

# Custer County Natural Hazard Mitigation Plan

**Expiration Date: 04/13/2028**



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# I. INTRODUCTION

**Changes/Revisions to Introduction:** Introduction section has been rewritten and re-formatted.

## INTRODUCTION

Custer County is vulnerable to natural hazards which have the potential to damage and/or destroy the built environment within the county's borders; Custer County acknowledges potential risk exists to people, property, infrastructure, and the economy. Historically, natural hazards resulted in disasters that have inflicted costly damage to property, infrastructure, and residents. While disasters cannot always be prevented, effective mitigation planning reduces risk or potential risk, and thus reduces the costs associated with response and recovery. Hazard mitigation is an effort to make communities more resilient through comprehensive planning efforts such as engaging stakeholders, decision-makers, local leaders, and local governments; resulting in cost-savings for taxpayers by reducing the need to rebuild or remediate damaged property and infrastructure. The planning process includes 1) identification of hazards, 2) analyzing risks associated with the hazards identified, and 3) developing a mitigation strategy to reduce or eliminate risks identified.

## AUTHORITY

In October of 2000, the Disaster Mitigation Act (DMA2K) was signed to amend the 1988 Robert T. Stafford Disaster Relief and Emergency Assistance Act. Section 322 of the Disaster Mitigation Act requires local governments to have a natural hazard mitigation plan in place as a condition of receiving federal disaster mitigation funds. The Plan must:

1. Identify hazards and their associated risks and vulnerabilities.
2. Develop and prioritize mitigation actions; and
3. Encourage cooperation and communication between all levels of government and the public.

To be eligible for FEMA's Hazard Mitigation Assistance (HMA) grant programs, the Disaster Mitigation Act of 2000 (DMA 2000) requires local governments to have a FEMA-approved mitigation plan in place. In the mitigation plan, local jurisdictions must demonstrate proposed mitigation projects have a basis in a solid planning process where the unique risks and capabilities of each community are assessed. Mitigation plans must be updated every five years to demonstrate progress has been made toward meeting the community's mitigation goals and ensure the plan continues to be an effective mitigation tool to meet the needs of the county and the communities located within.

## PURPOSE

The purpose of the *Custer County Natural Hazard Mitigation Plan* is to fulfill federal, state, and local hazard mitigation planning responsibilities consistent with the Federal Emergency Management Agency's guidelines. This Plan will promote mitigation measures; implement short/long range strategies to minimize suffering, loss of life, damage to infrastructure, and property damage; eliminate or minimize conditions that would have an undesirable impact on the citizens, economy, environment, and the well-being of the county. This Plan will educate and facilitate communication with the public, build public and political support for mitigation activities, and develop implementation and planning requirements for hazard mitigation projects.

## **PLAN USE**

This *Custer County Natural Hazard Mitigation Plan* should be used to help local elected and appointed officials plan, design, and implement policies, programs, and projects to help reduce their community's vulnerability to natural hazards. The Plan should also be used to facilitate inter-jurisdictional coordination and collaboration related to natural hazard mitigation planning and implementation. Formal adoption of the updates to the Plan will keep the County and its communities in compliance with the Disaster Mitigation Act of 2000.

## **Scope**

- Provide opportunities for public input and encourage participation and involvement regarding the mitigation plan.
- Identify hazards and vulnerabilities within the county and local jurisdictions.
- Combine risk assessments with public and emergency management ideas.
- Develop goals based on the identified hazards and risks.
- Review existing mitigation measures for gaps and establish projects to sufficiently fulfill the goals.
- Prioritize and evaluate each strategy/objective.
- Review other technical documents and planning processes for cohesion and incorporation with mitigation planning.
- Establish guidelines for updating and monitoring the Plan.
- Present the Plan to Custer County and the participating jurisdictions for adoption.

## **Local Goals**

- Protection of life to the extent possible through mitigation planning efforts.
- Protection of critical facilities and public infrastructure to the extent possible through mitigation planning efforts.
- Protection of private property to the extent possible through mitigation planning efforts.
- Promote continuity among all levels of government (federal, state, county, city) by connecting mitigation planning efforts to existing local planning activities.
- Protection of the economy, businesses, industry, education opportunities, and the cultural fabric of a community to the extent possible through mitigation planning efforts.
- Protection of natural resources and the environment, to the extent possible through mitigation planning efforts.

## **Goals of Mitigation Programs as Established by FEMA**

- Eliminate or reduce the long-term risk to human life and property from identified natural and man-made hazards.
- Aid both the private and public sectors in understanding the risks they may be exposed to and exploring mitigation strategies to reduce those risks.
- Avoid risk of exposure to identified hazards.
- Minimize the impacts of those risks when they cannot be avoided.
- Mitigate the impacts of damage as a result of identified hazards.
- Accomplish mitigation strategies in such a way that negative environmental impacts are minimized.
- Provide a basis for funding projects outlined as hazard mitigation strategies.
- Establish a regional platform to enable the community to take advantage of shared goals, resources, and the availability of outside resources.

## **WHAT IS HAZARD MITIGATION?**

Hazard mitigation is defined as any cost-effective action(s) that reduces or prevents vulnerability of people, property, and infrastructure in regard to identified hazards and their associated risks. Hazard mitigation measures fall into three categories:

- Keep the hazard away from people, property, and structures.
- Keep people, property, and structures away from the hazard.
- Reduce the impact of the hazard on the victims.

Hazard mitigation measures must be practical, cost-effective, and environmentally and politically acceptable. Actions taken to limit the vulnerability of society to hazards must not in themselves be more costly than the value of anticipated damages.

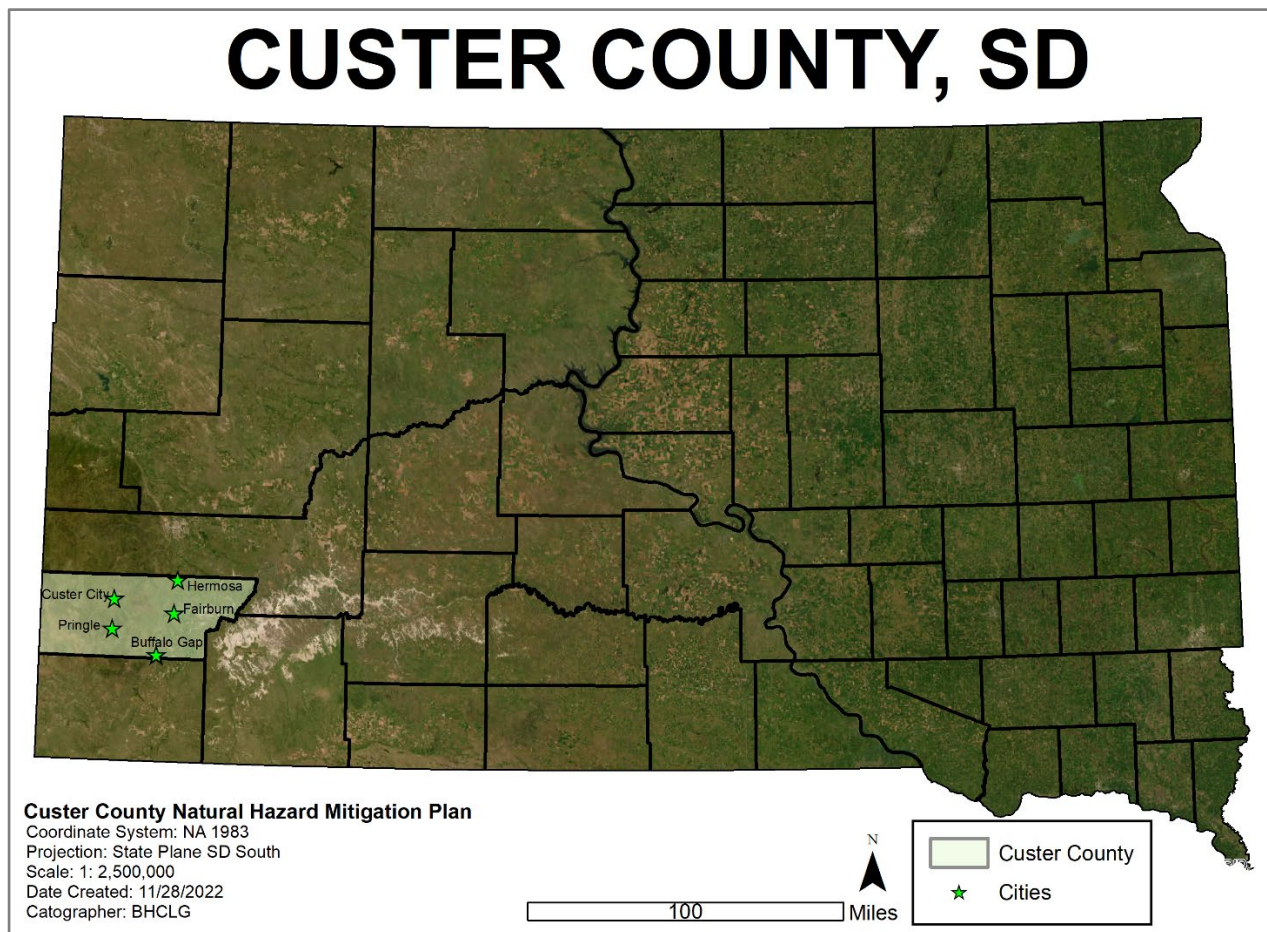
Mitigation actions should be incorporated into the activities associated with comprehensive and capital improvement planning with consideration given to areas with the greatest vulnerability to natural hazards. Capital investments whether for homes, roads, public utilities, pipelines, power plants, or public works, determine to a large extent the nature and degree of hazard vulnerability to a community. Once a capital facility is in place, it becomes more difficult to correct any errors in location or construction with respect to hazard vulnerability. For these reasons zoning, building codes, and other ordinances that manage development in high-vulnerability areas ensure new buildings and infrastructure are built to avoid or withstand the damaging forces of hazards. These actions are useful mitigation approaches local governments can implement.

Historically mitigation measures have been the most neglected programs within emergency management and planning departments within city and county governments. Since the priority to implement mitigation activities is generally low in comparison to the perceived threat, some important mitigation measures take time to implement. Mitigation success can be achieved when accurate information is portrayed through complete hazard identification and impact studies and followed by effective mitigation management. Hazard mitigation is key in reducing or eliminating risk to people, property, and infrastructure from damage caused by known and/or expected hazards.

This Plan evaluates hazards, risks, and vulnerabilities within the jurisdictional area of the entire county. The Plan supports, aids, identifies, and describes mitigation projects for each of the local jurisdictions that participated in the update. The suggested actions and implementation strategy for local governments could reduce the impact of future natural hazard occurrences. Reducing the impact of natural hazards can prevent such occurrences from becoming disastrous but will only be accomplished through a coordinated partnership with emergency managers, political entities, public works officials, community planners, and other dedicated individuals working to implement the strategies outlined in this plan.



## COUNTY PROFILE



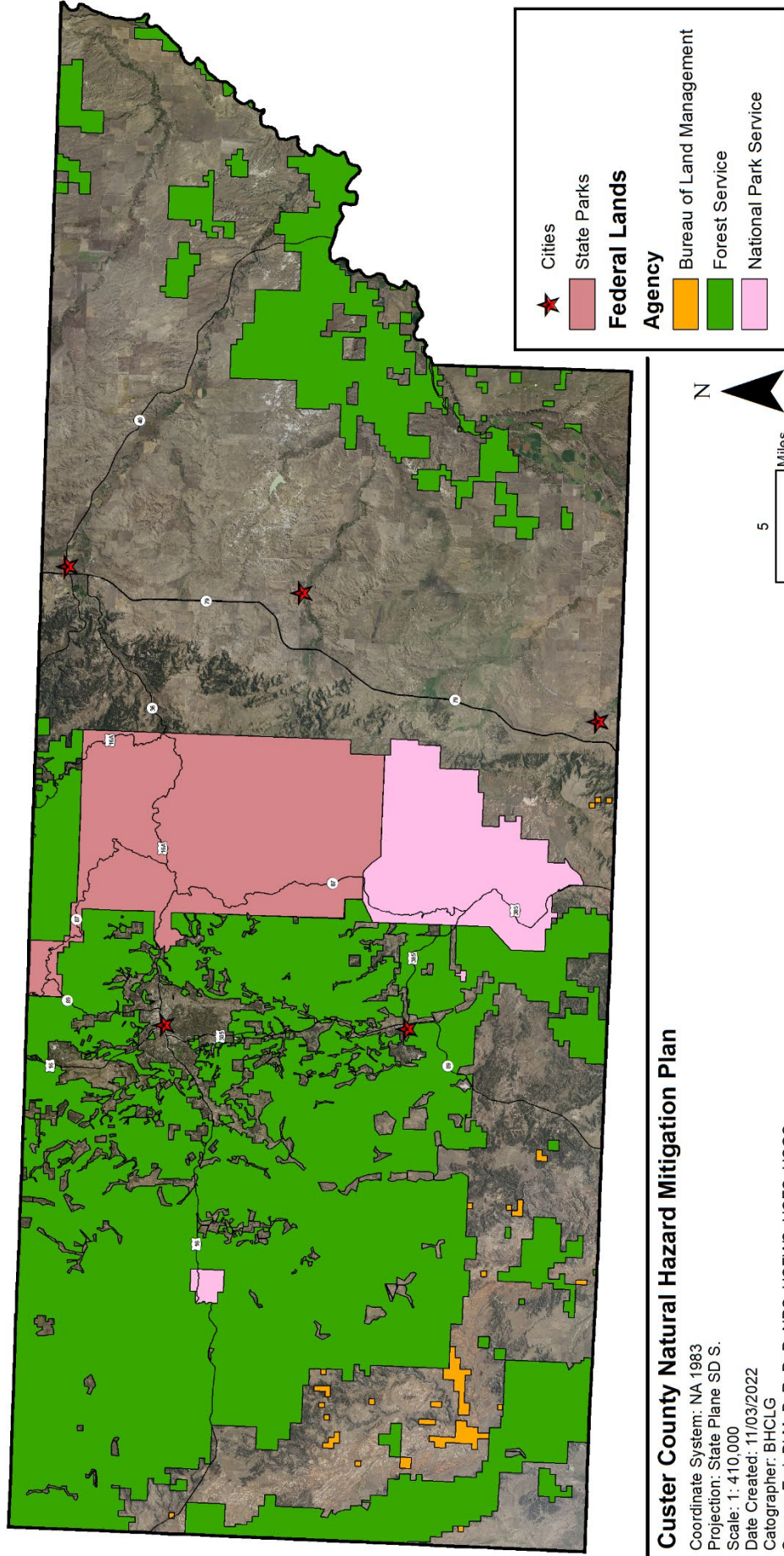
**Figure 1.1** Location of Custer County, South Dakota.

Custer County Geographical Quick Facts	
<ul style="list-style-type: none"> <li>• <b>Bordering counties:</b> <ul style="list-style-type: none"> <li>• Pennington County, SD - Oglala Lakota County, SD - Fall River County, SD - Niobrara County, WY - Weston County, WY</li> </ul> </li> <li>• <b>Land area:</b> <ul style="list-style-type: none"> <li>• Custer County - 1,556.94 square miles</li> <li>• USFS Black Hills National Forest – 487.57 square miles</li> <li>• SD Game, Fish &amp; Parks – 112.52 square miles</li> <li>• USFS Nebraska Forest and Grasslands – 81.33 square miles</li> <li>• Bureau of Land Management – 6 square miles</li> <li>• Wind Cave National Park – 52.34 square miles</li> <li>• Jewel Cave National Park – 2 square miles</li> </ul> </li> <li>• <b>Townships or Unorganized Territories</b> <ul style="list-style-type: none"> <li>• Custer County has no townships or unorganized territories.</li> </ul> </li> <li>• <b>Population per square mile:</b> <ul style="list-style-type: none"> <li>• 5.3</li> </ul> </li> <li>• <b>Soils:</b> <ul style="list-style-type: none"> <li>• Loamy, Loamy and Sandy Soils, Clay Shales, Loamy to Clay</li> </ul> </li> <li>• <b>Major transportation routes:</b> <ul style="list-style-type: none"> <li>• U.S. Highways 385 and 16</li> <li>• South Dakota State Highways 36, 40, 79, 87, and 89</li> </ul> </li> </ul>	

**Table 1.1** Geographic quick facts of Custer County, South Dakota.

# CUSTER COUNTY, SD

## Federal Lands and State Parks



**Custer County Natural Hazard Mitigation Plan**

**Figure 1.2** Custer County's Land Ownership.

Custer County Population Demographics	
Location	Population
Custer County	8,318
Buffalo Gap	131
Custer City	1,919
Fairburn	60
Hermosa	382
Pringle	109

**Table 1.2** Population demographics of Custer County and local jurisdictions. (U.S. Census Bureau Decennial Census 2020).

Custer County Climate	
Season	Average Temperature
Winter	28°F
Spring	50°F
Summer	72°F
Fall	33°F
Precipitation	
Annual precipitation from 1981-2010	18.5 inches

**Table 1.3** Climate data of Custer County, South Dakota. (U.S. NOAA: National Centers for Environmental Information, *Climate at a glance*).

### National Flood Insurance Program Participation

As of June 2022, Custer County, Custer City, and Hermosa participated in the National Flood Insurance Program (NFIP). The Towns of Buffalo Gap and Fairburn do not participate in NFIP and are currently sanctioned. Sanctioned communities choose not to participate in the NFIP program after data has been received on which floodplain regulations are based.<sup>1</sup> The Town of Pringle is unmapped and does not participate in the NFIP program. NFIP status, as of June 2020, was provided by the South Dakota State NFIP Coordinator (Appendix H).

Custer County Municipalities Overview				
Towns	Population	Location	Elevation	NFIP
Buffalo Gap	131	43° 29' 29" N, 103° 18' 46" W	3,266ft	no
Custer City	1,919	43° 45' 59" N, 103° 35' 55" W	5,323ft	yes
Fairburn	60	43° 41' 09" N, 103° 12' 41" W	3,300ft	no
Hermosa	382	43° 50' 22" N, 103° 11' 27" W	3,328ft	yes
Pringle	109	45° 36' 30" N, 103° 35' 37" W	4,891 ft	no

**Table 1.4** Custer County Municipalities Overview, including participation in National Flood Insurance Program (NFIP). (Custer County. *Google Earth Pro*, U.S. Census Bureau Decennial Census 2020).

<sup>1</sup>FEMA. 2022. *National Flood Insurance Community Status and Public Notification*.



## II. PREREQUISITES

**Changes/Revisions to Planning Process:** The planning team was formed with at least one representative from each adopting jurisdiction. BHCLG and Custer County Emergency Manager also met with each adopting body's elected officials to discuss the Plan update.

### ADOPTION BY THE LOCAL GOVERNING BODY

The local governing body that oversees the update of the *Custer County Natural Hazard Mitigation Plan* is the Custer County Commission. The Commission has tasked the Custer County Emergency Manager with the responsibility of ensuring the Plan is compliant with Federal Emergency Management Agency (FEMA) Guidelines and corresponding regulations.

### MULTI-JURISDICTIONAL PLANNING PARTICIPATION AND ADOPTION

This multi-jurisdictional plan serves the entire geographical area within the boundaries of Custer County, South Dakota. All five of the municipalities in the county elected to participate in the planning process and the update of the existing *Custer County Pre-Disaster Mitigation Plan, 2018*. The participating local jurisdictions include the following: Buffalo Gap, Custer City, Fairburn, Hermosa, and Pringle.

A large portion of Custer County encompasses sizable amounts of state and federal lands. These entities are not under any jurisdiction of Custer County but were consulted and invited to participate and/or adopt the Plan.

The *Custer County Natural Hazard Mitigation Plan (2023)* will be adopted by resolution by the participating incorporated municipalities and the Custer County Commission. The Resolutions of Adoption are included as supporting documentation for the Plan. The dates of adoption by resolution for each of the jurisdictions are summarized in Table 2.1.

Dates of Plan Adoption by Jurisdiction	
Jurisdiction	Date of Adoption
Custer County	03/22/2023
Buffalo Gap	04/10/2023
Custer City	03/22/2023
Fairburn	03/15/2023
Hermosa	03/21/2023
Pringle	03/14/2023

**Table 2.1.** Participating jurisdictions' date of Custer County Hazard Plan adoption date.

All participating jurisdictions involved in the Plan updated their information, provided feedback on new developments, and any changes since the last update. Local jurisdictions have also presented the Resolution of Adoption to their councils and passed the resolutions upon FEMA approval of the Plan. The resolutions are included in Appendix I. Table 2.2 shows the "participation" of local jurisdictions that intended to adopt the Plan.

Participation of Local Jurisdictions						
Nature of Participation	Custer County	Buffalo Gap	Custer City	Fairburn	Hermosa	Pringle
Attended Meetings or work sessions (a minimum of 2 meetings will be considered satisfactory).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Provided inventory and summary of reports and plans relevant to hazard mitigation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Provided Risk Assessment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Provided descriptions of what is at risk (including local critical facilities and infrastructure at risk from specific Hazards)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Submitted a description or map of local land-use patterns (current and proposed/expected).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Developed goals for the community.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Developed mitigation actions with an analysis/explanation of why those actions were selected.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Prioritized actions emphasizing relative cost-effectiveness.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reviewed and commented on draft Plan.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hosted opportunities for public involvement (allowed time for public comment at a city council meeting during public comment period)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Table 2.2.** Local jurisdictions participation requirements met. At least seven of the participation requirements must be met for the jurisdiction to have participated in the adoption of Plan.

### III. PLANNING PROCESS

**Changes/Revisions to Planning Process:** The planning process for this update focused on ensuring there was participation and involvement from all of the adopting jurisdictions, state and federal agencies. BHCLG and County Emergency Manager met with all adopting bodies commissions/boards and councils. A planning team was created with representation from each town/city, the County, and state and federal representatives.

#### DOCUMENTATION OF THE PLANNING PROCESS

*“An open and public involvement process is essential to the development of an effective plan.” Requirement 201.6(b).*

Meeting Summaries		
Date	Location	Summary
10/11/2022	Town Hall Pringle, SD	BHCLG and the Custer County EM met with the Town of <b>Pringle</b> during their regularly scheduled town board meeting. During this meeting, BHCLG informed the public and town board members about the required update, planning process, and overview of mitigation. The board was provided with a mitigation packet to fill out (Appendix G). The Town of Pringle tasked <i>Tony Boggs</i> as the point of contact for the Plan update.
10/12/2022	Custer County 1881 Courthouse Custer, SD	The initial informational meeting was held during the regularly scheduled <b>Custer County</b> Commission meeting. The content of this meeting was to inform the public and county commissioners about the required update and planning process. At this time the county commissioners also approved the contract for Black Hills Council of Local Governments (BHCLG) to complete the update of this Plan. The Custer County Emergency Manager was tasked as the point of contact for BHCLG, to assist in the Plan update.
10/17/2022	City Hall Custer, SD	BHCLG and Custer County’s EM met with <b>Custer City</b> during their regularly scheduled town board meeting. BHCLG informed the public and town board members about the required update and planning process. Custer City tasked <i>Todd Pechota</i> to serve as the primary point of contact for the Plan update.
10/19/2022	Town Hall Fairburn, SD	BHCLG met with the Town of <b>Fairburn</b> during their regularly scheduled town board meeting. During this meeting, BHCLG informed the public and town board members about the required update and planning process. The Town of Fairburn decided to discuss further their point of contact for the Plan update.
10/25/2022	City Hall Hermosa, SD	BHCLG and the Custer County EM met with the <b>Hermosa</b> Planning Commission and town board to discuss the Custer County Mitigation Plan update. During this meeting, BHCLG informed the public and town board members about the required update and planning process. The Town of Hermosa tasked <i>Joan Harris</i> as the point of contact for the Plan update.
11/07/2022	Town Hall Buffalo Gap, SD	BHCLG met with the Town of <b>Buffalo Gap</b> during their regularly scheduled town board meeting. During this meeting BHCLG informed the public and town board members about the required update and planning process. The Town of Buffalo Gap tasked <i>Daniel Frieden</i> as the point primary of contact for the Plan update.



11/17/2022	Custer County Courthouse Custer, SD	Custer County EM and BHCLG met with the local fire departments at the Fire Advisory Board meeting and <b>Custer County</b> Commissioners to discuss the mitigation plan update. During this meeting the fire departments were asked to provide any feedback on known areas of concern and any areas that need treatment.
11/21/2022	Custer County Courthouse Custer, SD	The <b>planning team's</b> first meeting was held as a hybrid in-person/zoom format. The group discussed an overview of mitigation, including the purpose and process of the Plan. The team also reviewed parts of the 2018 Plan, to evaluate if any of the hazards need to be updated or removed. Finally, the team worked towards finalizing the list of invitees to the upcoming stakeholders' meetings.
11/30/2022	Custer County Courthouse Custer, SD	<b>Custer County</b> Planning Director and Equalization Director discussed the County's planning mechanisms, planning documents, inventory assets, and the County's floodplain management process.
12/16/2022	Custer County Courthouse Custer, SD	Custer County EM presented an update of the Plan process to the <b>Custer County Commission Meeting</b> . The EM also provided the invitation for the upcoming stakeholders meeting.
12/16/2022	Custer County Courthouse Custer, SD	BHCLG and County EM met with the representative of <b>Pringle</b> , to discuss unique risks to the town and discuss potential mitigation projects.
12/20/2022	Custer Fire House Custer, SD	Custer County Mitigation Plan Stakeholders meeting included representatives from a range of different institutions and businesses were invited to participate in the Mitigation Planning Session. Public notice was posted on Custer County's Emergency Managers social media pages. The stakeholder's list was formulated with assistance of the Custer County Emergency Manager, Planning Team, and guidance from <i>FEMA's Local Mitigation Planning Handbook</i> . A list of organizations invited can be found in Appendix A. Invitations were sent out via email. Participants were asked to identify hazard risks, vulnerability, and discuss mitigation strategies.
12/28/2022	Custer County Courthouse Custer, SD	The <b>planning team</b> met to discuss and update the mitigation goals from the 2018 Plan and create new goals for the 2023 Plan update.
12/30/2022	Town Hall Buffalo Gap, SD	BHCLG and County EM met with the <b>Buffalo Gap</b> planning team representative for a work session to discuss risks/vulnerabilities/and mitigation goals for the town of Buffalo Gap.

**Table 3.1** Mitigation Meeting dates, location, and summary.

The process of the Plan update began with BHCLG and the County Emergency Manager meeting with the Custer County Commission and all town boards/city councils. Representatives were chosen for each jurisdiction to serve as planning team members (Table 3.9). The planning team members were requested to attend the planning group meetings, review the previous Plan, provide planning documents/studies/ordinances, provide a list of critical facilities and infrastructure, identify risks and vulnerabilities, and update mitigation projects.

The meeting minutes, sign-in, and notices/agendas (when applicable) from each of the meetings are included in Appendix A. Commissioners, board members, and public officials involved in the Plan are listed in Tables 3.2-3.7. Local, state, and federal organizations that helped by providing information are listed in Table 3.8.

**\*\*Note:** commissioners and council members as well as other elected and non-elected officials of the towns and counties change often. The names listed below are the most recent office/position holders.

<b>Custer County Commissioners and Public Officials Involved in the Plan</b>	
Steve Esser	Emergency Manager
Jesse Doyle	Highway Superintendent
Troy Schmidt	GIS Director
Jim Lintz	Commissioner, Chair
Mark Hartman	Commissioner, Visa Chair
Mike Linde	Commissioner
Craig Hindle	Commissioner
Travis Bies	Commissioner
Dawn McLaughlin	Finance Officer
Joe Panza	Building/Ground Maintenance
Terri Kester	Planning Director
Laura Rosane	Planning Deputy Director
Teri L Morgan	Register of Deeds
Kevin Treloar	Highway Dept. Foreman
Mike Baldwin	Weed and Pest Control
Leah Vissia	Equalization

**Table 3.2** Custer County officials involved in the Custer County Hazard Mitigation Plan Update.

<b>Town of Buffalo Gap Board Members and Public Officials Involved in the Plan</b>	
Daniel Frieden	President
Terry Kizer	Treasurer
Raymond Hussey	Treasurer
Heather Besco	Finance Officer

**Table 3.3** Town of Buffalo Gap officials involved in the Custer County Hazard Mitigation Plan Update.

<b>City of Custer City Council Members and Public Officials Involved in the Plan</b>	
Jeannie Fischer	City Council
Todd Pechota	City Council
Julie Jenniges	City Council
Peg Ryan	City Council
Nina Nielsen	City Council
Laurie Woodward	Finance Officer

**Table 3.4** Town of Custer City officials involved in the Custer County Hazard Mitigation Plan Update.

<b>Town of Fairburn Board Members and Public Officials Involved in the Plan</b>	
Melissa Kremer	Board President
Joan Harris	Finance Officer
Sally Nordstrom	Trustee
Dean Weekley	Trustee

**Table 3.5** Town of Fairburn officials involved in the Custer County Hazard Mitigation Plan Update.

<b>Town of Hermosa Board Members and Public Officials Involved in the Plan</b>	
Dan Holsworth	President
Linda Kramer	Trustee
Brett Thomason	Trustee
Low Waltman	Planning and Zoning Board
Chuck Irvine	Planning and Zoning Board
Tanya Stockham	Planning and Zoning Board
Bobbie Klaski	Planning and Zoning Board
Joan Harris	Planning and Zoning Board President
Gail Boddicker	Finance Officer

**Table 3.6** Town of Hermosa officials involved in the Custer County Hazard Mitigation Plan Update.

Town of Pringle Trustee Members and Public Officials Involved in the Plan	
Lisa Baertsch	Clerk
Dee Anderson	President
Robert Morgan	Trustee
Tony Boggs	Trustee
Pat Zeimet	Trustee

**Table 3.7** Town of Pringle officials involved in the Custer County Hazard Mitigation Plan Update.

Local, State, and Federal Agencies Involved in the Plan
South Dakota Wildland Fire
South Dakota Department of Transportation
South Dakota Department of Tourism
United States Forest Service
Bureau of Land Management
United States National Park Service
South Dakota Game, Fish & Parks – Custer State Park
South Dakota Geological Survey

**Table 3.8** Local, State, and Federal Agencies involved in the Custer County Hazard Mitigation Plan Update.

Planning Team Representatives	
Custer County	Steven Esser, Emergency Manager
Custer County	Terri Kester, Planning Director
Pringle	Tony Boggs, Trustee Robert Morgan Sr, Trustee (Alternate)
Custer City	Todd Pechota, City Council
Hermosa	Joan Harris, P & Z Board President
Buffalo Gap	Daniel Frieden, Town Board President
Fairburn	Joan Harris, Finance Officer
USFS: Black Hills Nat. Forest,	Rob Hoelscher, District Ranger
USFS: Nebraska Nat. Forest and Grasslands	Brian Daunt, Forest Fire Management Officer
USFS – Black Hills and Nebraska Nat. Forest	Jeni Lawver, Fire Prevention Officer
Custer State Park	Matt Snyder, Regional Park Supervisor

**Table 3.9** Participating Plan representatives and title.

## **PUBLIC INVOLVEMENT [§201.6(b)(1)]**

The public was provided several opportunities at county commission and town board/city council meetings to comment during the drafting stage of the Plan update. State law requires that public meetings allow for public comment during the meetings as described in SDCL 1-25-1.

