the Climate Mapping for Resilience and Adaptation tool that looks at how different emission scenarios affect climatological hazards. The table below shows that the annual total precipitation is expected to increase in both low emissions and high emission scenarios. Changes will likely occur in timing and intensity. Winter and spring will be 15-25% wetter, summer will be 5-15% drier, and fall will be 5% wetter.[85] The Annual Days that Exceed 99th Precipitation table shows the annual number of days that exceed the 99th percentile precipitation increases as time goes on in both the lower emissions and higher emissions scenario.

85 NCEI. 2022. "State Climate Summaries – Nebraska". https://statesummaries.ncics.org/chapter/ne/#:~:text=The%20state%20is%20located%20far,(1895%E2%80%932020)%20averag.

Average Annual Total Precipitation

County	Emission Scenario	Historical (1976-2005)	Early Century (2015-2044)	Mid Century (2035-2064)	Late Century (2070-2099)
Box Butte	Lower Emissions (RCP 4.5)	16 Inches	16 Inches	17 Inches	17 Inches
	Higher Emissions (RCP 8.5)	16 Inches	17 Inches	17 Inches	17 Inches
Dawes	Lower Emissions (RCP 4.5)	17 Inches	18 Inches	18 Inches	18 Inches
	Higher Emissions (RCP 8.5)	17 Inches	18 Inches	18 Inches	18 Inches
Sheridan	Lower Emissions (RCP 4.5)	17 Inches	18 Inches	18 Inches	18 Inches
	Higher Emissions (RCP 8.5)	17 Inches	18 Inches	18 Inches	18 Inches
Sioux	Lower Emissions (RCP 4.5)	16 Inches	16 Inches	16 Inches	16 Inches
	Higher Emissions (RCP 8.5)	16 Inches	16 Inches	16 Inches	17 Inches

Source: NOAA[86]

Annual Days that Exceed 99th Percentile Precipitation

County	Emission Scenario	Historical (1976-2005)	Early Century (2015-2044)	Mid Century (2035-2064)	Late Century (2070-2099)
Box Butte	Lower Emissions (RCP 4.5)	3 Days	3 Days	3 Days	4 Days
	Higher Emissions (RCP 8.5)	3 Days	3 Days	4 Days	4 Days
Dawes	Lower Emissions (RCP 4.5)	3 Days	3 Days	4 Days	4 Days
	Higher Emissions (RCP 8.5)	3 Days	3 Days	4 Days	4 Days
Sheridan	Lower Emissions (RCP 4.5)	3 Days	4 Days	4 Days	4 Days
	Higher Emissions (RCP 8.5)	3 Days	4 Days	4 Days	4 Days
Sioux	Lower Emissions (RCP 4.5)	3 Days	3 Days	3 Days	4 Days
	Higher Emissions (RCP 8.5)	3 Days	3 Days	4 Days	4 Days

Source: NOAA

Future Development

Any future building or development inside of the floodplain should be discouraged to protect future assets. Land-use regulations should be used to limit development in floodplains and other flood prone areas as well as protecting natural flood mitigation features. Buyout programs can be used to eliminate properties located in floodplains, especially properties that have experienced repetitive losses. Communities may also consider incorporating "green infrastructure to address flooding concerns. Examples of green infrastructure include using permeable surfaces for parking areas, using rainwater retention swales, developing rain gardens, developing green roofs, and

86 NOAA. January 2024. "Climate Mapping for Resilience and Adaptation". https://livingatlas.arcgis.com/assessment-tool/explore/details.

establishing greenways. To further reduce future risk to floods, communities can implement stormwater management plans, participate in the National Pollutant Discharge Elimination System program, or participate in the National Flood Insurance Program (NFIP) or Community Rating System (CRS).

Nebraska's minimum standards for floodplain management require that all new construction and substantial improvements of residential structures shall have the lowest floor (including basements) elevated at least one foot above the base flood elevation. Nebraska standards also prohibit new structures for human habitation in the floodway.[87] These requirements will help reduce flood impacts and damages by requiring a one foot "freeboard" to allow for known flood hazards and result in lower premiums for those participating in the NFIP.

Regional Vulnerabilities

An updated national study examining social vulnerability as it relates to flood events found that low-income and minority populations are disproportionately vulnerable to flood events.[88] These groups may lack needed resources to mitigate potential flood events as well as resources that are necessary for evacuation and response. In addition, low-income residents are more likely to live in areas vulnerable to the threat of flooding but lack the resources necessary to purchase flood insurance. The study found that flash floods are more often responsible for a higher rate of injuries and fatalities than prolonged flood events.

Other groups that may be more vulnerable to floods, specifically flash floods, include the elderly, those outdoors during rain events, and those in low-lying areas. Elderly residents may suffer from a decrease or complete lack of mobility and as a result, be caught in flood-prone areas. Residents in campgrounds or public parks may be more vulnerable to flooding events. Many of these areas exist in natural floodplains and can experience rapid rise in water levels resulting in injury or death.

GIS parcel data was acquired from each County Assessor to analyze the location, number, and total value of property improvements (e.g. buildings, garages, sheds, etc.) located in the 100-year floodplain at the parcel level. A summary of the results of this analysis is provided in the following table.

87 Nebraska Department of Natural Resources. June 27, 2008. "Rules and regulations Concerning Minimum Standards for Floodplain Management Programs". https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/desk-reference/legal-authority/Title_455_0708.pdf.

88 Tate, E., Rahman, M.A., Emrich, C.T. et al. Flood exposure and social vulnerability in the United States. Nat Hazards (2021). https://doi.org/10.1007/s11069-020-04470-2.

Exposure in the 100-Year Floodplain (1% Annual Flood Risk Area)

Jurisdiction	Number of Structures	Total Value of Structures	Percentage of Structures
Box Butte County	455	$63,794,816	9%
Alliance	224	$33,985,425	6.6%
Hemingford	0	$0	0%
Dawes County	754	$122,904,370	18.7%
Chadron	7	$5,604,790	0.3%
Crawford	5	$1,165,350	0.8%
Whitney	0	$0	0%
Sheridan County	712	$74,511,572	21.6%
Clinton	0	$0	0%
Gordon	0	$0	0%
Hay Springs	125	$8,025,021	34.2%
Rushville	4	$781,503	0.8%
Sioux County	0	N/A	N/A
Harrison	0	N/A	N/A

County Assessor, 2024

For additional flooding risk information see the *2022 Nebraska State Flood Hazard Mitigation Plan*.[89] The following table is a summary of regional vulnerabilities. For additional jurisdictional-specific flood vulnerabilities, refer to *Section Eight*.

Regional Flooding Vulnerabilities

Sector	Vulnerability
People	-Low income and minority populations may lack the resources needed for evacuation, response, or to mitigate the potential for flooding -Elderly or residents with decreased mobility may have trouble evacuating -Residents in low-lying areas, especially campgrounds, are vulnerable during flash flood events -Residents living in the floodplain may need to evacuate for extended periods
Economic	-Business closures or damages may have significant impacts -Agricultural losses from flooded fields or cattle loss -Closed roads and railways would impact commercial transportation of goods
Built Environment	-Buildings may be damaged
Community Lifelines	-Damages to roadways, bridges, and railways -Wastewater facilities are at risk, particularly those in the floodplain -Community Lifelines, especially those in the floodplain, are at risk to damage (specific community lifelines located in the floodplain are noted within individual community profiles)

National Flood Insurance Program (NFIP)

The NFIP was established in 1968 to reduce flood losses and disaster relief costs by guiding future development away from flood hazard areas where feasible; by requiring flood resistant design and construction practices; and by transferring the costs of flood losses to the owners of structures located in floodplains through flood insurance premiums.

89 Nebraska Department of Natural Resources. 2022. "2022 Nebraska State Flood Hazard Mitigation Plan". https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/2022_SFHMP_FINAL_20220630_Ver2.pdf.

In return for availability of federally backed flood insurance, jurisdictions participating in the NFIP must agree to adopt and enforce floodplain management standards to regulate development in special flood hazard areas as defined by FEMA's flood maps. One of the strengths of the program has been keeping people away from flooding rather than keeping the flooding away from people, through historically expensive flood control projects. The following tables summarize NFIP participation and active policies within the county. Additional information about NFIP participation, implementation, and enforcement is in *Section Eight*.

NFIP Participation

Jurisdiction	Participate in NFIP	Eligible-Regular Program	Date Current Map	Sanction	Suspension	Rescinded
Box Butte County	No	N/A	08/23/1977	Yes (08/23/1978)	-	-
Alliance	Yes	07/16/1987	07/16/1987	-	-	-
Hemingford	No	N/A	N/A	-	-	-
Dawes County	Yes	06/16/2011	06/16/2011	-	-	-
Chadron	Yes	03/05/2009	06/16/2011	-	-	-
Crawford	Yes	08/01/1986	06/16/2011	-	-	-
Whitney	No	N/A	06/16/2011	Yes (06/16/2012)	-	-
Sheridan County	Yes	12/01/2008	12/01/2008	-	-	-
Clinton	No	N/A	N/A	-	-	-
Gordon	Yes	09/13/2007	(NSFHA)	-	-	-
Hay Springs	Yes	02/01/1993	02/01/1993	-	-	-
Rushville	Yes	12/29/2000	04/02/1976	-	-	-
Sioux County	No	N/A	N/A	-	-	-
Harrison	No	N/A	N/A	-	-	-

Source: Federal Emergency Management Agency, National Flood Insurance Program[90]

NFIP Policies in Force and Total Payments

Jurisdiction	Policies In-force	Total Coverage	Total Losses	Total Payments
Box Butte County	N/A	N/A	N/A	N/A
Alliance	3	$809,000	2	$0
Hemingford	N/A	N/A	N/A	N/A
Dawes County	11	$1,177,000	0	$0
Chadron	3	$605,000	0	$0
Crawford	0	$0	0	$0
Whitney	N/A	N/A	N/A	N/A
Sheridan County	4	$557,000	1	$1,192
Clinton	N/A	N/A	N/A	N/A

90 Federal Emergency Management Agency. February 2025. "Community Status Book Report". https://www.fema.gov/cis/NE.html.

Jurisdiction	Policies In-force	Total Coverage	Total Losses	Total Payments
Gordon	0	$0	0	$0
Hay Springs	3	$499,000	0	$0
Rushville	0	$0	0	$0
Sioux County	N/A	N/A	N/A	N/A
Harrison	N/A	N/A	N/A	N/A

Source: FEMA - 2025

It should be noted that while the number of policies in force may change monthly and annually as representatives enroll, maintain, or lapse policies, the total number of losses and payments are cumulative over time.

This plan strongly encourages the county and all communities to participate in the NFIP. All participating counties and communities have confirmed that they will remain in good standing and continue involvement with the NFIP. Compliance with the NFIP should remain a top priority for each participant. Jurisdictions are encouraged to initiate activities above the minimum participation requirements, which are described in the Community Rating System Coordinator's Manual (FIA-15/2017) and its 2021 Addendum. No communities or counties in the planning area participate in the CRS Program.

NFIP Repetitive Loss Structures

NeDNR was contacted to determine if any existing properties are classified as NFIP Repetitive Loss Structures. Note there are two definitions for repetitive loss structures. Severe repetitive loss is a grant definition for HMA purposes that has specific criteria while repetitive loss is a general NFIP definition. There are no repetitive loss properties located in the planning area as of June 2024.

NFIP RL: Repetitive Loss Structure refers to a structure covered by a contract for flood insurance under the NFIP that has incurred flood-related damage on two occasions during a 10-year period, each resulting in at least a $1,000 claim payment.

NFIP SRL: Severe Repetitive Loss Properties are defined as single or multifamily residential properties that are covered under an NFIP flood insurance policy and:

(1) That have incurred flood-related damage for which four or more separate claims payments have been made, with the amount of each claim (including building and contents payments) exceeding $5,000, and with the cumulative amount of such claim payments exceeding $20,000; or

(2) For which at least two separate claims payments (building payments only) have been made under such coverage, with cumulative amount of such claims exceeding the market value of the building.

(3) In both instances, at least two of the claims must be within 10 years of each other, and claims made within 10 days of each other will be counted as one claim.

HMA RL: A repetitive loss property is a structure covered by a contract for flood insurance made available under the NFIP that:

(1) Has incurred flood-related damage on two occasions, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such food event; and

(2) At the time of the second incidence of flood-related damage, the contract for flood insurance contains Increased Cost of Compliance Coverage.

HMA SRL: A severe repetitive loss property is a structure that:

(1) Is covered under a contract for flood insurance made available under the NFIP.

(2) Has incurred flood related damage –

(a) For which four or more separate claims payments (includes building and contents) have been made under flood insurance coverage with the amount of each such claim exceeding $5,000, and with the cumulative amount of such claim payments exceeding $20,000; or

(b) For which at least two separate claims payments (including only building) have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the insured structure.

Jurisdictions Ranking Flooding as a Prioritized Hazard of Concern

The following jurisdictions identified flooding as a prioritized hazard of concern.

- Upper Niobrara White NRD
- Hemingford Public Schools

Grass/Wildfire

Wildfires, also known as grassfires, brushfires, forest fires, or wildland fires, are any uncontrolled fire that occurs in the countryside, agricultural fields, or wildland. Wildland areas may include but are not limited to grasslands, forests, woodlands, pastures, and other vegetated areas. Wildfires range in size from a few acres (the most common) to thousands of acres. Fire events can quickly spread from their original source, change direction, and jump gaps such as roads, rivers, and fire breaks. Wildfire behavior is particularly dependent on the local conditions including temperature, humidity, wind speed, wind direction, slope, topography, and available fuel load. While some wildfires burn in remote forested regions, others can cause extensive destruction of homes and other structures located in the wildland-urban interface (WUI), the zone of transition between developed areas and undeveloped land. Although fire is a natural and often beneficial process, fire suppression can lead to more severe fires due to the buildup of vegetation, which creates more fuel and increases the intensity and devastation of future fires.

Fire Protection

There are 15 local fire districts identified in the planning area. The following is a list of the fire districts and the figure on the next page shows their district boundaries.

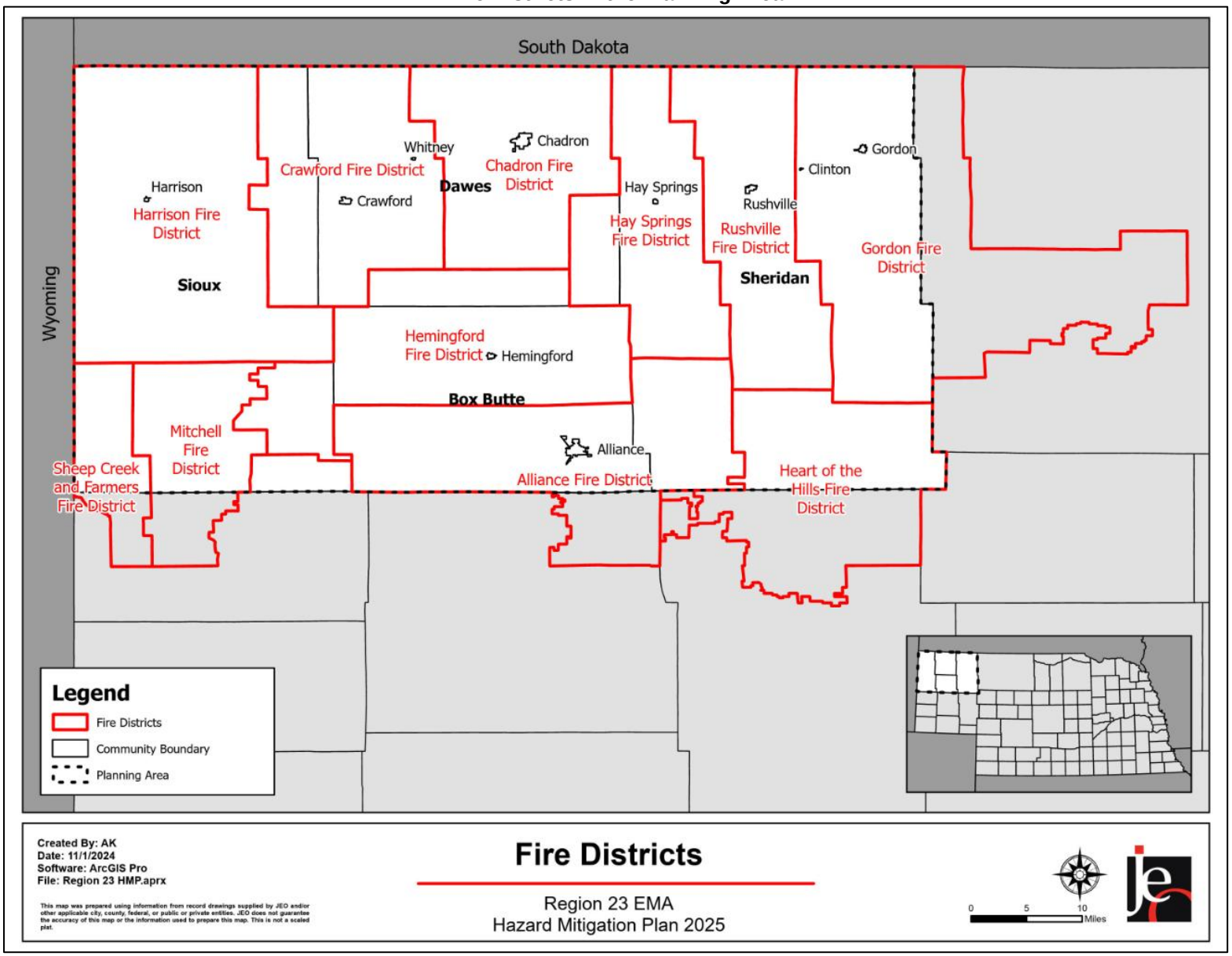
- Alliance Fire District
- Chadron Fire District
- Crawford Fire District
- Gordon Fire District
- Harrison Fire District
- Hay Springs Fire District
- Heart of Hills Fire District
- Hemingford Fire District
- Henry Fire District
- Minatare Fire District
- Mitchell Fire District
- Morrill Fire District
- Rushville Fire District
- Scottsbluff Fire District
- Sheep Creek and Farmers Fire District

Community Wildfire Protection Plans

Even though grass/wildfire is a natural part of the ecosystem, it can present a substantial hazard to life and property, especially in the WUI. The planning area is covered by the 2020 Pine Ridge Area Community Wildfire Protection Plan (CWPP).[91] The purpose of the CWPP is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies.

91 Nebraska Forest Service. 2025. “Community Wildfire Protection Plans.” https://nfs.unl.edu/publications/community-wildfire-protection-plans.

Fire Districts in the Planning Area



Firewise USA

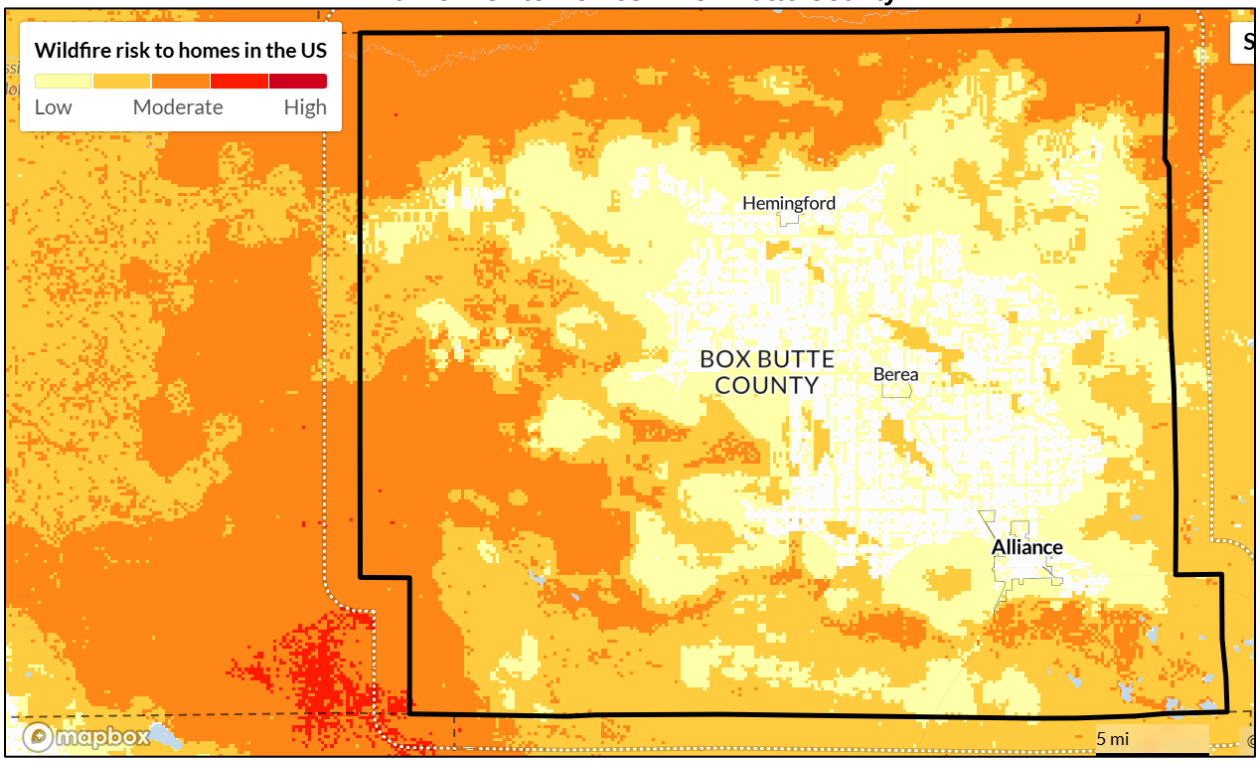
Firewise USA is a national recognition program that provides resources to inform communities how to adapt to living with wildfire and encourages neighbors to take action together to reduce their wildfire risk. There are no Firewise USA sites in the planning area.[92]

Location

Wildfires can occur throughout the planning area. The United States Department of Agriculture and United States Forest Service created the interactive web resource *Wildfire Risk to Communities* to help communities and jurisdictions understand, explore, and reduce wildfire risk. The following figures show wildfire risk to homes by county in the planning area.

The figure below shows the greatest wildfire risk to homes is located primarily in northern and western Box Butte County, with some high risk also south of Alliance. According to *Wildfire Risk to Communities*, Box Butte County has high risk of wildfire – higher than 79% of counties in the United States.

Wildfire Risk to Homes – Box Butte County



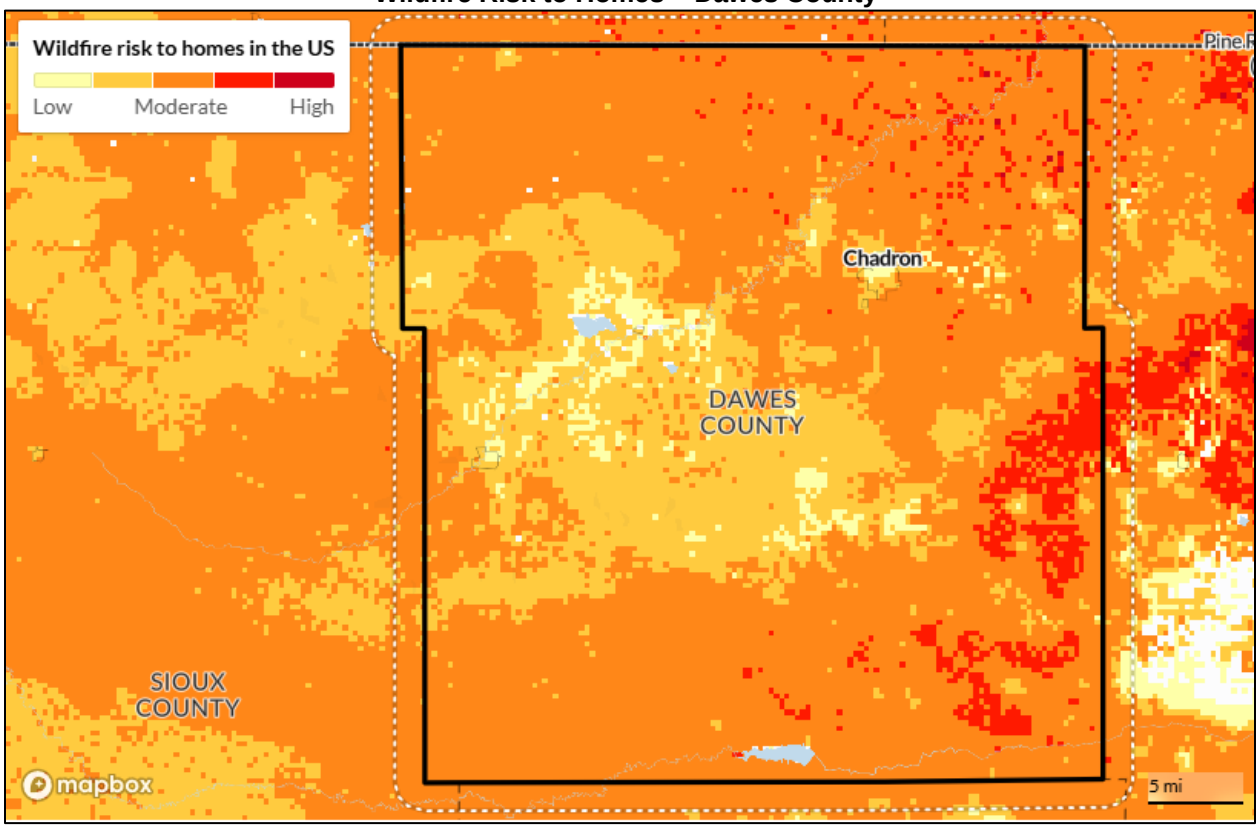
Source: Wildfire Risk to Communities[93]

92 National Fire Protection Association. February 2025. "Firewise USA Sites". https://www.nfpa.org/education-and-research/wildfire/firewise-usa/firewise-usa-sites.

93 USDA & US Forest Service. March 2025. "Wildfire Risk to Communities. https://wildfirerisk.org/.

The figure below shows the greatest wildfire risk to homes is located primarily in the eastern portion of Dawes County. According to *Wildfire Risk to Communities*, Dawes County has a high risk of wildfire – higher than 89% of counties in the United States.

Wildfire Risk to Homes – Dawes County

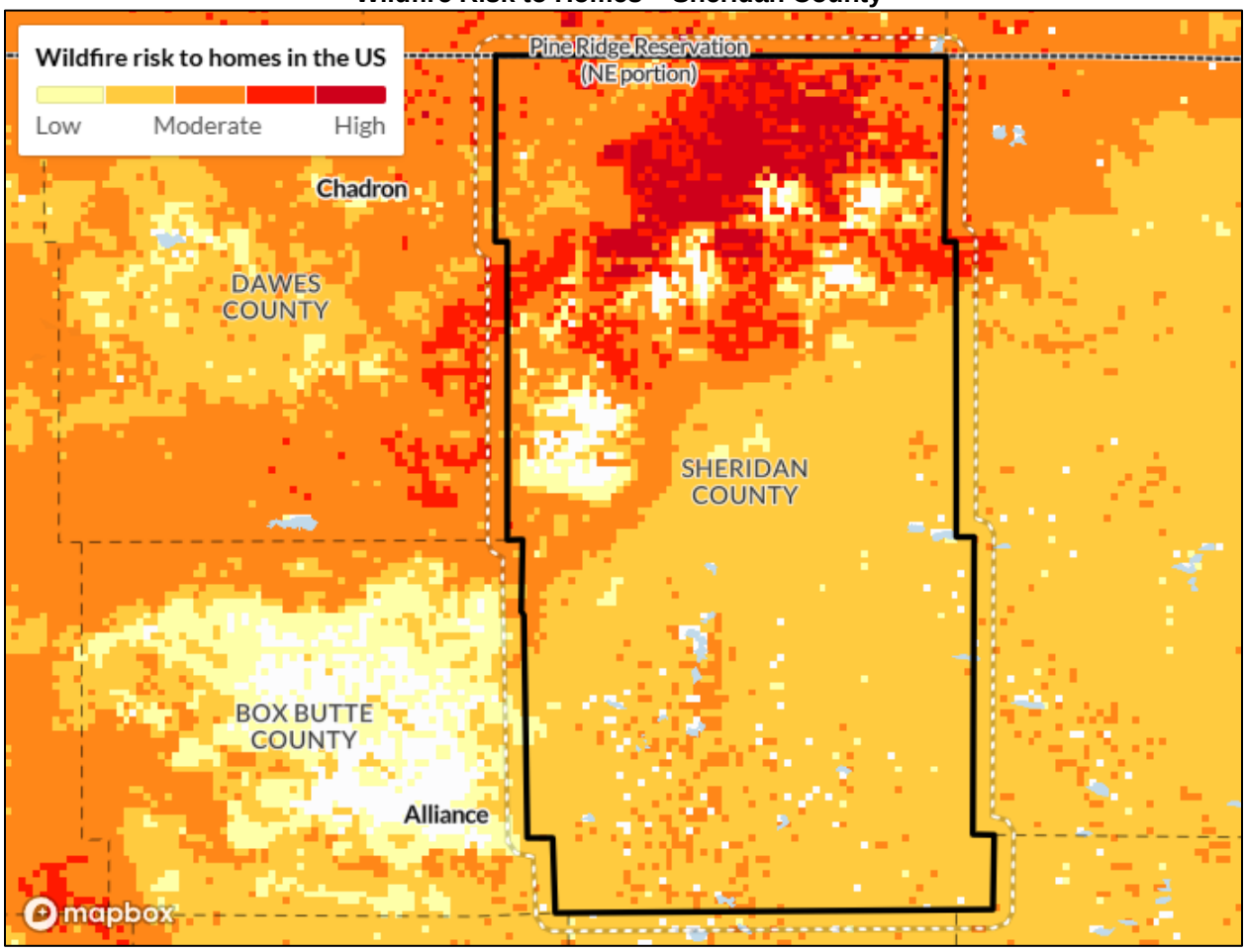


Source: Wildfire Risk to Communities[94]

94 USDA & US Forest Service. March 2025. "Wildfire Risk to Communities. https://wildfirerisk.org/.

The figure below shows the greatest wildfire risk to homes is located in the northern portion of Sheridan County. According to *Wildfire Risk to Communities*, Sheridan County has very high risk of wildfire – higher than 91% of counties in the United States.

Wildfire Risk to Homes – Sheridan County

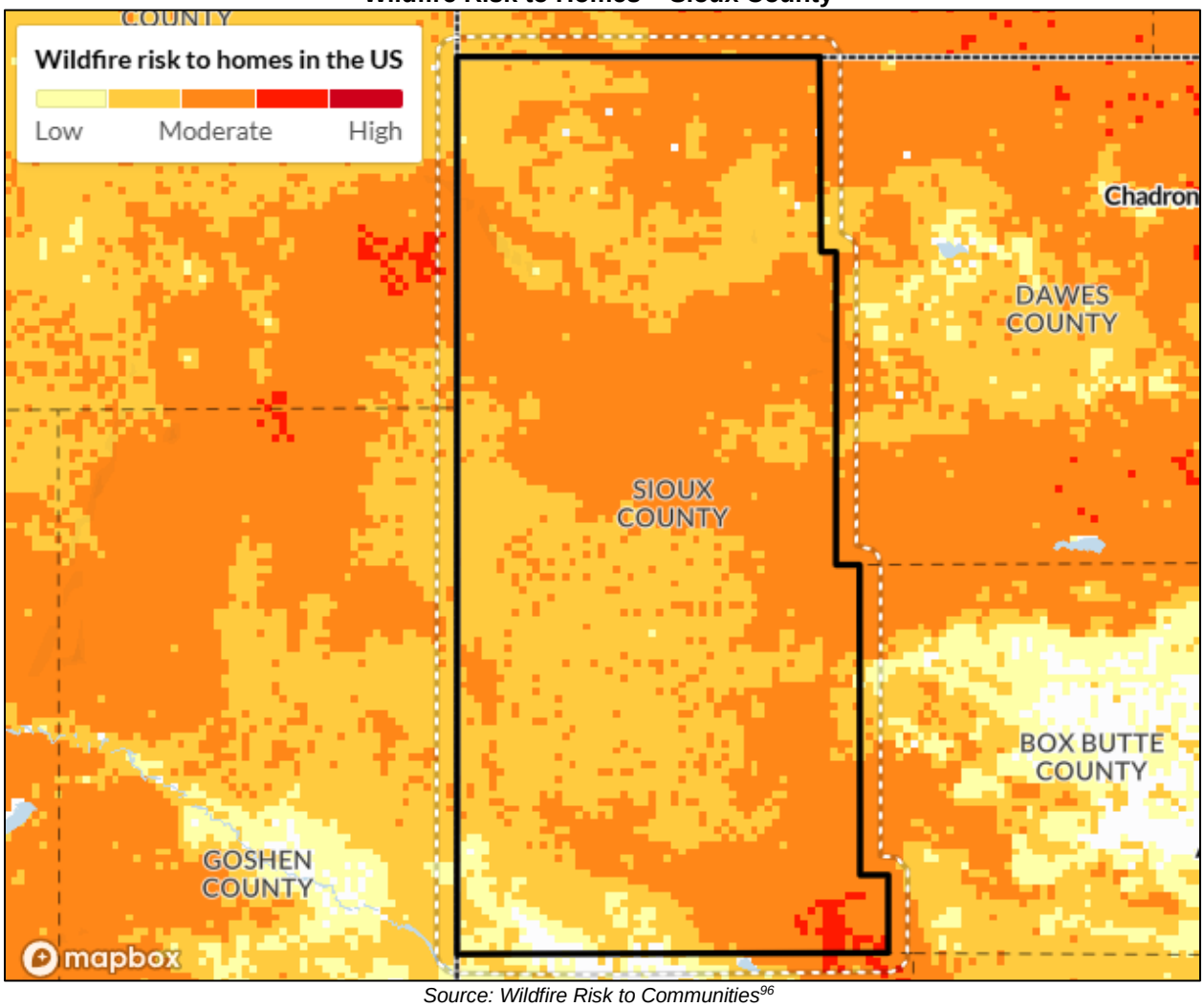


Source: Wildfire Risk to Communities[95]

95 USDA & US Forest Service. March 2025. "Wildfire Risk to Communities. https://wildfirerisk.org/.

The figure below shows the greatest wildfire risk to homes is located in the southeast corner of Sioux County. According to *Wildfire Risk to Communities*, Sioux County has high risk of wildfire – higher than 84% of counties in the United States.

Wildfire Risk to Homes – Sioux County



Source: Wildfire Risk to Communities[96]

Wildland-Urban Interface

In recent decades, as the population of the United States has become more decentralized and residents have moved farther away from the center of villages and cities, the areas known as the WUI has developed significantly. The WUI is defined as the zone of transition between developed areas and undeveloped land, where structures and other human development meet wildland. The expansion of the WUI increases the likelihood that wildfires will threaten people and homes, making it the focus of most wildfire mitigation efforts.

According to the 2020 Pine Ridge Area Community Wildfire Protection Plan, the entire four-county planning area has been designated as WUI. This is because intense fire behavior can start in rural areas, move quickly over large areas, and threaten population centers.

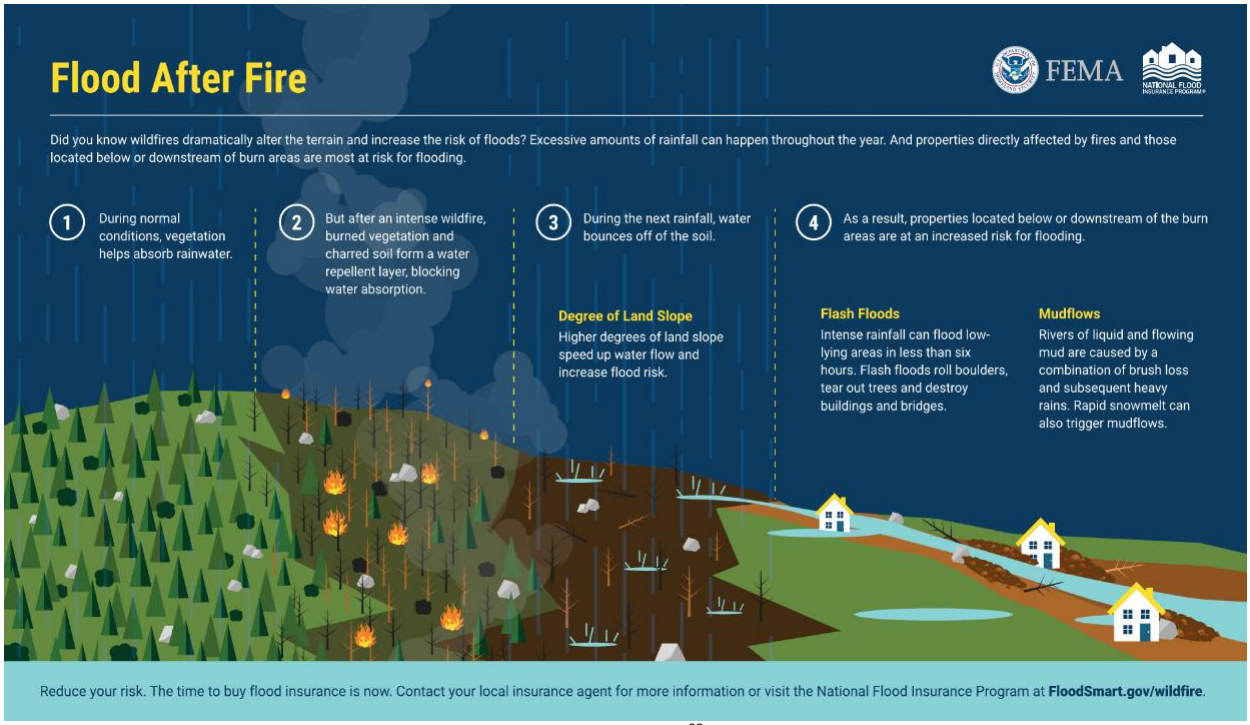
96 USDA & US Forest Service. March 2025. "Wildfire Risk to Communities. https://wildfirerisk.org/.

Extent

From 2000-2023, 1,748 wildfires were reported in the planning area and burned 364,986 acres in total.[97] Of these, 124 fires burned 100 acres or more, with the largest wildfires burning 214,409 acres in Sheridan County in September 2012. The average area burned per wildfire was approximately 209 acres.

Wildfire also contributes to an increased risk from other hazard events, compounding damage and straining resources. FEMA has provided additional information in recent years detailing the relationship between wildfire and flooding. Wildfire events remove vegetation and harden soil, reducing infiltration capabilities during heavy rain events. Subsequent severe storms that bring heavy precipitation can then escalate into flash flooding, dealing additional damage to jurisdictions.

FEMA Flood After Fire

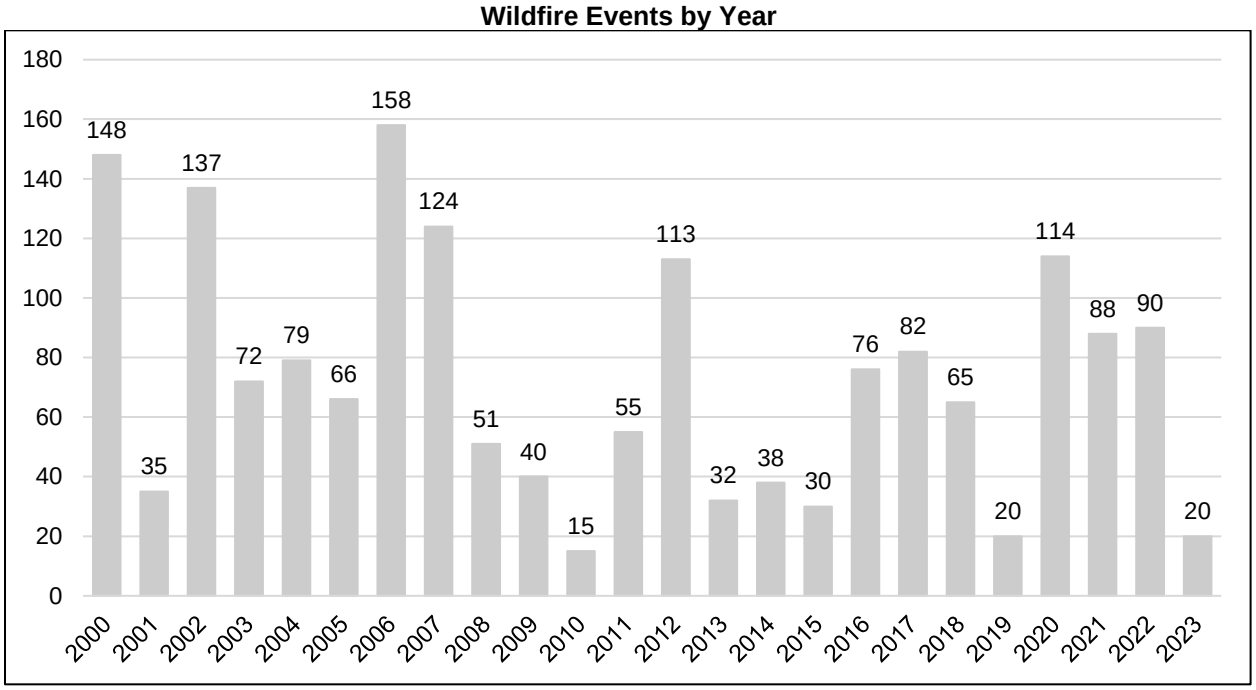


Source: FEMA[98]

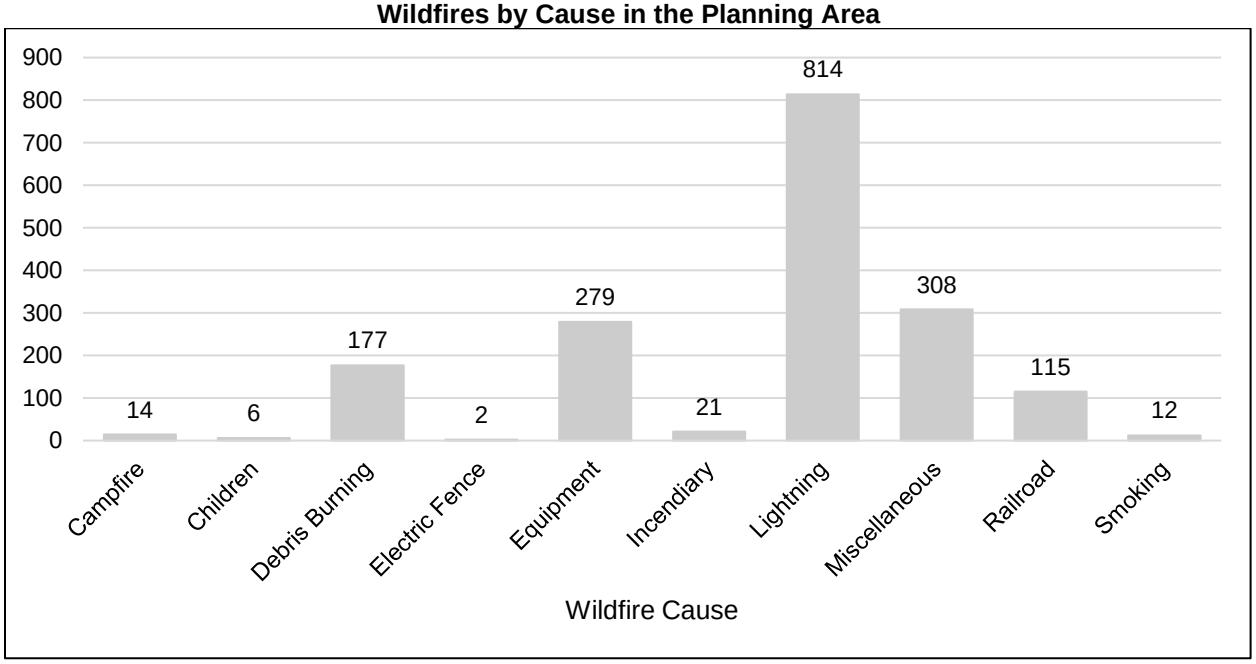
Historical Occurrences

For the planning area, 25 different fire departments reported a total of 1,748 wildfires between 2000 and 2023, according to the Nebraska Forest Service. The reported events burned 364,986 acres in total. Thirteen injuries and zero fatalities were reported from these events. Most fires occurred in 2000, 2002, 2006, and 2007. Most reported wildfires were caused by lightning. Wildfires ranged from less than one acre to 77,159 acres, with an average burned area of 209 acres. It is important to note that there is no comprehensive fire event database. Fire events, magnitude, and local responses were reported voluntarily by local fire departments to the Nebraska Forest Service and local reporting standards can vary between departments. Actual fire events and their impacts are likely underreported in the available data.

97 Nebraska Forest Service. 2024. “Fire Incident Type Summary.” Data Files 2000-2023 provided by NFS.
98 FEMA. 2023. “Flood After Fire”. https://agents.floodsmart.gov/marketing/participate-in-campaigns/flood-after-fire.



Source: NFS, 2000-2023



Source: NFS, 2000-2023

Bronco Fire

In September 2024 a fire broke out approximately 11 miles northwest of Crawford, Nebraska, in Sioux County. The Bronco Fire was deemed to be of a natural cause and burned 1,069 acres of grassland and brush, with much of it affecting the Oglala National Grassland. Federal, state, and local resources worked to combat the fire – a challenge due to the rough terrain and hot and dry weather conditions.

Bronco Fire



Source: Hay Springs Volunteer Fire Department Facebook Page

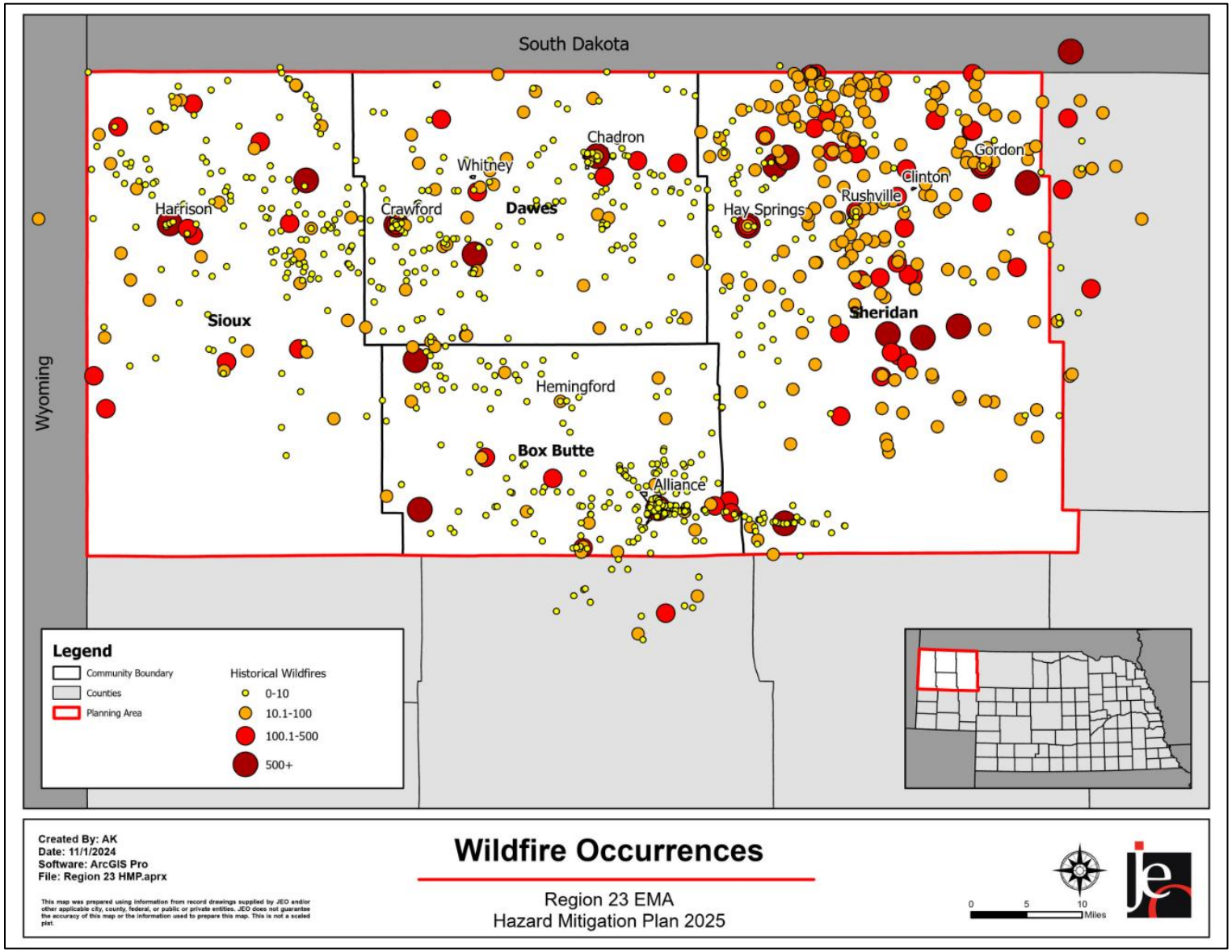
The figure on the next page shows the location and general size of wildfires provided to the Nebraska Forest Service from 2000 to 2023. As the number of reported wildfires by the county indicates, wildfire events can occur in any county within the planning area. Dawes County has reported the greatest number of fires, but Sheridan County had the highest number of acres burned.

Reported Wildfires by County

County	Reported Wildfires	Acres Burned	Injuries
Box Butte	**417**	**7,055**	**21 Homes Threatened, 18 Other Structures Threatened**
Dawes	**677**	**101,306**	**87 Homes Threatened, 28 Other Structures Threatened, 6 Homes Destroyed, 15 Other Structures Destroyed, 3 Injuries**
Sheridan	**531**	**185,978**	**66 Homes Threatened, 83 Other Structures Threatened, 6 Homes Destroyed, 36 Other Structures Destroyed, 10 Injuries**
Sioux	**123**	**73,647**	**6 Homes Threatened, 3 Other Structures Threatened, 2 Other Structures Destroyed**

Source: NFS, 2000-2023

Historical Wildfire Occurrences



Average Annual Losses

The average damage per event estimate was not able to be determined as property and crop damage estimates are not tracked or accurately tracked by the Nebraska Forest Service, RMA, or NCEI. However, the number of homes and other structures destroyed is tracked from reports submitted to the Nebraska Forest Service. In the planning area, 1,748 reported wildfires destroyed 12 homes, destroyed 53 other structures, and burned a total of 364,986 acres from 2000 to 2023. Thirteen injuries were reported from these events.

Damages caused by wildfires extend beyond the loss of building stock, recreation areas, timber, forage, wildlife habitat, and scenic views. Secondary effects of wildfires, including erosion, landslides, introduction of invasive species, and changes in water quality, all increase due to the exposure of bare ground and loss of vegetative cover following a wildfire, and can often be more disastrous than the fire itself in long-term recovery efforts.

Wildfire Loss Estimation

Hazard Type	Number of Events	Events Per Year	Number of Acres Burned	Average Acres Per Fire
Wildfire	1,748	72.8	364,986	209

Source: NFS, 2000-2023

Wildfire Event Impacts and Threats

Hazard Type	Injuries	Fatalities	Homes Destroyed	Homes Threatened	Other Structures Destroyed	Other Structures Threatened
Wildfire	13	0	12	180	53	132

Source: NFS, 2000-2023

Historical Probability & Future Likelihood

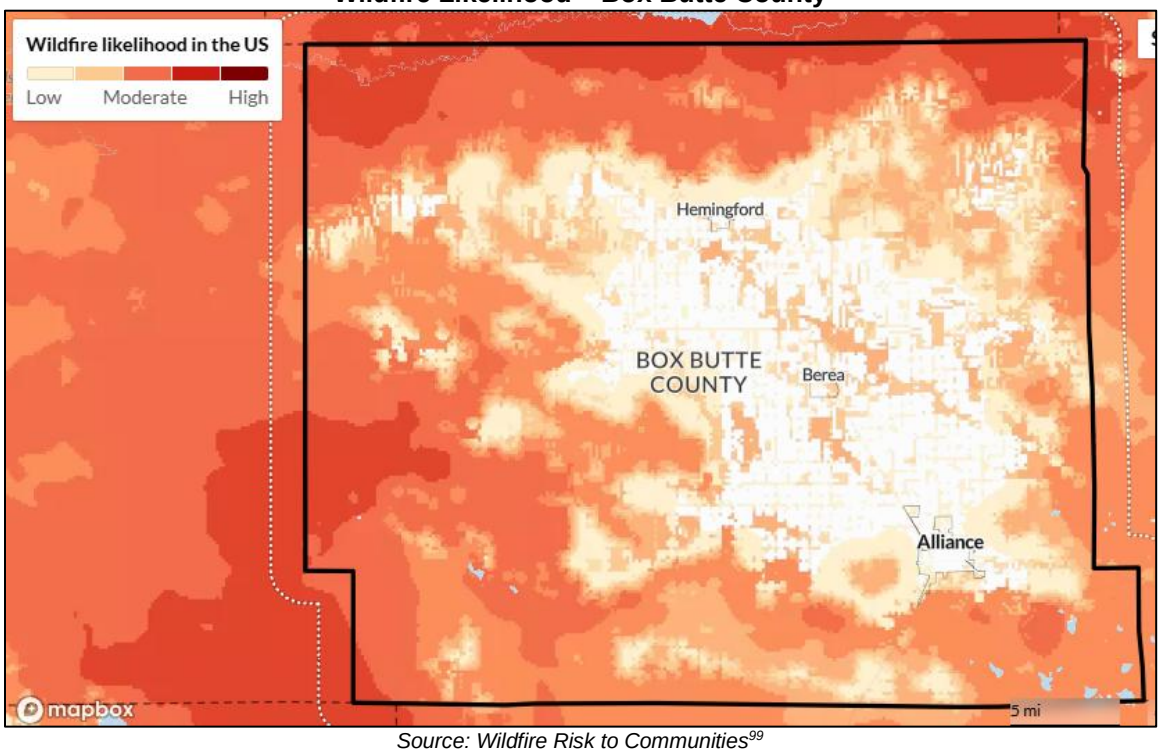
The historical probability of wildfire occurrence is based on the historic record provided by the Nebraska Forest Service and reported potential by participating jurisdictions. With a grass/wildfire occurring each reported year there is a 100 percent annual historical probability of wildfires occurring in the planning area each year. Due to the anticipated impacts from climate change and future, the future likelihood of grass/wildfire events is very likely.

Historical Probability & Future Likelihood – Grass/Wildfire

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
100%	Increase in Frequency and Intensity	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Very Likely**

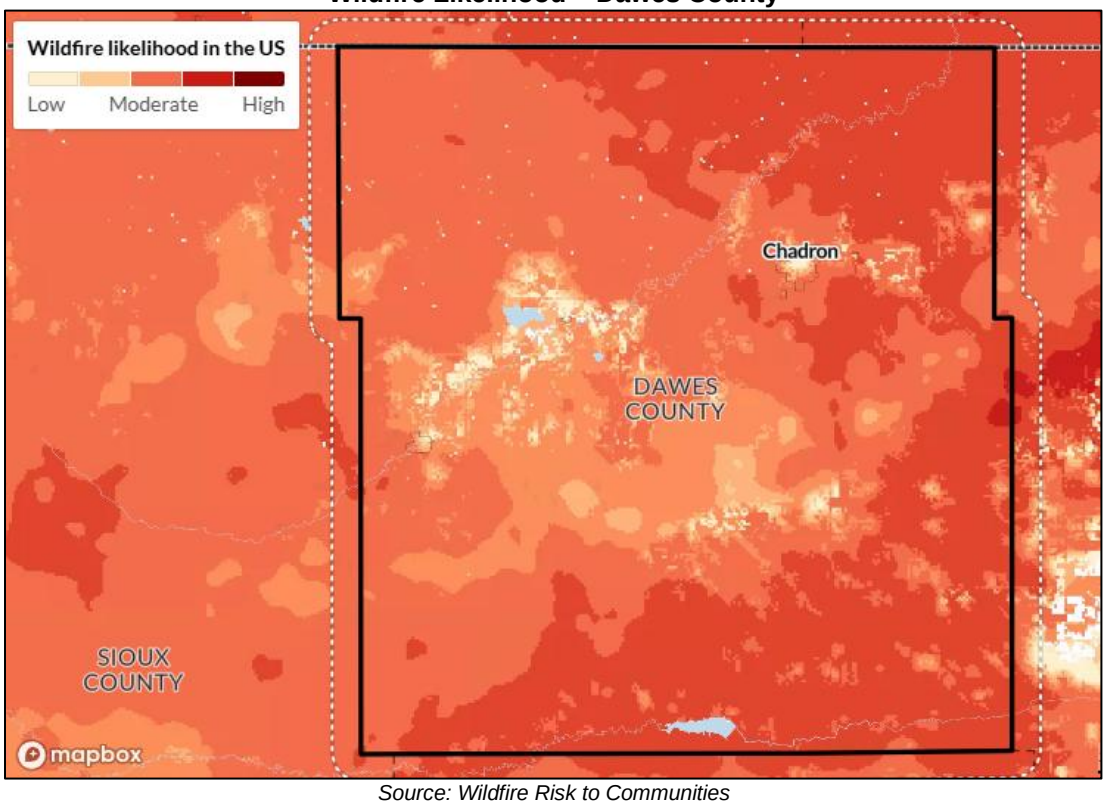
The USDA's and the U.S. Forest Service's *Wildfire Risk to Communities* also includes wildfire likelihood. The maps on the next couple of pages show the probability by location of wildfire burning in any given year for each of the four counties. Box Butte, Dawes, Sheridan, and Sioux Counties were all given high wildfire likelihood.

Wildfire Likelihood – Box Butte County



Source: Wildfire Risk to Communities[99]

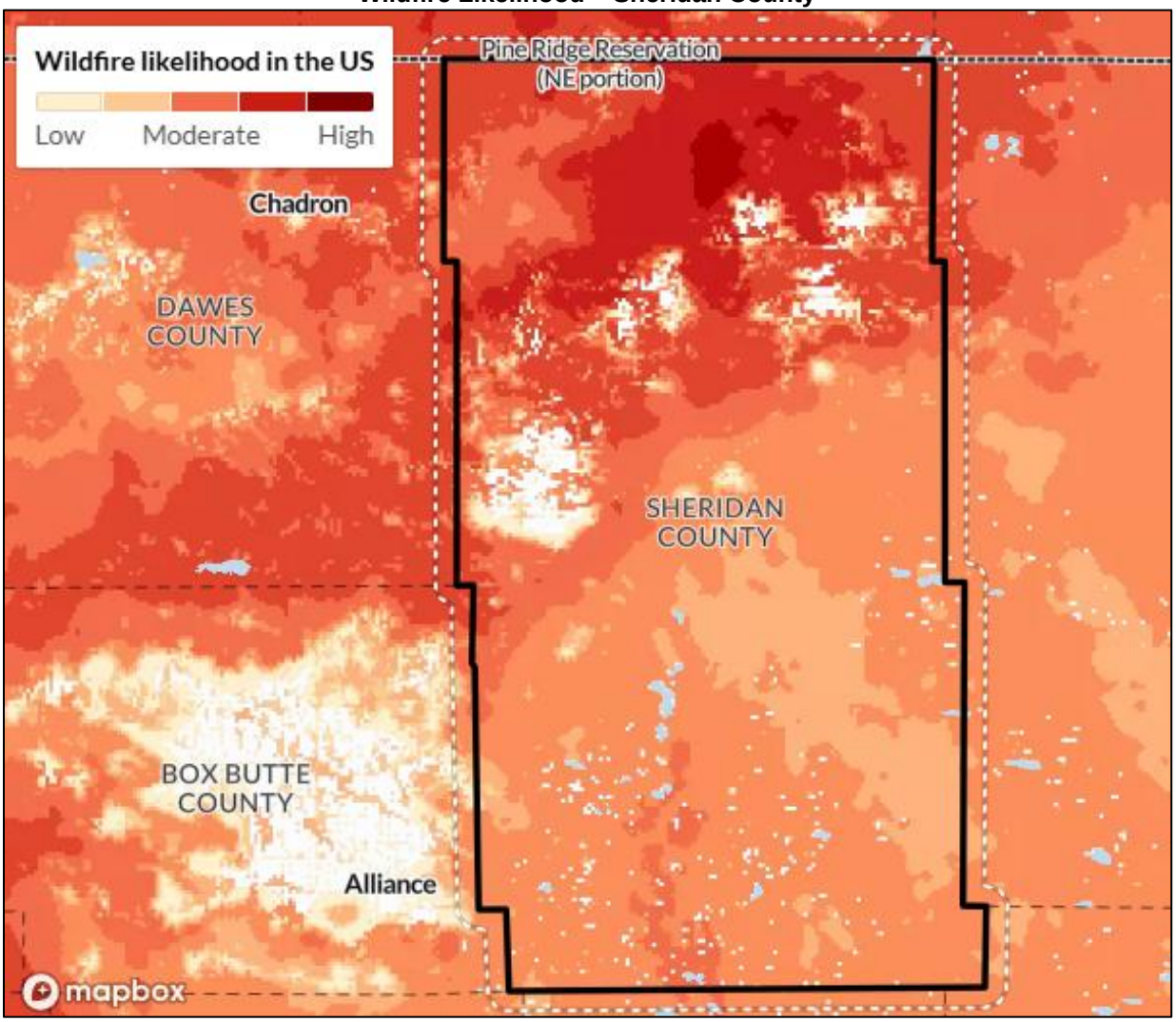
Wildfire Likelihood – Dawes County



Source: Wildfire Risk to Communities

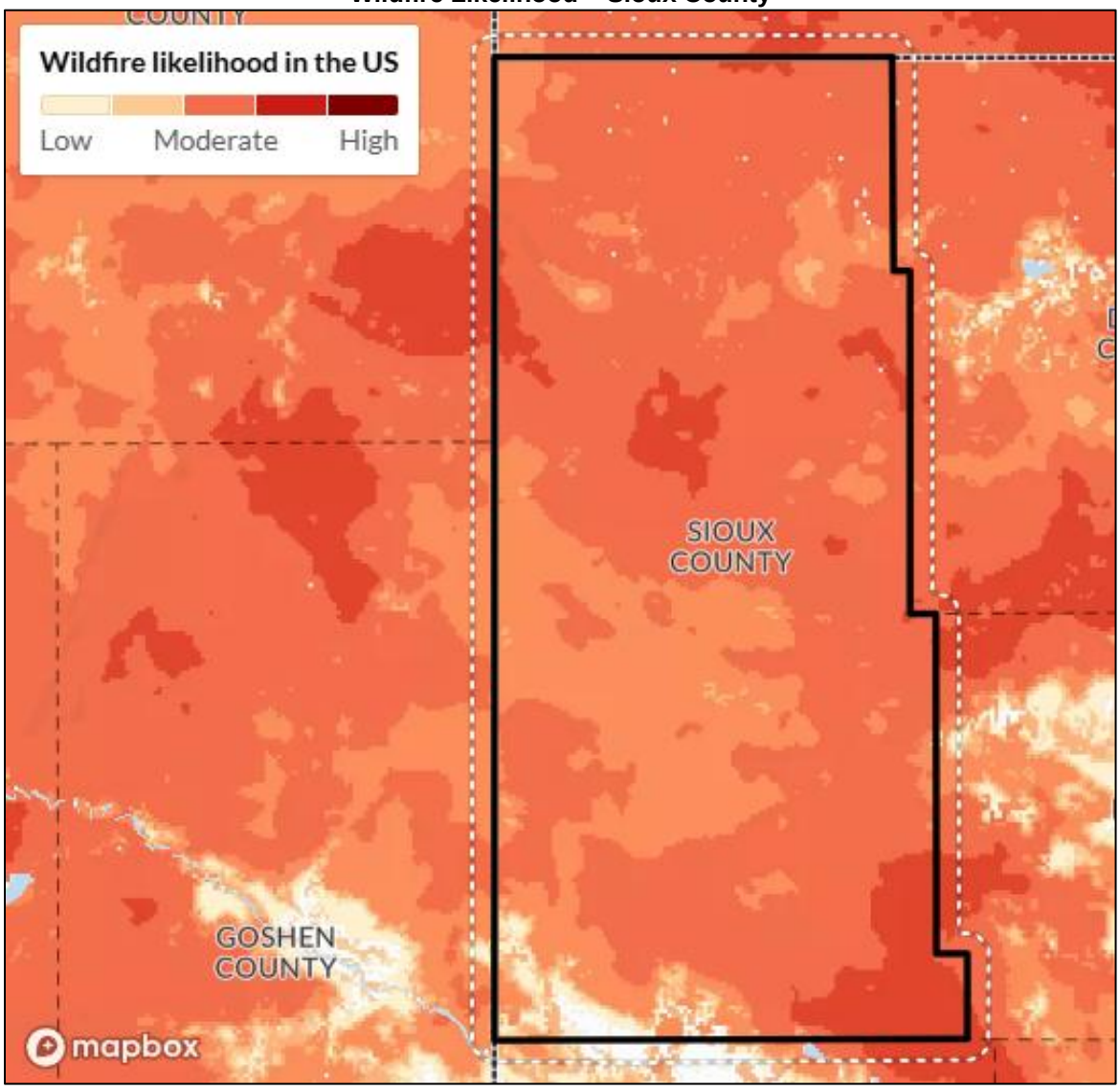
99 USDA & US Forest Service. March 2025. "Wildfire Risk to Communities. https://wildfirerisk.org/.

Wildfire Likelihood – Sheridan County



Source: Wildfire Risk to Communities

Wildfire Likelihood – Sioux County



Source: Wildfire Risk to Communities

Climate Change

Rising temperatures will likely increase the frequency and intensity of grass/wildfires. Warmer temperatures cause snow to melt sooner and create drier soils and forests, which can ignite fires quickly and cause them to spread rapidly. Additionally, warmer nighttime temperatures contribute to the continued spread of wildfires over multiple days.[100] As mentioned in the drought section, climate change will likely contribute to the rise in the frequency and intensity of drought, especially during the summer months.[101] With increased drought conditions, grass/wildfires will also likely increase due to dry vegetation and less access to water. Additionally, changes in climate can lead to the spread of invasive species, increasing potential fuel loads in wildland areas. The table

100 NASA Global Climate Change. September 2019. "Satellite Data Record Shows Climate Change's Impact on Fires." Accessed 2022. https://climate.nasa.gov/news/2912/satellite-data-record-shows-climate-changes-impact-on-fires/.

101 NCEI. 2022. "State Climate Summaries – Nebraska". https://statesummaries.ncics.org/chapter/ne/#:~:text=The%20state%20is%20located%20far,(1895%E2%80%932020)%20averag.

below shows the change in wildfire danger days in four-county region with different warming scenarios.

Change in Wildfire Danger Days

	Warming Scenarios			
	1° C	1.5° C	2° C	3° C
Change in Wildfire Danger Days	+4 Days per Year	7-13 Days per Year	14-29 Days per Year	14-29 Days per Year

Source: Probable Futures[102]

Future Development

Any new development across the planning area would be located within the WUI. Of most concern would be development on the edges of communities or other areas that encroach on wildland or natural areas. Local officials can adopt codes and ordinances that can guide growth in ways to mitigate potential losses from wildfires. These may include more stringent building code standards, setback requirements, or zoning regulations. Problems can arise if new development increases without coordinated fuels reduction and the creation of defensible space around homes.

In the event of a grass/wildfire, vegetation, structures, and other flammables can combine to create unwieldy and unpredictable events. Factors relevant to the fighting of such fires include access, firebreaks, proximity of water sources, distance from fire stations, and available firefighting personnel and equipment. The vulnerability of structures and homes is increased by combustible roofing and construction material; no/insufficient defensible space; poor access to structures; heavy natural fuel types; limited water supply; and winds over 30 miles per hour.

Regional Vulnerabilities

Grass/wildfire poses a threat to a range of demographic groups. Wildfire and urban fire could result in major evacuations of residents in impacted and threatened areas. Groups and individuals lacking reliable transportation could be trapped in dangerous locations. Lack of transportation is common among the elderly, low-income individuals, and racial minorities. Wildfires can cause extensive damage to both urban and rural building stock and properties including community lifelines, as well as agricultural producers which support the local industry and economy. Damaged homes can reduce available housing stock for residents, causing residents to leave the area. Additionally, fire events threaten the health and safety of residents and emergency response personnel.

Other notable vulnerabilities exist for fire departments which service both urban and rural areas as many fire districts lack adequate resources and staff to respond to multi-fire complexes or events in separate areas. The utilization and development of mutual aid agreements or memorandum of understandings are an important tool for districts to share resources and coverage. Smoke and air pollution from wildfires can be a severe health hazard, especially for sensitive populations, including children, the elderly, and those with respiratory and cardiovascular diseases. Smoke generated by wildfire consists of visible and invisible emissions that contain particulate matter, gases, and toxins. Public health impacts associated with wildfire include difficulty in breathing, odor, and reduction in visibility.

Included in the local CWPP are locations of concern as identified by local fire districts. These locations of concern by county are listed below along with a map of their location.

102 Probable Futures. “Maps of Temperature”. Accessed January 2024. https://probablefutures.org/.

Box Butte County

According to the 2020 Pine Ridge Area CWPP, "no specific areas of concern were identified by the planning team or fire departments, but the statewide Priority Lands analysis indicated potential concerns surrounding Alliance and Hemingford. All of Box Butte County lies within the boundaries of the WUI as defined in the introduction to this CWPP." [103]

Dawes County

According to the 2020 Pine Ridge Area CWPP, local officials "identified the Pine Ridge and the Niobrara River as being at high risk. Chadron, Crawford, Fort Robinson State Park, and Marsland all lie within areas of concern. Crow Butte Resources, a uranium mining operation in the Squaw Creek watershed, sits near the forested Pine Ridge and also lies within the area of concern.."[104]

Sheridan County

According to the 2020 Pine Ridge Area CWPP, locations of special concern include "the Wellnitz Fire footprint and the north central part of the county where there are homesteads with limited access and difficult terrain as being at high risk. The NFS priority landscape analysis indicated the immediate surroundings of Hay Springs and Gordon as at-risk WUI. The 2013 CWPP identified all of the area north of Highway 20 as an area of concern, as well as the communities of Rushville and Whiteclay. It was also noted that eastern redcedar encroachment in pasture lands of southern Sheridan County is creating an increasing fire risk. The Hay Springs fire department identified the area west of Beaver Road as an area of concern due to difficult access, rough terrain, one way in/out, heavy fuels, and lack of water within effective distance."

Sioux County

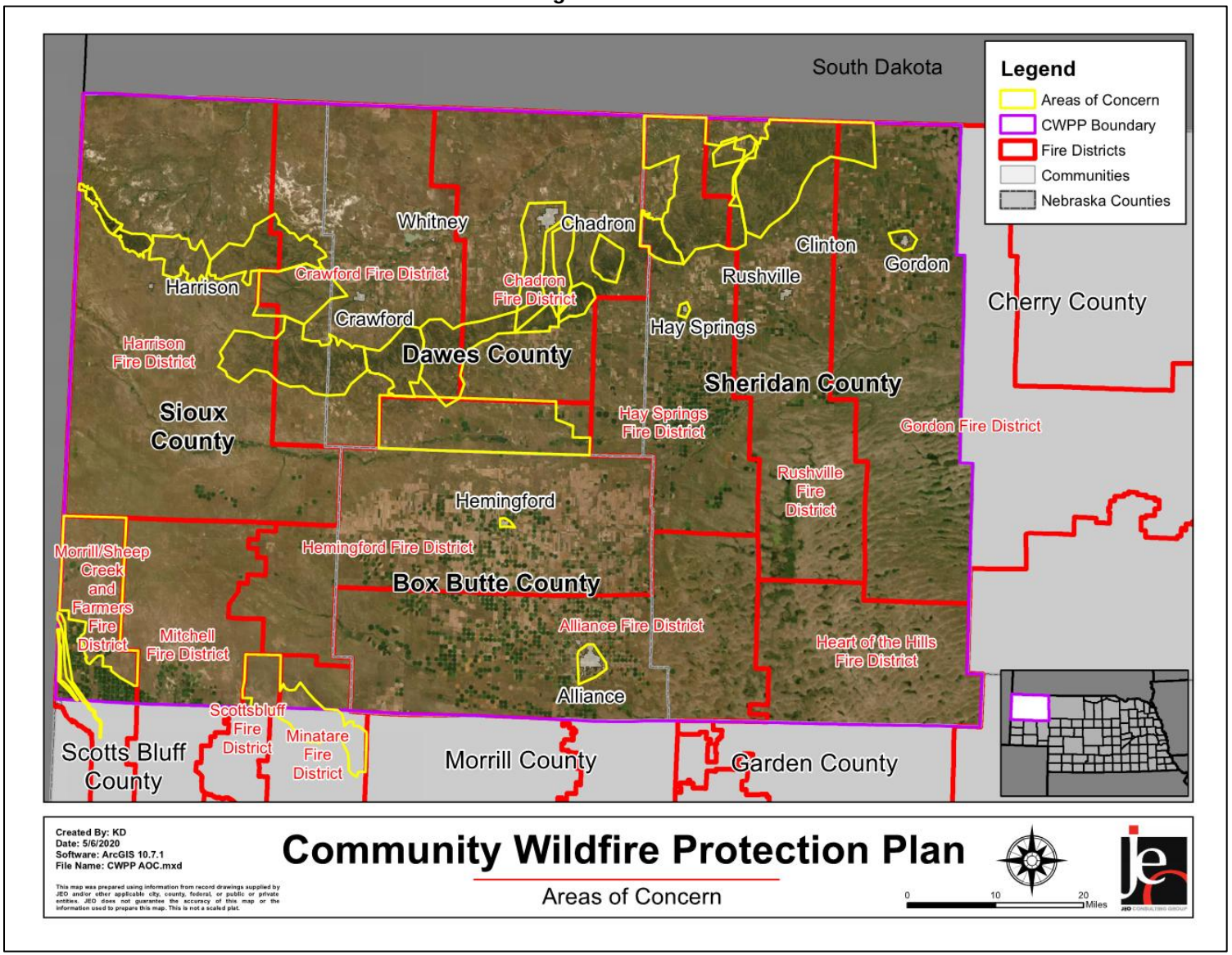
According to the 2020 Pine Ridge Area CWPP, locations of special concern include "the historic large fire footprints and the remaining green areas of the Pine Ridge, especially where there are homesteads with limited access and difficult terrain as being at high risk. The NFS priority landscape analysis indicated Niobrara River as at risk. The 2013 CWPP identified the Village of Harrison and the Agate Fossil Beds National Monument as areas of concern.

The Minatare/Melbeta fire department identified the sandy hills north of Lake Minatare that extend into the southeast corner of Sioux County as an area of concern due to difficult access, rough terrain, one way in/out, heavy fuels, and lack of water within effective distance. The Morrill/Sheep Creek and Farmers fire department noted concerns about areas along the railroad tracks, Sheep Creek, and Niobrara River with rough terrain and difficult access. They also have concerns about being unfamiliar with some portions of the fire district because of private property or access to the property itself. Additionally, the department noted that starting seven miles north of Morrill the soil becomes very sandy and it is tough terrain to get around on. This includes the area from the Wyoming border to the end of north and east boundaries of the district. The Scottsbluff Rural Fire Department identified 24 square miles in southern Sioux County with few water resources, several trailers and buildings on one-way roads, grassland, no roads. Only one road—the sugar factory road—serves this area, and it is bad in wet conditions. The NGPC said that the Gilbert Baker WMA in Sioux County, four miles north of Harrison, has rough terrain with limited access by truck. It is heavily forested, although some thinning is taking place along Monroe Canyon Rd. There is a fuel break along the west side of the WMA.".

103 Nebraska Forest Service. 2025. "Community Wildfire Protection Plans." https://nfs.unl.edu/Nebraska-community-wildfire-protection-plan/.

104 Nebraska Forest Service. 2025. "Community Wildfire Protection Plans." https://nfs.unl.edu/Nebraska-community-wildfire-protection-plan/.

Pine Ridge Areas of Concern



Source: Nebraska Forest Service

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Eight.*

Regional Grass/Wildfire Vulnerabilities

Sector	Vulnerability
People	-Risk of injury or death for residents and firefighting personnel -Displacement of people and loss of homes -Lack of transportation poses risk to low-income individuals, families, and elderly -Transportation routes may be blocked by fire, preventing evacuation efforts
Economic	-Damages to buildings and property can cause significant losses to business owners -Loss of businesses
Built Environment	-Property damages
Community Lifelines	-Damage to power lines and utility structures -Potential loss of firefighting equipment and resources -Risk of damages to buildings
Other	-May lead to poor water quality -Post fire, flash flooding events may be exacerbated

Jurisdictions Ranking Grass/Wildfire as a Prioritized Hazard of Concern

The following jurisdictions identified grass/wildfire as a prioritized hazard of concern.

- Region 23 EMA
- Upper Niobrara White NRD
- Box Butte County
- City of Alliance
- Village of Hemingford
- Dawes County
- City of Chadron
- City of Crawford
- Sheridan County
- City of Gordon
- City of Hay Springs
- City of Rushville
- Sioux County
- Village of Harrison
- Hemingford Public Schools
- Hemingford Fire District

Hazardous Materials Release

The following description for hazardous materials is provided by the Federal Emergency Management Agency (FEMA):

> Chemicals are found everywhere. They purify drinking water, increase crop production and simplify household chores. But chemicals also can be hazardous to humans or the environment if used or released improperly. Hazards can occur during production, storage, transportation, use or disposal. You and your community are at risk if a chemical is used unsafely or released in harmful amounts into the environment where you live, work or play.[105]

Hazardous materials in various forms can cause fatalities, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Many products containing hazardous chemicals are used and stored in homes routinely. Chemicals posing a health hazard include carcinogens, toxic agents, reproductive toxins, irritants, and many other substances that can harm human organs or vital biological processes.

Chemical manufacturers are one source of hazardous materials, but there are many others, including service stations, hospitals, and hazardous materials waste sites. Varying quantities of hazardous materials are manufactured, used, or stored in an estimated 4.5 million facilities in the United States—from major industrial plants to local dry-cleaning establishments or gardening supply stores.

Hazardous materials come in the form of explosives, flammable and combustible substances, poisons, and radioactive materials. Hazardous materials incidents are technological (meaning non-natural hazards created or influenced by humans) events that involve large-scale releases of chemical, biological or radiological materials. Hazardous materials incidents generally involve releases at fixed-site facilities that manufacture, store, process or otherwise handle hazardous materials or along transportation routes such as major highways, railways, navigable waterways, and pipelines. A large number of spills also occur during the loading and unloading of chemicals.

Fixed sites are those that involve chemical manufacturing sites and stationary storage facilities. The Environmental Protection Agency (EPA) requires the submission of the types and locations of hazardous chemicals being stored at any facility within the state over the previous calendar year. This is completed by submitting a Tier II form to the EPA as a requirement of the Emergency Planning and Community Right-to-Know Act of 1986.[106]

Likewise, the U.S. Department of Transportation, through the U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA), has broad jurisdiction to regulate the transportation of hazardous materials, including the discretion to decide which materials shall be classified as hazardous. These materials are placed into one of nine hazard classes based on their chemical and physical properties. The hazard schedules may be further subdivided into divisions based on their characteristics. Because the properties and characteristics of materials are crucial in understanding the dynamics of a spill during a transportation incident, it is important for response personnel to understand the hazard classes and their divisions.

105 Federal Emergency Management Agency. 2017. “Hazardous Materials Incidents”. https://www.ready.gov/hazardous-materials-incidents.

106 Emergency Planning and Community Right-to-Know Act of 1986, Pub. L. No. 116 § 10904. (1986).

The table below shows the nine classes of hazardous material according to the 2020 Emergency Response Guidebook.

Hazardous Materials Classes

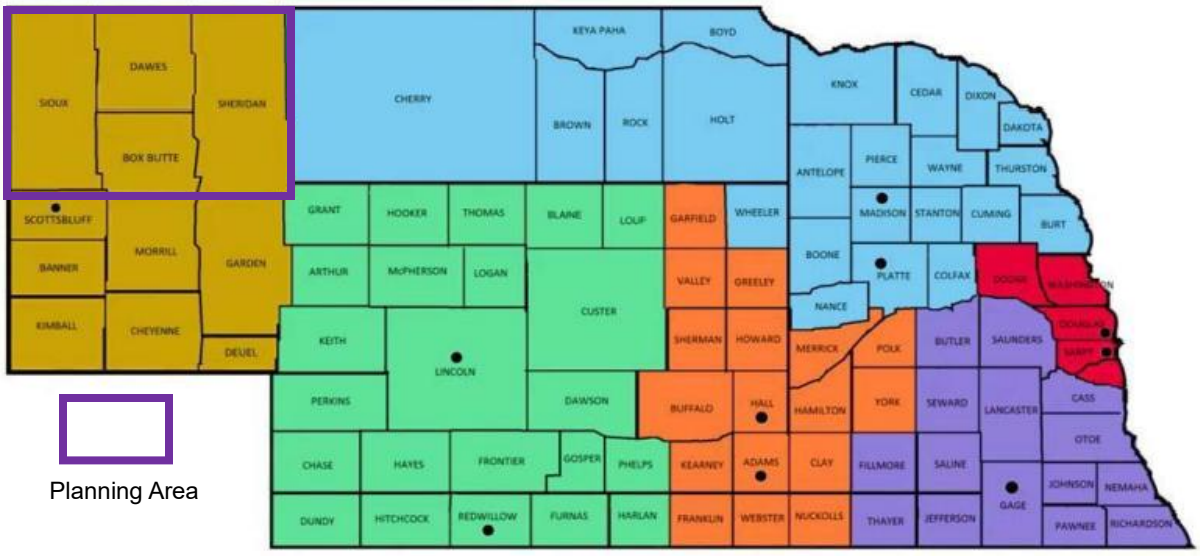
Class	Type of Material	Divisions
1	Explosives	1.1 Explosives which have a mass explosion hazard 1.2 Explosives which have a projection hazard but not a mass explosion hazard 1.3 Explosives which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard 1.4 Explosives which present no significant hazard 1.5 Very insensitive explosives with a mass explosion hazard 1.6 Extremely insensitive articles which do not have a mass explosion hazard
2	Gases	2.1 Flammable gases 2.2 Non-flammable, non-toxic gases 2.3 Toxic gases
3	Flammable liquids (and Combustible liquids)	
4	Flammable solids; Substances liable to spontaneous combustion; Substances which, on contact with water, emit flammable gases	4.1 Flammable solids, self-reactive substances and solid desensitized explosives 4.2 Substances liable to spontaneous combustion 4.3 Substances which in contact with water emit flammable gases
5	Oxidizing substances and Organic peroxides	5.1 Oxidizing substances 5.2 Organic peroxides
6	Toxic Substances and infectious substances	6.1 Toxic substances 6.2 Infectious substances
7	Radioactive materials	-
8	Corrosive substances	-
9	Miscellaneous hazardous materials/dangerous goods and articles	-

Source: Emergency Response Guidebook, 2020[107]

There are ten State Emergency Response Teams (SERTs) stationed across the State of Nebraska which are trained to respond to large scale hazardous material incidents. Each department includes personnel at the technical, incident commander, and safety officer levels. There is one SERT district which covers the planning area. The nearest team is located in Scottsbluff.

107 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. 2022. "2020 Emergency Response Guidebook". https://www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg.

Nebraska SERTs Map



Source: NEMA[108]

Location

Fixed Site

There are 49 facility locations across the planning area that submitted Tier II reports to the Nebraska Department of Environment and Energy (NDEE) in 2023.[109] These locations are shown in the figure on the next page. The locations include a half mile buffer to show the potential evacuation area during a hazardous materials release. A half mile was chosen because, in the 2020 Emergency Response Guidebook, the initial evacuation area for a "Mixed Load/Unidentified Cargo" involved in a fire is a half mile in all directions.[110]

Transportation

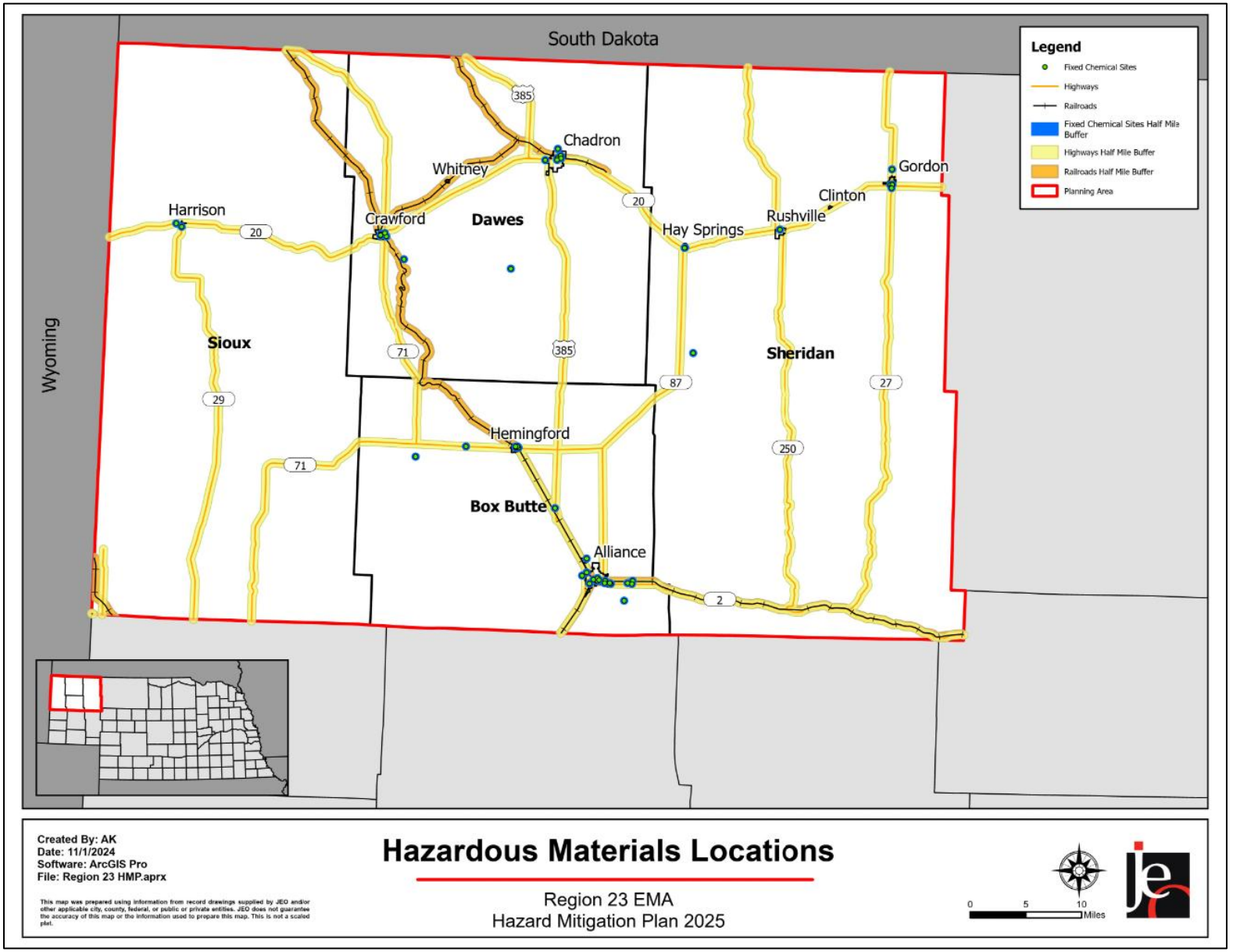
A large number of spills typically occur during the loading and unloading of chemicals for highway and pipeline chemical transport. Hazardous materials releases during transportation primarily occur on major transportation routes as identified in the figure Major Transportation Routes.

Pipelines

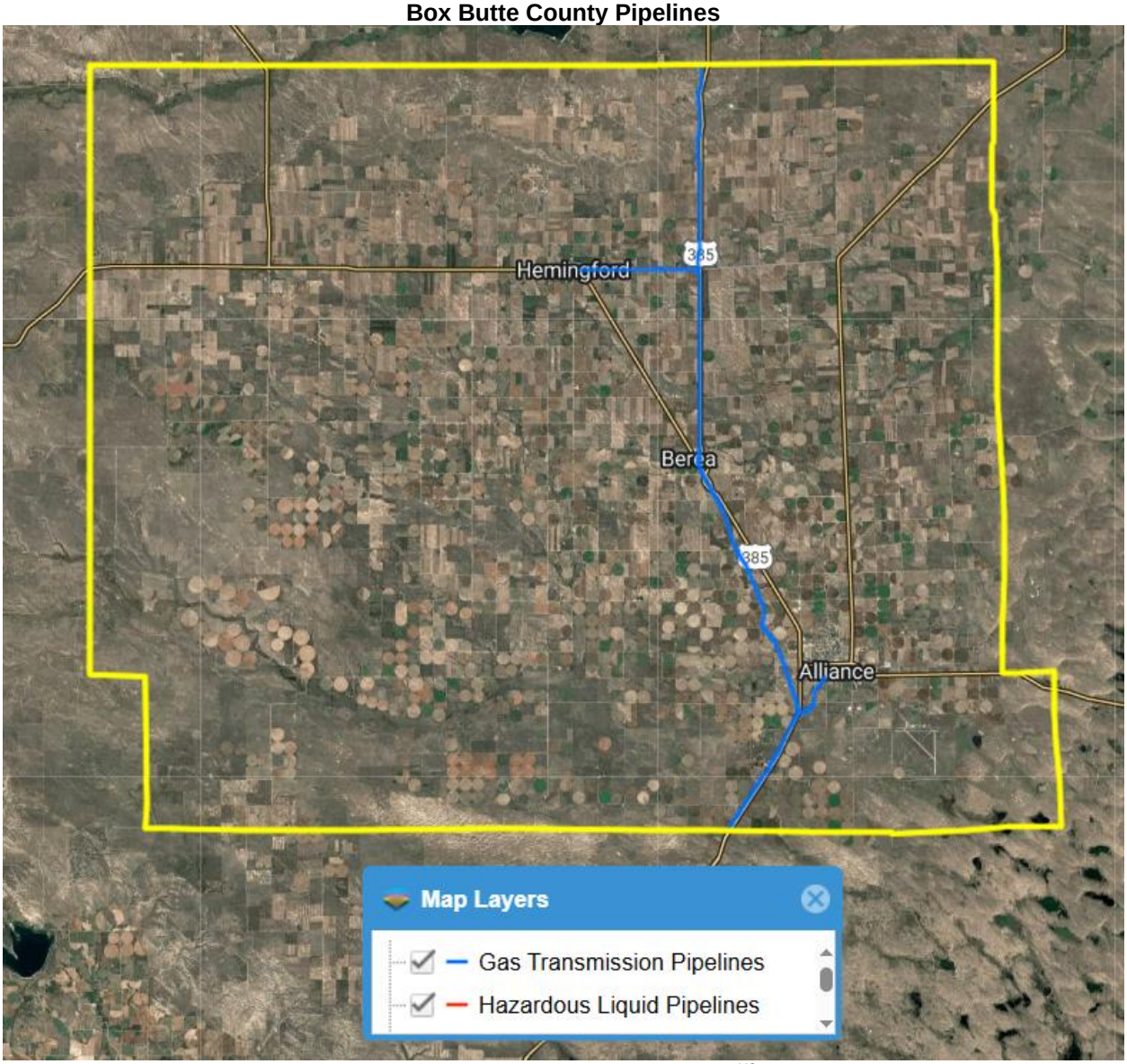
According to the National Pipeline Mapping System, there are multiple gas transmission pipelines located in the four-county planning area.[111] Maps of the pipelines can be seen over the next several pages.

108 Nebraska Emergency Management Agency. June 2020. "Emergency Assistance to a Hazardous Materials Incident". https://nema.nebraska.gov/assets/files/publications/hazmat-blue-book.pdf.
109 Nebraska Department of Environment and Energy. 2023. "Nebraska DEE Tier 2 Data Download". https://deq-iis.ne.gov/tier2/tier2Download.html.
110 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. 2024. "2020 Emergency Response Guidebook". https://www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg.
111 National Pipeline Mapping System. February 2025. "National Pipeline Mapping System Public Viewer". https://pvnpms.phmsa.dot.gov/PublicViewer/.

Hazardous Material Locations



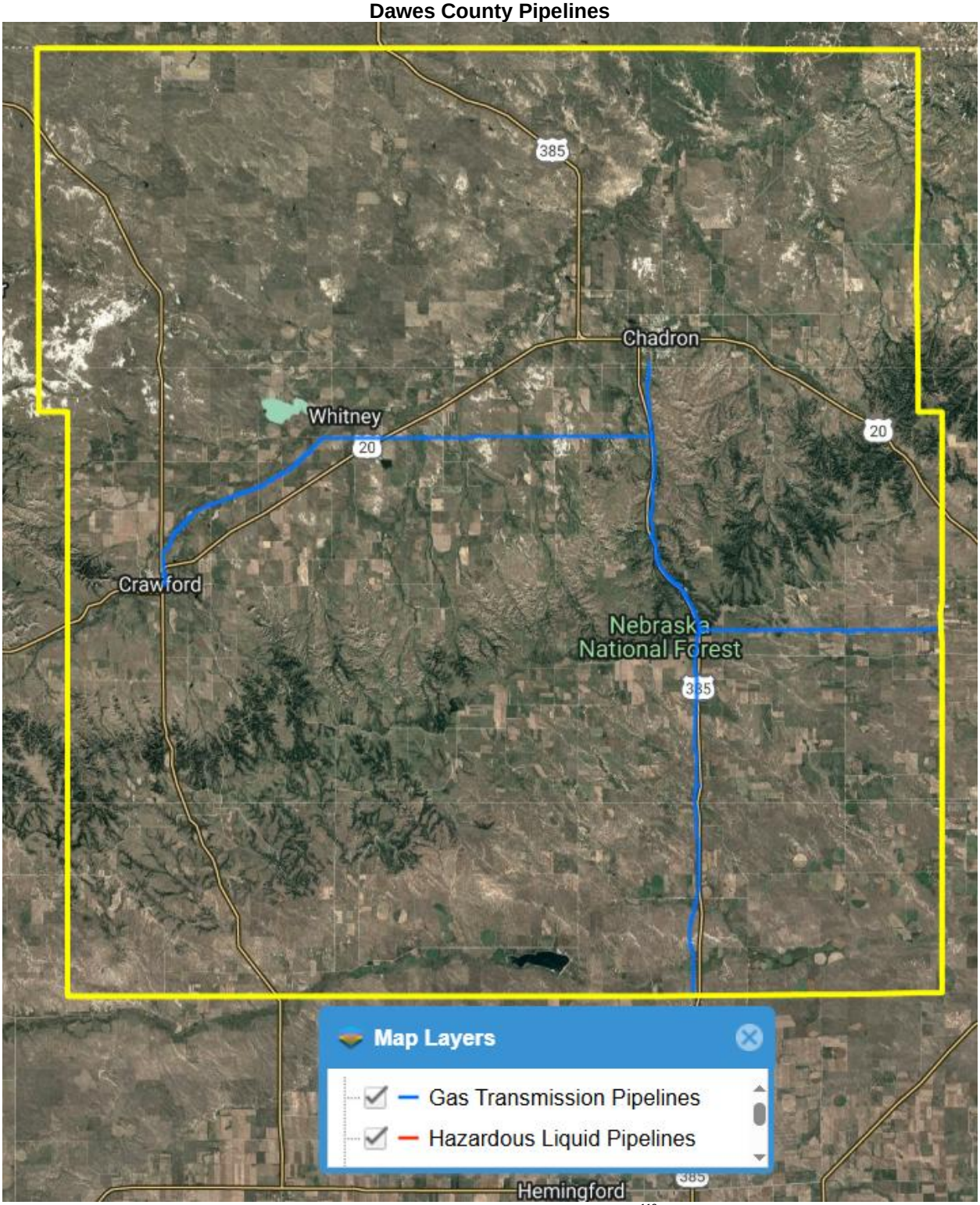
Box Butte County Pipelines



Source: National Pipeline Mapping System[112]

112 National Pipeline Mapping System. February 2025. "National Pipeline Mapping System Public Viewer". https://pvnpms.phmsa.dot.gov/PublicViewer/.

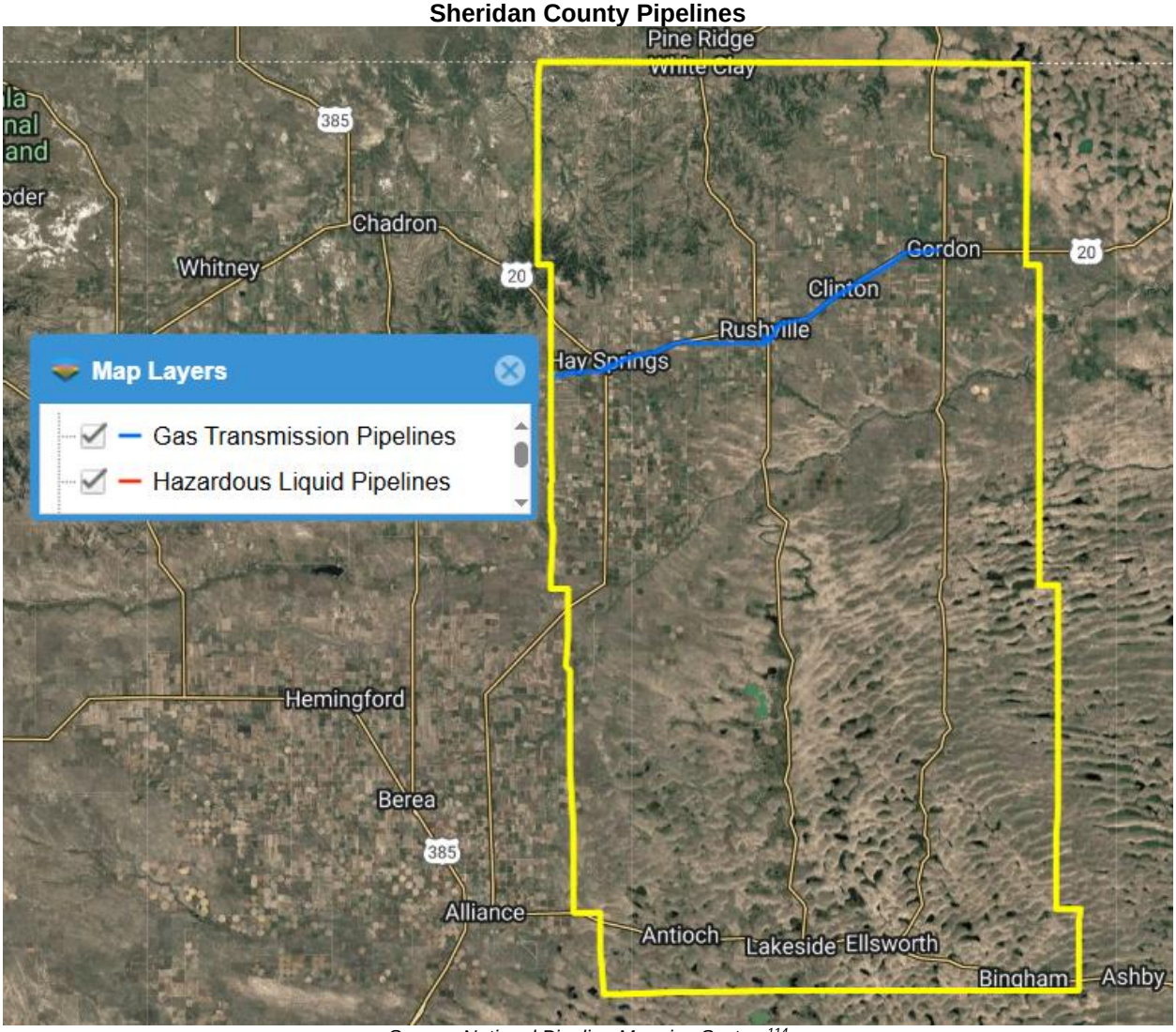
Dawes County Pipelines



Source: National Pipeline Mapping System[113]

113 National Pipeline Mapping System. February 2025. "National Pipeline Mapping System Public Viewer". https://pvnpms.phmsa.dot.gov/PublicViewer/.

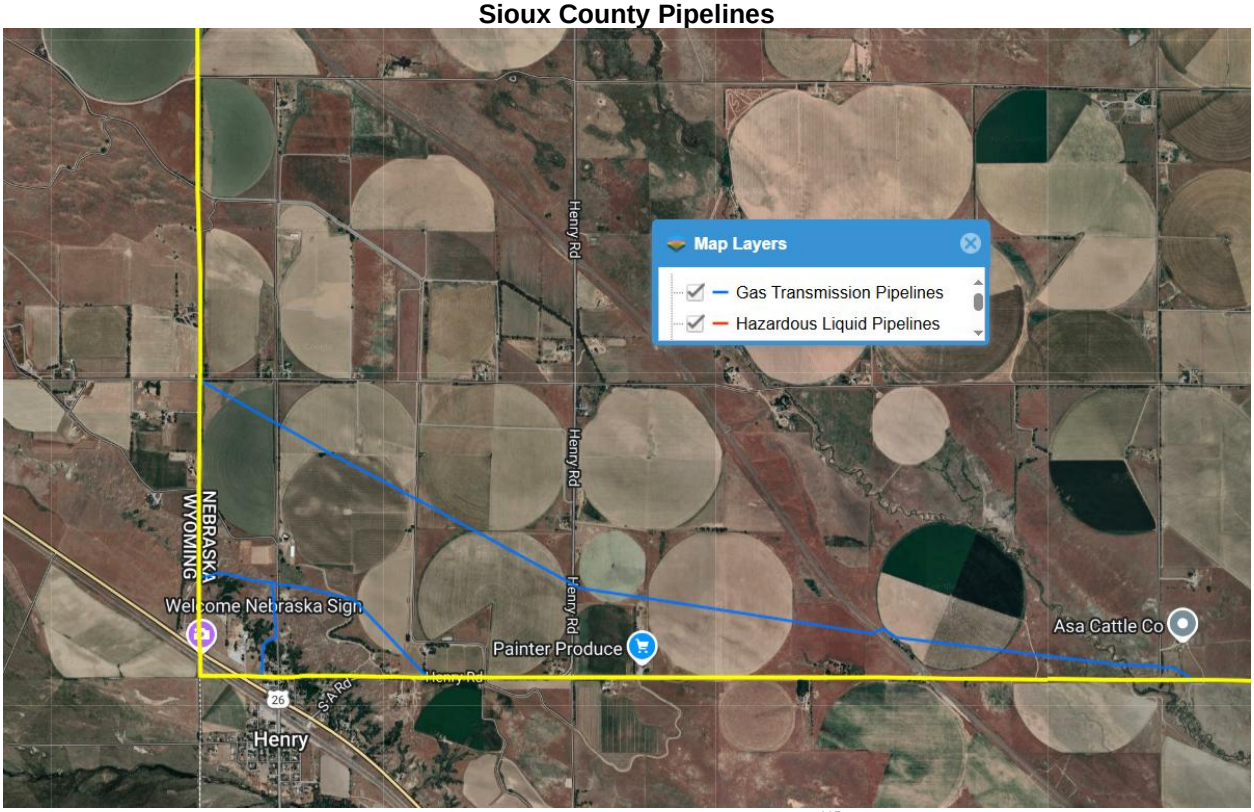
Sheridan County Pipelines



Source: National Pipeline Mapping System[114]

114 National Pipeline Mapping System. February 2025. "National Pipeline Mapping System Public Viewer". https://pvnpms.phmsa.dot.gov/PublicViewer/.

Sioux County Pipelines



Source: National Pipeline Mapping System[115]

115 National Pipeline Mapping System. February 2025. "National Pipeline Mapping System Public Viewer". https://pvnpms.phmsa.dot.gov/PublicViewer/.

Extent

The extent of hazardous materials releases varies and depends on the type of chemical that is released with most events localized to the facility or container. In total 13 fixed site and 44 transportation releases have occurred in the planning area, and the total amount spilled ranged from less than 1 gallon to 66,000 gallons. Of the 57 chemical spills, one of the spills resulted in an evacuation, with no injuries.

Historical Occurrences

Fixed Site

According to the U.S. Coast Guard's National Response Center database (NRC), there have been 13 hazardous materials releases at fixed sites from 1990 to 2023 in the planning area. There was no property damage or injuries.[116] The following table displays the more serious spills that have occurred throughout the planning area (>500 gallons).

Fixed Site Hazardous Material Releases

Year of Event	Location of Release	Quantity Spilled	Material Involved	Injury	Fatality	Evacuations
1990	Alliance	65,795 gallons	Fuel Oil	0	0	0
1991	Alliance	5,000 pounds	Cleaner with Sodium Hydroxide	0	0	0

Source: National Response Center, 1990-2023

Transportation

According to the Pipeline and Hazardous Materials Safety Administration (PHMSA), 44 hazardous materials releases occurred during transportation in the planning area between 1971 and 2023. During these events, there were no injuries, no fatalities, one evacuation, and $266,139 in damages.[117] The following table provides information about the more serious spills that have occurred throughout the planning area (>500 gallons spilled or evacuation).

116 U.S. Coast Guard National Response Center. 2024. "Chemical Pollution and Railroad Incidents, 1990-2023." [datafile]. https://nrc.uscg.mil/.

117 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. 2024. "Incident Statistics: Nebraska". https://www.phmsa.dot.gov/hazmat-program-management-data-and-statistics/data-operations/incident-statistics.

Transportation Hazardous Materials Release

Year of Event	Location of Release	Material Involved	Method of Transportation	Amount	Total Damage	Evacuation
1976	Harrison	Liquid Tar, Oil	Highway	7,700	$0	No
1979	Hay Springs	Fuel Oil	Highway	1,600	$0	No
1984	Harrison	Aviation Fuel	Highway	3,400	$0	No
1989	Alliance	Fuel Oil	Rail	1,500	$0	No
1998	Alliance	Gasoline	Highway	500	$1,107	No
2015	Crawford	Hydrochloric Acid	Highway	796	$0	Yes

Source: PHMSA, 1971–2023[118]

Average Annual Damages

Using data from the tables above, average annual damage from hazardous materials releases can be estimated. There have been 13 fixed site spills in the planning area reported from the NRC and 44 transportation spills as reported by PHMSA. Neither the NRC nor PHMSA track crop losses from chemical spills. These events reported $266,139 in property damage. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life.

Hazardous Materials Release Loss Estimate

Hazard Type	Number of Events	Events Per Year	Injuries	Fatalities	Total Damages	Average Annual Chemical Spill Loss
Hazardous Materials Release (Fixed Site)	13	0.4	0	0	$0	$0
Hazardous Materials Release (Transportation)	44	0.8	0	0	$266,139	$5,021

Source: National Response Center, 1990-2023[119]*; PHMSA, 1971- 2023*

Historical Probability & Future Likelihood

Given the historical record of occurrence of 11 years with a fixed-site chemical spill out of 33 years, the annual historical probability of occurrence for hazardous materials releases at fixed sites is 33 percent. Due to the anticipated impacts from future development, the future likelihood of fixed site chemical spills is likely.

Given the historical record of occurrence of 32 years with a transportation chemical spill out of 53 years (many years had several chemical spills occur), the annual historical probability of occurrence for hazardous materials releases during transportation is 60 percent. Due to the anticipated impacts from future development, the future likelihood of a transportation release event is very likely.

118 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. 2024. "Incident Statistics: Nebraska". https://www.phmsa.dot.gov/hazmat-program-management-data-and-statistics/data-operations/incident-statistics.

119 U.S. Coast Guard National Response Center. 2024. "Chemical Pollution and Railroad Incidents, 1990-2023." [datafile]. https://nrc.uscg.mil/.

Historical Probability & Future Likelihood – Hazardous Materials Release

Hazard	Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
Fixed Site	33%	Neither Increase nor Decrease in Frequency	Increase in Frequency and Exposure	**Likely**
Transportation	60%	Neither Increase nor Decrease in Frequency	Increase in Frequency and Exposure	**Very Likely**

Climate Change

Climate trends are not anticipated to have a direct impact on hazardous materials releases. However, as events continue to impact infrastructure used by and for hazardous materials, future spills will likely occur. For example, flooding is likely to increase,[120] which could damage roadways and pipelines causing more spills to occur.

Future Development

Future development is likely to increase the frequency of hazardous materials release because there will be more traffic and likely more chemical storage sites. To reduce the risk to people and property damage, future development should encourage chemical storage and manufacturing facilities to be built away from community lifelines such as hospitals, schools, daycares, nursing homes, and other residential areas. Likewise, residential development and locations that house vulnerable populations should be built away from major transportation corridors used for chemical transportation.

Regional Vulnerabilities

Using the half mile buffers for both the major transportation routes and fixed chemical sites, an analysis was performed to identify community lifelines that are located within those buffer areas. The half mile buffer was chosen because, in the 2020 Emergency Response Guidebook, the initial evacuation area for a "Mixed Load/Unidentified Cargo" involved in a fire is a half mile in all directions.[121] While some of the fixed chemical sites may not house chemical types or quantities that would require a half mile evacuation area, this does give an idea of what may need to be evacuated until the impacted or spilled material is identified. This does not mean that all of the identified community lifelines will be impacted by every hazardous materials release, it merely shows the lifelines that are more vulnerable to hazardous materials release due to their proximity to these locations. In total, 189 out of 223 community lifelines are located within a half mile of a major transportation route and 170 out 223 community lifelines are located within a half mile of a fixed chemical site.

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Eight*.

120 NOAA. January 2024. "Climate Mapping for Resilience and Adaptation". https://livingatlas.arcgis.com/assessment-tool/explore/details.

121 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. 2022. "2020 Emergency Response Guidebook". https://www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg.

Regional Hazardous Materials Release Vulnerabilities

Sector	Vulnerability
People	-Those in close proximity to chemical fixed sites or transportation corridors could have minor to moderate health impacts -Possible evacuation -Hospitals, nursing homes, and the elderly at greater risk due to low mobility
Economic	-A chemical plant shutdown in smaller communities would have significant impacts to the local economy -Evacuations and closed transportation routes could impact businesses near spill
Built Environment	-Risk of fire or explosion
Community Lifelines	-Transportation routes can be closed during evacuations -Community lifelines are at risk of evacuation

Jurisdictions Ranking Hazardous Materials Release as a Prioritized Hazard of Concern

The following jurisdictions identified hazardous materials release as a prioritized hazard of concern.

- Box Butte County
- Chadron Public Schools
- Hemingford Public Schools

Human Infectious Disease

According to the Cleveland Clinic, Infectious Diseases are:

> "illnesses caused by harmful agents (pathogens) that get into your body. The most common causes are viruses, bacteria, fungi and parasites. Infectious diseases usually spread from person to person, through contaminated food or water and through bug bites."[122]

In some situations, Human Infectious Diseases can lead to the declaration of a public health emergency. The number of cases that qualify as a public health emergency depends on several factors including the illness, its symptoms, ease in transmission, incubation period, and available treatments or vaccinations. With the advent of sanitation sewer systems and other improvements in hygiene since the 19th century, the spread of infectious disease has greatly diminished. Additionally, the discovery of antibiotics and the implementation of universal childhood vaccination programs have played a major role in reducing human disease impacts.

Today, human disease incidences are carefully tracked by the Centers for Disease Control and Prevention (CDC) and state organizations for possible epidemics and to implement control systems. Novel illnesses or diseases have the potential to develop annually and significantly impact residents and public health systems.

Some of the best actions or treatments for outbreaks are nonpharmaceutical interventions (NPI). These are readily available behaviors or actions, and response measures people and communities can take to help slow the spread of respiratory viruses such as influenza. Understanding NPIs and increasing the capacity to implement them in a timely way can improve overall community resilience during an outbreak. Using multiple NPIs simultaneously can reduce influenza transmission in communities even before vaccination is available.[123]

Pandemics are global or national disease outbreaks. These types of illnesses, such as influenza, can easily spread person-to-person, cause severe illness, and are difficult to contain. An especially severe pandemic can lead to high levels of illness, death, social disruption, and economic turmoil. Past pandemic events include:

- 1918 Spanish Flu: the H1N1 influenza virus spread world-wide during 1918 and 1919. It is estimated that at least 50 million people worldwide died during this pandemic with about 675,000 deaths alone in the United States. No vaccine was ever developed, and control efforts included self-isolation, quarantine, increased personal hygiene, disinfectant use, and social distancing.

- 1957 H2N2 Virus: a new influenza A virus emerged in Eastern Asia and eventually crossed into coastal U.S. cities in summer of 1957. In total 1.1 million people worldwide died of the flu with 116,000 of those in the United States.

122 Cleveland Clinic. 2022. Accessed October 2023. "Infectious Diseases." https://my.clevelandclinic.org/health/diseases/17724-infectious-diseases.

123 U.S. Department of Health and Human Services. 2017. "Pandemic Influenza Plan: 2017 Update." https://www.cdc.gov/flu/pandemic-resources/pdf/pan-flu-report-2017v2.pdf.

- 1968 H3N2 Virus: an influenza A virus discovered in the United States in September 1968 which killed over 100,000 citizens. The majority of deaths occurred in people 65 years and older.

- 2009 H1N1 Swine Flu: a novel influenza A virus discovered in the United States and spread quickly across the globe. This flu was particularly prevalent in young people while those over 65 had some antibody resistance. The CDC estimated the U.S. had over 60.8 million cases and 12,469 deaths.

- 2019 COVID-19: the novel influenza A virus which originated in Wuhan China and spread globally. As of November 8, 2022, the CDC reported 97.6 million cases and 1.1 million deaths attributed to COVID-19 in the United States. Efforts to control and limit the virus included self-isolation, quarantine, increased cleaning measures, social distancing, and vaccinations. Significant impacts to the national and global economy have been caused by COVID-19.

The Nebraska Department of Health and Human Services requires doctors, hospitals, and laboratories to report on many communicable diseases and conditions to monitor disease rates for epidemic events. Additionally, regional or county health departments monitor local disease outbreaks and collect data relevant to public health. Panhandle Public Health District serves all of Region 23.

Location

Human disease outbreaks can occur anywhere in the planning area. Public heath emergencies or pandemic threshold levels are dependent on the outbreak type, transmission vectors, location, and season. Normal infectious disease patterns are changing due to increasing human mobility and climate change. Rural populations are particularly at risk for animal-related diseases while urban areas are at greater risk from community spread type illnesses. All residents throughout the planning area are at risk during public health emergencies. All areas within the planning area experienced impacts from COVID-19 specifically during 2020.

Extent

Those most affected by human infectious disease outbreaks are typically the very young, the very old, the immune-compromised, the economically vulnerable, and the unvaccinated. Roughly 27% of the planning area's population is 19 years or younger, and 28% of the planning area is 65 years or older. These factors increase vulnerability to the impacts of outbreaks. Refer to *Appendix C: Planning Area Profile* for further discussion of age and economic vulnerability in the planning area. It is not possible to determine the extent of individual public health emergency events, as the type and severity of a novel outbreak cannot be predicted. However, depending on the disease type, a significant portion of residents may be at risk to illness or death.

The extent of human infectious diseases is closely tied to the proximity or availability of health centers and services. There is one hospital in the county and several nursing facilities and health clinics.

Immunodeficiency disorders (such as diabetes), obesity, or other pre-existing health complications reduce the ability of the body to fight infection. Diabetes prevalence in the four-county planning area and for the state are listed in the table below.

Diabetes Prevalence in the Planning Area

Geography	Diagnosed Diabetes Rate
Box Butte County	7.5
Dawes County	7.6
Sheridan County	7.7
Sioux County	6.8
State of Nebraska	**9.7**

Source: Centers of Disease Control and Prevention, 2025[124]
**County data is from 2021; State data is from 2022*

Nebraska Administrative Code - Title 173, Chapter 3 and Chapter 4 outline the immunization requirement for students attending licensed childcare centers and elementary or secondary schools. Requirements are for the following vaccinations: poliomyelitis, Diphtheria, pertussis, tetanus, measles, mumps, rubella, Hepatitis B, and varicella (chicken pox). The Vaccines for Children program is a federally funded and state-operated vaccine supply program that provides free vaccines to children under 18 who are of American Indian or Alaska Native descent, enrolled in Medicaid, uninsured, or underinsured. Additionally, the HPV vaccination series is recommended for teenagers and influenza vaccinations are recommended yearly for those over six months old. Individuals without vaccinations are at greater risk of contracting diseases or carrying diseases to others.

Historical Occurrences

Cases and fatalities associated with Human Infectious Diseases vary between illness types and severity of outbreak. Past major outbreaks in Nebraska have specifically included the H1N1 Swine Flu in 2009 and COVID-19 in 2020.

- H1N1 Swine Flu (2009) – outbreaks were first reported in mid-April 2009 and spread rapidly. The new flu strand for which immunity was nonexistent in persons under 60 years old was similar in many ways to typical seasonal influenza. Symptoms of H1N1 included fever greater than 100°F, cough, and sore throat. County specific counts of H1N1 are not available, however a total of 215 probable and confirmed cases were reported for Nebraska by July 10, 2009.[125] Outbreaks in Nebraska were typically seen sporadically. The U.S. Public Health Emergency for the H1N1 Influenza outbreak expired on June 23, 2010. The CDC developed and encouraged all US residents to receive a yearly flu vaccination to protect against potential exposures. The H1N1 continues to appear annually and persons in the planning area are at risk of infection in the future.

- COVID-19 (2020) – In January 2020, the CDC confirmed the first case of COVID-19 in the United States, and it quickly spread across the country. By March 2020, the World Health Organization declared COVID-19 a pandemic and travel bans were instituted around the globe. Primary symptoms of the infection included cough, fever or chills, shortness of breath or difficulty breathing, fatigue, muscle and body aches, headache, loss of taste or

124 Centers for Disease Control and Prevention. 2025. “Diagnosed diabetes prevalence – Nebraska.” https://gis.cdc.gov/grasp/diabetes/diabetesatlas-surveillance.html#.
125 Centers for Disease Control and Prevention. July 2009. Accessed March 2025. “CDC H1N1 Flu | July 10, 2009.”. https://archive.cdc.gov/#/details?q=nebraska%20h1n1&start=0&rows=10&url=https://www.cdc.gov/h1n1flu/updates/071009.htm.

smell, sore throat, and others. The first presumptive case of COVID-19 in the State of Nebraska was a 36-year old Omaha woman. Governor Pete Ricketts instituted restrictions on public gatherings and commerce through a Directed Health Measure on March 19, 2020.

The table below displays COVID-19 confirmed cases and deaths as of March 26, 2024.

COVID-19 Cases by County

Jurisdiction	Population (2020)	Confirmed Cases	Fatalities
Box Butte County	10,842	2,535	26
Dawes County	8,199	1,515	17,639
Sheridan County	5,127	1,160	41
Sioux County	1,135	82	1

Source: The New York Times[126]

Average Annual Losses

The national economic burden of influenza medical costs, medical costs plus lost earnings, and total economic burden was $10.4 billion, $26.8 billion, and $87.1 billion respectively in 2007.[127] However, associated costs with pandemic response are much greater. Current estimated costs for COVID-19 in the United States exceed $16 trillion. Specific costs do not include losses from displacement, functional downtime, economic loss, injury, or loss of life. The direct and indirect effects of significant health impacts are difficult to quantify.

Historical Probability & Future Likelihood

There is no pattern as to when human infectious diseases occur. Based on historical records, it is likely that small-scale disease outbreaks will occur annually within the planning area. However, large scale disease events (such as COVID-19) cannot be predicted.

Given its prevalence, the annual historical probability of occurrence for human infectious disease is 100 percent. Due to the anticipated impacts from future development and potential impacts from climate change, the future likelihood of a human infectious disease event is very likely.

Historical Probability & Future Likelihood – Human Infectious Disease

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
100%	Uncertain	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Very Likely**

Climate Change

Shifting climatic conditions can alter the geographic range of disease-carrying insects and pests. Mosquitoes that transmit viruses such as Zika, West Nile, and Dengue may become more prevalent in Nebraska. These types of zoonotic disease may initially spread faster as the local population is not aware of the proper steps to reduce their risk.

126 The New York Times. 2024. Accessed July 2024. “Track Covid-19 in Box Butte County, Neb”. https://www.nytimes.com/interactive/2023/us/box-butte-nebraska-covid-cases.html.

127 Molinari, N.M., Ortega-Sanchez, I.R., Messonnier, M., Thompson, W.W., Wortley, P.M., Weintraub, E., & Bridges, C.B. April 2007. “The annual impact of seasonal influenza in the US: measuring disease burden and costs.” DOI: 10.1016/j.vaccine.2007.03.046.

It is estimated that over the next 30 years, 143 million people are likely to migrate to other areas due to the effects of climate change like increasing sea levels, drought, and other climate disaster events. [128] This global migration could lead to increased human infectious diseases as different population groups come more in contact with each other and are exposed to different pathogens.

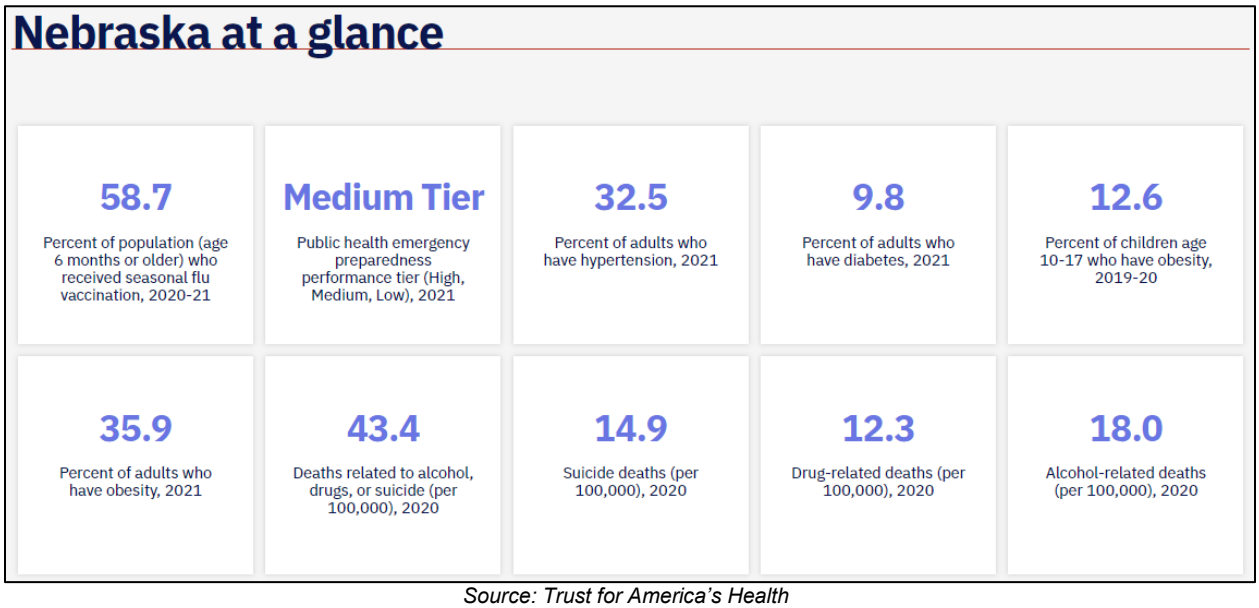
Future Development

The impacts of a human infectious disease could be lessened by building and/or designating mass vaccination sites, as well as ensuring there are adequate rooms and beds at hospitals, nursing homes, and assisted living centers. Adding or replacing HVAC systems with improved filtration to these and other buildings, such as schools, would also lessen impacts from this hazard. Infectious disease can have a drastic effect on the local economy and development. Planning for contingencies and being adaptable can minimize the negative effects.

Regional Vulnerabilities

An independent study conducted in 2019 by Trust for America's Health gave Nebraska a score of six out of ten for their efforts to reduce vulnerability to the spread of infectious diseases. The report noted: "Nebraska's public health outcomes stack up unevenly against those of the United States, but it has taken several steps that strengthened its preparedness for public health emergencies. Deaths owed to drug misuse, alcohol, or suicide trail the country as a whole. Its rates of obesity and related conditions indicate a mixed picture, with the percentage of adults with obesity higher than the U.S. median, even as rates of diabetes and hypertension rank low. Finally, the state achieved a score of six out of a possible 10 measures of public health preparedness for diseases, disasters, and bioterrorism." [129] The following figure describes Nebraska's overall statistics.

Trust for America Public Health Statistics



Source: Trust for America's Health

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Eight*.

128 Intergovernmental Panel on Climate Change. 2022. "Climate Change 2022: Impacts, Adaptation and Vulnerability". https://www.ipcc.ch/report/ar6/wg2/.

129 Trust for America's Health. 2019. "State Profile: Nebraska". https://www.tfah.org/state-details/nebraska/.

Regional Human Infectious Disease Vulnerabilities

Sector	Vulnerability
People	-Vulnerable populations include the very young, the very old, the unvaccinated, the economically vulnerable, and those with immunodeficiency disorders. -Institutional settings such as prisons, dormitories, long-term care facilities, day cares, and schools are at higher risk to contagious diseases -Poverty, rurality, underlying health conditions, and drug or alcohol use increase chronic and infectious disease rates
Economic	-Large scale or prolonged events may cause businesses to close, which could lead to significant revenue loss and loss of income for workers
Built Environment	-Increased number of unoccupied business structures
Community Lifelines	-Transportation routes may be closed if a quarantine is put in place -Healthcare facilities in the planning area may be overwhelmed quickly by widespread events -Healthcare facilities in the planning area may be overwhelmed quickly by widespread events -Community Lifelines could see suspended action or reduced resources due to sick staff
Other	-Long-term human infectious diseases can have negative impacts on resident's mental health

Jurisdictions Ranking Human Infectious Disease as a Prioritized Hazard of Concern

The following jurisdictions identified human infectious disease release as a prioritized hazard of concern.

- Chadron Public Schools
- Hemingford Public Schools

Severe Thunderstorms

Severe thunderstorms are common and unpredictable seasonal events throughout Nebraska. The NWS defines a severe thunderstorm as a storm that produces one inch hail or larger in diameter and/or winds equal or exceeding 58 mph.[130]

Thunderstorms can develop in fewer than 30 minutes and can grow to an elevation of eight miles into the atmosphere. Lightning can be present in thunderstorms and can cause harm to humans and animals, fires to buildings and agricultural lands, and electrical outages in municipal electrical systems. Lightning can strike up to 10 miles from the portion of the storm depositing precipitation. There are three primary types of lightning: intra-cloud, inter-cloud, and cloud to ground. While intra and inter-cloud lightning are more common, communities are potentially impacted when lightning contacts the ground. Lightning generally occurs when warm air mixes with colder air masses resulting in atmospheric disturbances necessary for polarizing the atmosphere. Additionally, hail is a common component of thunderstorms and often occurs in series, with one area having the potential to be hit multiple times in one day. Hail can destroy property and crops with sheer force, as some hail stones can fall at speeds up to 100 mph.

Damage from severe thunderstorms can include crop losses from wind and hail; property losses due to building and automobile damages from hail; high wind; flash flooding; death or injury to humans and animals from lightning or getting struck by falling or flying debris; and personal injury from people without shelter during these events or standing near windows. The potential for damage increases as the size of the hail increases. The figure on the next page displays the average number of days with thunderstorms across the country each year. The planning area experiences an average of 36 to 45 thunderstorms over the course of one year.

Location

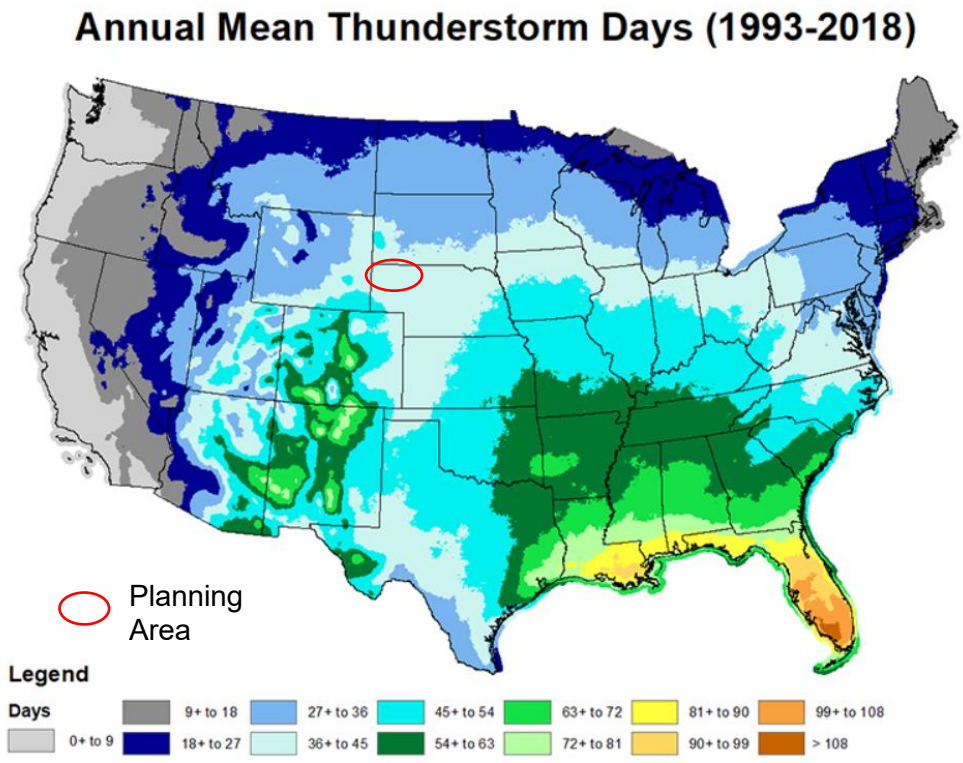
The entire planning area is at risk to thunderstorms due to the regional nature of this type of event.

Extent

The geographic extent of a severe thunderstorm event may be large enough to impact the entire planning area (such as in the case of a squall line, derecho, or long-lived supercell) or just a few square miles, in the case of a single cell that marginally meets severe criteria. The NWS defines a thunderstorm as severe if it contains hail that is one inch in diameter or capable of winds gusts of 58 mph or higher. The Tornado and Storm Research Organization (TORRO) scale is used to classify hailstones and provides some detail related to the potential impacts from hail. The table on the next page outlines the TORRO Hail Storm Intensity Scale.

130 National Weather Service. 2024. “Severe Weather Definitions”. https://www.weather.gov/bgm/severedefinitions#:~:text=Severe%20Thunderstorm%20Watch-,This%20is%20issued%20by%20the%20National%20Weather%20Service%20when%20conditions,exceed%2058%20miles%20an%20hour.

Average Number of Thunderstorms



Source: NWS[131]

TORRO Hail Scale

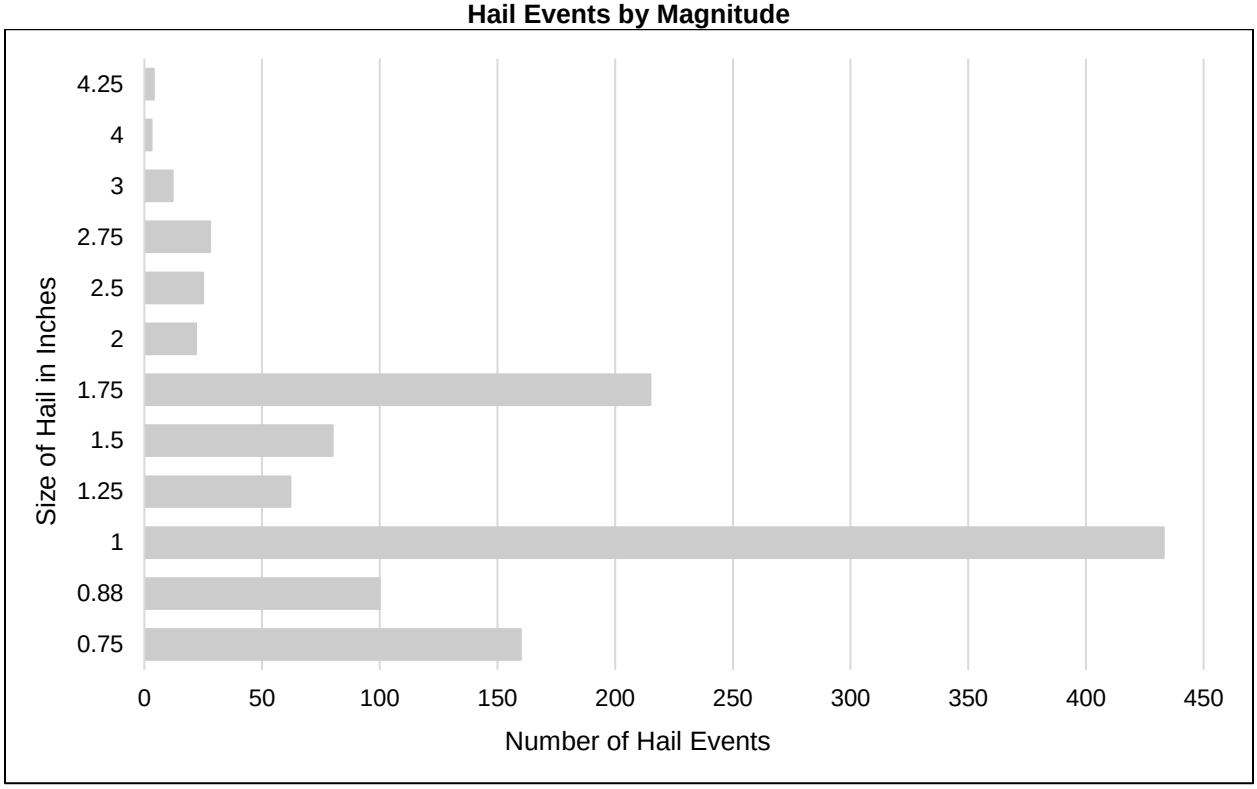
Class	Type of Material	Divisions
H0: Hard Hail	5 mm; (Pea size); 0.2 in	No damage
H1: Potentially Damaging	5 -15 mm (Marble) 0.2 – 0.6 in	Slight general damage to plants and crops
H2: Significant	10 -20 mm (Grape) 0.4 – 0.8 in.	Significant damage to fruit, crops, and vegetation
H3: Severe	20 -30 mm (Walnut) 0.8 – 1.2 in	Severe damage to fruit and crops, damage to glass and plastic structures
H4: Severe	30 -40 mm (Squash Ball) 1.2 – 1.6 in	Widespread damage to glass, vehicle bodywork damaged
H5: Destructive	40 – 50 mm (Golf ball) 1.6 – 2.0 in.	Wholesale destruction of glass, damage to tiled roofs; significant risk or injury
H6: Destructive	50 – 60 mm (chicken egg) 2.0 – 2.4 in	Grounded aircrafts damaged, brick walls pitted; significant risk of injury
H7: Destructive	60 – 75 mm (Tennis ball) 2.4 – 3.0 in	Severe roof damage; risk of serious injuries
H8: Destructive	75 – 90 mm (Large orange) 3.0 – 3.5 in.	Severe damage to structures, vehicles, airplanes; risk of serious injuries
H9: Super Hail	90 – 100 mm (Grapefruit) 3.5 – 4.0 in	Extensive structural damage; risk of severe or even fatal injuries to persons outdoors
H10: Super Hail	>100 mm (Melon) > 4.0 in	Extensive structural damage; risk or severe or even fatal injuries to persons outdoors

Source: TORRO[132]

131 NOAA National Weather Service. 2019. "Thunderstorms". https://www.noaa.gov/jetstream/thunderstorms.
132 Tornado and Storm Research Organization. 2024. "Hail Scale". https://www.torro.org.uk/research/hail/hscale.

The NCEI reported 1,150 individual hail events across the planning area from 1996 to 2023.[133] As the NCEI reports events per county, this value overestimates the total amount of thunderstorm events. The average hailstone size was 1.2 inches. Events of this magnitude correlate to an H4 Severe classification. It is reasonable to expect H3 classified events to occur several times in a year throughout the planning area. In addition, it is reasonable, based on the number of occurrences, to expect larger hailstones to occur in the planning area annually. The planning area has endured seven H10 hail events (>4.0 inches) during the period of record. The figure below shows hail events based on the size of the hail.

Hail Events by Magnitude



Source: NCEI, 1996- 2023

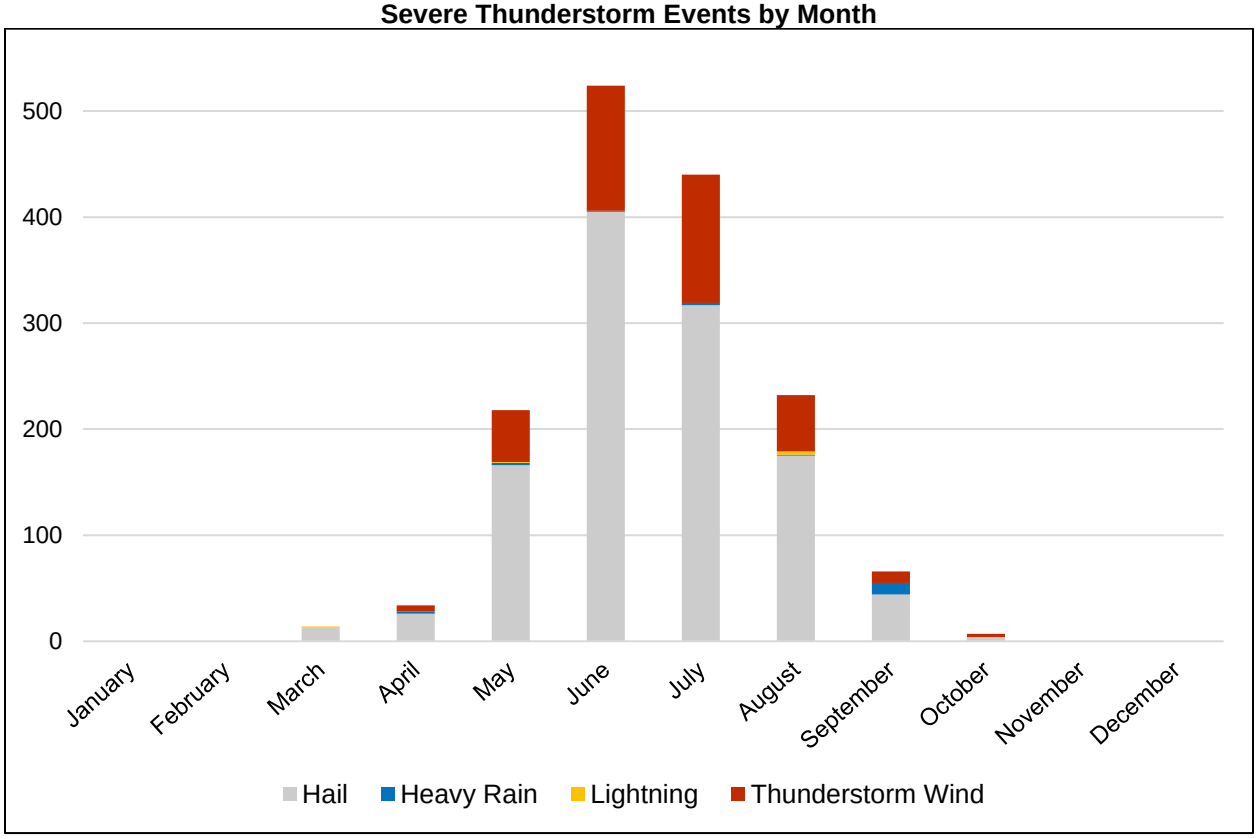
Communities and jurisdictions across the planning area are likely to experience similar extent impacts from severe thunderstorms. However, communities or areas with poor stormwater management systems may be at higher risk during heavy rain events.