...The public body shall reserve at every regularly scheduled official meeting a period for public comment, limited at the public body's discretion, but not so limited as to provide for no public comment. At a minimum, public comment shall be allowed at regularly scheduled official meetings which are designated as regular meetings by statute, rule, or ordinance.

It was during this legally required public comment period the public was allowed to provide comments. Mitigation Planning was listed on the required notices for the town board/city council and county commission meetings. Notices for public meetings require a minimum of time, date, and location, and were posted in accordance with SDCL 1-25.1.1:

1-25-1.1. ...Each political subdivision shall provide public notice, with proposed agenda, that is visible, readable, and accessible for at least an entire, continuous twenty-four hours immediately preceding any official meeting, by posting a copy of the notice, visible to the public, at the principal office of the political subdivision holding the meeting. The proposed agenda shall include the date, time, and location of the meeting. The notice shall also be posted on the political subdivision's website upon dissemination of the notice if a website exists. For any special or rescheduled meeting, the information



in the notice shall be delivered in person, by mail, by email, or by telephone, to members of the local news media who have requested notice. For any special or rescheduled meeting, each political subdivision shall also comply with the public notice provisions of this section for a regular meeting to the extent that circumstances permit.

Although during the Plan update meetings there was no public comment, discussion took place among the council members, engineers, finance officers, city engineers and/or attorneys (when relevant), fire specialists and city staff. Meeting minutes were for each local jurisdiction and published in the paper or record for each entity as required by law. The Plan's author was able to speak with two residents, one from Hermosa and one from Fairburn, for input on historic events, risk, and vulnerability to their respective towns. Their comments were incorporated into the Plan.

After the draft of the Plan was complete, it was posted on the Custer County's and Custer City's websites for public review and comment. An ad was placed in the local newspaper, the Custer County Chronicle, to inform people where to find the Plan draft and how to provide comments. Notice was also posted on Custer County's Emergency Management Facebook page with a link to the Plan on the County's website. The administrators for the Facebook pages reported the post reached 210 people, 6 were engaged (opened the link to the Plan), 0 commented on the post and 1 liked the post. The comments received have been addressed. Administrators of the social media pages provided screen shots of the Facebook post and they have been included in Appendix C.

Notice was emailed to the emergency managers in the neighboring counties of: Southwest District (Fall River and Oglala Lakota Counties), and Pennington in South Dakota, and Niobrara and Weston Wyoming. A copy of the email is included in Appendix C. Those that received notice of the Plan draft were allowed thirty days to provide comments on the draft.

Neighboring Emergency Managers			
Neighboring County	Emergency Manager	Email Address	Response Received
Southwest District	Frank Maynard	em@frcounty.org	Yes
Pennington, SD	Dustin Willett	dustin.willett@pennco.org	Yes
Niobrara, WY	Jim Santistevan	niobraracountyema@gmail.com	No
Weston, WY	Gilbert Nelson	gnelson@westongov.com	No

**Table 3.10** Listing of all neighboring county emergency managers.

## TECHNICAL REVIEW OF EXISTING DOCUMENTS [§201.6(b)(3)]

*The planning process shall include the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.*

A review and incorporation of existing plans, studies, reports, and technical information was completed. Each community was asked to provide a list of existing documents they had available. Documents incorporated into the Plan are cited throughout the document. In addition to the *Custer County Pre-Disaster Mitigation Plan 2018*, the author reviewed several other existing documents including but not limited to:

- *South Dakota State Hazard Mitigation Plan (2019)*
- *South Dakota Drought Mitigation Plan (2015)*
- *South Dakota Forest Action Plan (2020 revision)*
- *Black Hills National Forest Land and Resource Management Plan Revised 1997 (2006)*
- *USGS Karst Map and Expansive Soils*
- *Wind Cave National Park Fire Management Plan (2005)*
- *Fire Management Plan for Jewel Cave National Monument (2004) \*re-evaluated yearly*

<b>Record of Review – Custer County</b>	
<b>Existing program/policy/technical documents</b>	<b>Year</b>
Custer County Ordinance Number 2: An ordinance providing regulations for the subdivision and use of land with Custer County	2007
First Revision to the Custer County Ordinance Number 2	2019
Custer County HWY Dept. Road and Approach Specifications	2006 & 2022 (revision)
Custer County Ordinance #6 Revised Flood Damage Prevention Ord.	2012
Custer County Comprehensive Plan	2008
Custer County Community Wildfire Protection Plan	2006
Upper French Creek Flood Mitigation Plan	2001
Custer County Ordinance No. 20 (Open Burning)	2021
One Mile Extraterritorial Area Policy Agreement – Hermosa	2021
Cooperative Forest Road Agreement	2021
Black Elk Preparedness Plan	2022
Custer County Structure Placement – 600' South of Mineral Dr. and Granite Heights Dr.	2021

**Table 3.11** Review of Existing Documents for Custer County

<b>Record of Review – Town of Buffalo Gap</b>	
<b>Existing program/policy/technical documents</b>	<b>Year</b>
Preliminary Engineering Report for Drinking Water System	2022
Mobile Home Ordinance (unavailable for review)	-
Ordinance No. 35 – Providing for Fire Protection and Fire Prevention at Buffalo Gap	1939
Ordinance No. 36 – Starting of open fire in the town of Buffalo Gap	1948

**Table 3.12** Review of Existing Documents for Town of Buffalo Gap

<b>Record of Review – City of Custer City</b>	
<b>Existing program/policy/technical documents</b>	<b>Year</b>
Custer City Municipal Code: Title 15 Building and Construction	Reviewed (12/2022)
Custer City Municipal Code: Title 15, Chap. 15.16 Flood Damage Prevention	Reviewed (12/2022)
Custer City Municipal Code: Title 17 Zoning	Reviewed (12/2022)
Wastewater Facility Plan City of Custer, SD	2020
Custer City Parks Master Plan	2017
Custer City Comprehensive Plan	2020

**Table 3.13** Review of Existing Documents for Custer City

<b>Record of Review – Town of Fairburn</b>	
<b>Existing program/policy/technical documents</b>	<b>Year</b>
Adoption of Custer County Ordinance 20	2021

**Table 3.14** Review of Existing Documents for Town of Fairburn

<b>Record of Review – Town of Hermosa</b>	
<b>Existing program/policy/technical documents</b>	<b>Year</b>
Town of Hermosa Comprehensive Plan	2009 (Amended 2018)
Town of Hermosa Ordinance XV Land Use	Reviewed (12/2022)
Active Transportation Plan	2019
Town of Hermosa Zoning Map	2018
Town of Hermosa Future Land Use Map	2005
One Mile Extraterritorial Area Policy Agreement – Custer County	2021
Hermosa Area Floodplain Enhancement Plan (This Plan was unavailable for review)	2014

**Table 3.15** Review of Existing Documents for Town of Hermosa

Record of Review – Town of Pringle	
Existing program/policy/technical documents	Year
Town of Pringle Ordinance No. 30 Prohibiting Open Fires Except with Permit	1952

**Table 3.16** Review of Existing Documents for Town of Pringle

## REVIEW OF THE 2018 PLAN

Each section of the *Custer County Pre-Disaster Plan 2018* was reviewed. Much of the information taken from the 2018 version of the Plan was relevant. Specific areas that needed improvement or changes include the planning process, mitigation strategy, risk assessment, and review of existing planning and technical documents. Each of the jurisdictions and Custer County were provided information on previous risks, concerns, and projects from the 2018 Plan. They were asked to review the information, to provide updates of completed projects and identify new risks/concerns within their jurisdiction.

## MITIGATION ACTIVITIES AND ACCOMPLISHMENTS

The following is a list of interagency accomplishments that have helped make Custer County a safer place to live:

- Implementation of a workable Emergency Operations Center/ Incident Command System Interface.
  - Physical interaction of the Local Emergency Operations Plan with the applicable communities.
  - Mandated use of the Incident Command System as a management tool during disaster response.
  - Integrated the NIMS through County resolution as per HSPDD 5 and 8.
  - Updating the County's Fire Restriction Ordinance
  - Resource (manpower) identification of all jurisdictional partnerships with both the public and private sectors.
  - Implementation of community-based programs such as Firewise, CERT, and Citizen Corp on a community level.
  - Initiation of comprehensive plan updates in Custer County, Hermosa, Custer City. Discussion about creating comprehensive plans for the other towns within Custer County has been initiated but not yet acted upon.
  - Digitalization of local government infrastructure.
  - A multi-agency contract to initiate stream monitoring on French Creek Basin.
  - Re-engineering of the dispatch function to provide 24 hours PSAP capabilities.
  - Utilization of grant funding for advanced responder training and equipment.
  - Establishment of a Hazard Mitigation Interagency Team to coordinate federal, state, and local governments response to natural hazard events.
  - Continued: Assessment of dam inventory within Custer County to include State and Federal structures.
  - Continued: Regulation of facilities in the floodplain through appropriate local ordinances.
  - Continued: National Flood Insurance Program (NFIP) enrollment of Custer County, City of Custer, and Town of Hermosa.
  - Preparation of the Upper French Creek Flood Mitigation Plan for Custer County and Custer City (2001).
  - Continued: 911 addressing.
  - Buyout of problematic structures and properties under the Brownfields and Flood Mitigation Programs.
- 2021- Acquisition of two homes located in the floodplain in Custer City using FEMA PDM funding.

## IV. RISK ASSESSMENT

**Change/Revisions to Risk Assessment:** The risk assessment was completely reformatted. Additional specific information was collected for hazards as provided by the jurisdictions and County. The following hazards were added: dam failure, extreme temperatures, high/severe winds, tornados. Removed: Hazardous Materials, as this has not been evaluated through this Plan but rather is addressed in the County's Local Emergency Operations Plan. Homeland Security was also removed due to the limitless potential for different types, timing, and location of hazards. Renamed: 'Wildland Fire/Urban Interface' to 'Wildfire'; "Earthquake & Landslide" to "Geological", "Flash Flooding" to "Flooding". While the Planning Team explained most of the county experiencing "Flash Flooding" events, the title was changed to include all types of flooding.

### IDENTIFYING HAZARDS [§201.6(c)(2)(i)]

*The planning process shall include 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.*

A comprehensive list of hazards was evaluated, and disasters were placed in three separate columns depending on the likelihood of the disaster occurring in the planning jurisdiction. Table 4.1 was derived from the FEMA worksheets provided in the planning handbook for mitigation planning. Hazards that occur at least once a year or more were placed in the high probability column; hazards that may have occurred in the past or could occur in the future but do not occur on a yearly basis were placed in the low probability column; and hazards or disasters that have never occurred in the area before and are unlikely to occur in the planning jurisdiction any time in the future were placed in the unlikely to occur column. While man-made hazards were discussed briefly with the planning group, it was decided to eliminate man-made hazards from the Plan because those types of hazards are difficult to predict and assess due to wide variations in the types, frequencies, and locations. Types and scopes of manmade hazards are unlimited.

Only the natural hazards from the High Probability and Low Probability Columns will be further evaluated throughout this Plan. All manmade hazards and hazards in the Unlikely to Occur column will not be further evaluated in the Plan. Table 4.2 below identifies the hazards addressed in the Plan throughout the planning process. Hazards were identified for this Plan in several ways including: observing development patterns, input from jurisdictions, public meetings, planning work sessions, previous disaster declarations, consulting the *State Hazard Mitigation Plan 2019* and research of the history of hazard occurrences located within Custer County.

Natural Hazards Categorized by Likelihood of Occurrence		
High Probability	Low Probability	Unlikely to Occur
Drought	Aircraft Accident	Avalanche
Extreme Cold	Biological	Coastal Storm
Extreme Heat	Civil Disorder	Hurricane
Flood	Dam Failure	Volcanic Ash
Freezing Rain/Sleet/Ice	Earthquake***	Volcanic Explosion
Hail	Ice Jam	Tsunami
Heavy Rain	Landslide	
Heavy Snow	Radiological	
Lightning	Tornado	
Rapid Snow Melt	***Earthquakes are marked with an asterisk because they occur but are so small that the effects are minimal. Thus, mitigation measures specifically for earthquakes are not a priority.	
Strong Winds		
Thunderstorm		
Transportation		

Utility Interruption**	** Utility interruptions are not a natural hazard but often occur as a result of natural hazards such as ice storms and strong winds.
Wildfire	

**Table 4.1** FEMA Assessing Risks list of hazards. (Mitigation Planning Workshop for Local Governments Student Manual May 2004. SM 4-14.)

Jurisdiction Identified Hazards						
Natural Hazards Identified	Custer County	Buffalo Gap	Custer City	Fairburn	Hermosa	Pringle
Dam Failure	L	NA	NA	NA	NA	NA
Drought	H	H	H	H	H	H
Earthquake	L	L	L	L	L	L
Extreme Cold	M	M	L	H	M	L
Extreme Heat	M	H	L	H	M	L
Expansive Soils	L	NA	NA	NA	L	NA
Flood	H	M	H	L	M	L
Hail	H	M	H	H	H	H
Heavy Rain	H	M	H	L	H	M
Landslides	L	L	L	L	NA	NA
Lightning	H	H	H	H	M	H
Heavy Snow	H	M	H	H	H	M
Strong Winds	H	H	H	H	H	M
Tornados	M	L	L	L	L	L
Wildfire	H	M	H*	H*	L*	H*
Winter Storms	H	H	H	H	H	H
NA	Not applicable; not a hazard to the jurisdiction					
L	Low risk; little damage potential (minor damage to less than 5% often jurisdiction)					
M	Medium risk; moderate damage potential (causing partial damage 5-10% of the jurisdiction, and irregular occurrence)					
H	High risk; signification risk/major damage potential (ex. destructive, damage to more than 10% of the jurisdiction and/or regular occurrence)					
O	Jurisdiction did not report hazards					

**Table 4.2** Natural Hazards identified by each jurisdiction. \*Near proximity to city limits but not within city limits.

## Significant Hazard Occurrences

The Stafford Act has two types of disaster declarations: emergency declarations and major disaster declarations. These two types allow the President to provide supplemental federal disaster assistance. While there have been several emergency and major disaster declarations made statewide, Table 4.3 shows for the last ten years those events that impacted Custer County.

Federal Disaster Declarations	
Incident Date	Types of Disasters
07/19/2012 – 07/23/2012	South Dakota Myrtle Fire*
10/03/2013 – 10/16/2013	Severe Winter Storm, Snowstorm, and Flooding
12/12/2017 – 12/14/2017	South Dakota Legion Lake Fire*
05/26/2019 – 06/07/2019	Severe Storm and Flooding
01/20/2020 – continuing	South Dakota Covid-19 Pandemic

**Table 4.3** Listing of federal disaster declarations from 2010 to November 2022. \*Fire Management Assistance Declaration

## Natural Hazards in the Plan Jurisdiction

Descriptions of the natural hazards likely to occur in the planning jurisdiction are listed in Appendix E. National Oceanic Atmosphere Administration (NOAA) was used to research natural hazards and disasters having occurred within the last ten years within the geographic location covered under the Custer County Plan. A summary of the findings for significant hazard occurrences from the past ten years are in Table 4.4:

Significant Hazard Occurrences 2012-2022		
Type of Hazard	# of days with an event Since 2012	Source
Blizzard	9	NOAA
Extreme Temperatures	5	NOAA
Flash Flood	4	NOAA
Flood	11	NOAA
Hail	111	NOAA
Heavy Rain	2	NOAA
High Wind	39	NOAA
Lightning	1	NOAA
Thunderstorm Winds	59	NOAA
Tornado	5	NOAA
Wildfire/Forest Fire	413	National Interagency Fire Center
Winter Storm/Winter Weather/Heavy Snow	91	NOAA

**Table 4.4** List of significant hazards from 2012-2022. (NOAA: National Center for Environmental Information, *Storm Event Database*), (Information was taken from National Interagency Fire Center: Historic Fires.) A complete listing of all hazards can be found in Appendix B.

Most of the hazard events listed were obtained using NOAA website. The data provided spans between January 1950 to June 2022, as reported by the National Weather Service. Data collection and processing procedures have changed over time, creating incomplete data. The information provided helps illustrate the hazards Custer County faces. For a more comprehensive collection of the hazards in the county, other sources in the communities and the state were consulted.

The NOAA documented hazard events are believed to be incomplete, to get an accurate picture of Custer County, additional sources were referenced when appropriate. With such a high number of occurrences it is reasonable to expect at least some property or crop damage was sustained in the communities during some of the occurrences, even though the damage may not have been reported or recorded. It is possible such damage was not reported because it was thought to be insignificant at the time, or because those responsible for reporting such information did not report to the proper agencies. Unfortunately, the total damage for each event is not available, but hopefully soon a method for collecting this data will evolve so it can be made available to local governments for mitigation planning.

### **HAZARD PROFILE [§201.6(c)(2)(ii)]**

*Requirement §201.6 (c)(2)(i): [The risk assessment shall include a] description of the type 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.*

Geographic location of each natural hazard is addressed in this Plan. Most hazards identified have some potential of occurring anywhere in the county with the exception of flooding and dam failure which are more localized hazards. Previous occurrences are listed individually by the type of hazard and by location in the following tables. Table 4.5 identifies the latitude and longitude of the local jurisdictions along with the population, elevation, and number of occupied homes.



Community within the County				
Towns	Population	Location	Elevation	Occupied Units
Buffalo Gap	131	43° 29' 29" N, 103° 18' 46" W	3,266ft	74
Custer City	1,919	43° 45' 59" N, 103° 35' 55" W	5,323ft	922
Fairburn	60	43° 41' 09" N, 103° 12' 41" W	3,300ft	34
Hermosa	382	43° 50' 22" N, 103° 11' 27" W	3,328ft	154
Pringle	109	45° 36' 30" N, 103° 35' 37" W	4,891 ft	60

**Table 4.5.** Population, location, elevation, and occupied units for each of the adopting jurisdictions in Custer County. (Custer County, Google Earth Pro), U.S. Census Bureau Decennial Census 2020).

Additionally, the extent (i.e., magnitude or severity) of each hazard, information on previous occurrences of each hazard, and the probability of future events (i.e., chance or occurrence) for each hazard are addressed below. Due to the long listing of all hazard occurrences in the last 72 years, the complete history can be found in Appendix B.

## DAM FAILURE

Dam Failure is usually associated with intense rainfall or prolonged flooding conditions, but it can also occur in any weather condition. The future risk for Dam failure in Custer County is low, with no known historical dam failure events in the county. Dam failure can be caused by a variety of sources including faulty design, construction and operational inadequacies, intentional breaches, or a flood event that exceeds the design. The greatest threat from dam failure is to people and property in areas immediately below the dam since flood discharges decrease as the flood wave moves downstream. In the Northern Great Plains, projected future weather patterns call for more intense rain events, which could lead to a higher risk of dam failure from flooding.<sup>2</sup>

The degree and extent of damage depend on the size of the dam and circumstances of the failure. A large dam failure might bring about considerable loss of property, destruction of cropland, roads, utilities, loss of income, environmental devastation, and even loss of life. Small dam failure can also have consequences such as a loss of irrigation water for a season and extreme financial hardship for many farmers.

South Dakota's Department of Agriculture and Natural Resources Water Rights Program provided an inventory of the dams which are large enough to fall under South Dakota's Safety of Dams Rules, see Appendix B. Custer County has a total of 32 dams identified by the Water Rights Program Dam Inventory. The National Inventory of Dams uses five classifications of hazard potential for dams: low, significant, high, undetermined, and not available (Table 4.6). Dams with a classification of high-risk are required to have inspections every five years.

National Inventory of Dams Classification Table			
Dam Hazard Potential Classification	Low Hazard	Significant Hazard	High Hazard
Loss of human life	None expected	None expected	Probable
Economic losses	Low and generally limited to owner	Yes	Yes (but not necessary for this classification)
Environmental damages	Low and generally limited to owner	Yes	Yes (but not necessary for this classification)
Lifeline interests impacted	No	Yes	Yes (but not necessary for this classification)

**Table 4.6.** Dam Hazard Potential Classifications. The table was taken from the National Inventory of Dams. (National Inventory of Dams. 2022. *Managing Dams*)

<sup>2</sup> USGCRP, *Climate Science Special Report: Fourth National Climate Assessment, Volume 1*.

Custer County has a total of six high-risk dams: Bismark Lake, Center Lake Dam, Lakota (Biltmore), Legion Lake Dam, Stockade Lake Dam, and Sylvan Lake Dam. Information on dams from the latest inspection can be found in Table 4.7, non-federal owner, and Table 4.8 federally owned.

High-Risk Dams in Custer County (non-federal)						
		Rating	Date of Inspection	Date Complete	Maximum Storage	Owner
Center Lake Dam		Fair	11/05/2020	1935	705 acre-ft	State
Rating Reason:	The Department of Game, Fish, and Parks and the Custer State Park staff have done a good job of routine maintenance at Center Lake Dam. However, there are several larger maintenance items identified in the recommendations of the inspection report that should be done to keep the dam in fair condition.					
Legion Lake Dam		Fair	11/05/2020	1934	198 acre-ft	State
Rating Reason:	Custer State Park staff has done a good job of keeping up with routine maintenance at Legion Dam. However, there are several larger maintenance projects listed in the recommendations section of the inspection report that should be addressed to keep the dam in fair condition.					
Stockade Lake Dam		Fair	11/05/2020	1930	2605 acre-ft	State
Rating Reason:	Custer State Park staff have done a good job of keeping up with routine maintenance at Stockade Lake Dam. However, there are several larger maintenance projects listed in the recommendations section of the inspection report that should be addressed to keep the dam in fair condition.					
Sylvan Lake Dam		Fair	11/05/2020	1906	240 acre-ft	State
Rating Reason:	The Department of Game, Fish, and Parks and Custer State Park has done a good job of maintaining Sylvan Lake Dam. There were a few items noted on this inspection. The cracking and calcification on the downstream face of the dam should continue to be monitored to ensure that it does not develop into a hazardous condition.					
Classification Definitions						
Satisfactory	No existing or potential deficiencies are recognized					
Fair	No existing dam safety deficiencies are recognized for normal loading conditions. Rare or extreme hydraulic and/or seismic events may result in a dam safety deficiency					
Poor	A dam safety deficiency is recognized for loading conditions which may realistically occur. Remedial action is necessary					
Unsatisfactory	A dam safety deficiency is recognized that requires immediate or emergency remedial action					
Not Rated	This dam has not been inspected or have been inspected but not rated					

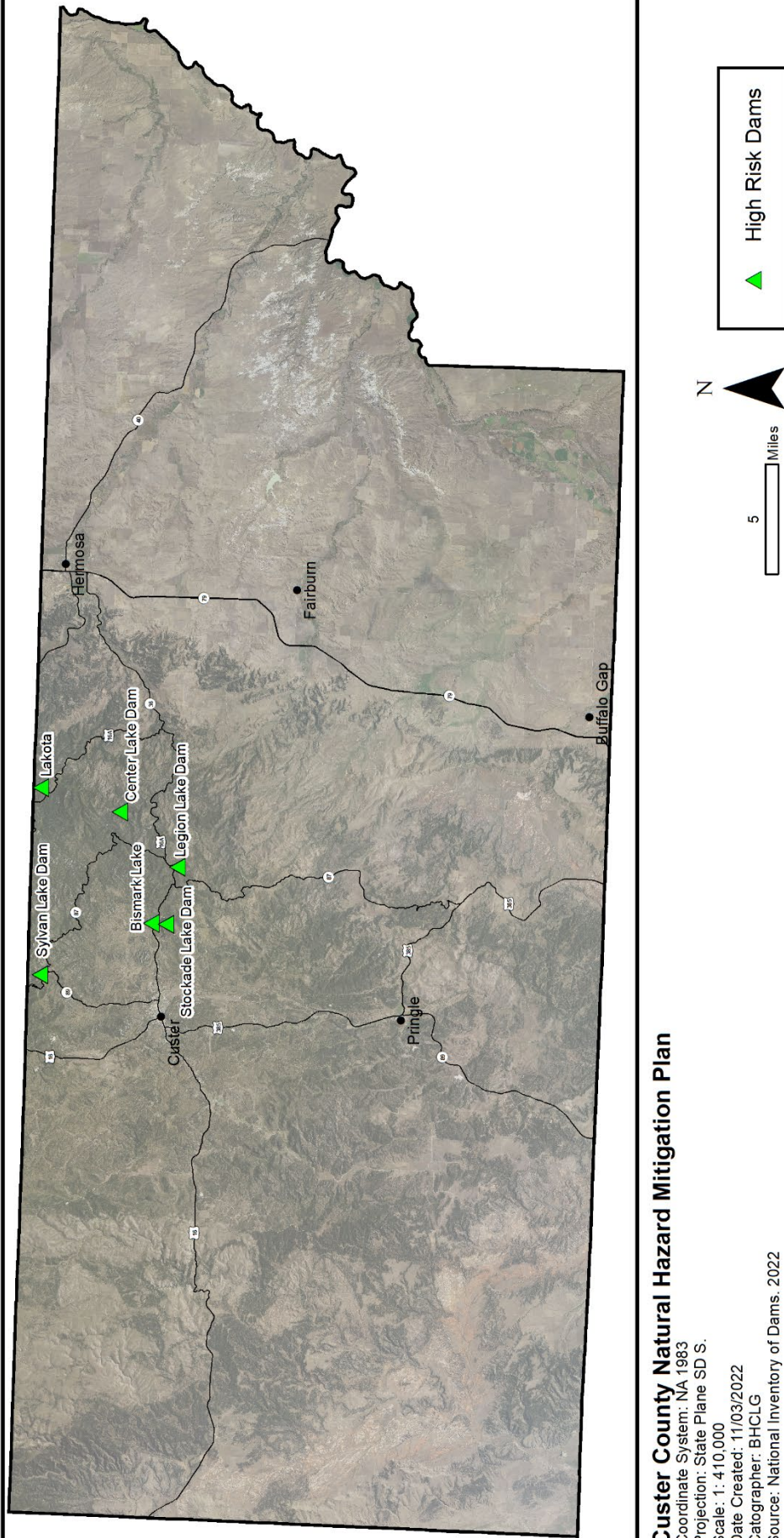
**Table 4.7.** List of Non-Federal High-Risk Dams in Custer County. (South Dakota DANR Water Rights Program. Appendix B).

Federal High-Risk Dams in Custer County					
	Rating	Date of Inspection	Date Complete	Maximum Storage	Owner
<b>Bismark Lake</b>	Not Rated	09/27/2019	1937	626 acre-ft	Federal USDA FS
Rating Reason:	N/A				
<b>Lakota (Biltmore)</b>	Not Rated	09/27/2019	1962	705 acre-ft	Federal USDA FS
Rating Reason:	N/A				

**Table 4.8.** List of Federally owned High-Risk Dams in Custer County. Federal dam report findings are not public, so no rating reason was available. (National Inventory of Dams. 2022).