Historical Occurrences

The NCEI reports events as they occur in each community. A single severe thunderstorm event can affect multiple communities and counties at a time; the NCEI reports these large scale, multi-county events as separate events. The result is that a single thunderstorm event covering the entire region could be reported by the NCEI as several events. Severe thunderstorms in the planning area usually occur in the afternoon and evening during the late spring and summer months.

133 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.

Severe Thunderstorm Events by Month



Source: NCEI, 1996- 2023[134]

The NCEI reports a total of 361 thunderstorm wind, 19 heavy rain, 5 lightning, and 1,150 hail events in the planning area from 1996 to 2023. In total these events were responsible for $4,984,600 in property damage. The USDA RMA data shows that severe thunderstorms caused $125,197,236 in crop damage.[135] Eight injuries and no fatalities were reported in association with these storms. Event descriptions from NCEI for the most damaging events are provided below.

- **August 29, 2012 – Lightning:** $1,000,000 of property damage in Hay Springs. "Lightning ignited a wildfire on August 29th that spread quickly north across grassland and timbers across northwest Sheridan County. The wildfire burned approximate 44,159 acres in Nebraska and moved north into South Dakota. Initial assessments showed the wildfire burned approximately 100 power poles. The Rushville Sheriff requested an Evacuate Immediate (NWEM) message as the fire spread into parks and to alert homeowners and campers in the area. The fire stats showed 50 to 60 outbuildings destroyed, and approximately 10 homes damaged. The wildfire continued into September".[136]

- **June 21, 1997 – Hail:** $750,000 of property damage in Sheridan County.[137]

134 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.
135 U.S. Department of Agriculture Risk Management Agency. 2024. "Cause of Loss Historical Data Files: 2000-2023." https://www.rma.usda.gov/tools-reports/summary-business/cause-loss.
136 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.
137 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.

- **August 2, 1996 – Lightning:** $400,000 of property damage in Dawes County. “Lightning started 2 fires north of Crawford. One fire burned 125 acres and the other burned 20 acres as well as 112 hay bales. Both fires were grass fires”.[138]

- **July 22, 2010 – Thunderstorm Wind:** $300,000 of property damage in Dawes County. “Hail damage to many cars, shattered windows at Walmart parking lot. Many business signs were blown out or had holes in them from the hail. Many street signs and several power lines were down. Three trailer homes sustained major damage. One was flipped on its roof and the other two were blown to pieces into a nearby field. Orange construction barriers tossed 0.75 miles from the highway”.[139]

- **June 5, 1996 – Hail:** $300,000 of damages in Box Butte County. “Large hail and frequent lightning occurred from four miles west of Alliance to Alliance. In that area, many cars were damaged. House windows were broken, and some roofs were damaged as well. Lightning caused power to be out for an hour in about one third of Alliance. Lightning also struck a few trees, causing some damage”.[140]

Average Annual Damages

The average damage per event estimate was determined based upon recorded damages from NCEI Storm Events Database since 1996. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. Severe thunderstorms cause an average of $178,021 per year in property damage[141] and $5,216,552 in crop damage.[142]

Severe Thunderstorms Loss Estimate

Hazard Type	Number of Events[1]	Average Events Per Year	Total Property Loss[1]	Average Annual Property Loss	Total Crop Loss[2]	Average Annual Crop Loss
Hail	1,150	41	$2,302,200	$82,221	$118,861,116	$4,952,547
Heavy Rain	19	0.7	$0	$0	$6,336,120	$264,005
Lightning	5	0.2	$74,000	$2,643		
Thunderstorm Wind	361	12.9	$1,215,400	$43,407		
Total	**1,535**	**54.8**	**$4,984,600**	**$178,021**	**$125,197,236**	**$5,216,552**

Source: 1 Indicates data is from NCEI (1996 to 2023); 2 Indicates data is from USDA RMA (2000 to 2023)

Historical Probability & Future Likelihood

Based on historical records and reported events, severe thunderstorm events are likely to occur on an annual basis. The NCEI reported a total of 1,535 severe thunderstorm events between 1996 and 2023, resulting in 100% historical probability for thunderstorms. Even with the uncertainty about how climate change and future development will impact severe thunderstorms, the future likelihood of severe thunderstorms is very likely.

138 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.
139 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.
140 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.
141 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.
142 U.S. Department of Agriculture Risk Management Agency. 2024. "Cause of Loss Historical Data Files: 2000-2023." https://www.rma.usda.gov/tools-reports/summary-business/cause-loss.

Historical Probability & Future Likelihood – Severe Thunderstorms

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
100%	Uncertain	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Very Likely**

Climate Change

For extreme events like severe thunderstorms there is "considerable uncertainty about how projected changes in the climate will affect these events". However, severe thunderstorms will "continue to be a normal feature for Nebraska."[143] According to the Fifth National Climate Assessment, "severe thunderstorms in the United States during spring and fall will increase under stronger warming scenarios. These changes are likely to lengthen the severe thunderstorm season in the Midwest during cool-season months."[144]

Future Development

All future development could be impacted by severe thunderstorms. The ability to withstand major damage lies in sound land use practices and consistent enforcement of building codes and regulations for new construction. Municipalities that have adopted the current International Building Codes have a lower risk of damage as the code has sections designed to deal with the impacts of hail events. Lightning rods, protected rooftop utilities, and surge protectors, are possible steps new developments can take to reduce impacts from lightning and severe thunderstorms.

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Eight*.

Regional Thunderstorm Vulnerabilities

Sector	Vulnerability
People	-Elderly citizens with decreased mobility may have trouble evacuating or seeking shelter -Mobile home residents are risk of injury and damage to their property if the mobile home is not anchored properly -Injuries can occur from not seeking shelter, standing near windows, and shattered windshields in vehicles
Economic	-Damages to buildings and property can cause significant losses to business owners and employees
Built Environment	-Buildings are at risk to hail damage -Downed trees and tree limbs -Roofs, siding, windows, gutters, HVAC systems, etc. can incur damage
Community Lifelines	-High winds and lightning can cause power outages and down power lines -Roads may wash out from heavy rains and become blocked from downed tree limbs -Community lifelines may sustain damage from hail, lightning, and wind

143 University of Nebraska-Lincoln. 2014. "Understanding and Assessing Climate Change: Implications for Nebraska". http://snr.unl.edu/download/research/projects/climateimpacts/2014ClimateChange.pdf.

144 U.S. Global Change Research Program. 2023. "Fifth National Climate Assessment". https://nca2023.globalchange.gov/.

Jurisdictions Ranking Severe Thunderstorms as a Prioritized Hazard of Concern

The following jurisdictions identified severe thunderstorms as a prioritized hazard of concern.

- Region 23 EMA
- Upper Niobrara White NRD
- Box Butte County
- City of Alliance
- Village of Hemingford
- Dawes County
- City of Chadron
- City of Crawford
- Sheridan County
- City of Gordon
- City of Hay Springs
- City of Rushville
- Sioux County
- Village of Harrison
- Crawford Public Schools
- Gordon-Rushville Public Schools
- Hemingford Public Schools

Severe Winter Storms

Severe winter storms are an annual occurrence in Nebraska. Winter storms can bring extreme cold, freezing rain, heavy or drifting snow, and blizzards. Generally, winter storms occur between the months of November and March but may occur as early as October and as late as April. Heavy snow is usually the most defining element of a winter storm. Large snow events can cripple an entire jurisdiction by hindering transportation, knocking down tree limbs and utility lines, and structurally damaging buildings.

Extreme Cold

Along with snow and ice storm events, extreme cold is dangerous to the well-being of people and animals. What constitutes extreme cold varies from region to region but is generally accepted as temperatures that are significantly lower than the region's average low temperature. For the planning area, the coldest months of the year are December, January, and February. The average low temperature for these months is below freezing (average low for the three months is 14.1°F). The average high temperature for the months of January, February, and December is near 37.2°F.[145]

Freezing Rain

Along with snow events, winter storms also have the potential to deposit significant amounts of ice. Ice buildup on tree limbs and power lines can cause them to collapse. This is most likely to occur when rain falls that freezes upon contact, especially in the presence of wind. Freezing rain is the name given to rain that falls when surface temperatures are below freezing. Unlike a mixture of rain and snow, ice pellets or hail, freezing rain is made entirely of liquid droplets. Freezing rain can also lead to many problems on the roads, as it makes them slick, causing automobile accidents, and making vehicle travel difficult.

Blizzards

Blizzards are particularly dangerous due to drifting snow and the potential for rapidly occurring whiteout conditions, which greatly inhibits vehicular traffic. Defined by the NWS as a combination of sustained winds or frequent gusts of 35 mph or greater, and visibilities of less than a quarter mile from falling or blowing snow for three hours or more.[146] Blizzards can cripple an entire jurisdiction for several days by hindering transportation, knocking down tree limbs and utility lines, structurally damaging buildings, and injuring or killing crops and livestock.

Location

The entire planning area is at risk of severe winter storms.

Extent

The Sperry-Piltz Ice Accumulation Index (SPIA) was developed by the NWS to predict the accumulation of ice and resulting damages. The SPIA assesses total precipitation, wind, and temperatures to predict the intensity of ice storms. Ice Storm Warnings are issued when accumulation of at least 0.25 inches is expected from a storm, which controlling for high winds,

145 NOAA National Centers for Environmental Information. 2024. "U.S. Climate Normals Quick Access". https://www.ncei.noaa.gov/access/us-climate-normals/.

146 NOAA National Weather Service. 2024. "Winter Storms and Blizzards". https://www.weather.gov/fgz/WinterStorms#:~:text=Officially%2C%20the%20National%20Weather%20Service,(at%20least%203%20hours).

would tend to classify ice storms in Nebraska as SPIA Level 2 or higher. The figure below shows the SPIA index.

SPIA Index

ICE DAMAGE INDEX	*AVERAGE ICE AMOUNT (in inches) *Revised: Oct. 2011*	WIND (mph)	DAMAGE AND IMPACT DESCRIPTIONS
0	<0.25	<15	Minimal risk of damage to exposed utility systems; no alerts or advisories needed for crews, few outages.
1	0.10 – 0.25	15 – 25	Some isolated or localized utility interruptions are possible, typically lasting only a few hours. Roads and bridges may become slick and hazardous.
	0.25 – 0.50	>15	
2	0.10 – 0.25	25 – 35	Scattered utility interruptions expected, typically lasting 12 to 24 hours. Roads and travel conditions may be extremely hazardous due to ice accumulation.
	0.25 – 0.50	15 – 25	
	0.50 – 0.75	>15	
3	0.10 – 0.25	> – 35	Numerous utility interruptions with some damage to main feeder lines and equipment expected. Tree limb damage is excessive. Outages lasting 1 – 5 days.
	0.25 – 0.50	25 – 35	
	0.50 – 0.75	15 – 25	
	0.75 –1.00	>15	
4	0.25 – 0.50	> – 35	Prolonged and widespread utility interruptions with extensive damage to main distribution feeder lines and some high voltage transmission lines/structures. Outages lasting 5 – 10 days.
	0.50 – 0.75	25 – 35	
	0.75 –1.00	15 – 25	
	1.00 –1.50	>15	
5	0.50 – 0.75	> – 35	Catastrophic damage to entire exposed utility systems, including both distribution and transmission networks. Outages could last several weeeks in some areas. Shelters needed.
	0.75 –1.00	> – 25	
	1.00 –1.50	> – 15	
	> 1.50	Any	

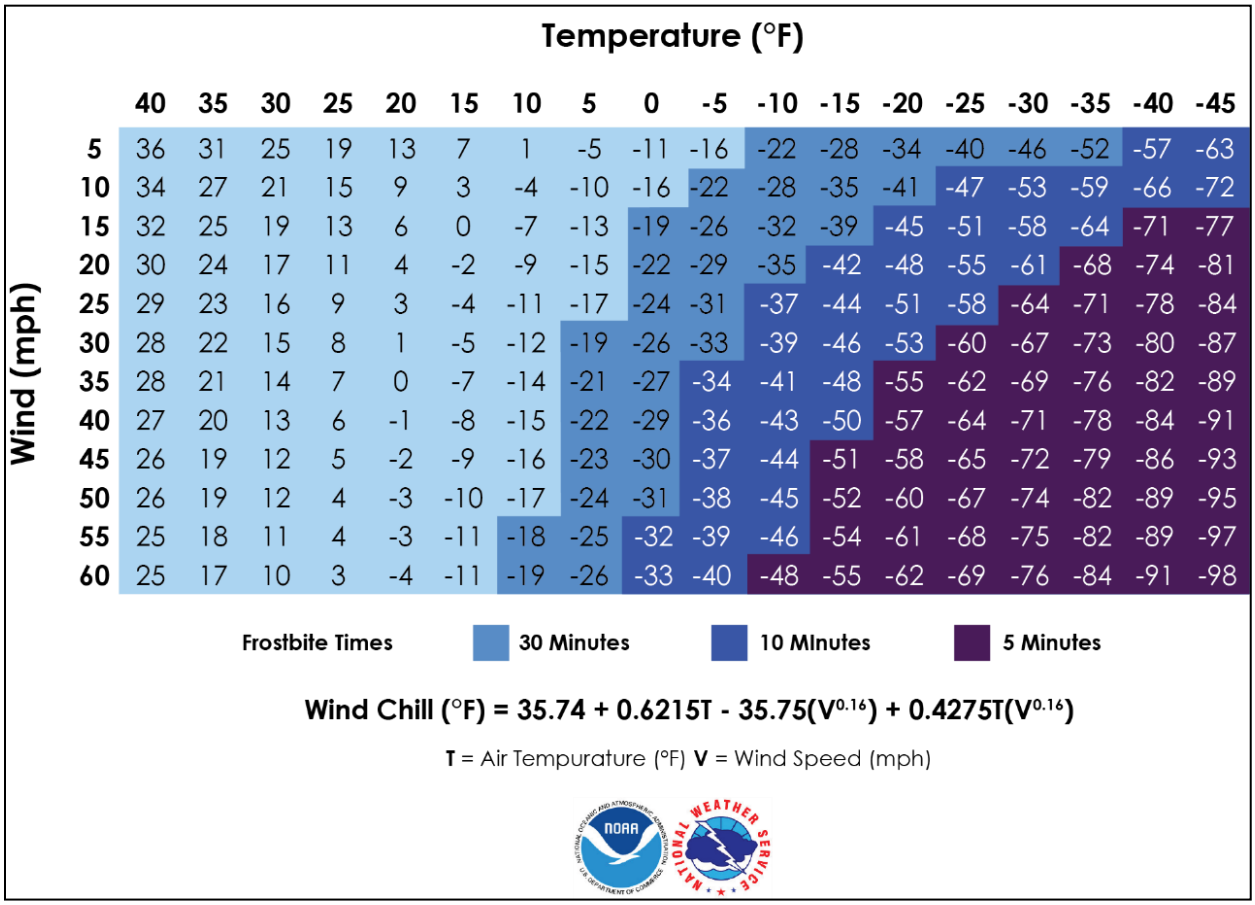
(Categories of damage are based upon combinations of precipitation totals, temperatures and wind speeds/directions.)

Source: SPIA-Index[147]

The Wind Chill Index was developed by the NWS to determine the decrease in air temperature felt by the body on exposed skin due to wind. The wind chill is always lower than the air temperature and can quicken the effects of hypothermia or frost bite as it gets lower. The figure on the next page shows the Wind Chill Index used by the NWS.

147 SPIA-Index. 2009. "Sperry-Piltz Ice Accumulation Index". Accessed June 2017. http://www.spia-index.com/index.php.

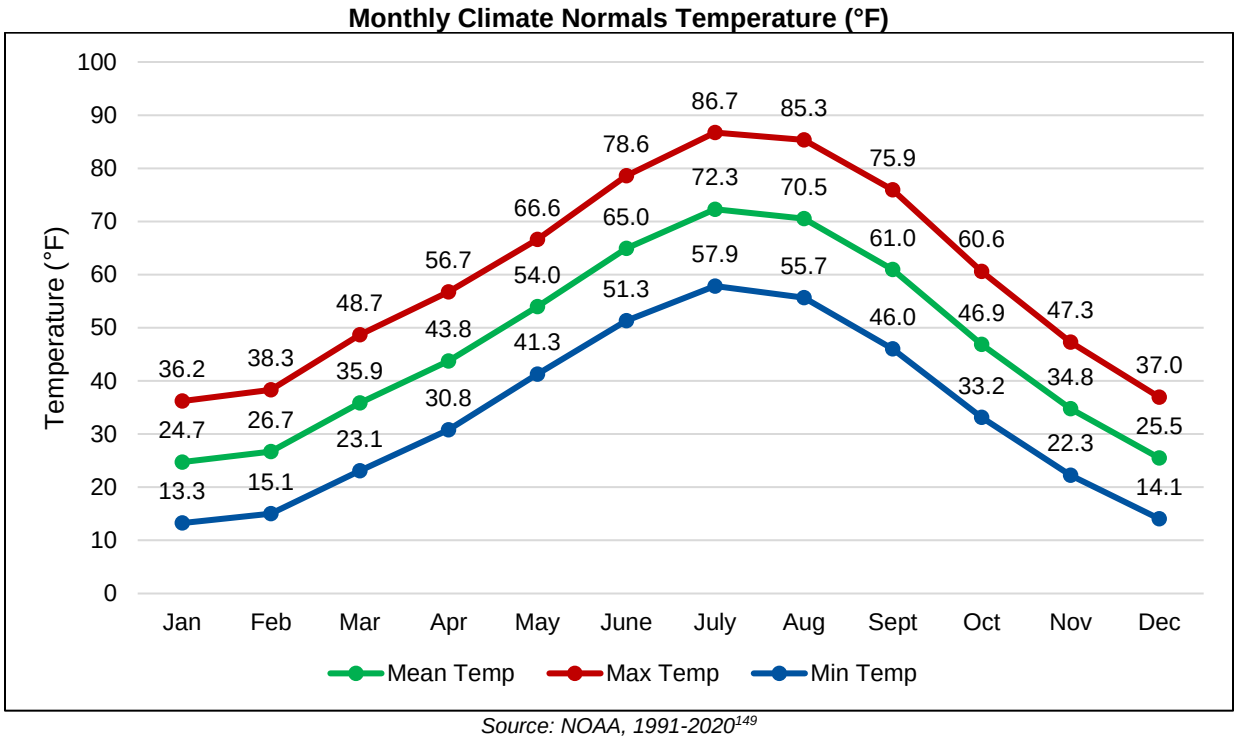
Wind Chill Index Chart



Wind (mph)	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-82	-89	-95
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98

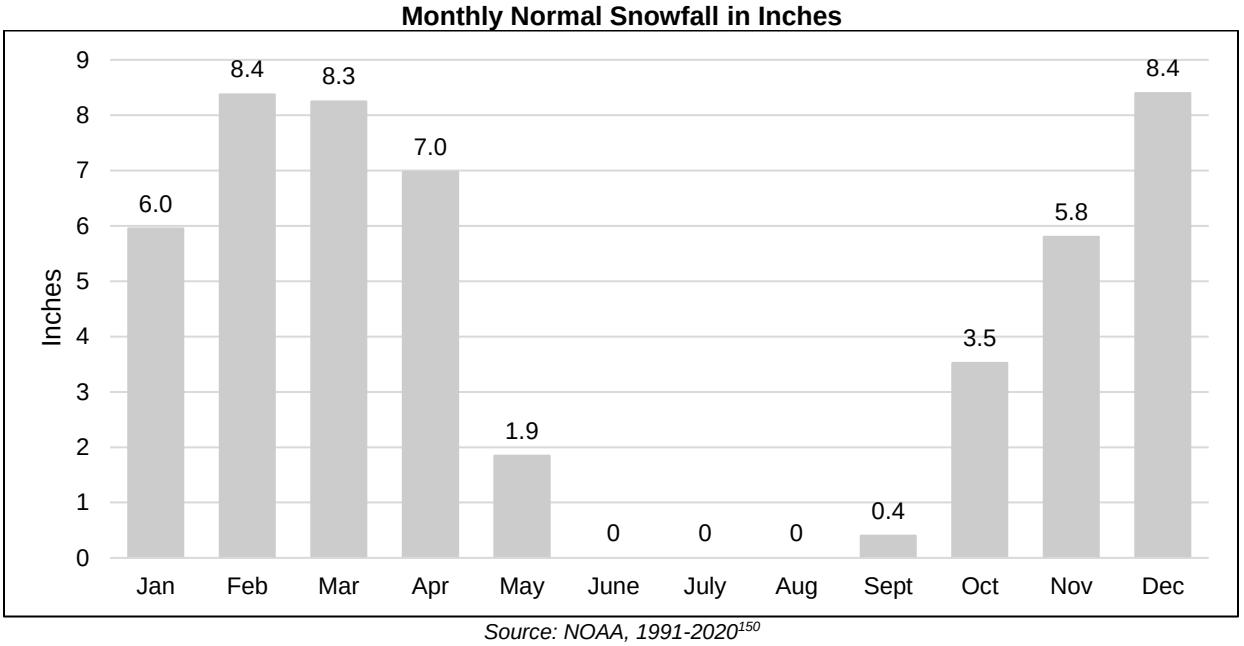
Source: NWS[148]

148 NOAA National Weather Service. 2001. "Wind Chill Chart". http://www.nws.noaa.gov/om/cold/wind_chill.shtml.



Source: NOAA, 1991-2020[149]

Average monthly snowfall for the planning area is shown in the figure below. It shows the snowiest months are between December, February, and March. Communities and jurisdictions across the planning area are likely to experience similar extent impacts from severe winter storms.



Source: NOAA, 1991-2020[150]

149 NOAA National Centers for Environmental Information. 2024. "U.S. Climate Normals Quick Access". https://www.ncei.noaa.gov/access/us-climate-normals/.
150 NOAA National Centers for Environmental Information. 2024. "U.S. Climate Normals Quick Access". https://www.ncei.noaa.gov/access/us-climate-normals/.

Historical Occurrences

According to the NCEI, there were a combined 413 severe winter storm events for the planning area from 1996 to 2023. These recorded events caused a total of $174,000 in reported property damage[151] and $12,384,890 in crop damage.[152] According to the NCEI, there were two injuries, and one fatality associated with severe winter storms in the planning area. Event descriptions from the NCEI for major damaging events, injuries, and fatalities are listed below.

- **April 4, 2009 – Blizzard:** $70,000 in property damage in Sheridan County. "Blizzard conditions began across Sheridan County by 10 am MST on April 4, 2009. Snowfall amounts ranged from 10 to 14 inches. Strong north winds of 30 to 50 mph caused significant blowing and drifting snow with reduced visibility to near zero during the afternoon and evening hours. A cooperative observer reported snow drifts up to 8 feet deep. Power was out over much of the county Saturday and Sunday. Many newborn calves died during the storm".[153]

- **February 25, 2000 – Winter Storm:** $45,000 in property damage in Box Butte County.[154]

- **April 19, 2000 – Winter Storm:** $25,000 of property damage in Dawes County. "Heavy snow and gusty winds caused spotty power outages and road closures in parts of the northern Nebraska panhandle. 6 inches of snow was reported in Harrison and Chadron, NE" .[155]

- **November 6, 2008 – Winter Storm:** $15,000 of property damage in Sheridan County**.** "Heavy snow of 6 to 12 inches fell across the northern half of Sheridan County. The heavy snow along with northwest winds of 40 to 50 mph broke off numerous trees and power poles and caused snow drifts up to 4 feet high. Many rural homes were without electricity for over 48 hours. Drifting snow south of Rushville blocked all the doors to one home and the owner had to crawl out of a window to get out".[156]

Average Annual Damages

The average damage per event estimate was determined based upon NCEI Storm Events Database since 1996 and includes aggregated calculations for each of the five types of winter weather as provided in the database. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. Severe winter storms have caused an average of $6,214 per year in property damage and $516,037 per year in crop damage for the planning area.

Severe Winter Storms Loss Estimate

151 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.
152 U.S. Department of Agriculture Risk Management Agency. 2024. "Cause of Loss Historical Data Files: 2000-2023." https://www.rma.usda.gov/tools-reports/summary-business/cause-loss.
153 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.
154 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.
155 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.
156 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.

Hazard Type	Number of Events[1]	Average Events Per Year[1]	Total Property Loss[1]	Average Annual Property Loss[1]	Total Crop Loss[2]	Average Annual Crop Loss[2]
Blizzard	68	2.4	$74,000	$2,643	$12,384,890	$516,037
Heavy Snow	97	3.5	$0	$0		
Ice Storm	0	0	$0	$0		
Winter Storm	189	6.8	$85,000	$3,036		
Winter Weather	59	2.1	$15,000	$536		
Total	**413**	**14.8**	**$174,000**	**$6,214**	**$12,384,890**	**$516,037**

Source: 1 Indicates data is from NCEI (1996 to 2023)[157]; 2 Indicates data is from RMA (2000-2023)[158]

Historical Probability & Future Likelihood

Based on historical records, severe winter storm events are likely to occur on an annual basis. The NCEI reported a severe winter storm event every year, resulting in a 100% historical probability for severe winter storms. Even with the uncertainty about how climate change and future development will impact severe winter storms, the future likelihood of events is very likely.

Historical Probability & Future Likelihood – Severe Winter Storms

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
100%	Uncertain	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Very Likely**

Climate Change

For extreme events like severe winter storms "it is difficult to know what will happen to the frequency and intensity" of these events. However, winter storms will "continue to be a normal feature for Nebraska."[159] The table below shows the number of freezing days in the four-county region with different warming scenarios.

Number of Freezing Days

	Warming Scenarios			
	1° C	1.5° C	2° C	3° C
Number of Freezing Days	31-90 Days per Year	31-90 Days per Year	31-90 Days per Year	8-90 Days per Year

Source: Probable Futures[160]

Future Development

All future developments will be affected by winter storms. More buildings and infrastructure in the planning area creates a higher probability of damage to occur from winter weather as more property is exposed to risk. The ability to withstand impacts lies in sound land use practices and consistent enforcement of codes and regulations for new construction.

157 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.
158 U.S. Department of Agriculture Risk Management Agency. 2024. "Cause of Loss Historical Data Files: 2000-2023." https://www.rma.usda.gov/tools-reports/summary-business/cause-loss.
159 University of Nebraska-Lincoln. 2014. "Understanding and Assessing Climate Change: Implications for Nebraska". http://snr.unl.edu/download/research/projects/climateimpacts/2014ClimateChange.pdf.
160 Probable Futures. "Maps of Temperature". Accessed March 2025. https://probablefutures.org/.

Regional Vulnerabilities

Severe winter storms that bring snow, ice, and high winds can cause significant impacts on life and property. Many severe winter storm deaths occur because of traffic accidents on icy roads, heart attacks when shoveling snow, and hypothermia from prolonged exposure to the cold. The temporary loss of home heating can be particularly hard on the elderly, young children, and other vulnerable individuals.

Severe winter storm also can cause the temporary closure of key roads, highways, the interstate, train operations, businesses, schools, government offices, and other important community services. These effects, if lasting more than several days, can create significant economic impacts for the communities affected as well as for the surrounding region.

The following table provides information related to regional vulnerabilities. For jurisdictional-specific vulnerabilities, refer to *Section Eight*.

Regional Severe Winter Storm Vulnerabilities

Sector	Vulnerability
People	-Elderly citizens are at higher risk to injury or death, especially during extreme cold and heavy snow accumulations -Citizens without adequate heat and shelter at higher risk of injury or death -Exposure or injury to first responders during working conditions -Exposure for motorists or other people outdoors
Economic	-Closed roads and power outages can cripple a region for days, leading to significant revenue loss and loss of income for workers
Built Environment	-Heavy snow loads can cause roofs to collapse -Significant tree damage possible, downing power lines and blocking roads
Community Lifelines	-Heavy snow and ice accumulation can lead to downed power lines and prolonged power outages -Transportation, especially Interstate 80, may be difficult or impossible during blizzards, heavy snow, and ice events -Emergency response and recovery operations, communications, water treatment plants, and others are at risk to power outages, impassable roads, and other damages

Jurisdictions Ranking Severe Winter Storms as a Prioritized Hazard of Concern

The following jurisdictions identified severe winter storms as a prioritized hazard of concern.

- Region 23 EMA
- Upper Niobrara White NRD
- Box Butte County
- City of Alliance
- Village of Hemingford
- Dawes County
- City of Chadron
- Sheridan County
- Village of Clinton
- City of Gordon
- City of Rushville
- Sioux County
- Village of Harrison
- Crawford Public Schools
- Gordon-Rushville Public Schools
- Hemingford Public Schools
- Hemingford Fire District

Terrorism and Cyber-Attack

For the purposes of this plan, this hazard is going to include terrorism, cyber-attack, active shooter incidents, and other intentional human-caused threats that pose a significant hazard to life safety, property, infrastructure, or the environment.

Active Shooter
One or more individuals actively engaged in killing or attempting to kill people in a populated area.

Domestic Terrorism
Violent, criminal acts committed by individuals and/or groups to further ideological goals stemming from domestic influences within the United States, such as those of a political, religious, social, racial, or environmental nature.

International Terrorism
Violent, criminal acts committed by individuals and/or groups who are inspired by, or associated with, designated foreign terrorist organizations or nations.

Intentional attacks and terrorist activity may be based on ideology (i.e. religious fundamentalism, national separatist movements, and social revolutionary movements), but attacks can also be random with no ties to ideological reasoning.

Threat assessment, mitigation, and response to terrorism are federal and state directives that work in conjunction with local law enforcement and county emergency management.

Cyber-Attack
Cyber-attack is an incident involving the theft or modification of information on computer systems that can compromise the system or potentially disrupt essential services. A cyber-attack incident can impact governmental agencies, private utilities, or critical infrastructure/key resources like a power grid, public transportation system, and wireless networks. Cyber infrastructure includes electronic information and communications systems, and the information contained in those systems. Computer systems, control systems, and networks such as the internet are all part of cyber infrastructure.

> "Many of the Nation's essential and emergency services, as well as our critical infrastructure, rely on the uninterrupted use of the Internet and the communications systems, data, monitoring, and control systems that comprise our cyber infrastructure. A cyber-attack could be debilitating to our highly interdependent critical infrastructure and key resources and ultimately to our economy and national security."
>
> - National Strategy for Homeland Security

Nation-states, criminal organizations, terrorists, and other malicious actors conduct attacks against critical cyber infrastructure on an ongoing basis. The impact of a serious cyber incident or successful cyber-attack would be devastating to regional and local governments' assets, systems, and/or networks; the information contained in those networks; and the confidence of those who trust governments to secure those systems.

A cyber-attack can affect a system's:

- Confidentiality: protecting a user's private information
- Integrity: ensuring that data is protected and cannot be altered by unauthorized parties
- Availability: keeping services running and giving administration access to key networks and controls.

Location

Terrorism and cyber-attacks can occur throughout the entire planning. Most attacks in the United States have taken place in business/commercial sites, public open spaces, and schools. However, government buildings, healthcare facilities, and houses of worship can also be targets for ideologically motivated attacks. Critical infrastructure and commercial, private, and government computer systems may also be targeted for physical or cyber-attacks.[161]

Extent

Terrorist and cyber-attacks can vary greatly in scale and magnitude, depending on the location, method, and target of the attack. They can range from an entire water system to a single building or structure.

Historical Occurrences

Data from local planning teams and the Global Terrorism Database were consulted to identify past occurrences of events. According to the Global Terrorism Database, there were no terrorist incidents in the planning area from 1970 to 2020.[162] However, one event was provided by the Chadron Public Schools local planning team. More details about the events are given below.

- **February 1994:** In February 1994, the district experienced an active shooter event at Chadron Middle School. A seventh-grade student shot and injured one teacher. No fatalities were reported. The school district has prioritized and emphasized the need for effective safety procedures since the event.[163]

Cyber-attacks are a common occurrence, and government and private sector organizations are targeted by various types of cyber-attacks regularly. Most of these attacks have been stopped prior to any impacts, however the threat is continual and constantly evolving. It is important to note that there is no comprehensive cyber-attack database at this time.

Average Annual Damages

According to the Global Terrorism Database and local planning teams, the 1994 active shooter event was the only known terrorism event in planning area. No damage figures were reported; however, a terrorist or cyber-attack event could range from less than $1 million in rural areas to more than $10 million in urban areas.

Historical Probability & Future Likelihood

Based on historical occurrences, the historical probability is 2%.[164] However, historical occurrences may not be a useful measure of future likelihood. At the national level, the annual

161 Federal Bureau of Investigation. 2022. "Active Shooter Incidents in the United States in 2022". https://www.fbi.gov/file-repository/active-shooter-incidents-in-the-us-2022-042623.pdf/view.
162 University of Maryland and National Consortium for the Study of Terrorism and Response to Terrorism. 1970-2020. "Global Terrorism Database". https://www.start.umd.edu/gtd/.
163 Chadron Public Schools Local Planning Team. Direct Communication. September 2024.
164 University of Maryland and National Consortium for the Study of Terrorism and Response to Terrorism. 1970-2020. "Global Terrorism Database". https://www.start.umd.edu/gtd/.

occurrence of active shooter attacks and ideologically motivated violence in the United States has increased substantially over the past 20 years.[165,166]

Cyber-attacks are occurring continuously across the state and region. While defense systems become more adept at catching cyber-attacks before they cause significant infrastructure or service disruption, the frequency and sophistication of cyber-attacks is expected to continue to increase. Due to the anticipated impacts from climate change, future development, and increasing events nationally, the future likelihood of terrorism and cyber-attack is Likely.

Historical Probability & Future Likelihood – Terrorism and Cyber-Attack

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
2%	Neither Increase nor Decrease in Frequency	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Likely**

Climate Change

Climate change will likely have very limited direct impact on terrorism and cyber-attacks. However, the impacts of climate change will likely put additional stress on social structures and may contribute to an increase in social disenfranchisement and politically motivated violence.

Future Development

Increased security measures at vulnerable locations such as schools or government buildings will reduce the likelihood and impacts of terrorism and cyber-attacks. Measures can include bollards to protect from vehicles, fencing, security cameras, advanced locks, etc. Having strong cyber security can keep bad actors from taking control of virtual systems with the intent to cause harm to humans and damage to buildings.

Chadron Public Schools Local Planning Team. Direct Communication. September 2024.

165 Federal Bureau of Investigation. 2022. “Active Shooter Incidents in the United States in 2022”. https://www.fbi.gov/file-repository/active-shooter-incidents-in-the-us-2022-042623.pdf/view.

166 Federal Bureau of Investigation. May 2021. “Active Shooter Incidents 20-Year Review, 2000-2019”. https://www.fbi.gov/file-repository/active-shooter-incidents-20-year-review-2000-2019-060121.pdf/view.

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities. For jurisdictional-specific vulnerabilities, refer to *Section Eight.*

Regional Terrorism and Cyber-Attack Vulnerabilities

Sector	Vulnerability
People	-Civilians at risk of injury or death -Students and staff at school facilities at risk of injury or death from school shootings -Police officers and first responders at risk of injury or death
Economic	-Damaged businesses can cause loss of revenue and loss of income for workers -Risk of violence in an area can reduce income flowing into and out of that area -Agricultural attacks could cause significant economic losses for the region
Built Environment	-Targeted buildings may sustain heavy damage
Community Lifelines	-Water supply, power plants, utilities may be damaged -Police stations, schools, and government offices are at a higher risk

Jurisdictions Ranking Terrorism and Cyber-Attack as a Prioritized Hazard of Concern

The following jurisdictions identified terrorism and cyber-attack as a prioritized hazard of concern.

- Dawes County
- City of Crawford
- Chadron Public Schools
- Crawford Public Schools
- Hemingford Public Schools

Tornadoes and High Winds

High winds typically accompany severe thunderstorms, severe winter storms, tornadoes, and other large low-pressure systems, which can cause significant crop damage, downed power lines, loss of electricity, traffic flow obstructions, and significant property damage including trees and center-pivot irrigation systems.

The National Weather Service (NWS) defines high winds as sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration.[167] The figure on the next page shows the wind zones in the United States. The wind zones are based on the maximum wind speeds that can occur from a tornado or hurricane event. The planning area is in Zone III which has maximum winds of 200 mph equivalent to an EF4/5 tornado.

A tornado is typically associated with a supercell thunderstorm. For a rotation to be classified as a tornado, three characteristics must be met.

- There must be a microscale rotating area of wind, ranging in size from a few feet to a few miles wide.
- The rotating wind, or vortex, must be attached to a convective cloud base and must be in contact with the ground.
- The spinning vortex of air must have caused enough damage to be classified by the Fujita Scale as a tornado.

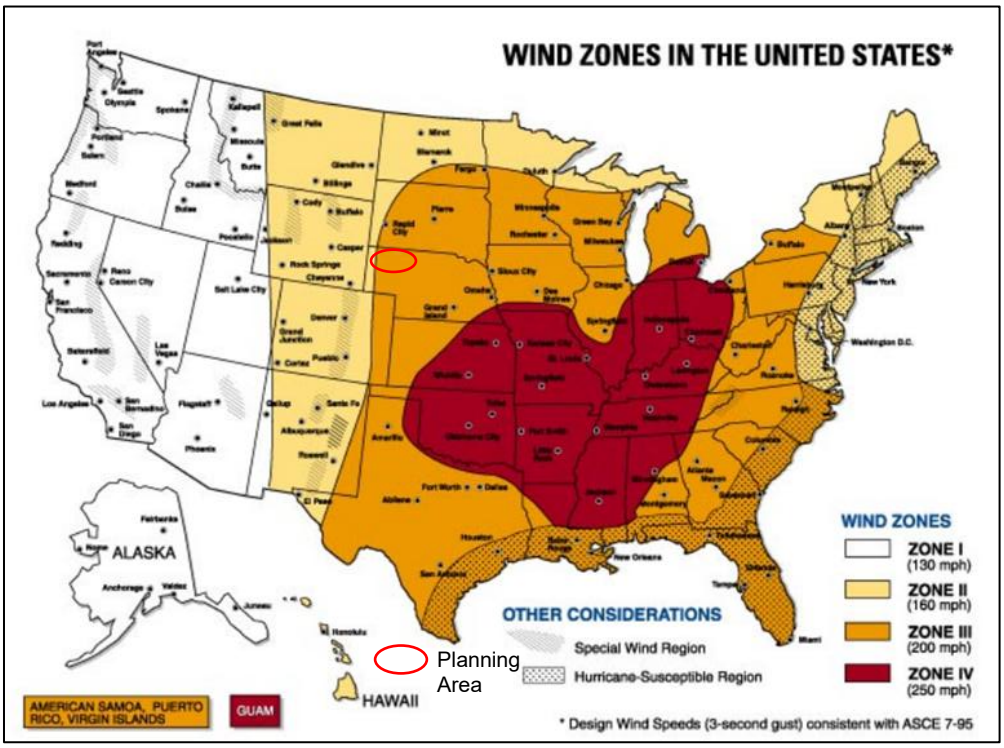
Once tornadoes are formed, they can be extremely violent and destructive. They have been recorded all over the world but are most prevalent in the American Midwest and South, in an area known as “Tornado Alley.” Tornadoes can travel distances of over 100 miles and reach over 11 miles above ground. Tornadoes usually stay on the ground for no more than 20 minutes. Nationally, the tornado season typically occurs between April and July. On average, 80 percent of tornadoes occur between noon and midnight.

Location

High winds and tornadoes can occur throughout the planning area. The impacts would be greater in more densely populated areas, such as Alliance and Chadron. The Tornado Tracks figure below shows the historical track locations across the planning area according to the Midwestern Regional Climate Center.

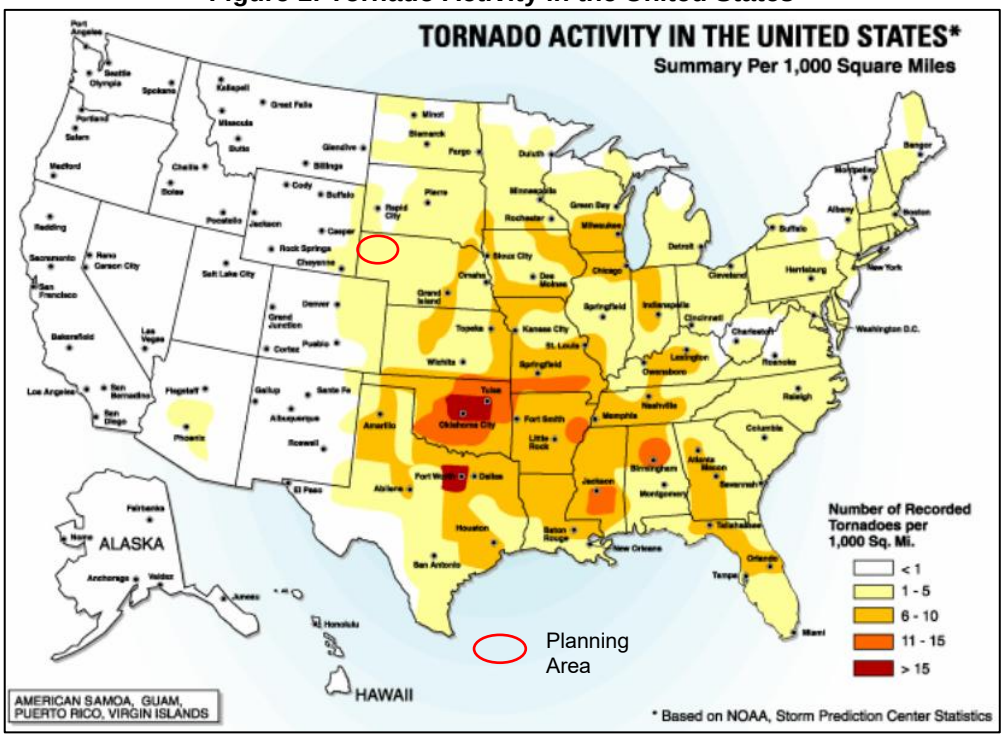
167 National Weather Service. 2017. “Glossary”. http://w1.weather.gov/glossary/index.php?letter=h.

Wind Zones in the U.S.



Source: FEMA[168]

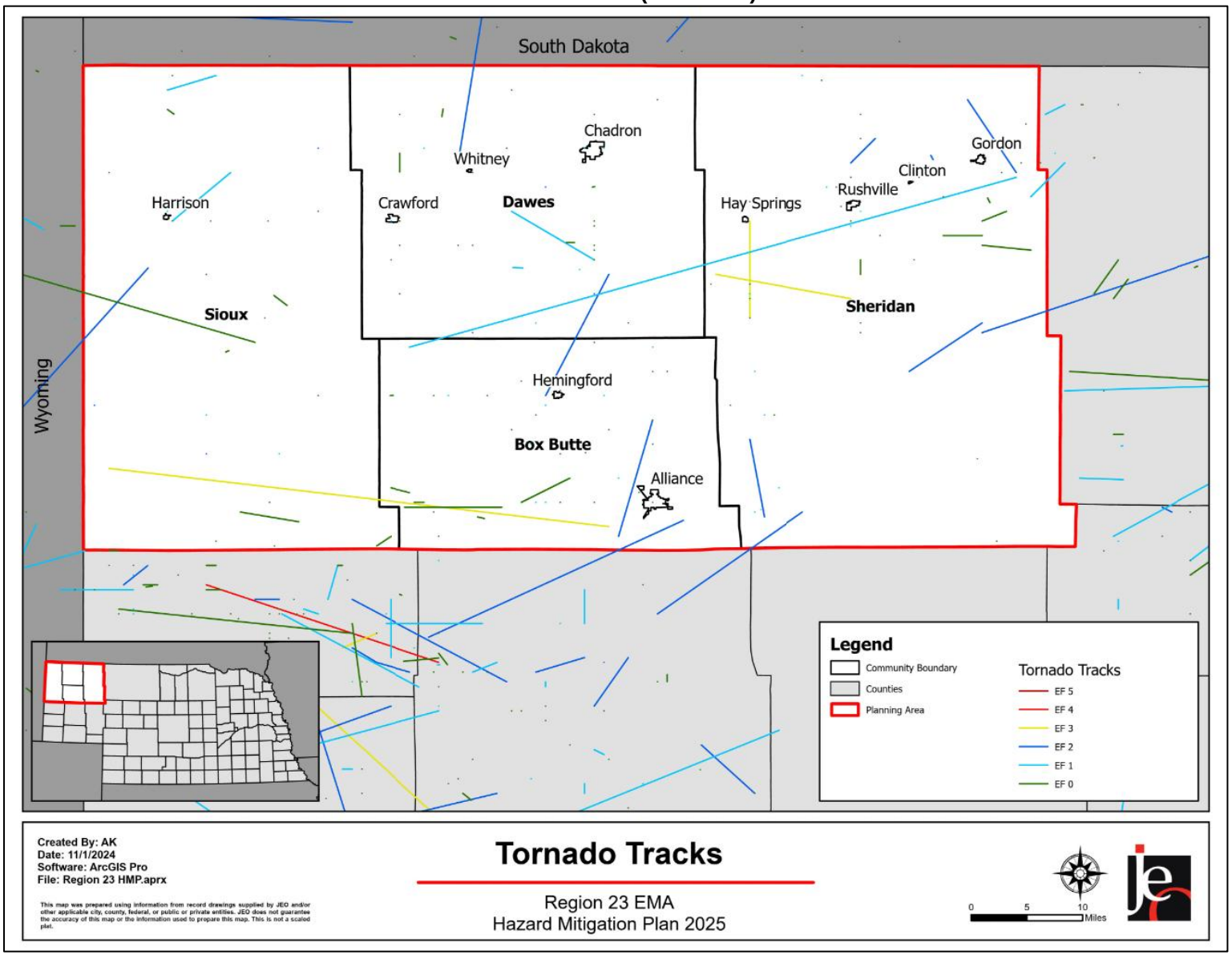
Figure 1: Tornado Activity in the United States



Source: FEMA

168 FEMA. "Section 1: Understanding Hazards". Accessed December 2022. https://www.fema.gov/pdf/library/ism2_s1.pdf.

Tornado Tracks (1950-2022)



Extent

The Beaufort Wind Scale can be used to classify wind strength while the magnitude of tornadoes is measured by the Enhanced Fujita Scale. The following table outlines the Beaufort scale including wind speed ranking, range of wind speeds per ranking, and a brief description of conditions for each.

Beaufort Wind Ranking

Beaufort Wind Force Ranking	Range of Wind	Conditions
0	<1 mph	Smoke rises vertically
1	1-3 mph	Smoke drift indicates wind direction; still wind vanes
2	4-7 mph	Wind felt on face; leaves rustle; wind vanes begin to move
3	8-12 mph	Leaves and small twigs constantly moving; light flags extended
4	13-18 mph	Dust, leaves, and loose paper lifted; small tree branches move
5	19-24 mph	Small trees in leaf begin to sway
6	25-31 mph	Large branches moving; whistling in wires
7	32-38 mph	Whole trees moving; resistance felt walking against wind
8	39-49 mph	Twigs breaking off trees; generally impedes progress
9	50-54 mph	Slight structural damage; slate blows off roofs
10	55-63 mph	Trees broken or uprooted; considerable structural damage
11	64-72 mph	Widespread damages; very rarely experienced
12	72+ mph	Hurricane; devastation

Source: Storm Prediction Center[169]

After a tornado passes through an area, an official rating category is determined, which provides a common benchmark that allows comparisons to be made between different tornadoes. The Enhanced Fujita Scale replaced the Fujita Scale in 2007. The Enhanced Fujita Scale does not measure tornadoes by their size or width, but rather the amount of damage caused to human-built structures and trees after the event. The official rating category provides a common benchmark that allows comparisons to be made between different tornadoes. The enhanced scale classifies EF0-EF5 damage as determined by engineers and meteorologists across 28 different types of damage indicators, including different types of building and tree damage. To establish a rating, engineers and meteorologists examine the damage, analyze the ground-swirl patterns, review damage imagery, collect media reports, and sometimes utilize photogrammetry and videogrammetry. Based on the most severe damage to any well-built frame house, or any comparable damage as determined by an engineer, an EF-Scale number is assigned to the tornado.

The following tables summarize the Enhanced Fujita Scale and damage indicators. According to the National Institute of Science and Technology on the Joplin Tornado, tornadoes rated EF3 or lower account for around 96 percent of all tornado damages.[170]

169 Storm Prediction Center: National Oceanic and Atmospheric Administration. 1805. “Beaufort Wind Scale”. http://www.spc.noaa.gov/faq/tornado/beaufort.html.

170 Kuligowski, E.D., Lombardo, F.T., Phan, L.T., Levitan, M.L., & Jorgensen, D.P. March 2014. “Final Report National Institute of Standards and Technology (NIST) Technical Investigation of the May 22, 2011, Tornado in Joplin, Missouri”.

Enhanced Fujita Scale

Storm Category	3 Second Gust (mph)	Damage Level	Damage Description
EFU	N/A	N/A	No surveyable damage. Intensity cannot be determined due to a lack of information.
EF0	65-85 mph	Gale	Chimneys are damaged, tree branches are broken, shallow-rooted trees are toppled.
EF1	86-110 mph	Weak	Roof surfaces are peeled off, windows are broken, some tree trunks are snapped, unanchored mobile homes are overturned, attached garages may be destroyed.
EF2	111-135 mph	Strong	Roof structures are damaged, mobile homes are destroyed, debris becomes airborne (missiles are generated), large trees are snapped or uprooted.
EF3	136-165 mph	Severe	Roofs and some walls are torn from structures, some small buildings are destroyed, non-reinforced masonry buildings are destroyed, most trees in forest are uprooted.
EF4	166-200 mph	Devastating	Well-constructed houses are destroyed, some structures are lifted from foundations and blown some distance, cars are blown some distance, large debris becomes airborne.
EF5	200+ mph	Incredible	Strong frame houses are lifted from foundations, reinforced concrete structures are damaged, automobile-sized missiles become airborne, trees are completely debarked.

Source: NOAA[171]; FEMA[172], NWS[173]

Enhanced Fujita Scale Damage Indicator

Number	Damage Indicator	Number	Damage Indicator
1	Small barns, farm outbuildings	**15**	School – 1 story elementary (interior or exterior halls)
2	One- or two-family residences	**16**	School – Junior or Senior high school
3	Single-wide mobile homes (MHSW)	**17**	Low-rise (1-4 story) buildings
4	Double-wide mobile homes (MHDW)	**18**	Mid-rise (5-20 story) buildings
5	Apartment, condo, townhouse (3 stories or less)	**19**	High-rise (over 20 stories)
6	Motel	**20**	Institutional buildings (hospital, government, or university)
7	Masonry apartment or motel	**21**	Metal building systems
8	Small retail buildings (fast food)	**22**	Service station canopy
9	Small professional (doctor office, branch bank)	**23**	Warehouse (tilt-up walls or heavy timber)
10	Strip mall	**24**	Transmission line tower
11	Large shopping mall	**25**	Free-standing tower
12	Large, isolated (“big box”) retail building	**26**	Free standing pole (light, flag, luminary)
13	Automobile showroom	**27**	Tree- hardwood
14	Automotive service building	**28**	Tree -softwood

Source: NOAA

Using the NCEI reported events since 1996, the average high wind event in the planning area is a level 10 on the Beaufort Wind Ranking scale. The reported high wind events ranged from 40

171 NOAA. 2006. “Enhanced F Scale for Tornado Damage”. https://www.spc.noaa.gov/efscale/ef-scale.html.
172 FEMA. “Section 1: Understanding Hazards”. Accessed July 2024. https://www.fema.gov/pdf/library/ism2_s1.pdf.
173 NWS. 2016. Accessed March 2025. “National Weather Service Instruction 10-1605” pp. A-74-75. https://www.ncdc.noaa.gov/stormevents/pd01016005curr.pdf.

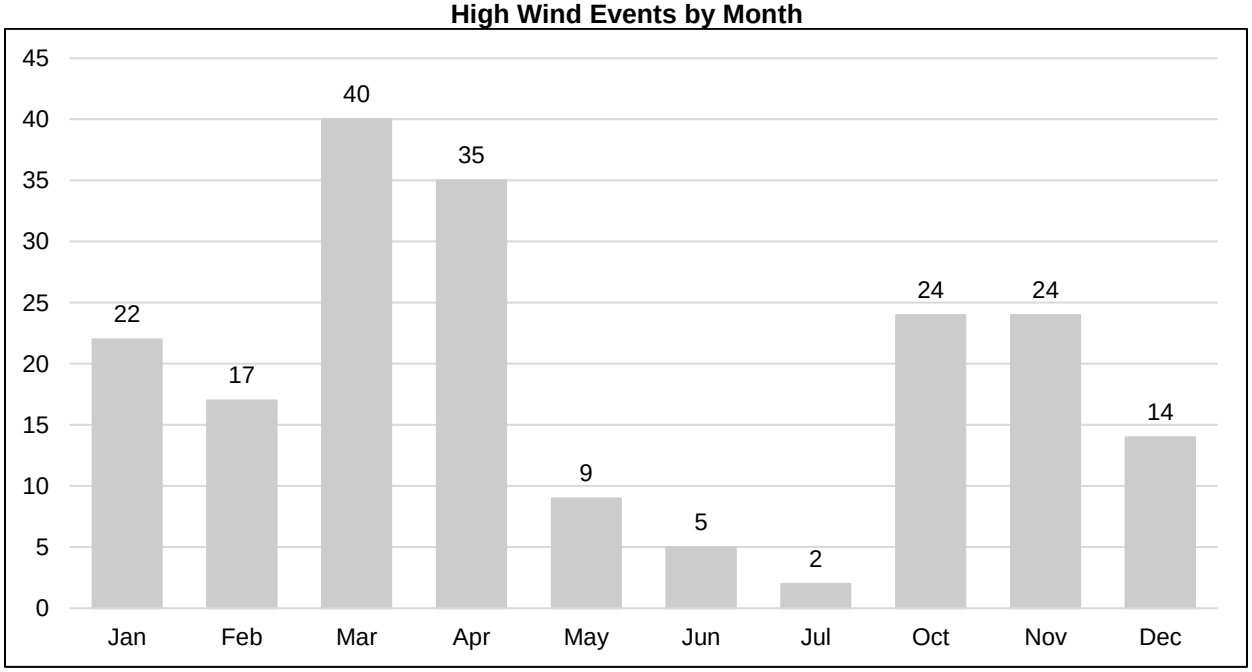
mph to 79 mph, with an average speed of 56 mph. Based on the historical record, it is most likely that tornadoes that occur within the planning area will be of EF0 strength. Of the 77 reported tornado events, 60 were EF/F0, 6 were EF/F1, 4 were EF/F2, and 7 were EFU.[174]

The extent of damage felt by high wind or tornado events will vary depending on the severity of the event and amount of infrastructure and development within a community or area. Due to the nature of how tornadic events are categorized, significant tornado events will occur in areas with more infrastructure.

Historical Occurrences

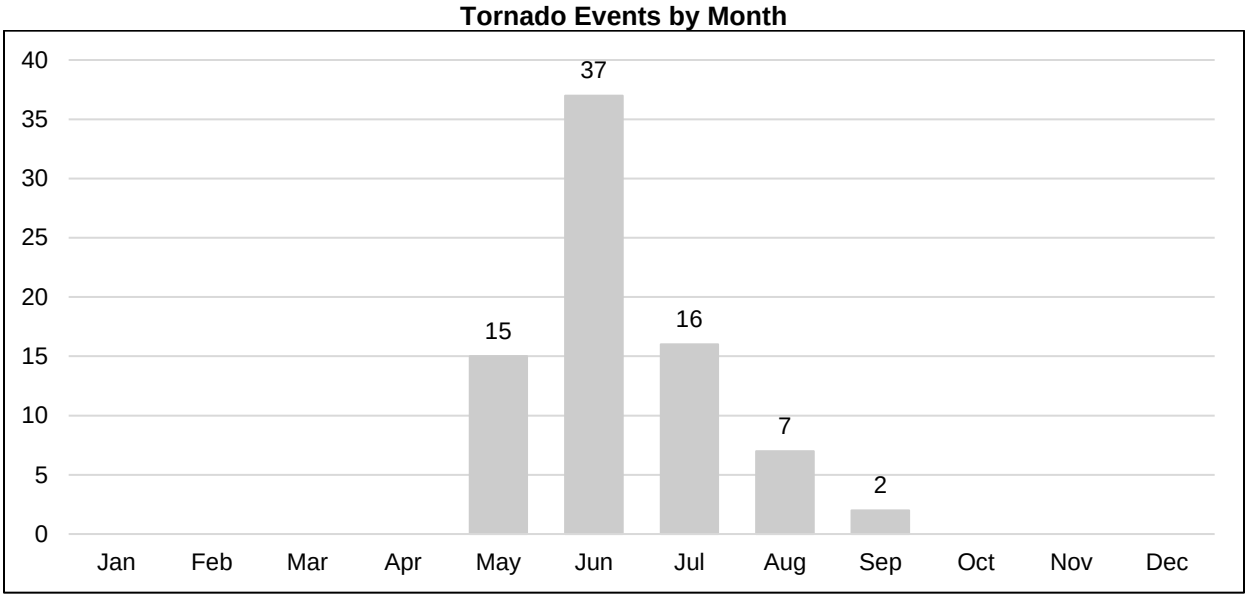
Due to the regional scale of high winds, the NCEI reports events as they occur in each county. While a single event can affect two or more counties at a time, the NCEI reports them as separate events. There were 192 high wind events that occurred between 1996 and 2023 and 77 tornadic events ranging from a magnitude of EF0 to EF2. These events were responsible for $1,484,000 in property damage and $15,511,163 in crop damage. One injury and no deaths were reported from these events. As seen in the following figures, most high wind events occur in March and April, while most tornado events occur in May, June, and July.

High Wind Events by Month



Source: NCEI, 1996-2023

174 NOAA National Centers for Environmental Information. 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/.



Source: NCEI, 1996-2023

Event descriptions from NCEI for the events that caused the most injuries, and the most damaging events are provided below.

- **June 12, 2017, Tornado -** $1,000,000 in property damage in Box Butte County. "A discontinuous tornado path continued northeast into Box Butte County from Morrill County. Additional roof damage was surveyed to a large building near the Alliance Airport (DI 1, DOD 3). This was the end of the discontinuous tornado path in Morrill and Box Butte Counties. Sixty-five train cars were blown over south of Alliance".[175]

- **June 21, 2013, Tornado** – $10,000 in property damage and $250,000 in crop damage in Sheridan County. "A tornado formed 5 miles south southeast of Gordon at 1731 MST in a corn field. It moved southeast for a path length of three quarters of a mile where a center irrigation pivot system was damaged, and crop destroyed in the path. In addition, six power poles were pulled out of the ground and a tree line damaged before dissipating at 1739 MST. The tornado was rated an EF0 with an average path width of .20 yards".[176]

- **June 20, 2006, Tornado** – $150,000 in property damage in Sheridan County. "An anti-cyclonic left-moving supercell produced a brief, weak tornado that ripped off the roof of a home, destroyed the attached two car garage, moved outbuildings, and destroyed metal cattle shields. Debris from the destroyed home impacted a large metal machine shed and was scattered along a 1 mile path northeast of the farmstead. The home was a complete loss as the chimney fell into the house breaking floor joists".[177]

175 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.
176 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.
177 NOAA National Centers for Environmental Information. 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/.

Average Annual Damages

The average damage per event estimate was determined based upon NCEI Storm Events Database since 1996. This does not include losses from displacement, functional downtime, economic loss, injury or loss of life. It is estimated that high wind events can cause an average of $4,607 per year in property damage and $646,298 per year in crop damage. Tornadoes have caused an average of over $48,393 per year in property damage; however, damages from tornadoes vary greatly depending on the severity or magnitude of each event.

High Winds and Tornado Losses

Hazard Type	# of Events[1]	Average # events per year	Total Property Loss[1]	Average Annual Property Loss	Total Crop Loss[2]	Average Annual Crop Loss
High Winds	192	6.9	$129,000	$4,607	$15,511,163	$646,298
Tornadoes	77	2.8	$1,355,000	$48,393	$0	$0
Total	**269**	**9.6**	**$1,484,000**	**$53,000**	**$15,511,163**	**$646,298**

Source: 1 NCEI (1996- 2023), 2 USDA RMA (2000-2023)

Historical Probability & Future Likelihood

Given the historical record of occurrence for high wind events (28 out of 28 years with reported events), the annual historical probability of a high wind event is 100 percent. Given the historical record of occurrence for tornado events (28 out of 28 years with reported events), for the purposes of this plan, the annual historical probability of a tornado occurrence is 100 percent. Even with the uncertainty of how climate change and future development will impact severe events like tornadoes and high winds, the future likelihood of an event is very likely.

Historical Probability & Future Likelihood – Tornadoes and High Winds

Hazard	Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
High Winds	100%	Uncertain	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Very Likely**
Tornadoes	100%	Uncertain	Neither Increase nor Decrease in Frequency. Increase in Exposure	**Very Likely**

Climate Change

For extreme events like tornadoes and high winds there is “considerable uncertainty about how projected changes in the climate will affect these events”. However, “tornadoes and severe storms will continue to be a normal feature for Nebraska.”[178]

Future Development

Any future development and population growth elevates exposure of property and people to the impacts of tornadoes and high winds. Future development should take steps to reduce potential damage from these events. Building codes for new structures can be strengthened, requiring increased rebar in foundations, enhanced nailing patterns for wall sheathing, the use of Simpson Strong Ties and Straps, and require the use of anchors and tie-downs of mobile homes. Additionally, individuals can choose to build to an option Code Plus Standard, such as Fortified for Safer Living or construct a tornado shelter on their property. The installation of public shelters to protect residents caught outside or in vulnerable areas, such as mobile home parks, can

178 University of Nebraska-Lincoln. 2014. “Understanding and Assessing Climate Change: Implications for Nebraska”. http://snr.unl.edu/download/research/projects/climateimpacts/2014ClimateChange.pdf.

increase safety of residents in those areas. Development regulations that require safe rooms, basements, warning sirens, or other structures that reduce risk to people would also help decrease vulnerability.

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional specific vulnerabilities, refer to *Section Eight*.

Table 1: Regional Tornado and High Wind Vulnerabilities

Sector	Vulnerability
People	-Vulnerable populations include those living in mobile homes (especially if improperly anchored), nursing homes, schools, or in substandard housing -People outside during events -Citizens without access to shelter below ground or in reinforced rooms -Elderly with decreased mobility or poor hearing may be at higher risk -Lack of multiple ways to receive weather warnings, especially at night
Economic	-Agricultural losses to both crops and livestock -Damages to businesses and prolonged power outages can cause significant impacts to the local economy, especially with EF3 tornadoes or greater
Built Environment	-All building stock is at risk of significant damages
Community Lifelines	-Downed power lines and power outages -All above ground infrastructure at risk to damages -Impassable roads due to debris blocking roadways - All community lifelines are at risk to damages

Jurisdictions Ranking Tornadoes and High Winds as a Prioritized Hazard of Concern

The following jurisdictions identified tornadoes and high winds as a prioritized hazard of concern.

- Region 23 EMA
- Upper Niobrara White NRD
- Box Butte County
- City of Alliance
- Village of Hemingford
- Dawes County
- City of Chadron
- City of Crawford
- Village of Clinton
- City of Gordon
- City of Rushville
- Sioux County
- Village of Harrison
- Chadron Public Schools
- Crawford Public Schools
- Gordon-Rushville Public Schools
- Hemingford Public Schools
- Hemingford Fire District

Appendix B: Planning Process Documentation

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Introduction

The following appendix provides documentation for the planning process that was discussed in *Section Four: Planning Process Summary*. This appendix provides information on public involvement and outreach, notified stakeholders, notified neighboring jurisdictions, meeting invitation letters, meeting sign-in sheets, meeting worksheets, public review comments, and adoption resolutions that have been gathered.

Public Involvement and Outreach

Notified Stakeholder Groups

Organizations	Type
Alliance Chamber of Commerce	Chamber of Commerce
Alliance Municipal Airport	Airport
American Red Cross	Non-Profit
Box Butte County Extension	University Extension Agency
Box Butte County Farm Service Agency	Federal Agency
Box Butte General Hospital	Hospital
Bureau of Reclamation	Federal Agency
Chadron Chamber of Commerce	Chamber of Commerce
Chadron Community Hospital	Hospital
Chadron Municipal Airport	Airport
Crest View Care Center	Nursing Home
Dawes County Extension	University Extension Agency
Dawes County Farm Service Agency	Federal Agency
FEMA	Federal Agency
Gordon Chamber of Commerce	Chamber of Commerce
Gordon Countryside Care	Nursing Home
Gordon Memorial Hospital District	Hospital
Gordon Municipal Airport	Airport
Hay Springs Municipal Airport	Airport
Hemingford Chamber of Commerce	Chamber of Commerce
Hemingford Community Care Center	Nursing Home
Highland Park Care Center	Nursing Home
Modisett Airport	Airport
National Weather Service	Federal Agency
NDOT	State Agency
Nebraska Forest Service	State Agency
Nebraska Game and Parks Commission	State Agency
NEMA	State Agency
Niobrara Electric Association	Public Power District
NRCS	Federal Agency
Oglala Sioux Lakota Nursing Home	Nursing Home
Panhandle Public Health Department	Health Department

Organizations	Type
Panhandle Rural Electric Membership Association	Public Power District
Pioneer Manor Nursing Home	Nursing Home
Ponderosa Villa	Nursing Home
Sheridan County Extension	University Extension Agency
Sheridan County Farm Service Agency	Federal Agency
Sioux County Extension	University Extension Agency
USFS Pine Ridge District	Federal Agency

Notified Neighboring Jurisdictions

Notified Neighboring Jurisdictions		
Cherry County, NE	Region 26 Emergency Management	Torrington, WY
Garden County, NE	Region 22 Emergency Management	Van Tassell, WY
Scotts Bluff County, NE	Region 21 Emergency Management	Morrill, NE
Morrill County, NE	Fall River and Oglala Lakota Counties, SD	Mitchell, NE
Middle Niobrara NRD	Oglala Sioux Tribe	Scottsbluff, NE
North Platte NRD	Niobrara County, WY	Lingle, WY
Upper Loup NRD	Goshen County, WY	

Website

The project website was used to communicate with the public, participating jurisdictions, and stakeholders about the plan update, meeting information, and other critical information. A link to the website can be found here: https://jeo.com/region-23-hazard-mitigation-plan-update

Project Website

ABOUT THE PROJECT

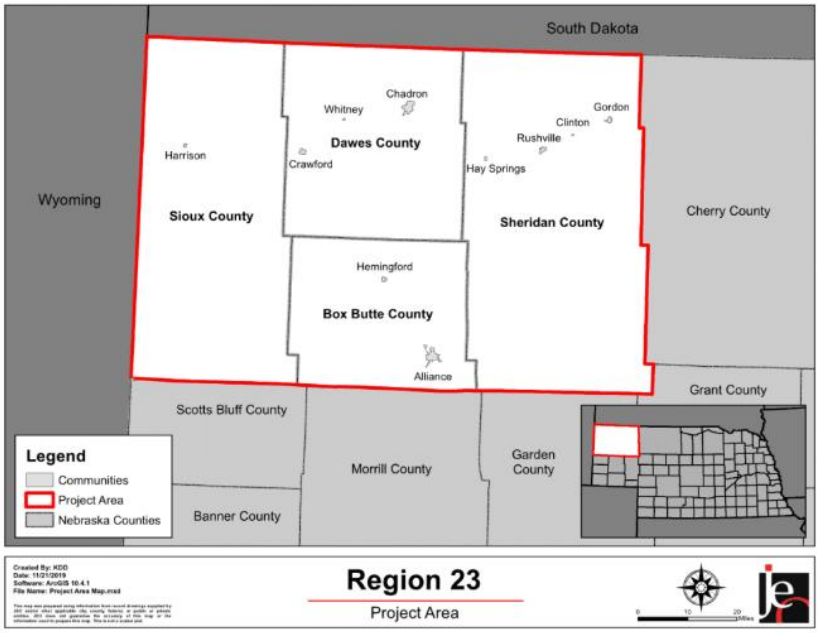
The Region 23 Emergency Management Agency is updating its Hazard Mitigation Plan (HMP) with the assistance of JEO Consulting Group. An HMP is a *community-guided* document that identifies vulnerabilities to natural and man-made hazards, then determines mitigation projects to reduce or eliminate those vulnerabilities.

Having an approved HMP is a requirement of the Federal Emergency Management Agency (FEMA) for jurisdictions to become eligible for Hazard Mitigation Assistance grants. An HMP will enable your community to be stronger and more resilient by:

1. Reducing your community's risk and impacts from disasters,
2. Gaining eligibility for pre- and post-disaster mitigation grants, and
3. Building partnerships with stakeholders within your community and region.

HMPs are required to be updated and approved every five years. The Region 23 EMA last updated their HMP in 2020. Throughout the planning process, members of the community are invited to participate by attending public meetings and providing information for the plan. Jurisdictions eligible to participate include:

- Cities and Villages
- School Districts
- Fire Districts
- Local Health Departments
- Public Colleges
- Other taxing authorities



PROJECT MEETINGS

The planning process includes public meetings to provide an opportunity for participants and interested stakeholders to learn about the plan and

Project Announcement

A press release was sent out to local newspapers to help spread the word about the hazard mitigation plan and public survey. A project announcement flyer was also made available to the Regional Planning Team and included on the project website. Below are copies of the press release, flyer, and announcements that were made by the Regional Planning Team.

Project Announcement Press Release

FOR IMMEDIATE RELEASE

June 21, 2024

Project Contact: Phil Luebbert
Phone: 402-474-8768
Email: pluebbert@jeo.com

WORK TO UPDATE 2020 HAZARD MITIGATION PLAN BEGINNING

Effort Being Led by Region 23 Emergency Management

For every $1 spent on hazard mitigation, $6 in post storm cleanup and rebuilding is saved, according to the Federal Emergency Management Agency (FEMA) and Institute of National Building Scientists. Proactive hazard mitigation planning allows a community to take actions to reduce or eliminate threats from natural and manmade disasters. To help guide future hazard mitigation projects, Region 23 Emergency Management is undertaking an effort to update its current Hazard Mitigation Plan, last approved in 2020. Once a community, county, or district is part of an approved Hazard Mitigation Plan they become eligible for up to a 75% cost share for a wide variety of projects listed in the plan. Hazard Mitigation Plans are required to be updated on a five-year cycle and the current plan will expire in 2025.