# CUSTER COUNTY, SD

## High Risk Dams



### Custer County Natural Hazard Mitigation Plan

Coordinate System: NAD 1983  
 Projection: State Plane SD S.  
 Scale: 1: 410,000  
 Date Created: 11/03/2022  
 Cartographer: BHCLG  
 Source: National Inventory of Dams, 2022

**Figure 4.1.** High risk dams in Custer County. ( South Dakota DNR Water Rights Program Dam Inventory, 2022).



## DROUGHT

Future Hazard Probability					
Event Type	Abnormally Dry	Moderate Drought	Severe Drought	Extreme Drought	Exceptional Drought
Number of years with events	114	104	80	60	37
Years of recorded data	126 years (1895-2021)	126 years (1895-2021)	126 years (1895-2021)	126 years (1895-2021)	126 years (1895-2021)
Probability of future event in any given year	90%	83%	63%	48%	29%
Probability calculation	$114/126=0.90$	$104/126=0.83$	$80/126=0.63$	$60/126=0.48$	$37/126=0.37$

**Table 4.9.** Future probability of drought future occurrence based on National Integrated Drought Information System (National Integrated Drought Information System. *Drought Conditions for Custer County: Historical Conditions for Custer County*)

Drought Category System
<b>DO – Abnormally Dry</b>
<ul style="list-style-type: none"> <li>Grain and pasture growth is stunted</li> </ul>
<b>D1 – Moderate Drought</b>
<ul style="list-style-type: none"> <li>Topsoil is dry; grain crop yields decline</li> <li>Pasture and water supplies decline; cattle industry under stress</li> </ul>
<b>D2 – Severe Drought</b>
<ul style="list-style-type: none"> <li>Planting begins early; irrigation use increases</li> <li>Hay is short; cattle sales are early</li> </ul>
<b>D3 – Extreme Drought</b>
<ul style="list-style-type: none"> <li>Row crop loss is significant</li> <li>Producers haul water for cattle and provide supplemental feeding; cattle sales increase</li> </ul>
<b>D4 – Exceptional Drought</b>
<ul style="list-style-type: none"> <li>Row crop loss is significant; producers are selling livestock herds; market price fall</li> <li>Epizootic hemorrhagic disease spreads; wildlife populations decline; recreational fishing and hunting are affected</li> <li>Extremely low flow and river debris impair navigation of major rivers; commercial barge traffic slows; water use restrictions are implemented</li> </ul>

**Table 4.10.** U.S. Drought Monitor – Drought 5-Category System. (National Integrated Drought Information System. 2022. *Drought Conditions for Custer County: Current Conditions for Custer County*)

Custer County has experienced many droughts throughout history, lasting for months or several years. Figure 4.3 shows the complete drought history for the county from 1895 to 2022. Since 2018, there have been roughly 20 classified as at least abnormally dry drought conditions. The risk for drought in Custer County is high. FEMA's National Risk Index scores the drought risk for Custer County as relatively low when compared to the rest of the country. This score represents the relative level of likely agricultural loss due to drought conditions.<sup>3</sup>

The Northern Great Plains region is predicted to have a rise in temperatures, increase in extreme precipitation, and longer spans between bouts of precipitation. All of these factors have an impact on the future drought conditions for the region. Higher temperatures impact the effect evaporation rates have on soil moisture, streamflow, and snowpack.<sup>4</sup> South Dakota is expected to see increases in evaporation rates as a result of rising temperatures. The higher evaporation rates are predicted to impact the warm-season soil moisture loss and intensity of droughts.<sup>5</sup>

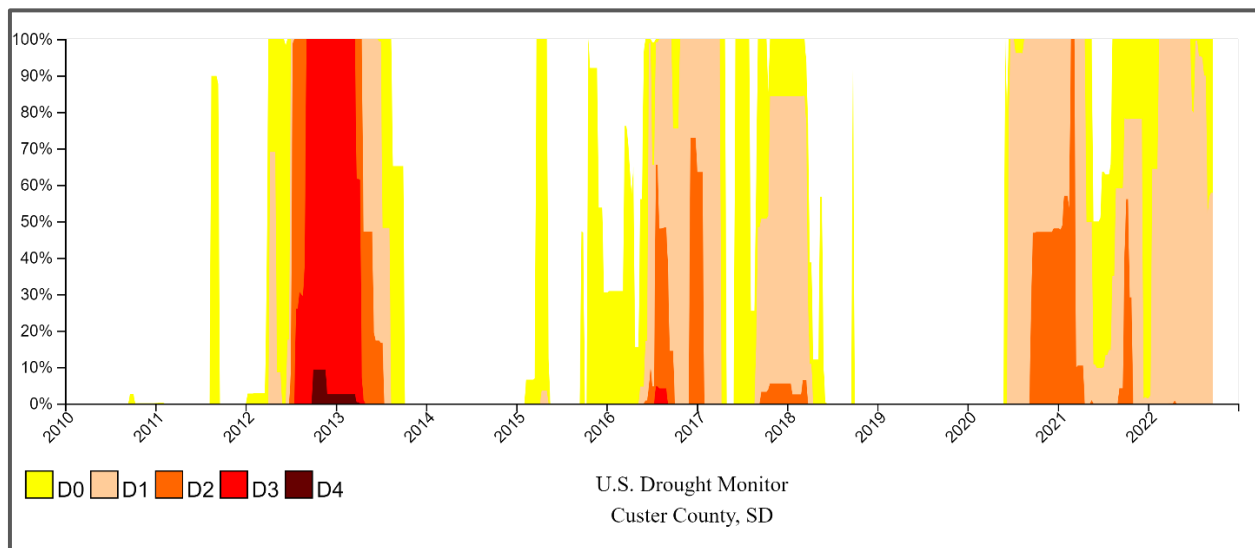
<sup>3</sup> National Risk Index. *Drought*.

<sup>4</sup> USGCRP, *Climate Science Special Report: Fourth National Climate Assessment, Volume 1*

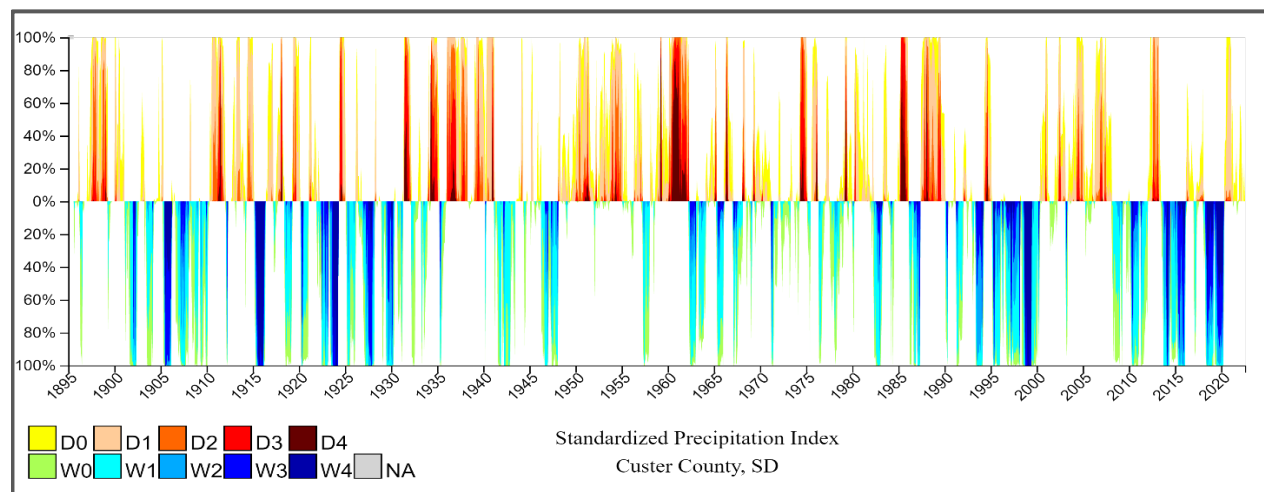
<sup>5</sup> Frank, R. et al. 2022.



Figure 4.2 shows the drought conditions from 2010 to September 2, 2022. It is highly probable there can be a drought in any given year. Long-term drought in Custer County ranges from extreme drought to wet. The long-term drought, information, Figure 4.4, is derived from several different methodologies, including, PDSI, Z-index, 6- month, 1-year, 2-year, and 5-year SPI estimates. <sup>6</sup>

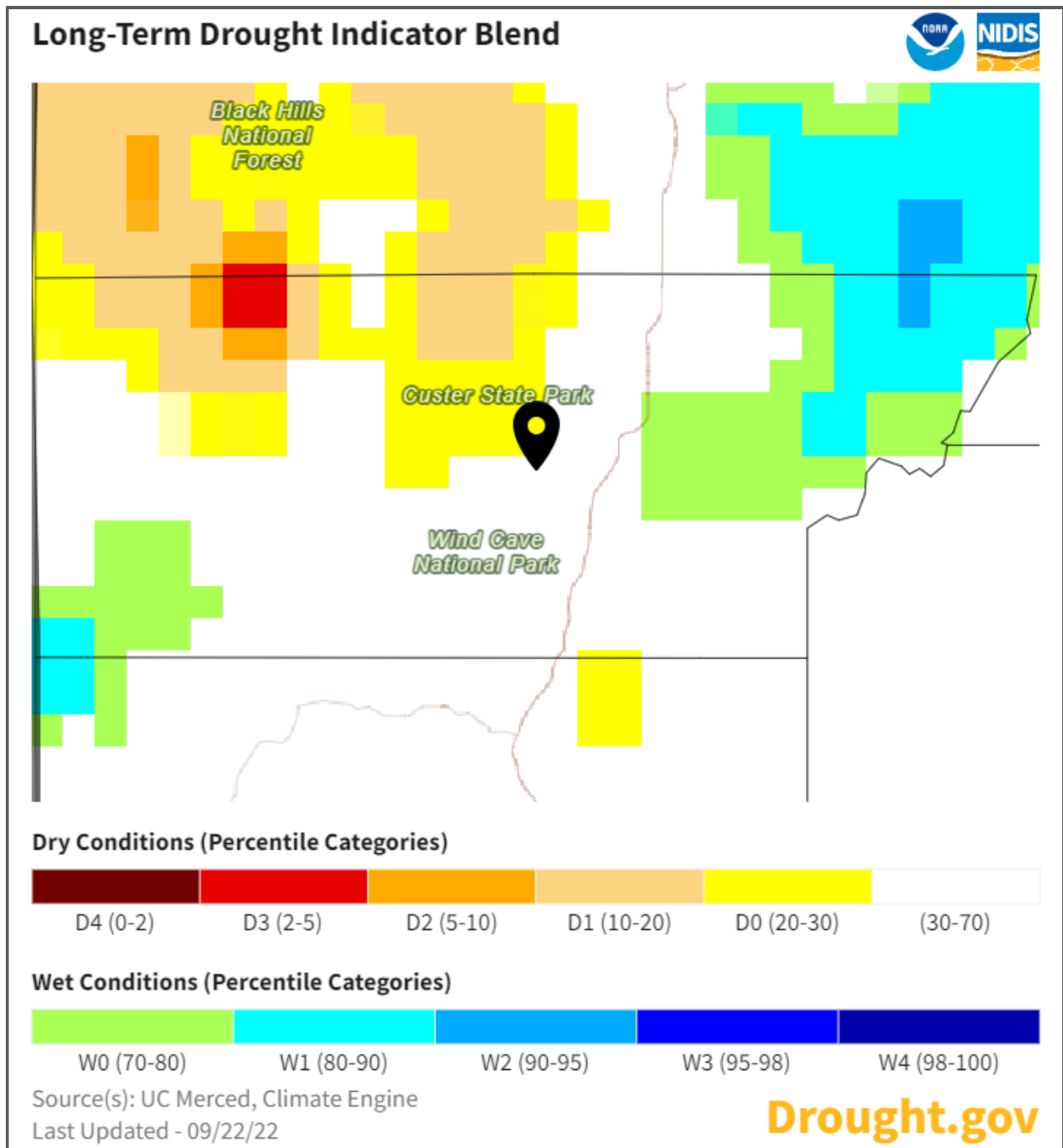


**Figure 4.2.** Custer County drought conditions from 2010. Accessed 09/27/2022. (National Integrated Drought Information System. (2022). *Drought Conditions for Custer County: Historical Conditions for Custer County*)



**Figure 4.3.** Custer County's drought conditions from 1895 to 2022. Accessed 09/27/2022. (National Integrated Drought Information System. (2022). *Drought Conditions for Custer County: Historical Conditions for Custer County*).

<sup>6</sup> National Integrated Drought Information System. *Drought Conditions for Custer Count: Historical Conditions for Custer County*



**Figure 4.4.** Custer County's long-term drought conditions. Accessed 09/27/2022. (National Integrated Drought Information System. (2022). *Drought Conditions for Custer County*).

Future Hazard Probability			
Event Type	Cold/Wind Chill	Extreme Cold/Wind Chill	Heat
Number of historical events	4	1	1
Number of years with events	4	1	1
Years of recorded data	24 years (1997-2021)	5 years (2016-2021)	15 years (2006-2022)
Possible number of days with event per year	0.17	0.20	0.07
Probability of future event	17%	20%	7%
Occurrence calculation	$4/24=0.17$	$1/5=0.20$	$1/15=0.07$
Probability calculation	$4/24=0.17$	$1/5=0.20$	$1/55=0.07$

**Table 4.11.** Probability future extreme temperatures occurrence. Calculations based on NOAA weather data. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*).

Extreme temperatures encompass extreme cold, extreme heat, and cold wind chills. Defining extreme temperatures is somewhat subjective. People in the area may have adapted to extreme temperatures and result in these weather events not being reported as often as they occur. FEMA's National Risk Index for Custer County shows a score of cold wave risk as very high.<sup>7</sup> The risk index does not data available for heat waves in Custer County.

Most of the county falls in the Köppen climate type of Dfb (Temperate continental climate/humid continental climate)<sup>8</sup> Custer County is classified as continental which tends to have warm-cool summers and very cold winters. Often winters are accompanied by snowstorms, strong winds, and very cold temperatures.<sup>9</sup> This type of climate also often produces extreme variations of both precipitation and temperatures. The climatic conditions are variable depending on the area's topography, with trends of lower temperatures and increase precipitation at higher altitudes.<sup>10</sup>

The Black Hills are known for experiencing notable temperature variations, often given the nickname of the "Banana Belt", caused by the warming Chinook winds which can cause warmer temperatures than the rest of the Midwest. This is especially noticed in the winter months.<sup>11</sup> During the summer months the eastern part of the county experiences warmer temperatures, around three degrees warmer, than the western Black Hills area.<sup>12</sup>

The Northern Great Plains are predicted to see an increase in extreme heat and a decrease in extreme cold temperatures over time. Extreme heat can influence human health, fires, drought, and precipitation.<sup>13</sup> Heat Factor was used to estimate the risk for Custer County in the next 30 years. The methodology used considers several factors such as landscape, vegetation, elevation, urbanization, and distance to water bodies and coastlines. Overall Custer County has a minor risk from heat. This is determined by averaging the current and future high "feels like" temperatures for the county.<sup>14</sup>

<sup>7</sup> National Risk Index. *Cold Wave*.

<sup>8</sup> Peel, MC, *Köppen-Geiger climate classification – 2007*.

<sup>9</sup> NOAA: National Centers for Environmental Information. (2022). *What are the different climate types?*

<sup>10</sup> USGS. (2003). *Ground-water resources in the Black Hills Area, South Dakota*.

<sup>11</sup> NOAA: *The Black Hills Remarkable Temperature Chance of January 22, 2943*.

<sup>12</sup> *Custer County Comprehensive Plan*. 2008.

<sup>13</sup> USGCRP, *Climate Science Special Report: Fourth National Climate Assessment, Volume 1*.

<sup>14</sup> Risk Factor. 2022. *Methodology used to determine community Heat Factors*.



Custer County Heat Factor: Heat risk over the next 30 years			
Risk Type	Definition	This year	+30 years
Heat Wave Likelihood	3+ or more days of temperatures feeling like 92°F or higher.	53%	79%
Health Caution Days	Feels like 90°F or higher can be physically hazardous, especially high-risk individuals.	17 days	26 days
Dangerous Days	Feels like 100°F or higher can be dangerous over a period of time.	1 day	2 days
Hot Days	Feels like 92°F or higher in Custer County.	7 days	17 days

**Table 4.12** Heat Factor present and future risk for Custer County. Definitions and projects are specific to Custer County, SD. Risk Factor. 2022. Heat Factor

The location for extreme temperatures is not specifically identified by jurisdiction due to the vast area across South Dakota affected by extreme temperatures. Below is an example of events of extreme temperatures; a listing of all events can be found in Appendix B.

Significant Weather Events – Extreme Temperatures	
Historic	<ul style="list-style-type: none"> <li>07/12/1954 – According to the <i>Custer County Comprehensive Plan</i> the temperatures reached 100 degrees.</li> <li>01/19/1963 – According to the <i>Custer County Comprehensive Plan</i> the temperatures reached -43 degrees.</li> <li>07/15/2006 - High pressure brought record heat to western South Dakota, with many locations setting all-time record high temperatures. The National Weather Service cooperative observer 8 miles north-northwest of Usta in Perkins County recorded a maximum temperature of 120 degrees on July 15th, which tied the previous all-time record high in South Dakota, first set on July 5th, 1936, in Gann Valley. A woman died of heat exhaustion while hiking in the Badlands National Park on July 16th.</li> <li>2006 – According to the <i>Custer County Comprehensive Plan</i> temperatures in Hermosa reached 111 degrees.</li> <li>12/16/2016 – Arctic air pushed into the area behind an existing storm system. High temperatures were below zero on the 17th, with temperatures dropping to 15 below to 35 below zero on the morning of the 18th. An official NWS cooperative observer in Hoover recorded a low temperature of 39 below zero on the morning of the 18th. Wind chill values were as low as 45 below zero across the area.</li> </ul>
Since 2018	<ul style="list-style-type: none"> <li>01/01/2018 - Bitterly cold air remained across the area into the beginning of the new year. Lows on New Year's Day morning ranged from 15 below to 35 below zero across much of the area, with some locations across northwestern South Dakota dropping to 35 below to 45 below. Wind chills were as low as 35 below to 50 below on the plains. Very cold conditions continued into the morning of January 2 across northwestern and west central South Dakota.</li> <li>02/14/2021 - An Arctic air mass settled over the Northern Plains for a prolonged period, producing bitterly cold temperatures and extremely low wind chills. Low temperatures were well below zero across the area, with wind chills as low as 35 below to 50 below zero.</li> </ul>

**Table 4.13** Significant weather events of extreme temperature in Custer County. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database* and *Custer County Comprehensive Plan*).



## FLOOD

Future Hazard Probability		
Event Type	Flash Flood	Flood
Number of historical events	19	18
Number of years with events	15	9
Years of recorded data	25 years (1996-2021)	25 years (1996-2021)
Possible number of days with event per year	0.76	0.72
Probability of future event	60%	36%
Occurrence calculation	$19/25=0.76$	$18/25=0.72$
Probability calculation	$15/25=0.60$	$9/25=0.36$

**Table 4.14.** Probability flood occurrence. Calculations based on NOAA weather data. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*).

Flooding/flash flooding is a temporary overflow of water onto lands not normally covered by water producing measurable property damage or forcing the evacuation of people and resources. Floods can result in injuries and even loss of life when fast-flowing water is involved. Six inches of moving water is enough to sweep a vehicle off of a road. Disruption of communication, transportation, electric service, and community services, along with contamination of water supplies, transportation accidents are very possible. Flooding is a longer event than flash flooding. Flooding can last for days to weeks, while flash flooding is generally inundation lasting less than 6 hours. Flash flooding often occurs after heavy or excessive rain events.<sup>15</sup>

Many factors can affect flooding, including deforestation, urbanization, dams, floodwater management activities, and different agricultural practices. The NOAA storm database does not have documentation of occurrences before 1996. Likely due to the lack of reporting that occurred prior to that time. However, this does run the risk of overstating the probability of flood and flash flood occurrence each year. FEMA's National Risk Index scores riverine flooding, when a stream or river exceeds its capacity, as relatively high.<sup>16</sup> The planning team expressed Custer County tends to see more flash flooding type events.

The Northern Great Plains region is expected to see an increase in less frequent but more extreme precipitation events accompanied by longer periods without precipitation. Flooding is more likely to occur when drier soils are inundated with heavy amounts of water. As the region sees drier conditions with periods of extreme precipitation, it is more likely the amount of flooding events will also increase. Precipitation amounts vary from season to season. Over the past decades, general precipitation has increased throughout the United States. The season with the greatest increase was fall, which has had an increase of 15% since the twentieth century. While the winter months and summer months have shown a negative percent change over time, in some areas as much as -5% to -10%.<sup>17</sup>

Higher temperatures will also have an impact on the evaporation rates effect on soil moisture, streamflow, and snowpack.<sup>18</sup> The *South Dakota State Hazard Mitigation Plan* points out the special flood hazard areas are expected to increase nationwide by as much as 40%-50% over the next 100

<sup>15</sup> NOAA: National Centers for Environmental Information. 2022. *Flood and flash flood definitions*

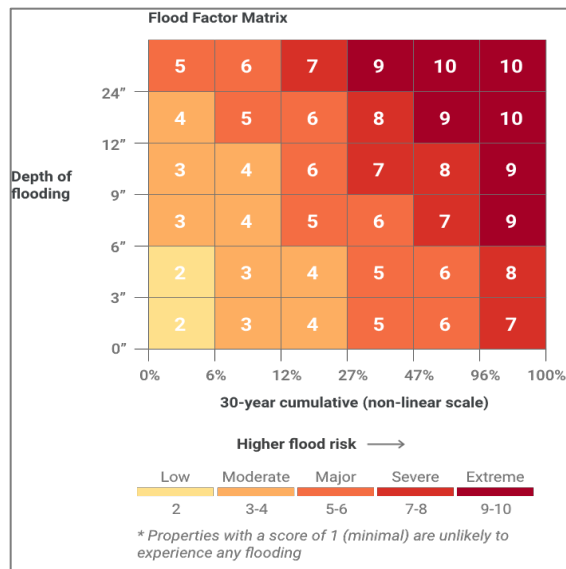
<sup>16</sup> National Risk Index. *Riverine Flooding*.

<sup>17</sup> USGCRP, *Climate Science Special Report: Fourth National Climate Assessment, Volume 1*.

<sup>18</sup> Ibid. USGCRP.

years. This is attributed not only to the increase in precipitation but also to the increased urbanization of areas.<sup>19</sup>

The use of *Risk Factor* can assist in projecting the future flooding risk of the county. The First Street Foundation Modeling method shows specific locations risk of flooding from rain, rivers, tides, and storm surge. The model is comprised of decades of peer reviews, climatology models, hydrology, and statistics.<sup>20</sup> Risk scores have five categories: minor, moderate, major, severe, and extreme. The scores are reflective of the weighted percentages of properties, facilities, and roads with operational risk at a given depth. The model also considers climate variations over time such as altered frequency and severity of weather events.<sup>21</sup>



**Figure 4.5.** Flood factor matrix. The matrix shows the likelihood of flooding at different depth thresholds. (First Street Foundation. 2020. *First Street Foundation Flood Model 2020 Methodology Overview*).

Custer County Flood Factor: Flooding risk over the next 30 years	
Category Type	Risk
Overall, Custer County	Major
Residential	Major
Road	Major
Commercial	Major
Critical Infrastructure	Moderate
Social	Major

**Table 4.15.** Flood Factor Summary. Custer County, SD. (Risk Factor, 2022, Flood Factor).

The flood source area encompasses nearly all of north-central Custer County and Custer City. The principal water delivery systems in Custer County include French Creek and the tributaries of North Fork, South Fork, Ruby Creek, Laughing Water Creek, Sidney Creek, and Willow Creek. Other tributaries are Grave Coolidge Creek and Battle Creek in eastern Custer County.

There have been limited accounts of significant impacts from flooding in the county. Some major events include Custer City from French Creek in 1999 and 2007, with the most recent event taking place in 2019, and Hermosa from Battle Creek in 1999 (twice), 2007, and 2008. The Dewey area of western Custer County experienced flooding in 2003 and 2008. The majority of the rural damages have been to state and county road systems.<sup>22</sup>

After the August 2007 flood in Hermosa, the County spent over \$100,000 in mitigating damage to public roads to the west of Hermosa. Costs were associated with the rehabilitation of roadways, hardening with rock placement, and placement of gravel. No culverts were lost but many were plugged with materials washed from the roadway.<sup>23</sup>

Areas that have experienced significant damage are areas near Lame Johnny Creek, Grace Coolidge Creek, Custer City area with the flooding of French Creek and around the Hermosa with flooding of Battle Creek. French Creek and the accompanying tributary drainage areas experience

<sup>19</sup> State of South Dakota Hazard Mitigation Plan. 2019

<sup>20</sup> First Street Foundation. *First Street Foundation Flood Model 2020 Methodology Overview*

<sup>21</sup> Risk Factor. *Community methodology – Is your community at risk of flooding? 2022*.

<sup>22</sup> Custer County Pre-Disaster Mitigation Plan. 2018.

<sup>23</sup> Ibid. Custer County Pre-Disaster Mitigation Plan.

periodic flash flooding. Most of north central Custer County drains into French Creek, which in turn runs to Stockade Lake (Stockade Dam). In 2001, Custer County and Custer City worked together to create the *Upper French Creek Flood Mitigation Plan*. The Plan was developed to help identify critical flood hazards issues in the county and city, as well as different mitigation activities.<sup>24</sup> Based on conversations with the County, the Plan was not utilized to its fullest. Due to the age of Plan, it may need to be re-evaluated before being put into action.

In 2019, French Creek flooding caused damages in Custer City and the surrounding areas, including Upper French Creek Road and Lower French Creek Road. Images 4.1 and 4.2 show the damages on Lower French Creek Road. Culverts had managed to stay intact, and repairs mostly involved gravel replacement. A section of Upper French Creek Road was completely washed out. The highway department estimated the total damage to be around \$80,000. Road closures caused travelers from the upper portion of the road to re-route using forest service roads.<sup>25</sup> Other areas affected by the flooding include American Center Road., with issues of a culvert needing repaired, and East French Creek near Fairburn.<sup>26</sup> Similarly, these repairs were mainly gravel replacement.



**Image 4.1.** Flood damage on Lower French Creek Rd. (Image provided by Custer County HWY Department).



**Image 4.2.** Flood damage on Lower French Creek Rd. (Image provided by Custer County HWY Department).

Another area known for having flooding issues is Battle Creek Rd at Tiffany Lane. The road is not maintained by the County, but the crossings are. The highway department expressed that the solution to this issue is to replace the culvert at this crossing with a larger box culvert.

Dewey Road, a 25.5-mile road located in southwestern Custer County, floods yearly. It serves the unincorporated community of Dewey, for property owners, ranchers, and commercial industries. It is the only road system in the area that connects to several major area highways and is the primary road used by emergency services. One of the concerns is restricted access to traffic. In 2008, flooding in this area caused residents to be isolated for three days, as they waited for flood waters to recede and repairs to be made.<sup>27</sup> Dewey does have a volunteer fire department, however in the event aid was required surrounding departments in Custer City and Custer Highlands, would need to come through Dewey Road.

A unique aspect of this road is that the geological area where this road sits provides materials to repair the road, with costs to the County being very low. The highway department explained with the topography of the area, the solution would most likely require relocating the road. The project would be expensive and require cooperation from the Bureau of Land Management.

Flooding is also an issue on Granite Heights Dr. where it crosses French Creek. In 2021, Brosz Engineering, Inc. completed a hydraulic analysis at south of Mineral Dr and Granite Heights Dr. The study suggested that a larger culvert was needed in this location<sup>28</sup>. There is currently privately

<sup>24</sup> *Upper French Creek Flood Mitigation Plan*. 2001.

<sup>25</sup> Ferguson, Jason. *Flood road repair starts at \$200k*. 2019.

<sup>26</sup> Ibid. Ferguson, Jason. 2019.

<sup>27</sup> Ibid. *Custer County Pre-Disaster Mitigation Plan*.

<sup>28</sup> Brosz Engineering. 2021



owned piping infrastructure buried on top of the culver that would need to be relocated before the larger culverts could be installed.

Exposed piping is also an issue in French Creek. There at least two locations believed to have exposed piping that runs across French Creek, which are known to act as debris catchers during flooding events. Custer City owns one and a private sanitary district owns the other. The exposed pipes have the potential risk of being damaged causing a loss of services to users.

County Road 7-11 is subject to occasional flooding. In recent years there has been an increase in tourist traffic. It is believed that digital mapping services are suggesting this road as a faster/alternative route to Wind Cave National Park. The road was not intended to serve the amount of traffic it is currently experiencing. Additionally, the CR 7-11 runs alongside an environmentally sensitive area that is used for trout spawning. Due to these concerns improvements or repairs to this road can be extremely challenging.

The Highland's Volunteer Fire Department's Fire Hall sits in a low-laying area that has experienced flooding. While the Fire Hall building has not flooded, the road going north and south has had flash flooding conditions. The VFD stressed that in the event both the north and south parts of the road flooded, they would be unable to respond to calls. The flooding conditions have been known to last for several hours before receding. The Custer County Highway Department explained that due to the topography and the way drainage comes into the area, there are no feasible solutions to addressing the road. A possible solution would be to relocate the fire hall.

Flooding of an area can change due to the aftermath of a wildfire event. The stakeholder's meeting revealed after the Dec 2017 Legion Lake Fire, the hydrology of the area changed. The fire spread to Custer State Park, Wind Cave National, and private land. Custer State Park explained that after the fire, places that normally didn't flood were having issues. Lane Johnny Road, for example, needed to be elevated, new culverts put in, and ditches expanded. The Wildlife Loop Road had also seen some new flooding. The mitigation of this road involved ditches being cleaned out. After these mitigation measures were done, they hadn't seen additional flood issues in these areas. A representative from NOAA clarified, after the fire occurred, soils were unable to absorb moisture as they once had. This is a common occurrence after wildfires. Since most of the vegetation in the area has grown back, flooding in this area isn't an issue. NOAA also stressed the importance of cleaning wildfire debris because rain and runoff can cause the debris to get washed downstream.

Significant Weather Events – Flash Flood	
Historic	<ul style="list-style-type: none"><li>• 06/1972 - Battle Creek has had several flooding events. The greatest was during the Northern Black Hill flood of June 1972. Rapid Creek in Rapid City registered a stream flow of 50,000cfs (cubic feet per second) at the height of the flooding. The same event produced very strong thunderstorms near Hermosa. Stream gages on Battle Creek recorded a flow of 21,200cfs. This is ten times the discharge as was recorded in other years. The USGS reported that Battle Creek had flow of 2,950cfs in 1952 and 2,400cfs in 1995. They reported eight flood events between 1950-2005<sup>29</sup>.</li><li>• 08/07/1999 - Nearly stationary thunderstorms produced from 3 to 7 inches of rainfall in the French Creek basin. This water inundated French Creek which flows through Custer and considerable damage occurred to county roads and portions of the Custer City. Over one dozen evacuations were ordered. One major result of the flooding was the contamination of the waste treatment plant which took in 2.9 million gallons of water in 48 hours, and it can normally handle just 500,000 gallons of water a day. The newly completed city baseball park was also completely flooded. Between Custer City and the state highway department, damage estimates to streets, bridges, highways, and buildings were approximately \$115,000. There has been no estimate so far of damage to private property, but numerous homes had up to 3 to 4 inches of water in their basements.</li><li>• 05/06/2005 - Five inches of rain fell in a one-and-a-half-hour period during the evening over Beaver Creek, just west of Buffalo Gap. The creek flooded Custer County highway 101 in several places and eroded the road near a large culvert, making it unpassable to traffic.</li></ul>

<sup>29</sup> Custer County Pre-Disaster Mitigation Plan 2018.

	<p>Water height was estimated at 8 feet from evidence on large cottonwood trees. The water continued downstream and caused flooding along other county roads. The stream gage on Beaver Creek southeast of Buffalo Gap registered a peak stage of 7.66 feet at 230 am MDT (flood stage is 6.0). Large amounts of small hail, piled up to 2 feet deep, also occurred with the storm, causing a van to slide off South Dakota highway 79 just south of the Custer-Fall River county line. The van slid into a ditch, which filled with water due to a culvert plugged with debris and hail. Only 3 inches of the top of the van remained above water, but none of the occupants were injured.</p> <ul style="list-style-type: none"> <li>• 08/17/2007 - A heavy rain estimated at four to six inches fell west of Hermosa between 6 pm and 8 pm MST. Battle and Grace Coolidge Creeks overflowed their banks and several dry canyons filled with water and drained into the creeks. State highways 40 and 36 were flooded in numerous spots. A river gauge on Battle Creek just east of Hermosa crested at 14.91 feet at 9 pm, rising from 2.63 ft at 7:30 pm and above the flood stage of 8.0 feet. About six inches of water covered Highway 79 at the Battle Creek bridge. A railroad bridge about 3/4 mile downstream became clogged with debris and water rose behind the embankment and flooded six homes. At about 8:30 pm MST, a section of the embankment failed, flooding a new subdivision on the other side. All of the approximately 20 houses were damaged; three homes were washed off their foundations, and one of those houses was carried a half a mile east of the subdivision by the flowing water. There were no injuries.</li> <li>• 05/23/2008 - Heavy rain caused flooding in Hermosa, Custer, and Custer State Park. Minor flooding was observed along Grace Coolidge Creek in Custer State Park. Battle Creek at Hermosa crested at 10.0 feet, two feet over flood stage of 8.0 feet.</li> <li>• 05/24/2010 - Flooding was reported along streams in eastern Custer County foothills including Iron Creek, Battle Creek, Grace Coolidge Creek, Lane Johnny Creek, French Creek, and Beaver Creek. Several county roads were damaged from the flooding.</li> </ul>
Since 2018	<ul style="list-style-type: none"> <li>• 08/02/2019 - Significant flooding occurred on French Creek from the Custer Limestone area downstream to Stockade Lake, including the Custer City. Several smaller tributaries into French Creek, including Ruby Creek, also flooded. Flash flooding inundated Custer Limestone Road just east of the intersection of Forest Service 284 and Forest Service 285, French Creek Road at Hoover Court, Highway 16, Highway 16A, Highway 89, Custer Street, South 4th Street, French Creek Drive, Gordon Street, 7th Street, 8th Street, Washington Street, Sidney Park, Granite Valley Drive, and Iron Creek Road. Several homes and businesses were also flooded. \$1,000,000 in damages were reported<sup>30</sup>. It was reported that 717 customers in the Custer area were without power due to the flooding. The heavy rain prompted evacuations in Custer City and surrounding areas<sup>31</sup>.</li> <li>• 06/25/2020 - A severe thunderstorm developed in the Custer area and remained nearly stationary for close to an hour and a half. The storm produced a lot of hail around quarter size, which accumulated six inches deep in some areas. The large amounts of hail and heavy rain also caused flash flooding on the east side of Custer.</li> </ul>

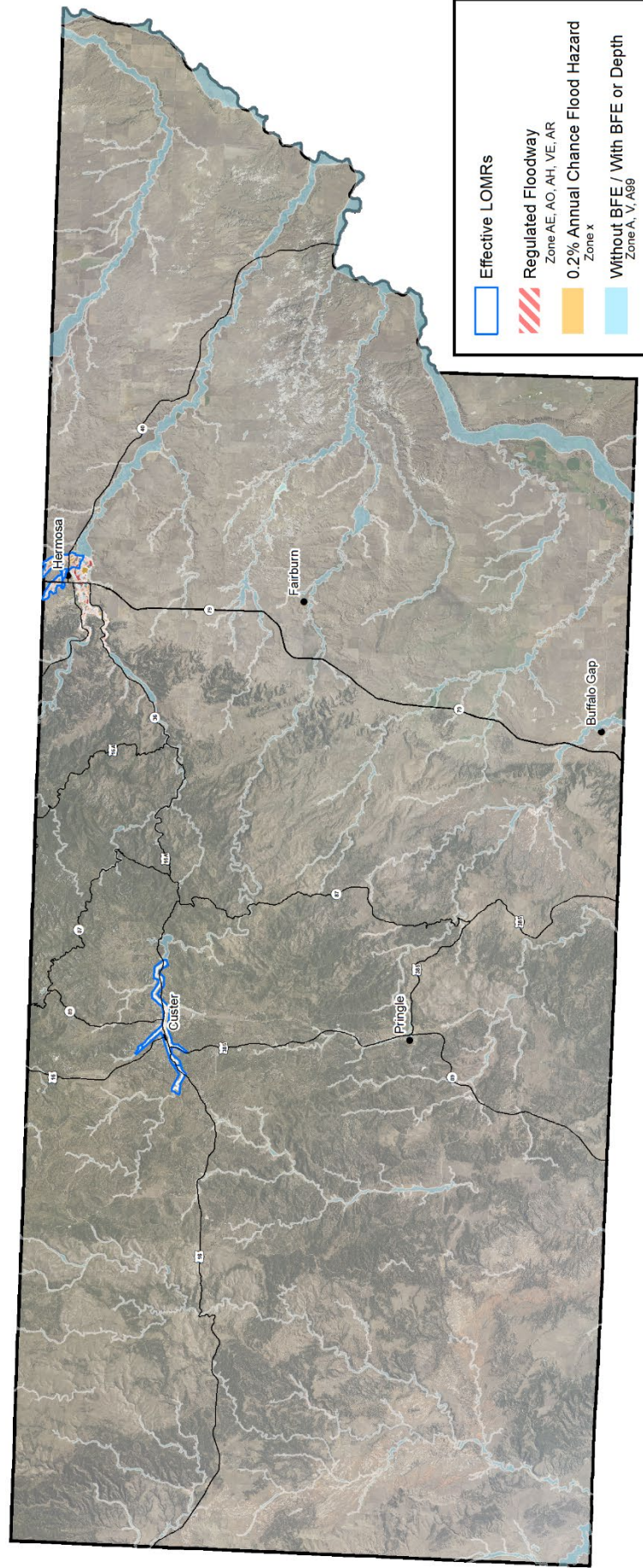
**Table 4.16** Significant weather events of flooding in Custer County. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*.and *Custer County Comprehensive Plan*).

<sup>30</sup> NOAA: National Centers for Environmental Information. (2020). *Storm Events Database*

<sup>31</sup> NewsCenter1. 2019. *Power restored to Custer area after flooding causes power outage*.

# Custer County, SD

## Floodplain



### Custer County Natural Hazard Mitigation Plan

Coordinate System: NA 1983  
 Projection: State Plane SD S.  
 Scale: 1:420,000  
 Date Created: 11/28/2022  
 Cartographer: BHCLG  
 Source: FEMA National Flood Hazard Layer

**Figure 4.6.** Custer County Floodplain. (FEMA National Flood Layer).



Future Hazard Probability	
Event Type	Earthquake
Number of historical events	10
Number of years with events	7
Years of recorded data	149 years (1872-2021)
Possible number of days with event per year	0.07
Probability of future event	5%
Occurrence calculation	$10/149=0.07$
Probability calculation	$7/149=0.05$

**Table 4.17.** Probability geological occurrence. Calculations based on data provided from South Dakota Geological Survey. Appendix B

Geological hazards in Custer County are low. Geological hazards can include events such as earthquakes, landslides, subsidence, and expansive soils. While data on earthquakes can be easily found, records of landslides, subsidence, and expansive soils incidents are limited. The mentioned events reveal that there is a potential for geological hazards in Custer County.

Areas east of the Rocky Mountains experience infrequent earthquakes. Earthquakes that do occur are often of a low magnitude and rarely result in major damages, like those seen on the western coast of the United States.<sup>32</sup> Although rare occurrences, Custer County is susceptible to earthquakes. FEMA's National Risk Index rates Custer County as having a very low risk of earthquakes compared to the rest of the country.<sup>33</sup> The South Dakota Geological Survey explained that earthquakes happen every few years in South Dakota but are not large enough to be considered threatening to life or property. Since 1872 there have been nearly 100 recorded earthquakes in South Dakota. Since South Dakota doesn't have any major faults, the South Dakota Geological Survey states:

The likely cause of these earthquakes are adjustments deep in the basement rocks underlying the state or ongoing rebound of the earth's crust from compression by ice sheets during the last ice age.

Once seismic movement begins there may be several movements in succession before the energy dissipates. This could explain some of the historical data. In 1924, four earthquakes occurred on the same day. The same location saw earthquakes in 1936, 1941, 1943, and 1964. Fig 4.5 shows the locations of earthquakes in Custer County from 1872 to June 16, 2021.

Landslides tend to occur after bouts of heavy rainfall or rapid snowmelt. Areas that have been impacted by wildfires have a higher probability of having landslides due to the lack of vegetation to take in precipitation. Landslides have the potential to happen in Custer County. Areas most prone to landslides are places where previous landslides have occurred, bases of steep slopes, bases of drainage channels, and developed hillsides using leach-field systems.<sup>34</sup>

FEMA's National Risk Index scores landslide risk for Custer County as relatively high compared to the rest of the country<sup>35</sup>. However, the Planning Team reported that they were unaware of areas with land sliding issues. The *State of South Dakota Hazard Mitigation Plan* 2019 shows areas in Custer County that have risk (Appendix B). During the stakeholders meeting participants explained that there are some areas on the eastern side of the county that show evidence of sloughing but are

<sup>32</sup> USGS. *East vs West Coast Earthquakes*.

<sup>33</sup> National Risk Index. *Earthquake*.

<sup>34</sup> *State of South Dakota Hazard Mitigation Plan*. 2019

<sup>35</sup> National Risk Index. *Landslide*.

almost entirely grazing lands. County also expressed that they were unaware of any landslide/sloughing issues with any of the county's roads. South Dakota Highway 36 was identified as an area with known landslide issues. The South Dakota Department of Transportation provided information on a slide repair that occurred in 2019 at SD HWY 36 approximately four miles west of the junction with SD HWY 79. The background:

The backslope at this location was steepened in 2001 to accommodate a wider section of highway. Above the backslope surface moisture has been able to penetrate the backslope material. The elevated moisture content in the backslope material combined with a steepened backslope has produced the instability.

The *State of South Dakota Hazard Mitigation Plan* shows areas in Custer which have the potential risk of subsidence due to rock formations such as gypsum or carbonates (Appendix D).<sup>36</sup> However, the County representatives and stakeholders explained that there haven't been any known issues but did acknowledge that there is gypsum in the southwest corner of the county.

Expansive soils, mainly consisting of clays, are susceptible to swelling and shrinkage due to changes in soil moisture<sup>37</sup>. Expansive soils are present in all states in the United States and can cause billions of dollars of damage each year.<sup>38</sup> The clays expansive nature can cause permanent damage to structures and infrastructure over time, potentially causing troublesome to dangerous situations.<sup>39</sup> The County and stakeholders said that they have not seen any issues with expansive soils. The town of Hermosa has issues with unstable shale within and near city limits.

Significant Events – Geological	
Historic	<ul style="list-style-type: none"> <li>• 12/30/1924 – Four earthquakes were recorded at (43.5, -103.5), the record shows the earthquakes happened five minutes apart starting at 10:10pm. The magnitude was recorded at 4, with each earthquake having an intensity of 4.</li> <li>• 10/30/1936 – An earthquake with an intensity of 4 was recorded at (43.5, -103.5)</li> <li>• 05/25/1941 – An earthquake was reported with an intensity of 5, magnitude of 4 at (43.5, 103.5)</li> <li>• 05/15/1943 – Earthquake occurred at (43.5, -103.5) with an intensity of 4, no magnitude recorded.</li> <li>• 03/24/1964 – An earthquake was reported at (43.5, -103.5) with an intensity of 5, magnitude of 3.7.</li> <li>• 01/05/1964 – An earthquake was reported at (43.6, -104) with intensity of 3, magnitude of 2.8</li> <li>• 12/12/2013 – An earthquake with an intensity of 4, magnitude of 3.5 was recorded at (43.8, -103.32)</li> </ul>
Since 2018	<ul style="list-style-type: none"> <li>• NA</li> </ul>

**Table 4.18.** Significant weather events of earthquakes in Custer County. (South Dakota Geological Survey).

<sup>36</sup> *State of South Dakota Hazard Mitigation Plan*. 2019

<sup>37</sup> Cuelho, Eil, & Michelle Akin. *Mitigation of Expansive Soils in South Dakota Study SD2014-13 Final Report*

<sup>38</sup> Ibid. *State of South Dakota Hazard Mitigation Plan*.

<sup>39</sup> Ibid. Cuelho, Eil, & Michelle Akin.



## HIGH/SEVERE WIND

Future Hazard Probability	
Event Type	High Wind
Number of historical events	80
Number of years with events	25
Years of recorded data	25 years (1996-2021)
Possible number of days with event per year	3.2
Probability of future event	100%
Occurrence calculation	$80/25=3.2$
Probability calculation	$25/25=100\%$

**Table 4.19.** Probability high wind occurrence. Calculations based on NOAA weather data. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*).

Severe wind events are common in western South Dakota. FEMA's National Risk Index for strong wind risk scores Custer County as relatively low, compared to the rest of the country.<sup>40</sup> However, historical data would suggest a high risk for the county. Several times a year the residents of Custer County can expect to experience strong winds of more than 40 mph. Gusts of wind in excess of 90 mph have also been recorded for the area. High wind history for Custer County can be found in Appendix B. It is currently unknown if predicted future weather conditions will have any effect on the intensity or frequency of severe winds.<sup>41</sup>

Significant Weather Events – High/Severe Wind	
Historic	<ul style="list-style-type: none"> <li>02/10/1996 - Strong northwest winds behind a cold front blew across western South Dakota. The Rapid City airport recorded a peak gust of 70 mph, which was a record for February. Several semi-trailer trucks were blown over by the winds: 15 miles north of Buffalo, 8 miles south of Reva, along Highway 83 north of White River, and Interstate 90 east of Belvidere. A billboard blew over and smashed two cars in Black Hawk. A ham radio tower was toppled around Hill City. Buildings lost their roofs and trees fell. The winds downed powerlines, which started four fires. One fire consumed 1500 acres just east of Custer State Park; another blackened 25 acres in the park; and 40 acres burned near Stockade Lake.</li> <li>07/01/1998 - At Custer, a boy was reported to have minor injuries from flying debris. Also, near Custer, a girl was injured by a falling limb. Major damage occurred to a store in Custer when winds ripped off a large portion of the face of the store and part of the roof. Much of the city lost power for several hours when poles were snapped by the strong winds. Large trees were split and knocked down across Custer State Park.</li> <li>01/27/2008 - Strong southwesterly winds developed across the Black Hills during the afternoon and persisted through much of the night. Wind gusts of 60 to 70 mph were common across the higher terrain of the Black Hills and the northern and eastern foothills. The strongest winds were noted in the Spearfish and Hermosa areas, where a few gusts exceeded 90 mph.</li> <li>10/17/2012 - A strong cold front passed through the region on the morning of October 17. Strong north to northwest winds increased behind the front across western and south-central South Dakota. The gusty winds persisted through the afternoon of the 18th as a strong pressure gradient developed over the region. Sustained winds of 30 to 50 mph and gusts to 80 mph were recorded.</li> </ul>
Since 2018	<ul style="list-style-type: none"> <li>10/20/2019 - A strong low-pressure system moved across the region, bringing rain, snow, and strong northwest winds. The strongest winds were in the Rapid City area and parts of the southern Black Hills. Gusts over 80 mph in the Custer area caused damage, including the partial collapse of a building in downtown Custer.</li> <li>03/29/2021 - A significant wind event occurred from the early morning through the late day. Strong west to southwest winds developed during the early morning hours across parts of the Black Hills and foothills, when gusts of 60 to over 70 mph were recorded. A strong cold front then moved through from northwest to southeast during the morning and early</li> </ul>

<sup>40</sup> National Risk Index. *Strong Wind*.

<sup>41</sup> *State of South Dakota Hazard Mitigation Plan*. 2019

	<p>afternoon. Wind gusts of 60 to over 80 mph developed and persisted through the late day. The strong winds downed some trees and caused isolated power outages in the Black Hills. The winds also helped spread significant wildfires near Mount Rushmore and just west of Rapid City.</p> <ul style="list-style-type: none"> <li>04/07/2022 - An intense low-pressure system moved slowly across the Northern Plains, producing a prolonged period of strong northwesterly winds across the area. The strongest winds developed during the early morning of the 6th and continued into the daytime hours of the 7th. Sustained winds of 30 to 50 mph and gusts of 60 to 80 mph were recorded at times, especially across the northwestern and west central South Dakota plains. Several tractor-trailers were blown over on Interstate 90 east of Rapid City.</li> </ul>
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**Table 4.20.** Significant weather events of high/severe winds in Custer County. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*).



## SUMMER STORM

Probability of Future Occurrence				
Event Type	Hail	Lightning*	Heavy Rain	Thunderstorm Winds
Number of historical events	583	4	4	122
Number of years with events	48	3	4	31
Years of recorded data	66 years (1955-2021)	23 years (1998-2021)	15 years (2006-2021)	58 (1963-2021)
Possible number of days with event per year	8.8	-	0.27	2.1
Probability of future event	73%	100%*	27%	53%
Occurrence calculation	583/66=8.8	-	4/15=0.27	122/58=2.1
Probability calculation	48/66=0.73	-	4/15=0.27	31/58=0.53

**Table 4.21.** Probability future summer storm occurrence. Calculations based on NOAA weather data. \*It is likely that lightning was unreported. Fire data shows that several fires were caused by lightning strikes, based on this information the probability is most likely 100%. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*).

Summer storm occurrences in the county are also very common. FEMA's National Risk Index scores hail risk and lightning<sup>42</sup> in Custer County as very high. The index score shows the score and rating of a community when compared to the rest of the United States.<sup>43</sup> Thunderstorms in Custer County usually occur in the summer months but have occurred as early as April. Record of summer storm events in Custer County can be found in Appendix B.

Topography plays a large role in the development of the weather patterns affecting Custer County. The central portion of the county is more mountainous, and the eastern part contains more foothills and plains. Serve weather conditions develop when the colder air patterns of the mountainous region collide with the warmer air building from the prairie, resulting in very strong storm conditions.<sup>44</sup>

Summer storms in Custer County often are accompanied by bouts of hail. Hail occurrences are common in Custer County and a full history by location throughout the county can be found in Appendix B. Since 1955 there has been a total of \$4,577,000 of reported property damage. It is believed that this is underreported. Unfortunately, the total damages for each event are not available, but hopefully soon a method for collecting this data will evolve so that it can be made available to local governments for mitigation planning.

<sup>42</sup> National Risk Index. *Lightening*.

<sup>43</sup> National Risk Index. *Hail*.

<sup>44</sup> *Custer County Pre-Disaster Mitigation Plan*. 2018.

The extent or severity of lightning can range from significant to insignificant depending on where it strikes and what structures are hit. Water towers, cell phone towers, power lines, trees, and common buildings and structures all have the possibility of being struck by lightning. Areas of the Black Hills of higher elevation have a higher potential for lightning strikes.<sup>45</sup> Lightning strikes are also known to cause wildfires. Since lightning is common in this region of the United States and Custer County, it is evident that the information reported on the NOAA website is inaccurate and incomplete. Wildfire data shows that the source of ignition was lightning strikes.

Future weather predictions expect an increase in the intensity and frequency of storms. Warmer weather accompanied by wet conditions often leads to severe storms. With current models showing expected warmer temperatures and higher rates of evaporation, likely hail events will also increase. No information was found regarding to how or if the size of hail would be impacted.<sup>46</sup>

Significant Weather Events – Summer Storms	
Historic	<ul style="list-style-type: none"> <li>08/01/2001 - Two large lightning fires ignited on July 30 and continued until Aug 8. The two fires grew until they were only a few miles apart in Custer County. No injuries were reported, however 26,800 total acres burned with these two fires. One historic cabin, seven outbuildings, and one seasonal residence were destroyed. 1000 people fought this fire. During the week-long fire, over 173 hours of flight time were logged among numerous aircraft. 400,000 gallons of water was dropped from aircraft along with 357,000 gallons of fire retardant.</li> <li>06/01/2008 - Severe thunderstorms developed along the eastern slopes of the Black Hills and dropped large hail and heavy rain over eastern Custer and Shannon Counties. Softball sized hail was reported south of Hermosa.</li> <li>06/21/2013 - Softball size hail damaged property. A long-lived severe thunderstorm developed over the southern Black Hills and moved eastward across the South Dakota plains during the morning. The storm produced very large hail to softball size from eastern Custer to northern Jackson Counties.</li> <li>09/04/2013 - A thunderstorm became severe over the Custer area and produced 1.5-to-two-inch diameter hail, causing widespread damage to property. Hail damaged vehicles and property, damages reported \$2,150,000.</li> <li>05/27/2014 - A lightning bolt hit a storm chaser as he was filming a storm. The charge traveled to the ground and blew a hole in the pavement. The chaser's car and another car were disabled.</li> </ul>
Since 2018	<ul style="list-style-type: none"> <li>In 2018, Fairburn was hit by a hailstorm that caused major damage throughout town. Town Hall received \$85,000 worth of damage. (via Town of Fairburn)</li> <li>08/02/2019 - Nearly stationary thunderstorms developed over and near Custer during the early afternoon. The radar estimated six to seven inches of rain fell west of Custer, with measured observations as much as 5.35 inches. Runoff moved downstream along French Creek, causing severe flooding in the town of Custer through the evening. Road closures and some evacuations were reported by the Custer County Sheriff's office before water began to recede.</li> <li>06/10/2021 - A supercell thunderstorm tracked northeast from Wyoming across southwestern South Dakota. The storm produced some hail, but mostly strong wind gusts around 70 mph, from Custer and Fall River Counties to Jackson and Haakon Counties.</li> </ul>

**Table 4.22.** Significant weather events of summer storms in Custer County. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*).

<sup>45</sup> *State of South Dakota Hazard Mitigation Plan. 2019*

<sup>46</sup> USGCRP, *Climate Science Special Report: Fourth National Climate Assessment, Volume 1.*





Future Hazard Probability	
Event Type	Tornado
Number of historical events	14
Number of years with events	12
Years of recorded data	61 years (1961-2022)
Possible number of days with event per year	0.23
Probability of future event	20%
Occurrence calculation	$14/61=0.23$
Probability calculation	$12/61=0.20$

**Table 4.23.** Probability future tornado occurrence. Calculations based on NOAA weather data. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*).

All of Custer County is susceptible to summer storms which have the potential to form tornados. FEMA's National Risk Index scores tornado risk in Custer County as relatively low, when compared to the rest of the country.<sup>47</sup> Warning time for summer storms is normally several hours, sufficient for relocation and evacuation if necessary. However, tornados may occur with little or no warning. The *Climate Science Special Report* anticipates that overtime the Northern Plains will see a high frequency of severe summer storms.<sup>48</sup> While there is no evidence to show the anticipated extent or intensity of storms in the region, it is currently unknown if the county will experience an increase of intensity or frequency of tornado events.<sup>49</sup>

Significant Weather Events – Tornados	
Historic	<ul style="list-style-type: none"> <li>06/22/1966 – F2- Reported \$25,000 in property damage</li> <li>07/15/1969 – F1- Reported \$25,000 in property damage</li> <li>05/05/1993 – F0- A tractor-trailer was blown over near the junction of Highway 79 and Fairburn Road. (\$500 reported property damage)</li> <li>06/29/1994 – F0 - A tornado destroyed a chicken coup, chain link fence, and flipped a 1500-pound trailer upside down. The tornado also reportedly held 8 x 10 foot shed in the air for 10 minutes. A witness reported the tornado was not connected to a cloud and appeared to form from nearly clear skies. Perhaps this could better be defined as a land spout.</li> </ul>
Since 2018	<ul style="list-style-type: none"> <li>07/03/2019 – EF0 - A tornado touched down in Wyoming and continued into western South Dakota. No damage was reported.</li> <li>05/23/2021 – EF1 – (Pringle) A tornado was reported about five miles south of Custer, just west of US Highway 385. The tornado snapped and uprooted many trees along several roads.</li> <li>05/23/2021 – EF1 – (Custer County) A tornado touched down just northeast of Custer and tracked to the east-northeast for over five miles. This tornado snapped several trees along Willow Creek Road.</li> </ul>

**Table 4.24.** Significant weather events of tornados in Custer County. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*.)

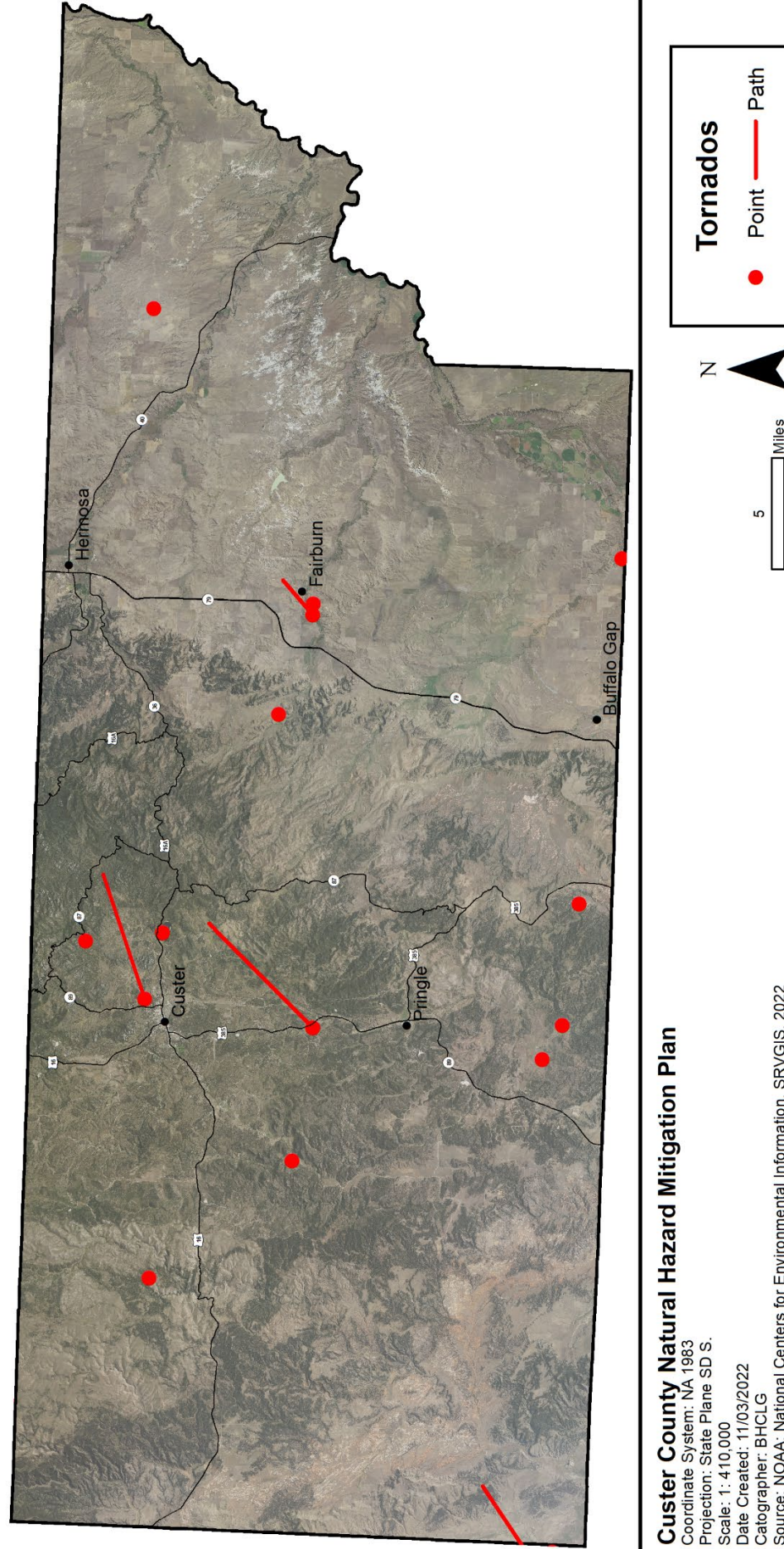
<sup>47</sup> National Risk Index. *Tornado*.

<sup>48</sup> USGCRP, *Climate Science Special Report: Fourth National Climate Assessment, Volume 1*.

<sup>49</sup> Ibid. USGCRP.

# CUSTER COUNTY, SD

## Tornados 1961-2021



### Custer County Natural Hazard Mitigation Plan

Coordinate System: NA 1983  
 Projection: State Plane SD S.  
 Scale: 1: 410,000  
 Date Created: 11/03/2022  
 Cartographer: BHCLG  
 Source: NOAA: National Centers for Environmental Information. SRV/GIS. 2022

**Figure 4.7.** Tornados in Custer County from 1961-2021. (NOAA: National Centers for Environmental Information. SRV/GIS.)

Future Hazard Probability	
Event Type	Wildfire
Number of historical events	1585
Number of years with events	41
Years of recorded data	41 years (1980-2021)
Possible number of days with event per year	38.66
Probability of future event	100%
Occurrence calculation	$1585/41=38.66$
Probability calculation	$41/41=1$

**Table 4.25.** Probability future wildfire occurrence. ( USGS-GeoMac and Wildfire Interagency Fire Center)

Wildland fires are a major concern for Custer County. The western two-thirds of Custer County is heavily timbered with ponderosa pines reflecting a mixture of federal, state, and private lands, and the eastern one-third of the county is open terrain consisting of mainly prairie grasses.