A Hazard Mitigation Plan is a publicly guided document that identifies vulnerability to natural disasters such as flood, drought, wildfire, winter storm, tornado, severe thunderstorm, and dam failure. The plan identifies risks, establishes mitigation alternatives, and prioritizes projects which may alleviate potential damages to property and provide protection when future disasters occur.

This planning effort is being guided by a planning team consisting of Region 23 Emergency Management, county and municipal representatives, Nebraska Emergency Management Agency, and others. Public input will be gathered throughout the duration of the plan development through online tools, a survey, and public meetings. All communities, counties, school districts, fire districts, and other taxing authorities within the Region 23 planning area are eligible to participate.

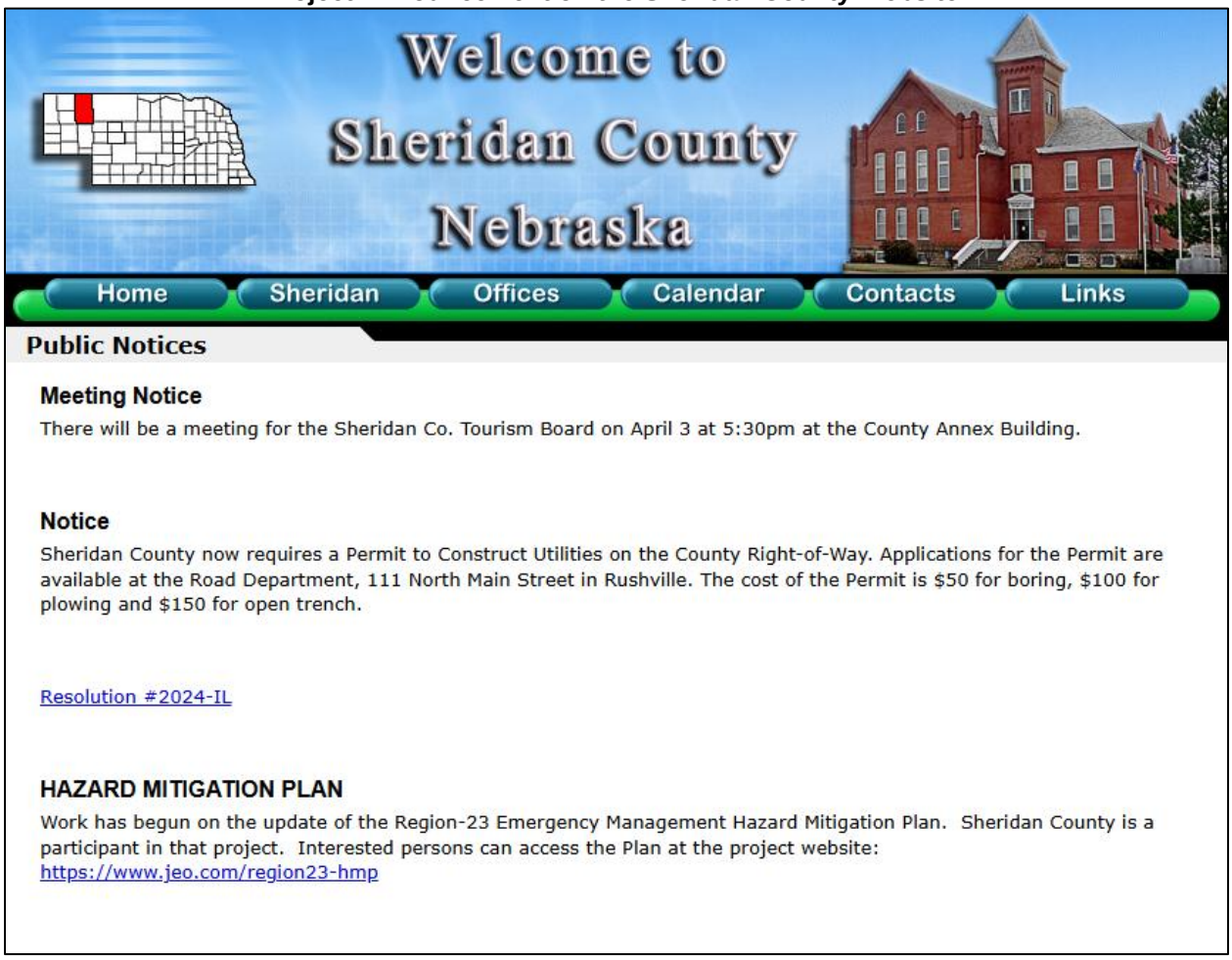
Region 23 has hired JEO Consulting Group, Inc. to assist with the plan development over the next year. This hazard mitigation plan update is funded by a FEMA planning grant. The cost is shared 75% through federal funding and 25% through a local match.

For more information on this planning effort, please view the project website at: https://www.jeo.com/region23-hmp, or contact Phil Luebbert, JEO Project Manager, at 402-474-8768 or by email at pluebbert@jeo.com.

Project Announcement Flyer



Project Announcement on the Sheridan County Website



Project Announcement Social Media Post – Alliance Fire Department



Public Survey

A public survey was used to gather information from the general public. The survey was available online as well as by hard copy. A hard copy version of the survey can be found below.

Public Survey Page 1 of 4

Region 23 EMA Hazard Mitigation Plan Update 2025

Public Survey

As part of the Region 23 EMA Hazard Mitigation Plan Update 2025, the planning team is seeking your input on hazards that impact Box Butte, Dawes, Sheridan, and Sioux Counties. Please take a few moments to answer the following questions.

1. What affiliation within the planning area do you have? (Check all that apply)

☐	**Resident**
☐	**Business Owner**
☐	**Employed in Box Butte, Dawes, Sheridan, or Sioux County**

2. Please select which jurisdiction you live in.

☐	**Alliance**	☐	**Rushville**
☐	**Clinton**	☐	**Whitney**
☐	**Chadron**	☐	**Unincorporated Area of Box Butte County**
☐	**Crawford**	☐	**Unincorporated Area of Dawes County**
☐	**Gordon**	☐	**Unincorporated Area of Sheridan County**
☐	**Harrison**	☐	**Unincorporated Area of Sioux County**
☐	**Hay Springs**	☐	**Other**
☐	**Hemingford**		

3. What types of hazards have you experienced in your community? (Check all that apply)

☐	**Animal and Plant Disease**	☐	**Hazardous Materials Release**
☐	**Dam Failure**	☐	**Human Infectious Diseases**
☐	**Drought**	☐	**Severe Thunderstorms**
☐	**Extreme Temperatures**	☐	**Severe Winter Storms (Includes Ice Storm)**
☐	**Flooding**	☐	**Terrorism and Cyber Attack**
☐	**Grass/Wildfire**	☐	**Tornadoes and High Winds**

Public Survey Page 2 of 4

4. Please rank your level of concern regarding these hazard events occurring in your jurisdiction or impacting your residence or workplace. Please rate each hazard as follows:

1 = No Concern, 2 = Some Concern, 3 = High Concern, 4 = Extreme Concern.

Animal & Plant Disease		**Flooding**		**Severe Thunderstorms**	
Dam Failure		**Grass/Wildfire**		**Severe Winter Storms**	
Drought		**Hazardous Materials Release**		**Terrorism & Cyber Attack**	
Extreme Temperatures		**Human Infectious Diseases**		**Tornadoes & High Winds**	

5. Preparing for a disaster can take many forms. Of the following items, please circle your level of importance to you.

Protecting People	Very Important	Somewhat Important	Neutral	Not Important
Protecting Private Property	Very Important	Somewhat Important	Neutral	Not Important
Protecting Community Assets (Parks, Community Buildings)	Very Important	Somewhat Important	Neutral	Not Important
Protecting Critical Infrastructure (Hospitals, Fire/Police Stations, Utilities)	Very Important	Somewhat Important	Neutral	Not Important
Preventing Development in Hazardous Areas (ex. Flood Prone Areas)	Very Important	Somewhat Important	Neutral	Not Important
Protecting Natural Environment	Very Important	Somewhat Important	Neutral	Not Important
Protecting Historical/Cultural Landmarks	Very Important	Somewhat Important	Neutral	Not Important
Protecting Economic Drivers and Tourist Locations	Very Important	Somewhat Important	Neutral	Not Important
Improving Emergency Response Capabilities (fire/police/emergency management equipment and training)	Very Important	Somewhat Important	Neutral	Not Important

Public Survey Page 3 of 4

6. Of the following projects, select up to 3 that would be most important to your community to reduce risk and be more resilient?

- ☐ **Alert Sirens / Early Warning Systems / Emergency Notification**
- ☐ **Backup Generators**
- ☐ **CPR / AED Training**
- ☐ **Creating Drought Response Protocol**
- ☐ **Cyber Security Improvements**
- ☐ **First Aid Training**
- ☐ **Hazardous Tree Removal**
- ☐ **Public Education on Hazards**
- ☐ **Safe Room / Storm Shelter**
- ☐ **Stormwater Management – Bank Stabilization, Drainage Improvements, Culvert Upsizing**
- ☐ **Updated Planning Mechanisms (Comprehensive Plan, Building Codes, Zoning Regulations, etc.)**
- ☐ **Utility Protective Measures (Electric, Gas, etc.)**
- ☐ **Water & Sanitary Sewer System Protective Measures**
- ☐ **Wildfire Fuels Reduction / Fuel Break Creation**
- ☐ **Other: _____**

7. What is the best way for you to receive information about preparing for a disaster (Choose up to 3)?

- ☐ **Community Website**
- ☐ **County Website**
- ☐ **Social Media (Facebook/Twitter/Other)**
- ☐ **Emergency Text Alerts**
- ☐ **Radio Alerts**
- ☐ **Newsletters**
- ☐ **Public Meetings**
- ☐ **Other: _____**

8. What is one thing you'd like your community to do to help reduce risk to natural disasters or severe weather events in the future?

Public Survey Page 4 of 4

9. Comment on any other issues that the Hazard Mitigation Plan Team should consider in developing a strategy to reduce future losses caused by hazard events.

Thank you for your time! Completed surveys may be dropped off, mailed, or emailed to:

Region 23 EMA
Attn: Nan Gould
250 Main St
Chadron, NE 69337
reg23ema@bbc.net

Or to: JEO Consulting Group
Attn: Anthony Kohel
2000 Q Street, Ste 500
Lincoln, NE 68503
akohel@jeo.com

For more information on the plan, please visit https://www.jeo.com/region23-hmp

Public Survey Postings

All participants were asked to post the survey on their website and on social media. Below is an example of a website post about the survey.

Box Butte County Website - Link to the Public Survey

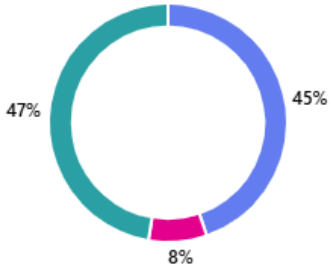


Public Survey Summarized Responses

Results of the public survey can be found below. In total there were 23 responses from members of the public. Due to the low number of responses, the results could only be used by a few communities to help influence hazard prioritization and mitigation actions selected by local planning teams.

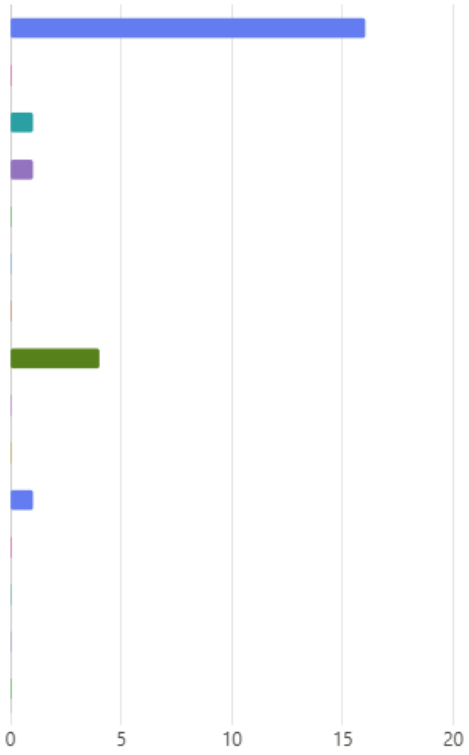
1. What affiliation within the planning area do you have? (Check all that apply)

Resident	17
Business Owner	3
Employed in Box Butte. Dawes, Sheridan, or Sioux County	18

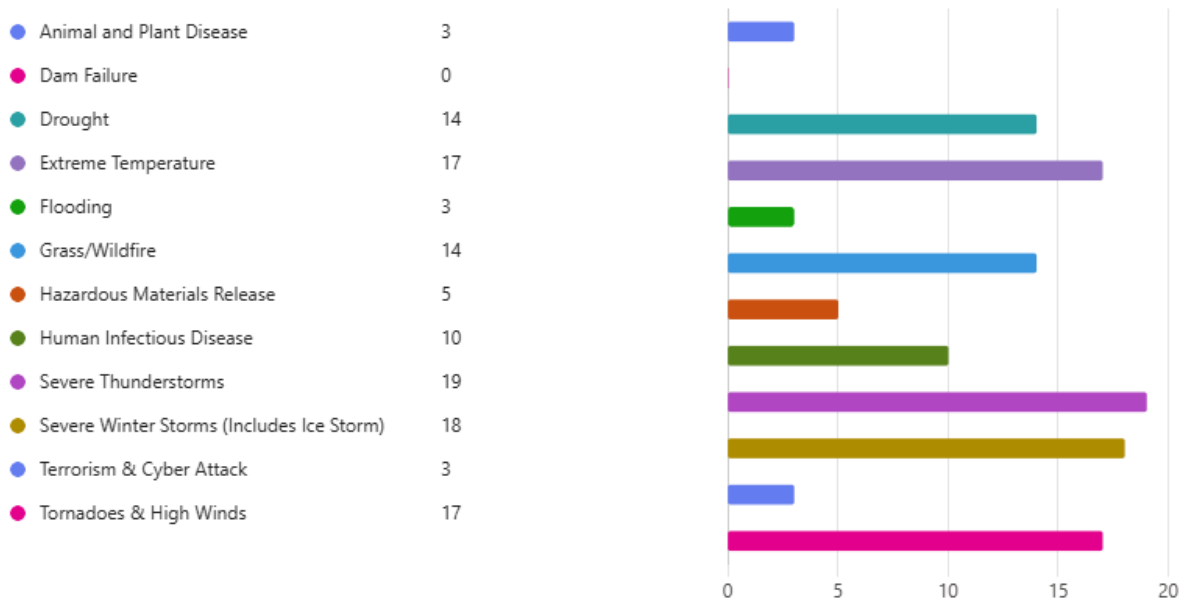


2. Please select which jurisdiction you live in.

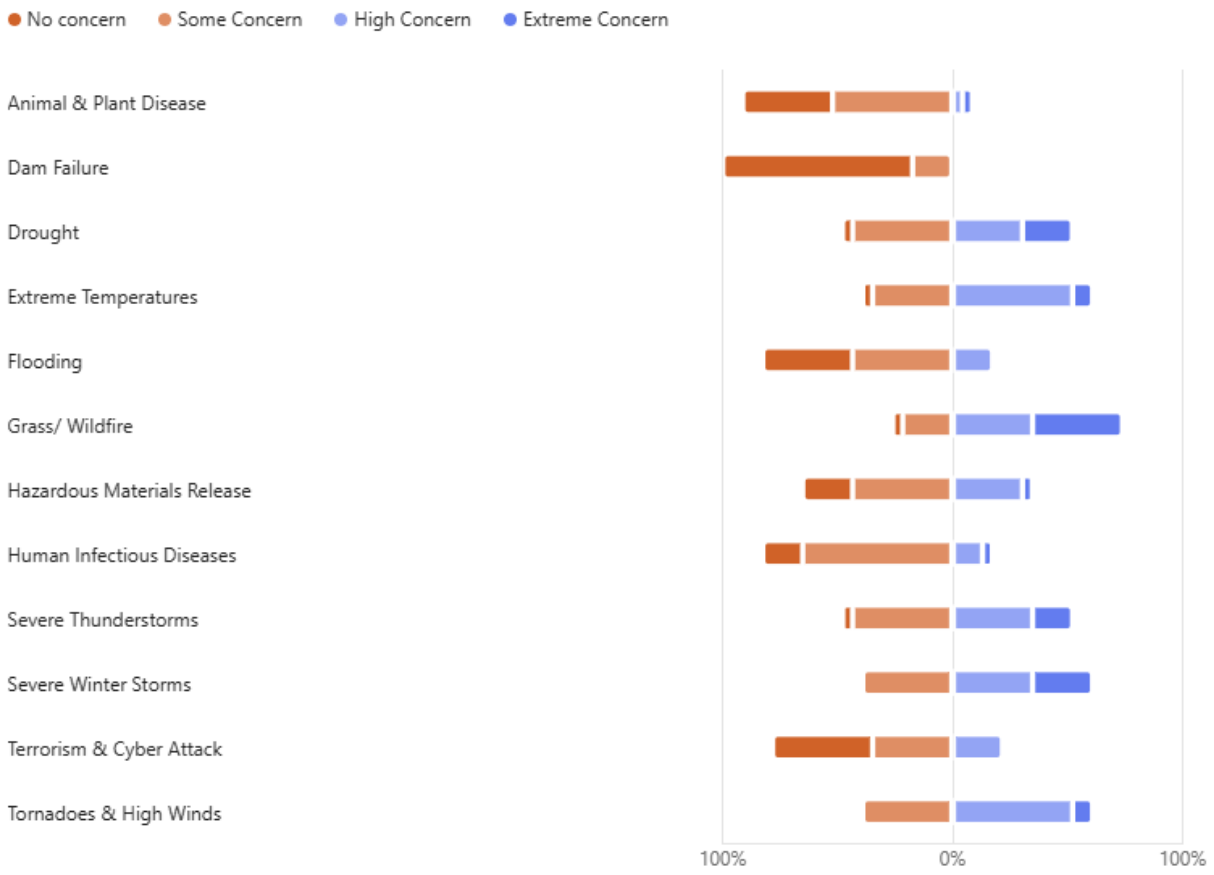
Alliance	16
Clinton	0
Chadron	1
Crawford	1
Gordon	0
Harrison	0
Hay Springs	0
Hemingford	4
Rushville	0
Whitney	0
Unincorporated Area of Box Butte County	1
Unincorporated Area of Dawes County	0
Unincorporated Area of Sheridan County	0
Unincorporated Area of Sioux County	0
Other	0



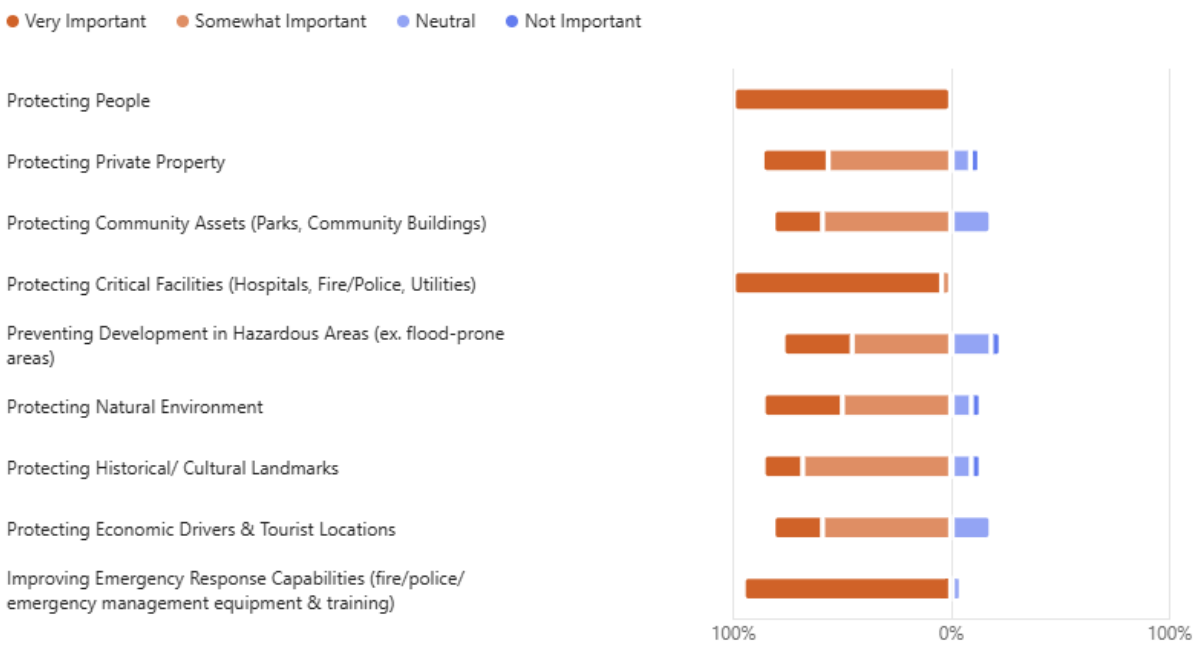
3. What types of hazards have you experienced in your community? (Check all that apply)



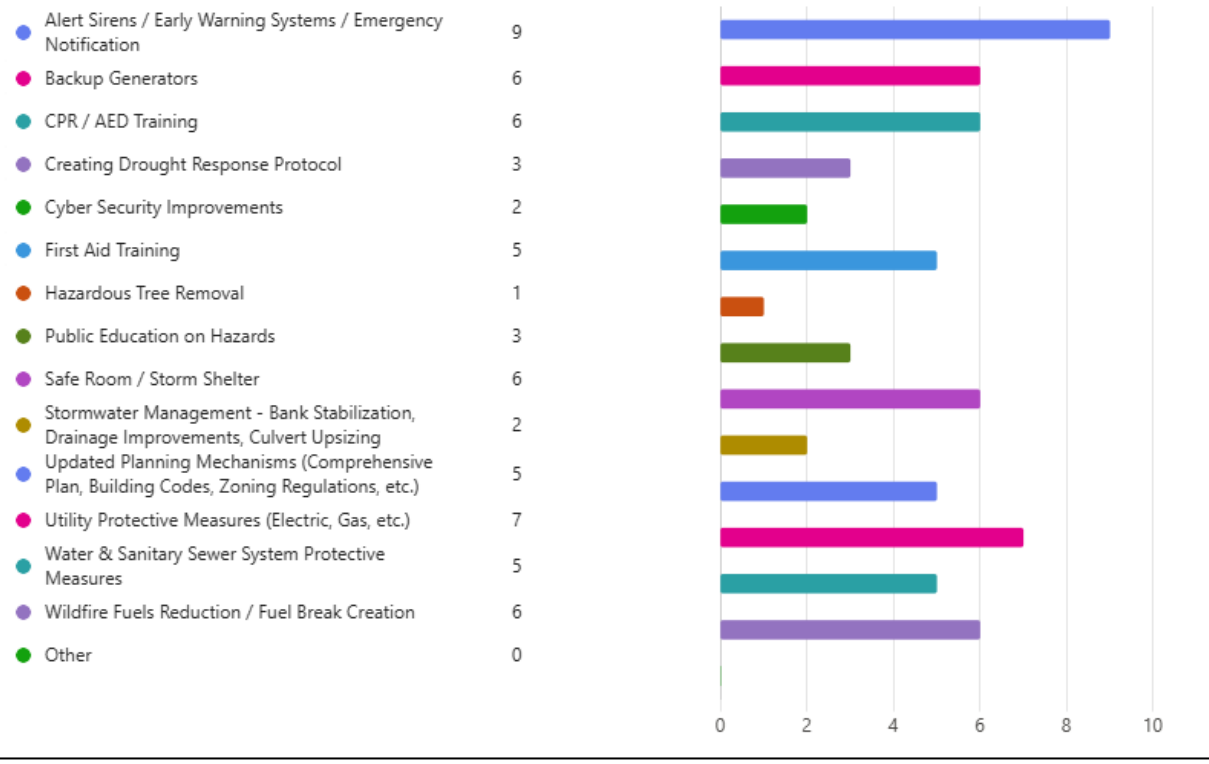
4. Please rank your level of concern regarding these hazard events occurring in your jurisdiction or impacting your residence or workplace. Please rate each hazard as follows:

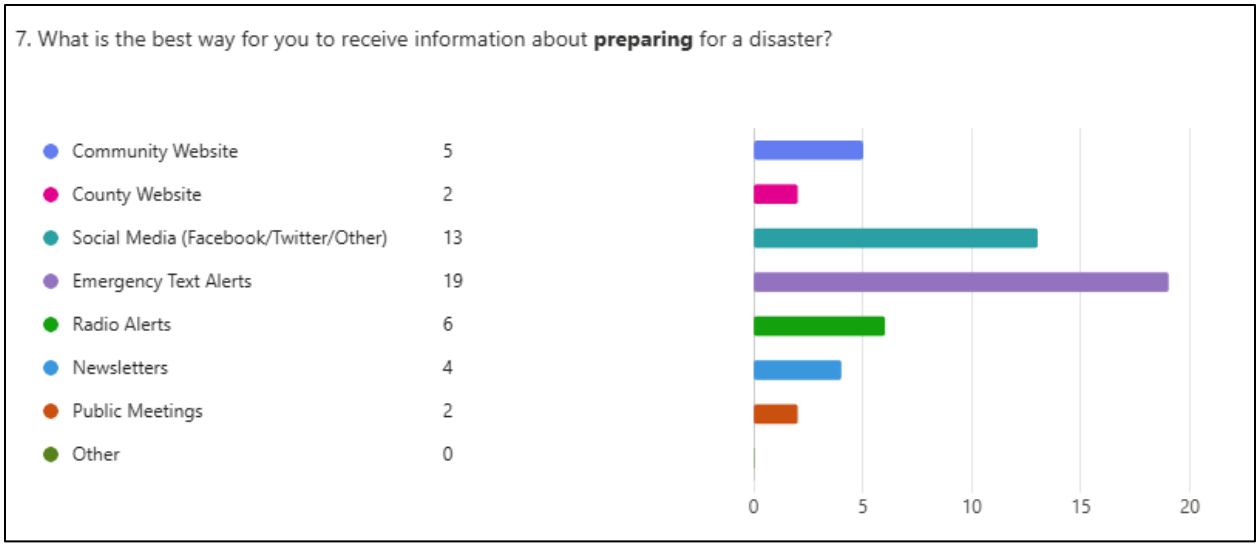


5. Preparing for a disaster can take many forms. Of the following items, please indicate its level of importance to you.



6. Of the following projects, select up to 3 that would be most important to your community to reduce risk and be more resilient?





8. What is the one thing you'd like your community to do to reduce risk to natural disasters or severe weather events in the future?

Most Common Responses:

- Response equipment and procedure updates
- Education and alerts to residents
- Hazardous property mitigation

9. Comment on any other issues that the Hazard Mitigation Plan Team should consider in developing a strategy to reduce future losses caused by hazard events.

Most Common Response:

- Emergency preparedness and education
- Responder alignment through joint training
- Support for vulnerable populations during disasters

Round 1 Meeting Invitations

Participating Jurisdictions Round 1 Meeting Invitation

July 17, 2024

RE: Region 23 Hazard Mitigation Plan - Public Meeting

Dear Hazard Mitigation Planning Participant,

The Region 23 Emergency Management Agency (Region 23) is beginning the first phase of its Hazard Mitigation Plan update. A hazard mitigation plan examines regional and local vulnerabilities to a range of hazards (e.g., flooding, severe winter storms, drought, etc.) and identifies strategies and projects to reduce their impact. Your jurisdiction is required to attend a meeting in order to participate in the plan. Once a community, county, or district (School District, Fire District, Irrigation District, etc.) is part of an approved plan, they become eligible for up to a 75% cost share from the Federal Emergency Management Agency (FEMA) for a variety of projects listed in the plan.

FEMA requires at least one representative from your jurisdiction to attend planning meetings. The first public meeting will last approximately 1 to 1.5 hours and can be attended in-person or virtually.

The meeting will be held in:

- Chadron: Monday, **August 26, 6:00 pm (MT)** at the Region 23 EMA Office, 250 Main St, Chadron, NE 69337
    - Or Join Online at https://us02web.zoom.us/j/84309760039

If you are joining online, you can access and download your jurisdiction's meeting worksheets starting August 23rd by visiting this Google Drive link: https://bit.ly/Region23_GoogleDrive.

Region 23 is working with JEO Consulting Group to help update the plan. **Please RSVP** to the meeting by contacting Anthony Kohel, JEO Planner, at (402) 474-8753 or akohel@jeo.com. For more information, you can visit the project website at https://www.jeo.com/region23-hmp. If you have any questions, please contact Region 23 or JEO. We are looking forward to seeing you at the first public meeting!

Sincerely,

Anthony Kohel, Planner
JEO Consulting Group
On behalf of Region 23

cc. Nan Gould, Region 23 Emergency Manager

JEO CONSULTING GROUP, INC.
JEO ARCHITECTURE, INC.
p: 402.435.3080
f: 402.435.4110
2000 O Street, Suite 500
Lincoln, Nebraska 68503
jeo.com

Stakeholders Round 1 Meeting Invitation

July 17, 2024

RE: Region 23 Hazard Mitigation Plan - Public Meeting

Dear Hazard Mitigation Planning Stakeholder,

The Region 23 Emergency Management Agency (Region 23) is beginning the first phase of its Hazard Mitigation Plan update. You are receiving this letter because you are a potential stakeholder for this planning effort. The hazard mitigation plan examines regional and local vulnerabilities to a range of hazards (i.e. flooding, severe winter storms, drought, chemical spills, etc.) and identifies strategies and projects to reduce their impact.

As a stakeholder, you are encouraged to provide input to the planning process to ensure identified mitigation efforts are appropriate and consistent with the special needs of the organization you represent. Your input will be integrated into the larger community profile prepared by your community's local representatives. The first public meeting will last approximately 1 to 1.5 hours and can be attended in-person or virtually.

The meeting will be held in:

- Chadron: Monday, **August 26, 6:00 pm (MT**) at the Region 23 EMA Office, 250 Main St, Chadron, NE 69337
    - Or Join Online at https://us02web.zoom.us/j/84309760039

Region 23 is working with JEO Consulting Group to help update the plan. **Please RSVP** to the meeting by contacting Anthony Kohel, JEO Planner, at (402) 474-8753 or akohel@jeo.com.

A Public Survey was also created to better understand the impacts and concerns of stakeholders in the planning area. The survey can be found here: https://forms.office.com/r/pyR9kqa8vx

For more information, you can visit the project website at https://www.jeo.com/region23-hmp. If you have any questions, please contact Region 23 or JEC. We are looking forward to seeing you at the first public meeting!

Sincerely,

Anthony Kohel, Planner
JEO Consulting Group
On behalf of Region 23

cc. Nan Gould, Region 23 Emergency Manager

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Lincoln, Nebraska 68503
jeo.com

Neighboring Jurisdictions Round 1 Meeting Invitation

July 17, 2024

RE: Region 23 Hazard Mitigation Plan - Public Meeting

To Whom it May Concern:

This letter is being sent to inform your jurisdiction of a planning effort underway by the Region 23 Emergency Management Agency (Region 23) to update its Hazard Mitigation Plan (HMP), with assistance from JEO Consulting Group. FEMA requires that neighboring communities be notified of this planning effort and are encouraged to attend the public informational meetings.

An HMP is a community-guided document that identifies both vulnerability to natural hazards and mitigation measures to reduce or eliminate this vulnerability. Neighboring jurisdictions are encouraged to provide input to the planning process or attend meetings to ensure identified mitigation efforts are regionally appropriate and consistent with those identified within other communities in the region. The first public meeting will last approximately 1 to 1.5 hours and can be attended in-person or virtually.

The meeting will be held in:

- Chadron: Monday, **August 26, 6:00 pm (MT)** at the Region 23 EMA Office, 250 Main St, Chadron, NE 69337
    - Or Join Online at https://us02web.zoom.us/j/84309760039

Please RSVP to the meeting by contacting Anthony Kohel, JEO Planner, at (402) 474-8753 or akohel@jeo.com.

For more information, you can visit the project website at https://www.jeo.com/region23-hmp. We are looking forward to seeing you at the first public meeting!

Sincerely,

Anthony Kohel, Planner
JEO Consulting Group
On behalf of Region 23

cc. Nan Gould, Region 23 Emergency Manager

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Lincoln, Nebraska 68503
jeo.com

Round 1 Sign-In Sheets

In Person Sign-In Sheets

CHadron Round 1 Meeting Sign-In Sheet Page 1 of 2

Region 23 EMA Hazard Mitigation Plan Update
Round 1 Meeting
Chadron, NE – August 26, 2024 – 6:00 PM

Name	Title	District/Jurisdiction Represented	Address	Phone	Email	Signature
Phil Luebbert	Senior Planner	JEO Consulting Group	201 Coffman St #1536 Longmont, CO 80502	402-474-8768	pluebbert@jeo.com	
Anthony Kohel	Planner	JEO Consulting Group	2000 Q St. Ste 500 Lincoln, NE 68503	402-474-8753	akohel@jeo.com	
Mary Baker	Resiliency Strategist	JEO Consulting Group	2000 Q St. Ste 500 Lincoln, NE 68503	402-474-8748	mbaker@jeo.com	
Nan Gould	Coordinator	Region 23 EMA	250 Main St Chadron, NE 69337	308-432-2251	coordinator@region23em.org	
Angela Mose ✓	Meteorologist	NWS – Cheyenne			angela.mose@noaa.gov	
Barbara Keegan	Highway Superintendent	Box Butte County	101 Howard St Alliance, NE 69301	308-762-6797	road@boxbuttecountyne.gov ~~bbcrd@bbc.net~~	
Dan Brien	Streets Supervisor	City of Crawford	135 Elm St Crawford, NE 69339			
David Leavitt	Chief of Police	City of Alliance	PO BOX D Alliance NE 69301	308-762-4955	dleavitt@bbcpublicsafety.us	
Eugene Hanks ✓	Superintendent	Crawford Public Schools	908 5th St Crawford, NE 69339	308-665-1928	eugene.hanks@cpsrams.org	
Eric Arneson	Principal	Hemingford Public Schools	913 Niobrara Ave Hemingford, NE 69348	308-487-3330	earneson@gubn.org	
Everette Langford ✓	Chief Deputy	Sheridan County			9615Langford@gmail.com	
Fred Raben		Village of Whitney	3205 Missouri St Whitney, NE 69367		mrfredllc@gmail.com	
Glen Spaugh	City Manager	City of Gordon	311 North Oak St Gordon, NE 69343	308-282-0837	spaughg@gordon-ne.us	
Helen Wichman	Administrator	Crest View Care Center	420 Gordon Ave Chadron, NE 69337		helen.wichman@crestvcc.com	
James Krotz	Commissioner	Sheridan County	3484 520th Rd Rushville, NE 69360		jkrotz@sheridancounty.ne.gov	
Janet Johnson	Zoning/Building Official	City of Chadron	PO Box 390 Chadron, NE 69337	308-432-0506	codes@chadron-nebraska.com	
Jim Miles		Hemingford Public Schools	913 Niobrara Ave Hemingford, NE 69348		jmiles@gubn.org	
Julia Butler	City Clerk	City of Crawford	135 Elm St Crawford, NE 69339	665-1462	butlercityclerk@bbc.net	
Kari Gaswick	Vice President – Administration & Finance	Chadron State College	1000 Main St Chadron, NE 69337	308-432-6202	kgaswick@csc.edu	
Richard Hickstein	Chief of Police	City of Chadron			rhickstein@chadronpd.com	
Roy Retzlaff	Board Member	Village of Clinton	RR #1, Box 137 Gordon, NE 69343		royretz@live.com	

Please Sign In!

Chadron Round 1 Meeting Sign-In Sheet Page 2 of 2

Region 23 EMA Hazard Mitigation Plan Update
Round 1 Meeting
Chadron, NE – August 26, 2024 – 6:00 PM

Name	Title	District/Jurisdiction Represented	Address	Phone	Email	Signature
Shad Bryner	Fire Chief	Hemingford Fire District	PO Box 594 Hemingford 69348	308-760-3341	sbryner@bbc.net	
Shane Norman	Mayor	City of Crawford	135 Elm St Crawford, NE 69339		crawfordmayor@bbc.net	
Thomas Bozeman	Emergency Manager	Goshen County	PO Box160 Torrington, WY 82240	307-532-7039	tbozeman@goshensheriff.org	
Thomas Price	Asst. Highway Superintendent	Sheridan County	111 North Main St Rushville, NE 69360	308-327-5657	sheridanroad5657@gmail.com	
Jesse VAnce	BOARd Member	Village of Harrison	122 KATE ST. Harrison, NE 69346	308-665-5789	VANCE@jesse0606@gmail.com	
DawnRay	SupportServices	HayBrings LTC,	318 N 3rd st HaySprings NE	308-638-4483	supportservices@pioneermanor.net	
TROY SHOEMAKER	FIRE CHIEF	CITY OF ALLIANCE	315 CHEYENNE Alliance, NE 69301	308-762-2151	tshoemaker@cityofalliance.net	
Jim Keegan	Fire / EM #23	Box Butte	PO Box 224 Hemingford	308 760 -4507	jbkeegan@bbc.net	
Wade Yada	highway super	Dawes	250 main st. Chadron	308-432-0483	dawescountysupt@gmail	
Tom Mark	City of Chadron Mgr	Dawes			mmanager@chadron-nebraska.com	
Jake Stewart	County Commissioner	Dawes Co	435 Chapin St	308-432-6692	commissionerstewartj@gmail.com	
Brandon Martens	Chadron VFD	Dawes	PO Box 829	316-217-1106	brandonmartens@gmail.com	
Josh Stadler	Maint. Sup. Chadron Public Schools	Chadron Public Schools			josh.stadler@chadronschools.net	

Please Sign In!

Round 1 Example Participant Profile with Questions

Community Profile

City of Alliance

Region 23 EMA
Hazard Mitigation Plan 2025

Name(s): _____

Date: _____

Worksheets Due By: _____

Please answer the questions in red italics. Your responses are critical for completing this Community Profile.

Completed Community Profiles and other worksheets can be returned to JEO Consulting Group, Attn: Anthony Kohel, 2000 Q Street Ste 500, Lincoln, NE 68503 or akohel@jeo.com. If you have any questions, please call 402-474-8753.

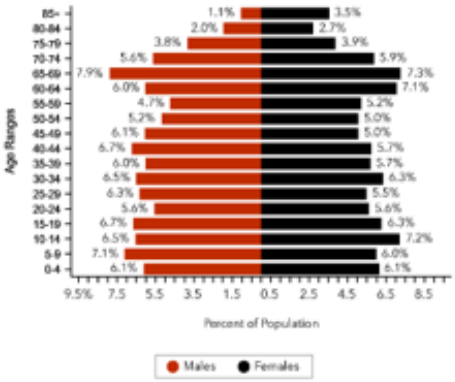
Community Fact Sheet

Community Summary Fact Sheet

Alliance, NE
Region 23 EMA Hazard Mitigation Plan 2025

7,919	40.2	3,359	2.33	$176,570	$66,875
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID

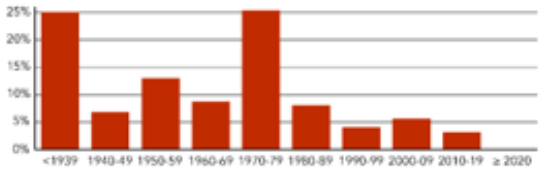


TOTAL POPULATION	
2024 Total Population (Estimate)	7,919
2020 Total Population (U.S. Census)	8,136
2010 Total Population (U.S. Census)	8,471
2000 Total Population (U.S. Census)	8,966

AT RISK POPULATIONS

1,036	1,726	194	16%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

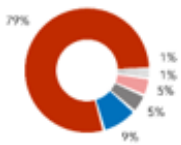
HOUSING: YEAR BUILT



EMPLOYMENT

375	2.9%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Asian Population
- Black Population
- American Indian Population
- Other Race Population
- Population of 2+ Races
- White Population

15% of the Total Population is Hispanic

HOUSING

469	3%
Vacant Housing Units	Mobile Homes

esri | Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting

Plan Maintenance

Information will be added for the Round 2 meeting.

Capability Assessment

The planning team assessed the City of Alliance's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Please check the right column in the following table for your community. The table includes responses from the 2020 HMP. If there have been changes or updates, please cross out the answer and provide the updated answer. Fill in any missing information highlighted in red.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes (local and County)
	Floodplain Management Plan	Yes
	Storm Water Management Plan	Yes
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	
	If yes:	Year Adopted:
		IBC Edition:
	Water System Emergency Response Plan	
	Wellhead Protection Plan	
	National Flood Insurance Program	Yes
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Other (if any)	
Administrative &	Planning Commission	Yes
	Floodplain Administrator	Yes

Capability/Planning Mechanism		Yes/No
Technical Capability	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	Yes
	Storm Water Service Fees	No
	Development Impact Fees	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	Yes
	Firewise Communities Certification	No
	Tree City USA	Yes
	Other (if any)	

Please rate your jurisdiction's overall capability in the following ways (Limited, Moderate, or High)

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	
Staff/Expertise to Implement Projects	
Public Support to Implement Projects	
Time to Devote to Hazard Mitigation	
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	

National Flood Insurance Program (NFIP)

NFIP Information

NFIP Overview	
Date of NFIP Participation:	07/16/1987
Floodplain Administrator:	Brent Kusek
Is Floodplain Administrator a Certified Floodplain Manager?	
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	4
Total NFIP Premium ($):	$1,539
Total NFIP Coverage ($):	$963,000
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	N/A
Number of Severe Repetitive Loss Structures:	N/A
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Paper
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year and 500-year floodplains at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following tables.

Data to be included at Round 2 Meeting.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain

Source: County Assessor, 2024

Parcel Improvements and Value in the 500-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain

Plans and Studies

Please fill out the plan integration worksheet to add this information.

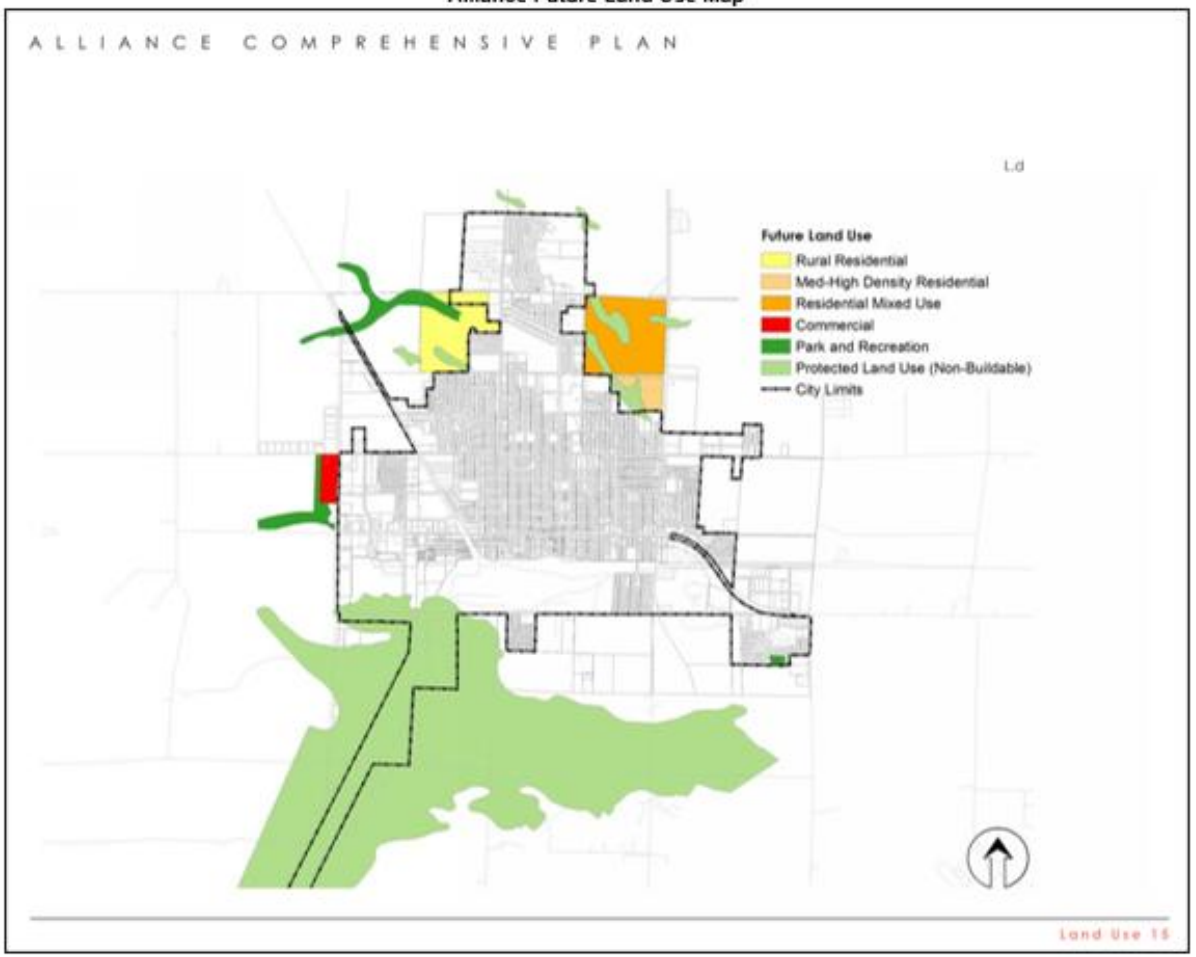
Future Development Trends

What has changed over the past five years? (For example: new housing or businesses? Demolished buildings? New roads or areas of improvement?) Where did these changes take place?

Were any new structures developed in the floodplain or other hazardous areas? (For example, near chemical sites, the Wildland-Urban Interface, dam or levee inundation areas?) If so, what types of structures and where were they developed?

Are any new housing developments or new businesses/industry planned in the near future? Where? Are they going to be located in the floodplain or other hazardous areas?

Alliance Future Land Use Map



Community Lifelines

As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; and Hazardous Material Facilities.



Please review the table of community lifelines identified in the past plan and provide any changes as needed. Remove any lifelines by crossing them out.

Community Lifelines

CL Number	Name	Generator (Y/N)
1	Alliance Fire Department	Y
2	Alliance Municipal Airport*	Y
3	Alliance Municipal Building (City Manager, City Clerk)	Y
4	Alliance Outdoor Warning Siren #1	N
5	Alliance Outdoor Warning Siren #2	N
6	Alliance Outdoor Warning Siren #3	N
7	Alliance Outdoor Warning Siren #4	N
8	Alliance Outdoor Warning Siren #5	N
9	Alliance Outdoor Warning Siren #6	N
10	Alliance Outdoor Warning Siren #7	N
11	Alliance Public Works (Water, Sewer, Electric, Public Transit)	Y
12	Box Butte County Courthouse/Sheriff's Office	N
13	Box Butte Hospital	Y
14	Broadwater Substation	N
15	Cody Substation	N
16	Elkhorn Water Tower	N
17	Emerson Substation	N
18	Good Samaritan Society-The Sandhills	N
19	Good Samaritan Society-Wildflower Terrace Senior Living	N
20	Highland Park Care Center	Y
21	Highland Park-Cross Roads Assisted Living	N
22	Lift Station A	N
23	Lift Station B	N
24	Lift Station C	N
25	Lift Station D	N
26	Lift Station E	N
27	Marian Residence	N
28	Regional Law Enforcement Center	Y
29	Toluca Water Tower	N

Please provide a list of additional community lifelines (not identified above) for your community in the table below. Include the address and if they have a backup generator.

Name	Address or Intersection	Generator (Y/N)

Community Lifelines Map

Map will be added before the Round 2 Meetings

Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Alliance which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the City of Alliance. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Please review the following section and answer the provided questions. Note that reported data in the following paragraphs is from the 2020 plan and does not reflect new data available through 2024.

Grass/Wildfires

The local planning team identified grass/wildfire as a significant threat for the city. According to the Nebraska Forestry Department there were 298 reported fires by the Alliance Fire Department from 2000 to 2018 which consumed a total of 5,589 acres. Of the reported events, one fire in August of 2012 consumed approximately 1,000 acres. The City of Alliance participates in the Pine Ridge Community Wildfire Protection Plan (CWPP). According to the CWPP, Alliance is located within the WUI. The Alliance Fire Department has mutual aid agreements with the fire departments in the surrounding areas, but during large scale events it is possible nearby fire department would be unable to lend assistance due to addressing the needs of their respective community/protection area.

Is this hazard still of concern for your community? (circle one) Yes No
If no, please skip the following questions.

Have there been any changes since the last plan? Does this accurately describe your community's risk or concern related to this hazard? Please describe any recent events and their impacts on the community.

What has the community done to mitigate risk to this hazard?

What needs to be done to reduce the risk to this hazard?

Severe Thunderstorms

Severe thunderstorms are a regular part of the climate for Box Butte County and Alliance. The NCEI recorded 176 severe thunderstorm events from 1996 to 2019, with $509,100 in damages to property and $110,000 in crop damage. Severe thunderstorms and hail can result in the loss of electricity, blocked roadways, damages to trees, and flooding. Blocked roadways present life safety concerns to those needing evacuation or immediate medical attention. The city has experienced tree damage from severe thunderstorms and high winds. Hazardous trees are removed as identified throughout the city. While the city has not experienced significant power outages lasting more than a few hours, current codes require new construction to bury powerlines and old infrastructure is buried as resources allow. The city has installed seven warning sirens which encompass the entire city limits. These sirens were recently updated, and weather radios were purchased as part of a city partnership and HMGP grant.

Is this hazard still of concern for your community? (circle one) Yes No
If no, please skip the following questions.

Have there been any changes since the last plan? Does this accurately describe your community's risk or concern related to this hazard? Please describe any recent events and their impacts on the community.

What has the community done to mitigate risk to this hazard?

What needs to be done to reduce the risk to this hazard?

Severe Winter Storms

The planning teams estimated that severe winter storms were highly probable in the future for Alliance. According to the NCEI, there were 84 severe winter storms in Box Butte County from 1996 through September 2019. These storms resulted in $62,000 in property damage and $1,000 in crop damage. A winter storm in 1997 caused significant damage by downing power poles and lines and up to a foot of snow blocked major transportation routes. A semi-trailer tipped and crashed in Alliance while north of town approximately 55 cattle escaped enclosures and were killed on the railroad tracks when struck by a BNSF train in near-zero visibility conditions.

Since the storm event is zonal in nature, the number that impacted Alliance is unknown. Major local concerns regarding severe winter storms include blocked transportation routes and the safety of residents. The city is responsible for clearing snow from local roads and snow removal plans and resources are reviewed or updated annually as needed.

Is this hazard still of concern for your community? (circle one) Yes No
If no, please skip the following questions.

Have there been any changes since the last plan? Does this accurately describe your community's risk or concern related to this hazard? Please describe any recent events and their impacts on the community.

What has the community done to mitigate risk to this hazard?

What needs to be done to reduce the risk to this hazard?

Tornadoes and High Winds

The local planning team identified tornadoes and high winds as a significant concern for the City of Alliance. According to the NCEI data, there were seven tornadoes that passed near Alliance from 1996 to 2019. All tornados were either EF/F0 with all but one having no reported damages. A June 2017 tornado caused $1,000,000 in property damage when 65 train cars were blown over and the roof of a large building was damaged near the Alliance Airport. There are no FEMA certified safe rooms located in the City of Alliance. High winds have also caused significant tree damage in Alliance which have blocked roads, downed powerlines, and caused some property damages. Tree debris removal is the responsibility of the city and hazardous trees are removed as needed. As a strong agricultural community, numerous fertilizer, fuel, and propane tanks are located in town and the surrounding areas. The city has adopted codes which require such tanks to be anchored to prevent tipping during high wind events.

Is this hazard still of concern for your community? (circle one) Yes No
If no, please skip the following questions.

Have there been any changes since the last plan? Does this accurately describe your community's risk or concern related to this hazard? Please describe any recent events and their impacts on the community.

What has the community done to mitigate risk to this hazard?

What needs to be done to reduce the risk to this hazard?

The following hazards are evaluated in the Hazard Mitigation Plan. From this list, please circle any other hazards which your community is concerned about and/or pursuing mitigation efforts for.

If top concerns are already identified for your community, please skip this section.

Animal & Plant Disease
Dam Failure
Drought
Extreme Temperatures
Flooding
Grass/Wildfires
Hazardous Materials Release
Human Infectious Disease
Severe Thunderstorms
Severe Winter Storms
Terrorism and Cyber Attack
Tornadoes and High Winds

As part of hazard prioritization, please provide some detail for each of the hazards you identified as to why they are of top concern, including past event descriptions, impacts to vulnerable populations, injuries, fatalities, property/crop damages, and current or future mitigation efforts.

Hazard #1: _____

Describe past events which have impacted your community. Please include the date of event, any property damages, or repairs that were required.

Why was this hazard selected as a top concern for the community? What specific vulnerabilities does the community have to this hazard?

Have you completed any projects to reduce your risk to this hazard?

What projects are needed in the future to reduce risk to your community?

DRAFT

Hazard #2: _____

Describe past events which have impacted your community. Please include the date of event, any property damages, or repairs that were required.

Why was this hazard selected as a top concern for the community? What specific vulnerabilities does the community have to this hazard?

Have you completed any projects to reduce your risk to this hazard?

What projects are needed in the future to reduce risk to your community?

Round 1 Plan Integration Worksheet



Region 23 EMA

HAZARD MITIGATION PLAN

PLAN INTEGRATION WORKSHEET

JEO CONSULTING GROUP
AUGUST 2024

Name(s):_____

Jurisdiction:_____

1

INTRODUCTION

Thank you for participating in the Region 23 Hazard Mitigation Plan.

The Hazard Mitigation Plan determines vulnerabilities to natural and human-caused hazards in your jurisdiction, then identifies mitigation projects to reduce or eliminate those vulnerabilities. An approved HMP is a requirement of the Federal Emergency Management Agency (FEMA) for jurisdictions to become eligible for Hazard Mitigation Assistance grants.

FEMA encourages jurisdictions to integrate their hazard mitigation plan with other planning mechanisms, such as their building codes, comprehensive plans, zoning ordinances, etc. to ensure that plans across a jurisdiction are consistent and reflect overall goals.

This worksheet will identify the ways that other plans in your jurisdiction are, or could be, aligned with hazard mitigation principles. The information you provide will be used to develop the plan integration section of your jurisdictional profile.

Please complete these worksheets and return them to JEO Consulting Group by September 16th.

Email: akohel@jeo.com

Phone: 402-474-8753

Mail: JEO Consulting Group
Attn: Anthony Kohel
2000 Q Street Suite 500
Lincoln, NE 68503

2

STEP 1

Please complete the following table.

Which of these plans/ordinances does your jurisdiction have?

Plan/Ordinance	Yes/No	Year of most recent update
Comprehensive Plan		
Zoning Ordinance		
Subdivision Regulations		
Floodplain Regulations/Ordinance		
Building Code		
Capital Improvements Plan		
Wellhead Protection Plan		
Water System Emergency Response Plan		
Community Wildfire Protection Plan		
Drought Ordinance / Drought Management Plan		
Other:		
Other:		

For any additional plans your community has, e.g. Evacuation Plan, Stormwater Management Plan, etc., please send JEO a copy.

STEP 2

In the following pages, please complete the sections that are applicable to your jurisdiction's plans/ordinances.

3

Comprehensive Plan

Does the comprehensive plan discuss natural hazards? ☐ Yes ☐ No

If yes, which hazards are discussed?

Does your comprehensive plan:

Contain goals/objectives aimed at Safe Growth: ☐ Yes ☐ No ☐ In future update

Direct development away from the floodplain: ☐ Yes ☐ No ☐ In future update

Direct housing away from chemical storage facilities: ☐ Yes ☐ No ☐ In future update

Direct housing and vulnerable populations away from major transportation routes: ☐ Yes ☐ No ☐ In future update

Encourage infill development: ☐ Yes ☐ No ☐ In future update

Encourage elevation of structures located in the floodplain: ☐ Yes ☐ No ☐ In future update

Identify areas that need emergency shelters: ☐ Yes ☐ No ☐ In future update

Has the hazard mitigation plan been integrated with the comprehensive plan? If yes, how?

Is there a plan or timeline to update your comprehensive plan? ☐ Yes ☐ No

If yes, explain the plan or timeline.

Building Code

If the building codes are based on the International Building Codes, what year/version is in effect? Have any amendments to the Code been made? If yes, please describe.

How is enforcement of the building code done?

Has the hazard mitigation plan been integrated with the building code? If yes, how?

4

Zoning Ordinance / Floodplain ordinance / Subdivision Regulations

Is there a plan or timeline to update your Zoning Ordinance / Floodplain Ordinance / Subdivision Regulations?

☐ Yes ☐ No

If yes, explain the plan or timeline.

Do the Zoning Ordinance / Floodplain Regulations / Subdivision Regulations:

Restrict Development in hazard prone areas?	☐ Yes ☐ No ☐ In future update
Prohibit development within the floodplain?	☐ Yes ☐ No ☐ In future update
Discourage development in the floodplain?	☐ Yes ☐ No ☐ In future update
Limit population density in the floodplain?	☐ Yes ☐ No ☐ In future update
Require **more** than one foot of elevation above Base Flood Elevation in the floodplain?	☐ Yes ☐ No ☐ In future update
Discourage housing and vulnerable populations near chemical storage sites?	☐ Yes ☐ No ☐ In future update
Consider wildfire and the wildland urban interface?	☐ Yes ☐ No ☐ In future update
Do the subdivision regulations restrict subdivision of land within or adjacent to the floodplain?	☐ Yes ☐ No ☐ In future update
Include well setback requirements?	☐ Yes ☐ No ☐ In future update
Include the ability to implement water restrictions?	☐ Yes ☐ No ☐ In future update

Has the hazard mitigation plan been integrated into these planning documents? If yes, how?

Drought Ordinance / Drought Management Plan / Wellhead Protection Plan / Water System Emergency Response Plan

Please provide an electronic copy or a link of the plan(s) to JEO.

5

Capital Improvement Plan

Is there a plan or timeline to update your Capital Improvement Plan? ☐ Yes ☐ No

If yes, explain the plan or timeline.

Does the Capital Improvement Plan include:

Stormwater projects?	☐ Yes ☐ No ☐ In future update
Upsizing of culverts and drainage structures?	☐ Yes ☐ No ☐ In future update
Radio Communication Upgrades?	☐ Yes ☐ No ☐ In future update
Widening roadways that would improve evacuations?	☐ Yes ☐ No ☐ In future update
Bridge improvements?	☐ Yes ☐ No ☐ In future update
Installing new municipal wells?	☐ Yes ☐ No ☐ In future update
Upsizing water distribution pipes?	☐ Yes ☐ No ☐ In future update
Installing water meters for residential structures?	☐ Yes ☐ No ☐ In future update
Updating electrical distribution system?	☐ Yes ☐ No ☐ In future update
Burying powerlines?	☐ Yes ☐ No ☐ In future update
Installing emergency generators in critical facilities?	☐ Yes ☐ No ☐ In future update
Emergency Operations Center / Emergency Coordination Center Construction/Upgrades	☐ Yes ☐ No ☐ In future update
Constructing a new fire hall?	☐ Yes ☐ No ☐ In future update
Constructing a new police headquarters?	☐ Yes ☐ No ☐ In future update
Constructing a new public works facility?	☐ Yes ☐ No ☐ In future update
Constructing/Upgrade 911 Communication Center?	☐ Yes ☐ No ☐ In future update
Constructing a community storm shelter?	☐ Yes ☐ No ☐ In future update
Constructing a new water treatment facility?	☐ Yes ☐ No ☐ In future update

Has the hazard mitigation plan been integrated with the capital improvement plan? If yes, how?

6

Round 1 Stakeholder Worksheet

Region 23 EMA
2025 Hazard Mitigation Plan
Hazard Prioritization

Organization_____ **Name(s)** _____

As part of the Region 23 Hazard Mitigation Plan, the following hazards are evaluated at the regional level. Stakeholders are encouraged to participate in this planning process by identifying top hazards of concern which may impact their organization or community they are a part of. Furthermore, your input to the planning process ensures identified mitigation efforts are appropriate and consistent with the communities you work with or the populations you serve and represent. Top hazards of concern may include those which have produced significant damage to facilities, power outages, injuries or fatalities, or a lack of adequate resources, etc.

From the list below, please identify your top hazards of concern (3 to 5 hazards).

- Animal & Plant Disease
- Dam Failure
- Drought
- Extreme Temperatures
- Flooding
- Grass/Wildfire
- Hazardous Materials Release
- Human Infectious Disease
- Severe Thunderstorms
- Severe Winter Storms
- Terrorism and Cyber Attack
- Tornadoes and High Winds

Which of the above hazards are of top concern?

1. _____
2. _____
3. _____
4. _____
5. _____

Region 23 EMA Hazard Mitigation Plan | 2025 1

As part of the hazard prioritization, please provide some detail for each of the hazards you identified as to why they are of top concern, including past event descriptions, impacts to vulnerable populations, injuries, fatalities, property/crop damages, and current or future mitigation efforts.

Hazard #1: _____

- Describe past events which have impacted your agency or organization. Please include the date of event, any property damages, or repairs that were required.

- What are your top concerns for this hazard? (e.g., injuries or fatalities, blocked transportation routes, crop damages, impacts on vulnerable populations, disruption of services, etc.)

- Have you completed any projects to reduce your risk to this hazard?

- What projects are <u>needed in the future</u> to reduce risk to the community or your organization?

Hazard #2: _____

- Describe past events which have impacted your agency or organization. Please include the date of event, any property damages, or repairs that were required.

- What are your top concerns for this hazard? (e.g., injuries or fatalities, blocked transportation routes, crop damages, impacts on vulnerable populations, disruption of services, etc.)

- Have you completed any projects to reduce your risk to this hazard?

- What projects are <u>needed in the future</u> to reduce risk to the community or your organization?

Hazard #3: _____

- Describe past events which have impacted your agency or organization. Please include the date of event, any property damages, or repairs that were required.

- What are your top concerns for this hazard? (e.g., injuries or fatalities, blocked transportation routes, crop damages, impacts on vulnerable populations, disruption of services, etc.)

- Have you completed any projects to reduce your risk to this hazard?

- What projects are <u>needed in the future</u> to reduce risk to the community or your organization?

Hazard #4: _____

- Describe past events which have impacted your agency or organization. Please include the date of event, any property damages, or repairs that were required.

- What are your top concerns for this hazard? (e.g., injuries or fatalities, blocked transportation routes, crop damages, impacts on vulnerable populations, disruption of services, etc.)

- Have you completed any projects to reduce your risk to this hazard?

- What projects are <u>needed in the future</u> to reduce risk to the community or your organization?

Hazard #5: _____

- Describe past events which have impacted your agency or organization. Please include the date of event, any property damages, or repairs that were required.

- What are your top concerns for this hazard? (e.g., injuries or fatalities, blocked transportation routes, crop damages, impacts on vulnerable populations, disruption of services, etc.)

- Have you completed any projects to reduce your risk to this hazard?

- What projects are <u>needed in the future</u> to reduce risk to the community or your organization?

Round 2 Meeting Invitation

Participating Jurisdictions Round 2 Meeting Invitation

November 21, 2024

RE: Region 23 Hazard Mitigation Plan - Round 2 Public Meeting

Dear Hazard Mitigation Planning Participant,

The Region 23 Emergency Management Agency (Region 23) is moving forward with the second phase and meeting of its Hazard Mitigation Plan update. You are receiving this letter because your jurisdiction's attendance is required to continue participation in this planning effort. The intent of this meeting is to gather and review vital information including updating previous mitigation alternatives, identifying new mitigation alternatives, and reviewing previously collected data.

FEMA requires at least one representative from your jurisdiction to participate in the planning process in order to be recognized as a participating jurisdiction. This is the second and last meeting required in this planning process and will last approximately 1 to 1.5 hours. The meeting can be attended in person or virtually. If you are unable to attend, please contact JEO on how to get caught up.

Meeting details are found below. Food will be provided.

- Chadron: Monday, **January 6 at 6:00 pm (MT)** at the Region 23 EMA Office, 250 Main St, Chadron, NE 69337
  - Or Join Online at https://us02web.zoom.us/j/83458639253

If you are joining online, you can access and download your jurisdiction's meeting worksheets starting January 3rd by visiting this Google Drive link: https://bit.ly/Region23_GoogleDrive.

Please RSVP to the meeting by contacting Anthony Kohel, JEO Planner, at (402) 474-8753 or akohel@jeo.com. For more information, you can visit the project website at https://www.jeo.com/region23-hmp. If you have any questions, please contact Region 23 or JEO. We are looking forward to seeing you at the Round 2 meeting!

Sincerely,

Anthony Kohel, Planner
JEO Consulting Group
On behalf of Region 23

cc. Nan Gould, Region 23 Emergency Manager

JEO CONSULTING GROUP, INC.
JEO ARCHITECTURE, INC.
p: 402.435.3080
f: 402.435.4110
2000 Q Street, Suite 500
Lincoln, Nebraska 68503
jeo.com

Stakeholder Round 2 Meeting Invitation

November 21, 2024

RE: Region 23 Hazard Mitigation Plan - Round 2 Public Meeting

Dear Hazard Mitigation Planning Stakeholder,

The Region 23 Emergency Management Agency (Region 23) is moving forward with the second phase and meeting of its Hazard Mitigation Plan update. You are receiving this letter because you are a **stakeholder** in this planning effort. The intent of this meeting is to gather and review vital information, including updating previous mitigation alternatives, identifying new mitigation alternatives, and reviewing previously collected data.

As a stakeholder, you are encouraged to provide input to the planning process to ensure identified mitigation efforts are appropriate and consistent with the special needs of the organization you represent. Your input will be integrated into the larger community profile prepared by your community's local representatives. The meeting will last approximately 1 to 1.5 hours and can be attended in person or virtually.

Meeting details are found below. Food will be provided.

- Chadron: Monday, **January 6 at 6:00 pm (MT)** at the Region 23 EMA Office, 250 Main St, Chadron, NE 69337
  - Or Join Online at https://us02web.zoom.us/j/83458639253

If you are joining online, you can access and download your community's meeting worksheets starting January 3rd by visiting this Google Drive link: https://bit.ly/Region23_GoogleDrive.

Please RSVP to the meeting by contacting Anthony Kohel, JEO Planner, at (402) 474-8753 or akohel@jeo.com. For more information, you can visit the project website at https://www.jeo.com/region23-hmp. If you have any questions, please contact Region 23 or JEO. We are looking forward to seeing you at the Round 2 meeting!

Sincerely,

Anthony Kohel, Planner
JEO Consulting Group
On behalf of Region 23

cc. Nan Gould, Region 23 Emergency Manager

JEO CONSULTING GROUP, INC.
JEO ARCHITECTURE, INC.
p: 402.435.3080
f: 402.435.4110
2000 Q Street, Suite 500
Lincoln, Nebraska 68503
jeo.com

Round 2 Sign-In Sheets

In-Person Sign-in Sheets

Chadron Round 2 Meeting Sign-In Sheet Page 1 of 1

Region 23 EMA Hazard Mitigation Plan Update
Round 2 Meeting
Chadron, NE – January 6, 2025 – 6:00 PM

Name	Title	District/Jurisdiction Represented	Address	Phone	Email	Signature
Phil Luebbert	Senior Planner	JEO Consulting Group	201 Coffman St #1536 Longmont, CO 80502	402-474-8768	pluebbert@jeo.com	
Anthony Kohel	Planner	JEO Consulting Group	2000 Q St. Ste 500 Lincoln, NE 68503	402-474-8753	akohel@jeo.com	
Mary Baker	Resiliency Strategist	JEO Consulting Group	2000 Q St. Ste 500 Lincoln, NE 68503	402-474-8748	mbaker@jeo.com	
Nan Gould	Coordinator	Region 23 EMA	250 Main St Chadron, NE 69337	308-432-2251	coordinator@region23em.org	
Ashley Ahrens	Lead educator	Dawes County Extension	250 Main St, Ste 8 Chadron, NE 69337	308-432-3543	agoad2@unl.edu	
Barbara Keegan	Highway Superintendent	Box Butte County	101 Howard St Alliance, NE 69301	308-762-6797	road@boxbuttecountyne.gov	(virtual)
Darren Snively	~~Fire Weather Program Leader~~ WFMC	National Weather Service – ~~North Platte~~ Cheyenne			darren.v.snively@noaa.gov	(virtual)
David Leavitt	Chief of Police	City of Alliance	PO Box D Alliance NE 69301	308-762-4955	dleavitt@bbcpublicsafety.us	
Eugene "Mo" Hanks	Superintendent	Crawford Public Schools	908 5th St Crawford, NE 69339	308-665-1928	eugene.hanks@cpsrams.org	
James Krotz	Commissioner	Sheridan County	3484 520th Rd Rushville, NE 69360		jkrotz@sheridancounty.ne.gov	(Virtual)
John Reed	City Manager	City of Gordon	311 North Oak St Gordon, NE 69343	308-282-0839	reedj@gordon-ne.us	
Josh Stadler	Maintenance Supervisor	Chadron Public Schools	602 E 10th St Chadron NE 69337	307-670-5242	josh.stadler@chadronschools.net	
Nathan Livingston	Superintendent	Gordon-Rushville Public Schools	PO Box 530 Gordon NE 69343	308-282-1322	nathan.livingston@grmustangs.org	(Virtual)
Patrick O'Brien	General Manager	Upper Niobrara White NRD	430 E 2nd St Chadron NE 69337	308-432-6190	obrien@unwnrd.org	
Roy Retzlaff	Board Member	Village of Clinton	RR #1, Box 137 Gordon NE 69343		royretz@live.com	
Samantha Orr	City Clerk	City of Hay Springs	PO Box B Hay Springs NE 69347	308-638-7275	hayspringscityhall@gpcom.net	
Shauna Smith	City Clerk	City of Rushville	PO Box 99 Rushville NE 69360	308-327-2221	rushcity@gpcom.net	
Shawn Jacobs	Warning Coordination Meteorologist	National Weather Service – North Platte			shawn.jacobs@noaa.gov	(Virtual)
Troy Shoemaker	Fire Chief	City of Alliance/ Alliance Fire District	PO Box D Alliance NE 69301	308-762-2151	tshoemaker@cityofalliance.net	
Jake Stewart	County Commissioner	Dawes Co			commissioncstewartj@gmail.com	
Brandon Waters	Chadron VFD	CVFD	P.O. Box 829	316-217-1100	brandonrwaters@gmail.com	

Please Sign In!