Custer County and the Black Hills have had a history of forest and prairie fires that pre-date the settlement of this area. It was not until the last 100 years that there has been a noticeable effect to control the spread of wildland fires. The majority of fire suppression activities have occurred within the past fifty years resulting from an increased need to protect urban and rural residential structures. Wildland fire management employed the philosophy that it was better to quickly contain and put out the fire than to allow it to burn even though there were no structures at risk. This resulted in the buildup of fuels that could potentially cause even larger fires.<sup>50</sup>

The risk from wildfires throughout the county is high. Compared to the rest of the country FEMA's National Risk Index scores Custer County with relatively moderate risk.<sup>51</sup> The occurrence of major fire events is heightened when there is prolonged drought or severe storms affiliated with widespread tree damage. With a predicted decrease in precipitation, and expected higher frequency of drought conditions, wildfire events intensity and frequency are expected to increase.<sup>52</sup>

The historical data collected on Custer County reflects that the vast majority of natural hazard occurrences were timber fires. Most fires occur between May and September, but wildfires can occur any time of the year.<sup>53</sup> Fire frequency varies throughout the Black Hills, but historic records would suggest that wildfires are more frequent in the southern, more dry areas of the Black Hills, and less frequent in the northern hills which tend to be wetter.<sup>54</sup> Major fire events are more likely to occur during or after conditions of prolonged drought, high winds, widespread tree damage often caused by severe storms, and insect infestations. Many wildfires are lightening related.<sup>55</sup> The magnitude of wildfires depends upon the base fuel, terrain, weather conditions, and availability of rapid resources.<sup>56</sup> Table 4.27 and Table 4.28 show the total wildfires by acres burned.

According to NOAA, since 2000, only two wildfires were reported in Custer County, which is grossly underreported. To attempt to get a more complete picture of the wildfire impact in Custer County, data was compiled from several agencies.

<sup>50</sup> Ibid. *Custer County Pre-Disaster Mitigation Plan*.

<sup>51</sup> National Risk Index. *Wildfire*.

<sup>52</sup> FEMA. *Assessing Future Conditions: Meeting FEMA's State Mitigation Plan Requirements*.

<sup>53</sup> Ibid. *Custer County Pre-Disaster Mitigation Plan*.

<sup>54</sup> *South Dakota Forest Action Plan*. 2020.

<sup>55</sup> *Custer County Pre-Disaster Mitigation Plan*. 2018.

<sup>56</sup> Ibid. *Custer County Pre-Disaster Mitigation Plan*. 2018.



Chief Deputy State Fire Marshal provided a report of fire incidents in Custer County from 2011 to 2021. The reports, Table 4.26 were created by data provided by local fire departments and volunteer fire departments. These reports are incomplete and not broken down by specific fire event type.

Wildland Fire Interagency Geospatial Services (WFIGS), Table 4.27, has wildfire data ranging from May 25, 2014, to August 23, 2022. This group produces data under the interagency Wildland Fire Data Program, hosted in the National Interagency Fire Center ArcGIS Online Organization.<sup>57</sup> USGS - GeoMAC has kept records of federal fire occurrences from 1980 to 2016, Table 4.28. After 2016 the database is no longer supported.



**Image 4.3.** Legion Lake Fire. (Photo provided by USFS)

State Fire Marshalls Report 2011-2021		
Type	Number of Events	
Structural Fire	28	
Vehicular Fire	17	
Other	90	
Casualty Summary	Civilian	Fire Service
Fire related injury	5	0
Fire related death	2	0

**Table 4.26.** State Fire Marshalls Report 01/01/2011 – 12/31/2021. The report provided does not show wildfire specific events. (Appendix B)

National Interagency Fire Center Wildfires May 2014-August 2022	
Total Wildfires	342
Acres Burned	Total Wildfires
0-0.29 acres	183
0.3-9.9 acres	116
10-99.9 acres	29
100-299.9 acres	8
300-900.9 acres	1
1000-4999.9 acres	3
5000+ acres	2

**Table 4.27.** National Interagency Fire Center Historic Data. Acres Burned: A measure of acres reported for the fire. More specifically, the number of acres within the current perimeter of a specific, individual incident, including unburned and unburnable islands. Minimum size must be 0.1. Accessed 08/25/2022 (Appendix B)

USGS-GeoMAC 1980-2014	
Total Wildfires	1243
Acres Burned	Total Wildfires
0-0.29 acres	730
0.3-9.9 acres	426
10-99.9 acres	57
100-299.9 acres	11

<sup>57</sup> Wildland Fire Interagency Geospatial Services. 2022. *Wildland Fire Locations Full History*

300-900.9 acres	9
1000-4999.9 acres	4
5000+ acres	6

**Table 4.28.** USGS-GeoMAC Data. Acres Burned: A measure of acres reported for the fire. More specifically, the number of acres within the current perimeter of a specific, individual incident, including unburned and unburnable islands. Minimum size must be 0.1. Data no longer available online. (Appendix B)

Using the First Street Foundation Wildfire Model can help to determine the probability of a facility and community being directly or indirectly impacted by embers. The community risk also incorporates the impacts wildfire can have on infrastructure, emergency services, transportation, businesses, and finances of homeowners (Table 4.29). The risk is determined using a relative ranking ranging from 1-minimal to 10-extreme. Minimal risk would indicate no wildfire risk. The risk represents the weighted number of facilities/properties with direct or indirect exposure to wildfires. The change in risk also considers the projected change in weather patterns over the next 30 years.<sup>58</sup>

Future modeled weather conditions play a role in the predicted risk increase. Increased temperatures, drier conditions, and increased extreme precipitation events are likely to create a favorable environment for wildfires to occur more frequently.<sup>59</sup>

Custer County Fire Factor: Fire risk over the next 30 years	
Overall County	Severe Risk
Residential	Severe Risk
Commercial	Severe Risk
Critical Infrastructure	Severe Risk
Social Facilities	Severe Risk
Minimal Risk	Properties with a Fire Factor 1 (no risk)
Minor Risk	Properties with a Fire Factor 2 (less than a 1% chance of burning over 30 years)
Moderate Risk	Properties with a Fire Factor 3 or 4 (1%-6% chance of burning over 30 years)
Major Risk	Properties with a Fire Factor 5 or 6 (6%-14% chance of burning over 30 years)
Severe Risk	Properties with a Fire Factor 7 or 8 (14%-26% chance of burning over 30 years)
Extreme Risk	Properties with a Fire Factor 9 or 10 (more than 26% chance of burning over 30 years).

**Table 4.29.** Custer County Wildfire Risk over the next 30 years. (Risk Factor. 2022. Fire Factor).

The *Forest Service Research Data Archive* created a model for the United States wildfire risk. By using vegetation and wildland fuels data from LANDFIRE 2014, an annual probability model for wildfire was created.<sup>60</sup> Figure 4.8 shows wildfire hazard potential for potential wildfires that may be difficult to control. This figure is meant to aid by showing areas where fuel treatment may be needed. Figure 4.9 the model shows the risk to homes. Custer County has the highest risk to homes in South Dakota.<sup>61</sup> The populated areas of the county rank 100% for risk in South Dakota for the likelihood of wildfire.<sup>62</sup>

<sup>58</sup> Risk Factor. 2022

<sup>59</sup> *State of South Dakota Hazard Mitigation Plan*. 2019

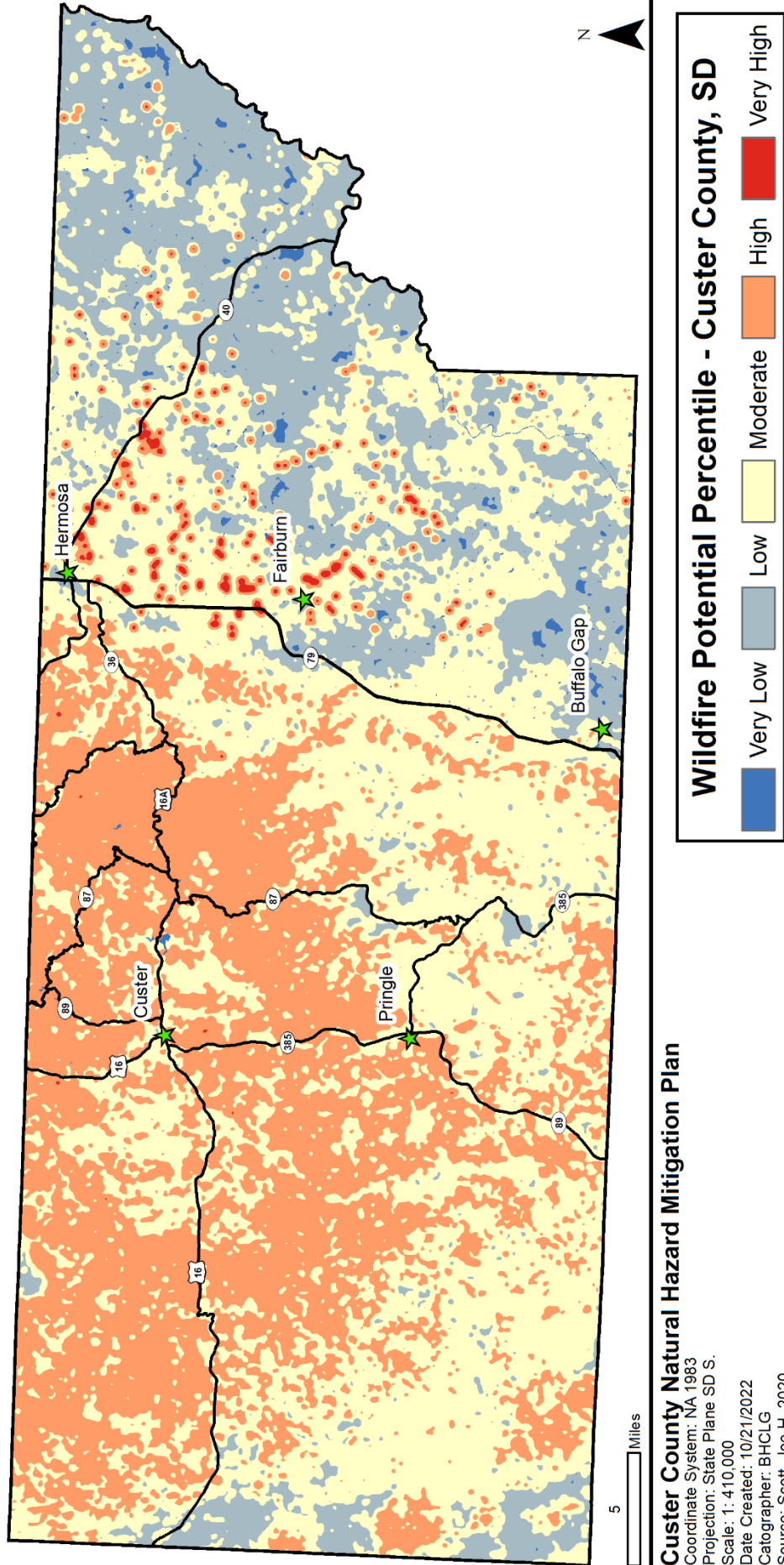
<sup>60</sup> Scott, Joe H. et al. 2020. Wildfire Risk to Communities

<sup>61</sup> USDA Forest Service. *Wildfire Risk to Communities: Custer County Risk to Homes*.

<sup>62</sup> Headwaters Economics. 2022. *A Profile of Wildfire Risk*.



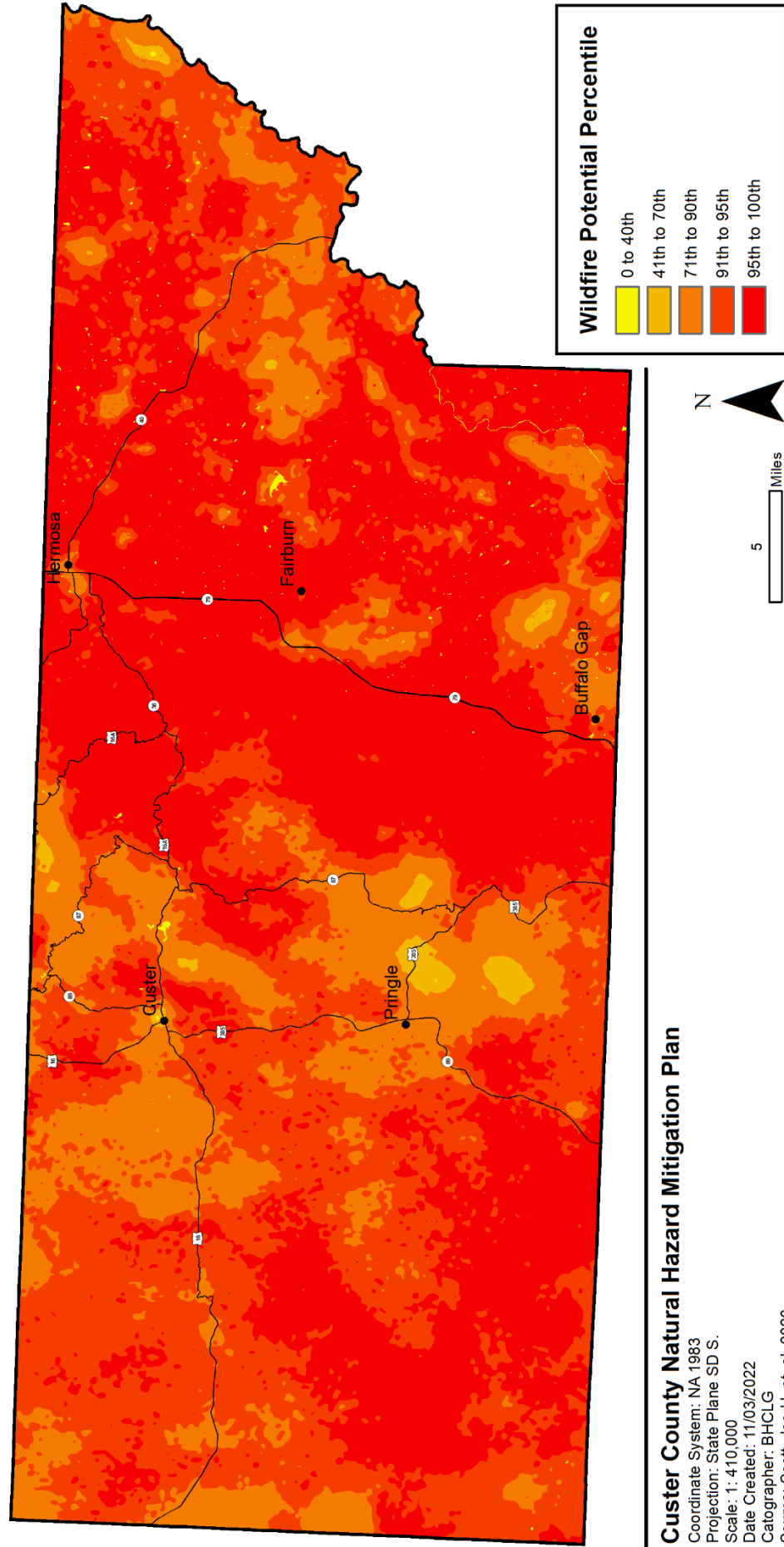
# 



**Figure 4.8.** Yearly probability of wildfires in Custer County. (Scott, Joe H., et al. *Wildfire Risk to Communities: Spatial datasets of landscape-wide wildfire risk components for the United States.*)

# CUSTER COUNTY, SD

## Risk to Homes



**Figure 4.9.** Risk to potential percentile structures. Wildfire risk is based on potential structures in an area with already existing structures. (Scott, Joe H. et al. Wildfire Risk to Communities: Spatial datasets of landscape-wide wildfire risk components for the United States).

Custer County faces two types of wildfire threats: forest fires from the Black Hills Forest and prairie fires. The Wildland Urban-Interface (WUI) is a set of conditions that exist when structures and other human development meet or intermingle with wildland or vegetative fuels. South Dakota is estimated to have anywhere between 15.1%-30% of homes in the WUI relative to total houses in the state.<sup>63</sup> The WUI map, Figure 4.10, was created by a methodology of Microsoft data set accessed in 2019, using 0.3m resolution high-resolution satellite images of building footprints taken from Bing Maps and the 2016 National Land Cover Dataset. The figure shows the WUI with neighborhood radii: 500m.<sup>64</sup>

The *Custer County Community Wildfire Protection Plan* addressed at-risk communities. The criteria to be “at-risk” are meeting the definition of a wildland/urban interface community, containing an environment that will support a large-scale wildland fire, and involving a significant threat to human life or property. The communities of Custer City, Hermosa, Pringle, Dewey, Argyle, and Custer Highlands meet the criteria of an at-risk community.<sup>65</sup> Custer County’s *Community Wildfire Protection Plan 2006* is considered to be outdated by the USFS to be used for viable projects. The County is currently working with the Bureau of Land Management to secure funding to update the community wildfire protection plan.

As structure density increases in an area, consideration must be given not only to the natural vegetation but also to urban fuels. For example, homes are urban fuels and would contribute to fire intensity if ignited. Firewise practices and procedures can greatly reduce structural ignitability by interrupting fire spread and reducing receptive fuel beds in and around structures. The new cohesive strategy suggests that land managers focus on three major items: landscape restoration, fire adaptive communities, and response to wildfire.<sup>66</sup>

Survivable space around structures is very important when mitigating the risk of wildfire. Building materials, topography, types of vegetation, and fuel loads are key considerations when determining how much survivable space is required. Effective survivable space varies from 30-200ft. around a structure and provides firefighters working room to safely perform suppression activities. Structures that are built on steeper slopes require more survivable space on the down-slope side. Documented scientific research from the Missoula fire Sciences Laboratory indicates structures that are 100ft. or more from high-intensity crown fire normally do not ignite from the radiant or convective heat. Usually, small things that people overlook can cause the initial ignition of the structure. Survivable space needs to be maintained such that it will not support high-intensity crown fire that may ignite a structure. Ladder fuels need to be removed to lower the possibility of fire spreading into the canopy from the ground. Not only is there a danger of a fire approaching from outside an area but there is also the danger of a fire starting within the survivable space and spreading outward. Fuel modification within survivable space can also reduce the threat to the surrounding forest. Fire-resistant vegetation is an efficient way to reduce fire intensities. Hardwood and deciduous types of vegetation are good ways to provide safety while providing pleasing aesthetic value. Natural barriers such as rock walls, gravel, and other fuel breaks also help reduce the spread of fire.<sup>67</sup>

Structures situated in prairie areas need to consider the hazards associated with fuels such as cured grasses. Mitigation efforts could include graveled driveways and/or disking fuel breaks. Rock, gravel, or cultivation flowerbeds are efficient fuel breaks. A fuel break adjacent to a structure will break the continuity and reduce the change of fire spreading to and igniting the structure.<sup>68</sup>

The topography of an area will influence fire and must be considered when mitigating the threat. The shape of the terrain influences the intensity and spread of wildland fires. Slopes with south or

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<sup>63</sup> U.S. Fire Administration. 2022. *What is the WUI?*

<sup>64</sup> Carlson, Amanda R, et. al. 2022

<sup>65</sup> *Custer County Pre-Disaster Mitigation Plan*. 2018.

<sup>66</sup> Ibid. *Custer County Pre-Disaster Mitigation Plan*.

<sup>67</sup> Ibid. *Custer County Pre-Disaster Mitigation Plan*.

<sup>68</sup> Ibid. *Custer County Pre-Disaster Mitigation Plan*.

west aspects tend to be drier and have fuels that cure earlier in the season. Topography alters the normal heat transfer process and modifies the general weather patterns, producing localized weather conditions that influence fire behavior. Fires that start at the base of slopes become larger and more intense due to the availability of up-slope fuels. As slope increases, the rate of spread and flame lengths also increase. The topographic configuration of narrow canyons poses dangerous conditions. Values or improvements in saddles, chimneys, or at mid-slope and above need to consider additional mitigation efforts to reduce fire intensity in these challenging areas. The fuels on the south and west slopes are also preheated from the sun and may produce more erratic fire behavior. The downslope area adjacent to structures needs to increase the amount of survivable space to provide additional protection to these values from wildfire. Siren location, preparation, and construction practices were listed as important for developers and builders, especially in heavily timbered areas.<sup>69</sup>

The issue of property access was perhaps the greatest concern for emergency and utility service providers. The ability to safely get vehicles, equipment, and personnel in and out of response locations under emergency conditions was paramount. Standardizing and maintaining road systems was also expressed as a critical factor in mitigating a hazard event. The County does not currently require secondary access and egress for subdivisions.

<b>Custer County Comprehensive Plan</b>	
Policy 2.1.1: Promote a safe, well-maintained road system, with consideration to the importance of access for emergency vehicles.	
<b>Custer County Ordinance Number 2</b>	
All public roads shall be constructed to County Road Specifications. Such road constructions will be subject to inspection by the Highway and Planning Departments, during construction and upon completion.	

South Dakota Wildland Fire expressed that areas west of Argyle and Red Bird Canyon have become a concern as development continues. Access and egress are limited, and homes continue to encroach into the WUI. The Highlands Volunteer Fire Department also provided a map showing areas of concern (Appendix B).

<b>Areas of Wildfire Concern – Identified by Highlands Volunteer Fire Department</b>	
<b>Location</b>	<b>Concern</b>
4S 1E Sections 20, 29, 32	Thick timber with limited access to residents to the west of this area.
4S 1E Sections 12, 13, 23, 24, 25, 26	This area has been a concern for a long time. The forest service is currently working on a treatment plan for roughly 760 acres in this area. The project includes mostly thinning and prescribed burns.
Blacktail Ct, Turkey Trail, Antelope Rd	Several homes with no defensible space
3S 1E Sections 09, 16, 17, 20	Redbird Canyon Rd, which was part of the Jasper Fire, has steep terrain and thick timber that will make areas that were unburned hard to protect, especially residential areas.

**Table 4.30** Wildfire areas of concern. Identified by Highlands VFD. (Appendix B)

The Argyle Volunteer Fire Department was able to provide a list of dead-end roads in their fire area.

<b>Dead End Roads Identified by Argyle Fire Department</b>					
Beardsley	West Argyle	East Argyle	Mountain Lion	Lone Elk	Sundance
Prairie Schooner	Cedar Lane	Gold Rush	Wolf Lane	Kimberly Dr	
Farmer Rd	South Park	Canyon Rim	Ridge Rd	Spring Valley Rd	

**Table 4.31** Dead End Roads Identified by Argyle VFD.

<sup>69</sup> Custer County Pre-Disaster Mitigation Plan. 2018

Custer County and the USFS have a *Cooperative Road Agreement* signed in 2021. The agreement lists out each road and specifies which jurisdiction is responsible for maintenance responsibility. Timber growing in the right-of-way (ROW) of roads can be considered hazardous for several reasons such as safety concerns. Removal of trees in the ROW along with the road itself can help create a barrier line to help stop wildfires that occur in the forest. These trees are property of the USFS and considered merchantable timber. The agreement states that any removal needed of trees in the ROW, under the County's jurisdiction, must be coordinated with USFS, to determine the value of the trees being removed. The current agreement, however, lacks definition/mapping of the ROW. While the County's ordinance says that all public ROW shall be at least 66ft. wide, it is unclear if the USFS acknowledges this. Additionally, coordination of tree removal lacks a clear definition as to which department at USFS is to be consulted. The current agreement expires in 2026, it is advised that these issues be further discussed during the update of the agreement.<sup>70</sup>

One of the greatest challenges for wildfire mitigation projects is cross-boundary cooperation. Wildfire doesn't recognize jurisdictional boundaries, but oftentimes entities are limited in their ability to treat areas outside their boundaries. A new program is being rolled out by the USFS called the Potential Operational Delineations (PODs), which will help mitigate wildfire risk in a collaborative effort between jurisdictions. The program seeks to work with adjacent landowners and jurisdictions for cross-boundary planning. The program is designed to engage local wildfire experts, stakeholders, and scientists, to help identify not only risk areas but to develop mitigation strategies and projects.<sup>71</sup>

Public and private campgrounds and recreational areas can be greatly at risk. The risk factor is greatly enhanced with the inclusion of seasonal events such as Custer State Park Buffalo Round-Up, Sturgis Motorcycle Rally, and area major tourist attractions. Large fires have forced evacuations in the past of individual residences and subdivisions.<sup>72</sup>

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<sup>70</sup> *Cooperative Forest Road Agreement between the Custer, County of and the USFS, Forest Service Region 2, Black Hills National Forest. 2021*

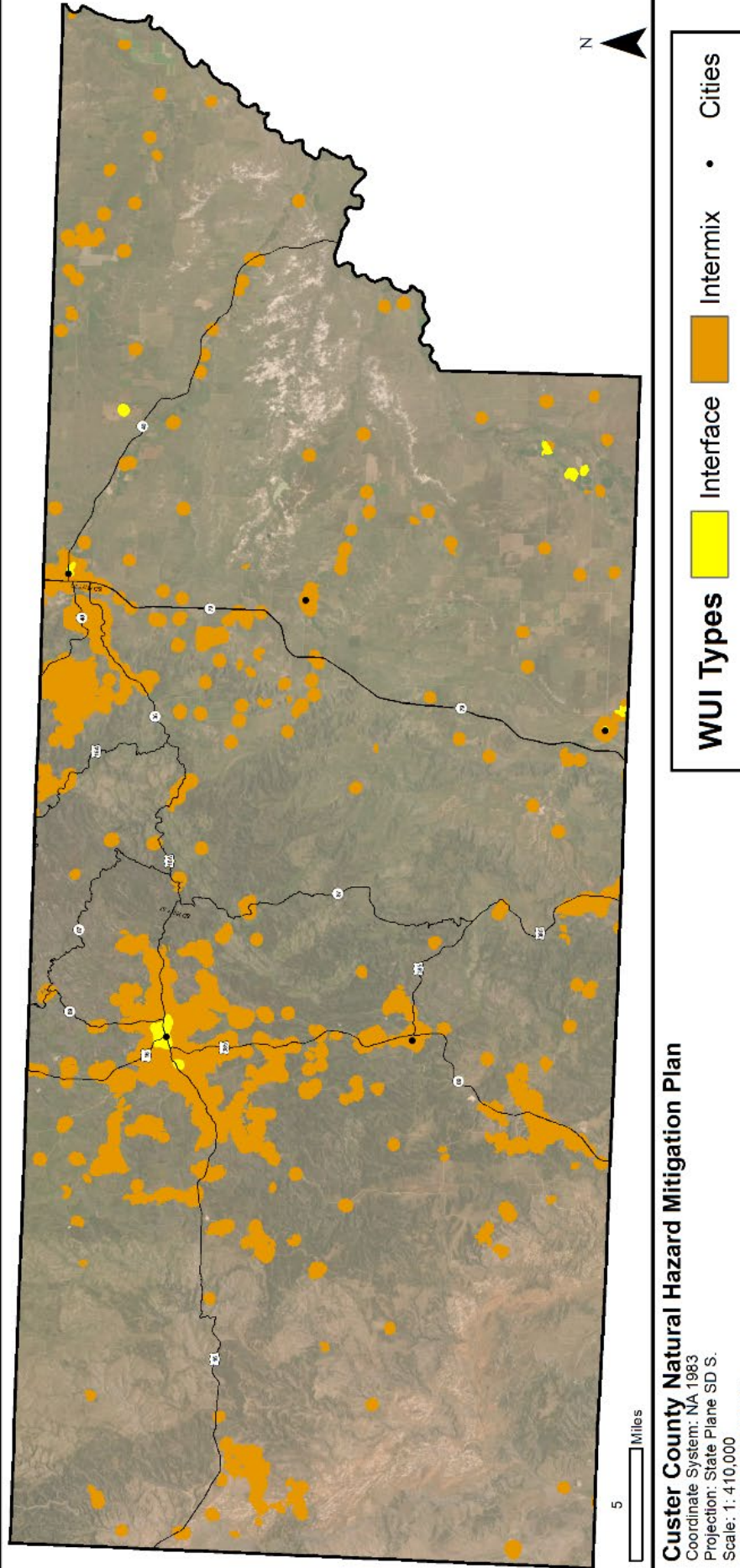
<sup>71</sup> USDA. *PODs at a glance.*

<sup>72</sup> *Custer County Pre-Disaster Mitigation Plan. 2018.*



# CUSTER COUNTY, SD

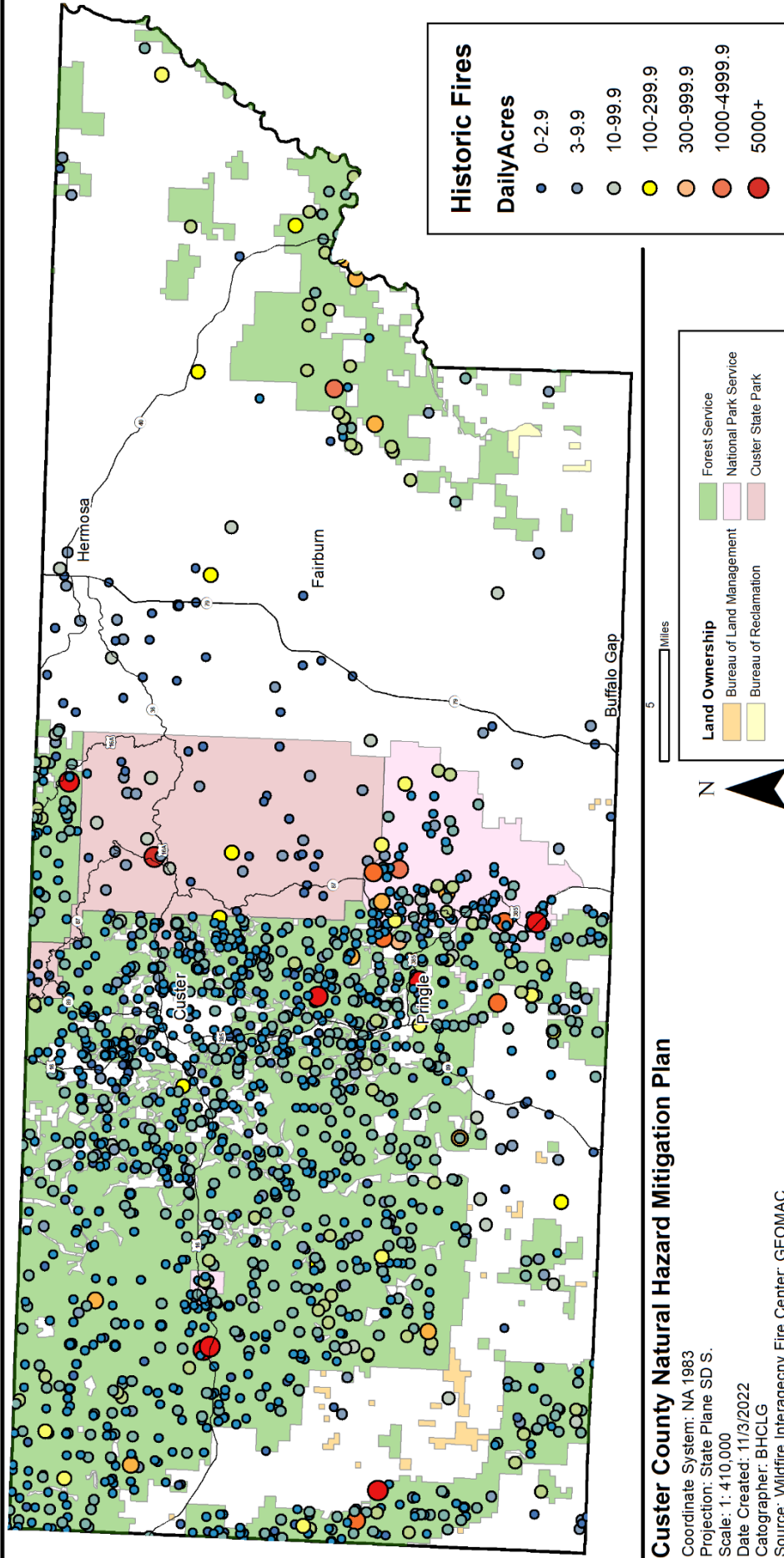
## WUI - 500m Neighborhood Radius



**Figure 4.10.** WUI at 500m neighborhood radius. (Carlson, Amanda R, et. al. 2022)

# CUSTER COUNTY, SD

## Wildfires 1980 - October 2022



**Figure 4.11. Custer County's historical fires from 1980-2022. Fires are shown by acres burned. (Wildfire Interagency Fire Center; GEOMAC)**



## WINTER STORMS

Future Hazard Probability				
Event Type	Blizzard	Heavy Snow	Winter Storm	Winter Weather
Number of historical events	21	22	71	49
Number of years with events	12	12	24	11
Years of recorded data	25 years	25 years	25 years	13 years
Possible number of days with event per year	0.84	0.88	2.84	3.76
Probability of future event	48%	48%	96%	85%
Occurrence calculation	21/25=0.84	22/25=0.88	71/25=2.84	49/13=3.76
Probability calculation	12/25=0.48	12/25=0.48	24/25=0.96	11/13=0.85

**Table 4.32.** Probability future winter storm occurrence. Calculations based on NOAA weather data. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*).

Winter storms in Custer County are not unusual. FEMA's National Risk Index scores winter weather risk in Custer County as relatively low compared to the rest of the country.<sup>73</sup> Historical weather data for the county suggests a high risk for winter storms. These storms usually take place from November until May. The snow and high winds created by winter storms often create hazardous driving conditions. While such storms would be considered extreme in many parts of the Country, the consistent nature of such weather hazards are expected in this area. Thus, planning and response mechanisms for blizzards, snow, and ice storms are vital and are routine procedures in Custer County due to the common nature of such storms.

Winter storms in South Dakota are known to cover large geographical areas. Often an entire county or multiple counties can be affected by a single storm. The eastern part of the county is more susceptible to the effects of blizzards. All of the winter storm hazards, identified in Appendix B, were considered to have occurred countywide. Due to the multiple categories that NOAA has for winter weather, the probability of winter storms combines several hazard events including blizzards, winter weather, winter storm, and heavy snow.

It is projected that over time, winter storms throughout South Dakota will increase in frequency. The intensity of future events, however, is unknown.<sup>74</sup> Snow coverage of the Northern Great Plains has seen little to no overall change. The greatest trends seen since the 1960s have been an increase in snow in the fall and a decrease in the spring. Spring snow melt is important for water supply in the Northern Great Plains. However, since 1980 there has been a decline, associated with warm springs in the area. Drier winters also lead to several issues such as drought and wildfire<sup>75</sup>

Information is being reported and recorded more accurately now than in previous decades, which is most likely a result of technology, internet, and a coordinated and focused effort to share information between agencies and local governments and track weather and climate patterns.

### Significant Weather Events – Winter Storms

<sup>73</sup> National Risk Index. *Winter Weather*.

<sup>74</sup> FEMA. *Assessing Future Conditions: Meeting FEMA's State Mitigation Plan Requirements*.

<sup>75</sup> USGCRP, *Climate Science Special Report: Fourth National Climate Assessment, Volume 1*.

Historic	<ul style="list-style-type: none"> <li>• 10/26/1996 – A winter storm with heavy snow and gusty northwest winds created blizzard-like conditions over western South Dakota. The heaviest snow fell in the central and northern Black Hills where one to two feet was common. Lead received 38.9 inches, setting an all-time state record for 24-hour snowfall. Winds frequently gusted over 45 mph, reducing visibility to zero and creating drifts several feet deep. Many roads in the Lead-Deadwood area were blocked for over 24 hours. The wet heavy snow downed numerous power lines and poles. Electric service to some rural areas was out for five days. Damage to power lines and poles in western South Dakota was estimated near \$600,000. (\$30,000 reported in property damage)</li> <li>• 11/05/2008 – An intense fall storm produced blizzard conditions across the South Dakota plains for over 24 hours. Precipitation started as rain during the day and changed to heavy, wet snow during the evening of the 5<sup>th</sup>. Snow and blowing snow continued through much of the 6<sup>th</sup> with visibility near zero much of the time. Snowfall amounts were six to 18 inches with drifts 12 feet high. More than two thousand power poles were downed, causing widespread power outages that affected thousands of residents. Some locations did not have power for over a week, especially across the Pine Ridge Reservation. Most roads across the area, including Interstate 90, were closed for 24 hours or longer. Many livestock died from hypothermia. Officials estimated total damage to be around 5 million dollars.</li> <li>• 12/23/2010 – An upper-level disturbance passed over the region during the night and early morning, bringing milder air over cold air at the surface. Light freezing rain developed over western South Dakota, mixing with snow and sleet at times. The heaviest freezing rain fell across southwestern South Dakota, including the Black Hills, where as much as a quarter inch of ice accumulated. Roads became ice covered and caused many accidents during the morning.</li> <li>• 10/04/2013 – A historic blizzard pounded western South Dakota with record-setting snowfall and strong winds for almost 48 hours from the evening of October 3 through the afternoon of October 5. One to two feet of snow was reported over the plains of western South Dakota, with three to five feet of snow falling over the northern and central Black Hills. Wind gusts to 70 mph across the plains produced significant blowing and drifting snow, with visibilities near zero for much of the day on October 4. The heavy wet snow and strong winds downed trees and power lines, causing prolonged outages and impassible highways. The roofs of several businesses, a middle school, and community center collapsed from the heavy snow. Thousands of livestock were killed from hypothermia, suffocation, or drowning. The South Dakota Animal Industry Board received reports of over 21,000 cattle, over 1300 sheep, 400 horses: and 40 bison deaths from the storm. Tree and debris removal costs were several million dollars.</li> </ul>
Since 2018	<ul style="list-style-type: none"> <li>• 04/10/2019 – An intense spring storm system brought rain, snow, and gusty winds to the area. Rain developed during the late afternoon and night of April 9. Rain gradually switched over to snow across northwestern South Dakota and the Black Hills area during the overnight hours. Thundersnow was also noted over the Black Hills area during the early morning of April 10. Snow was heavy at times during the late night and morning across parts of northwestern South Dakota. Snow expanded across the rest of the western and south-central South Dakota plains during the day. Winds increased from the north late Wednesday and persisted into Thursday. Blowing and drifting snow developed, especially east of the Black Hills, where blizzard conditions occurred in some areas late Wednesday night and Thursday. Snowfall totals ranged from a few inches over far southwestern South Dakota to over two feet across portions of west central and south-central South Dakota.</li> <li>• 11/29/2019 – An intense winter storm brought heavy snow and strong winds to western and south-central South Dakota. Snowfall amounts ranged from 5 to 10 inches across much of far southern South Dakota and the southern Black Hills to 10 to 20 inches across much of the northwest and west central South Dakota plains. Over the northern Black Hills, 15 to 30 inches of snow were recorded. Strong northwest winds over 50 mph produced significant blowing and drifting snow and blizzard conditions on the plains. Many highways were nearly impassible or closed, including Interstate 90.</li> <li>• 04/16/2020 – Heavy snow showers developed across parts of the southern Black Hills during the early evening hours. Snowfall of one to four inches fell near and east of Highway 385 in a two-to-three-hour period, with localized amounts of around six inches in the Custer area. Heavy snow showers developed across parts of the southern Black Hills during the early evening hours. Snowfall of one to four inches fell near and east of Highway 385 in a two-to-three-hour period, with localized amounts of around six inches in the Custer area.</li> </ul>

**Table 4.33.** Significant weather events of winter storms in Custer County. (NOAA: National Centers for Environmental Information. 2022. *Storm Events Database*).



## ASSESSING VULNERABILITY: OVERVIEW

*Requirement §201.6(c)(2)(ii): [The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph §201.6(c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community.*

The following paragraphs summarize the description of the jurisdiction's vulnerability to each hazard and the impact of each hazard on the jurisdiction.

Blizzards are characterized by high winds, blowing snow, cold temperatures, and low visibility. Blizzards create conditions such as icy roads, closed roads, downed power lines and trees. Custer County's population is especially vulnerable to these conditions because people tend to leave their homes to get places such as work, school, and stores rather than staying inside. Traffic is one of the biggest hazards in Custer County during a blizzard because people often get stuck, stranded, and lost when driving their vehicles, which usually prompts others such as family and or emergency responders to go out in the conditions to rescue them.

Dam Failure can be caused by overtopping, foundation defects, cracking, inadequate maintenance and upkeep, and piping. Custer County has a total of 32 dams. Most of these dams are in areas that if failure occurred would cause little damage to property. However, six of the dams in Custer County are classified as high-risk. High-risk dams have the risk of not only property damage, but more importantly loss of life. The classification is based on the potential of downstream consequences of the dam failing, not the condition of the dam. It is due to this reason that these dams are required to have an emergency action plan in the event of a failure. The Custer County Emergency Manager provided the *Master Dam Plans*, which involves activating all known warning systems, and evacuations of areas, homes, and businesses around threat of water. In addition, there is a requirement by the state of South Dakota that all high-risk dams are inspected every five years.

Drought can be defined as a period of prolonged lack of moisture. High temperatures, high winds, and low relative humidity all result from. A decrease in the amount of precipitation can adversely affect stream flows and reservoirs, lakes, and groundwater levels. Lower levels of moisture caused by drought; the chances of wildfires increase. Drought can also impact directly and indirectly higher water and food prices, water restrictions, air and water quality, and restricted access to recreational areas.<sup>76</sup> Water shortages can affect supplies for domestic, municipal, industrial, agricultural, and recreational uses. Crops and other vegetation are harmed when moisture is not present within the soil. South Dakota's economy which is closely tied to agriculture and only magnifies the potential loss which could be suffered by the state's economy during drought conditions. The agriculture sector is severely affected by the lack of vegetation and water for livestock. Crop and pasture yields can be greatly diminished during periods of drought. Additionally, timber can be placed under stress and susceptible to insect infestation. The mountain pine beetle epidemic mentioned in the 2018 version of this Plan, has been mitigated through various forestry practices and procedures. Through these practices the mountain pine beetle is now normal levels throughout Custer County and the Black Hills.

If drought conditions in the region continue to increase, there will most likely bring an increased demand for water and energy resources. The region may see as a result the constraint of development, stress on natural resources, and

### **Custer County Comprehensive Plan**

Policy 4.1.1: Promote development strategies that help protect and sustain the regional water supply

<sup>76</sup> State of South Dakota Drought Mitigation Plan. 2015



increased competition for water.<sup>77</sup> The degree of impact increased the longer the drought period, leading to the depletion of reservoirs and the decline of groundwater basins water levels.<sup>78</sup> Streams in the Black Hills serve as the primary recharge of aquifers for much of Western South Dakota. As population and development increase this adds stress to the availability and quantity of water resources. Drought conditions lower the recharge of the aquifers. The Black Hills area, in 1980, saw drought conditions that caused reduced stream flow, creating a shortage of water in the area.<sup>79</sup>

The stakeholders meeting mentioned during periods of drought, water availability for fire suppression is a concern, this is especially the case in the eastern part of the county. Many rural subdivisions and Custer City have limited water supplies that may be greatly affected due to the geologic constraints of the area.<sup>80</sup>

Earthquakes occur in the area. The magnitude and intensity of an earthquake is measured by the Richter scale and the Mercalli scale. Custer County has had seven recorded earthquakes. While earthquakes are not a common occurrence, it would be reasonable to expect that a large earthquake would have comparative impact on Custer County as it would anywhere else.

Expansive Soils are located throughout Custer County. The expanding and shrinking of soils can cause damage to structures. Often seen are damages to foundations, floors, and basements, but can also affect all areas of a structure. This hazard often occurs over long periods of time as soil expands and shrinks repeatedly. Damage from expansive soils can often be mistaken as natural aging damage of structures.

**Custer County's Ordinance Number 2  
Regulations for the Subdivisions and Use  
of Land:**

If the property involves areas where the soil characteristics, terrain, drainage, geology, ground cover, or location imposes unusual requirements, the Planning Commission may request supplementary data to demonstrate the feasibility of subdividing the land.

Extreme Cold temperatures often accompany a winter storm, so you may have to cope with power failures and icy roads. Whenever temperatures drop below normal and as wind speed increases, heat can leave your body more rapidly. These weather-related conditions may lead to serious health problems. Extreme cold is a dangerous situation that can bring on health emergencies for susceptible people, such as those without shelter or who are stranded, or who live in a home that is poorly insulated or without heat. Exposure is the biggest threat/vulnerability to human life; however, incidences of exposure are isolated and thus unlikely to happen.

Extreme Heat has caused worldwide catastrophic crop damage, thousands of deaths from hyperthermia, and widespread power failures due to increased use of air conditioning. Loss of power and crop and livestock damage are the largest vulnerability to the county during extreme heat. Extreme heat can also greatly affect those individuals who work primarily outdoors.<sup>81</sup> Both influence quality of life, however, neither are detrimental to the existence of the population of Custer County. If the region sees an increase of extreme heat and an alteration of seasonal temperature timings, the agriculture and ranching communities will need to begin adjusting accordingly.<sup>82</sup>

Flooding can result in injuries and even loss of life when fast flowing water is involved. Six inches of moving water is enough to sweep a vehicle off a road. Disruption of communication, transportation, electric service, and community services, along with contamination of water supplies and transportation accidents are very possible.

<sup>77</sup> USGCRP, *Climate Science Special Report: Fourth National Climate Assessment, Volume 1*

<sup>78</sup> *State of South Dakota Drought Mitigation Plan*. 2015

<sup>79</sup> Driscoll et. al. *Hydrology of the Black Hills area, South Dakota*

<sup>80</sup> *Custer County Pre-Disaster Mitigation Plan*. 2018.

<sup>81</sup> Headwater Economics. 2022. *Populations at Risk*.

<sup>82</sup> USGCRP, *Climate Science Special Report: Fourth National Climate Assessment, Volume 1*

## **NFIP: [§201.6(2)(ii)]**

Approximately 1.6% of Custer County is located within the floodplain. Currently 28 properties in unincorporated Custer County, 6 in Custer City, and 16 in Hermosa participate in the NFIP program. Communities are encouraged to participate in the National Flood Insurance Program.

### **CRS Program:**

Neither Custer County nor any of the jurisdictions within participate in the CRS program.

Other mitigation activities have included:

1. In 2021, two homes in Custer City were removed from the floodplain. Both homes had received damage from flooding in the past. The houses were purchased, demolished, and the land was converted to open space. The project was funded through a Hazard Mitigation Grant through FEMA.

### ***Custer County Comprehensive Plan***

Policy 4.1.5: Preserve areas designated as floodway by the Federal Emergency Management Agency (FEMA) as undeveloped unless development is in accordance with *Ordinance #6 Flood Damage Prevention Ordinance*.

2. The Town of Hermosa provides a narrative on their website when and why a Floodplain Development Permits is required.
3. Custer County's website links to [www.floodsmart.gov](http://www.floodsmart.gov) to help educate the public on flooding, such as steps to prepare for flooding.

*Custer County's Floodplain Ordinance 6* restricts development in special floodplain hazard areas. Any development or construction in these areas must follow strict guidelines and be signed off by the Floodplain Administrator. All building permits are checked to see if the area for the permit is located in a floodplain.

### ***Custer County's Ordinance Number 2 Regulations for the Subdivisions and Use of Land:***

1. The Planning Commission may require a drainage plan for any proposed subdivision. Adequate provision shall be made within each subdivision to provide for needed drainage facilities, and this provision shall account for the ultimate development within the tributary area.
2. A storm sewer plan shall be prepared prior to other utility plans. These plans shall give preferential engineering considerations to gravity flow improvements.
3. Off-premises drainage easements and improvements shall be designed to provide for subdivision runoff into a natural channel.
4. Low areas subject to periodic inundation or that fall within an area of special flood hazard as identified by FEMA, shall not be developed until evidence is provided to the Planning Commission that:
  - a. The nature of the land use will not impede surface water runoff and that the land will not be subject to appreciable damage by inundation.
  - b. The area may be filled or improved in such a manner as to prevent such periodic inundation, provided that such fill does not retard the flow of surface waters or result in the increase of water level endangering life and property of others.
  - c. Lowest flood elevations will be established to prevent damage to any structures.
  - d. High-density subdivisions intended for residential dwellings, public buildings, commercial enterprises, or industrial use, and not located within one-half (1/2) mile of a public sanitary sewer system, shall have an acceptable wastewater disposal plan.

All plans for wastewater disposal are the responsibility of the subdivider and shall conform to the requirements of the Planning Commission and/or the Board, and comply with all Federal, State, and County Health Department codes and regulations. These plans may include individual septic systems; however, the Planning Commission may request that the subdivider provide further evidence prepared by the competent professional that the subject land is capable of accommodating the proposed individual sewer system(s) without causing pollution.

Having a qualified Floodplain Administrator is a mitigation activity in itself. Requiring that new construction meets the floodplain ordinance and having someone to enforce those requirements is essential to mitigation planning and helps reduce the risk of natural weather events becoming natural disasters. FEMA provides training courses for individuals to become certified floodplain administrators. The State of South Dakota also offers courses for certification. To better help protect the county and cities/towns from flood damage it is recommended that floodplain administrators take the opportunity to attend these courses.

**Table 4.35.** NFIP information and activities done to mitigate flood risk by Custer County and jurisdictions.

Freezing Rain/Ice Storms may cause build up on power lines, poles, trees, and structures. The additional weight can often cause weak structures to cave in and cause tree branches and power lines to break and fall. Custer County and the local jurisdictions within are susceptible to these conditions due to the types of structures and surfaces that exist in the county that cannot be protected from freezing rain. Traffic on the roads and highways tend to be the biggest hazard during freezing rain conditions because vehicles often slide off the road, which prompts emergency responders and others to have to go out on rescue missions in adverse conditions.

Hail causes damage to property such as crops, vehicles, windows, roofs, and structures. Custer County and its local jurisdictions are vulnerable to hail, like most other areas in South Dakota, due to the nature of the hazard. Mitigating hail is difficult and is usually found in the form of insurance policies for structures, vehicles, and crops.

Heavy Rain can cause damage to property such as homes and roads. Heavy rain in Custer County can cause road inundation in low-laying areas. Roads and bridges can be washed out, thus causing traffic hazards for travelers and commuters. All areas of the county are vulnerable when heavy rains occur. Storm sewers are built for the typical storm and therefore do not accommodate excessive or heavy rains.

High/Severe Wind can cause damage to property, injury, or death. High winds can cause downing of trees and powerlines, building collapse, and flying debris. Western South Dakota is susceptible to high wind events. High wind warning is issued for sustained winds reaching 40mph or greater, or if gusts of 58 mph or greater are predicted.

Ice Jams cause damage to bridges, roads, and culverts due to water currents pushing large chunks of ice under or through small openings. The County and jurisdictions stated that they had no knowledge of ice jams being an issue.

Landslides are caused by the movement of earth downslope. Areas where old landslides have occurred often include steep slopes, bases of drainage channels, and developed hillsides. Landslides that occur in developed areas can cause damage to property and infrastructure, and injury or loss of life. The *South Dakota Hazard Mitigation Plan* shows that there are some areas in Custer County that range from low to highly susceptible to landslides (Appendix B).

Lightning often strikes the tallest objects within the area. Most injuries from lightning occur near the end of thunderstorms. Individuals who sought shelter leave those areas prior to the entire completion of the thunderstorm. Believing it is safe to freely move around, lightning strikes catch them off guard. In towns, trees and poles often receive the most strikes. In rural areas, shorter

objects are more vulnerable to being struck. Electrical lines and poles are also vulnerable because of their height and charge. In addition, many streetlights function with sensors. Since thunderstorms occur primarily during hours of darkness, lightning strikes close to censored lights cause the lights to go out, causing a potential hazard for drivers. Flickering lights and short blackouts are not at all uncommon in the county. One of lightning's dangerous attributes includes the ability to cause fires. The entire county is vulnerable to lightning strikes and subsequent fires.

Severe Winter Storms have a high risk of occurrence. Heavy snow can immobilize transportation, down power lines and trees, and cause the collapsing of weaker structures. Livestock and wildlife are also very vulnerable during periods of heavy snow. Most storms can be considered to have occurred countywide. Due to the multiple occurrences of winter storms each year, an exhaustive compilation is not possible. The greatest danger during winter weather is traveling. Many individuals venture out in inclement weather. Reasons include the necessity of getting to work, going to school, going out just to see how the weather is, and to rescue stranded persons.

Subsidence is a hazard that has a high probability of occurring in localized areas, but overall, a low probability of occurring in a majority of the county. Subsidence can cause damage to property, structures, infrastructures, and loss of life. Areas with higher risk of subsidence can be found on the Karst Map in Appendix B.

Thunderstorms cause lightning and large amounts of rain in a small timeframe. The entire county experiences thunderstorms on a regular basis and is only vulnerable when weather events outside the norm occur. Specific vulnerabilities are further identified in the paragraphs for "Lightning" and "Heavy Rains".

Tornados present significant danger and occur most often in South Dakota during the months of May, June, and July. The greatest period of tornado activity, about 82% of occurrence, is from 11 am to midnight. Within this time frame, most tornados occur between 4 pm and 6 pm. Often associated with summer storms are utility problems. Electric services have historically buried powerlines in the county. They are not currently working on any projects in the area. The western part of the county can be challenging due to rock formations, so the majority of work has been in the eastern section of the county.

Wildfires occur primarily during drought conditions but can increase with as little as one to two weeks with hot, dry, and windy weather conditions, any time of year. Wildfires can cause extensive damage, both to property and human life, and can occur anywhere in the county. There can be large losses to standing timber and the threat of erosion and debris buildup from rapid run off. There is potential for loss of life, structures, utility infrastructure, as well as impacts upon economic factors such as tourism, logging, and ranching. Even though wildfires can have various beneficial effects on wilderness areas for plant species that are dependent on the effects of fire for growth and reproduction, large wildfires often have detrimental atmospheric consequences, and too frequently wildfires may cause other negative ecological impacts.

Wildfire smoke, which is a combination of gases and particles from burned materials. The smoke can affect anyone, but those at an increased risk are those with asthma, chronic obstructive pulmonary disease, heart disease, children, pregnant woman, and responders.<sup>83</sup> During younger children's development stages, they are more sensitive to health problems and environmental stress. Those with poor health during childhood are more likely to see continued issues into adulthood. As an example, children have faster breathing rates than adults and tend to spend more time outdoors, causing a higher sensitivity to wildfire smoke. Older adults, those 65 and older, are also at a high risk from air pollutants, such as dust and particle matter. The poor air quality that is present during wildfire events creates a vulnerability to these individuals.<sup>84</sup>

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<sup>83</sup> National Center for Environmental Health. 2022. *Protect yourself from wildfire smoke*.

<sup>84</sup> Headwaters Economics. 2022. *Populations at Risk*.

Ability for evacuation during emergencies can affect populations such as the elderly, certain pre-existing medical conditions, compromised mobility, compromised language and cultural barriers, which make it harder to interact with agencies and follow directions, low-income, and families in poverty.<sup>85</sup>

Moisture amounts have the biggest impact on fire situations. During wet years, fire danger is generally lower. More controlled burns are conducted and less mishaps occur. During dry years, severe restrictions are placed on any types of burns. For information on dealing with open/controlled burning within the county, see SDCL 34-35-15. SDCL 7-8-20(18), which gives Custer County Commission the authority to prohibit opening burning. Custer County adopted Ordinance No. 20, regulating open burning in Custer County for areas east of Highway 79 that fall outside the Black Hills Forest Fire Protection District (BHFFPD). Any location within the county that falls in the BHFFPD must have a burn permit issued by South Dakota Wildland Fire, however this rule excludes any municipalities within the jurisdiction<sup>86</sup>

Current techniques may permit and even encourage fires in some regions as a means of minimizing or removing sources of fuel from any wildfire that might develop. Custer County has a strong collaboration between the different fire agencies on the federal, state, county, and local levels. All agencies are making efforts to work together to identify areas of treatment. South Dakota Wildland Fire works with all agencies in tracking different projects that take place in the region. All fire departments in Custer County have mutual aid agreements with Pennington County, Fall River County, and West County (WY). As well as with State and Federal agencies.

While wildfires can occur anywhere in the county, historically a majority of fires occur near the Black Hills forested areas. WUI considerations are very important in areas that are highly developed with residential uses. With increased development in WUI areas the risk of wildfire damage increases. Seventy-nine percent of Custer County's populated areas are exposed to the threat of wildfire from a direct source; adjacent flammable wildland vegetation. While 21% have a risk of indirect exposure, embers, or home-to-home ignition.<sup>87</sup> Custer County's current Community Wildfire Protection Plan 2006 is outdated and needs to be updated.

South Dakota Wildland Fire and stakeholders commented that one of the big issues for those responding to fires is the lack of water supply. Many developed areas lack hydrants or wells. Due to this many responders are in the habit of always taking tenders to fire sites. Fire responders also run into issues with limited access to areas and road topography. The County does not currently have an ordinance requiring secondary or emergency access or egress for new development, that has resulted in subdivisions without alternative routing.

## **Vulnerable Populations:**

Social vulnerability addressed the effects natural hazards can have on vulnerable and underserved populations. FEMA's National Risk Index scored social vulnerability in Custer County as relatively low.<sup>88</sup>

From 2010<sup>89</sup> to 2020<sup>90</sup>, Custer County saw a population increase of 1.24%. In 2020, the population density in Custer County was 5.3 persons per square mile.<sup>91</sup> The median age is 55.9 and an estimated 30.6% of residents are 65 years or older.<sup>92</sup> It is estimated 16.8% of residents with a disability including difficulties with hearing, vision, cognitive, ambulatory, self-care and/or

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<sup>85</sup> Headwaters Economics. 2022. *Populations at Risk*.

<sup>86</sup> South Dakota Wildland Fire. *Burn Permits*.

<sup>87</sup> USDA Forest Service. *Wildfire Risk to Communities: Custer County Exposure Risk*.

<sup>88</sup> National Risk Index. *Social Vulnerability*. >

<sup>89</sup> U.S. Census Bureau. 2010. Table P1

<sup>90</sup> U.S. Census Bureau. 2020. Table P1

<sup>91</sup> U.S. Census Bureau (2020). Population per square mile 2020

<sup>92</sup> U.S. Census Bureau (2020). Age and Sex



independent living.<sup>93</sup> This percentage in Custer County is slightly higher than the national average of 12.7%.<sup>94</sup>

Custer County Age	
Age	Percentage
Under 5 years old	3.4%
65 years and older	30.6%
80 years and older	1.8%

**Table 4.36** U.S Census Bureau. 2022. (American Community Survey. Age and Sex)

Young children and the elderly are more vulnerable to different natural hazards. Young children have a higher vulnerability to respiratory-related issues that can be caused by such things as wildfire smoke, airborne particles, and allergens. These can be associated with risks such as wildfires, high winds, and extreme temperatures. The immune systems of young children are also still developing, causing children to be more susceptible to disease. This risk can be caused by issues with public water systems, compromised sanitation, and the spread of disease.<sup>95</sup>

Those individuals without a means of transportation can have difficulty in emergencies that may require evacuations, such as wildfire or flooding. They can also be limited in the ability to access emergency shelters that may be able to provide shelter and supplies during events such as summer and winter storms.<sup>96</sup> Roughly 1.1% of residents of Custer County have no vehicle available and 19.3% have at least one vehicle per household.<sup>97</sup> Often households that lack vehicles are often seen to have lower incomes.

The median household income in Custer County is \$64,556 and has a 12.7% poverty rate.<sup>98</sup> Poverty or lower income households are similarly vulnerable to those without vehicles. These individuals often require the most assistance during hazardous weather but lack the means or ability to get help. Additionally, those in poverty are less likely to take proactive measures to mitigate hazards.<sup>99</sup>

Custer County Demographic – Race	Percentage
White	91.2%
Black	0.4%
Native American or Alaska Native	2.1%
Asian	0.3%
Native Hawaiian and other Pacific Islander	0%
Other race	1%
Two or more races	5%

**Table 4.37** Population and Race demographics of Custer County, South Dakota. (U.S. Census Bureau Decennial Census 2020).

Headwater's *Populations at Risk* report explained that minority populations tend to have more vulnerability to disasters and extreme temperatures. Barriers in language, culture, quality of housing, community isolation, and housing patterns can attribute to these vulnerabilities. Natural disasters can result in negative impacts on the environment, which can lead to situations that can affect the health of the population. Some races have an increased risk of poorer health outcomes.<sup>100</sup>

<sup>93</sup> U.S. Census Bureau. 2020. Age by number of disabilities

<sup>94</sup> Headwater Economics. 2022. *Populations at Risk*.

<sup>95</sup> Ibid Headwater Economics.