Round 2 Example Participant Profile with Questions

Community Profile

City of Alliance

Region 23 EMA
Hazard Mitigation Plan 2025

Name(s): _____

Date: _____

Worksheets Due By: _____

Please answer the questions in red italics. Your responses are critical for completing this Community Profile.

Completed Community Profiles and other worksheets can be returned to JEO Consulting Group, Attn: Anthony Kohel, 2000 Q Street Ste 500, Lincoln, NE 68503 or akohel@jeo.com. If you have any questions, please call 402-474-8753.

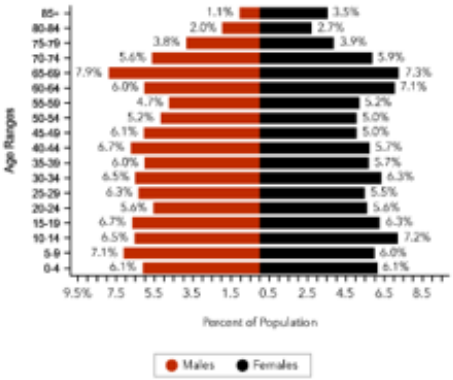
Community Fact Sheet

Community Summary Fact Sheet

Alliance, NE
Region 23 EMA Hazard Mitigation Plan 2025

7,919	40.2	3,359	2.33	$176,570	$66,875
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



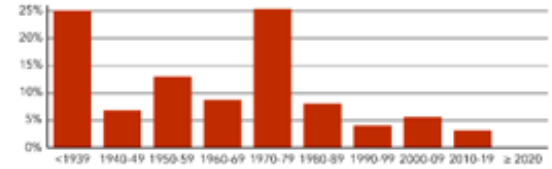
TOTAL POPULATION

2024 Total Population (Estimate)	7,919
2020 Total Population (U.S. Census)	8,136
2010 Total Population (U.S. Census)	8,471
2000 Total Population (U.S. Census)	8,966

AT RISK POPULATIONS

1,036	1,726	194	16%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

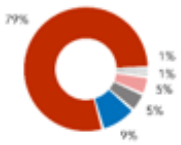
HOUSING: YEAR BUILT



EMPLOYMENT

375	2.9%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- Asian Population
- Black Population
- American Indian Population
- Other Race Population
- Population of 2+ Races
- White Population

15% of the Total Population is Hispanic

HOUSING

469	3%
Vacant Housing Units	Mobile Homes

esri | Source: Esri, U.S. Census, Esri-Data Axle, ACS, Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Troy Shoemaker	Fire Chief	City of Alliance	Yes	
Brent Kusek	Community Development Director	City of Alliance	Yes	

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

For your jurisdiction, what positions are responsible for reviewing and updating the profile outside of the five-year update?

Position: _____

Position: _____

Position: _____

Please indicate how frequently your jurisdiction intends to review/revise the profile. (circle one)

Every 6 months ***Annually*** ***Bi-annually***

How will your jurisdiction notify and involve the public in the plan review and revision? (For example, social media, website updates, letters to all residents, board/council meetings, etc.)

Capability Assessment

The planning team assessed the City of Alliance's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes

Capability/Planning Mechanism		Yes/No
	Floodplain Management Plan	Yes
	Storm Water Management Plan	Yes
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	If yes:	Year Adopted: 2021
		ICC Edition: 2018
	Water System Emergency Response Plan	Yes
	Wellhead Protection Plan	
	National Flood Insurance Program	Yes
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Other (if any)	
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	No
	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	Yes
	Storm Water Service Fees	No
	Development Impact Fees	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes

Capability/Planning Mechanism		Yes/No
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	Yes
	Firewise Communities Certification	No
	Tree City USA	Yes
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

National Flood Insurance Program (NFIP)

NFIP Information

NFIP Overview	
Date of NFIP Participation:	07/16/1987
Floodplain Administrator:	Brent Kusek
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	4
Total NFIP Premium ($):	$1,539
Total NFIP Coverage ($):	$963,000
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	N/A
Number of Repetitive Loss Structures:	N/A
Number of Severe Repetitive Loss Structures:	N/A
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Paper
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year floodplain at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following tables.

Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
3,412	$508,567,214	224	$33,985,425	6.6%

Source: County Assessor, 2024

Plans and Studies

The City of Alliance has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the city updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Building Code (2021)

The building code sets standards for constructed buildings and structures. Alliance's building codes are based on the 2018 International Code Council. These codes regulate and govern the conditions and maintenance of all property, buildings, and structures by providing the standards for supplied utilities, facilities, and other physical things and conditions essential to ensure that structures are safe, sanitary, and fit for occupation and use. Enforcement of the zoning code is done prior to building permits being issued, while building code inspection is done by city officials during construction. There have been two amendments to the Residential code. The first made sprinklers optional on housing covered by the respective code. The second amended the Fuel Gas Code making natural gas hookups on lots adjacent to utility and disallowed large propane tanks. The hazard mitigation plan has not been integrated with the city building code.

Capital Improvement Plan

The purpose of the capital improvement plan is for the city to strategize how to budget for nonrecurring physical or digital purchases. A capital improvement plan typically spans multiple years and includes financing plans. The plan includes radio communication upgrades, municipal wells, upsizing of culverts and drainage structures, installing water meters for residential structures, and updating the electrical distribution system. The city plans to update the capital improvement plan to a 10-year CIP process.

Comprehensive Plan (2023)

The comprehensive plan is designed to guide the future actions and growth of the city. The plan directs development away from the floodplain, directs housing away from chemical storage facilities, directs housing and vulnerable populations away from major transportation routes, and encourages infill development. The city plans to incorporate information from the hazard mitigation plan into its next comprehensive plan update. The plan is reviewed annually and heavily updated every ten years to reflect changes. The plan includes the following: directing development away from the floodplain, directing housing away from chemical storage facilities, directing housing and vulnerable populations away from major transportation routes and encouraging infill development. The comprehensive plan gets reviewed annually and is updated heavily every ten years to reflect changes, goals accomplished, and future goals.

Floodplain Regulation Ordinance (2023), Zoning Ordinance (2023), and Subdivision Regulations (2023)

The city's floodplain regulations, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. These documents include the ability to implement redistrict development in hazard prone areas, discourage development in the floodplain, and discourage housing and vulnerable populations near chemical storage sites. The city reviews these documents annually to make sure it complies with local needs and requirements from State and Federal jurisdictions. The documents include the following: restricting development in hazard

prone areas, discouraging development within the floodplain and discouraging housing and vulnerable populations near chemical storage sites. The hazard mitigation plan has been integrated into the documents through the floodplain regulations and storm water drainage requirements.

Box Butte County Local Emergency Operations Plan (2023)

The Box Butte County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan.

Pine Ridge Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Water System Emergency Response Plan (2022)

The water system emergency response plan serves as a guideline for water operators and city officials to minimize the disruption of normal services to consumers and to provide public health protection during an emergency event. The document identifies several natural and human-caused events and discusses the water system's response during those events.

Future Development Trends

The following are new businesses that have been developed within the city:

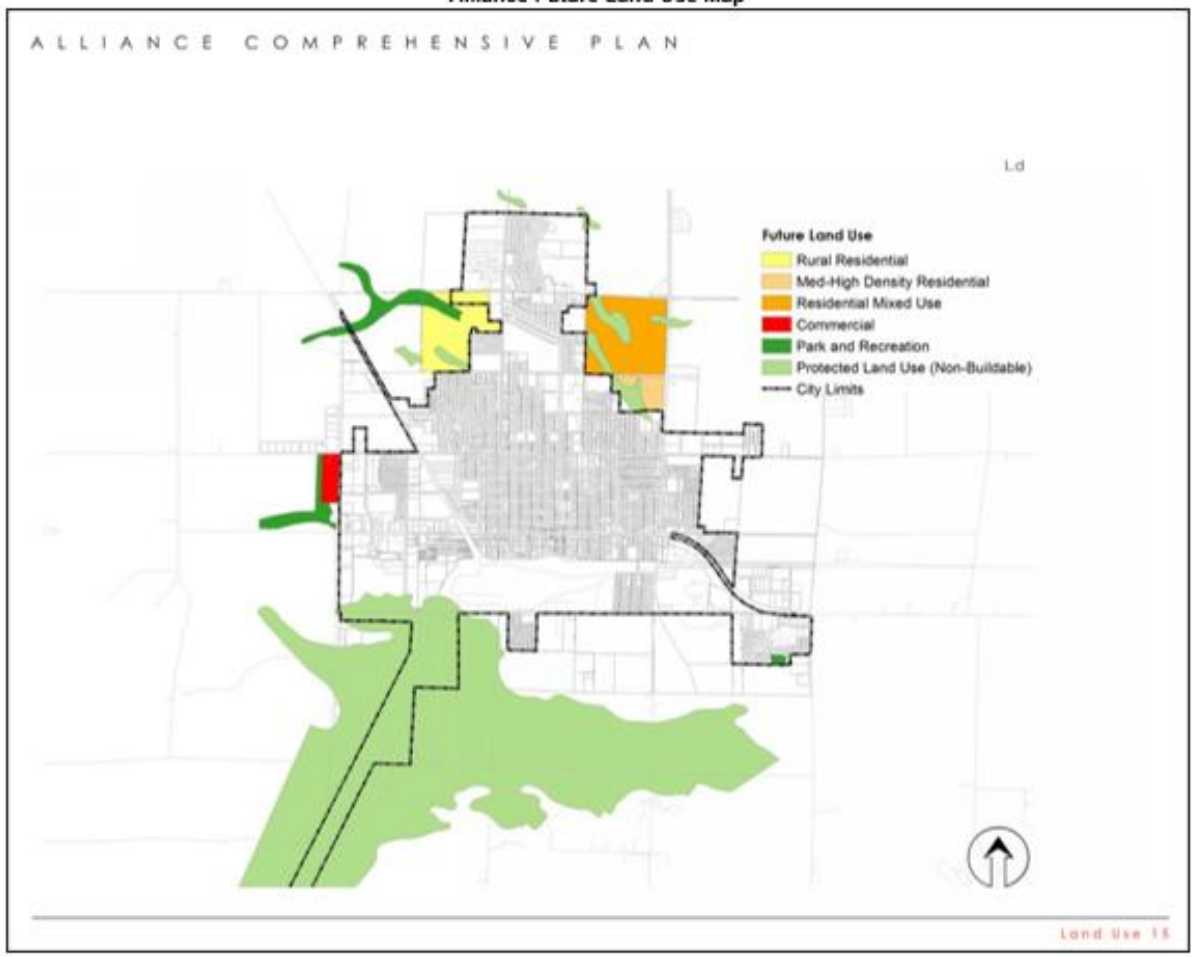
- Runza, 2461 S Hwy 385
- WESTCO Tire Shop, 1630 West 10th Street
- WESTCO Agronomy, 2377 Highway 2
- WESTCO Agronomy Storage, 2381 Highway 2
- WESTCO Bulk Fertilizer Warehouse, 2371-3 Highway 2
- Holiday Inn Express, 1630 Holsten Drive
- Heartland Flats, 2465 S Hwy 385
- Platte Valley Bank,
- City of Alliance Public Works/Public Transit, 106 S Cody Avenue
- Alliance Fire Department Training Facility, 1408 West 1st Street
- WNCC Lineman School Addition, 1621 East Kansas
- Consumers Co-op Credit Union, 1301 West 3rd Street
- Pizza Hut, 1239 East 3rd Street
- Scooters Coffee, 1439 West 3rd
- Oreilly Auto Parts, 1242 West 3rd
- Dollar General, 1229 West 3rd

The following are buildings that have been demolished within the city:

- WESTCO Tire and Automotive, 3rd and Big Horn
- 716 Big Horn
- 123 Box Butte Avenue
- 640 Belmont
- 321 West 6th Street
- 207 Sweetwater Avenue
- 310 East 3rd Street
- 610 East 7th Street
- 100 Big Horn (City of Alliance Warehouse #3)
- 105 Big Horn Avenue (City of Alliance Parks Building)
- City of Alliance Old Swimming Pool house, 16th Street and Cheyenne Avenue
- Alliance Animal Clinic, 903 Flack Avenue
- 1811 Nebrado Street
- BNSF Terminal Building and Yard Tower, 800 West Kansas Street

None of the new development projects have occurred near the floodplain or other hazardous areas and no new businesses are planned or anticipated in the near future.

Alliance Future Land Use Map



Region 23 EMA Hazard Mitigation Plan | 2025 9

Community Lifelines

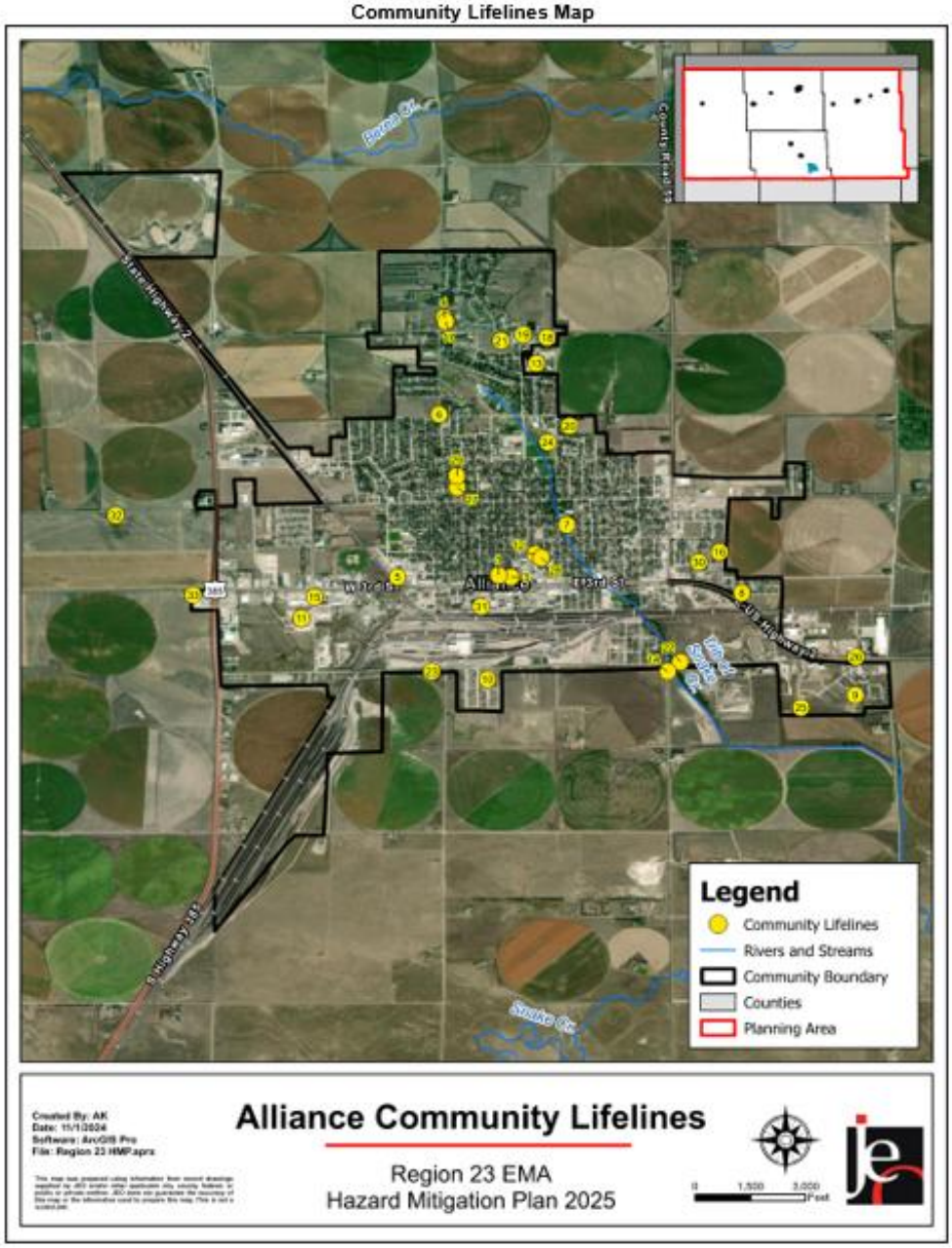
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Alliance Fire Department	Safety & Security	G	N
2	Alliance Municipal Airport*	Transportation	G	N
3	Alliance Municipal Building (City Manager, City Clerk)	Safety & Security	G	N
4	Alliance Outdoor Warning Siren #1	Safety & Security		N
5	Alliance Outdoor Warning Siren #2	Safety & Security		N
6	Alliance Outdoor Warning Siren #3	Safety & Security		N
7	Alliance Outdoor Warning Siren #4	Safety & Security		Y
8	Alliance Outdoor Warning Siren #5	Safety & Security		N
9	Alliance Outdoor Warning Siren #6	Safety & Security		N
10	Alliance Outdoor Warning Siren #7	Safety & Security		N
11	Alliance Public Works (Water, Sewer, Electric, Public Transit)	Safety & Security	G	N
12	Box Butte County Courthouse/Sheriff's Office	Safety & Security		N
13	Box Butte Hospital	Health & Medical	G	N
14	Broadwater Substation	Energy		Y
15	Cody Substation	Energy		N
16	Elkhorn Water Tower	Water Systems		N
17	Emerson Substation	Energy		N
18	Good Samaritan Society-The Sandhills	Health & Medical		N
19	Good Samaritan Society-Wildflower Terrace Senior Living	Health & Medical		N
20	Highland Park Care Center	Health & Medical	G	N
21	Highland Park-Cross Roads Assisted Living	Health & Medical		N
22	Lift Station A	Water Systems		Y
23	Lift Station B	Water Systems		N
24	Lift Station C	Water Systems		N
25	Lift Station D	Water Systems		N
26	Lift Station E	Water Systems		N
27	Marian Residence	Health & Medical		N
28	Regional Law Enforcement Center	Safety & Security	G	N
29	Toluca Water Tower	Water Systems		N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Alliance which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the City of Alliance. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

The local planning team identified grass/wildfire as a significant threat for the city. According to the Nebraska Forestry Service there were 338 reported fires by the Alliance Fire Department from 2000 to 2021 which consumed a total of 6,390 acres. Of the reported events, one fire in August of 2012 consumed approximately 1,000 acres. The City of Alliance participates in the Pine Ridge Community Wildfire Protection Plan (CWPP). According to the CWPP, Alliance is located within the WUI. The Alliance Fire Department has mutual aid agreements with the fire departments in the surrounding areas, but during large scale events it is possible nearby fire department would be unable to lend assistance due to addressing the needs of their respective community/protection area.

Severe Thunderstorms

Severe thunderstorms are a regular part of the climate for Box Butte County and Alliance. The NCEI recorded 95 severe thunderstorm events from 1996 to 2023, with $431,100 in damages to property and $0 in crop damage. Severe thunderstorms and hail can result in the loss of electricity, blocked roadways, damage to trees, and flooding. Blocked roadways present life safety concerns to those needing evacuation or immediate medical attention.

Severe Winter Storms

The planning teams estimated that severe winter storms were highly probable in the future for Alliance. According to the NCEI, there were 107 severe winter storms in Box Butte County from 1996 to 2023. These storms resulted in $62,000 in property damage and $1,000 in crop damage. A winter storm in 1997 caused significant damage by downing power poles and lines and up to a foot of snow blocked major transportation routes. A semi-trailer tipped and crashed in Alliance while north of town approximately 55 cattle escaped enclosures and were killed on the railroad tracks when struck by a BNSF train in near-zero visibility conditions.

Since the storm event is zonal in nature, the number that impacted Alliance is unknown. Major local concerns regarding severe winter storms include blocked transportation routes and the safety of residents. The city is responsible for clearing snow from local roads and snow removal plans and resources are reviewed or updated annually as needed.

Tornadoes and High Winds

The local planning team identified tornadoes and high winds as a significant concern for the City of Alliance. According to the NCEI data, there were seven tornadoes that passed near Alliance from 1996 to 2023. All tornados were either EF/F0 with all but one having no reported damages. A June 2017 tornado caused $1,000,000 in property damage when 65 train cars were blown over and the roof of a large building was damaged near the Alliance Airport. There are no FEMA

certified safe rooms located in the City of Alliance. High winds have also caused significant tree damage in Alliance which have blocked roads, downed powerlines, and caused some property damage. Tree debris removal is the responsibility of the city and hazardous trees are removed as needed. As a strong agricultural community, numerous fertilizers, fuel, and propane tanks are located in town and the surrounding areas. The city has adopted codes which require such tanks to be anchored to prevent tipping during high wind events.

DRAFT

Review Mitigation and Strategic Actions

Please review the following mitigation actions identified in the previous HMP, make any changes needed, and fill in missing information. Mark if each action has been completed, kept, or should be removed and describe the current status of the action.

Note: FEMA now requires that every hazard identified in the plan must have at least one mitigation action that addresses it.

Action	Backup Power Generators		
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters. *Previous Plan stated: "This project has not yet been started. All city offices are in need of backup generators."*		
Hazard(s) Addressed	All Hazards		
Estimated Cost	$15,000 - $30,000+ per generator		
Local Funding	City General Fund, HMGP, BRIC		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	City of Alliance Electrical Department		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Civil Service Improvements		
Description & Location	Improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment. This can include fire trucks, ATV's, water tanks/trucks, snow removal equipment, etc. This would also include developing backup systems for emergency vehicles and identifying and training additional personnel for emergency response. *Previous Plan stated: "This project has not yet been started."*		
Hazard(s) Addressed	All Hazards		
Estimated Cost	Varies by need		
Local Funding	City General Fund, Box Butte County, BRIC, HMGP		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	City Clerk, Utilities Departments		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Complete/Update Community Wildfire Protection Plan		
Description & Location	Complete and/or update a CWPP. A CWPP enables a community to plan how it will reduce the risk of wildfire. *Previous Plan stated: "The Pine Ridge Area Community Wildfire Protection Plan is being updated as part of the 2020 HMP Update. The city will continue to participate in ongoing updates of the CWPP."*		
Hazard(s) Addressed	Wildfire		
Estimated Cost	$25,000		
Local Funding	HMGP, BRIC, Region 23 Cost Share, City Staff Time		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	Region 23 Emergency Management Agency, Fire Department		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Comprehensive City Disaster/Emergency Response/Rescue Plan		
Description & Location	Update comprehensive city/village disaster and emergency response /rescue plan. *Previous Plan stated: "This is an ongoing action. The plan is updated regularly or as needed."*		
Hazard(s) Addressed	All Hazards		
Estimated Cost	$6,000+		
Local Funding	City General Fund, Box Butte County, HMGP, BRIC		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	City Commissioners, Police Department, Region 23 Emergency Management Agency		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Drainage Study/Stormwater Management Plan		
Description & Location	Preliminary drainage studies and assessments can be conducted to identify and prioritize design improvements to address site specific localized flooding/drainage issues to reduce and/or alleviate flooding. Stormwater master plans can be conducted to perform a community- wide stormwater evaluation, identifying multiple problem areas and potential drainage improvements. Update the current Stormwater Management Plan. *Previous Plan stated: "This project has not yet been started."*		
Hazard(s) Addressed	Flooding		
Estimated Cost	$10,000 - $15,000		
Local Funding	City General Fund, CDBG, Upper Niobrara White NRD		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	City of Alliance Public Works, Floodplain Administrator		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Emergency Communications		
Description & Location	Establish a county-wide inter-operable communication system that ties the City of Alliance Public Safety Answering Point (PSAP) to the South-Central 911 System for the sharing of 911 equipment to strengthen regionalization efforts. Establish a county-wide emergency radio communication system that connects to Nebraska's Statewide Radio System (SRS). *Previous Plan stated: "This project is in progress. The Alliance Fire Department has purchased new radio equipment and is currently working with Motorola Solutions to engineer connections with all city departments."*		
Hazard(s) Addressed	All Hazards		
Estimated Cost	$1,500,000 - $2,000,000		
Local Funding	General Fund, HMGP, Emergency Communications Grants, Partnerships with Village of Hemingford and Box Butte County		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	Alliance Fire Department, City of Alliance		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Evacuation Plan		
Description & Location	Establish a plan to effectively evacuate residents during storm events and major flooding. *Previous Plan stated: "This project has not yet been started. Some evacuation planning is available in city emergency plan. Plan needs to be updated to meet local needs."*		
Hazard(s) Addressed	All Hazards		
Estimated Cost	$2,000+		
Local Funding	Region 23 EMA, DHS		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	Region 23 Emergency Management, Alliance Fire Department		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Expand Water Storage Capacity		
Description & Location	Evaluate the need to expand water storage capacity through a new water tower, standpipe, etc. to provide a safe water supply for the community and additional water for fire protection. Establish emergency water supplies such as dry hydrants and individual or community cisterns for defending structures from wildland fires. *Previous Plan stated: "This project has not yet been started."*		
Hazard(s) Addressed	Drought and Extreme Heat		
Estimated Cost	$30,000+		
Local Funding	CDBG, UNWNRD, City General Fund		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	Alliance Public Works Department		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Groundwater/Irrigation/Water Conservation Management Plan and Practices		
Description & Location	Develop and implement a plan/ best management practices to conserve water use and reduce total use (high water use to low water use) and consumption of groundwater resources by citizens and irrigators of agricultural land during elongated periods of drought Identify water saving irrigation projects of improvements such as sprinklers of soil moisture monitoring. Potential restrictions on water could include limitation on lawn watering, car washing, farm irrigation restrictions, or water sold to outside sources. Implement BMPs through water conservation practices such as changes in irrigation management, education on no-till agriculture and use of xeriscaping in communities. *Previous Plan stated: "This project has not yet been started."*		
Hazard(s) Addressed	Drought		
Estimated Cost	$10,000+		
Local Funding	City General Fund, UNWNRD, NDEE, HMGP, BRIC		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	Alliance Public Works Department		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Improve Snow/Ice Removal Programs		
Description & Location	Improve the snow routes and snow/ice removal procedures for streets. Improvements should address plowing snow, ice removal, parking during snow and ice removal, and removal of associated storm debris. *Previous Plan stated: "This is an ongoing action. The city annually reviews and updates its program."*		
Hazard(s) Addressed	Severe Winter Storms		
Estimated Cost	$20,000+		
Local Funding	City General Fund		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	Alliance Public Works Department		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Public Awareness/Education		
Description & Location	Considerations for activities include outreach projects and the distribution of maps and environmental education materials to increase public awareness of natural hazards to public and private property owners, property renters, businesses, and local officials. Other activities include providing education to citizens on water conservation methods. Purchasing and using equipment such as overhead projectors and laptops can allow for easier ways to educate the public during meetings *Previous Plan stated: "Education efforts to residents is an ongoing outreach effort."*		
Hazard(s) Addressed	All Hazards		
Estimated Cost	$500+		
Local Funding	City General Fund, HMGP, BRIC		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	City Administration, Region 23 EMA		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Safe Rooms		
Description & Location	Design and construct fully supplied safe rooms in highly vulnerable urban and rural areas such as mobile home parks, campgrounds, schools, and other such areas throughout the planning area. *Previous Plan stated: "This project has not yet been started."*		
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds		
Estimated Cost	$200-$300/sf stand-alone; $150-$200/sf addition/retrofit		
Local Funding	City General Fund, HMGP, BRIC		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	Alliance Fire Department, Region 23 EMA		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

Action	Stormwater System and Drainage Improvements		
Description & Location	Smaller communities may utilize stormwater systems comprising of ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacement or modification of bridges may be necessary to provide greater capacity, maintain or improve structural integrity during flood events, and eliminate flooding threats and damages. *Previous Plan stated: "The city has stated that a drainage study/stormwater management plan should take place to identify improvements to address flooding and drainage issues. Improvements will be made after the drainage study/stormwater management plan are developed."*		
Hazard(s) Addressed	Flooding		
Estimated Cost	$10,000-$100,000+		
Local Funding	City General Fund, Upper Niobrara White NRD		
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency	City of Alliance Public Works, Floodplain Manager		
Update (circle one)	Completed	Keep	Remove
Status	What is the current status of this project?		

New Mitigation and Strategic Actions

Please identify any new mitigation actions your jurisdiction is interested in pursuing or interested in applying for grant funding. Complete the table(s) below. Please fill out all rows. For examples of mitigation actions, review the provided FEMA Handbook (https://www.fema.gov/sites/default/files/2020-06/fema-mitigation-ideas_02-13-2013.pdf) or reach out to a JEO Project Contact.

Action			
Description & Location			
Hazard(s) Addressed			
Estimated Cost			
Local Funding			
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency			
Status			

Action			
Description & Location			
Hazard(s) Addressed			
Estimated Cost			
Local Funding			
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency			
Status			

Round 2 NFIP Worksheet

NATIONAL FLOOD INSURANCE PROGRAM

National Flood Insurance Program (NFIP) Worksheet

REGION 23 HAZARD MITIGATION PLAN 2025

JEO CONSULTING GROUP
JANUARY 2025

Name(s):_____

Jurisdiction:_____

Please return this worksheet to JEO Consulting Group by Monday January 27, 2025. It can be emailed to Anthony Kohel at akohel@jeo.com or mailed to JEO Consulting Group, Attn: Anthony Kohel, 2000 Q Street Suite 500, Lincoln, NE 68503.

1

NFIP QUESTIONS

Is your Floodplain Administrator a Certified Floodplain Manager? ☐ Yes ☐ No

Does your Floodplain Administrator have duties other than floodplain management? ☐ Yes ☐ No

Does your community plan to continue involvement with the NFIP in the future?

Please explain your community's floodplain permitting process.

How does your community enforce local floodplain regulations and ensure compliance?

Do your floodplain regulations exceed FEMA or State of Colorado Requirements? If yes, in what ways?

What digital tools (FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your Floodplain Administrator use?

How does your community identify substantially damaged structures after a flood event?

How does your community identify substantially improved structures?

2

What are the barriers (if any) to running your NFIP program effectively?

Describe any areas of flood risk in your community that have limited NFIP Policy Coverage. Why do they have limited coverage?

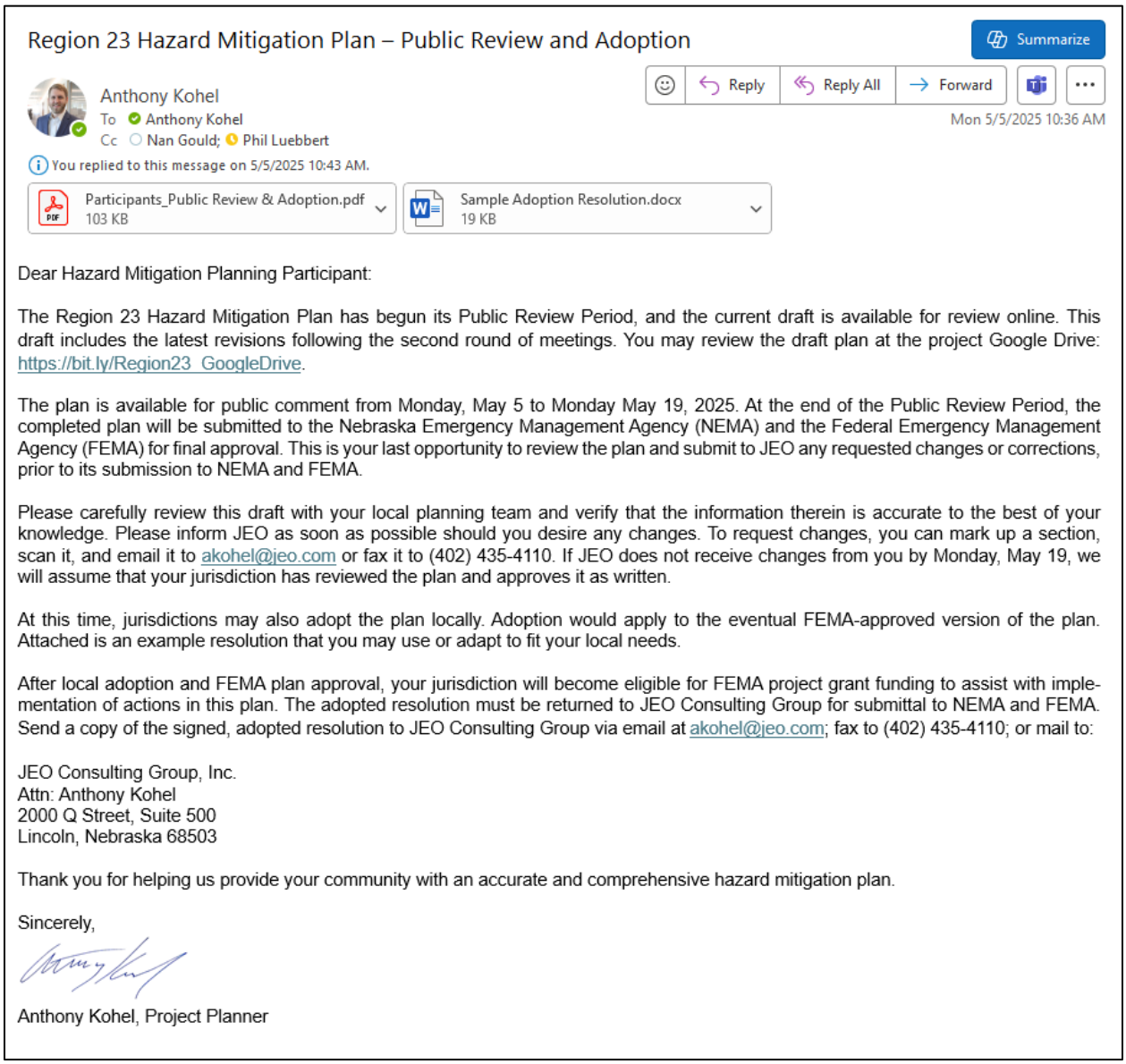
How does your community educate property owners or other stakeholders about the importance of flood insurance?

How are Letters of Map Change tracked and compiled?

3

Public Review Notification Email

Once the HMP draft was completed, a public review period was opened to allow participants and community members at large to review the plan, provide comments, and request changes. The public review period was open from May 5, 2025, through May 19, 2025. Participating jurisdictions were emailed or mailed a letter notifying them of this public review period. That email can be seen below.



Region 23 Hazard Mitigation Plan – Public Review and Adoption

Summarize

Reply | Reply All | Forward

Anthony Kohel
To Anthony Kohel
Cc Nan Gould; Phil Luebbert

Mon 5/5/2025 10:36 AM

You replied to this message on 5/5/2025 10:43 AM.

Participants_Public Review & Adoption.pdf
103 KB

Sample Adoption Resolution.docx
19 KB

Dear Hazard Mitigation Planning Participant:

The Region 23 Hazard Mitigation Plan has begun its Public Review Period, and the current draft is available for review online. This draft includes the latest revisions following the second round of meetings. You may review the draft plan at the project Google Drive: https://bit.ly/Region23_GoogleDrive.

The plan is available for public comment from Monday, May 5 to Monday May 19, 2025. At the end of the Public Review Period, the completed plan will be submitted to the Nebraska Emergency Management Agency (NEMA) and the Federal Emergency Management Agency (FEMA) for final approval. This is your last opportunity to review the plan and submit to JEO any requested changes or corrections, prior to its submission to NEMA and FEMA.

Please carefully review this draft with your local planning team and verify that the information therein is accurate to the best of your knowledge. Please inform JEO as soon as possible should you desire any changes. To request changes, you can mark up a section, scan it, and email it to akohel@jeo.com or fax it to (402) 435-4110. If JEO does not receive changes from you by Monday, May 19, we will assume that your jurisdiction has reviewed the plan and approves it as written.

At this time, jurisdictions may also adopt the plan locally. Adoption would apply to the eventual FEMA-approved version of the plan. Attached is an example resolution that you may use or adapt to fit your local needs.

After local adoption and FEMA plan approval, your jurisdiction will become eligible for FEMA project grant funding to assist with implementation of actions in this plan. The adopted resolution must be returned to JEO Consulting Group for submittal to NEMA and FEMA. Send a copy of the signed, adopted resolution to JEO Consulting Group via email at akohel@jeo.com; fax to (402) 435-4110; or mail to:

JEO Consulting Group, Inc.
Attn: Anthony Kohel
2000 Q Street, Suite 500
Lincoln, Nebraska 68503

Thank you for helping us provide your community with an accurate and comprehensive hazard mitigation plan.

Sincerely,

Anthony Kohel, Project Planner

Public Review Comments Received

During public review, jurisdictions and the public could provide comments via mail or email. A review of the comments and who they were from can be found below.

- **Box Butte County –** Provided updates to their hazard prioritization information and mitigation action updates.

Adoption Resolution Template

RESOLUTION NUMBER _____

WHEREAS, the Federal Disaster Mitigation Act of 2000 was signed in to law on October 30, 2000, placing new emphasis on state and local mitigation planning for natural hazards and requiring communities to adopt a hazard mitigation action plan to be eligible for pre-disaster and post-disaster federal funding for mitigation purposes; and

WHEREAS, a Multi-Jurisdictional Hazard Mitigation Plan was prepared by the Region 23 Emergency Management Agency, with assistance from JEO Consulting Group, Inc.

WHEREAS, the purpose of the mitigation plan was to lessen the effects of disasters by increasing the disaster resistance of the counties and participating jurisdictions located within the planning boundary by identifying the hazards that affect _____ and prioritize mitigation strategies to reduce potential loss of life and property damage from those hazards, and

WHEREAS, FEMA regulations require documentation that the plan has been formally adopted by the governing body of _____ in the form of a resolution and further requesting approval of the plan at the Federal Level; and

NOW, THEREFORE, the governing body of _____ does herewith adopt the most recent and FEMA approved version of the Region 23 Emergency Management Agency Hazard Mitigation Plan in its entirety; and

PASSED AND APPROVED this _____ day of _____, 2025.

_____
President of the Board

ATTEST:

_____
Clerk

Box Butte County Adoption Resolution

RESOLUTION NUMBER **2025-05**

WHEREAS, the Federal Disaster Mitigation Act of 2000 was signed in to law on October 30, 2000, placing new emphasis on state and local mitigation planning for natural hazards and requiring communities to adopt a hazard mitigation action plan to be eligible for pre-disaster and post-disaster federal funding for mitigation purposes; and

WHEREAS, a Multi-Jurisdictional Hazard Mitigation Plan was prepared by the Region 23 Emergency Management Agency, with assistance from JEO Consulting Group, Inc.

WHEREAS, the purpose of the mitigation plan was to lessen the effects of disasters by increasing the disaster resistance of the counties and participating jurisdictions located within the planning boundary by identifying the hazards that affect Box Butte County and prioritize mitigation strategies to reduce potential loss of life and property damage from those hazards, and

WHEREAS, FEMA regulations require documentation that the plan has been formally adopted by the governing body of Box Butte County in the form of a resolution and further requesting approval of the plan at the Federal Level; and

NOW, THEREFORE, the governing body of Box Butte County does herewith adopt the most recent and FEMA approved version of the Region 23 Emergency Management Agency Hazard Mitigation Plan in its entirety; and

PASSED AND APPROVED this 7th day of May, 2025.

Chairman of the Board

BOX BUTTE COUNTY COUNTY CLERK OFFICIAL SEAL ALLIANCE NEBRASKA

ATTEST:

Clerk

Region 23 EMA Adoption Resolution

REGION 23 EMERGENCY MANAGEMENT

RESOLUTION NUMBER **2025-01**

WHEREAS, the Federal Disaster Mitigation Act of 2000 was signed into law on October 30, 2000, placing new emphasis on state and local mitigation planning for natural hazards and requiring communities to adopt a hazard mitigation action plan to be eligible for pre-disaster and post-disaster federal funding for mitigation purposes; and

WHEREAS, a Multi-Jurisdictional Hazard Mitigation Plan was prepared by the Region 23 Emergency Management Agency, with assistance from JEO Consulting Group, Inc.

WHEREAS, the purpose of the mitigation plan was to lessen the effects of disasters by increasing the disaster resistance of the counties and participating jurisdictions located within the planning boundary by identifying the hazards that affect Region 23 Emergency Management and prioritize mitigation strategies to reduce potential loss of life and property damage from those hazards, and

WHEREAS, FEMA regulations require documentation that the plan has been formally adopted by the governing body of Region 23 Emergency Management in the form of a resolution and further requesting approval of the plan at the Federal Level; and

NOW, THEREFORE, the governing body of Region 23 Emergency Management does herewith adopt the most recent and FEMA approved version of the Region 23 Emergency Management Agency Hazard Mitigation Plan in its entirety; and

PASSED AND APPROVED this 15th day of May, 2025.

Chair of the Board

ATTEST:

Coordinator, Region 23 EM

Appendix C: Planning Area Profile

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Introduction

The following appendix provides a deeper look at the county and community characteristics that may not have been discussed fully in *Section Three: Planning Area Overview* or individual participant profiles. Some specific characteristics are covered in each jurisdiction's profile, redundant information will not be covered in this appendix. This appendix will highlight at-risk populations and characteristics of the built environment that add to regional and local vulnerabilities. Special jurisdictions such as fire districts and school districts may not be discussed in depth in this appendix as information is not always available for these entities.

Location and Geography

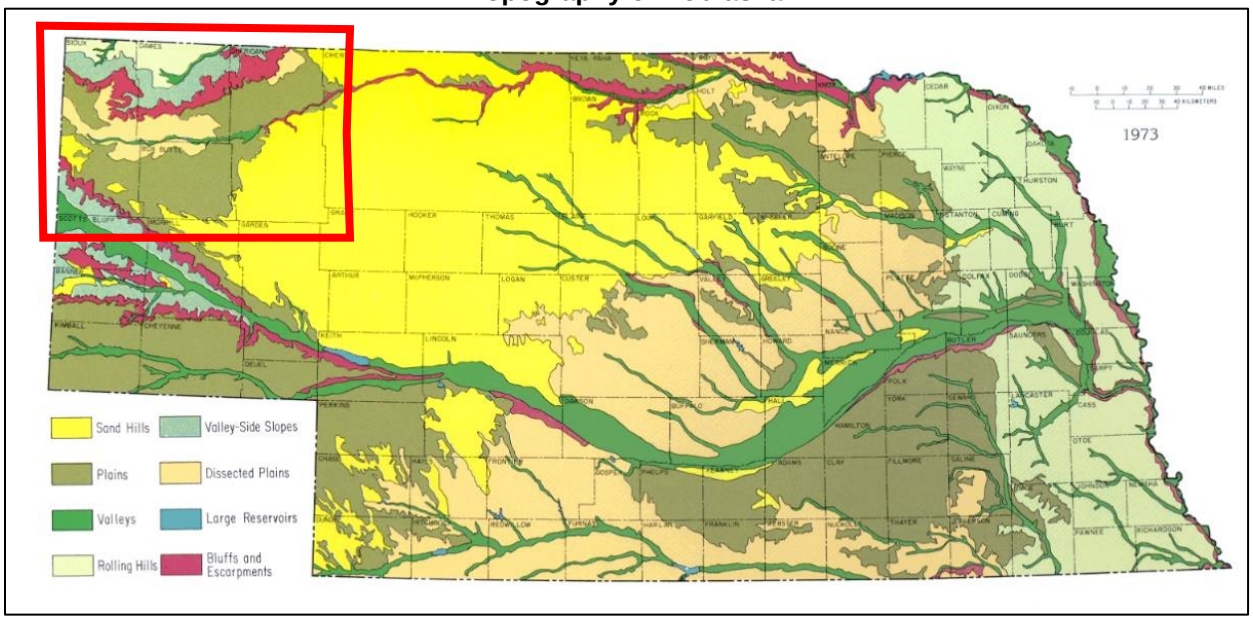
The Region 23 hazard mitigation planning area is located in northwest Nebraska. It includes all of Box Butte, Dawes, Sheridan, and Sioux Counties, and covers 7,016 square miles. There are 10 incorporated communities in the planning area. The figure on the next page shows the planning area, incorporated communities, major transportation routes, major waterways, and location within the state.

The planning area has a diverse range of topographic regions including plains, sandhills, valleys, rolling hills, dissected plains, valley-side slopes, and bluffs and escarpments. Descriptions of these topographic regions are below.

- **Bluffs and Escarpments**: Rugged land with very steep and irregular slopes.
- **Dissected Plains**: Hilly land with moderate to steep slopes and sharp ridge crests.
- **Large Reservoirs**: Constructed for purposes such as water storage for irrigation, generation of electricity, flood control or recreation.
- **Plains**: Flat-lying land that lies above the valley. The materials of the plains are sandstone or stream-deposited silt, clay, sand and gravel overlain by wind-deposited silt.
- **Rolling Hills**: Hilly land with moderate to steep slopes and rounded ridge crests.
- **Sandhills**: Hilly land composed of low to high dunes of sand stabilized by grass cover.
- **Valleys**: Flat-lying land along the major streams.[1]

1 University of Nebraska-Lincoln, 1973. "Topographic Regions Map". https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1461&context=conservationsurvey.

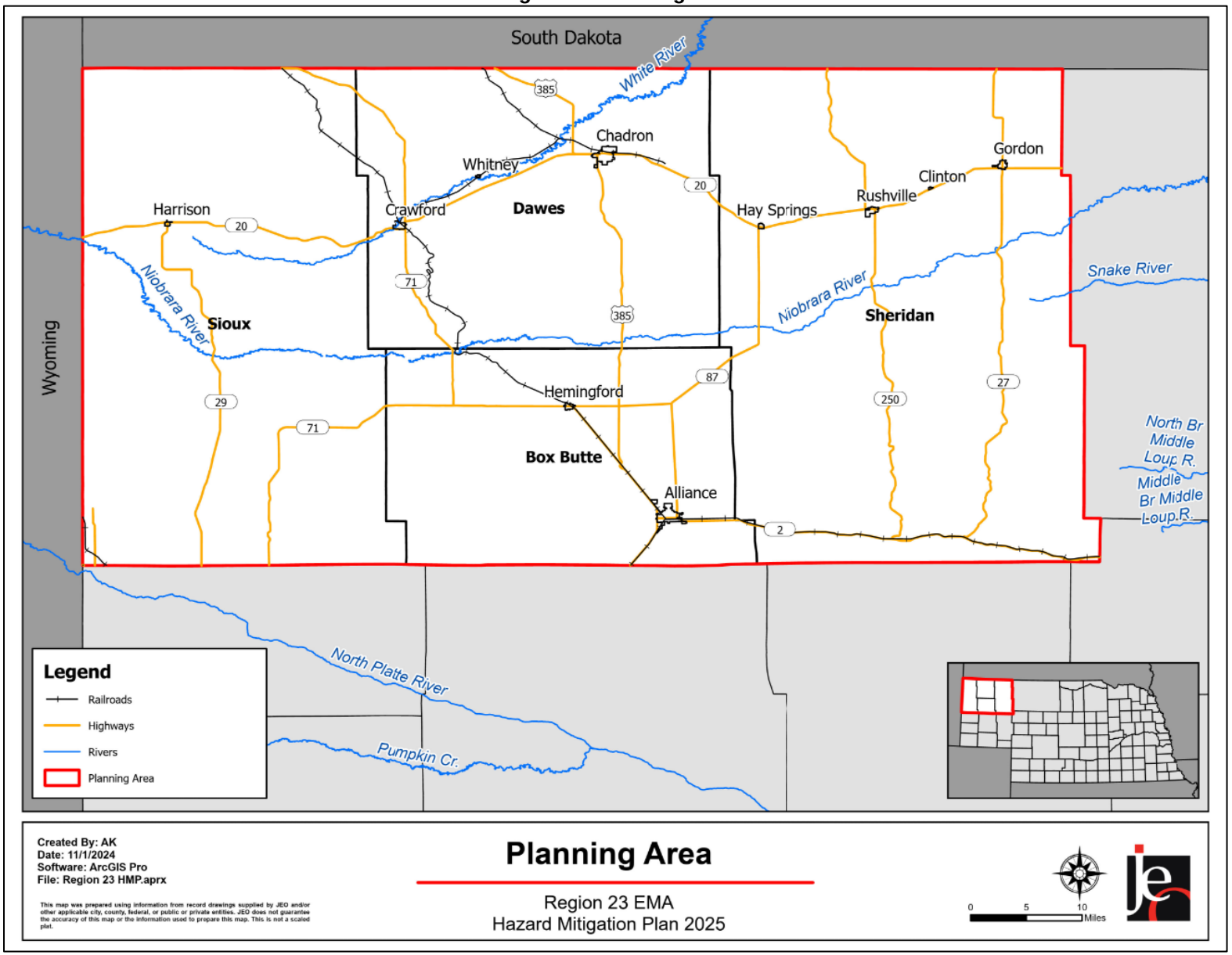
Topography of Nebraska



Source: University of Nebraska-Lincoln

Major transportation routes include U.S. Highways 20 and 385, and State Highways 2, 27, 29, 71, 87, and 250. The region resides in the White River Watershed and the Niobrara River Watershed. Main waterways in the planning area include White River and the Niobrara River. The White River flows into South Dakota where it joins with the Missouri River. The Niobrara River Watershed is comprised of the river as it comes out of Wyoming and flows into Box Butte Reservoir. After it exits the region the Niobrara River is joined by the Snake River.

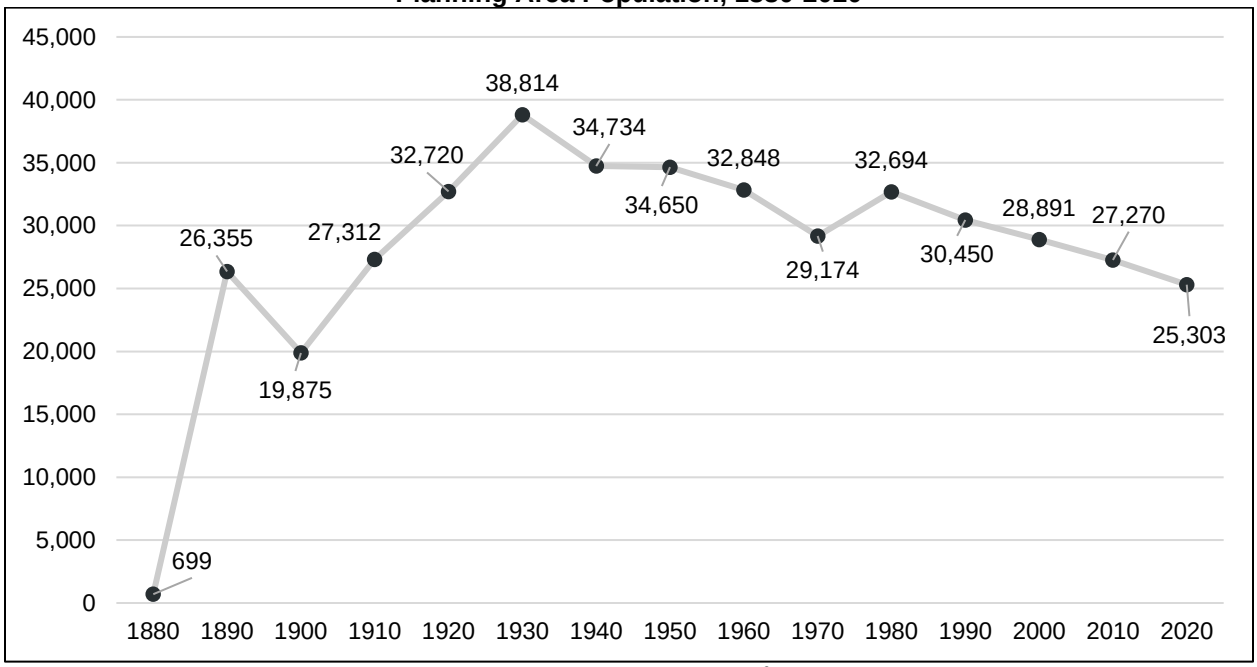
Region 23 Planning Area



Demographics

As noted above, the planning area includes Box Butte, Dawes, Sheridan, and Sioux Counties. The U.S. Census Bureau collects specific demographic information for each county. The population of the four-county planning area is 25,303.[2] Community and regional vulnerability are impacted by growing or declining populations. Communities and regions growing quickly may lack resources to provide services for all members of the area in a reasonable timeframe including snow removal, emergency storm shelters, repairs to damaged infrastructure, or even tracking the location of vulnerable populations. Communities and regions experiencing population decline may be more vulnerable to hazards because of vacant and/or dilapidated structures, an inability to properly maintain critical infrastructure, and higher levels of unemployment. It is important for communities and regions to monitor their population changes and ensure that potential issues are incorporated into hazard mitigation plans, as well as other planning mechanisms. The planning area has decreased slowly since its high point in 1930, with one decade of growth in the 1970s. Individual community population change over time can be found in the *Participant Profile Appendices*. The figures below show the population over time for the planning area and broken down by county.

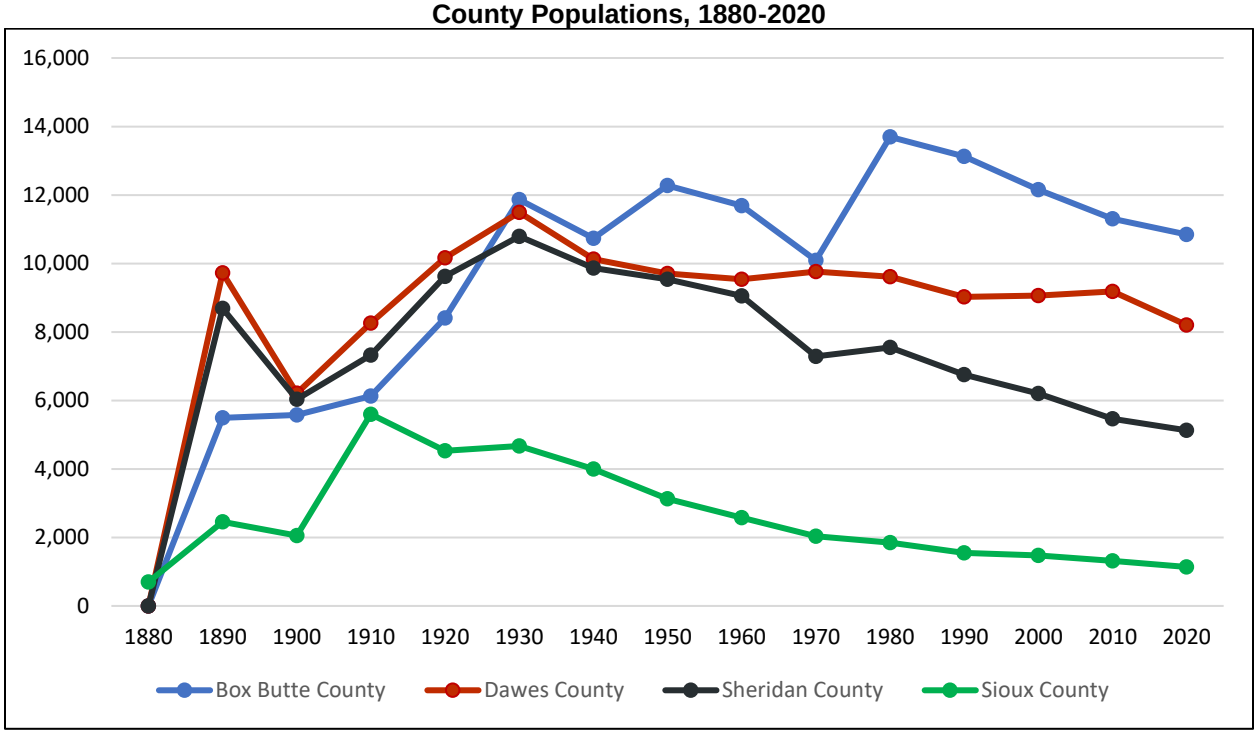
Planning Area Population, 1880-2020



Source: U.S. Census Bureau[3]

2 United States Census Bureau. "2020 Census Bureau Decennial Census: P1: Race." https://data.census.gov/.
3 United States Census Bureau. "2020 Census Bureau Decennial Census: P1: Race." https://data.census.gov/.

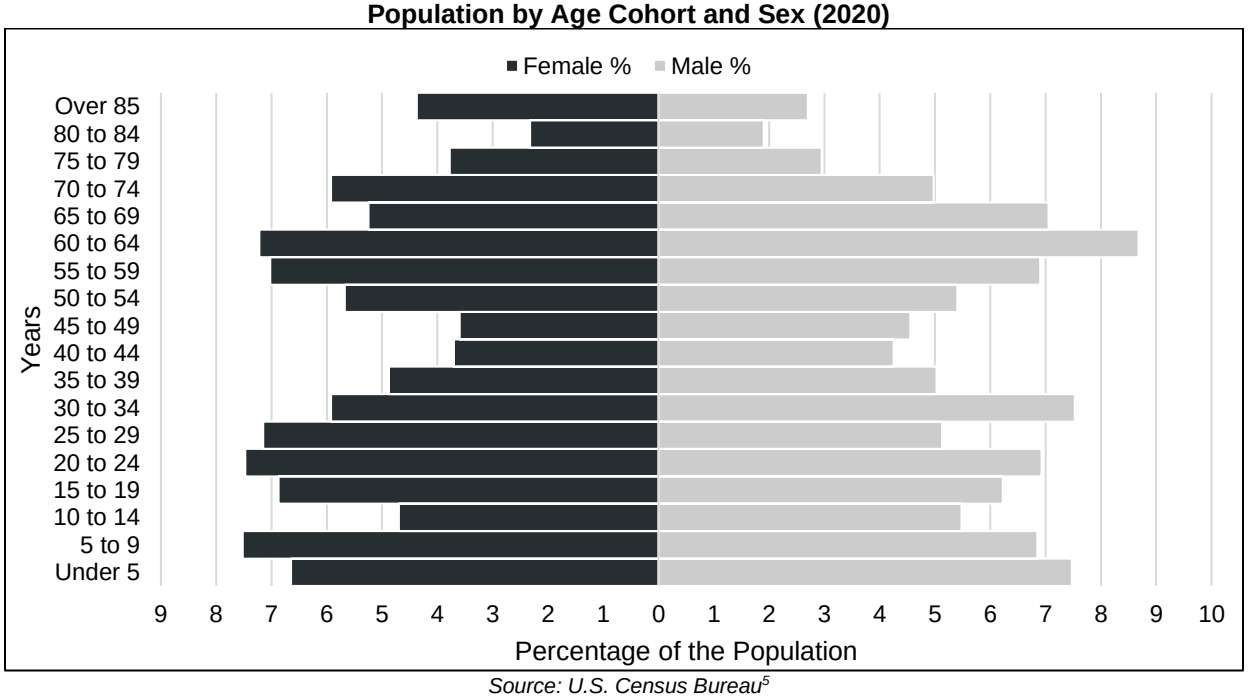
County Populations, 1880-2020



Source: U.S. Census Bureau[4]

Looking at the age cohort breakdown of the planning area, the population is spread out fairly evenly among age groups. This suggests a steady population and a need for elderly care, childcare, and schools in the future.

Population by Age Cohort and Sex (2020)



Source: U.S. Census Bureau[5]

4 United States Census Bureau. "2020 Census Bureau Decennial Census: P1: Race." https://data.census.gov/.
5 United States Census Bureau. "2020 Census Bureau Decennial Census: P1: Race." https://data.census.gov/.

At-risk Populations

In general, certain populations may have increased vulnerability due to difficulty with medical issues, extremes in age, and communication issues due to language barriers. However, outliers may be considered when discussing potentially at-risk populations.

- Outward appearance does not necessarily mark a person as at-risk.
- A hazard event will, in many cases, impact at-risk populations in different ways.

The National Response Framework defines at-risk populations as "…populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to maintaining independence, communication, transportation, supervision, and medical care."[6] The information below outlines at-risk population information for the planning area. Individual community at-risk population information can be found in the *Participant Profile Appendices*.

Dependent children under 20 years old are one of the most vulnerable populations to disasters.[7] The majority of people in this age group do not have access to independent financial resources and transportation. They lack the practical knowledge necessary to respond appropriately during a disaster. Despite this vulnerability, children are generally overlooked in disaster planning because the presence of a caretaker is assumed. With approximately 26% of the planning area's population younger than 20, children are a key vulnerable group to address in the planning process.

Schools house a high number of children and adults within the planning area during the daytime hours of weekdays, as well as during special events on evenings and weekends. The following table identifies the various school districts located within the planning area, and the map on the next page shows the school district boundaries. School districts that participated in this plan update include Chadron Public Schools, Crawford Public Schools, Gordon-Rushville Public Schools, and Hemingford Public Schools.

School Districts in the Planning Area

School District	Total Enrollment
Alliance Public Schools	1,345
Chadron Public Schools	941
Crawford Public Schools	174
Gordon-Rushville Public Schools	550
Hay Springs Public Schools	201
Hemingford Public Schools	395
Sioux County Public Schools	89

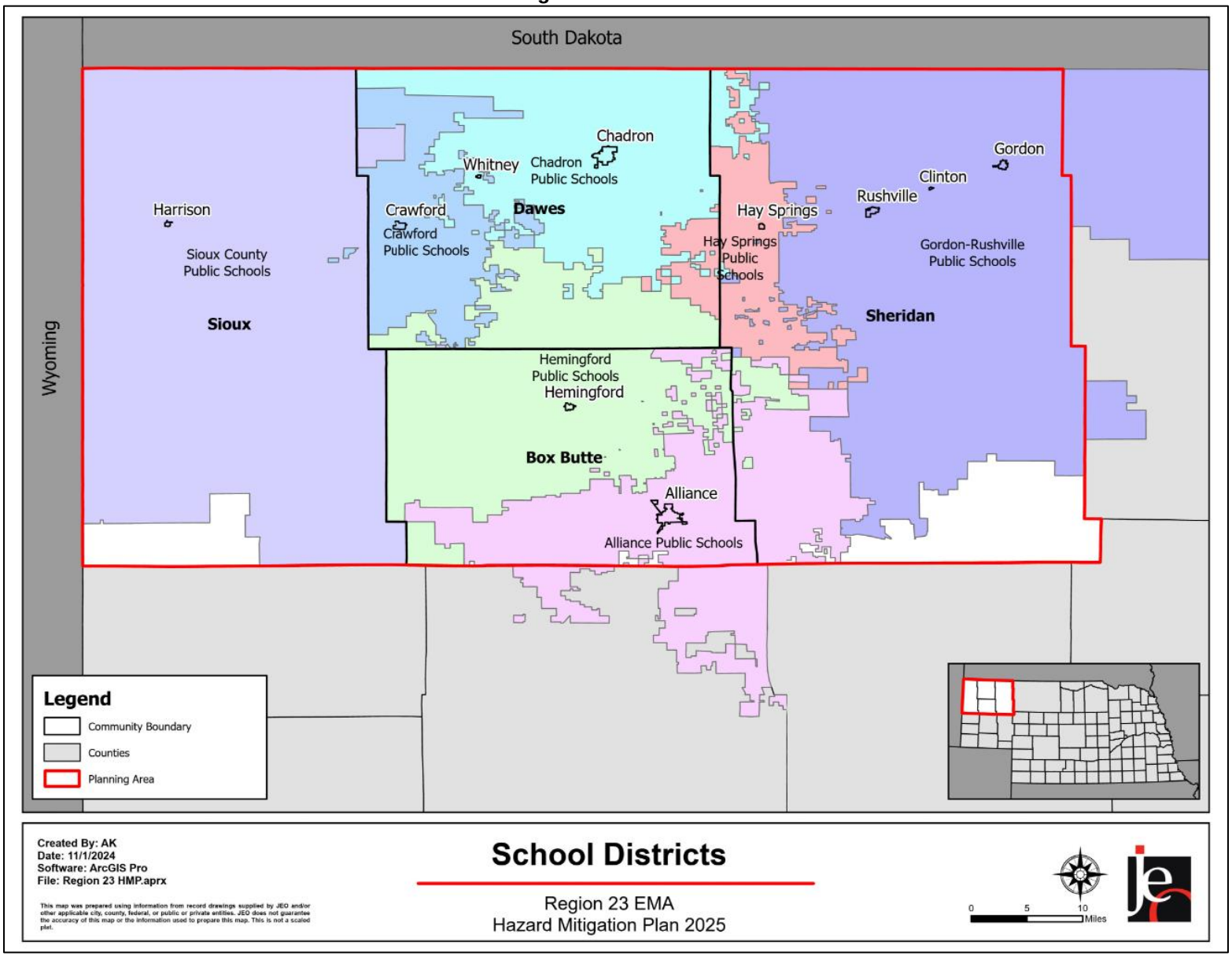
Source: Nebraska Department of Education[8]

6 United States Department of Homeland Security. October 2019. "National Response Framework Third Edition." https://www.fema.gov/media-library/assets/documents/117791.

7 Flanagan, Gregory, Hallisey, Heitgerd, & Lewis. 2011. "A Social Vulnerability Index for Disaster Management." Journal of Homeland Security and Emergency Management, 8(11): Article 3.

8 Nebraska Department of Education. May 2024. "Nebraska Education Profile". https://nep.education.ne.gov/.

Planning Area School Districts



Like minors, seniors (age 65 and greater) are often more significantly impacted by hazards and temperature extremes. During prolonged heat waves or periods of extreme cold, seniors may lack resources to effectively address hazard conditions and as a result may incur injury or potentially death. Prolonged power outages (either standalone events or as the result of other contributing factors) can have significant impacts on any citizen relying on medical devices. One study conducted by the Center for Injury Research and Policy found that increases in vulnerability related to severe winter storms (with significant snow accumulations) begin at age 55.[9] The study found that on average there are 11,500 injuries and 100 deaths annually related to snow removal. Men over the age of 55 are 4.25 times more likely to experience cardiac events during snow removal.

While elderly populations live throughout the planning area, there is the potential that they will be in higher concentrations at care facilities. The table below identifies the number and location of care facilities throughout the planning area.

Inventory of Care Facilities

County	Hospitals	Adult Care Homes	Assisted Living Homes
Box Butte County	1	2	2
Dawes County	1	2	2
Sheridan County	1	3	2
Sioux County	0	0	0
Total	**3**	**7**	**6**

Source: Nebraska Department of Health and Human Services[10]

Residents who speak English as a second language may struggle with a range of issues before, during, and after hazard events. General vulnerabilities revolve around what could be an inability to effectively communicate with others or an inability to comprehend materials aimed at notification and/or education of hazard events. When presented with a hazardous situation it is important that all community members be able to receive, decipher, and act on relevant information. An inability to understand warnings and notifications may prevent non-native English speakers from acting in a timely manner. Further, educational materials related to hazards are most often developed in the dominant language for the area, for the planning area that would be English. Residents who struggle with English in the written form may not have sufficient information related to local concerns to effectively mitigate potential impacts. The planning area has very few residents who speak English as a second language.

Racial minorities may also face increased vulnerability as they tend to have access to fewer financial and systemic resources that would enable them to implement hazard mitigation projects and to respond and recover from hazard events, including residence in standard housing and possession of financial stability. The table on the next page shows the racial composition of the planning area.

9 Center for Injury Research and Policy. January 2011. “Snow Shoveling Safety.” http://www.nationwidechildrens.org/cirp-snow-shoveling.

10 Nebraska Department of Health and Human Services. December 2023. “Rosters of Facilities And Services”. https://dhhs.ne.gov/licensure/Pages/Rosters-of-Facilities-and-Services.aspx.

Racial Composition Trends

Race	2010		2020		% Change
	Number	% of Total	Number	% of Total	
White, Not Hispanic	24,251	88.93%	21,339	84.33%	-4.59%
Black	207	0.76%	244	0.97%	0.21%
American Indian and Alaskan Native	1,386	5.08%	1,278	5.06%	-0.02%
Asian	143	0.53%	160	0.63%	0.11%
Native Hawaiian and Other Pacific Islander	52	0.19%	10	0.04%	-0.15%
Other Races	540	1.98%	640	2.53%	0.55%
Two or More Races	691	2.53%	1,631	6.44%	3.91%
Total Population	**27,270**	-	**25,303**	-	-

Source: U.S. Census Bureau[11,12]

Housing

The U.S. Census Bureau provides information related to housing units. Potential areas of vulnerability are described below for the planning area. Individual community housing information can be found in the *Participant Profile Appendices*.

Of the occupied housing units in the planning area, about 32 percent are renter occupied. Renter-occupied housing units often do not receive many of the updates and retrofits that are needed to make them resilient to disaster impacts. Communities may consider enacting landlord outreach programs aimed at educating property owners about the threats in their area and what they can do to help reduce the vulnerability of the tenants living in their housing units.

Unoccupied homes may not be maintained as well as occupied housing, thus adding to vulnerability. During disaster events like high winds, these structures may fail and result in debris which can impact other structures as well as people, resulting in injuries or fatalities, as well as higher damage totals.

Occupied, Vacant, Owner, and Renter Housing

Jurisdiction	Total Housing Units					Occupied Housing Units			
	Occupied		Vacant			Owner		Renter	
	#	%	#	%		#	%	#	%
Box Butte County	4,566	87%	668	12.8%		3,170	69.4%	1,396	30.6%
Dawes County	3,325	83%	677	16.9%		2,102	63.2%	1,223	36.8%
Sheridan County	2,163	80%	536	19.9%		1,536	71%	627	29%
Sioux County	515	73%	190	27%		366	71.1%	149	28.9%
Total	**10,569**	**83.6%**	**2,071**	**16.4%**		**7,174**	**67.9%**	**3,395**	**32.1%**

Source: U.S. Census Bureau[13]

The U.S. Census Bureau provides information related to housing units and potential areas of vulnerability. The selected characteristics examined in the table below include lacking complete

11 United States Census Bureau. "2010 Census Redistricting Data (Public Law 94-171): P1: Race." https://data.census.gov.
12 United States Census Bureau. "2020 Census Bureau Decennial Census: P1: Race." https://data.census.gov/.
13 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." https://data.census.gov/.

plumbing facilities; lacking complete kitchen facilities; broadband internet subscription; housing units that are mobile homes; and housing units with no vehicles.