<sup>96</sup> Headwater Economics. 2022. *A Profile of Wildfire Risk*.

<sup>97</sup> U.S. Census Bureau. 2020. Physical Housing Characteristics for Occupied Housing Units

<sup>98</sup> U.S. Census Bureau. 2020. Quick Facts

<sup>99</sup> Ibid. Headwater Economics.

<sup>100</sup> Ibid. Headwater Economics.

Custer County has roughly 19.8% of housing that is classified as mobile homes, compared to the national percentage of 5.4%. Headwater Economics reports that mobile homes are more susceptible to damage and injury caused by extreme weather events.

**Custer County Ordinance Number  
Regulations for the Subdivisions and Use of  
Land:**

Manufactured homes must meet Federal Manufactured Home Construction and Safety Standards as outlined in Title VI, Housing and Community Development Act of 1974.

Custer County has a large influx of visitors, especially from May thru September.<sup>101</sup> Tourist locations in Custer County include Custer State Park, Black Hills National Forest, Buffalo Gap National Grasslands, Jewel Cave National Park, Wind Cave National Park, and the Crazy Horse Monument. The South Dakota Department of Tourism was consulted for the estimated visitation numbers, and responded that while difficult to find this number, using a few different methods can provide a rough estimate. A third-party company provides data gathered from mobile devices county-wide that fit the criteria of “visitor”. The company observed 11% of devices, roughly 800,000 visitors in the area of Custer State Park and Custer City in 2021. Game, Fish & Parks reported roughly 2.3 million visitors. The Department of Tourism feels the actual number is most likely somewhere between these two counts. Seasonal visitors can also be vulnerable during hazard events, such as lack of adequate shelter, unfamiliarity with the area, limited mobility, etc.

### **ADDRESSING VULNERABILITY: REPETITIVE LOSS PROPERTIES**

*Requirement §201.6(2)(ii): [The risk assessment] must also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged by floods.*

Repetitive loss properties are those for which two or more losses of at least \$1,000 each have been paid under the National Flood Insurance Program (NFIP) within any 10-year period since 1978. The State NFIP Coordinator provided information as of October 2022. The following NFIP participants can be found on Table 4.38. There were no repetitive losses reported for Custer County or any jurisdictions. FEMA’s new database does not provide specific addresses anymore, so the data only shows grand totals by county and jurisdiction. The list that was provided shows each participant’s total losses paid out.

<b>NFIP Participants Policy Information</b>					
<b>Community Name</b>	<b>Current NFIP Policies</b>	<b>Number of Losses</b>	<b>Total Losses Paid</b>	<b>Flood Insurance Coverage</b>	<b>Repetitive Loss Properties</b>
<b>Unincorporated Areas</b>	28	30	\$475,213.91	\$6,372,900	0
<b>Custer City</b>	6	12	\$44,714.76	\$2,009,000	0
<b>Hermosa</b>	16	9	\$125,589.81	\$2,808,600	0
<b>Totals</b>	<b>50</b>	<b>51</b>	<b>\$645,518.48</b>	<b>\$11,190,500</b>	<b>0</b>

**Table 4.38** NFIP participants information for policies in force, insurance, no. of paid losses total losses paid and repetitive losses, October 2022.. Communities: Buffalo Gap, Fairburn, and Pringle do not participate in the NFIP program.

### **ASSESSING VULNERABILITY: IDENTIFYING STRUCTURES**

*Requirement §201.6(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...*

One of the purposes of this Plan is identifying critical facilities and determining to what extent these structures are vulnerable to natural hazards. In the event of a disaster, Custer County and participating entities want to ensure they have the ability to prevent further loss of life by generator powered critical facilities and shelters. Tables 4.39-4.44 list inventory of assets for each community including critical facilities, vulnerable population, economic assets, and historic assets that would

<sup>101</sup> Custer County Comprehensive Plan. 2008

cause the greatest distress if destruction occurred. The participants were asked to think of structures that would cause the most devastation to their communities if the structures were to be lost in a natural hazard event, “In other words, list those structures that you cannot live/operate without.” Plan participants were then instructed to determine the value of those structures. Most of the values provided are the insured values from the insurance policies. The Plan author acknowledges that determining what is “critical” can mean something different to every community and that the information provided in the table is not comprehensive. However, the information provided by the plan participants in their emailed responses was used as a baseline and can be supplemented in future years during the annual plan review and/or during the 5-year update. By using information provided by the representatives from each community it also helps establish a sense of ownership in the mitigation plan.

Custer County’s bridges and culverts were mentioned as critical infrastructure but are not listed in their entirety. The County Emergency Manager explained that these records are kept with the South Dakota Department of Transportation. Additionally bridge inspections take place once a year and are reported to the South Dakota Department of Transportation.

The State of South Dakota now offers Crisis Track, a disaster management software, designed to help identify a disaster cost for faster disaster assistance.<sup>102</sup> Custer County recently joined to use the program, which can assist with both private and public structures and infrastructure.

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<sup>102</sup> Crisis Tract. 2022. Disaster Management Software.

Custer County Inventory Assets									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Courthouse w/ Generator	✓				27,669	\$7,836,602	\$1,243,123	Courthouse offices/ primary emergency op. & dispatch center	-
Library/ Community Center	✓				9,207	\$1,992,919	\$541,481	Library/ veterans services/ community health/ meeting rooms	-
Custer Hwy Shop/ Office w/ 100kw Generator	✓				6,960	\$938,196	\$163,097	County highway main maintenance shop	-
County Highway Department	✓				12,960	\$365,454	\$15,000	Heated storage	-
Search & Rescue Bldg.	✓				6,400	\$502,232	\$10,000	Search & rescue building/ backup dispatch & emergency op. center	
Fairgrounds Display Hall/ Quonset	✓	✓			4,000	\$114,165	-	Display hall/ distribution center	-
Fairgrounds Women's Bldg..	✓				3,200	\$136,211	\$2,690	Fairground women's Bldg/ shelter	-
Beef Barn/ Display Booths	✓				11,880	\$536,336	\$6,721	Beef barn/ display booths/ shelter and distribution	-
Airport Office/ Equip Storage	✓				2,960	\$323,824	\$13,439	Airport office/ equip storage	-
Airport/ East Hangar	✓				3,600	\$258,844	-	Airport east hangar/ storage and distribution	-
Bear Mountain/ Steel Radio Transmission Tower	✓				100	\$25,000	\$50,000	Radio repeater tower	-
Buffalo Gap Shop	✓				2,352	\$95,305	\$33,599	Highway maintenance shop	-
1881 Courthouse Museum				✓	-	\$820,433	-	Museum	-
Weed & Pest Bldg.	✓				2,848	\$142,921	\$16,310	Weed and pest/ county extension service offices and storage	-
Argyle VFD	✓				-	-	-	-	-
Highland VFD	✓				-	-	-	-	-
Folsom VFD	✓				-	-	-	-	-
Battle Creek VFD	✓								
Custer Community Hospital	✓	✓			-	-	-	-	-
Custer Clinic	✓	✓			-	-	-	-	-
Black Hills Energy Substations (2)	✓				-	-	-	-	-
Black Hills Energy Coop Substations (4)	✓								

**Table 4.39** Critical infrastructure for Custer County as of 2022. Information was provided by Custer County.

Town of Buffalo Gap Inventory Assets									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Well #1	✓				-	-	-	-	-
Underground Tank 50,000gal	✓				-	-	-	-	-
Above-ground tank 88,000gal	✓				-	-	-	-	-
Well #2	✓				-	-	-	-	-
Buffalo Gap Fire Dept	✓								
Buffalo Gap Historic Fire Dept				✓	-	-	-	-	-
Buffalo Gap Town Hall					-	-	-	-	-
Community Center	✓				-	-	-	-	-
Buffalo Gap Blowout Rodeo Grounds			✓		-	-	-	-	-
Historic Sandstone Buffalo Gap School				✓	-	-	-	-	-
Old Saddle Shop				✓	-	-	-	-	-
Woodsman Hall				✓	-	-	-	-	-
Ranch Feed and Seed			✓		-	-	-	-	-
Watering Hole (bar and grocery)			✓					-	

**Table 4.40** Critical infrastructure for the Town of Buffalo Gap as of 2022. Information was provided by Buffalo Gap.



Custer City Inventory Assets									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
The Store House	✓				-	-	-	-	-
Custer VFD	✓				-	-	-	-	-
Custer Elementary School	✓				-	-	-	-	-
Custer High School	✓				-	-	-	-	-
City Garage Building	✓				-	-	-	-	-
Maintenance Shop/Garage Building	✓				-	-	-	-	-
Hospital/Clinic Monument	✓				-	-	-	-	-
Ambulance Custer County	✓				-	-	-	-	-
Search and Rescue Custer County	✓				-	-	-	-	-
South Dakota Highway Patrol	✓				-	-	-	-	-
South Dakota DOT Shop	✓				-	-	-	-	-
Custer City Hall	✓				-	-	-	-	-
Custer City Swimming Pool	✓				-	-	-	-	-
Custer County Courthouse	✓				-	-	-	-	-
Assisted Living Center Monument	✓				-	-	-	-	-
Custer School District/Armory	✓				-	-	-	-	-
USDA – Forest Service Supervisor's Office	✓				-	-	-	-	-
Black Hills Energy and Substation	✓				-	-	-	-	-
Black Hills Electric Coop	✓				-	-	-	-	-
Golden West Telephone Company	✓				-	-	-	-	-
Lynn's Grocery Store			✓		-	-	-	-	-
City Wastewater Treatment Plan	✓				-	-	-	-	-
Lagoons	✓				-	-	-	-	-
Water Dispenser Building	✓				-	-	-	-	-
Siren (Fire Hall)	✓	✓			-	-	-	-	-
City Wells (16)/Pumps/Well Houses	✓				-	-	-	-	-
Lift Station	✓				-	-	-	-	-
Water Storage Tank 150k	✓				-	-	-	-	-
Water Storage Tank 570k	✓				-	-	-	-	-

**Table 4.41** Critical infrastructure for the City of Custer as of 2022. Information was provided by Custer City. The City of Custer provided a list of critical facilities and a list of the City's assets. A complete list of city assets can be found in Appendix G.

Town of Fairburn Inventory Assets									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Fairburn Fire Hall (VFD)	✓				-	-	-	-	-
Civic Center/Town Hall	✓				-	-	-	-	-
Post Office	✓				-	-	-	-	-
Community Center	✓				-	-	-	-	-
Museum				✓	-	-	-	-	-
Church	✓				-	-	-	-	-

**Table 4.42** Critical infrastructure for Town of Fairburn as of 2022. Information was provided by Fairburn.

Town of Hermosa Inventory Assets									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Town Hall (Library, Emergency Shelter & Food Bank)	✓	✓			2,080	\$583,200	-	Meeting, emergency shelter provides food	-
Garage/Rental	✓		✓		1,260	\$47,760	-	Rental income	-
Pump House – 2 Upper and Lower	✓	✓			206/132	\$97,850/ \$44,00	-	Supplies water for the community	-
Water Tower-2 Upper and Lower	✓	✓				\$367,180/ \$627,875	-	Supplies water for the community	-
Water Treatment	✓	✓			3 cells	31,000 (valve) 13,000 (coolant)	-	Supplies safe water for the community	-
Well and Pump – 2 Upper and Lower	✓	✓			-	\$130,478/ \$130,478	-	Supplies water for the community	-
Storage Building					22,831	\$39,000	-	Misc storage	-
Booster Station	✓	✓			100	\$50,200	-	Provides a means for sewer to get to lagoon	-

Fencing at Two Water Tanks Upper and Lower						891	\$17,875	-	Safety	-
Emergency Warning Sirens East & West	✓					-	\$45,660/ \$45,660	-	Notification for citizens	-
Fencing at Lower Pump						963	\$5,000	-	Safety	-
Fencing at Lagoon						1,920	\$26,800	-	Safety	-
Storage Shed at Tower						99	\$4,280	-	-	-
Heartland Hair		✓				-	-	-	Hair Salon	-
Custer County Fairgrounds	✓					-	-	-	Provides emergency shelter for livestock & meal for displaced	-
Pops Grocery	✓	✓				-	-	-	Grocery store	-
Hermosa Community Center		✓				-	-	-	Game room	-
Hermosa Arts & History Association				✓		-	-	-	Historic preservation of community history	-
United Church of Christ						-	-	-	Church	-
Masonic Temple						-	-	-	Masons meeting building	-
Hermosa Post Office	✓					-	-	-	Post office	-
Hermosa Coffee House			✓			-	-	-	Coffee shop	-
Our Saviors Lutheran Church						-	-	-	Church	-
Hermosa School	✓					-	-	-	Education	-
Corner Pantry Truck Stop	✓					-	-	-	Fuel, gas	-
Nelsons Oil	✓					-	-	-	Propane	-
Fire Department	✓					-	-	-	Safety from fire	-
Farmhouse Vintage Designs		✓				-	-	-	Store	-
Roy's Twin Screen			✓			-	-	-	Seasonal outdoor movie theater	-
So. Hills Campground		✓				-	-	-	Seasonal campground	-
Lazy R		✓				-	-	-	Food & Lounge	-
Dollar General	✓		✓			-	-	-	Store, grocery, clothing, blankets, emergency necessities	-
Walnut Grove Storage			✓			-	-	-	Personal storage	-
Ferguson Subdivision		✓				-	-	-	Residential Homes	-
Walnut Grove Mobile Home Park		✓				-	-	-	-	-
G&G Subdivision		✓				-	-	-	-	-
Hermosa Res. N of Main		✓				-	-	-	-	-
Hermosa Res. S of Main		✓				-	-	-	-	-
Hermosa Res. S. of Manning		✓				-	-	-	-	-
Taz Court		✓				-	-	-	-	-
Hermosa Hills Subdivision		✓				-	-	-	-	-

Table 4.43 Critical infrastructure for Town of Hermosa as of 2022. Information was provided by Hermosa.

Town of Pringle Inventory Assets									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Pringle VFD	✓				-	-	-	-	-
Water Tower	✓				-	-	-	-	-
Community Center	✓				-	-	-	-	-
Golden West Utilities Building	✓				-	-	-	-	-
Electric Substation	✓				-	-	-	-	-

**Table 4.44** Critical infrastructure for Town of Pringle as of 2022. Information was provided by Pringle.

## ASSESSING VULNERABILITY: ESTIMATING POTENTIAL LOSSES

*Requirement §210.6(c)(2)(ii)(B): [The Plan should describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the methodology used to prepare the estimate...*

The following information shows the county and jurisdiction's structure vulnerabilities. Inconsistencies and missing information may result from lack of existing mechanisms, plans, and technical documents available to the communities. Each of the communities provided the best available data considering the lack of resources in which to access the information. Custer County's Equalization Department was able to provide the following information for a report run on June 23 2022. The department did not have information on the number of structures but was able to provide a total number of sites with at least one structure. No land values were included. The value of the structures is based on state board values. Custer County also assisted in providing this data for the cities, however, each jurisdiction was asked to provide the total number of structures/sites for religious, government, education, and utilities. Neither the County nor the cities/towns had information on the number of people per structure. The County and BHCLG were unable to provide the number of sites or values for structures located in hazard areas, such as floodplain or WUI. The data was incomplete and outdated, so was not included. This section of the previous Plan was scarce and did not address potential dollar losses. Participating communities were requested to provide more complete data during the 2023 update; however, many of them struggled to provide the information requested.

<b>Custer County (unincorporated)</b>		
<b>Estimated Potential Dollar Losses to Vulnerable Structures</b>		
<b>Type of Structure</b>	<b>Number of Sites</b>	<b>Value of Structures</b>
Residential	5,387	\$694,521,972
Commercial	143	\$30,851,077
Agricultural	553	\$14,006,343
Religious	*22	-
Tax Exempt	*32	-
<b>Total</b>	<b>6,137</b>	<b>\$739,379,392</b>

**Table 4.45.** Estimated dollar losses to vulnerable structures in Custer County (unincorporated areas). The number of structures is unknown, the number in the county shows the number of sites with at least one structure on the property. Data for current value of structures for different hazards was unavailable. No value was available for structures classified as religious or tax exempt. Religious and Tax-Exempt numbers are total for the entire county including jurisdictions.

<b>Buffalo Gap</b>		
<b>Estimated Potential Dollar Losses to Vulnerable Structures</b>		
<b>Type of Structure</b>	<b>Number of Sites</b>	<b>Value of Structures</b>
Residential	151	\$4,468,116
Commercial	15	\$822,453
Agricultural	0	-
Religious	-	-
Tax Exempt	-	-
<b>Total</b>	<b>166</b>	<b>\$5,290,569</b>

**Table 4.46.** Estimated dollar losses to vulnerable structures in Buffalo Gap. The number of structures is unknown, the number in the county shows the number of sites with at least one structure on the property. Data for current value of structures for different hazards was unavailable.

<b>Custer City</b>		
<b>Estimated Potential Dollar Losses to Vulnerable Structures</b>		
<b>Type of Structure</b>	<b>Number of Sites</b>	<b>Value of Structures</b>
Residential	985	\$115,556,215
Commercial	188	\$59,878,538
Agricultural	-	-
Religious	7	-



Government	8	-
Education	2	-
Utilities	2	-
<b>Total</b>	<b>1,192</b>	<b>\$175,434,753</b>

**Table 4.47.** Estimated dollar losses to vulnerable structures in Custer City. The number of structures is unknown, the number in the county shows the number of sites with at least one structure on the property. Data for current value of structures for different hazards was unavailable.

<b>Fairburn</b>		
<b>Estimated Potential Dollar Losses to Vulnerable Structures</b>		
<b>Type of Structure</b>	<b>Number of Sites</b>	<b>Value of Structures</b>
Residential	76	\$2,915,634
Commercial	3	\$16,837
Agricultural	1	\$950
Religious	1	-
Tax Exempt	2	-
Utilities	1	-
<b>Total</b>	<b>84</b>	<b>\$2,933,421</b>

**Table 4.48.** Estimated dollar losses to vulnerable structures in Fairburn. The number of structures is unknown, the number in the county shows the number of sites with at least one structure on the property. Data for current value of structures for different hazards was unavailable.

<b>Hermosa</b>		
<b>Estimated Potential Dollar Losses to Vulnerable Structures</b>		
<b>Type of Structure</b>	<b>Number of Sites</b>	<b>Value of Structures</b>
Residential	301	\$21,535,234
Commercial	21	\$3,867,833
Agricultural	-	-
Religious	3	-
Government	4	-
Education	1	-
<b>Total</b>	<b>330</b>	<b>\$25,403,067</b>

**Table 4.49.** Estimated dollar losses to vulnerable structures in Hermosa. The number of structures is unknown, the number in the county shows the number of sites with at least one structure on the property. Data for current value of structures for different hazards was unavailable.

<b>Pringle</b>		
<b>Estimated Potential Dollar Losses to Vulnerable Structures</b>		
<b>Type of Structure</b>	<b>Number of Sites</b>	<b>Value of Structures</b>
Residential	114	\$3,610,331
Commercial	10	\$608,409
Religious	1	-
Government	1	-
Utilities	2	-
<b>Total</b>	<b>128</b>	<b>\$4,218,740</b>

**Table 4.50.** Estimated dollar losses to vulnerable structures in Pringle. The number of structures is unknown, the number in the county shows the number of sites with at least one structure on the property. Data for current value of structures for different hazards was unavailable.

## **ASSESSING VULNERABILITY: ANALYZING DEVELOPMENT TRENDS**

*Requirement §201.6(c)(2)(ii)(C): [The plan should describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.*

The land use and development trends for each jurisdiction were identified by representatives from each of the jurisdictions. To help look at the development trends the County and the jurisdictions were asked to provide information on building permits in the last five years for new structures. Those

entities that do not require building permits were asked to provide a narrative of development within their city limits.

Custer County is experiencing an influx of people. Roughly 69% of the population lives in unincorporated parts of Custer County. From 2010<sup>103</sup> to 2020<sup>104</sup>, the county has seen a population increase of 1%, with the population projected to increase by 8.1% by 2026.<sup>105</sup>

Any construction that takes place in the unincorporated parts of the county requires a building permit. The Custer County Planning Department was able to provide totals permits numbers and map showing general locations of development in the county. Building permits issued in Custer County; 2018: 159, 2019: 175, 2020: 213, 2022: 232, 2022: 265 (as of 11/18/22). The maps can be found in Appendix D. Custer County does not have zoning, but employs other land development regulations, like subdivision and floodplain development ordinances to help regulate development. The Custer County Director of Planning serves as the appointed Floodplain Administrator.<sup>106</sup>

### **Highlights of some policies from the *Custer County Comprehensive Plan***

The *Custer County Comprehensive Plan* addresses issues such as population growth, rural residential subdivision expansion, commercial and industrial development, and tourism and revenue resources. Several policies listed in the plan focus on land use and development to help protect life, property, and infrastructure.

Policy 1.1.1.: Recognize the unincorporated area of the county as being primarily agriculture, minimize the conversion of agriculture land to other uses, and preserve good farm and ranch land from the intrusion of unnecessary urban uses which affect the productivity and amenities of the agricultural area. Maintain the agricultural designation at 40 acres.

Policy 1.1.2: Recognize that urban, commercial, and industrial land uses, other than normal home occupation and agriculture value-added uses, should be accommodated within and around existing city areas.

Policy 1.1.4: Consider the efficiency and economic of providing services.

Policy 1.2.1: Ensure that private developers provide adequate open space within residential developments.

Policy 1.2.2: Promote preservation of natural areas in new developments.

Policy 1.3.1: Re-evaluate *Ordinance #2 Regulation for the Subdivision and Use of Land* for thoroughness, effectiveness, and consistency with the Comprehensive Plan.

Policy 1.3.2: Maintain a close working relationship with all agencies within the county in order to minimize the impact and infrastructure costs when considering new developments and division of land.

Policy 1.3.3: Manage non-agricultural residential development in the rural area at a density low enough that it does not require urban services, particularly that of public sewage disposal and water supply.

Policy 1.3.4: Maintain a working relationship with other agencies (local, state, and national) that operate within the county so that development of any type is consistent with and does not violate the policies and ordinance of Custer County.

Policy 2.1.1: Promote a safe, well-maintained road system, with consideration to the importance of access for emergency vehicles.

<sup>103</sup> U.S. Census Bureau (2010). 2010: DEC Redistricting Data (PL 94-171)

<sup>104</sup> U.S. Census Bureau (2020). 2020: DEC Redistricting Data (PL 94-171)

<sup>105</sup> Lightcast. 2022. *Custer County, SD*.

<sup>106</sup> *Custer County Ordinance #6 Revised Flood Damage Prevention Ordinance*. 2012.

Policy 2.1.3: Promote residential development densities that are reflective of the carrying capacity of the County's transportation infrastructure.
Policy 4.1.1: Promote development strategies that help protect and sustain the regional water supply.
Policy 4.1.5: Preserve areas designated as floodway by the Federal Emergency Management Agency (FEMA) as undeveloped unless development is in accordance with <i>Ordinance #6 Flood Damage Prevention Ordinance</i> .
Policy 5.1.3: Encourage standards of construction to be the latest applicable State recommended building code.
Policy 6.1.3: Promote locational criteria for employment-generating development based on availability of appropriate services (highway access, water, sewer, emergency services, etc.)

The Town of Buffalo Gap does not require building permits. From 2010 to 2020 census data shows a 4% increase for the town of Buffalo Gap. The Town explained most development has been seen around the rodeo grounds, just outside of city limits. Some mobile homes have been moved into town in the last five years.

Custer City makes up 23% of the total population of Custer County. Custer City has seen a 7% decrease in population from 2010-2020. However, the City feels this number to be inaccurate. In the last five years there have been a total of 40 permits issued for new residential and commercial construction in the last five years. The City explained the city has =seen expansion related to people moving to rural locations in an increasing number and the city is growing by expanding outward. There has been an increase in housing developments within and along the outskirts of the city. Infrastructure continues to be upgraded to meet the needs of residents. Since the previous Plan, the City of Custer updated its comprehensive plan, including an updated land-use map. Custer City has a 3-miles extraterritorial jurisdiction. However, the County explained there is currently no policy agreement in place. The City also has adopted a floodplain ordinance. Per Ordinance 15.16.041, designates the community development director as the floodplain administrator. The City's Planning Administrator fills this role.

Custer City: Climate and Geographic Design Criteria	
Ground Snow Load	40 psf
Wind Design/Speed (mph)	115
Seismic Design Cat.	A
Subject to Damage From	
Weathering	Moderate
Frost Line Depth	48"
Termite	Slight to Moderate
Winter Design Temp	-7
Ice Barrier Underlayment Req.	Yes
Flood Hazards	NFIP
Air Freezing Index	2000
Mean Annual Temp (Fahrenheit)	41°F

**Table 4.51.** Custer City, SD Climate and Geographic Design Criteria (Ordinance 15.04.012 Amendments to the International Residential Code).

Custer City has adopted certain codes from 2018 International Residential Code for one- and two-family dwellings ch. 1-24, 44 and appendices E, H, J, and Q; the 2018 International Building Code and appendices C, G, I and J; 2018 International Fire Code, 2018 International Fuel Gas Code, 2018 International Existing Building Code, and the basic fire protection code of the State of South

Dakota. In addition to this the City also added certain amendments to the residential code for one and two-family dwellings.<sup>107</sup>

From 2010-2020 Fairburn had a 29% decrease in population. The Town does not have zoning or require any building permits. It is believed there has been no growth in the last five years, due in part to the water association not accepting new hookups.

The decennial census shows a 4% decrease in population from 2010 to 2020 in Hermosa. However, the Town of Hermosa has had a total of 62 permits issues for new construction. Hermosa's growth and development has a close relationship with Rapid City. The Town explained, many new residents work in Rapid City but have opted to live in Hermosa. In 2020 and 2021 there were new highs for new stick-built homes in town. The trend in the next five years is expected to continue, with already planned subdivisions expanding. The Planning and Zoning Board is working to incorporate other housing options such as tiny homes into their ordinances.

The Town of Hermosa has a 1-mile extraterritorial area policy agreement in place with Custer County. The agreement is in place to help provide more effective and economical services for future growth and development.<sup>108</sup> Hermosa also has adopted a floodplain ordinance, in which they contract out the role of floodplain administrator to a private engineer, Elmer Claycomb.

New subdivisions hooking up to municipal water and sewer<sup>109</sup> are required to a degree to annex into the town.<sup>110</sup> The Town is currently working with Lone Coyote development west of HWY 79 to bring them water and annex them into the Hermosa. Part of the challenge is the community resides in both Pennington and Custer County. Hermosa Hills and Walnut Grove subdivisions continue to add homes yearly. Hermosa has also had commercial development with a new Dollar General store and repurposing of existing buildings in town, Hermosa Coffee House, and Farmhouse Vintage & Designs.

Hermosa's Active Transportation Plan makes recommendations for following FEMA guidance for land in the floodplain, to reserve the areas of public land north of 3<sup>rd</sup> St, for develop of a park.<sup>111</sup> The Town also uses the FEMA conditional letter of map revision, 2013, to help guide planning and zoning decisions.<sup>112</sup>

The Town's ordinance doesn't allow manufactured homes older than 20 years without board approval. Newer manufactured homes are under HUD standards and built to withstand higher wind speeds.

**Town of Hermosa - Ordinance XV Land Use – Chapter 153 Mobile Homes; Parks:**

2. No mobile home shall be placed within the town limits that was manufactured more than 20 years before the date of application. A variance may be issued upon approval of the Board of Trustees.

**Highlight from Town of Hermosa Comprehensive Plan**

Policies: To encourage the preservation and management of Battle Creek and tributary flood hazard areas.

The Towns comprehensive plan mentions the topography and geology of the area will affect development in Hermosa. Infrastructure such as gravity-flow water, sanitary sewer, drainage control facilities, and street construction requirements are subject to the drainage basins in the area as well as the ridges that separate the basins.<sup>113</sup>

According to the decennial census, the town of Pringle has seen a population of 3% from 2010 to 2020. Pringle did not have any building permits to report. Pringle has not seen any new development

<sup>107</sup> Custer City Municipal Code: Title 15 Building and Construction.

<sup>108</sup> *One Mile Extraterritorial Area Policy Agreement*. 2021.

<sup>109</sup> Hermosa Ordinance 51.02 Use of Municipal Sewers Required.

<sup>110</sup> Hermosa Ordinance 50.22 Water Users Outside of Town Limits.

<sup>111</sup> *Active Transportation Plan*. 2019.

<sup>112</sup> *Town of Hermosa Comprehensive Plan*. 2018.

<sup>113</sup> *Ibid. Town of Hermosa Comprehensive Plan*.

or growth within city limits. Development seems to be happening outside of the city limits about three-four miles outside of town.

## UNIQUE OR VARIED RISK ASSESSMENT

*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.*

After conducting the risk assessment for each jurisdiction, FIRM maps show some areas are more prone to flooding than others. While all areas are susceptible to wildfire, historical fire data shows jurisdictions in close proximity to forested areas have a higher chance of wildfire. Summer storms can have a strong impact on the eastern portion of the county. The towns of Hermosa, Fairburn, and Buffalo Gap have had serious encounters due to their location on the front range of the Black Hills.<sup>114</sup>

To better examine the flood and wildfire risk in communities, *Risk Factor* was used as a reference. *Risk Factor* uses a *First Street Foundation* modeling method which shows specific locations risk of wildfires and flooding from rain, rivers, tides, and storm surge. The model was created using decades of peer-reviews, climatology models, hydrology, and statistics<sup>115</sup>. The flood and wildfire risks evaluated are social, residential, commercial, infrastructure and roads. The overall rating ranges from minor, moderate, major, severe, and extreme. The rating system looks at the percentage properties at risk with a 30-year prediction. The model considers the changing of climate in its findings.<sup>116</sup> The unique risk for each jurisdiction is listed below.

Flooding risk is based on the likelihood of a building footprint being flooded. Figure 4.5 shows the rating system for Flood Factor. The First Street Foundation Wildfire Model assists in determining the probability of a community's risk of being directly impacted by wildfire or indirectly impacted by embers. The risk rating incorporates the impacts wildfire can have on infrastructure, emergency services, transportation, businesses, and finances of homeowners.<sup>117</sup> Table 4.52 outlines the rating scale.