Selected Housing Vulnerabilities

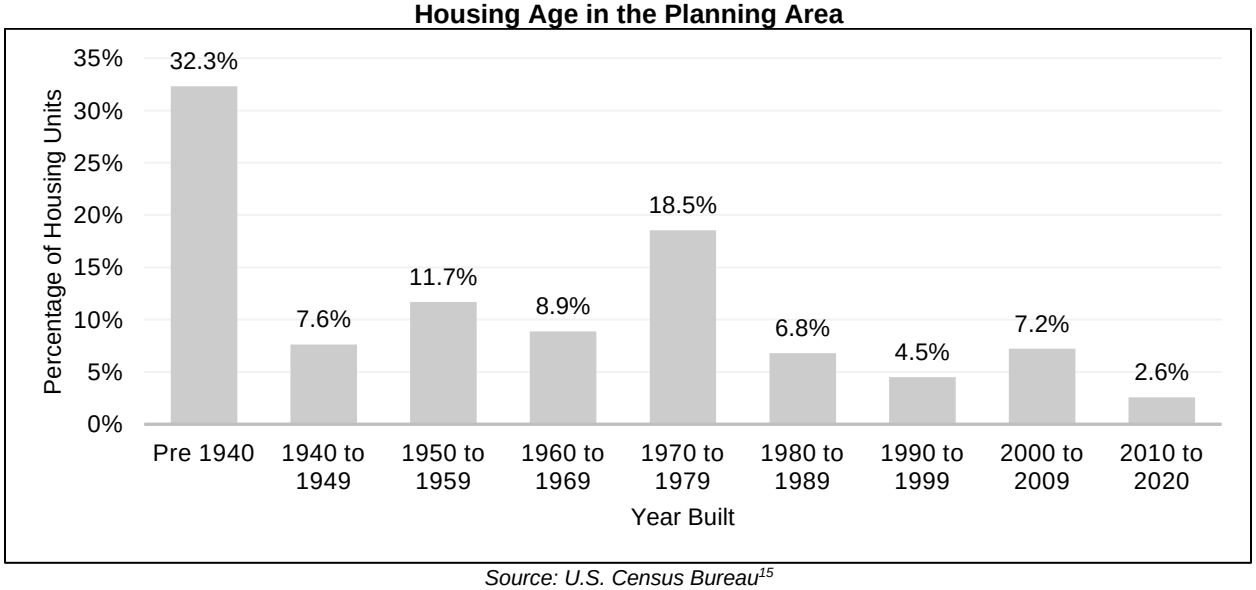
Housing Characteristics	Box Butte County	Dawes County	Sheridan County	Sioux County	Total
Occupied Housing Units	4,566 (87%)	3,325 (83%)	2,163 (80%)	515 (73%)	**10,569**
Lacking Complete Plumbing Facilities	0.4%	0.2%	0%	0%	**25 (0.2%)**
Lacking Complete Kitchen Facilities	1.3%	0.3%	1.7%	0%	**106 (1%)**
Broadband Internet Subscription	89.7%	86.1%	82.2%	70.7%	**9,101 (86.1%)**
No Vehicles Available	5.4%	3.5%	4.5%	5.3%	**488 (4.6%)**
Mobile Homes	4.9%	6.8%	9%	8.5%	**688 (6.5%)**

Source: U.S. Census Bureau[14]

Mobile homes have a higher risk of sustaining damage during high wind events and severe winter weather. Mobile homes that are either not anchored or are anchored incorrectly can be overturned by 60 mph winds. Households without vehicles may have difficulty evacuating during a hazardous event and a reduced ability to access resources in times of need.

Most homes within the planning area were built before 1980, with 32% of homes built before 1940. Housing age can serve as an indicator of risk, as structures built prior to the development of state building codes and prior to the identification of flood prone areas in the 1970s and 1980s may be more vulnerable. Residents living in these homes may be at higher risk of the impacts from flooding, high winds, severe winter weather.

Housing Age in the Planning Area



Source: U.S. Census Bureau[15]

14 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." https://data.census.gov/.

15 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics". https://data.census.gov/.

Employment and Economics

The U.S. Census Bureau provides information related to employment and economic indicators. The information below outlines vulnerabilities related to employment and economics for the planning area. Individual community employment and economics information can be found in the *Participant Profile Appendices*.

Low-income populations and those that are unemployed may lack resources to prepare for, respond to, or recover from hazard events. Residents with limited economic resources might struggle to prioritize the implementation of mitigation measures over more immediate needs. Further, residents with limited economic resources are more likely to live in older, more vulnerable structures. Residents below the poverty line will be more vulnerable to all hazards within the planning area.

Vulnerable Employment and Economic Characteristics

Jurisdiction	Percent of People Living Below the Poverty Line	Median Household Income	Unemployment Rate
Box Butte County	12%	$67,893	4%
Dawes County	13%	$53,760	1.5%
Sheridan County	10.8%	$53,609	2.2%
Sioux County	17.4%	$50,833	3.9%
Total	**13.3%**	**$56,524**	**2.8%**

Source: U.S Census Bureau[16]

Social Vulnerability

FEMA's National Risk Index is a mapping tool that analyzes a community's risk to natural hazards on a scale of 0 (lowest possible value) to 100 (highest possible value). It is broken down into two values Social Vulnerability: susceptibility to adverse impacts of natural hazards when compared to the rest of the U.S. and Community Resilience: ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S.

National Risk Index

Jurisdiction	Social Vulnerability	Community Resilience	Overall Risk
Box Butte County	Relatively Moderate (41.12)	Relatively Moderate (51.78)	Very Low (20.36)
Dawes County	Relatively Low (23.36)	Relatively Low (37.91)	Very Low (10.63)
Sheridan County	Relatively Moderate (51.18)	Relatively Low (21.93)	Very Low (20.62)
Sioux County	Relatively Low (25.53)	Very High (17.35)	Very Low (6.33)

FEMA[17]

Rural Capacity Index

The Rural Capacity Index developed by Headwaters Economics evaluates rural communities and counties across the planning for local capacity. Capacity includes the staffing, resources, and expertise to both apply for funding and fulfill reporting requirements, as well as design, build, and maintain infrastructure products over the long term. Counties lacking local capacity often have

16 United States Census Bureau. "2022 Census Bureau American Community Survey: DP03: Selected Economic Characteristics." https://data.census.gov/.

17 Federal Emergency Management Agency. March 2025. "National Risk Index". https://hazards.fema.gov/nri/map.

the greatest need for infrastructure investments—particularly rural counties. The Rural Capacity Index helps identify communities and counties with limited capacity on a scale of 0 (no capacity) to 100 (high capacity). This index is based on ten variables that can function as proxies for community capacity. The following table lists out the components and scores for each of the four counties in the planning area.

Rural Capacity Index

Components of Index	Box Butte County	Dawes County	Sheridan County	Sioux County
County is Metropolitan?	No	No	No	No
Has a Head of Planning?	Yes	Yes	Yes	Yes
Has a College or University?	Yes	Yes	No	No
Adults with Higher Education:	20%	35%	22%	25%
Families Below Poverty Level:	7%	7%	7%	8%
Households with Broadband:	92%	83%	83%	78%
People without Health Insurance:	8%	10%	12%	9%
Voter Turnout:	67%	58%	67%	75%
Income Stability Score (0 to 100):	58	60	49	31
Population Change (2010 to 2022):	-618	-937	-480	-143
Overall Rural Capacity Rating	**Medium**	**Medium**	**Low**	**Low**

Source: Headwaters Economics[18]

Historic Sites

According to the National Register of Historic Places for Nebraska by the National Park Service, there are 35 historic sites located in the planning area. Four of the sites are known to be in the 100-year floodplain.

Historic Sites

Site Name	Date Listed	Nearest Community, County	Floodplain (Y/N)
Alliance Commercial Historic District	3/21/2007	Alliance, Box Butte County	N
Box Butte County Courthouse	1/10/1990	Alliance, Box Butte County	N
City of Alliance Central Park Fountain	11/28/1990	Alliance, Box Butte County	Y
Running Water Stage Station Site	2/20/1975	Marsland, Box Butte County	Unknown
Army Theatre	7/7/1988	Crawford, Dawes County	N
Bordeaux Trading Post	3/16/1972	Chadron, Dawes County	N
Chadron Commercial Historic District	3/27/2007	Chadron, Dawes County	N
Chadron Public Library	6/21/1990	Chadron, Dawes County	N
Co-operative Block Building	9/12/1985	Crawford, Dawes County	N
Crites Hall	9/8/1983	Chadron, Dawes County	N
Dawes County Courthouse	7/5/1990	Chadron, Dawes County	N
Fort Robinson and Red Cloud Agency	10/15/1966	Crawford, Dawes County	Y
Hotel Chadron	8/15/2002	Chadron, Dawes County	N

18 Headwaters Economics. March 2025. “Rural Capacity Map”. https://headwaterseconomics.org/equity/rural-capacity-map/.

Site Name	Date Listed	Nearest Community, County	Floodplain (Y/N)
Library	9/8/1983	Chadron, Dawes County	N
Miller Hall	9/8/1983	Chadron, Dawes County	N
Sparks Hall	9/8/1983	Chadron, Dawes County	N
US Post Office-Crawford	5/11/1992	Crawford, Dawes County	N
Wohlers, Henry, Sr., Homestead	10/15/2004	Crawford, Dawes County	Unknown
Work, Edna, Hall	9/8/1983	Chadron, Dawes County	N
Antioch Potash Plants	5/16/1979	Antioch, Sheridan County	Unknown
Camp Sheridan and Spotted Tail Indian Agency	11/19/1974	Hay Springs, Sheridan County	Unknown
Colclesser Bridge	6/29/1992	Rushville, Sheridan County	Y
District #119 North School	8/30/2010	Ellsworth, Sheridan County	N
Fritz, Lee and Gottliebe, House	11/28/2003	Gordon, Sheridan County	N
Gourley's Opera House	7/6/1988	Rushville, Sheridan County	N
Loosveldt Bridge	6/29/1992	Rushville, Sheridan County	Y
Sheridan County Courthouse	1/10/1990	Rushville, Sheridan County	N
Spade Ranch	2/28/1980	Ellsworth, Sheridan County	N
Spade Ranch Store	9/3/2010	Ellsworth, Sheridan County	N
Agate Fossil Beds National Monument (Boundary Increase and Additional Documentation)	10/30/2013	Harrison, Sioux County	Unknown
Cook, Harold J., Homestead Cabin	8/24/1977	Agate, Sioux County	N
Hudson-Meng Bison Kill Site	8/28/1973	Crawford, Sioux County	Unknown
Sandford Dugout	3/9/2000	Mitchell, Sioux County	Unknown
Sioux County Courthouse	7/5/1990	Harrison, Sioux County	N
Wind Springs Ranch Historic and Archeological District	11/22/2000	Scottsbluff, Sioux County	Unknown

Source: National Park Service[19]

19 National Park Service. May 2024. “National Register of Historic Places NPGallery Database”. https://npgallery.nps.gov/NRHP.

Appendix D: Mitigation Strategy

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Introduction

The primary focus of the mitigation strategy is to identify action items to reduce the effects of hazards on existing infrastructure and property based on the established goals and objectives. These actions should consider the most cost effective and technically feasible options to address risk.

Requirement §201.6(c)(3)(i): [The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

Requirement §201.6(c)(3)(ii): [The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

Requirement: §201.6(c)(3)(ii): [The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program, and continued compliance with NFIP requirements, as appropriate.

Requirement: §201.6(c)(3)(iii): [The mitigation strategy section shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

Requirement §201.6(c)(3)(iv): For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

Summary of Changes

The development of the mitigation strategy for this plan update includes the addition of new mitigation actions, updated status or removal of past mitigation actions, and revisions to the mitigation action selection process or descriptions of mitigation actions for consistency across the planning area.

Selected Mitigation Actions

After establishing the goals, local planning teams evaluated mitigation actions. These actions included: the mitigation actions identified per jurisdiction in the previous plan and additional mitigation actions discussed during the planning process. The Regional Planning Team provided each participant a link to the FEMA Mitigation Ideas document to be used as a starting point to review a wide range of potential mitigation actions. Participants were also encouraged to think of actions that may need FEMA grant assistance and to review their hazard prioritization section for potential mitigation actions. Members of the Regional Planning Team were also available to help local jurisdictions identify mitigation action alternatives. These suggestions helped participants determine which actions would best assist their respective jurisdiction in alleviating damage in the event of a disaster.

During the update of previous identified actions and the identification of new actions, local planning teams prioritized each identified mitigation action as high, medium, or low. The listed priority rating does not indicate which actions will be implemented first. Generally, high priority actions either address a major concern for the jurisdiction, have few to no challenges in implementation, and/or garner large support from the public and administration. Low priority actions either address a minor concern for the jurisdiction, have many challenges in implementation, and/or may not have support from the public or administration at this time. Medium priority actions may only have one or two of the items listed above. A mitigation action's priority may change very quickly as circumstances change.

These projects are the core of a hazard mitigation plan. The local planning teams were instructed that each hazard listed in the plan must have an identified mitigation action. Actions must be

specific activities that are concise and can be implemented individually. Mitigation actions were evaluated based on referencing the jurisdiction's risk assessment and capability assessment. Jurisdictions were encouraged to choose mitigation actions that were realistic and relevant to the prioritized hazards of concern.

It is important to note that not all the mitigation actions identified by a jurisdiction may ultimately be implemented due to limited capabilities, prohibitive costs, low benefit-cost ratio, or other concerns. These factors may not be identified during this planning process. Additionally, some jurisdictions may identify and pursue additional mitigation actions not identified in this HMP.

Participant Mitigation Actions

Mitigation actions identified by participants of the HMP are found in the Mitigation Actions Matrix below. Additional information about selected actions can be found in the participant profiles in *Section Eight.* Each action includes the following information in the respective participant profile.

- **Mitigation Action:** General title of the action item.
- **Description:** A summary of what the action item(s) will accomplish.
- **Hazard(s) Addressed:** Which hazard the mitigation action aims to address.
- **Estimated Cost:** General cost estimate for implementing the mitigation action for the appropriate jurisdiction.
- **Local Funding:** A list of any potential local funding mechanisms to fund the action.
- **Timeline:** General timeline as established by planning participants.
- **Priority:** General description of the importance and workability in which an action may be implemented (high/medium/low).
- **Lead agency:** Listing of agencies or departments which may lead or oversee the implementation of the action item.
- **Status:** A description of what has been done, if anything, to implement the action item.

Implementation of the actions will vary between individual plan participants based upon the availability of existing information; funding opportunities and limitations; and administrative capabilities of communities. Establishing a cost-benefit analysis is beyond the scope of this plan and could potentially be completed prior to submittal of a project grant application or as part of a five-year update. Completed, removed, kept, and new mitigation actions for each participating jurisdiction can be found in *Section Eight*.

Mitigation Actions Project Matrix

During public meetings, each participant was asked to review mitigation projects listed in the 2020 HMP and identify new potential mitigation actions, if needed, to reduce the effects of hazards. The information listed in the following tables is a compilation of new and ongoing mitigation actions identified by jurisdiction. Completed and removed mitigation actions can be found in respective jurisdictional profiles.

Mitigation Actions Matrix 1 of 2

Mitigation Actions	Box Butte County	City of Alliance	Village of Hemingford	Dawes County	City of Chadron	City of Crawford	Sheridan County	Village of Clinton	City of Gordon	City of Hay Springs	City of Rushville	Sioux County	Village of Harrison
Alert Sirens					X							X	
Backup Generators	X	X	X	X	X	X		X	X	X	X	X	X
Building Codes	X												
Bury Power and Service Lines			X				X		X				
Civil Service Improvements	X	X	X						X				
Communication Equipment/System	X	X	X						X				
Continuity of Operations Plan			X	X					X				
Cyber Security Planning/Assessment				X									
Dam Engineering Study/Reinforcement									X				
Disease Outbreak Communication Plan													
Drainage Study/Stormwater Management Plan		X	X		X	X			X		X		
Drought Education/Outreach										X	X		X
Electrical Feed Line Study		X											
Electric System Looped Distribution/Redundancies			X				X						
Emergency Exercise: Dam Failure							X						
Emergency Exercise: Hazardous Materials Release													
Emergency Response Plan		X	X										
Evacuation Plan		X										X	
Firewise Community	X												

Mitigation Actions	Box Butte County	City of Alliance	Village of Hemingford	Dawes County	City of Chadron	City of Crawford	Sheridan County	Village of Clinton	City of Gordon	City of Hay Springs	City of Rushville	Sioux County	Village of Harrison
First Aid Training	x												
Hazardous Fuels Reduction							x					x	
Hazardous Tree Removal	x		x	x					x				
Implement Actions Identified in the CWPP							x		x				
Improve and Revise Snow/Ice Removal Program and Resources	x								x				
Increase Floodplain Management Capabilities	x						x		x	x		x	
Infrastructure Hardening	x			x									
Install Vehicular Barriers	x												
Low Impact Development Process	x												
Public Awareness and Education	x	x	x	x	x	x	x		x	x		x	x
Safe Room and Storm Shelters	x	x	x			x			x			x	
Security Upgrades						x							
Snow Removal Equipment								x					
Source Water Contingency Plan			x										
Stabilize/Anchor Fertilizer/Fuel Tanks	x												
Stormwater System and Drainage Improvements	x	x	x		x	x	x			x	x	x	
Stream Bank Stabilization									x				
Tree City USA						x							
Update CWPP		x											
Vacant/Dilapidated Structures		x		x	x								

Mitigation Actions	Box Butte County	City of Alliance	Village of Hemingford	Dawes County	City of Chadron	City of Crawford	Sheridan County	Village of Clinton	City of Gordon	City of Hay Springs	City of Rushville	Sioux County	Village of Harrison
Vulnerable Populations Housing/Database				x					x				
Warning System Improvements	x			x									
Water Conservation	x	x					x		x			x	
Water Storage		x								x	x		
Water Treatment Improvements						x							
Water Well			x										
Weather Radios				x								x	
Wildfire Prevention Programs									x				x
Windbreaks/Living Snow Fence			x				x		x				

Mitigation Actions Matrix 2 of 2

Mitigation Actions	Region 23 EMA	Upper Niobrara White NRD	Chadron Public Schools	Crawford Public Schools	Gordon-Rushville Public Schools	Hemingford Public Schools	Hemingford Fire District	Hay Springs Fire District
Alert Sirens	x						x	
Backup Generators	x	x	x	x	x	x	x	x
Building Codes								
Bury Power and Service Lines								
Civil Service Improvements								
Communication Equipment/System			x			x		
Continuity of Operations Plan								

Mitigation Actions	Region 23 EMA	Upper Niobrara White NRD	Chadron Public Schools	Crawford Public Schools	Gordon-Rushville Public Schools	Hemingford Public Schools	Hemingford Fire District	Hay Springs Fire District
Cyber Security Planning/Assessment								
Dam Engineering Study/Reinforcement		x						
Disease Outbreak Communication Plan			x					
Drainage Study/Stormwater Management Plan								
Drought Education/Outreach								
Electrical Feed Line Study								
Electric System Looped Distribution/Redundancies								
Emergency Exercise: Dam Failure								
Emergency Exercise: Hazardous Materials Release							x	
Emergency Response Plan	x							
Evacuation Plan								
Firewise Community								
First Aid Training								
Hazardous Fuels Reduction	x							
Hazardous Tree Removal								
Implement Actions Identified in the CWPP								
Improve and Revise Snow/Ice Removal Program and Resources								
Increase Floodplain Management Capabilities		x				x		
Infrastructure Hardening					x			
Install Vehicular Barriers								

Mitigation Actions	Region 23 EMA	Upper Niobrara White NRD	Chadron Public Schools	Crawford Public Schools	Gordon-Rushville Public Schools	Hemingford Public Schools	Hemingford Fire District	Hay Springs Fire District
Low Impact Development Process								
Public Awareness and Education	x	x	x	x	x	x		
Safe Room and Storm Shelters						x		
Security Upgrades				x		x		
Snow Removal Equipment								
Source Water Contingency Plan		x						
Stabilize/Anchor Fertilizer/Fuel Tanks								
Stormwater System and Drainage Improvements								
Stream Bank Stabilization								
Tree City USA								
Update CWPP								
Vacant/Dilapidated Structures								
Vulnerable Populations Housing/Database								
Warning System Improvements								
Water Conservation								
Water Storage								
Water Treatment Improvements								
Water Well								
Weather Radios								
Wildfire Prevention Programs		x						
Windbreaks/Living Snow Fence								

Appendix E: Hazard Mitigation Project Funding Guidebook

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Introduction

This *Hazard Mitigation Project Funding Guidebook* is provided by JEO Consulting Group, Inc.

The intent of the guidebook is to provide initial guidance on hazard mitigation project funding opportunities and where to find more information on grants. The information included is consistent with established processes for hazard mitigation planning. However, it is important to note the following in terms of the context for this guidebook relative to the overall planning process.

Project identification includes identifying all possible options to address planning objectives; at this stage, all options are viable. At times, the best option may be to work with other stakeholders in the community to design solutions that are in line with community values while reducing risk (e.g., a bike path or ball field that can double as a retention area, or the preservation of an animal habitat that also serves as a natural buffer). These types of solutions can often be funded in very innovative ways, including solutions which increase local industry and revenue. For information on the broad range of mitigation project types and how projects have been implemented in communities across the country, please refer to FEMA's Mitigation Best Practices webpage at https://www.fema.gov/mitigation-best-practices-portfolio.

It should be noted that the grant programs listed in this guidebook are not the only ones that could support hazard mitigation project implementation. Additionally, many of these programs are dependent on yearly funding allocations, resulting in fluctuations in the amount available. However, at this point, it is more important to be aware of the potential for various avenues of support for a broad array of project types. As needs and potential hazard mitigation project options are identified, more information can begin to be gathered on the range of programs which might be utilized. It will be more efficient to start with project options and then follow up with the identification of potential matches, working with the full range of available programs and agencies as part of a comprehensive project evaluation process.

While participation in a hazard mitigation plan is required for a jurisdiction to be eligible for FEMA funds, it is not the only funding source available for mitigation actions. Depending on the type of mitigation project being pursued, FEMA funding is not always the best option, so it is increasingly important to look for other opportunities. Opportunities for funding and technical assistance exist in various federal, state, and local agencies. Non-governmental funding opportunities are available at the regional or local level with private sector businesses, private foundations, and other non-governmental organizations (NGOs). In order to fully map out the range of local and state options, it is necessary to undertake a detailed stakeholder analysis – something which has not been done at this time. The following contains an overview of key federal and state programs that may include opportunities for hazard mitigation project funding, as well as additional information on suggested alternative funding routes.

Federal Funding Resources

Information about federal hazard mitigation project funding opportunities is organized by agency. Under each agency heading, applicable grant programs are listed with a description of the grant and, when available, information on typical funds available, eligibility, examples of past projects funded, and any additional relevant information. Agencies covered in this guidebook include:

- Federal Emergency Management Agency
- National Fish and Wildlife Foundation
- U.S. Army Corps of Engineers
- U.S. Bureau of Reclamation – WaterSMART
- U.S. Department of Agriculture
- U.S. Department of Agriculture Rural Development Funding
- U.S. Department of Energy
- U.S. Department of Housing and Urban Development
- U.S. Economic Development Administration
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Forest Service

Note: This is not a complete list of all federal funding opportunities. These grant programs have been chosen for their applicability to popular mitigation actions. The websites and reference materials used to provide this information are as current as possible; however, it is important to note that funding programs are dynamic and subject to frequent changes. While it is helpful to be familiar with the current information, it is equally as important to engage candidate federal and state agencies in a dialog as soon as possible.

FEMA also has a Recovery and Resilience Resource Library to help navigate the numerous programs available in pre-disaster recovery planning or in the wake of a disaster. Resources can be searched by keyword or filtered by eligibility, topic, intended beneficiary, or resource type. The Recovery and Resilience Resource Library can be found here: https://www.fema.gov/emergency-managers/practitioners/recovery-resilience-resource-library.

Federal Emergency Management Agency (FEMA)

Fire Management Assistance Grant Program (FMAG)	
Description	FMAG is available to states, local and tribal governments, for the mitigation, management, and control of fires on publicly or privately-owned forests or grasslands, which threaten such destruction as would constitute a major disaster.
Funds Available	The individual fire cost threshold is based on total eligible costs for the declared fire. The individual fire cost threshold for a state is the greater of $100,000 or five percent times the statewide per capita indicator, multiplied by the state population (the statewide per capita indicator is adjusted annually for inflation [e.g., the FY21 indicator is $1.55]).
Eligibility	Eligible applicants are entities legally responsible for the firefighting activities that reimbursement is being requested for, this includes states, local governments, and tribal governments.
Examples	Eligible firefighting costs may include expenses for field camps, repair and replacement tools, mobilization and demobilization activities, equipment use, materials and supplies.
Additional Information	https://www.fema.gov/assistance/public/fire-management-assistance

Flood Mitigation Assistance Program (FMA)	
Description	FMA is a competitive program that provides funding for projects that reduce or eliminate the risk of repetitive flood damages to buildings insured by the National Flood Insurance Program. Projects must be cost effective, located in a participating NFIP community in good standing, align with the current hazard mitigation plan, and meet all environmental and historical preservation requirements.
Funds Available	Fiscal Year 2022 had $800 million available for distribution which was more than five times the amount available for Fiscal Year 2021.
Eligibility	States, territories, and federally recognized tribes are eligible. Local governments are considered sub-applicants and must apply to the State, territory, or tribe.
Examples	Projects include: project scoping, technical assistance, community flood mitigation projects, individual structure/property-level flood mitigation projects, and management costs.
Additional Information	Cost share is required for all subapplications funded by the Flood Mitigation Assistance program. Generally, the cost share for this program is 75% federal / 25% non-federal. Contributions of cash, third-party in-kind services, materials, or any combination thereof, may be accepted as part of the non-federal cost share. More information can be found at https://www.fema.gov/grants/mitigation/floods

Hazard Mitigation Grant Program (HMGP)	
Description	FEMA's Hazard Mitigation Grant Program provides funding to state, local, tribal and territorial governments so they can develop hazard mitigation plans and rebuild in a way that reduces, or mitigates, future disaster losses in their communities. Funding is available when authorized under a Presidential major disaster declaration and in areas of the state requested by the Governor. Federally recognized tribes may also submit a request for a Presidential major disaster declaration within their impacted areas. All state, local, tribal and territorial governments must develop and adopt hazard mitigation plans to receive funding for their hazard mitigation projects.
Funds Available	Amount of funding is based on the estimated total or aggregate cost of disaster assistance: Up to 15% of the first $2 billion; Up to 10% for amounts between $2 billion and $10 billion; Up to 7.5% for amounts between $10 billion and $35.333 billion; States with enhanced mitigation plans: Up to 20%, not to exceed $35.333 billion.
Eligibility	Project eligibility under HMGP can be limited by the State as part of the HMGP Administrative Plan developed post-disaster. For example, funding may only be made available for projects that are related to the type of disaster, i.e., HMGP related to a significant flood disaster declaration may only be designated for flood mitigation projects like acquisitions of repetitively flooded properties.
Examples	Retrofitting existing buildings to make them less susceptible to damage from a variety of natural hazards. Purchasing hazard prone property to remove people and structures from harm's way. Drainage improvement projects to reduce potential for flood damage. Eligible project types do not have to coincide with the type of disaster declaration, as the state decides funding prioritization accordingly.
Additional Information	In this program, private homeowners and businesses cannot apply for a grant. However, a local community or other public entity may apply for funding on their behalf. Generally, the cost share is 75% federal and 25% non-federal funding. The 25% can come from any non-federal source, such as the state or local government, an individual, private contributions, Increased Cost of Compliance (ICC) funds from a flood insurance policy, or Small Business Administration loans. Additional information can be found at: https://www.fema.gov/grants/mitigation/hazard-mitigation/before-you-apply.

HMGP-Post Fire	
Description	This program provides funding to help communities implement hazard mitigation measures focused on reducing the risk of harm from wildfire. It provides hazard mitigation grant funding to state, local, tribal, and territorial governments in areas receiving a Fire Management Assistance Grant (FMAG) declaration. The FMAG is the Disaster Declaration required and funding amounts are determined by FEMA based on an annual national aggregate calculation of the past 10 year's FMAG declarations.
Funds Available	Funds available each year are based on an average of historical Fire Management Assistance Grant declarations from the past 10 years. Total funding available for each FMAG declaration in Fiscal Year 2022 is $786,552 for applicants with a standard hazard mitigation plans and $1,048,736 for those with an enhanced hazard mitigation plan. Multiple event funding will be aggregated into one grant under the first declaration.
Eligibility	Eligible projects include defensible space initiatives, ignition-resistant construction, hazardous fuels reduction, erosion control measures, slope failure prevention measures and flash flooding prevention measures.
Examples	Defensible space, reducing hazardous fuels, removing standing burned trees, ignition-resistant construction, installing warning signs, strengthen or harden water systems that were burned and caused contamination, reseeding ground cover, planting grass to prevent noxious weeds, erosion barriers on slopes, modify/remove culverts, drainage dips and emergency spillways.
Additional Information	The application period opens with the state or territory's first FMAG declaration of the fiscal year and closes six months after the end of that fiscal year. Application extensions may be requested. https://www.fema.gov/grants/mitigation/post-fire.

Pre-Disaster Mitigation (PDM)	
Description	The Pre-Disaster Mitigation grant program makes federal funds available to state, local, tribal, and territorial governments to plan for and implement sustainable cost-effective measures. These mitigation efforts are designed to reduce the risk to individuals and property from future natural hazards, while also reducing reliance on federal funding from future disasters.
Funds Available	On March 1, 2023, FEMA published a Notice of Funding Opportunity (NOFO) for FY23 Pre-Disaster Mitigation grant program. The total amount of funds that are being made available to 100 congressionally directed projects will be $233,043,782. Applicants may request up to an additional 5% of project costs for management and administration of the program from a separate pool of funds.
Eligibility	Only states, territories, or federally recognized tribal governments identified by Congress in the Consolidated Appropriations Act and enumerated in the accompanying Joint Explanatory Statement for Division F are identified in this Notice of Funding Opportunity (NOFO) and are eligible to apply. All applicants and subapplicants must have a FEMA-approved Hazard Mitigation Plan by the application deadline
Examples	Storm Shelters, Wildfire Prevention Project, Bridge Rehabilitation, Drainage Improvements, Water Storage Tanks, Flood Mitigation Planning Projects, Evacuation Center, and more.
Additional Information	https://www.fema.gov/grants/mitigation/pre-disaster

Recovery and Resilience Resource Library	
Description	FEMA developed library to navigate the numerous programs available to the United States and its territories to help recover from a disaster. Tool helps users to find and research federal disaster recovery resources that would be beneficial to pre-disaster recovery planning or in the wake of a disaster.
Funds Available	Varies
Eligibility	Resources are intended for state, local, territorial, and tribal governments as well as non-profits, businesses, healthcare institutions, schools, individuals, and households.
Examples	Evidence-based or evidence-informed interventions to strengthen rural and urban communities.
Additional Information	https://www.fema.gov/emergency-managers/practitioners/recovery-resilience-resource-library

State and Local Cybersecurity Grant Program	
Description	Funding to help states, local governments, rural areas, and territories address cybersecurity risks and cybersecurity threats to information systems.
Funds Available	$374 million is available under the SLCGP, with varying funding amounts allocated over four years from the Infrastructure Investment and Jobs Act. The recipient contribution can be cash (hard match) or third-party in-kind (soft match).
Eligibility	All U.S. states and territories are eligible to apply. The designated State Administrative Agency (SAA) for each state and territory is the only entity eligible to apply for SLCGP funding.
Examples	Planning, equipment, exercises, management & administration, organization, and training.
Additional Information	This year, each state and territory will receive a funding allocation as determined by the statutory formula: • Allocations for states and territories include a base funding level as defined for each entity: 1% for each state, the District of Columbia, and Puerto Rico. • State allocations include additional funds based on a combination of state population and rural population totals. • 80% of total state allocations must support local entities, while 25% of the total state allocations must support rural entities; these amounts may overlap. • https://www.fema.gov/grants/preparedness/state-local-cybersecurity-grant-program.

Safeguarding Tomorrow through Ongoing Risk Mitigation Revolving Loan Fund (STORM-RLF)	
Description	FEMA is making $150 million available to fund capitalization grants that enable eligible entities to administer revolving loan funds and provide direct loans to local governments for projects and activities that mitigate the impacts of drought, intense heat, severe storms (including hurricanes, tornados, windstorms, cyclones, and severe winter storms), wildfires, floods, earthquakes, and other natural hazards. FEMA will work closely with participating entities and gather best practices on topics such as entity administrative burden and capacity, achieving resilience and equity goals, and common project and activity types for loans under this program. FEMA's goal is to increase entity participation with higher funding levels in future grant cycles.
Funds Available	FEMA intends to award $150 million of the funds available under the new program to address climate change and create a more equitable and resilient nation.
Eligibility	Eligible entities are States, Federally recognized tribes that received a major disaster declaration, Territories, and the District of Columbia. State entities must enroll in this program for it to be an option to local public entities.
Examples	This is an opportunity to prioritize low-impact development, wildland-urban interface management, conservation areas, reconnection of floodplain and open space projects. Funding can be utilized for building code adoption and enforcement. Allowable uses include: Mitigation Activities, Non-Federal Cost-Share, Local Government Technical Assistance, and Entity Administrative Costs.
Additional Information	https://www.fema.gov/grants/mitigation/storm-rlf

National Fish and Wildlife Foundation

America the Beautiful Challenge	
Description	The America the Beautiful Challenge seeks to advance conservation and restoration projects that are consistent with the principles outlined in the Conserving and Restoring America the Beautiful report and that focus on at least one of the following core areas of need: • Conserving and restoring rivers, coasts, wetlands, and watersheds • Conserving and restoring forests, grasslands, and other important ecosystems that serve as carbon sinks • Connecting and reconnecting wildlife corridors, large landscapes, watersheds, and seascapes • Improving ecosystem and community resilience to coastal flooding, drought, and other climate-related threats • Expanding access to the outdoors, particularly in underserved communities Applicants are encouraged to develop large landscape scale and/or cross jurisdictional projects that advance existing conservation plans or are informed by Indigenous Traditional Knowledge.
Funds Available	Approximately $116 million was awarded nationally in 2023.
Eligibility	State government agencies, Indian Tribes, non-profit 501(c) organizations, local governments, municipal governments, and educational institutions.
Examples	Implementation grants, planning grants, sentinel landscape grants, national forest grants, and private forests, rangeland, and farmland grants.
Additional Information	https://www.nfwf.org/programs/america-beautiful-challenge?activeTab=tab-2

Five Star and Urban Water Restoration Grant Program	
Description	The Five Star and Urban Waters Restoration grant program seeks to develop community capacity to sustain local natural resources for future generations by providing modest financial assistance to diverse local partnerships focused on improving water quality, watersheds and the species and habitats they support.
Funds Available	Approximately $2,650,000 was available in 2022 for nationwide for projects meeting program priorities. There is one round of full proposals annually for this program. Awards range from $20,000 to $50,000 with an average size of $35,000 and about 50 grants awarded per year.
Eligibility	Non-profit 501(c) organizations, state government agencies, local governments, municipal governments, Tribal Governments and Organizations, and educational institutions.
Examples	Projects include a variety of ecological improvements along with targeted community outreach, education and stewardship. Ecological improvements may include one or more of the following: wetland, riparian, forest and coastal habitat restoration; wildlife conservation, community tree canopy enhancement, water quality monitoring and green infrastructure best management practices for managing run-off.
Additional Information	https://www.nfwf.org/programs/five-star-and-urban-waters-restoration-grant-program?activeTab=tab-1

U.S. Army Corps of Engineers

Planning Assistance to States	
Description	Provides assistance in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land resources. Typical studies are only planning level of detail, not design for project construction. Program can encompass many types of studies dealing with water resource issues. PAS program has two types of efforts-comprehensive plans and technical assistance: Comprehensive Plans and Technical Assistance. Comprehensive Plan Assistance includes planning for the development, utilization, and conservation of the water and related resources of drainage basins, watersheds, or ecosystems located within the boundaries of that State, including plans to comprehensively address water resources challenges such as the state water plan. Comprehensive plans can extend across state boundaries provided both States agree. Technical Assistance provided through the PAS program includes support of planning efforts related to the management of state water resources, including the provision and integration of hydrologic, economic, or environmental data and analysis in support of the State's water resources management and related land resources development plans identified in the state water plan or other water resources management related state planning documents, such as state hazard mitigation, preparedness, response, and recovery plans and plans associated with changing hydrologic conditions, climate change, long-term sustainability, and resilience.
Funds Available	Comprehensive planning activities through the PAS program are cost shared (50 per cent) with the study partner, and voluntarily contributed funds in excess of cost share may be provided by the non-Federal partner. The non-Federal cost share for preparation of a state comprehensive water resources plan may be provided by funds or through the provision of services, materials, supplies, or other in-kind services. Technical assistance activities through the PAS program are cost shared (50 per cent) with the study partner, and voluntarily contributed funds in excess of cost share may be provided by the non-Federal partner. The cost-share for technical assistance must be provided by funds (not in-kind).
Eligibility	States, local governments, other non-Federal entities, and eligible Native American Indian tribes.
Examples	Types of studies in recent years include water supply/demand, water conservation, water quality, environmental/conservation, wetlands evaluation/restoration, dam safety/failure, flood damage reduction, coastal zone protection, and harbor planning.
Additional Information	https://www.nae.usace.army.mil/missions/public-services/planning-assistance-to-states/

U.S. Bureau of Reclamation – WaterSMART

Small Scale Water Efficiency Projects	
Description	Funding for small-scale on-the-ground water management projects that conserve, better manage, or otherwise increase efficient use of water supplies. Projects supported by an existing water management and conservation plan, System Optimization Review, or other planning effort led by the applicant are prioritized.
Funds Available	Applicants may request up to $100,000 in federal funding, with a non-federal cost-share of 50% or more of total project costs for projects with total project costs no more than $225,000.
Eligibility	Eligible applicants for all WaterSMART Grants funding opportunities include states; tribes; irrigation districts; water districts; state, regional, or local authorities, whose members include one or more organization with water or power delivery authority; other organizations with water or power delivery authority; and nonprofit conservation organizations that are acting in partnership with and with the agreement of an entity previously described. To be eligible, applicants must be in the Western United States or U.S. Territories. Entities located in Alaska and Hawaii are also eligible to apply.
Examples	Example projects include Canal lining/piping, municipal metering, irrigation flow measurement, SCADA and automation, landscape irrigation measures, high-efficiency indoor appliances and fixtures, commercial cooling systems.
Additional Information	https://www.usbr.gov/watersmart/swep/index.html

Water Marketing Strategy Grants	
Description	Financial assistance for the development of water marketing strategies to facilitate water markets as a tool for helping willing buyers and sellers meet water demands efficiently in times of shortage and prevent water conflicts.
Funds Available	Program funding is allocated through a competitive process. Applicants may request federal funding up to $400,000 for projects to be completed within three years with a non-Federal cost share of 50% or more of the total project cost.
Eligibility	Eligible applicants for all WaterSMART Grants funding opportunities include states; tribes; irrigation districts; water districts; state, regional, or local authorities, whose members include one or more organization with water or power delivery authority; other organizations with water or power delivery authority; and nonprofit conservation organizations that are acting in partnership with and with the agreement of an entity previously described. To be eligible, applicants must be located in the Western United States or U.S. Territories. Entities located in Alaska and Hawaii are also eligible to apply.
Examples	Funding awarded under Water Marketing Strategy Grants can be used for outreach and partnership building, planning activities (e.g., hydrologic, economic, legal and other types of analysis), pilot activities, and the development of a “water marketing strategy” document.
Additional Information	https://www.usbr.gov/watersmart/watermarketing/index.html

Water and Energy Efficiency Grants	
Description	Focuses on projects that result in quantifiable and sustained water savings, including canal lining and piping projects, municipal metering projects, and Supervisory Control and Data Acquisition (SCADA) and automation projects.
Funds Available	Applicants may request federal funding: (I) up to $500,000 for projects to be completed within two years, (II) up to $2 million for projects to be completed within three years; and (III) up to $5 million for projects to be completed within three years, with a non-Federal cost share of 50% or more of the total project cost. No more than $5,000,000 in total WaterSMART Water and Energy Efficiency Grants funds will be awarded to any single applicant under this Funding Opportunity per fiscal year.
Eligibility	Eligible applicants for all WaterSMART Grants funding opportunities include states; tribes; irrigation districts; water districts; state, regional, or local authorities, whose members include one or more organization with water or power delivery authority; other organizations with water or power delivery authority; and nonprofit conservation organizations that are acting in partnership with and with the agreement of an entity previously described. To be eligible, applicants must be in the Western United States or U.S. Territories. Entities located in Alaska and Hawaii are also eligible to apply.
Examples	Projects conserve and use water more efficiently; increase the production of hydropower; mitigate conflict risk in areas at a high risk of future water conflict; and accomplish other benefits that contribute to water supply reliability in the western United States.
Additional Information	https://www.usbr.gov/watersmart/weeg/faq.html

U.S. Department of Agriculture

Conservation Innovation Grants (CIG)	
Description	Competitive program that supports the development of new tools, approaches, practices, and technologies to further natural resource conservation on private lands. Through creative problem solving and innovation, CIG partners work to address our nation's water quality, air quality, soil health and wildlife habitat challenges, all while improving agricultural operations. Public and private grantees develop the tools, technologies, and strategies to support next-generation conservation efforts on working lands and develop market-based solutions to resource challenges.
Funds Available	Applications made a CIG funding notice is announced each year. Funds for single- or multi-year projects, not to exceed three years, are awarded through a nationwide competitive grants process. Grantees must match the CIG investment at least one to one.
Eligibility	The natural resource concerns eligible for funding through CIG are identified in the funding announcement and may change annually to focus on new and emerging, high-priority natural resource concerns. National and State CIG – all non-Federal entities and individuals are eligible to apply. All CIG projects must involve EQIP-eligible producers.
Examples	Projects may be watershed-based, regional, multi-state or nationwide in scope.
Additional Information	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/cig/

Emergency Watershed Protection Program	
Description	The EWP Program offers technical and financial assistance to help local communities relieve imminent threats to life and property caused by floods, fires, windstorms, and other natural disasters that impair a watershed. EWP does not require a disaster declaration by federal or state government officials for program assistance to begin.
Funds Available	NRCS may provide technical assistance as services and/or funds to plan, design, and contract the emergency measures, subject to an agreement between NRCS and the Sponsor. Installation/Construction costs are not to exceed 75% or 90% for limited resource areas. Engineering/Technical Assistance is not to exceed 100%. No funds are available for real property rights.
Eligibility	Project criteria requires the project to provide protection from flooding or soil erosion; reduce threats to life and property; restore the hydraulic capacity to the natural environment; and economically and environmentally defensible. Eligible local sponsors for recovery projects include cities, counties, towns, conservation districts, or any federally-recognized Native American tribe or tribal organization.
Examples	Removal of debris from stream channels, road culverts, and bridges; reshaping and protection of eroded streambanks; correction of damaged or destroyed drainage facilities; establishing vegetative cover on critically eroding lands; repair of levees and structures; repair of certain conservation practices; and purchase of floodplain easements.
Additional Information	https://www.nrcs.usda.gov/programs-initiatives/ewp-emergency-watershed-protection

Small Business Innovation Research	
Description	The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs at the U.S. Department of Agriculture (USDA) offer competitively awarded grants to qualified small businesses to support high quality research related to important scientific problems and opportunities in agriculture that could lead to significant public benefits. This program as two phases, Phase I is open to any small business concern that meets the SBIR/STTR eligibility requirements and Phase II is open only to previous Phase I awardees.
Funds Available	Funds are offered across 10 topic areas including: Forests and Related Resources, Plant Production and Protection-Biology, Animal Production and Protection, Conservation of Natural Resources, Food Science and Nutrition, Rural and Community Development, Aquaculture, Biofuels and Biobased Products, Small and Mid-size Farms, and Plant Production and Protection-Engineering
Eligibility	The SBIR/STTR programs do not make loans and do not award grants for the purpose of helping a business get established. The program seeks to stimulate technological innovation in the private sector, strengthen the role of small businesses in meeting federal research and development needs, increase private sector commercialization of innovations derived from USDA-supported research and development efforts, and foster and encourage participation by women-owned and socially and economically disadvantaged small business firms in technological innovations
Examples	Salary and wages for company employees, associated fringe benefits, materials and supplies, and a number of other direct costs needed to conduct the proposed R&D
Additional Information	https://www.nifa.usda.gov/grants/programs/small-business-innovation-research-technology-transfer-programs-sbirsttr

Watershed Rehabilitation Program	
Description	The Watershed Rehabilitation Program helps project sponsors rehabilitate aging dams that are reaching the end of their design life and/or no longer meet federal or state standards. NRCS provides technical and financial assistance to local project sponsors to rehabilitate aging dams that protect lives and property, and infrastructure.
Funds Available	Across the Nation, watershed REHAB projects provide over $2.2 billion in reduced flooding and erosion damage while improving wildlife habitat, recreation, water quality and supply for an estimated 47 million people. Costs associated with additional or new water supply storage purposes added to the rehabilitation project may be cost-shared with watershed rehabilitation funds. Eligible project costs are covered 65% Federal/35% Local of total eligible project cost, not to exceed 100% of actual construction cost. No more than 100% of the engineering/Technical Assistance will be covered.
Eligibility	Eligible projects are dams that were originally constructed through a NRCS Watershed Program, no longer meet current safety and performance standards, including dams past their evaluated life, and has current operation and maintenance.
Examples	*Information not available*
Additional Information	https://www.nrcs.usda.gov/programs-initiatives/watershed-rehabilitation

U.S. Department of Agriculture Rural Development Funding

Community Facilities Loans and Grants	
Description	This program provides affordable funding to develop essential community facilities in rural areas, an essential community facility is defined as a facility that provides an essential service to the local community for the orderly development of the community in a primarily rural area, and does not include private, commercial, or business undertakings.
Funds Available	*Information not available*
Eligibility	Eligible for areas 20,000 or less in population. Applicants are municipalities, non-profits, special purpose districts, and federally recognized Indian tribes. Eligible borrowers include public bodies, community based non-profit corporations, and federally recognized tribes.
Examples	Funds can be used to purchase, construct, and/or improve essential community facilities, purchase equipment, and pay related project expenses
Additional Information	https://www.rd.usda.gov/programs-services/community-facilities/community-facilities-direct-loan-grant-program/ne

Community Facility Rural Community Development Initiative Grants	
Description	RCDI grants are awarded to help non-profit housing and community development organizations, low-income rural communities and federally recognized tribes support housing, community facilities, and community and economic development projects in rural areas. Funds may be used to improve housing, community facilities, and community and economic development projects in rural areas.
Funds Available	Grants are awarded with a minimum amount of $50,000 and maximum of $250,000. Funds are limited and are awarded through a competitive process. Matching fund requirement equal to amount of grant but in-kind contributions cannot be used as matching funds. Partnerships with other federal, state, local, private, and nonprofit entities are encouraged.
Eligibility	Open to public bodies, non-profit organizations, and qualified private organizations. Rural and rural areas other than a city or town with a population of greater than 50,000 people and the urbanized area contiguous and adjacent to such city or town.
Examples	RCDI grants may be used for but are not limited to training sub-grantees and providing technical assistance to sub-grantees on strategic plan developments, accessing alternative funding sources, board training, developing successful child care facilities, creating training tools, and effective fundraising techniques.
Additional Information	https://www.rd.usda.gov/programs-services/community-facilities/rural-community-development-initiative-grants#overview

Community Facility Technical Assistance and Training Grant	
Description	Provide associations Technical Assistance and/or training with respect to essential community facilities programs. The Technical Assistance and/or training will help identify and plan for community facility needs that exist in the area. Once those needs have been identified, the Grantee can assist in identifying public and private resources to finance those identified community facility needs.
Funds Available	Maximum grant award of $150,000. Grant funds are limited and are awarded through a competitive process. Matching funds are not required, in-kind contributions cannot be used as matching funds, partnerships with other entities are encouraged.
Eligibility	Open to public bodies, non-profit organizations, and federally recognized tribes. Rural areas including cities, villages, townships, towns, and Federally Recognized Tribal Lands outside the boundaries of a city of 20,000 or more.
Examples	Webster County purchased a new ambulance and equipment with Rural Development funds (and other sources) and South Sioux City was able to build a new fire station with funding from USDA Rural Development (and other sources).
Additional Information	https://www.rd.usda.gov/programs-services/community-facilities/community-facilities-technical-assistance-and-training-grant#overview

Emergency Community Water Assistance Grants (ECWAG)	
Description	This program helps eligible communities prepare for, or recover from, an emergency that threatens the availability of safe, reliable drinking water. A federal disaster declaration is not required, and this grant covers events such as drought or flood, earthquake, tornado or hurricane, disease outbreak, chemical spill, leak, or seepage, or other disasters.
Funds Available	Up to $150,000 for water transmission line projects. Water Source grants up to $1,000,000.
Eligibility	Primarily for residential purposes and are eligible for 10,000 or less population areas. Applicants are municipalities, special purpose districts (RWS), non-profits, and Recognized Indian Tribes. Applications are accepted year-round online through the RD Apply or through local RD office
Examples	Construction of waterline extensions, repair breaks or leaks in existing water distribution lines, and address related maintenance necessary to replenish the water supply. Water Source Grants are to construct a water source, intake, or treatment facility.
Additional Information	https://www.rd.usda.gov/programs-services/water-environmental-programs/emergency-community-water-assistance-grants/ne

U.S. Department of Energy

Grid Innovation Program	
Description	This program provides support for projects that use innovative approaches to transmission, storage, and distribution infrastructure to enhance grid resilience and reliability. Projects selected under this program will include interregional transmission projects, investments that accelerate interconnection of clean energy generation, and utilization of distribution grid assets to provide backup power and reduce transmission requirements. Innovative approaches can range from use of advanced technologies to innovative partnerships to the deployment of projects identified by innovative planning processes.
Funds Available	The Grid Innovation Program will invest up to $5 billion ($1 billion/year for Fiscal Years 2022-2026) in innovation and new approaches to transmission, distribution, storage, and regional resilience. The first funding cycle will include both FY22 and FY23, up to $2 billion. Projects are subject to a 50% cost share minimum.
Eligibility	Eligible entities include a state, a combination of 2 or more states, an Indian Tribe, a unit of local government, or a public utility commission.
Examples	Transmission, storage, and distribution infrastructure to enhance grid resilience and reliability.
Additional Information	https://www.energy.gov/gdo/grid-innovation-program

Grid Resilience Utility and Industry Grants	
Description	Grants provide funding to support activities that will modernize the electric grid to reduce impacts from extreme weather and natural disasters. This grant program will fund comprehensive transformational transmission and distribution technology solutions that will mitigate weather hazards across a region or within a community that can cause a disruption to the power system. Grants awarded under the program will fund transmission and distribution technology projects that seek to address hazards within a region or a community that can disrupt the power system, such as wildfires, floods or hurricanes.
Funds Available	Funding of $2.5 Billion over five years from FY 22-26 with $500 million available per year. Funding is capped at the amount the eligible entity has spent in the previous three years on hardening efforts. There is a 100% cost match for this program. The program includes a small utility set aside for those entities selling no more than 4 million MWh of electricity per year.
Eligibility	This funding opportunity is available to electric grid operators, electricity storage operators, electricity generators, transmission owners or operators, distribution providers, and fuel suppliers.
Examples	Infrastructure upgrades to strengthen and modernize the power grid against natural disasters that are exacerbated by the climate crisis.
Additional Information	https://www.energy.gov/gdo/grid-resilience-utility-and-industry-grants

Smart Grid Grants	
Description	Smart Grid Grants is designed to increase the flexibility, efficiency, and reliability of the electric power system, with particular focus on: increasing capacity of the transmission system, preventing faults that may lead to wildfires or other system disturbances, integrating renewable energy at the transmission and distribution levels, and facilitating the integration of increasing electrified vehicles, buildings, and other grid-edge devices. Smart grid technologies funded and deployed at scale through this program must demonstrate a pathway to wider market adoption.
Funds Available	The Smart Grid Grant program will invest up to $3 billion ($600 million/year for Fiscal Years 2022-2026) in grid resilience technologies and solutions. The first funding cycle will include both FY22 and FY23, up to $1.2 billion. Recipients must provide a cost-share of at least 50% of the grant.
Eligibility	This program is open to domestic entities including institutions of higher education; for-profit entities; non-profit entities; and state and local governmental entities, and tribal nations.
Examples	Grid enhancing technologies such as dynamic line rating, flow control devices, advanced conductors, and network topology optimization, to improve system efficiency and reliability. Investments in optical ground wire, dark fiber, operational fiber, and wireless broadband communications networks.
Additional Information	https://www.energy.gov/gdo/grid-innovation-program

U.S. Department of Housing and Urban Development

Community Development Block Grants	
Description	Provides annual grants on a formula basis to states, cities, and counties to develop viable urban communities by providing decent housing and a suitable living environment, and by expanding economic opportunities, principally for low- and moderate-income persons.
Funds Available	HUD determines the amount of each entitlement grantee's annual funding allocation by a statutory dual formula which uses several objective measures of community needs, including the extent of poverty, population.
Eligibility	Eligible grantees include principal cities of Metropolitan Statistical Areas, Other metropolitan cities with populations of at least 50,000, qualified urban counties with populations of at least 200,000 (excluding the population of entitled cities), States and insular areas. Eligibility for participation as an entitlement community is based on population data provided by Census. Each activity must meet one of the following national objectives for the program: benefit low- and moderate-income persons, prevention or elimination of slums or blight, or address community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community for which other funding is not available.
Examples	CDBG funds may be used for activities which include, but are not limited to: Acquisition of real property; Relocation and demolition; Rehabilitation of residential and non-residential structures; Construction of public facilities and improvements, such as water and sewer facilities, streets, neighborhood centers, and the conversion of school buildings for eligible purposes; Public services, within certain limits; Activities relating to energy conservation and renewable energy resources; Provision of assistance to profit-motivated businesses to carry out economic development and job creation/retention activities
Additional Information	HUD does not provide CDBG assistance directly to individuals, businesses, nonprofit or organizations or other non-governmental entities. https://www.hud.gov/program_offices/comm_planning/cdbg

CDBG Disaster Recovery Assistance	
Description	The Community Development Block Grant (CDBG) Program has Disaster Recovery grants to rebuild the affected areas and provide crucial seed money to start the recovery process. These flexible grants help cities, counties, and States recover from Presidentially declared disasters, especially in low-income areas, subject to availability of supplemental appropriations. Since CDBG Disaster Recovery (CDBG-DR) assistance may fund a broad range of recovery activities, HUD can help communities and neighborhoods that otherwise might not recover due to limited resources.
Funds Available	Varies according to the state plan outlined by the state department of economic development.
Eligibility	CDBG-DR funds are provided to the most impacted and distressed areas for Disaster Relief, Long-Term Recovery, Restoration of Infrastructure, Housing, and Economic Revitalization. HUD will notify eligible States, cities and counties if they are eligible to receive CDBG-DR grants. Those who receive grant money include state agencies, non-profit organizations, economic development agencies, citizens and businesses
Examples	Funding can be provided to cover unmet needs such as local cost share funding from public assistance projects or hazard mitigation grant projects.
Additional Information	https://www.hud.gov/program_offices/comm_planning/cdbg-dr

Neighborhood Stabilization Program	
Description	The Neighborhood Stabilization Program (NSP) was established for the purpose of providing emergency assistance to stabilize communities with high rates of abandoned and foreclosed homes, and to assist households whose annual incomes are up to 120 percent of the area median income (AMI). NSP funds were used for activities which included: Establish financing mechanisms for purchase and redevelopment of foreclosed homes and residential properties; Purchase and rehabilitate homes and residential properties abandoned or foreclosed; Establish land banks for foreclosed homes; Demolish blighted structures; Redevelop demolished or vacant properties.
Funds Available	$4 billion nationwide
Eligibility	States, certain local governments, and other organizations.
Examples	The NSP provides grants to every state, certain local communities, and other organizations to purchase foreclosed or abandoned homes and to rehabilitate, resell, or redevelop these homes in order to stabilize neighborhoods and stem the decline of house values of neighboring homes.
Additional Information	https://www.hud.gov/program_offices/comm_planning/nsp

U.S. Economic Development Administration

Public Works and Economic Adjustment Assistance (EAA)	
Description	The EAA provides funding to help plan, build, innovate, and put people into quality jobs in hundreds of communities across the nation. The Economic Adjustment Assistance program is EDA's most flexible program, and grants made under this program will help hundreds of communities across the nation plan, build, innovate, and put people back to work through construction or non-construction projects designed to meet local needs.
Funds Available	Total Program Funding of $500 Million with an award ceiling of $10 Million and a floor of $100,000.
Eligibility	A wide range of technical, planning, workforce development, entrepreneurship, and public works and infrastructure projects are eligible for funding under this program. Eligible applicants for EDA's Economic Adjustment Assistance program include a(n): District Organization of an EDA-designated Economic Development District; Indian Tribe or a consortium of Indian Tribes; State, county, city, or other political subdivision of a State, including a special purpose unit of a State or local government engaged in economic or infrastructure development activities, or a consortium of political subdivisions; Institution of higher education or a consortium of institutions of higher education; Public or private non-profit organization or association acting in cooperation with officials of a political subdivision of a State. Individuals or for-profit entities are not eligible.
Examples	Public infrastructure related to economic development.
Additional Information	As part of the $300 million Coal Communities Commitment, EDA will allocate at least $200 million of the Economic Adjustment Assistance funding to support coal communities. https://www.eda.gov/funding/programs/economic-adjustment-assistance.

U.S. Environmental Protection Agency

Clean Waters Act Section 319 Grants	
Description	Clean Water Act Section 319(h) funds are provided only to designated state and tribal agencies to implement their approved nonpoint source management programs. State and tribal nonpoint source programs include a variety of components, including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and regulatory programs.
Funds Available	Each year EPA awards Section 319(h) funds to states in accordance with a state-by-state allocation formula that EPA has developed in consultation with the states. Grant totals over the past 5 years have increased from $155.9 million in 2013 and $178 million in 2022.
Eligibility	*Information not available*
Examples	*Information not available*
Additional Information	https://www.epa.gov/sites/default/files/2015-09/documents/319-guidelines-fy14.pdf

Environmental Justice Collaborative Problem-Solving	
Description	This cooperative agreement program provides financial assistance to eligible organizations working on or planning to work on projects to address local environmental and/or public health issues in their communities. The program assists recipients in building collaborative partnerships with other stakeholders to develop solutions that will significantly address environmental and/or public health issue(s) at the local level. Selected applicants, or recipients, are required to use the EPA's Environmental Justice Collaborative Problem Solving Model as part of their projects.
Funds Available	The EJCPS Program anticipates awarding approximately $43,800,000 of Inflation Reduction Act funding through 83 cooperative agreements, organized in two tracks of funding. $25,000,000 for CBOs proposing projects for up to $500,000 each. Approximately 50 awards for up $500,000 each are anticipated under this track. $5,000,000 for qualifying small CBOs with 5 or fewer full-time employees proposing projects for up to $150,000 each. For more details about this opportunity, please review closely the "Small Community-based Nonprofit Set Aside". Approximately 33 awards for up to $150,000 each are anticipated under this track. Cooperative agreements will be funded for a three-year performance period.
Eligibility	Eligible entities include incorporated non-profit organizations, US Territories, Tribal government, either federally or state recognized, tribal organizations, and freely associated states.
Examples	In 2003 the Pacific Basin Development Council received this grant to build community resiliency.
Additional Information	https://www.epa.gov/environmentaljustice/environmental-justice-collaborative-problem-solving-cooperative-agreement-5

Urban Waters Small Grants	
Description	The mission of this program is to help local residents and their organizations, particularly those in underserved communities, restore their urban waters in ways that also benefit community and economic revitalization. The program recognizes that healthy and accessible urban waters can help grow local businesses and enhance educational, recreational, social, and employment opportunities in nearby communities. Projects should meet the following four objectives: address local water quality issues related to urban runoff pollution; provide additional community benefits; actively engage underserved communities; and foster partnership.
Funds Available	Urban Waters Small Grants are competed and awarded every two years with individual award amounts of up to $60,000.
Eligibility	Eligible applicants include States, local governments, Indian Tribes, public and private universities and colleges, public or private nonprofit institutions/organizations, intertribal consortia, and interstate agencies.
Examples	An example of a past grant awarded was the Urban Waters and South Platte Watershed from the Headwaters to the Denver Metropolitan Area.
Additional Information	https://www.epa.gov/urbanwaterspartners/urban-waters-small-grants

Water Infrastructure Finance and Innovation Act of 2014 (WIFIA)	
Description	The WIFIA program provides long-term, low-cost supplemental loans for regionally and nationally significant water and wastewater infrastructure projects. Borrowers benefit from a single fixed interest rate that is equal to the US Treasury rate of a similar maturity, an interest rate that is not impacted by the borrower's credit or loan structure, custom long-term repayment schedules with options to defer payment for up to 5 years.
Funds Available	$20 million minimum project size for large communities, $5 million minimum for small communities of 25,000 or less. WIFIA can fund a maximum of 49% of eligible project costs.
Eligibility	Eligible borrowers are 1) local, state, tribal, and federal government entities; 2) Partnerships and joint ventures; 3) Corporations and trusts; 4) Clean Water and Drinking Water State Revolving Fund (SRF) programs.
Examples	Wastewater conveyance and treatment projects. Drinking water treatment and distribution projects. Enhanced energy efficiency projects at drinking water and wastewater facilities.
Additional Information	Total federal assistance may not exceed 80% of a project's eligible costs. https://www.epa.gov/wifia/what-wifia

U.S. Fish and Wildlife Services

North American Wetlands Conservation Standard and Small Grant	
Description	A competitive matching grants program that supports public-private partnerships carrying out projects in the United Stated that further the goals of the North American Wetlands Conservation Act. These projects must involve long-term protection, restoration, and/or enhancement of wetlands and associated uplands habitat for the benefit of all wetlands-associated migratory birds.
Funds Available	US Small Grants may not exceed $100,000 and require a 1-to-1 ratio match for awarded grant amount. The US Standard Grant is for grants larger than $100,000 and requires a 1-to-1 match ratio.
Eligibility	US Small Grants proposals are due in October or else will be considered an early submission for the next Fiscal Year. The US Standard Grant has a two deadline for proposals, one in February and one in July. Proposal submitted after July are considered ineligible unless clearly marked as an early submission for the next Fiscal Year.
Examples	Acquisition of land for the purposes of wetlands conservation, wetland restoration projects, wetland enhancement projects, wetland establishment, or other direct long-term wetland conservation work.
Additional Information	https://www.fws.gov/sites/default/files/documents/north-american-wetlands-conservation-act-us-eligibility-criteria_0.pdf

U.S. Forest Service

Forestry Legacy Program	
Description	Focuses on private forest land that is faced by threats of conversion to non-forest land by urbanization, residential development. Providing economic incentives to landowners to keep forests as forest encourages sustainable forest management and supports strong markets for forest products. Landowners participate in the FLP by either selling property outright or by retaining ownership and selling only a portion of the property's development rights; both are held by state agencies or another unit of government. Use of a conservation easement allows land to remain in private ownership while ensuring that its environmental values are retained. Program funded by Land and Water Conservation Fund, which invests a small percentage of federal offshore drilling fees towards the conservation of important land, water, and recreation areas for all Americans.
Funds Available	Previous year funds for Fiscal Year 2023 totaled $188,000,000 across 34 projects.
Eligibility	Private Lands
Examples	Funded projects from 2023 include the Big Sioux River Forest, Pelican River Forest Project, Upper Thompson Connectivity Project, and others.
Additional Information	https://www.fs.usda.gov/managing-land/private-land/forest-legacy/program

State of Nebraska Funding Resources

In addition to federal grants, there are several state agencies and programs with potential applicability to supporting funding and implementation of mitigation projects. Many federal hazard mitigation grant programs are administered at the state level by Nebraska Emergency Management and Nebraska Department of Natural Resources, as noted above. These agencies will also likely be important in earlier stages of the hazard mitigation planning process by providing current hazard and risk assessment data.

While this section of the funding guidebook attempts to list as many funding options as possible, it is by no means a complete list of programs in Nebraska that could have the potential to support hazard mitigation project implementation. Like federal grant programs, many of these programs are dependent on yearly funding allocations, which results in fluctuations in their availability. The websites and reference materials used to provide this information are as current as possible; however, it is important to note that funding programs are dynamic and subject to frequent changes. While it is helpful to be familiar with the current information, it is equally as important to engage federal and state agencies in a dialog as soon as possible. State agencies covered in this guidebook include:

- Nebraska Department of Economic Development
- Nebraska Department of Environment and Energy
- Nebraska Department of Natural Resources
- Nebraska Environmental Trust
- Nebraska Forest Service
- Nebraska Silver Jackets

Nebraska Department of Economic Development

CDBG Program	
Description	The Small Cities Community Development Block Grant (CDBG) Program, administered through the Nebraska Department of Economic Development, helps smaller local governments fund community projects that might not otherwise be financially feasible. Through funding from the United States Department of Housing and Urban Development, the program allows each community to determine which projects are most needed, with a focus on Housing, Neighborhood Revitalization, Commercial Revitalization and Economic Development
Funds Available	Annually, Nebraska receives $10.6± million for distribute to eligible applicants, plus prior year resources not obligated and program income. Congress may, at their discretion, appropriate supplemental CDBG funds in response to a natural disaster where a Presidential Declaration has been authorized.
Eligibility	Communities and counties whose residents are 51% or more low- to moderate-income, based on the American Community Survey Five-Year Estimate 2011-2015.
Examples	Flood control, drainage improvements, property buyout and relocation.
Additional Information	https://opportunity.nebraska.gov/programs/community/cdbg/

Nebraska Department of Environment and Energy

Clean Water State Revolving Fund Program	
Description	With the passage of the Amendments to the Clean Water Act (CWA) in 1987, Congress provided for the replacement of the federal Construction Grants program with the Clean Water State Revolving Fund (CWSRF) program and Drinking Water State Revolving Fund (DWSRF) Program. The program provides capitalization grants to state to be used as the basis (along with a required twenty percent state match), to create revolving loan funds which provide low-interest loans to publicly owned water and wastewater systems to finance water and wastewater infrastructure projects, and including, stormwater management.
Funds Available	$28.2± million for DWSRF Program, plus $28.35 million for Lead Service Line Replacement, and $7.56 million for Emerging Contaminants. $17.7± million for CWSRF Program.
Eligibility	Publicly owned water and wastewater systems
Examples	Municipal water and wastewater systems, and stormwater management.
Additional Information	http://dee.ne.gov/Publica.nsf/PubsForm.xsp?documentId=56E958FDC603A27A862588B50052EF8E&action=openDocument

Nebraska Department of Natural Resources (NeDNR)

Flood Mitigation Assistance	
Description	The Flood Mitigation Assistance Grant Program (FMA) is administered by NeDNR and provides financial assistance for either planning or projects that assist in decreasing long-term risk of flood damage to structures insured under the National Flood Insurance Program. The FMA program has priorities to mitigate structures that have suffered repeated flood claims and those with severe repetitive loss.
Funds Available	Approximately $800 million nationwide in 2022. Nebraska did not receive any FMA in 2022.
Eligibility	Municipalities
Examples	Project (structural or non-structural) to reduce or eliminate repetitive flood damage. This includes: Capability and capacity building activities, localized flood risk reduction projects, and individual flood mitigation projects.
Additional Information	http://dee.ne.gov/Publica.nsf/PubsForm.xsp?documentId=56E958FDC603A27A862588B50052EF8E&action=openDocument

Water Sustainability Fund	
Description	The Water Sustainability Fund (WSF) is a source of financial support to help local project sponsors achieve the goals set out in Neb. Rev. Stat. § 2-1506. The Nebraska Natural Resources Commission (NRC) oversees WSF operations including application review, scoring & ranking, and awarding funding to successful applicants.
Funds Available	Of the annual funding appropriated by the Nebraska Legislature, ten percent is designated by statute for projects separating storm and sewer water. The NRC also reserves ten percent for projects requesting $250,000 or less. A 40% local cost match is required of local project sponsors.
Eligibility	Political subdivisions
Examples	Projects that meet the goals and objectives of an approved integrated management plan or ground water management, projects that mitigate the threats to drinking water, improves water quality, contributes to water sustainability goals and water supply initiatives, reduces threats to property damage or critical infrastructure systems.
Additional Information	WSF applications are filed electronically between March 16th and 31st each year. The applications are typically reviewed during the second quarter with final determination made on each application during the third quarter. https://nrc.nebraska.gov/water-sustainability-fund-0

Nebraska Environmental Trust (NET)

NET Grants	
Description	The NET project will fund any project or portion of a project that achieves one or more of the trusts categories. These categories include habitat, surface and ground water, waste management, air quality, and soil management.
Funds Available	In 2023 the NET Board approved the NET Grants Committee's recommendation to fund 23 projects for a total of $11,347,203. Grants are funded through the proceeds of the Nebraska Lottery, which determines the amount available to applicants.
Eligibility	There are no restrictions on applicants or project sponsors as long as the project falls within the eligibility criteria. Individuals, private organizations, and public entities may apply. For-profit organizations must demonstrate that the project results in public benefit and does not pay for private benefits. See our eligibility criteria for more information.
Examples	Mobile Prescribed Burn Unit and Education Outreach, Increase Fire Capacity & Rangeland Impact - Sandhills, Early warning: Monitoring for agricultural pests and disease vectors in western Nebraska
Additional Information	The Nebraska Environmental Trust accepts grant applications annually. Applications open around July and are due on or before the first Tuesday after Labor Day in September. Applications need to be submitted through an online grant application portal located at the following address: https://environmentaltrustgrants.org/

Nebraska Forest Service

Fire Shop (FEPP Program)	
Description	Through a cooperative program with the U.S. Forest Service, the Nebraska Forest Service is able to acquire and recondition vehicles which have become excess to the needs of the federal government. These vehicles can be loaned to cooperating rural fire districts. When no longer needed, these vehicles must be returned to the Nebraska Forest Service.
Funds Available	Fire-Fighting Equipment. The Fire Shop can also provide fire districts resources for reducing vehicle maintenance costs and provide routine complimentary maintenance checks.
Eligibility	Cooperating Fire Districts
Examples	Pumpers, trucks, CUCVs, generators, floodlights.
Additional Information	https://nfs.unl.edu/fireshop

Forest Fuels Reduction	
Description	Thinning of dense forests and removal of ladder fuels (ground vegetation that allows a fire to spread into the tree canopy).
Funds Available	Nebraska Forest Service reimburses landowners up to 75% of the costs for tree removal, piling and pile burning (if necessary); remainder paid by landowner.
Eligibility	Eligible locations include Pine Ridge, Niobrara Valley, and Wildcat Hills. State and private forest landowners are eligible to apply.
Examples	Thinning of dense forests and removal of hazardous "ladder fuels" from beneath trees.
Additional Information	https://nfs.unl.edu/fuels-assistance

Hazardous Fuels Reduction	
Description	Thinning of dense forests and removal of ladder fuels (ground vegetation that allows a fire to spread into the tree canopy) from private or state land adjacent to United States Forest Service (USFS) property.
Funds Available	NFS reimburses the landowner up to 100 percent of the costs for tree removal, piling and burning (if necessary). No landowner cost on eligible properties.
Eligibility	Eligible Locations must be adjacent to USFS property in the Pine Ridge. Eligible Applicants are State and private forest landowners
Examples	Thinning of dense forests and removal of hazardous "ladder fuels" from beneath trees.
Additional Information	https://nfs.unl.edu/fuels-assistance

Nebraska Silver Jackets

Nebraska Silver Jackets	
Description	The Silver Jackets are collaborative state-led interagency teams, continuously working together to reduce flood risk at the state level. Through the Silver Jackets program, the U.S. Army Corps of Engineers, the Federal Emergency Management Agency, additional federal, state and sometimes local and Tribal agencies provide a unified approach to addressing a state's priorities. The Silver Jackets team is the forum where all relevant agencies come together with the state to collaboratively plan and implement that interagency solution. Through partnerships, Silver Jackets optimizes the multi-agency utilization of federal resources by leveraging state/ local/ Tribal resources, including data/information, talent and funding, and preventing duplication of effort.
Funds Available	Varies
Eligibility	Anyone impacted by flooding
Examples	Education and outreach, risk assessments, hydrologic studies
Additional Information	https://floods.nebraska.gov/

Alternative Funding Resources

In recent years, states and communities across the country have sought and developed innovative funding sources as alternatives to traditional government grant programs. These funding sources fall into three main categories: Local Funding Options, Public-Private Partnerships, and Private Foundations. These funding sources will be important for current and future hazard mitigation planning efforts for several reasons including:

- Difficulty receiving mitigation grant assistance programs at the federal and state level.

- Opportunities to fund projects that might not qualify or align with traditional grant and assistance programs. Funding programs seek solutions that reduce risk for a particular threshold (i.e., 1-percent flood) and meet absolute cost-benefit criteria that the agencies themselves must adhere to. Therefore, these programs are not able to support efforts that may help most of the time but don't meet these thresholds.

Local Funding Options

Local funding options are just what they sound like, using local funds for local mitigation projects. Local funds are also needed as the non-federal share or matching funds for federal grant programs but can also be used independently to fund a range of project types. Local funding options include the following:

Capital Improvement Programs

Ongoing civic improvements can include prioritized hazard mitigation projects or mitigation can be included as one aspect of a larger project. For example, improving the hydraulic capacity of a culvert or bridge to prevent upstream flooding while undertaking periodic replacements for end of service considerations is one example. Replacing windows in a school with shatter resistant glass as part of an overall renovation is another example. Capital improvement programs are generally funded with local tax revenues and municipal bonds.

Permits, Fees, and Developer Contributions

Communities can establish fees, earmark a portion of existing permit and fee structures, and/or establish requirements for developer contributions for new developments in hazard prone areas that can then be used to fund local mitigation projects. The proceeds can be accumulated in what is often referred to as a Mitigation Trust Fund and the uses are typically tied to specific project types or relationships with projects already identified in specific plans or documents such as a Hazard Mitigation Plan.

Force Account / In-Kind Services

Although there is a cost associated with activities of public employees, there are a wide range of activities that can be undertaken by local government staff and officials as well as interested parties on their behalf that would yield significant benefits. An example is public outreach and education for individual property owners, businesses, and institutions to reduce their risk through correspondingly inexpensive or essentially activities. This would include tapping into available educations resources, promoting individual action, etc.

Property Owners

For a project that directly benefits one or more specific properties, the property owner can be asked to contribute. Through the hazard identification and risk assessment process, property owners can become better aware of their risks and options. Owners that recognize they have a flooding problem may be willing to pay a portion of the cost. In recent years, property owners have voluntarily agreed to pay the non-federal share (up to 25 percent of the total project cost) for FEMA Hazard Mitigation Assistance grants in some states. In some cases, the owners have paid even higher percentages of the cost. In addition, after a flood, owners may have cash from insurance claims or disaster assistance that they will be using to repair their homes and properties. By including the right floodproofing and mitigation project components into the repairs, the resilience of the property to future flooding may be improved. Having property owners contribute to a project can help stretch available local funds and gives the property owner an enhanced stake in the outcome of the project and incentive to make sure the property is properly maintained.

Individual Participation

Although mitigation is ultimately intended to benefit individuals, hazard mitigation plans often neglect to integrate participation of potential beneficiaries into the process. The participation by individuals, including small business owners, is important for making sure the resulting hazard mitigation plan reflects community needs and priorities, but it also allows for the local or regional planning team to identify measures and options that individuals can take to reduce their own risk at a cost they can afford.

Public-Private Partnerships

Developing a public-private partnership is a phrase used frequently in a wide range of government programs, especially in the context of hazard mitigation. Participation of private sector organizations in solving their own hazard risk situations can be a low-cost and effective method. It also encompasses finding opportunities for public and private sector partners to share costs equitably for larger projects that require substantial funds to implement. Private sector businesses and organizations have their own cost-benefit calculations to perform but joint efforts may make the balance sheets work for both sides.

Private Foundations

Cultivating relationships with local, regional, or even national foundations with interests or missions consistent with hazard mitigation, community sustainability, climate change adaptation, and other related topics can yield successful results in terms of funding and other means of support.

There are many local foundations around the State of Nebraska, many of which fund programs that can be utilized for components of hazard mitigation projects. Many of these foundations only support non-profit organizations, so the applicability of these funds to projects depends upon the partners involved.

Appendix F: Guide to Review and Update the Hazard Mitigation Plan

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Introduction

Each participating jurisdiction in the hazard mitigation plan will be responsible for monitoring, evaluation, and updating the plan during its five-year lifespan. During the planning process, participants identified the position(s) that will be responsible for plan maintenance, the frequency of review, and how the public will be involved. This appendix will help guide the review and update process.

Profile Review Tracking

Date Reviewed	By Whom	Summary of Changes

Evaluate Your Local Planning Team

When reviewing the plan, the local planning team should reassess its composition and ask the following questions:

Have there been staffing changes that warrant inviting different members to the local planning team?

Yes☐ No☐

Comments/Proposed Action:

Are there organizations that have been invaluable to the planning process or to the project implementation that should be represented on the planning team?

Yes☐ No☐

Comments/Proposed Action:

Are there any representatives of essential departments/organizations who have not fully participated in the planning and implementation of actions? If so, can someone from that department/organization commit to the planning team?

Yes☐ No☐

Comments/Proposed Action:

Are there ways to better include the public? Yes☐ No☐

Comments/Proposed Action:

Revisit Hazard Prioritization

During the planning process, your jurisdiction was asked to prioritize hazards of top concern. When reviewing your profile, the local planning team should look at the hazards identified along with the associated write-up to ensure the information is still accurate. The table below will help track any changes to your hazard prioritization.

Steps	Questions	Yes	No	Comments
Prioritized Hazards	Have your prioritized hazards changed?			If yes, which hazards should be added/removed?
Hazard Write-Ups	Have any new events taken place?			
Hazard Write-Ups	Are there new high-risk populations, buildings, or infrastructure?			
Hazard Write-Ups	Do any of the write-ups need to be changed?			

Evaluating Mitigation and Strategic Actions

Updating and evaluating the mitigation and strategic actions identified in your profile is an important step in the review process. For each mitigation action identified, the lead agency identified on each action can provide an update by filling out the information listed below.

Project Name:

Does the project description need to be updated? Yes☐ No☐

Does the estimated cost need to be updated? Yes☐ No☐

Does the timeline need to be updated? Yes☐ No☐

Does the priority level need to be updated? Yes☐ No☐

Does the lead agency need to be changed? Yes☐ No☐

Was the project implemented?

If yes: What were the results?

If no:

- Why not?

- Was there political support for the actions/projects? Yes☐ No☐
- Were enough funds available? Yes☐ No☐
- Was new information discovered about the risks or community that made implementation difficult or no longer sensible? Yes☐ No☐
- Were sufficient resources (for example staff and technical assistance) available? Yes☐ No☐
- Is this project still needed? Yes☐ No☐

Identify New Mitigation and Strategic Actions

When reviewing your jurisdictional profile, you may determine that new mitigation actions are needed based on changes to hazard prioritization, local capabilities, or risk.

Are there new mitigation projects that need to be added to the plan? Yes☐ No☐

If yes, fill out a table for each new mitigation action.

Mitigation Action Name			
Description and Location			
Hazard(s) Addressed			
Estimated Cost			
Local Funding			
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency			
Status			

Mitigation Action Name			
Description and Location			
Hazard(s) Addressed			
Estimated Cost			
Local Funding			
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency			
Status			

Plan Updates

Most profile updates do not need to be sent to Nebraska Emergency Management Agency or FEMA. Changes to the local planning team, hazard prioritization, or updates to current mitigation actions can be tracked internally until the next full plan update.

However, if you are adding a new mitigation action, it will need to be sent to Nebraska Emergency Management Agency, so it can potentially be eligible for FEMA hazard mitigation grant funding. The template letter below can be used when notifying Nebraska Emergency Management Agency of an added mitigation action. Prior to sending the letter, notify the project sponsor so that the plan document can also be updated.

[Date]

Nebraska Emergency Management Agency
Hazard Mitigation Unit
2433 N.W. 24th Street
Lincoln, NE 68524

To Whom It May Concern:
The [your jurisdiction] requests the following mitigation action be added to the [hazard mitigation plan name]. This action will be added to *[location of your profile (section and profile title)]*, page [#] and is attached.

(Fill Out Table)

Mitigation Action Name	
Description	
Hazard(s) Addressed	
Estimated Cost	
Local Funding	
Timeline	
Priority	
Lead Agency	
Status	

For questions, I can be reached by email at [email address] or by phone at [phone number].

Sincerely,

[Name]
[Title]
[Jurisdiction]

Special Districts Appendix

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School District Profile

Chadron Public Schools

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Ginger Meyer	Superintendent	Chadron Public Schools	-	-
Josh Stadler	Maintenance Supervisor	Chadron Public Schools	Attended	Attended

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

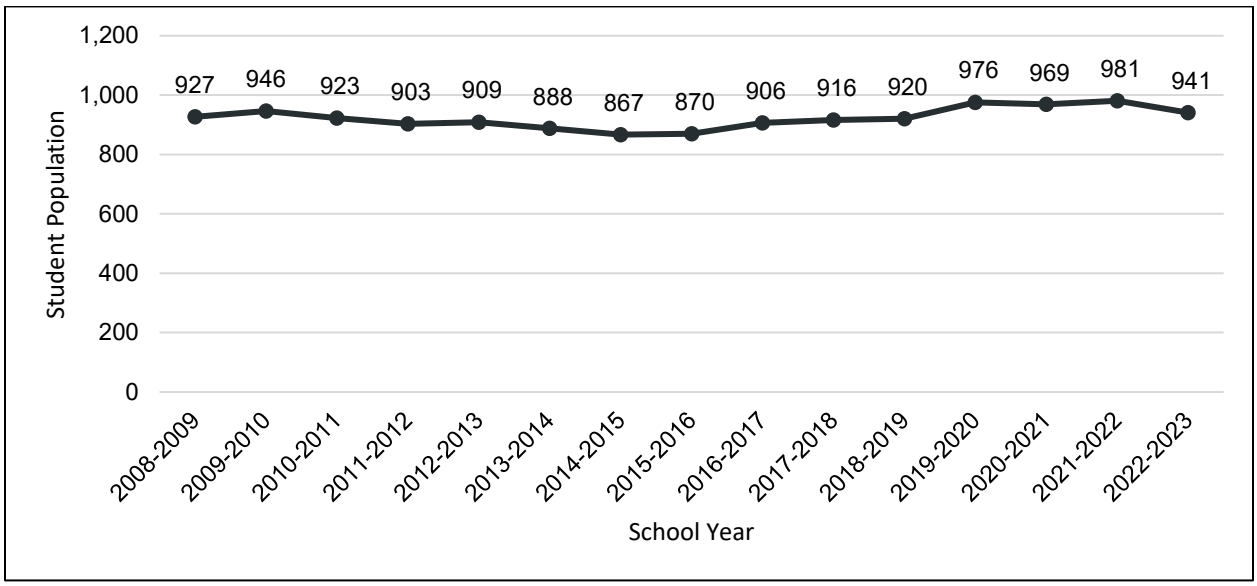
The School Administrators will review and update this participant profile outside of the five-year update. Chadron Public Schools will review the plan annually, and the public will be notified via the school district website.

Demographics

The following figure displays the historical student population trend starting with the 2008-09 school year and ending with the 2022-2023 year. It indicates that the student population has declined recently. There are 941 students enrolled in the district.[1] A declining student population can mean there is a decreasing tax revenue for the school district, which could make implementation of mitigation projects more fiscally challenging. The school district anticipates little change in student population.

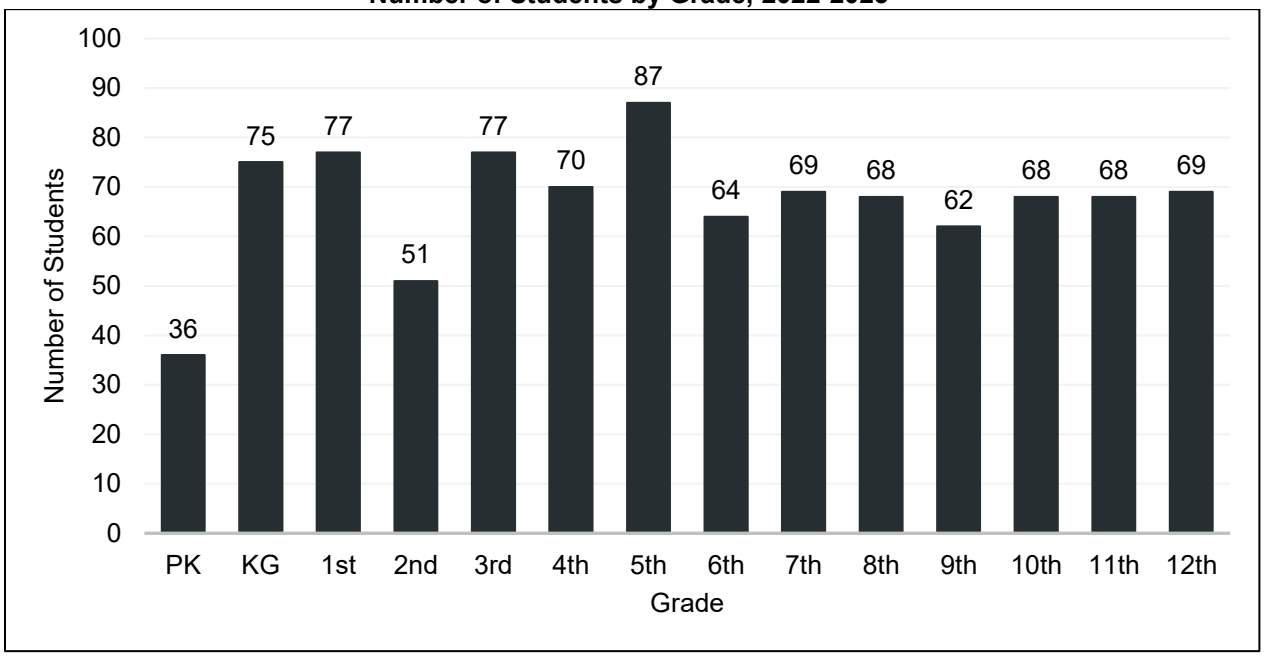
1 Nebraska Department of Education. July 2024. “Nebraska Education Profile.” https://nep.education.ne.gov/.

Student Population 2008-2023



Source: Nebraska Department of Education

Number of Students by Grade, 2022-2023



Source: Nebraska Department of Education

The figure above indicates that the largest number of students are in the 5th, 3rd, and 1st grades. The lowest population of students are in Pre-K and 2nd grades. According to the Nebraska Department of Education (NDE), 43% of students receive either free or reduced priced meals at school. This is lower than the state average of 50%. Additionally, 14% of students are in the Special Education Program. The school mobility rate is 6%, while the number of English Language Learners is unavailable.. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Student Statistics, 2022-2023

	School District	State of Nebraska
Free/Reduced Priced Meals	43%	50%
School Mobility Rate	6%	4%
English Language Learners	N/A	8%
Special Education Students	14%	16%

Source: Nebraska Department of Education

Capability Assessment

The planning team assessed Chadron Public Schools' hazard mitigation capabilities by reviewing the district's planning capability, administration and technical capability, fiscal capability, education and outreach capability, drills, and overall capability. New staff is trained on emergency procedures at orientation, and there are monthly and bi-annual emergency drills. Parents and students are educated about the emergency procedures via informational meetings and documentation. The district is also partnered with the local police and fire departments regarding the emergency procedures.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning Capability	Facility Improvements Plan	Yes
	Continuity of Operations Plan	Yes
	Crisis Response Plan	Yes
	Strategic Plan	Yes
	Other (if any)	Reunification & Building Specific Plans
Administration & Technical Capability	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	No
Fiscal Capability	Applied for Grants in the Past	Yes
	Awarded Grants in the Past	Yes
	Authority to Levy Taxes for Specific Purposes Such as Mitigation Projects	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved Bonds in the Past	No
	Flood Insurance	
	Other (if any)	
Education & Outreach Capability	Natural Disaster or Safety Related School Programs	Yes
	Hazard Education or Information Program	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 / year
	Tornado	2 / year
	Intruder	2 / year
	Bus evacuation	2 / year
	Evacuation	10 / year
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	High
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

Chadron Public Schools has multiple planning documents that discuss or relate to hazard mitigation. The plans are listed below along with a short description of how they are integrated with the hazard mitigation plan or how they contain hazard mitigation principles. When the school district updates these or other planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Emergency Operations Plan (2024)

The purpose of the Emergency Operations Plan is to identify and respond to incidents by outlining the responsibilities and duties of Chadron Public Schools and its employees. It outlines the expectations of staff, roles and responsibilities, direction and control systems, internal and external communications, training and sustainability, common and specialized procedures, and response to specific hazards and vulnerabilities. High priority hazards discussed in the plan include severe storms, fire, chemical, intruder, and terrorism. A crisis response plan and continuity of operations plan are also included in this document. The Emergency Operations Plan has not been integrated with the hazard mitigation plan. All staff are aware of the plan, and it gets reviewed and updated as needed.

Facility Improvements Plan

Chadron Public School's facility improvements plan outlines projects to be undertaken at school owned facilities and buildings. Projects include a description of the work to be completed, a rough cost estimate if available, and a timeline of when the project will likely be completed. The facility improvements plan is regularly updated.

Strategic Plan

The strategic plan for the school district outlines goals and objectives for the next several years. Included in these goals and objectives is keeping students and staff safe during hazardous events. This plan is updated and reviewed prior to each school year. It has not been integrated with the hazard mitigation plan.

Future Development Trends

The district has experienced minimal changes over the last five years. There are staff changes annually, and the building has had some facility upgrades, however, no new developments are currently planned.

Community Lifelines

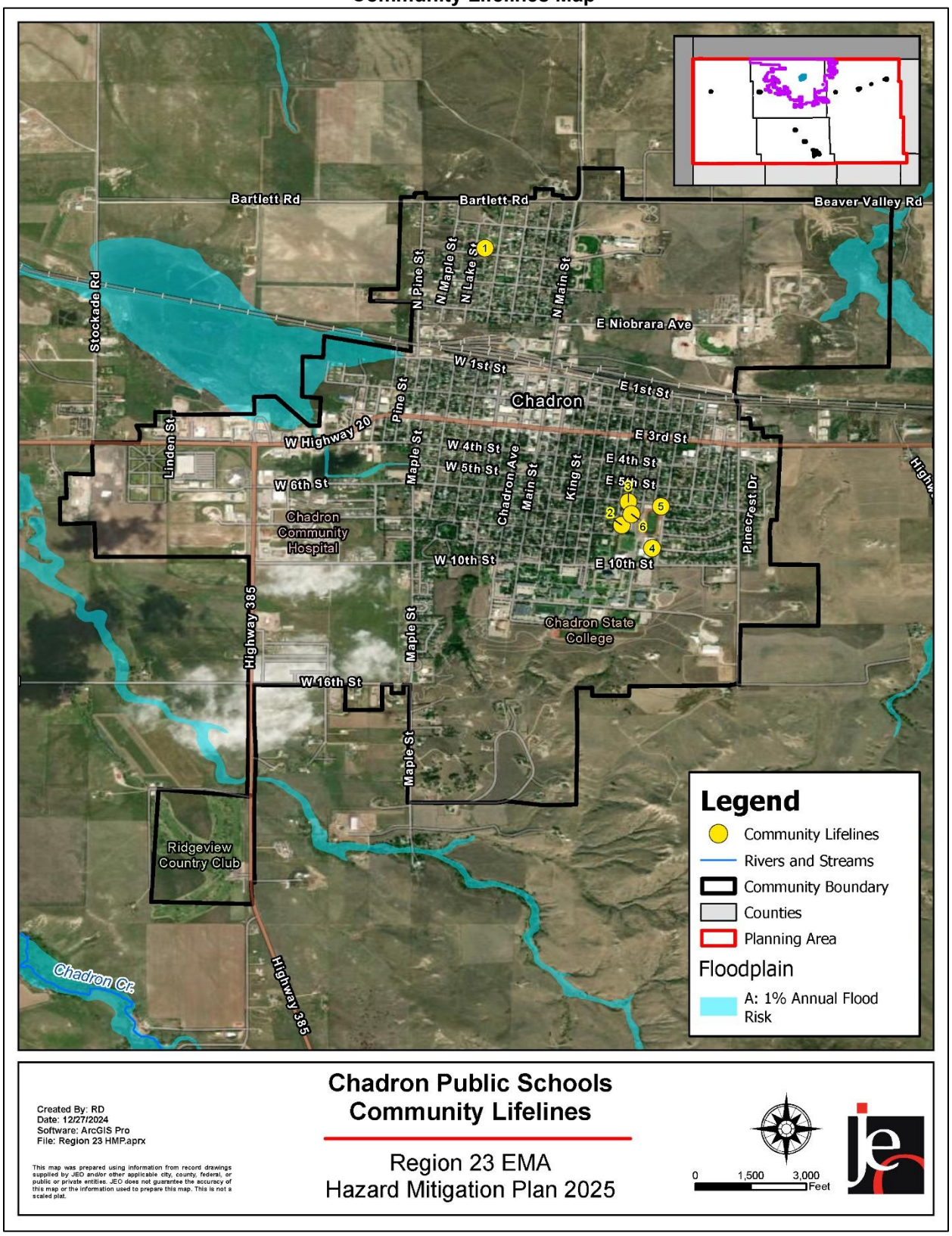
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Chadron Intermediate	Other	S	N
2	Chadron Primary	Other	S	N
3	Chadron Middle School	Other	S	N
4	Chadron Senior High School	Other	S	N
5	Bus Barn	Transportation	-	N
6	Skills for Living House	Other	-	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Chadron Public Schools which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Chadron Public Schools. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Human Infectious Diseases

Following the COVID-19 pandemic outbreak, the district has identified human infectious diseases as a top concern. The school district has prioritized the issue due to the proximity of students and teachers. Since the pandemic, a pandemic plan has been created, however, better communication between staff, students, parents and the health department has been identified as an area for improvement.

Tornadoes and High Winds

Tornadoes and high winds have the potential to cause extensive catastrophic damage to property and can endanger the lives of students and staff. During a high windstorm event in 2012 the school district experienced significant damage to the High School's gymnasium roof while an event was taking place. The district also experiences several tornado events annually during the school year or while events are taking place. Tornado sirens are located throughout the City of Chadron for early outdoor warnings, but none are located on school grounds. The local planning team identified a need for improved communication resources and capabilities during hazard events, including two-way battery powered radios in case of power outages. Sheltering locations are located in windowless basements or the lowest level of rooms per building, but there are no FEMA certified safe rooms in the schools. Middle and high schools are also used for community shelter locations in the event of a community wide disaster event, but neither facility have backup generators. School staff conduct training through various national and state safety conferences and the school safety plan is updated as needed. Since the previous HMP was completed, there has been extensive work on the Emergency Operations Plan. There have also been radios installed for district communication and new roofing has been installed on select portions of the buildings. An indoor dismissal plan has been introduced and communication plans have been improved, however, the district recognizes the need to continue these efforts in the future.

Terrorism and Cyber Attack

In February of 1994 an active shooter event occurred at Chadron Middle School, the first school shooting to occur in Nebraska. A seventh-grade student shot and injured one teacher. The school district has prioritized and emphasized the need for effective safety procedures since this event. All doors in the facilities have secure key-less locking mechanisms on interior doors and visitors are required to have door identification cards to enter the buildings. Safety buckets, which house materials such as a blanket, hammer, and first aid materials, are found in every classroom and are used during drills. Students and staff practice lockdown and active shooter drills annually. Staff continue training through national and state safety conferences regularly. The school safety plan is updated as needed and all standards meet or exceed established standards. The local planning team indicated a need for two-way radios as a backup communication method in the case of incident or power outages. Since the last update, the district has updated the Emergency Operations Plan and increased active shooter training and communication with staff. The district recognizes the need for additional communication efforts and staff training.

In recent years, there have been numerous attacks against the school district IT system, as identified by the district planning team. These attacks can negatively affect district computers, leak the information of staff and students, and can initiate an expensive and time-consuming repair process. In the wake of these attacks, the school has introduced two-step verification, cloud-backup software, and updated its cyber security programs. The district has also identified the need for future funding into combatting this hazard, as well as better training for staff and students.

New Mitigation and Strategic Actions

Action	Backup Communication Equipment
Description & Location	Acquire backup communication equipment, such as two-way radios, in the case of terrorist/cyber attack incident or power outage.
Hazard(s) Addressed	Terrorism and Cyber Attack
Estimated Cost	$2,000
Local Funding	School funds, Community taxes
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Action	Elevate Utilities and Critical Systems
Description & Location	Elevate utilities and critical systems to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	School funds, Community taxes
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

Action	Human Disease Outbreak Communication Plan
Description & Location	Develop a communication plan/protocol in the event of a human disease outbreak.
Hazard(s) Addressed	Human Infectious Disease
Estimated Cost	TBD
Local Funding	School funds, Community taxes
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps, and environmental education, increase student and staff awareness of natural and manmade hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$3,000+
Local Funding	School Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	In progress

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and school facilities
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000 per generator
Local Funding	School funds, Community taxes
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Removed Mitigation and Strategic Actions

Action	Alert/Warning Sirens
Description & Location	Perform an evaluation of existing alert sirens in order to determine which sirens should be replaced or upgraded. Install new sirens where lacking.
Hazard(s) Addressed	Tornado and High Winds
Reason for Removal	Completed

School District Profile

Crawford Public Schools

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Eugene "Mo" Hanks	Superintendent	Crawford Public Schools	Attended	Recording

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

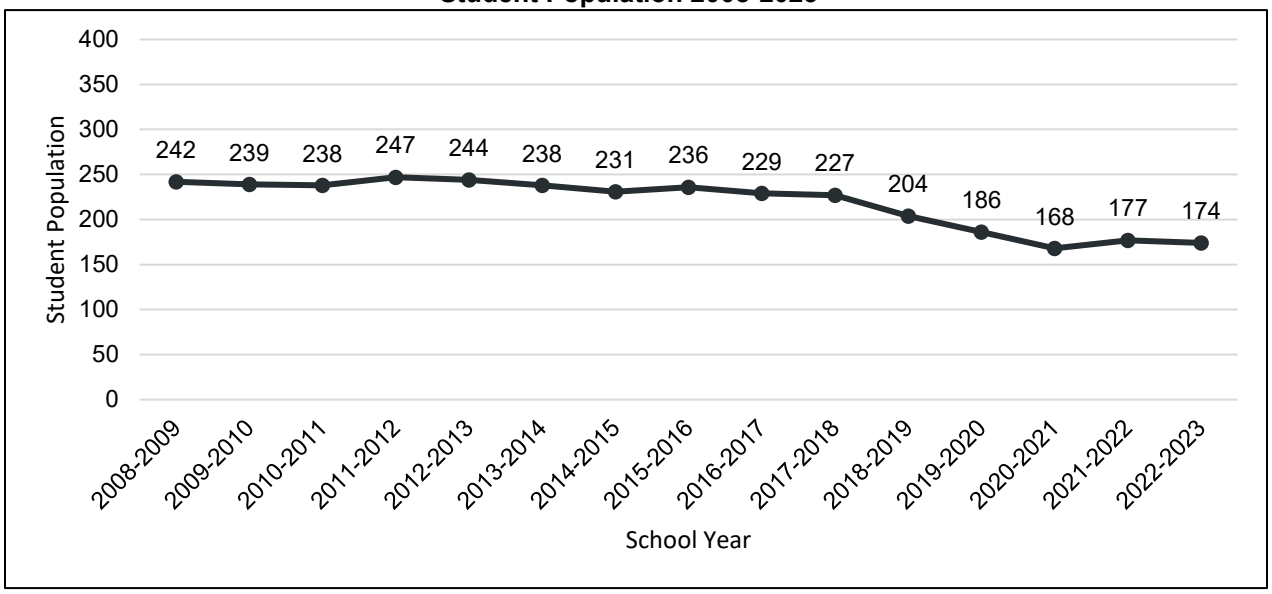
The Superintendent, Principal, and BOE Safety Committee will review and update this participant profile outside of the five-year update. Crawford Public School will review the plan annually, and the public will be notified via board meetings and the school website.

Demographics

The following figure displays the historical student population trend starting with the 2008-09 school year and ending with the 2022-2023 year. It indicates that the student population has generally declined since 2017. There are 174 students enrolled in the district.[2] A declining student population can mean there is a decreasing tax revenue for the school district, which could make implementation of mitigation projects more fiscally challenging. The school district anticipates little change in the student population.

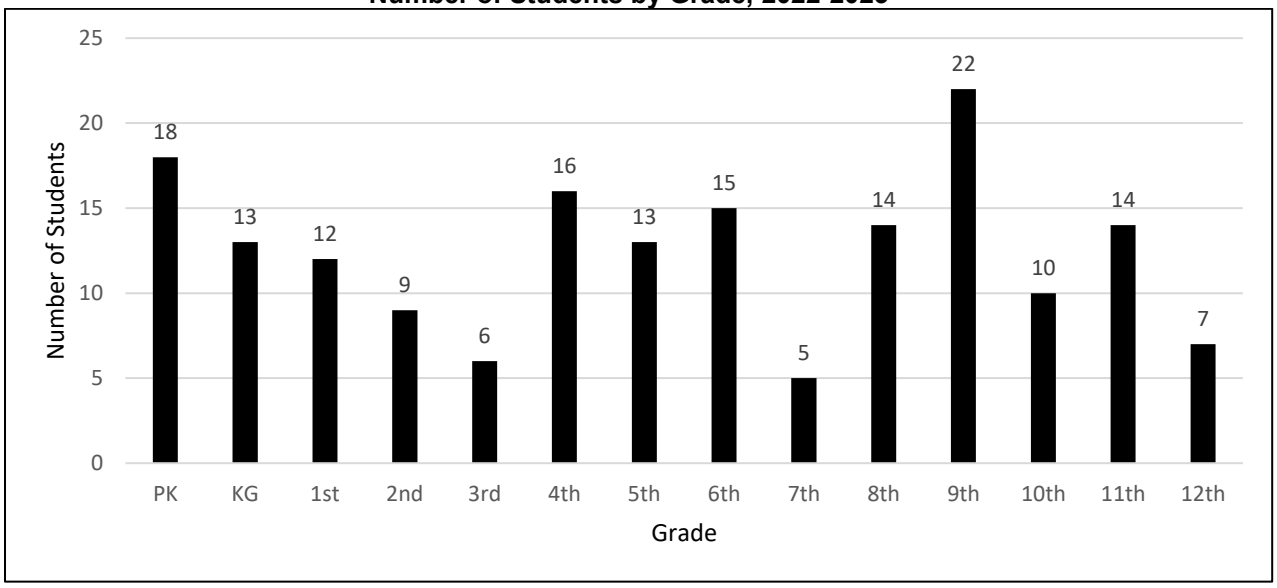
2 Nebraska Department of Education. July 2024. "Nebraska Education Profile." https://nep.education.ne.gov/.

Student Population 2008-2023



Source: Nebraska Department of Education

Number of Students by Grade, 2022-2023



Source: Nebraska Department of Education

The figure above indicates that the largest number of students are in Pre-K, 4th, and 9th grades. The lowest population of students are in 3rd and 7th grades. According to the Nebraska Department of Education (NDE), 67% of students receive either free or reduced priced meals at school. This is higher than the state average of 50%. Additionally, 16% of students are in the Special Education Program. The school mobility rate is 6% statewide, while the number of English Language Learners is unavailable. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Student Statistics, 2022-2023

	School District	State of Nebraska
Free/Reduced Priced Meals	67%	50%
School Mobility Rate	6%	N/A
English Language Learners	N/A	8%
Special Education Students	17%	16%

Source: Nebraska Department of Education

Capability Assessment

The planning team assessed Crawford Public Schools' hazard mitigation capabilities by reviewing the district's planning capability, administration and technical capability, fiscal capability, education and outreach capability, drills, and overall capability. Every staff member has access to the Emergency Operations Plan (EOP). The district also utilizes Staff Professional Development to train staff regarding emergency procedures. The district educates students and families about emergency procedures by conducting drills and practice with the students. They communicate with families using REMIND and social media. They also post information on their school website. The district partners with the Dawes County Sheriff's Deputies that patrol the school and come on school grounds when needed. They have lock boxes with keys to the school located by the main entrance to both buildings. They also have local fire and police walk through the facilities each year before school begins. The district has a large exterior numbers on the doors and windows and a map of the buildings with corresponding numbers for first responders. The Fire Chief is a contact person for Perma Security if the fire alarm goes off. Whenever an evacuation drill is activated, both the local fire department and Dawes County are notified so they can be on-site to observe and offer recommendations for the future.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning Capability	Facility Improvements Plan	Yes
	Continuity of Operations Plan	Yes
	Crisis Response Plan	Yes
	Strategic Plan	Yes
	Other (if any)	
Administration & Technical Capability	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	Applied for Grants in the Past	Yes
	Awarded Grants in the Past	Yes
	Authority to Levy Taxes for Specific Purposes Such as Mitigation Projects	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved Bonds in the Past	Yes
	Flood Insurance	Yes
	Other (if any)	
Education & Outreach Capability	Natural Disaster or Safety Related School Programs	Yes
	Hazard Education or Information Program	Yes
	StormReady Certification	
	Other (if any)	
Drills	Fire	10 / year
	Tornado	2 / year
	Intruder	1 or 2 / year
	Bus evacuation	2 / year

Capability/Planning Mechanism		Yes/No
	Evacuation	1 or 2 / year
	Other (if any) Hold and Secure Drills	2/ year

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	High
Public Support to Implement Projects	High
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	High

Plans and Studies

Crawford Public Schools has multiple planning documents that discuss or relate to hazard mitigation. The plans are listed below along with a short description of how they are integrated with the hazard mitigation plan or how they contain hazard mitigation principles. When the school district updates these or other planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Emergency Operations Plan (2024)

The purpose of the Emergency Operations Plan is to identify and respond to incidents by outlining the responsibilities and duties of Crawford Public Schools and its employees. It outlines the expectations of staff, roles and responsibilities, direction and control systems, internal and external communications, training and sustainability, common and specialized procedures, and response to specific hazards and vulnerabilities. High priority hazards discussed in the plan include severe storms, fire, chemical, intruder, and terrorism. A crisis response plan and continuity of operations plan are also included in this document. The plan also identifies areas that need emergency shelters. The plan is comprehensive, however there are hazard scenarios that have not yet been addressed. The plan is updated every spring, and the Board of Education approves these updates every summer.

Future Development Trends

In the last five years, the school district has had a slight drop in student population, but the faculty has remained about the same. According to the local planning team, there have been several development projects within the last five years. These developments include: new roofs on all buildings, new stands for the football field, replacement of a bus and two smaller vehicles, the addition of new intercom speakers to high school classrooms, an upgraded phone system, and upgraded entrance camera and buzzer systems at both the elementary and high school. There are no expected changes in student demographics, student population, staff, or buildings. The school district plans to upgrade the security system by adding additional cameras.

Community Lifelines

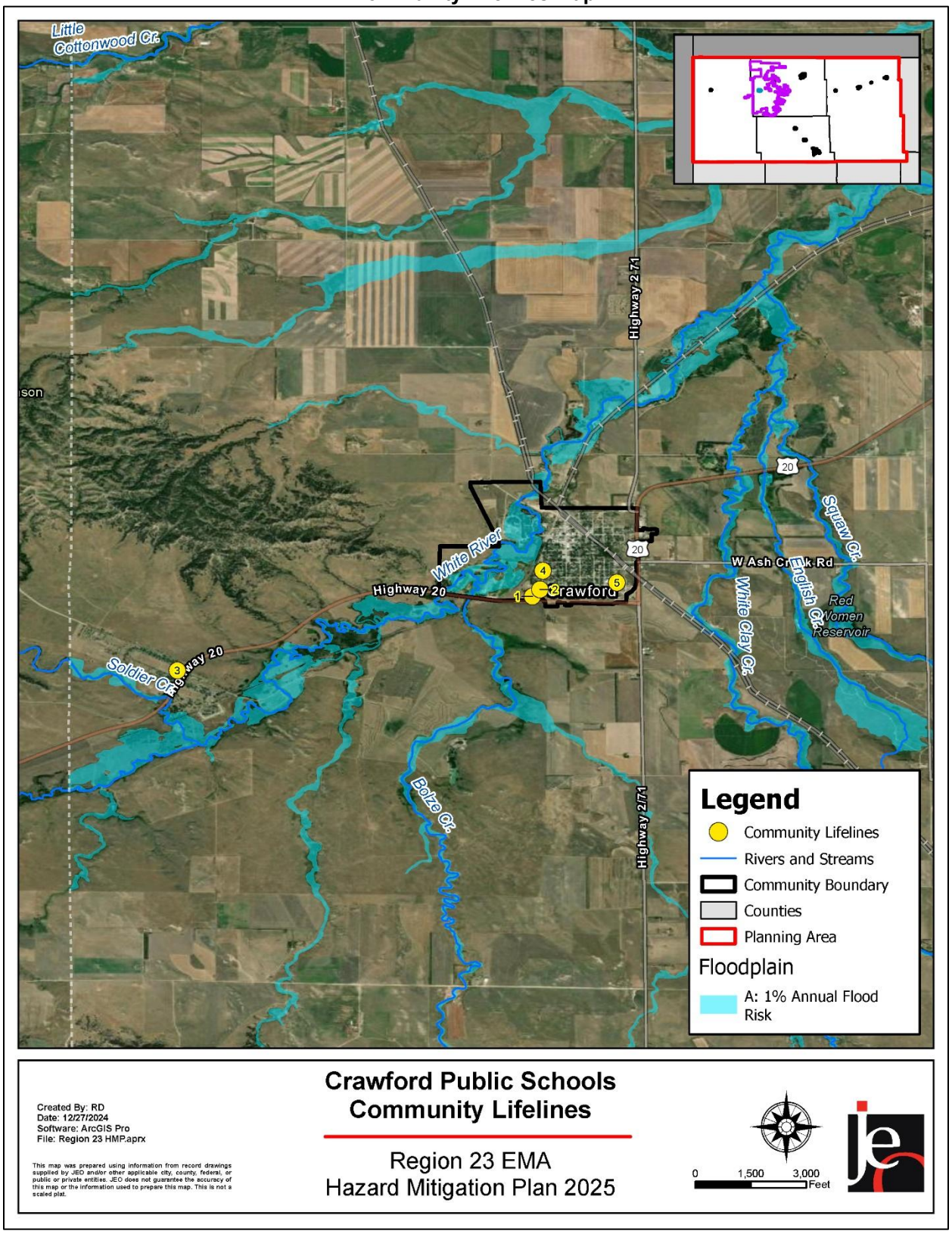
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Crawford Fire Department	Safety and Security	-	N
2	Crawford Community Center	Food, Hydration, Shelter	S	N
3	Fort Robinson State Park	Other	-	N
4	Legend Buttes Health Services	Health and Medical	-	N
5	Crawford Public Schools	Other	S	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Crawford Public Schools which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Crawford Public Schools. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Severe Thunderstorms

Severe thunderstorms are a regular part of the climate for Dawes County and Crawford. The local planning team identified severe thunderstorms as a top hazard for the district. Severe thunderstorms and hail can result in loss of electricity, blocked roadways, damage to trees, and flooding. Blocked roadways, as a result of downed trees, may also present life safety concerns to those needing immediate medical attention and prevent emergency response vehicles from reaching residents. Severe thunderstorms have caused damage to technology infrastructure and to specific devices because of power surges. In June of 2020 a major storm caused half a million dollars' worth of damage to the facilities and transportation. The district has upgraded their infrastructure over the past four years through the use of ESSER and REAP funds. All the roofs have been worked on since the last major storm. For the future, the district would like a Bus Barn to be built to protect their transportation.

Severe Winter Storms

Severe Winter Storms have also been identified as a threat to the district. Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. If the weather is life threatening, the district will call off classes and keep the school closed. At least half of the staff drive ten or more miles to school and many students walk. The district has utilized technology to keep track of the weather and projected storms. They have access to both the North Platte and Cheyenne Regional Weather Service.

Terrorism and Cyber Attack

The district experienced a cyber-attack on their firewall in Spring of 2024. Although they caught it in time and no damage was done, for the future, this hazard is identified as a high-priority concern for the district. They have updated their cyber security measures, phone system, intercom system, and door locks/entrance cameras. The district requires all visitors to wear a visitor badge while on school grounds and have all staff wear identification lanyards while on school grounds. Practice fire drills, bus evacuation drills, tornado drills, lockdown drills, and evacuation drills are held throughout the school year. The district plans to continually update their Emergency Operations Plan (EOP) and to continue to practice and communicate with staff and students in the case of a terrorism/cyber-attack.

Tornadoes and High Winds

The local planning team identified tornadoes and high winds as a significant concern for the district. Although there have not been many tornadoes in the recent past, high winds have been a concern. Both tornadoes and high winds can cause major issues for the school. If electricity is lost, classes are affected. Downed trees and limbs can also cause major damage. The school practices tornado drills twice a year and staff trim tree limbs annually to mitigate the risk of damage from high winds.

New Mitigation and Strategic Actions

Action	Backup Power Generator
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and school facilities
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000 per generator
Local Funding	School funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Action	Elevate Utilities and Critical Systems
Description & Location	Elevate utilities and critical systems to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	School funds, Community taxes
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

Action	Upgrade and Add Additional Security Cameras
Description & Location	Interior and Exterior Cameras for the Elementary, High School, Gym, and parking areas. We will also add a server and accessories to accommodate the new and additional cameras.
Hazard(s) Addressed	Terrorism and Cyber Attack
Estimated Cost	$50,000 ($41,000 for cameras; $8,000 for server; & $1,000 for license and accessories).
Local Funding	Qualified Capital Purpose Undertaking Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Planning Stages

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps, and environmental education, increase student and staff awareness hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$3,000+
Local Funding	School Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	In progress

School District Profile

Gordon-Rushville Public Schools

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Nathan Livingston	Superintendent	Gordon-Rushville School District	Recording	Attended
Alton Archibald	Technology Director	Gordon-Rushville School District	-	-
Chad Allison	Head of Maintenance	Gordon-Rushville School District	-	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Superintendent, Technology Director, and Head of Maintenance will review and update the profile outside of the five-year update. The Gordon-Rushville School District will review the plan bi-annually, and the public will be notified via social media and website updates.

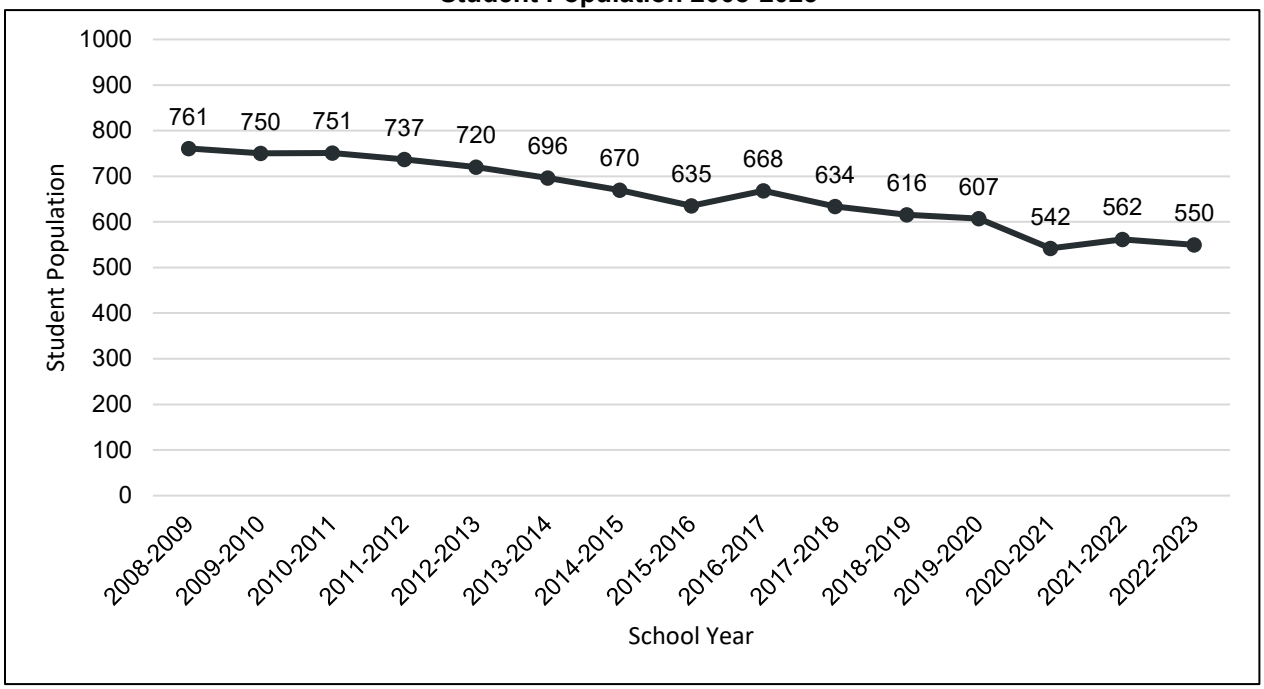
Demographics

The following figure displays the historical student population trend starting with the 2008-09 school year and ending with the 2022-2023 year. It indicates that the student population has been generally declining since 2008. There are 550 students enrolled in the district.[3] A declining student population can mean there is a decreasing tax revenue for the school district, which could make implementation of mitigation projects more fiscally challenging.

The district anticipates roughly the same number of students and potentially a slight decrease over the next five years due to rural residents moving to more urban areas and family farms decreasing in numbers. The district has a few Spanish speaking students. At this time, emergency instructions are not all available in both English and Spanish.

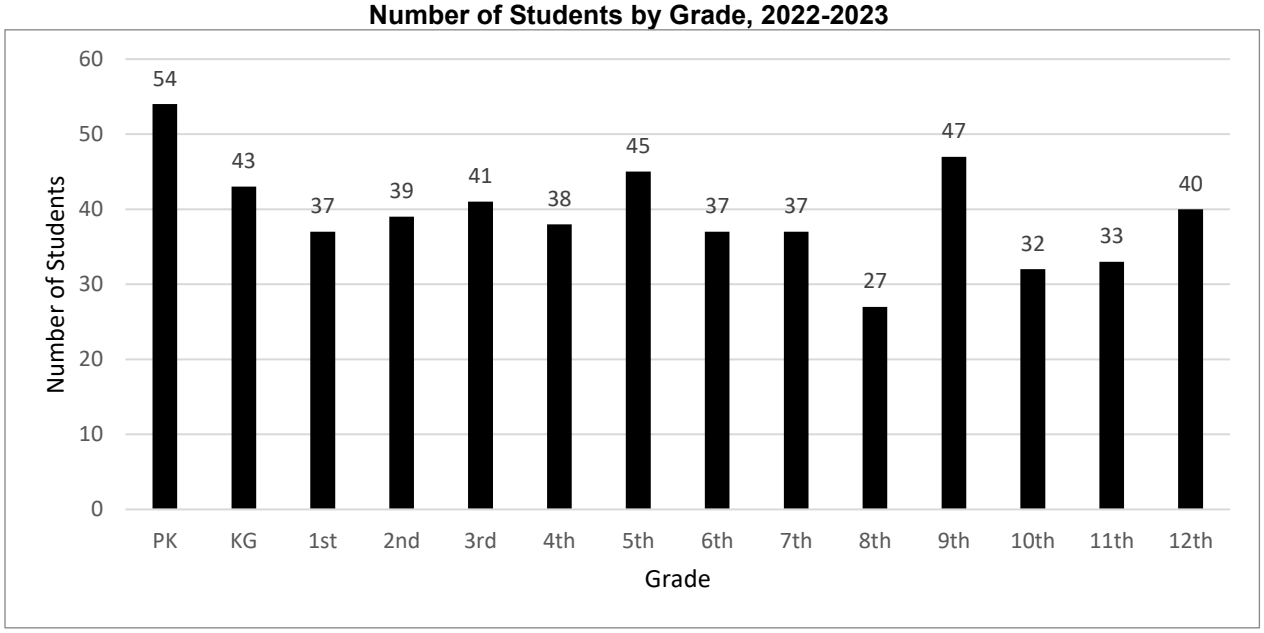
3 Nebraska Department of Education. July 2024. “Nebraska Education Profile.” https://nep.education.ne.gov/.

Student Population 2008-2023



Source: Nebraska Department of Education

Number of Students by Grade, 2022-2023



Source: Nebraska Department of Education

The figure above indicates that the largest number of students are in Pre-K, 9th, and 5th grades. The lowest population of students are in 8th, 10th, and 11th grades. According to the Nebraska Department of Education (NDE), 78% of students receive either free or reduced priced meals at school. This is lower than the state average of 52%. Additionally, 17% of students are in the Special Education Program. The school mobility rate is 6%, while the number of English Language Learners is unavailable.. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Student Statistics, 2023-2024

	School District	State of Nebraska
Free/Reduced Priced Meals	78%	52%
School Mobility Rate	6%	6%
English Language Learners	N/A	9%
Special Education Students	17%	17%

Source: Nebraska Department of Education

Capability Assessment

The planning team assessed Gordon-Rushville Public Schools' hazard mitigation capabilities by reviewing the district's planning capability, administration and technical capability, fiscal capability, education and outreach capability, drills, and overall capability.

The planning team indicated that each building conducts staff meetings at the beginning of the year where emergency procedures and protocols and the Standard Response Protocol (SRP) are covered. Staff practice various procedures throughout the year with fire drills, severe weather drills, lockdown drills, and evacuation drills.

Each building conducts student assemblies at the beginning of the year where emergency procedures and protocols and the Standard Response Protocol (SRP) are covered. Students practice various procedures throughout the year with fire drills, severe weather drills, lockdown drills, and evacuation drills. The Standard Response Protocol (SRP) is also available in signage throughout each building, informational packets are sent home to all families at the beginning of the year that goes over the SRP, and the SRP is available on district and building websites.

Local fire departments regularly visit Gordon Elementary and Rushville Elementary to educate and train the students regarding fire emergencies. The School Resource Officer speaks at various times to students regarding emergency procedures. At least once a year, local law enforcement are invited to attend a district safety and security meeting where emergency response procedures are discussed.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning Capability	Facility Improvements Plan	Yes
	Continuity of Operations Plan	No
	Crisis Response Plan	Yes
	Strategic Plan	Yes
	Other (if any)	
Administration & Technical Capability	Grant Manager	Yes
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	Applied for Grants in the Past	Yes
	Awarded Grants in the Past	Yes
	Authority to Levy Taxes for Specific Purposes Such as Mitigation Projects	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved Bonds in the Past	Yes
	Flood Insurance	No
	Other (if any)	

Capability/Planning Mechanism		Yes/No
Education & Outreach Capability	Natural Disaster or Safety Related School Programs	No
	Hazard Education or Information Program	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 / year
	Tornado	2 / year
	Intruder	1 / year
	Bus evacuation	2 / year
	Evacuation	11 / year
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Moderate
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

Gordon-Rushville Public Schools has multiple planning documents that discuss or relate to hazard mitigation. The plans are listed below along with a short description of how they are integrated with the hazard mitigation plan or how they contain hazard mitigation principles. When the school district updates these or other planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Emergency Response Guide (2024)

The purpose of the Emergency Response Guide is to identify and respond to incidents by outlining the responsibilities and duties of Gordon-Rushville Public Schools and its employees. It outlines the expectations of staff, roles and responsibilities, direction and control systems, internal and external communications, training and sustainability, common and specialized procedures, and response to specific hazards and vulnerabilities. High priority hazards discussed in the plan include severe storms, fire, chemical, intruder, and terrorism. The Emergency Response Guide has not been integrated with the hazard mitigation plan. All staff are aware of the plan, and it gets reviewed and updated annually.

Standard Response Protocol

The Standard Response Protocol (SRP) is a system of consistent actions and language used by the school district, staff, and first responders during emergencies. It provides a shared vocabulary and framework for responding to all types of hazards, promoting quick and coordinated action. The SRP is not a replacement for a school's existing safety plan but rather an enhancement that clarifies and standardizes responses

Facility Improvements Plan (Initial)

Gordon-Rushville's Public School's facility improvements plan outlines projects to be undertaken at school owned facilities and buildings. Projects include a description of the work to be

completed, a rough cost estimate if available, and a timeline of when the project will likely be completed. The facility improvements plan is regularly updated.

Strategic Plan

The strategic plan for the school district outlines goals and objectives for the next several years. Included in these goals and objectives is keeping students and staff safe during hazardous events. This plan is updated and reviewed prior to each school year. It has not been integrated with the hazard mitigation plan.

Future Development Trends

Over the past five years, the district has experienced steady population decline. New roofs were recently installed on the high school, Gordon Elementary, and part of the middle school building. Over the next several years, the planning team anticipates moderate population decline for the district. District buildings are increasing in age, and a facility assessment of all buildings is currently being conducted with JEO. After the assessment is completed, the district will look at prioritizing items for repair/replacement and develop a plan regarding such.

Community Lifelines

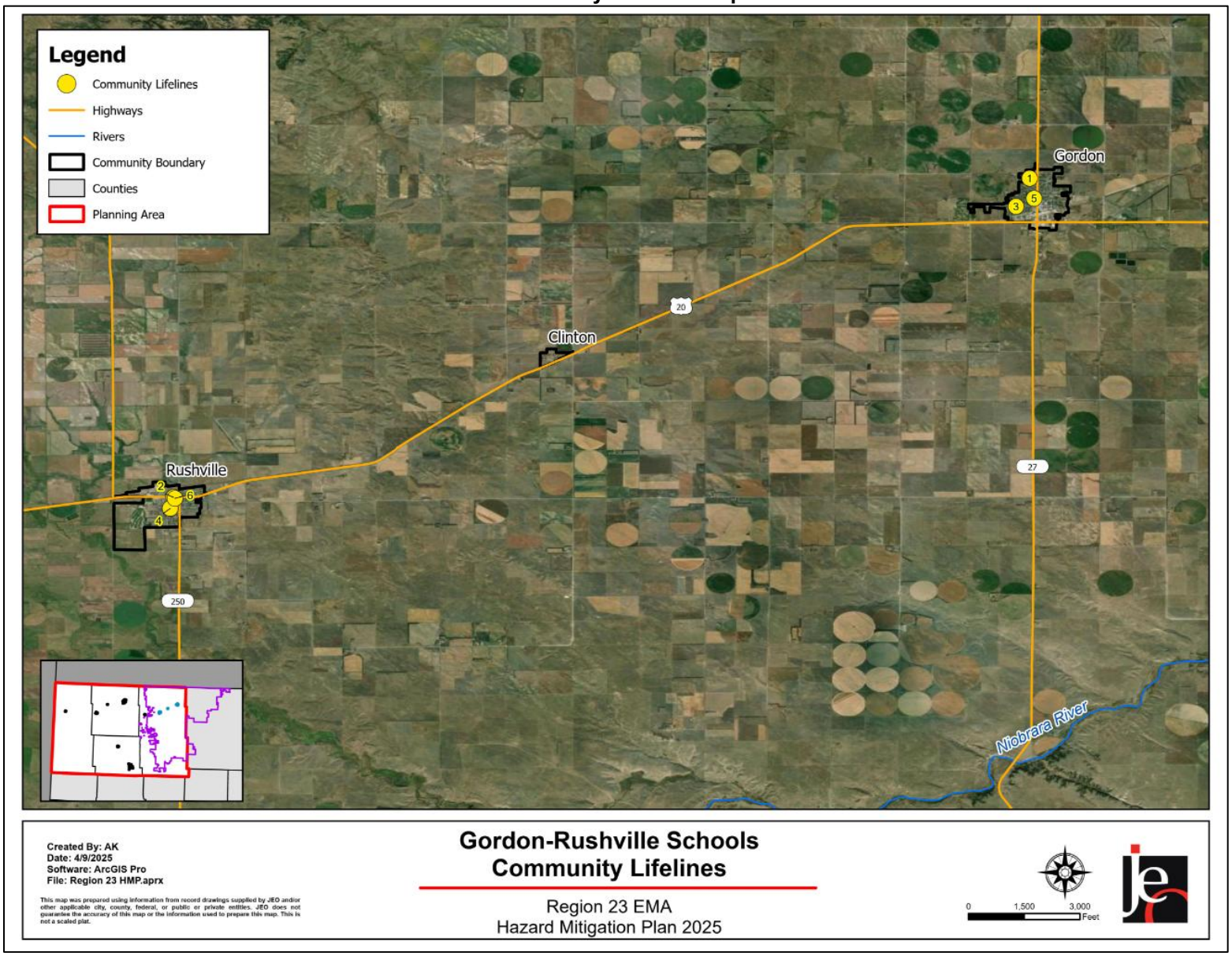
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Gordon-Rushville High School	Other	S	N
2	Gordon-Rushville Middle School	Other	S	N
3	Gordon Elementary	Other	S	N
4	Rushville Elementary	Other	S	N
5	Gordon City Auditorium	Food, Hydration, Shelter	S	N
6	Sheridan County Courthouse	Safety and Security	-	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Gordon-Rushville Public Schools which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Gordon-Rushville Public Schools. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Extreme Temperatures

The planning team has observed multiple instances in which extreme temperatures impacted the school district. Extreme cold and eating unit failures have forced cancellations of school activities. Extreme temperatures pose a risk to students and staff, as transportation vehicles can be affected, creating the potential for commuters to be stranded in frigid temperatures. In recent years, new HVAC units were installed to reduce risk of heating/cooling failure. The district also may need backup generators in the future to prevent adverse effects during a power outage.

Severe Thunderstorms

Severe thunderstorms are typically associated with heavy rain, lightning, high winds, and hail. Severe events can flood facilities and damage trees or school property. The district has experienced flooding in the high school basement, cafeteria, woods classroom, and leaking roofs at the high school. Storms have also broken windows, leaked water through windows, and blown large windowpane coverings off. Building damage, flooding, and window leaks have occurred at all district buildings at various times over the years.

Concerns for this hazard include frequency of storm events, cost and timeliness of repairs, availability of qualified repair companies in the area, and general maintenance and upkeep needed due to frequent storm impacts. In recent years, the district has installed new roofing at the high school, middle school, and Gordon Elementary. Drainage improvements were also completed to prevent flooding during storm events. In the future, additional drainage improvements and groundwork may be needed to improve slope and mitigate settling to prevent flooding. Additional roofs are needed on one part of the middle school.

Severe Winter Storms

Severe winter storms include snow, ice accumulation, blizzards, and other winter weather. They can cause power outages from downed power lines, damage to buildings or school vehicles, hinder transportation, and risk injuries for students and staff. The local planning team noted that past impacts include icy sidewalks from poor drainage, flooding/leaking roofs, heat/furnace issues, frozen pipes in bathrooms, damaged fencing during third-party snow removal, and cancellation of school and/or school activities. The planning team is primarily concerned about the safety of students traveling to school or events, as well as damage to buildings and grounds.

Projects completed to reduce risk to this hazard include heat/furnace repairs, re-roofing at the elementary school to prevent leaking, and new roofing at the high school, middle school, and Gordon Elementary. Projects needed in the future to reduce risk include possible dirt work to improve drainage and minimize melted snow on sidewalks turning into ice.

Tornadoes and High Winds

Tornadoes and high winds have the potential to cause extensive or catastrophic damage to property and can endanger the lives of students and staff. Past impacts include damaged buildings, sheet metal, and roofs from high winds. Buses have also been prevented from travel during periods of high winds, resulting in school delay and/or cancellation. The largest concerns for this hazard include damage to siding, roofs, and windows, as well as transportation issues and power outages. Projects needed in the future include potential replacement of siding and/or metal sheeting to better withstand high winds.

New Mitigation and Strategic Actions

Action	Infrastructure Hardening
Description & Location	Harden critical facilities to withstand high winds, hail, heavy snow, etc. by: hardening roofs, hail resistant barriers to HVAC systems, shatter-proofing windows, building tie-downs and anchors, flood walls, and other architectural designs that reduce damage. --A higher rated roof is needed at Gordon-Rushville Middle School.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Wind
Estimated Cost	$200,000
Local Funding	Depreciation Fund, Special Building Fund
Timeline	2-5 Years
Priority	High
Lead Agency	School Administration
Status	Planning stage

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and school facilities
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000 per generator
Local Funding	School Funds
Timeline	5+ Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Action	Elevate Utilities and Critical Systems
Description & Location	Elevate utilities and critical systems to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	School funds, Community taxes
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps, and environmental education, increase student and staff awareness of natural and manmade hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$3,000+
Local Funding	School Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	In progress

Fire District Profile

Hay Springs Fire District

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Fire District	Round 1 Meeting	Round 2 Meeting
Everette Langford	Representative	Hay Springs Fire District	Recording	Recording

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Fire Chief will review and update this participant profile outside of the five-year update. The Hay Springs Fire District will review the plan annually, and the public will be notified via social media.

Demographics

Fire districts do not collect demographic information of their population, nor does the U.S. Census Bureau recognize fire districts as a distinct unit. As a result, there is no demographic data generated specifically for each fire district. For information regarding population data, please refer to *Section 3 and Appendix C*. The fire district serves approximately 1,000 people

Capability Assessment

Due to the unique structure of fire districts, the typical capability assessment table was not used. The following table summarizes the fire district's response vehicles, special teams, and special equipment. In addition, the fire district can utilize mutual aid, county, and state resources if needed during large-scale events.

Response Vehicles, Special Teams, and Special Equipment

Participating Fire District	Aerial	Pumper	Tanker	Pumper / Tanker	Grass-Weed Truck	Utility Truck	Rescue Units	Special Teams	Special Equipment
Hay Springs Fire District	-	1	2	1	3	1	2	-	1

Mutual Aid Agreements

Participating Fire District	Mutual Aid Partnerships
Hay Springs Fire District	Rushville, Gordon, Chadron, Alliance, Hemingford, Merriman, Pine Ridge, Crawford, Harrison

Plans and Studies

County Local Emergency Operations Plans (2023)

The County Local Emergency Operations Plans (LEOPs) for Dawes and Sheridan Counties establish standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. They contain information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. These plans are updated every five years. The hazard mitigation plan has not been integrated with these plans.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Standard Operating Procedures

The standard operating procedures outline the department's response to a variety of different calls that could be received. These procedures are unlikely to be further integrated with the hazard mitigation plan as they deal directly with response efforts.

Future Development Trends

In the past five years, fire truck refill locations have been established. No large developments are expected in the next five years.

Community Lifelines

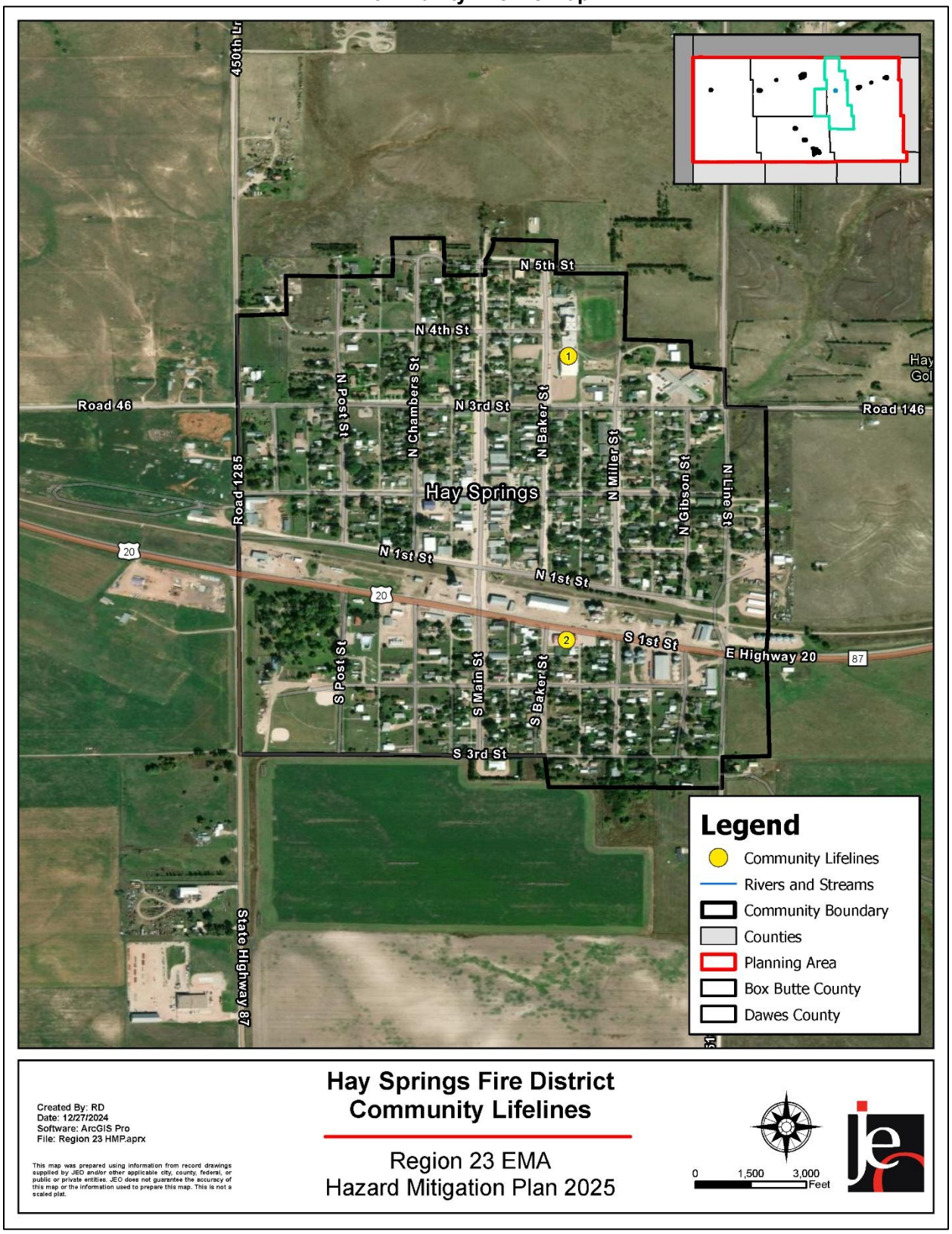
As listed in the tables below, the fire district identified community lifelines that are vital for disaster response and essential for returning the districts' functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Hydration, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Lister Sage Community Center	Food, Hydration, Shelter		N
2	Hay Springs Fire Hall	Safety and Security		N

Community Lifeline Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning teams prioritized specific hazards of top concern for the fire districts which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by each fire district. Based on this analysis, the local planning teams determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfire

The district has identified grass/wildfires as a top concern. In 2012, there was a massive wildfire event that damaged many fences, farm buildings, pastures, and crops. This is a top concern for the district because combating this hazard requires more manpower and resources than the district currently has. The district has continued to educate residents on ownership of land and how to prepare for grass/wildfires. They also provided education on the thinning of timber and brush.

Severe Winter Storms

Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. In April 2022, the district experienced a massive winter storm that shut down highways for several days which led to people being stranded. This hazard is a top concern for the district because of the importance of the roadways. The county has bought snowplows to combat this hazard, but more resources are needed for the future.

Tornadoes and High Winds

There was a major tornado event in the 1990s and severe windstorms that caused damage to many buildings and trees. This hazard is a top priority for the district because of the amount of damage these hazards caused, the manpower needed for cleanup, and the lack of equipment in combating these events. The district has dedicated resources and manpower to clean up areas around the town to limit items that can blow over and damage properties during storm events.

New Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+
Local Funding	Fire District Budget
Timeline	2-5 Years
Priority	Low
Lead Agency	Hay Springs Fire District
Status	Not Started

Action	Elevate Utilities and Critical Equipment
Description & Location	Elevate utilities and critical equipment to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	Fire District Budget
Timeline	5+ Years
Priority	Low
Lead Agency	Hay Springs Fire District
Status	Not started

Fire District Profile

Hemingford Fire District

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Fire District	Round 1 Meeting	Round 2 Meeting
Jim Keegan	Captain	Hemingford Fire District	Attended	Attended
Shad Bryner	Fire Chief	Hemingford Fire District	Attended	Attended

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Fire Chief, Assistant Chief, Fire Captains, and other members will review and update this profile outside of the five-year update. The district will review the plan bi-annually, and the public will be notified via social media and board meetings.

Demographics

Fire districts do not collect demographic information of their population, nor does the U.S. Census Bureau recognize fire districts as a distinct unit. As a result, there is no demographic data generated specifically for each fire district. For information regarding population data, please refer to *Section 3 and Appendix C*. The fire district serves approximately 2,000 people

Capability Assessment

Due to the unique structure of fire districts, the typical capability assessment table was not used. The following table summarizes the fire district's response vehicles, special teams, and special equipment. In addition, the fire district can utilize mutual aid, county, and state resources if needed during large-scale events.

Response Vehicles, Special Teams, and Special Equipment

Participating Fire District	Aerial	Pumper	Tanker	Pumper / Tanker	Grass-Weed Truck	Utility Truck	Rescue Units	Special Teams	Special Equipment
Hemingford Fire District	-	2	3	-	3	2	2	-	-

Mutual Aid Agreements

Participating Fire District	Mutual Aid Partnerships
Hemingford Fire District	Pine Ridge Mutual Aid, Scottsbluff Co. Mutual Aid

Plans and Studies

County Local Emergency Operations Plans (2023)

The County Local Emergency Operations Plans (LEOPs) for Box Butte, Dawes, and Sioux Counties establish standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. They contain information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. These plans are updated every five years. The hazard mitigation plan has not been integrated with these plans.

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

Standard Operating Procedures

The standard operating procedures outline the department's response to a variety of different calls that could be received. These procedures are unlikely to be further integrated with the hazard mitigation plan as they deal directly with response efforts.

Future Development Trends

Over the past five years, the fire district has updated some apparatuses, added an apparatus, and added equipment to those apparatuses. In the future, the fire district plans to upgrade and add apparatuses as they can, as well as add more equipment.

Community Lifelines

As listed in the tables below, the fire district identified community lifelines that are vital for disaster response and essential for returning the districts' functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Hydration, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Hemingford Vol. Fire Dept	Safety and Security	G	N
2	Water Tower/Repeater	Water Systems	G	N
3	Water Wells*	Water Systems		N

*Not displayed on map

Community Lifeline Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning teams prioritized specific hazards of top concern for the fire districts which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by each fire district. Based on this analysis, the local planning teams determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

The local planning team identified grass/wildfire as a significant threat for the district. According to the Nebraska Forestry Department there were 61 reported fires by the Hemingford Fire Department from 2000 to 2023 which consumed a total of 572 acres. In 2021, Hemingford experienced several grass fires that all burnt into one large fire with large losses to pastureland and fences. In 2019, there were two fire instances with high winds—one was a structure fire that started a wildland fire, and the other was a wildland fire that started during the first fire. Wildland fires are the highest frequency call the district has, being a large rural district has led to longer times to reach fires. Manpower has also been a challenge as the fire department is volunteer led. The district has partnered with mutual aid organizations. At times, the district relies heavily on the mutual aid partnerships to get the number of resources needed to combat fires. To reduce the wildfire risks, the district has updated some equipment and added additional equipment. They continue to train more people as they can.

Hazardous Materials Release

The district has identified hazardous materials release as a major concern. In 2019, Co-op has a large release of fertilizer, and the district has responded to numerous calls for natural gas and propane leaks, as well as sulfur fires at a fertilizer plant. They have also responded to vehicle accidents that have had hazardous materials, like propane, gun powder, agricultural chemicals, and fuels. The district has continued to train for hazardous material calls frequently. With BNSF, highway systems, and several agricultural facilities in the district, there are a lot of hazardous materials frequently being transported. The district has had five district members complete certifications for training for hazardous materials operations and have updated their hazardous monitors.

Severe Winter Storms

The district experiences severe winter storms annually that impact travel and power lines. In 2020, there was a series of severe winter storms that closed many roads through the district. This year, the fire department has had to utilize county road equipment to get to medical calls. When severe winter storms occur, there is major potential for power disruption and isolation due to closed/inaccessible roads. Trying to get to an emergency can be time consuming and challenging. Also, power disruption can affect citizens who are on oxygen and may lead to challenges in getting supplies. The district has worked with road departments for assistance in addressing this hazard.

Tornadoes and High Winds

The district identifies tornadoes and high winds as a major risk annually. Much of the concern with these events is the loss of power. With that loss of power, there is concern with people who need medical devices and assistance. There is also the potential for fires with down power lines. In 2020, the district experienced a major tornado in a rural area that caused damage to trees and powerlines. The district plans to continue training and awareness on this hazard in the future.

New Mitigation and Strategic Actions

Action	Alert/Warning Sirens
Description & Location	Perform an evaluation of existing alert sirens in order to determine which sirens should be replaced or upgraded. Install new sirens where lacking. The alert siren in Hemingford is aging and it is unknown how long the equipment has been in use. It also utilizes underground copper lines for communication that are owned by the telephone company, they switched over to fiber optic lines now. As the copper lines get older as well that could cause a problem.
Hazard(s) Addressed	Severe Thunderstorms, Tornadoes and High Winds
Estimated Cost	$50,000
Local Funding	Village of Hemingford
Timeline	2-5 Years
Priority	Medium
Lead Agency	Hemingford Fire District
Status	Not started.

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+ per generator
Local Funding	Fire District Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Hemingford Fire District
Status	Not started

Action	Elevate Utilities and Critical Equipment
Description & Location	Elevate utilities & critical equipment to mitigate potential flooding impacts. This can include HVAC units, fuel tanks, and electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	Fire District Budget
Timeline	5+ Years
Priority	Low
Lead Agency	Hay Springs Fire District
Status	Not started

Action	Training Exercise – Hazardous Material Release
Description & Location	Conduct training exercises for personnel to respond to a hazard material release.
Hazard(s) Addressed	Hazardous Materials Release
Estimated Cost	$2,000+
Local Funding	Fire District Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Hemingford Fire District
Status	In progress

School District Profile

Hemingford Public Schools

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Eric Arneson	Principal	Hemingford Public Schools	Yes	Recording
Jim Miles	Maintenance	Hemingford Public Schools	Yes	-
Dr. Travis Miller	Superintendent	Hemingford Public Schools	-	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

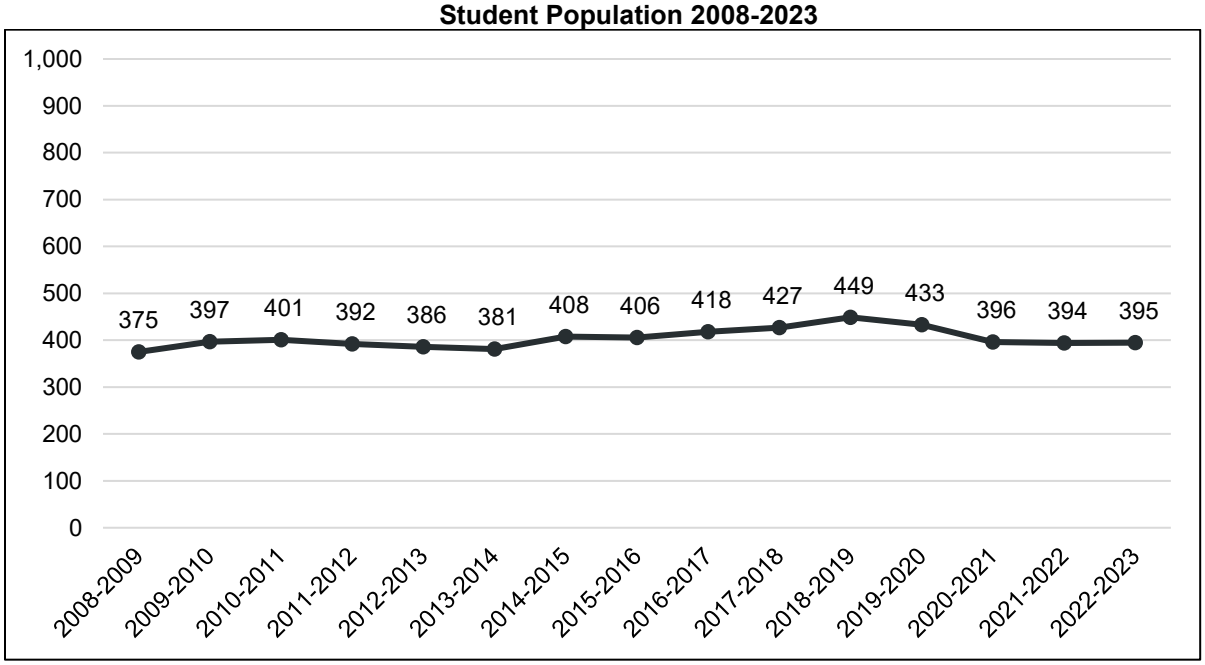
The Superintendent, Principal, and Head of Maintenance will review and update the profile outside of the five-year update. The district will review the plan bi-annually, and the public will be notified via social media and website updates.

Demographics

The following figure displays the historical student population trend starting with the 2008-2009 school year and ending with the 2022-2023 year. It indicates that the student population has generally declined since 2018. There are 395 students enrolled in the district.[4] A declining student population can mean there is a decreasing tax revenue for the school district, which could make implementation of mitigation projects more fiscally challenging. The school district anticipates little change to slight decrease to the student population within the next five years. All students utilize English as their primary language.

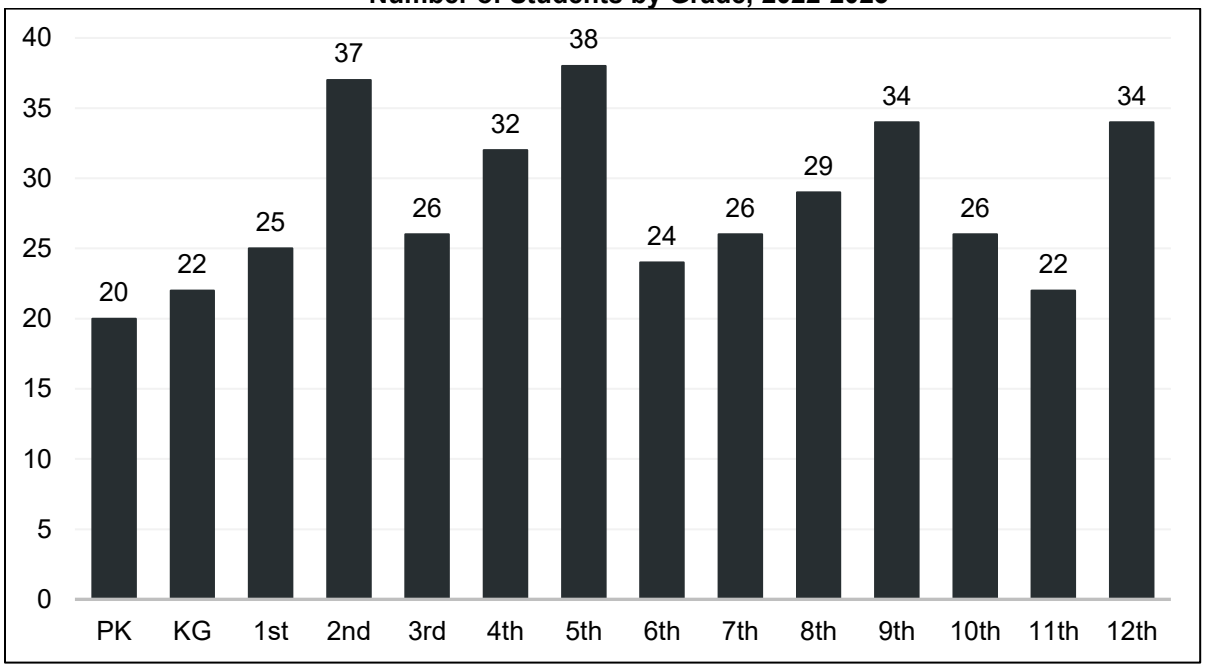
4 Nebraska Department of Education. July 2024. “Nebraska Education Profile.” https://nep.education.ne.gov/.

Student Population 2008-2023



Source: Nebraska Department of Education

Number of Students by Grade, 2022-2023



Source: Nebraska Department of Education

The figure above indicates that the largest number of students are in the 5th and 2nd grades. The lowest population of students are in Pre-K, Kindergarten and 11th grades. According to the Nebraska Department of Education (NDE), 35% of students receive either free or reduced priced meals at school. This is lower than the state average of 50%. Additionally, 18% of students are in the Special Education Program. The district has a 2% mobility rate, while the number of English Language Learners is unavailable. These particular students may be more vulnerable during a hazardous event than the rest of the student population.

Student Statistics, 2022-2023

	School District	State of Nebraska
Free/Reduced Priced Meals	35%	50%
School Mobility Rate	2%	4%
English Language Learners	N/A	8%
Special Education Students	18%	16%

Source: Nebraska Department of Education

Capability Assessment

The planning team assessed Hemingford Public School's hazard mitigation capabilities by reviewing the district's planning capability, administration and technical capability, fiscal capability, education and outreach capability, drills, and overall capability. The district utilizes and practices a Standard Response Protocol multiple times annually to train staff for any potential hazards or threats. Parents and community members are kept informed through newsletters that contain a series of flyers and explanations of drills. The school district has also partnered with the county sheriff for lockdown drills, and the local fire department for fire drills and fire prevention seminars.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning Capability	Facility Improvements Plan	In Progress
	Continuity of Operations Plan	Yes
	Crisis Response Plan	Yes
	Strategic Plan	Yes
	Other (if any)	
Administration & Technical Capability	Grant Manager	Yes
	Mutual Aid Agreement	No
	Other (if any)	
Fiscal Capability	Applied for Grants in the Past	Yes
	Awarded Grants in the Past	Yes
	Authority to Levy Taxes for Specific Purposes Such as Mitigation Projects	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Approved Bonds in the Past	Yes
	Flood Insurance	No
	Other (if any)	
Education & Outreach Capability	Natural Disaster or Safety Related School Programs	No
	Hazard Education or Information Program	Yes
	StormReady Certification	No
	Other (if any)	
Drills	Fire	10 / year
	Tornado	2 / year
	Intruder	1 / year
	Bus evacuation	2 / year
	Evacuation	10 / year
	Other (if any)	

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

Hemingford Public Schools has multiple planning documents that discuss or relate to hazard mitigation. The plans are listed below along with a short description of how they are integrated with the hazard mitigation plan or how they contain hazard mitigation principles. When the school district updates these or other planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Emergency Operations Plan (2024)

The purpose of the Emergency Operations Plan is to identify and respond to incidents by outlining the responsibilities and duties of Hemingford Public Schools and its employees. It outlines the expectations of staff, roles and responsibilities, direction and control systems, internal and external communications, training and sustainability, common and specialized procedures, and response to specific hazards and vulnerabilities. High priority hazards discussed in the plan include severe storms, fire, chemical, intruder, and terrorism. A crisis response plan and continuity of operations plan are also included in this document. The Emergency Operations Plan has not been integrated with the hazard mitigation plan. All staff are aware of the plan, and it gets reviewed and updated as needed.

Facility Improvements Plan (2024)

Hemingford Public School's facility improvements plan outlines projects to be undertaken at school owned facilities and buildings. Projects include a description of the work to be completed, a rough cost estimate if available, and a timeline of when the project will likely be completed. The facility improvements plan is regularly updated.

Strategic Plan (2022)

The strategic plan for the school district outlines goals and objectives for the next several years. Included in these goals and objectives is keeping students and staff safe during hazardous events. This plan is updated and reviewed prior to each school year. It has not been integrated with the hazard mitigation plan.

Future Development Trends

The school district has continually worked to upgrade the safety measures of their facilities. Within the last five years, security vestibules and electronic door access have been added to the school building. The district is also preparing a bond proposal for a school addition and remodeling. One area of concern is continual staffing changes and keeping this staff up to date on training.

Community Lifelines

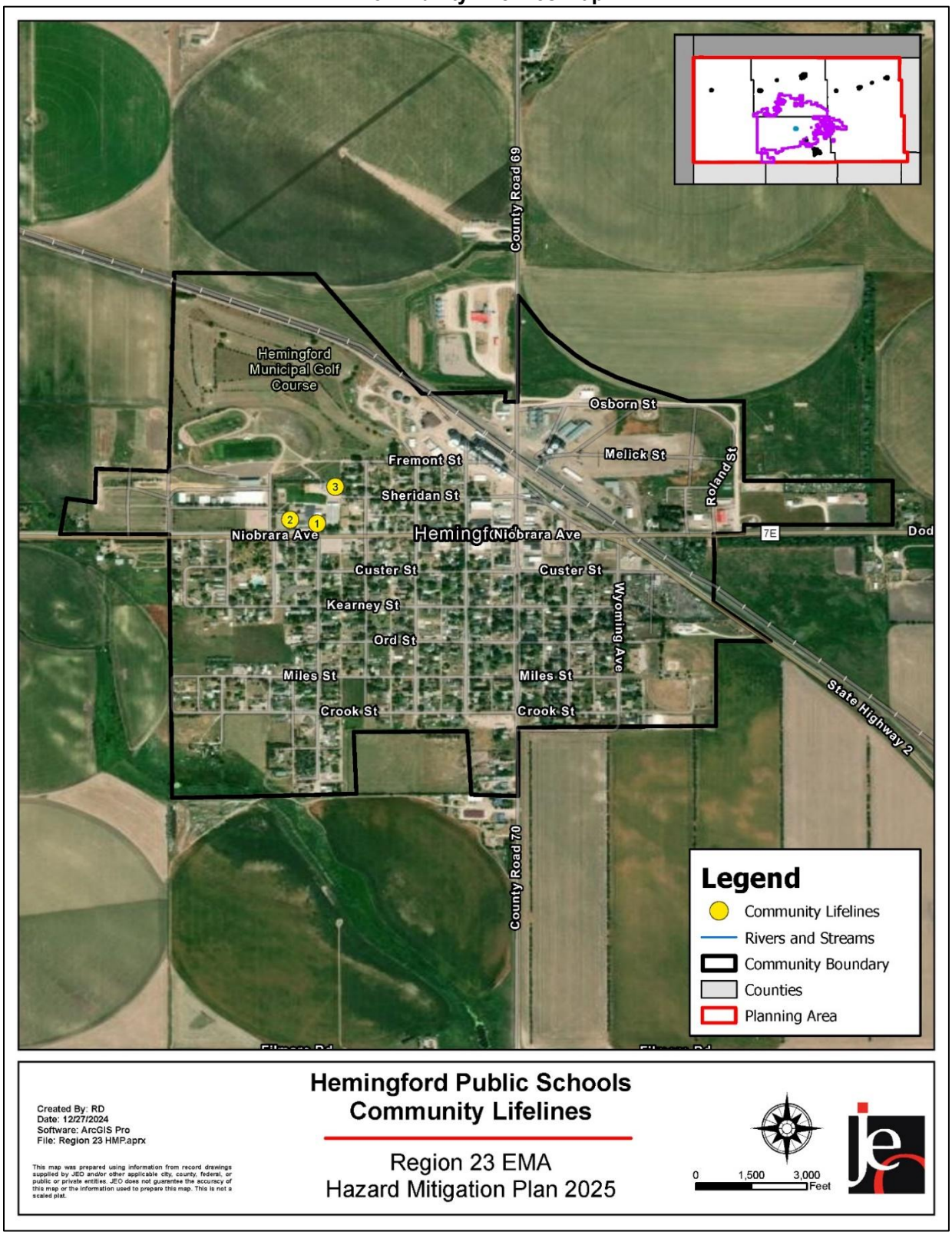
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Hemingford Elementary	Other	S	N
2	Hemingford High School	Other	S	N
3	Maintenance Building/ Ag Shop	Other	S	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Hemingford Public Schools which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Hemingford Public Schools. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Extreme Temperatures

In the past, the school district has observed multiple instances in which extreme temperatures mandated the cancellation of school activities. These temperatures pose a risk to students and staff, as transportation vehicles can be affected, creating the potential for commuters to be stranded in frigid temperatures. The district also does not have access to emergency generators. This creates the possibility of students and staff being stranded within school facilities without heat. The school district has arranged for special fuel to be used in transportation vehicles to mitigate the risk of buses breaking down, however this requires fuel trucks to deliver the product to the site. A fuel storage tank would allow cold weather fuel to be stored permanently, eliminating the need for a special order of the fuel truck.

Flooding

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

Grass/Wildfires

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

Hazard Materials Release

The district notes that they have not had direct issues with the release of hazardous materials, but that they are within close proximity to a federal highway, a high-usage rail line, and chemical storage facilities. They have identified on their emergency evacuation and shelter maps where to shelter in the case of a hazmat emergency. To mitigate the impact of hazardous materials, the district would need additional locations for hazmat shelters, training about how to seal doorways and windows, and potentially different HVAC systems.

Human Infectious Disease

During the COVID-19 pandemic, the district was impacted severely, as they were not allowed to have school by instruction from the state. Once they were allowed to have school again, instruction was impacted due to students missing and impacting their classmates. This is a top concern as the district works with people almost exclusively. They note that if they are not allowed to have school, instructing students is very challenging. The district has provided access to technology devices to students where they can do virtual learning. To reduce risk to the district, the internet would need to be fast enough for video chatting and cheap enough for families to afford access. They note that they are limited as they do not have control over households that do not have reliable internet access. They are able to provide Wi-Fi at school, but because of them being within a rural area, it would be a great hardship for some families to travel to town to access the internet.

Severe Thunderstorms

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

Severe Winter Storms

Severe winter storms include snow, ice accumulation, blizzards, and other winter weather. They can cause power outages from downed power lines, damage to buildings or school vehicles, hinder transportation, and risk injuries for students and staff. The school experiences closures due to winter weather annually. In the case of school closures, the district uses Remind, Facebook, and Twitter to share information, and will typically cancel any school activities if the weather is extreme. Past winter storms have also caused roof damage and concrete heaving. The district has identified the need for emergency generators in the event of a loss of power due to severe weather events.

Terrorism and Cyber Attacks

Although there have not been any major disruptions due to terrorism or cyber-attacks, the district has still identified this hazard as a top concern for the future. More of the teaching and learning are done online. If there was a major outage either to the internet or services, it would have substantial impacts on daily activities. The district has tried to have equipment that would mitigate the risk of outside attackers getting into their systems but note that they cannot control internet access or outside systems. Many of the district's documents are stored on servers off campus and outside of their control. They have backups of information stored on these servers.

Tornadoes and High Winds

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

or tornado events have occurred which have directly damaged or endangered school district properties.

New Mitigation and Strategic Actions

Action	Internet Access Points
Description & Location	Provide cellular Wi-Fi access points for students who require internet connectivity.
Hazard(s) Addressed	Human Infectious Disease
Estimated Cost	$12,000
Local Funding	General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

Action	Flood Control Measures
Description & Location	Perform flood control measures and acquire sandbags for diverting water during flood events.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000
Local Funding	General Fund, Building Funds
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

Action	Digital Data Protection
Description & Location	Firewall to prevent cyber-attacks on our local server. Most of district's data is stored on off-site 3rd party servers.
Hazard(s) Addressed	Terrorism and Cyber Attack
Estimated Cost	$19,500
Local Funding	General Fund, Building Funds
Timeline	1 Year
Priority	High
Lead Agency	School Administration
Status	In Progress

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps, and environmental education, increase student and staff awareness of natural and manmade hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$3,000+
Local Funding	School Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	In progress

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and school facilities.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+ per generators
Local Funding	General Fund, Building Funds
Timeline	2-5 Years
Priority	Medium
Lead Agency	School Administration
Status	Not started

Action	Safe Rooms/Storm Shelters
Description & Location	Design and construct storm shelters or safe rooms in school facilities.
Hazard(s) Addressed	High Winds and Tornadoes, Severe Thunderstorms, Severe Winter Storms, Hazard Materials Release
Estimated Cost	$250-$300/sf
Local Funding	General Fund, Building Funds
Timeline	5+ Years
Priority	Low
Lead Agency	School Administration
Status	Not started

EMA Profile

Region 23 Emergency Management Agency

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Nan Gould	Coordinator	Region 23	Attended	Attended
Brett Ditsch	Commissioner	Box Butte County	-	-
James Krotz	Commissioner	Sheridan County	Attended	Attended
Jake Stewart	Commissioner	Dawes County	Attended	-
JW Geiser	Commissioner	Sioux County	-	-

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The Emergency Manager will review and update this participant profile outside of the five-year update. Region 23 EMA will review the plan bi-annually, and the public will be notified in conjunction with LEPC meetings.

Capability Assessment

Region 23 Emergency Management Agency has the authority to issue general obligation bonds to finance certain projects. The Agency also regularly engages in public education and information programs related to hazard mitigation in the area, and routinely works with other counties, cities, and villages within their jurisdictional boundaries. Due to the unique structure of the Emergency Management Agency (EMA), the typical capability assessment table was not used. The following table summarizes the EMA's overall capabilities.

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	High
Time to Devote to Hazard Mitigation	Moderate
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

Region 23 has several plans which emphasize hazard mitigation efforts across the district. The Region assists with the development of emergency plans for each community and utilizes the HMP as a resource in the plan update process. Region 23 leads the development and update process for county Local Emergency Operation Plans (LEOPs). LEOPs identify roles and responsibilities of emergency responders and describe hazards of concern for the area.

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

Future Development Trends

In the last five years, new outdoor warning systems have been installed in Crawford and Whitney. New generators were installed at Dawes County Courthouse and Harrison Fire Department. No new structures have been developed in the floodplain or other hazardous areas. The region plans to continue replacing old outdoor warning sirens as needed and install generators as appropriate.

Community Lifelines

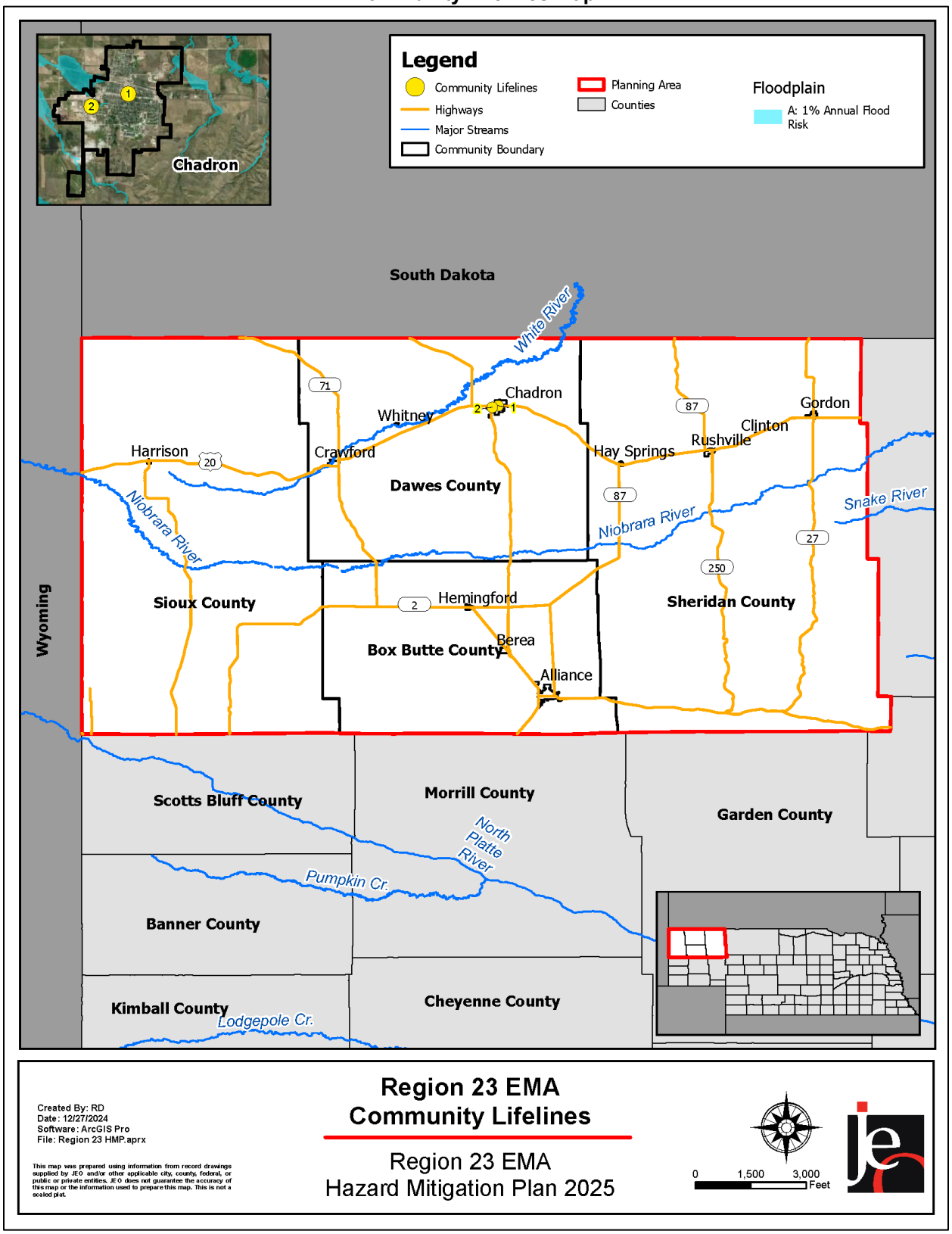
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Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Region 23 EMA Office	Safety and Security	S	N
2	Chadron VFD Training Building	Safety and Security	S	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Region 23 which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the EMA. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Grass/Wildfires

Wildfire is the top hazard of concern for the planning area and for the Region 23 EMA. As defined in the Pine Ridge Community Wildfire Protection Plan (CWPP), the entire four-county region is located within the WUI. The Pine Ridge Area in the northern portion of the district is a top concern for wildfire events due to high potential fuel load and rural area, while grass fires are of concern for private property. There have been 1,748 wildfire events reported in the Pine Ridge CWPP area by the Nebraska Forest Service. These wildfire events have burned nearly 400,000 acres and caused significant damage to agricultural land, recreation sites, and local infrastructure. The NFS reported $232,397 in crop damage. A postfire southwest of Crawford occurred in 2021 consuming approximately 5400 acres, resulting in a State Disaster Declaration.

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

Severe Thunderstorms

Severe thunderstorms are a common occurrence across the entire district. Heavy rain, thunderstorm wind, lightning, and hail are all associated with severe thunderstorms. Hail events cause the majority of damage to infrastructure and crops. According to NCEI, severe thunderstorm property damages have exceeded $4.9 million and crop damages have exceeded $1.8 million in the region. Hail can cause up to 100% crop loss for local producers which directly impacts the local economy and tax base of the EMA. Region 23 actively shares and promotes education efforts and information from the National Weather Service for severe storms, general safety information, and school materials. Many communities across the district are transitioning to hail resistant roofing, including Chadron where the EMA is located. All four counties in the planning area participate in the NWS Storm Ready program, which the EMA provides support and guidance as needed.

Severe Winter Storms

Severe winter storms are a hazard of top concern as they occur annually and have a high potential of significant damages. Severe winter storms in the planning area are commonly associated with heavy snowfall, extreme cold temperatures, and high winds. A blizzard in 2009 caused over $70,000 in property damages and occurred during calving season, significantly impacting the local agricultural community and economy. A blizzard in 2022 resulted in more than 25 inches of snow in the region causing disruptions to travel, emergency response, and power outages throughout

the region for several days and resulted in a State Disaster Declaration. Specific concerns also exist for road and bridge damage, blocked transportation routes, and springtime flooding from melting snowpack. Region 23 assists local emergency responders to coordinate resources and response. The region plans to continue outreach activities using CodeRed Emergency Notification system and other available media outlets.

Tornadoes and High Winds

Due to the location of the district within the high plains, straight-line and high wind events are the largest concern for the district. Damage from high wind events primarily impacts power lines and trees and windbreaks. Winds up to 60 mph are common across the region. The Nebraska Rural Public Power District provides power to the region. The district actively repairs and reinforces power line infrastructure throughout the region and works with the EMA to manage power outages. High wind events have caused over $129,000 in property damage and $25,000 in damage to crops in the four-county district. The most significant tornado events included two EF2 tornadoes in 2016 and 2017 and an EF0 in 2017 which caused $1,000,000 in damage and knocked over 65 train cars south of Alliance. The region is served by NPPD, NWRPPD, PREMA, and Niobrara Electric Association. In April 2024 there was a winter storm, along with excessive straight-line winds causing widespread power pole damages, power outages, and travel disruptions, resulting in a Federal Disaster Declaration. The region plans to assist local jurisdiction to obtain grant funding to replace outdated siren systems.

Continued Mitigation and Strategic Actions

Action	Alert/Warning Sirens
Description & Location	Reduce the risk of death/injury associated with severe weather promoting awareness, and ensures people take shelter when needed.
Hazard(s) Addressed	High Winds and Tornadoes, Severe Thunderstorms, Severe Winter Storms
Estimated Cost	$5,000+ per siren, varies by scope
Local Funding	General Fund, local match from communities pursuing projects
Timeline	2-5 Years
Priority	Medium
Lead Agency	Individual jurisdictions, Region 23 Emergency Management
Status	City of Chadron is currently seeking funding for siren system replacement. Siren projects were completed in Crawford and Whitney in the last five years.

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $30,000+
Local Funding	General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Region 23 Emergency Management
Status	Not Started

Action	Comprehensive Disaster/Emergency Response/Rescue Plan
Description & Location	Update comprehensive city/village disaster and emergency response /rescue plan. Assist communities in updating plans.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	Staff Time
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Region 23 Emergency Management
Status	In progress

Action	Education/Awareness Outreach Regarding Severe Thunderstorms and Severe Winter Storms
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education, increase public awareness of severe thunderstorms and severe winter storms.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms
Estimated Cost	$500+
Local Funding	General Fund
Timeline	2--5 Years
Priority	Medium
Lead Agency	Region 23 Emergency Management
Status	In progress

Action	Elevate and/or Harden Utilities and Critical Equipment
Description & Location	Elevate and/or harden critical equipment to mitigate potential flooding impacts at Emergency Operations Center and other potential locations. This can include elevating or hardening HVAC units, data storage, fuel tanks, or electrical panels.
Hazard(s) Addressed	Flooding
Estimated Cost	TBD
Local Funding	General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	Region 23 Emergency Management
Status	Not started

Action	Hazardous Fuels Reduction
Description & Location	The Nebraska Forest Service (NFS) Forest Fuels Reduction Program creates strategically located corridors of thinned forests across the landscape reduces fire intensity, improves fire suppression effectiveness, increases firefighters' safety, and better protects lives and property.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	Varies by scale
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Nebraska Forest Service, Region 23 Emergency Management
Status	In progress

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education, increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchase equipment such as overhead projectors and laptops.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$500+
Local Funding	General Fund
Timeline	2--5 Years
Priority	Medium
Lead Agency	Region 23 Emergency Management
Status	In progress

NRD Profile

Upper Niobrara White NRD

Region 23 EMA
Hazard Mitigation Plan 2025

Local Planning Team

Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Lynn Webster	Assistant Manager	Upper Niobrara White NRD	-	-
Patrick O'Brien	General Manager	Upper Niobrara White NRD	Recording	Recording

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

The General Manager and Assistant manager will review and update this participant profile outside of the five-year update. The NRD will review the plan annually, and the public will be notified via board meetings.

Capability Assessment

The NRD has the authority to levy taxes for specific purposes and to issue general obligation bonds to finance certain projects. The NRD also regularly engages in public education and information programs related to hazard mitigation in the area, and routinely works with other counties, cities, and villages within their jurisdictional boundaries. Due to the unique structure of the NRD, the typical capability assessment table was not used. The following table summarizes the district's overall capabilities.

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

The Upper Niobrara White NRD has both a comprehensive plan and an annual long-range plan of operation. These documents discuss flood control, sediment management, and forest management. The NRD is also a stakeholder in the Local Emergency Operations Plans for Box Butte, Dawes, Sheridan, and Sioux Counties, as well as a stakeholder in the Pine Ridge Area Community Wildfire Protection Plan. These planning documents discuss or relate to hazard mitigation. Plans are listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the NRD updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

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

The NRD developed an Integrated Water Management Plan in May 2009, which was then updated in 2011. The goals of the plan include minimizing ground water depletions and having a sustained aquifer. The IMP was created for the portion of the district deemed fully appropriated by NeDNR. Currently the district and NeDNR are developing a Voluntary IMP for portions of the district that are not fully appropriated.

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

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

Pine Ridge Area Community Wildfire Protection Plan (2020)

The purpose of the Pine Ridge Area Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2020 hazard mitigation plan were included in the CWPP and wildfire projects in the current hazard mitigation plan will be included during the next CWPP update.

County Local Emergency Operations Plans (2023)

The County Local Emergency Operations Plans (LEOPs) for Box Butte, Dawes, Sheridan, and Sioux Counties establish standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. They contain information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. These plans are updated every five years. The hazard mitigation plan has not been integrated with these plans.

Future Development Trends

Over the past five years, damaged roads and structures have been repaired. Two water shed structures were repaired due to 2019 flood damage. A watershed and flood prevention operation plan is being finalized for Box Butte creek in 2026.

Community Lifelines

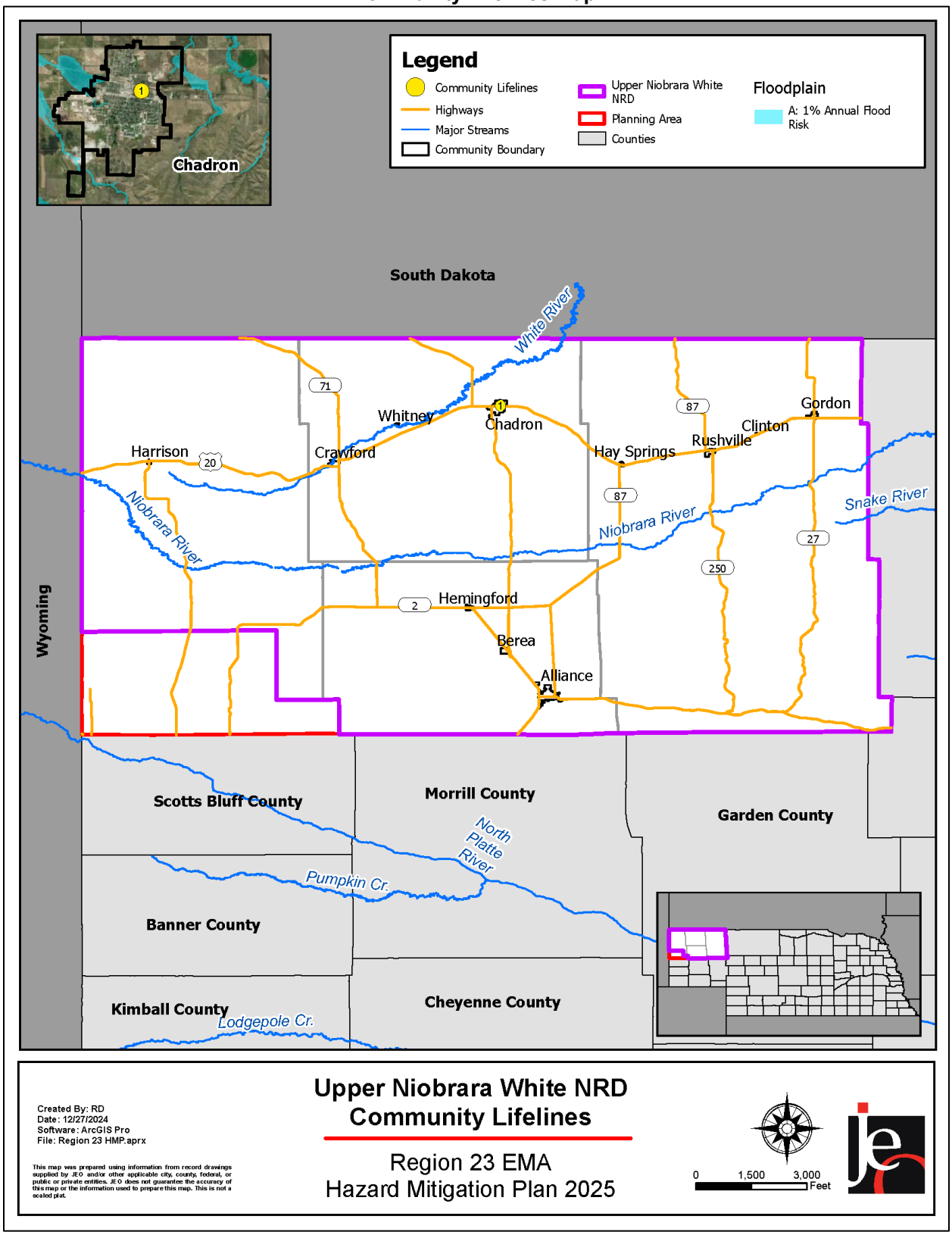
As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Water, and Shelter; Health and Medical; Energy; Communication; Transportation; Hazardous Material Facilities; and Water Systems.



Community Lifelines

CL Number	Name	Community Lifeline Type	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Upper Niobrara White NRD Office	Other	S	N

Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Region 23 Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for the NRD which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the NRD. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Dam Failure

The NRD has identified dam failure as a major concern because of the importance of dams in protecting critical infrastructures. According to the Nebraska Dam Inventory, there are a total of 166 dams located within the NRD boundaries, with classifications ranging from minimal to high hazard.[5] The figure on the next page maps the location of these dams within the NRD.

Dams in the NRD

County	Minimal Hazard	Low Hazard	Significant Hazard	High Hazard
Box Butte	5	5	0	0
Dawes	11	42	3	1
Sheridan	2	21	3	2
Sioux	15	52	3	1
Total	**33**	**120**	**9**	**4**

Source: NeDNR

Dams classified with high hazard potential require the creation of an Emergency Action Plan (EAP). The EAP defines responsibilities and provides procedures designed to identify unusual and unlikely conditions which may endanger the structural integrity of the dam within sufficient time to take mitigating actions and to notify the appropriate emergency management officials of possible, impending, or actual failure of the dam. The EAP may also be used to provide notification when flood releases will create major flooding. An emergency can occur at any time; however, emergencies are more likely to happen when extreme conditions are present. There are four high hazard dams located within the NRD, two located in Sheridan County, one located in Dawes County, and one in Sioux County.

High Hazard Dams within the NRD

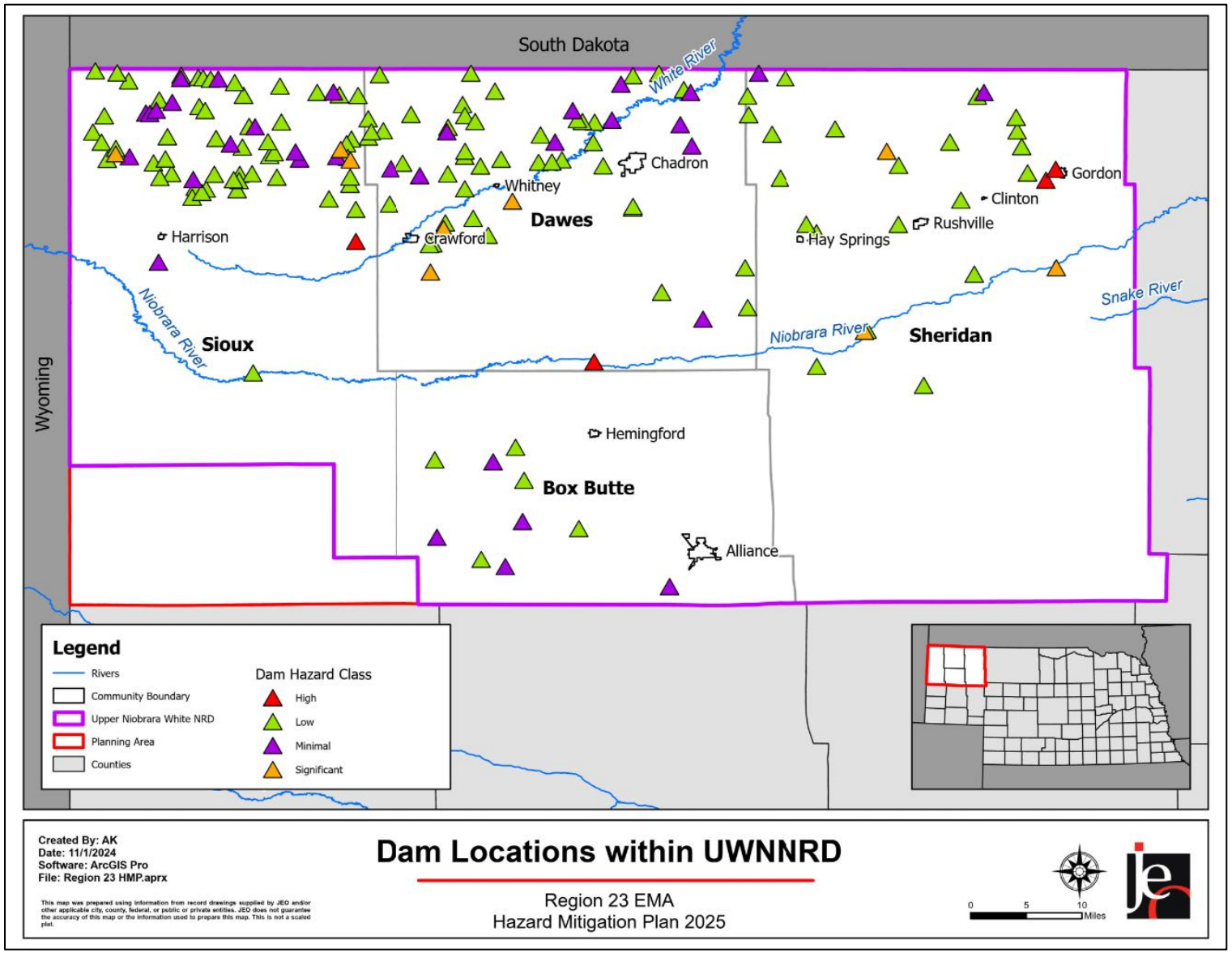
Dam Name	NID ID	Dam Height (Feet)	Max Storage (Acre Ft)	Last Inspection Rating
Box Butte Dam	NE01069	69	64,406	5/1/2024
Antelope Creek 20-A	NE00793	24	450	6/7/2023
Antelope Creek 40-B	NE00795	32	8,655	6/7/2023
Carter P Johnson Dam	NE01124	35	202	6/8/2023

Source: NeDNR

During 2019, two dams were damaged during spring flooding. The NRD worked to repair these dams. To reduce the risk of dam failure, the NRD would like to implement the WFPO plan.

[5] Nebraska Department of Natural Resources. May 2024. "Nebraska Dam Inventory". https://gis.ne.gov/portal/apps/webappviewer/index.html?id=2aab04a13817421992dc5398ad462e22.

Dam Locations in the NRD



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

Flooding
Flooding was identified as a hazard of concern due to its potential for property damage and risk to human safety. The district is located in a very rural area of the state with few roads interconnecting communities. Flooding events have the potential to wash out major transportation routes, delaying travel and access to emergency services for residents. Due to the topography of the district, flash flooding is a major concern. According to the NCEI, 23 flash flood events resulted in $22,000 in property damage within the four-county region, while 4 riverine flood events resulted in $0 in property damage in the planning area from 1996 to 2023. The total crop loss according to the RMA is $185,314 for the four-county region. No flood events reported damages to NRD owned properties.

Grass/Wildfires
The local planning team identified grass/wildfire as a significant threat for the district. According to the Nebraska Forestry Department there were 1,748 reported fires from 2000 to 2023 which consumed a total of 364,986 acres. The NRD identifies this hazard as a top concern because when vegetation is removed, the potential for wind and water erosion increases.

Severe Thunderstorms
Severe thunderstorms occur regularly across the planning area and the state. They often span large areas and often include hail, high winds, heavy rain, and lightning strikes which can cause significant damage to homes, businesses, facilities, trees, and agriculture across the district. The local planning team stated that severe storms occur annually, and major concerns exist over damage to crops and livestock or from localized flooding issues which can wash out transportation routes. The NCEI reports a total of 361 thunderstorm wind, 19 heavy rain, 5 lightning, and 1,150 hail events across the four-county area from 1996 to 2023. In total these events were responsible for $4,984,600 in property damage, and $125,197,236 in crop damage according to the USDA RMA. Eight injuries and no fatalities were reported in association with these storms.

Severe Winter Storms
The widespread nature of this hazard and the potential of significant damages make severe winter storms a hazard of top concern. Severe winter storms can include extreme cold, blizzards, ice storms, and general winter weather storms. The NCEI reported 413 severe winter storm events in the district's area between 1996 and 2023. These recorded events caused a total of $174,000 in reported property damage and $12,384,890 in crop damage. The following impacts are of concern from severe winter storms: power outages; injuries or fatalities to residents and travelers; cut off access to food, water, or fuel; blocked transportation routes; damage to sandhills topography from heavy snow; and economic loss due to winter weather impacts on livestock and agriculture.

Tornadoes and High Winds

High winds can cause widespread damages to crops, trees, infrastructure, and personal property and tornadoes are a concern due to their potential to cause catastrophic damage to property. The NCEI reported 192 high wind events and 77 tornadoes across the four-county area between 1996 and 2023. High winds are common across the entire planning area and often occur in conjunction with other hazards, such as severe thunderstorms and severe winter storms. The Upper Niobrara White NRD works with Region 23 to send CodeRed messages to residents during severe weather events.

Continued Mitigation and Strategic Actions

Action	Backup Power Generators
Description & Location	Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations, and other critical facilities and shelters.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$15,000 - $40,000+ per generator
Local Funding	General Fund, BRIC, HMGP
Timeline	5+ Years
Priority	Low
Lead Agency	UNWNRD
Status	Not started

Action	Dam Engineering Analysis/Repairs and Reinforcement
Description & Location	Conduct a preliminary engineering analysis for dam repairs and reinforcement. Dams serve to provide flood protection to businesses and residents during large storm events. Improvements to existing dams will increase flood protection. The Emergency Action Plan, Dam Breach, Analysis, and/or inspection/ safety equipment training may need to be updated along with improvements.
Hazard(s) Addressed	Dam Failure, Flooding
Estimated Cost	$500,000
Local Funding	General Fund, BRIC, HMGP, USACE
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD, dam owners
Status	In progress

Action	Evaluate Flood Risk
Description & Location	Evaluate flood risk potential in watersheds throughout the district and identify potential projects to reduce flood risk via both structural and non-structural options.
Hazard(s) Addressed	Flooding
Estimated Cost	$660,0000
Local Funding	USDA-NRCS grant, General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD
Status	WFPO plan is in progress

Action	Fire Prevention Program
Description & Location	The Nebraska Forest Service Wildland Fire Protection Program provides services in wildfire suppression training, equipment, pre-suppression planning, wildfire preventions, and aerial fire suppression.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	Varies
Local Funding	General Fund, NFS
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD, Coordinator/Natural Resources Coordinator, NFS
Status	In progress

Action	Public Awareness/Education
Description & Location	Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc.
Hazard(s) Addressed	Agricultural Disease, Dam Failure, Drought, Extreme Temperatures, Flooding, Grass/Wildfire, Hazardous Materials Release, Human Infectious Disease, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Attack, Tornadoes and High Winds
Estimated Cost	$5,000
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD
Status	In progress

Action	Source Water Contingency Plan
Description & Location	Villages and cities can evaluate and locate new sources of groundwater to ensure adequate supplies to support the existing community and any additional growth which may occur. Also, identify develop water sources for fire protection.
Hazard(s) Addressed	Drought, Grass/Wildfire
Estimated Cost	$5,000
Local Funding	General Fund, BRIC, HMGP, CDBG, NDEE
Timeline	2-5 Years
Priority	Medium
Lead Agency	UNWNRD, General Manager and Assistant Manager
Status	In progress

Removed Mitigation and Strategic Actions

Action	Expand Water Storage Capacity
Description & Location	Evaluate the need to expand water storage capacity to provide a safe water supply for the community and additional water for fire protection. Establish emergency water supplies such as dry hydrants and individual or community cisterns for defending structures from wildland fires.
Hazard(s) Addressed	Drought, Extreme Temperatures, Grass/Wildfire
Reason for Removal	Not a priority at this time.

RESOLUTION NUMBER **2025-02**

WHEREAS, the Federal Disaster Mitigation Act of 2000 was signed in to law on October 30, 2000, placing new emphasis on state and local mitigation planning for natural hazards and requiring communities to adopt a hazard mitigation action plan to be eligible for pre-disaster and post-disaster federal funding for mitigation purposes; and

WHEREAS, a Multi-Jurisdictional Hazard Mitigation Plan was prepared by the Region 23 Emergency Management Agency, with assistance from JEO Consulting Group, Inc.

WHEREAS, the purpose of the mitigation plan was to lessen the effects of disasters by increasing the disaster resistance of the counties and participating jurisdictions located within the planning boundary by identifying the hazards that affect Hemingford Public Schools and prioritize mitigation strategies to reduce potential loss of life and property damage from those hazards, and

WHEREAS, FEMA regulations require documentation that the plan has been formally adopted by the governing body of Hemingford Public Schools in the form of a resolution and further requesting approval of the plan at the Federal Level; and

NOW, THEREFORE, the governing body of Hemingford Public Schools does herewith adopt the most recent and FEMA approved version of the Region 23 Emergency Management Agency Hazard Mitigation Plan in its entirety; and

PASSED AND APPROVED this 15th day of September, 2025.

_____
President of the Board

ATTEST:

_____
Secretary

STUDENT BOARD REPRESENTATIVE - MONTHLY REPORT TEMPLATE

Student Board Representative
Board of Education Report
Date 09/15/2025

Submitted by: Dakota Horstman

1. Student Activities
    a. Football hasn't lost a game this season so far. The Varsity Football record is 3-0.
    b. Cross Country had a meet on Friday, six of the Varsity runners placed top fifteen.
    c. Varsity Volleyball on Thursday beat Leyton. The Varsity Volleyball record is 7-3.
    d. Cheer held a mini cheer clinic on Friday. There were many participants.

2. Other Pertinent Student Information/Feedback from Students
    a. Students enjoyed the dress up days for games. An example would be dressing up as frat, or minions for an away game.
    b. The students are excited for Homecoming week!
    c. The no phone policy has had conflicting feelings about it. Some students it doesn't affect, while others are struggling a little bit.
    d. The lunch room is crowded with elementary and high school students during lunch. The lines have been said to be taking longer to get food.

3. Progress on Student Board Member Initiative
    a. Since I am just starting, I haven't made much progress, but I am still working on it.
    b. I would like to start talking with some of the teachers to see how they feel this school year is going.
    c. I suggested to Mr. Redden that we should play games after the color run on Wednesday. He approved it, allowing more student engagement. I want to keep working on getting people more involved.
    d. I have talked with Mrs. Gilkerson about providing some care for a student. This student then got some help that they needed. I want to keep working, and keep helping struggling students.

Hemingford Public Schools

Administrative Reports to Board of Education

September 15, 2025

Mr. Arneson
HES Enrollment

Preschool	Kindergarten	1st Grade	2nd Grade	3rd Grade	4th Grade	5th Grade	6th Grade	Total
21	20	26	21	19	24	41	31	203

- MAP Growth Testing is off and running. This year starts a new assessment contract with NDE. This has changed our process a little bit. Instead of using NCSAS three times a year, we'll be using MAP Growth in the Fall and Winter, and NCSAS Growth in the spring.
- We received 10 trees from the "Trees for Nebraska Town" grant. They were planted by the concession stand. Thank you, Jim and Mr. Olson's botany class, for getting them planted.
- Our external review team visit is at the end of October. One of our goals is that each student will show growth in math. I created a spreadsheet that shows that we are 98.77% of our goal. (Share data)





Mr. Redden
HHS Enrollment

7th Grade	8th Grade	9th Grade	10th Grade	11th Grade	12th Grade	Total
33	35	26	28	26	31	179

- The school year is off to a great start. The change to the cell phone policy has been a positive change. It was a bit of a struggle for students at first, but they seem to be getting used to not being on them.
- Dr. Mark Adler came in and gave a Be Kind message to our students. This was done at South Campus with two grades attending at a time. It was a very powerful message that resonated with our students.
- Homecoming is next week. We have a fun filled and busy week planned.
- Mrs. Neefe is serving as the Region D representative and also as the Board Chair for the Nebraska FCCLA. They will be working on a new strategic plan on top of their normal work.
- I will be attending the annual MTSS conference in Kearney on October 9th and 10th, along with Ms. Davies.

Mrs. Plog
Special Education Numbers - From SRS (Student Records System) Current as of 9/12/25
(This includes students in the process of being evaluated)

Birth-3
1

Preschool	Kindergarten	1st Grade	2nd Grade	3rd Grade	4th Grade	5th Grade	6th Grade	(B-6th) Total
4 (+2)	4	5	2	7 (+2)	5 (-1)	6 (+1)	5	39 (+4)

7th Grade	8th Grade	9th Grade	10th Grade	11th Grade	12th Grade	12+ (To age 21)	(7-12+) Total
7 (+1)	7	3	5	7	3	0	32 (+1)

Total Enrollment in PowerSchool as of 9/14/25 - 382 - High School 180, Elementary 202
Total Special Education Students - 71 (+5)
Special Education Percentage - 18.5%
State Average- 17% (NDE State Education Profile as of 2023-2024, the most recent data year available)

- District Determinations: We have received our annual District Determinations letter from NDE and were determined to be at the level of “Meets Requirements,” which is the highest level available. We have no further action necessary at this time through NDE. This is data based on a variety of factors, including student outcome and compliance data, and risk analysis under the Uniform Grant Guidanc,e which computes the individual school district’s risk of noncompliance with financial processes. Most of this data is pulled from the 2023-2024 school year, so many times the information is often two years in arrears. NDE states that the 2024-2025 NEP data will be available on November 26, 2025, and then next year's District Determinations are largely based on that data.

- The High Ability Learner grant was due today. I submitted it last week. We receive approximately $5,000 every year to support our High Ability students and supplement that with approximately $1,000 of matching local funds. Our HAL coordinators this year are Joslynn Shanahan at the high school and Sarah Arneson at the elementary level. Portions of the budget go to Science Olympiad, Math Counts, tuition for HAL students taking Dual Credit courses taught by Hemingford teachers, and extra duty pay for the HAL coordinators and committee members. The HAL committee members this year are: Jackie Davies, Danielle Roland, Joei Cullan, Bridget Raben, and Katie Failor.

- The Indicator 11 NDE Report is due this Friday, September 19, 2025. The Part B Indicator 11 reports the number of children ages 3-21 who were evaluated within 45 school days or 60 calendar days, whichever comes first. The time period must be measured from the date the district received parental consent for an initial evaluation to the date the initial evaluation was completed. The time period for this data collection is July 1, 2024 - June 30, 2025. We evaluated 37 students last year, with none going longer than the required evaluation timeline.

- Our new para, Lora Wurst, has been working out great. Whitney Dean is the classroom teacher that she works with and Bailey Swanson is the resource teacher that she works with, and they both say that she has been doing an amazing job. She will receive additional training and support this year to continue to work with our highest need student, but I am very pleased with how the first few weeks have turned out.

- Let me know if you have any questions. Thanks so much!!

Superintendent's Report

September 15, 2025

Mission/Vision/Goals

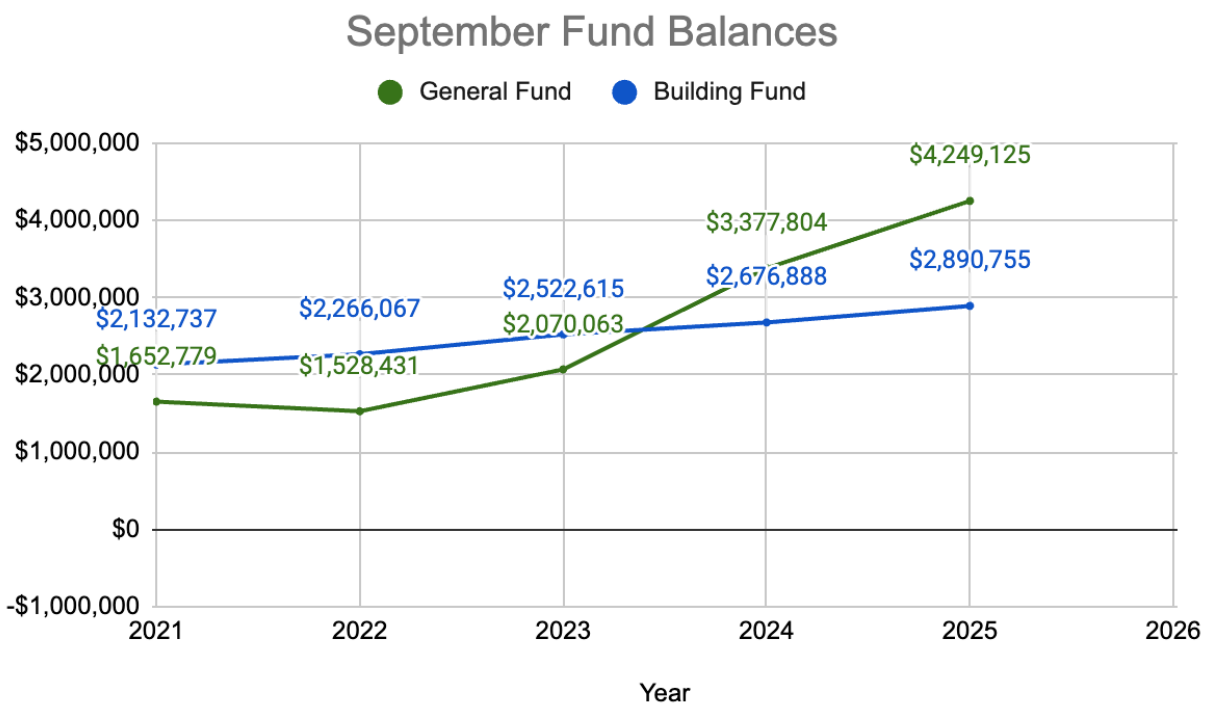
- We were able to bring Tonia Gibson (trainer who worked with our staff at the beginning of last school year) back to our school through the use of NDE-approved grant funds. Tonia met with teachers and members of our administrative teams to continue working on the use of evidence-based instructional practices.
- Please remember we are scheduled to host a school improvement visit in late October. The MTSS / school improvement team was provided with some time to work with the instructional staff during the teacher in-service days. As a reminder, we have two school improvement goals: one focused on math and another centered on the use of evidence-based instructional strategies. Here is a link to a one-page overview of our Mission, Vision, and School Improvement Goals
- I appreciate Mr. Arneson's work on data analysis regarding progress over the 5-year period in relation to our math goal.

Policy

- The policy manual has been updated as of August 25, 2025, and the changes from the August 11, 2025, board meeting have been incorporated.
- The updated policy review schedule is attached the policy review item for future reference.
- This coming month, I will be working on some updated policy proposals regarding internal controls (as a result of new guidelines from the state) along with continuing to work through the list of policy ideas shared by the board. I anticipate several policy proposals for the board's consideration at the October meeting.

Budget Planning and Management

- Thank you to the finance committee for all of the time and effort working through the budget. Your insights are appreciated and helpful.
- Financial Data is current on the Strategic Dashboard Indicators Page. Here is the monthly fund balance trend report for the General Fund and Building Fund:



Educational Leadership

- The MTSS and School Improvement Team has been working to continue implementing systems to support learning for all of our students. Their thoughtful implementation and focus on learning for all students in appreciated.

Organizational and Cultural Leadership

- I would like to commend Kristy Hanks for her work with the staff at NASB on staff compensation comparability as we prepare for upcoming collective bargaining.

Professional Leadership

- I would like to commend Mrs. Gilkerson and Mrs. Johnston, along with the Hope Squad members for collaborating with Dr. Mark Adler who shared an impactful #BeKind message with our students.

Community Relations

- The Hemingford Community Foundation and the Hemingford Congregational Church both recently gave $500 to the Bobcat CARE program. Their support for our students is appreciated.

Board-Superintendent Relations

- The State Education Conference Registration is open. So far we have Justin Ansley and Blanche Randolph registered. I am happy to take care of registrations for any additional board members who are able to attend.
- Collective bargaining with the Hemingford Education Association will need to begin prior to the 1st of November.
- Congratulations to the following board members for recent recognition by the Nebraska Association of School Boards:
    - Brett Cullan - Point Award - Level V
    - Rick Horstman - Point Award - Level V
    - Blanche Randolph - Point Award - Level VI
    - Justin Ansley - Point Award - Level VI

Strategic Plan (Highlights)

- Reporting order on these Principles is based on the Prioritization Summary:
    - **Guiding Principle III: Student and Staff Well-Being**
        - We are scheduled to host the Western Nebraska School Mental Health Confernce in the fall of 2026. The calendar committee has been working to select a date for the event. This year's conference is being hosted by Gordon-Rushville schools. We will have staff members in attendance at the conference in Gordon on September 22nd.
        - Here are the next items in our series of presentations to our students:
            - Mr. Jay Martin will be presenting to students in grades 5-12 (and interested parents/community members) on September 23rd regarding digital safety and security.
            - We are working to schedule Mr. Dean Jacobs to present to elementary students on the topic of dreaming big and making the world a better place in February.
    - **Guiding Principle I: Student-Centered Learning**
        - Mrs. Raben attended training in Omaha regarding Advanced Placement (AP) courses. I anticipate a presentation and proposal to the Board in October for consideration of adding AP options to our academic catalog.
    - **Guiding Principle IV: Communication and Engagement**
        - I would like to thank the Culture and Climate Committee for all of their hard work preparing for back to school opportunities for our staff, students, and community, in addition to planning some future opportunities for staff and students
        - Here is some data regarding communication:
            - Remind Conversations and Messages this past month: 45,534
            - Average daily visits to the school website this past month: 1,697
            - Number of times the school app has been downloaded: 669
    - **Guiding Principal II: Personnel Effectiveness**
        - I have appreciated the work of the team on putting together an updated new teacher induction process, including the new teacher induction packet. I anticipate we will continue to build-upon and refine that work for future years.

        - We are just beginning our second year with the updated teacher evaluation procedures. Teachers turned in goals to principals this past Friday. Feedback and support for teacher goals will again be incorporated into classroom walkthroughs.
    - **Guiding Principal V: District Resources**
        - Insurance-covered replacement of the elementary school roof started today. Initially we had planned on the work being done in August, but the work was pushed back to today.
        - Through our partnerships with the Western Nebraska Distance Learning Consortium (ESU#13) we have been able to secure an additional Zoom Cart and installation of Zoom Room capabilities in the music room. In addition to educational opportunities for students, I anticipate we will utilize the music room for professional development opportunities with staff in the future with the new capabilities.

Planned Professional Travel

- State Education Conference - Omaha - November
- I plan to attend student activities as my schedule allows.

Board Reminders (from the Contract with the Superintendent)

- **Evaluation.** The Board shall evaluate the Superintendent twice during the Superintendent's first year of employment and at least once each year thereafter. The first evaluation during the first year of employment and the yearly evaluations after the first year of employment shall occur no later than the regular November meeting. The Superintendent shall: remind the Board members in writing of this provision no later than its regular October meeting; make the Superintendent evaluation an agenda item for the regular November Board meeting during each year of this contract; and provide the Board members with the written evaluation instrument that is on file with the Nebraska Department of Education.
- **Renewal of Contract.** If a Board representative does not inform the Superintendent in writing on or before the seventh day after the regular December 2024 board meeting (and each December thereafter) of the Board's intention to consider the nonrenewal or amendment of this contract, the contract will automatically renew for a period of one year from and after the expiration date provided in Section 1 of this contract. The Superintendent shall remind the Board in writing of this provision no later than its regular November meeting of each year of this contract and shall make the renewal of the Superintendent's employment contract an agenda item for the regular December board meeting during each year of this contract. At the time of each contract renewal and/or amendment, the Superintendent shall be responsible for taking all necessary steps to ensure that the District has complied with the Superintendent Pay Transparency Act.

Leave Log

- I have used 6 ½ days of PTO leave. (July 9, 10, 11, 17, 18, 21, and 28 ½) The current balance is 34 days.

Hemingford Public School District # 10 Policy Review Schedule : Revised September 2025

September 2025	section 100 : 100 - 104.01 end	8 policies total
October 2025	section 200 : 200.00 - 204.01	25 policies total
November 2025	section 200 : 204.02 - 206.05 end	25 policies total
December 2025	section 300 : In full	27 policies total
January 2026	section 400 : 400 - 403.07	27 policies total
February 2026	section 400 : 403.08 - 406.09	27 policies total
March 2026	section 400 : 406.50 - 411.53	27 policies total
April 2026	section 400 : 412.01 - 415.50 end	28 policies total
May 2026	section 500 : 500 - 504.04	26 policies total
June 2026	section 500 : 504.04R1 - 504.23	26 policies total
July 2026	section 500 : 504.24 - 508.01	26 policies total
August 2026	section 500 : 508.01E1 - 50801E4_ end	25 policies total
September 2026	section 600 : 600 - 605.06	27 policies total
October 2026	section 600 : 605.07 - 610.02	26 policies total
November 2026	section 600 : 611.01 - 612.17 end	26 policies total
December 2026	section 700 : 700 - 705.02	18 policies total
January 2027	section 700 : 705.03 - 716.00 end	18 policies total
February 2027	section 800 : In full	27 policies total
March 2027	section 900 : In full	26 policies total
April 2027	section 1000 : In full	23 policies total