Fire Factor Rating System	
Risk Rating	% of properties with chance of burn over next 30 years
Minimal	Little to no risk
Minor	Less than 1%
Moderate	1-6%
Major	6-14%
Severe	14-26%
Extreme	More than 26%

**Table 4.52.** Fire Factor Summary. (Risk Factor. 2022. *How is my fire factor calculated?*)

## Town of Buffalo Gap

Buffalo Gap occasionally has experienced issues with flooding, often caused by rapid snow melt or the flooding of Beaver Creek. The creek starts near Custer City and flows close to Pringle, through Wind Cave National Park, enters Buffalo Gap from the northwest, and eventually reaches the Cheyenne River.

The parts of town most affected by flooding events are those in the designated floodplain. There have been rare cases where the entire town was affected by flooding, believed to be due to plugged culverts and poor drainage. Damage primarily consists of gravel wash on roads, debris clogging

<sup>114</sup> Custer County Pre-Disaster Mitigation Plan. 2018

<sup>115</sup> First Street Foundation. *First Street Foundation Flood Model 2020 Methodology Overview*

<sup>116</sup> Ibid. First Street Foundation.

<sup>117</sup> Risk Factor. 2022

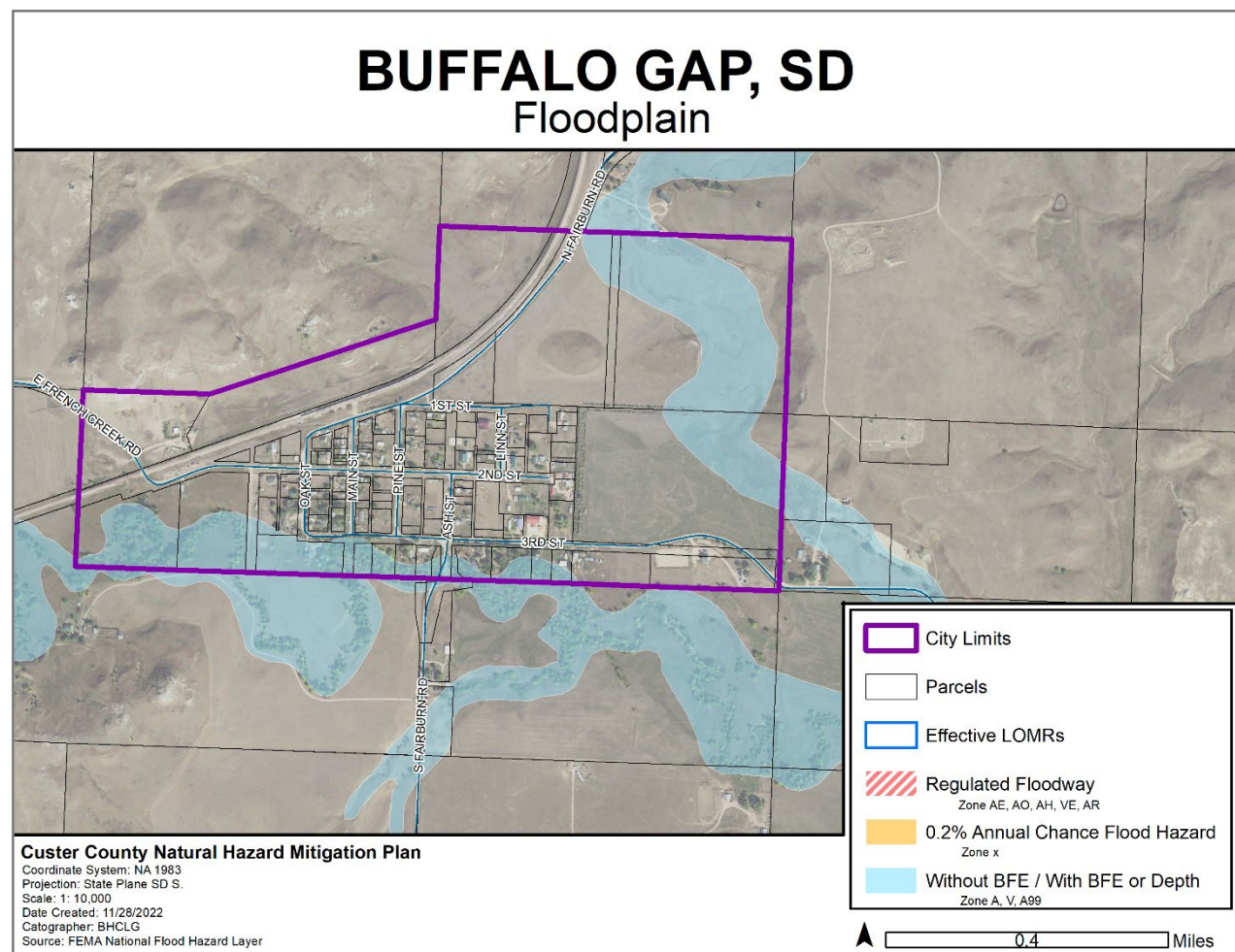


culverts, and miscellaneous trash deposits on streets and roads. Some areas the Town mentioned as having past flooding issues are the post office, along Pine Street, and an alley way behind the establishment, the Watering Hole.

The town of Buffalo Gap has a Flood Hazard Boundary Map (FHBM) effective as of November 5, 1976, and a Flood Insurance Rate Map (FIRM) effective as of January 6, 2012. However, Buffalo Gap doesn't currently participate in the NFIP program and is sanctioned (Appendix H).

Flood Factor: Flooding risk over the next 30 years	
Category Type	Risk
Overall, Buffalo Gap	Minor
Residential	Minor
Road	Minimal
Commercial	Minimal
Critical Infrastructure	Minimal
Social	NA

**Table 4.53.** Flood Factor Summary. Buffalo Gap, SD. (Risk Factor, 2022, Flood Factor).



**Figure 4.12.** Buffalo Gap floodplain. FEMA Flood Hazard Layer.

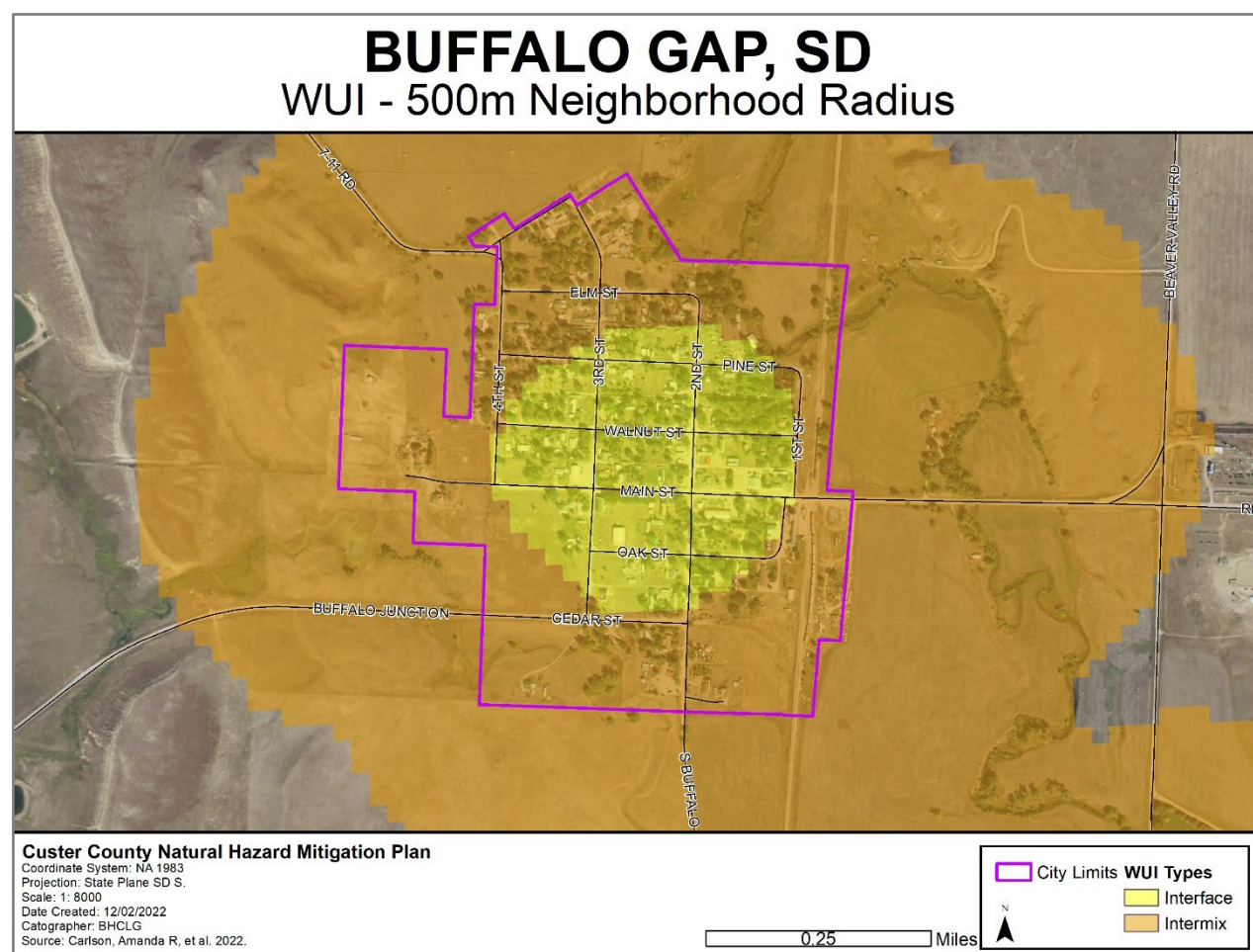
The Town representative explained, due to its topography Buffalo Gap tends to have less extreme weather than the surrounding areas. Like all areas of the county, Buffalo Gap is susceptible to summer and winter storms. The Town explained that during such events the community center can be utilized as a shelter, excluding tornado events. The community center was not built to withstand tornado strength winds. The *Custer County Pre-Disaster Mitigation Plan*, 2018, stated the Town received a PDM grant for a community safe room. However, neither the State OEM office nor the Town could verify this. The only known updates to the

community center was the placement of new siding. The Town did receive a FEMA grant for a new generator for the community center, that was installed in 2016. <sup>118</sup>

Wildfires are a risk to the entire county and all jurisdictions. The 2016 Dudley Fire that started in Buffalo Gap caused damage to at least one structure and destroying 175 tons of hay. The fire consumed more than 6 acres. <sup>119</sup>

Fire Factor: Wildfire risk over the next 30 years	
Category Type	Risk
Overall, Buffalo Gap	Severe
Residential	Severe
Commercial	Severe
Critical Infrastructure	Severe
Social	NA

**Table 4.54.** Fire Risk Summary. Buffalo Gap, SD. (Risk Factor. 2022. Fire Factor).



**Figure 4.13.** Buffalo Gap WUI. 500m neighborhood radius WUI. (Amanda R, et al. 2022).

## City of Custer City

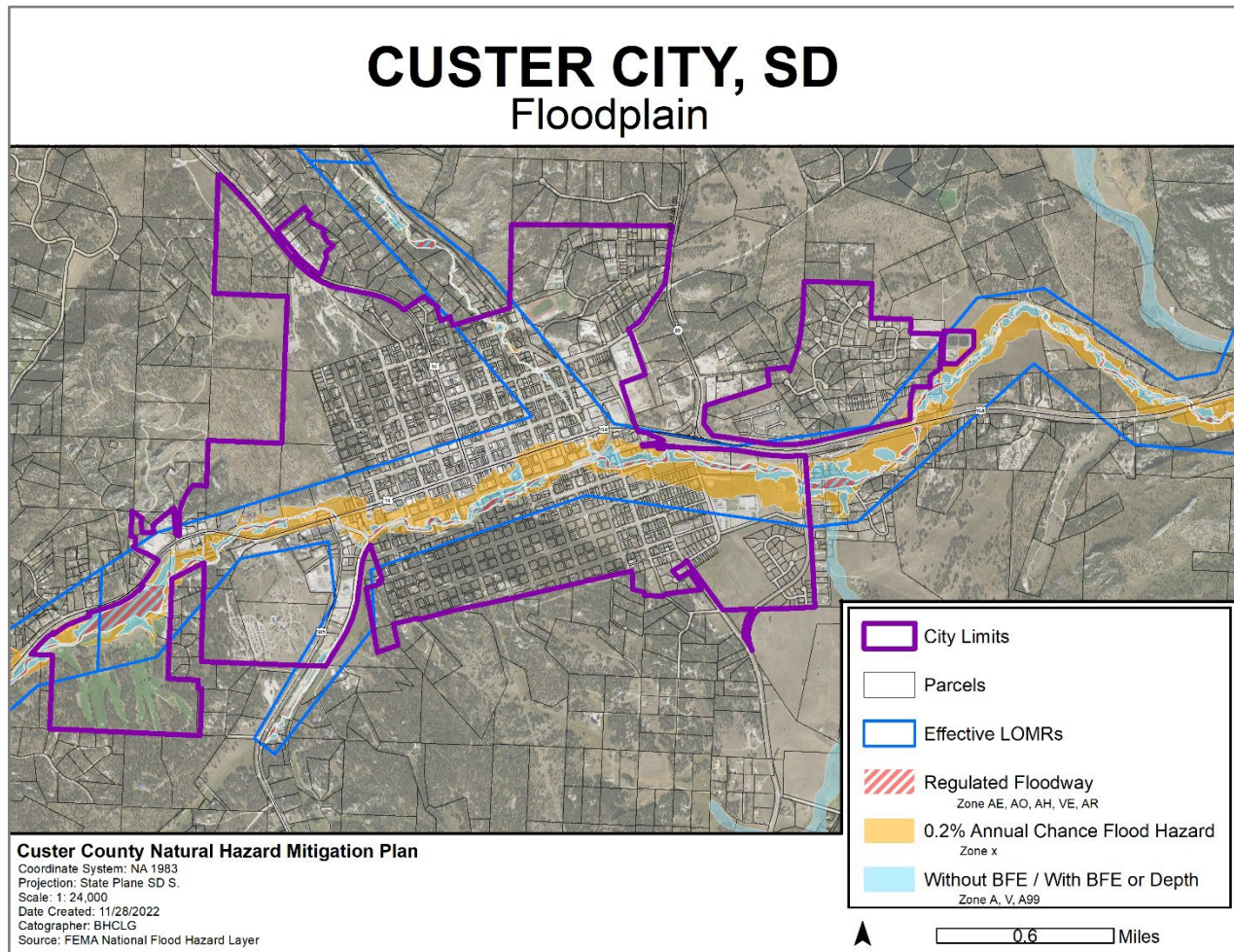
Custer City has a major concern with flooding. Custer City's Flood Hazard Boundary Map (FHB) was effective as of May 24, 1974, and Flood Insurance Rate Map (FIRM) was effective as of January 6, 2012. The City adopted a *Flood Damage Prevention Ordinance* with the purpose of protecting public health, safety, and general welfare, and to minimize losses due to flood conditions in specific

<sup>118</sup> Custer County Pre-Disaster Mitigation Plan. 2018

<sup>119</sup> NewsCenter1. 2016.



areas.<sup>120</sup> The ordinance identifies flood hazard areas at the Highway 385 Tributary, French Creek and Laughing Water Creek that are subject to periodic inundation. All land within city limits falling in areas of special flood hazards is subject to the City's Flood Damage Ordinance. Several of the City's plans and ordinances address issues of flooding, such as the *Custer Parks Recreation Master Plan*, *Custer City Comprehensive Plan*, and the City Ordinances.



**Figure 4.14.** Custer City floodplain. FEMA Flood Hazard Layer.

## Custer City Comprehensive Plan - Goals

### Park & Recreation:

- Limit development along French Creek to maintain a greenway through town that connects existing park facilities.

### Emergency Preparedness:

- Apply for a Community Planning Assistance for Wildfire (CPAW) grant to assess wildfire risk and identify wildfire mitigation techniques for development to improve community resiliency
- Continue to pursue opportunities for and encourage the removal of structures and property from flood risk areas and limit future development in designated floodplains.
- Work with Custer County Emergency Management to establish an emergency shelter with backup power in the community.

### Community Development:

- Acquire undeveloped properties in the floodplain and Big Rock Park, as feasible.
- Work with Custer County staff and officials and consider social, economic, and environmental factors to identify areas with high potential for future city growth.

<sup>120</sup> *Custer City Municipal Code: Title 15 Building and Construction. Chapter 15.16 Flood Damage Prevention.*

- Draft a new ETJ boundary for adoption by Custer County and provide opportunities for public input, particularly from city and county residents affected by the changes.
- Monitor growth and revise the ETJ as necessary, at least every five (5) years.
- Request input from Custer County regarding subdivision requests in the ETJ.

### **Custer City: Title 16 Subdivisions: Chapter 16.12 Preliminary Plats**

K. Periodic inundation. Any portion of the land in or adjacent to the subdivision subject to periodic inundation by storm drainage, overflow or ponding shall be clearly shown and identified on the plat.

R. The storm drainage plan shall contain the following information:

1. Location of proposed drainage ways, streams, and ponds in subdivision
2. Location and size of proposed drainage structures including culverts, bridges, pipes and drop inlets
3. Area of land contributing runoff to each drainage structure.
4. Location of easements and right-of-way for drainage way, maintenance, and access thereof
5. Direction of water flow throughout the subdivision
6. A more detailed drainage plan may be required by the public works director or designee

### **Custer City: Title 16 Subdivisions: Chapter 16.16 Final Plats**

T. Sanitary sewer and water plans and specifications shall be approved by the South Dakota Board of Water and Natural Resources.

### **Custer Parks Recreation Master Plan**

#### **Park& Recreation:**

- Preserve existing natural vegetation or provide buffers within stream corridors.
- Preserve natural drainage areas and utilize for open space connections.

French Creek and Laughing Water Creek and their tributaries provide an important function in the natural ecosystem of Custer City. These drainageways, when preserved provide natural stormwater control, preserve natural vegetation, increase biodiversity, and improve overall water quality throughout Custer City. In addition to the ecological benefits, French Creek and Laughing Water Creek can provide recreational benefits for Custer City. Natural drainageways provide opportunities for trail corridors and linear park connections between existing and new parks. It is recommended that these drainageways and their tributaries be properly managed and utilized for stormwater control and greenway connections for the Custer City parks and open space system.



**Image 4.4** Areal image of the Aug 2, 2019 flood in Custer City. (Image Courtesy of Custer County Search and Rescue).



**Image 4.5.** Aug 2, 2019 flood in Custer City. (Image Courtesy of Argyle VFD).

Historically Custer City has experienced several flooding events. The most recent was on August 2, 2019. It was estimated 6-7" of rain fell west of Custer City, with 4.38" falling with three hours.<sup>121</sup> The rainfall moved downstream of French Creek flooding parts of the city, images 4.4 and 4.5. The

<sup>121</sup> Huber, Makenzie. 2019.

event caused road closures and some area evacuations.<sup>122</sup> Over 700 customers of Black Hills Energy lost power after the flood waters reached the substation. There were no reports of injuries from the storm or flooding, but significant amount of road damage in the Upper and Lower French Creek areas were recorded.<sup>123</sup> The City's damage assessment reported \$79,535.54 in damages resulting from the 2019 event. In 2021, FEMA funding assisted with the acquisition of two homes in the floodplain. The houses were purchased, demolished, and the land converted to open space. The flooding from 2019 contributed in part to the acquisition of these homes.

<b>Flood Factor: Flooding risk over the next 30 years</b>	
<b>Category Type</b>	<b>Risk</b>
Overall, Custer City	Moderate
Residential	Moderate
Road	Moderate
Commercial	Major
Critical Infrastructure	Moderate
Social	Major

**Table 4.55.** Flood Factor Summary. Custer City, SD. (Risk Factor, 2022, Flood Factor).

The threat of wildfire is also a major concern for the city. Wildfires are a common occurrence in the Black Hills and over the years several have come into close proximity to Custer City. In 2022, two nearby fires caused the city to be on guard for possible evacuations. The Wabash Springs Fire, April 7, 2022, located only a few miles from the city, and the Elephant Fire, June 29, 2022, located seven miles from the city. Any time a fire is in close vicinity to the city, there is monitoring to ensure the safety of residents and property.

Fuel treatment projects can help to reduce the impact of wildfire in the city. Several locations have had fuel treatments including, near Little Italy Road, south of the football fields, and Pageant Hill Road. Additional areas that would benefit from treatment include, north of the Boothill subdivision, the corner of Willow Creek Road and Sylvan Lake Road, and west of Pageant Hill. The City of Custer is also currently developing a forestry plan to help reduce hazardous fuels and promote forest health.

<b>Fire Factor: Wildfire risk over the next 30 years</b>	
<b>Category Type</b>	<b>Risk</b>
Overall, Custer City	Major
Residential	Major
Commercial	Major
Critical Infrastructure	Major
Social	Major

**Table 4.56.** Fire Risk Summary. Custer City, SD. (Risk Factor, 2022, Fire Factor).

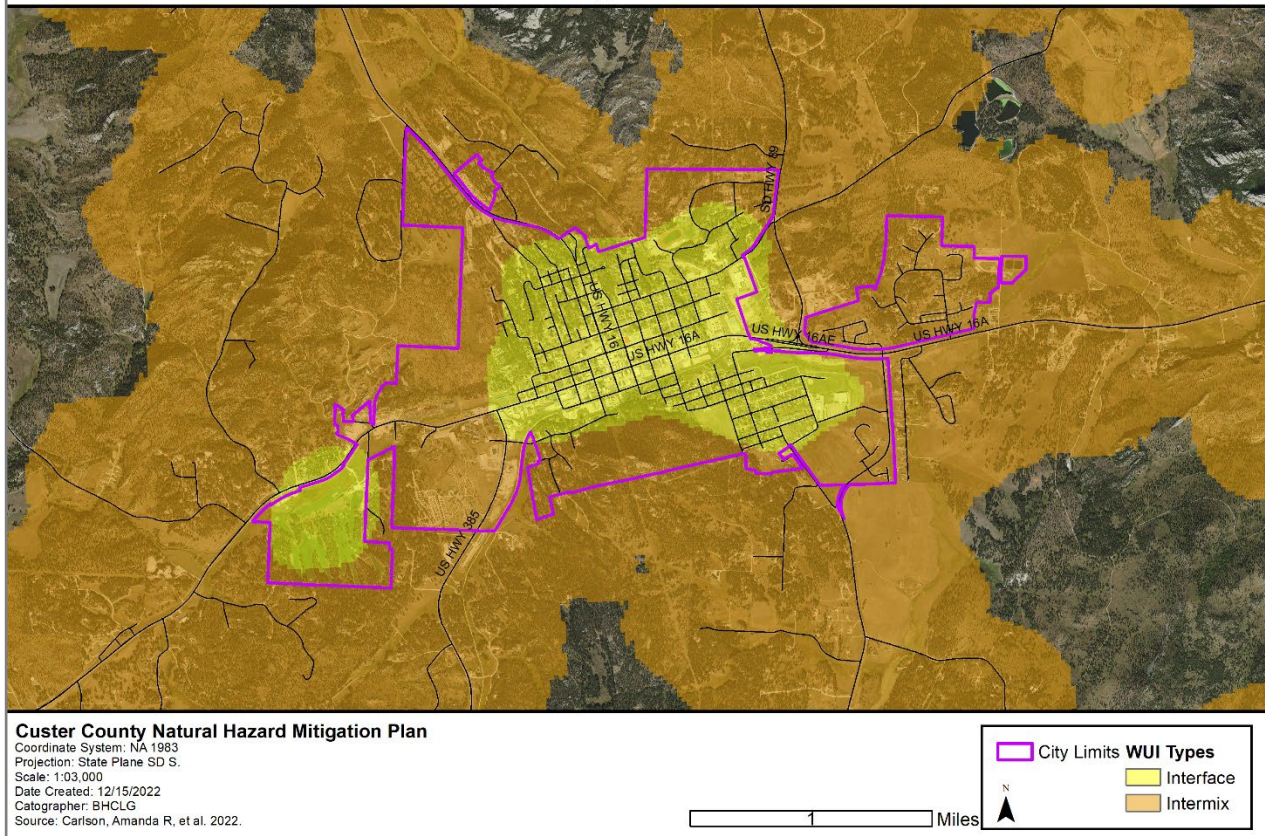
<sup>122</sup> NOAA. *August 2, 2019 Heavy Rainfall and Flooding in Custer, SD.*

<sup>123</sup> Reagan, Nick. 2019.



# CUSTER CITY, SD

## WUI - 500m Neighborhood Radius



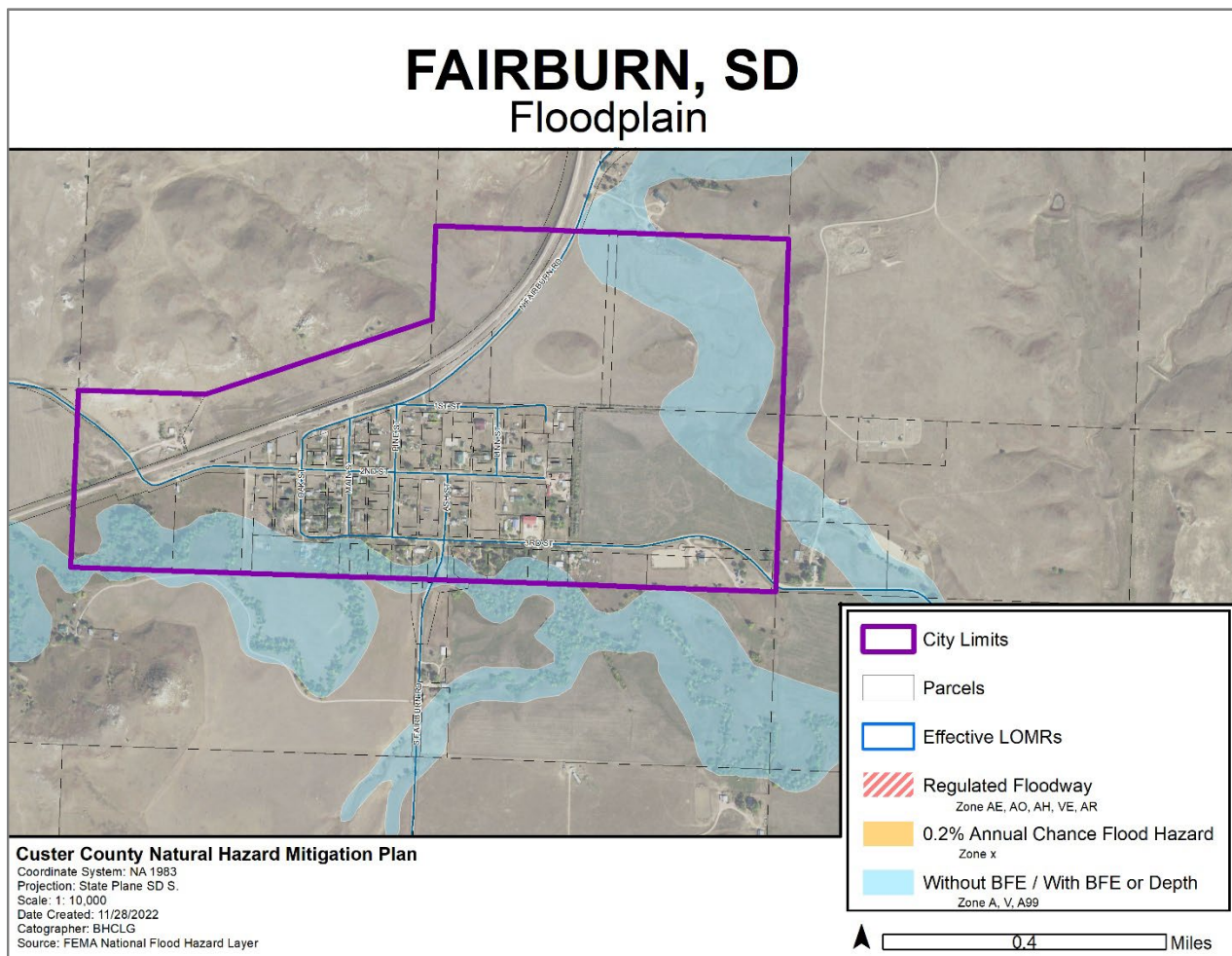
**Figure 4.15.** Custer City WUI. 500m neighborhood radius WUI. (Amanda R, et al. 2022).

### Town of Fairburn

The town of Fairburn has a Flood Insurance Rate Map (FIRM) identified and made effective on January 6, 2012, however, doesn't participate in the NFIP program and is currently sanctioned (Appendix H). The Town expressed at this time they don't have the capacity to undertake the requirements needed to participate in the NFIP program. A resident of the Fairburn explained they had no memory of flooding issues in Fairburn, while there had been instances of seeing the water rising in French Creek, there have been no spill over events. The Town's representative also conveyed there was no knowledge of or issues of flooding.

Flood Factor: Flooding risk over the next 30 years	
Category Type	Risk
Overall, Fairburn Gap	Minor
Residential	Minor
Road	Moderate
Commercial	Minimal
Critical Infrastructure	Minimal
Social	NA

**Table 4.57.** Flood Factor Summary. Fairburn, SD. (Risk Factor, 2022, Flood Factor).



**Figure 4.16.** Fairburn floodplain. FEMA Flood Hazard Layer.

Fairburn is at risk for prairie fires or grassland fires. One of the most recent fires that took place near Fairburn was the Agate Bed Fire, March 2021. The fire started about nine miles east of the town on the Buffalo Gap Grasslands. The acreage of damage was estimated to be more than 2,000 acres, with high winds contributing to the rapid spread of the fire.<sup>124</sup> The South Fairburn Road Fire, which was near the town, burned roughly 75 acres.

Fire Factor: Wildfire risk over the next 30 years	
Category Type	Risk
Overall, Fairburn	Extreme
Residential	Extreme
Commercial	Extreme
Critical Infrastructure	Extreme
Social	NA

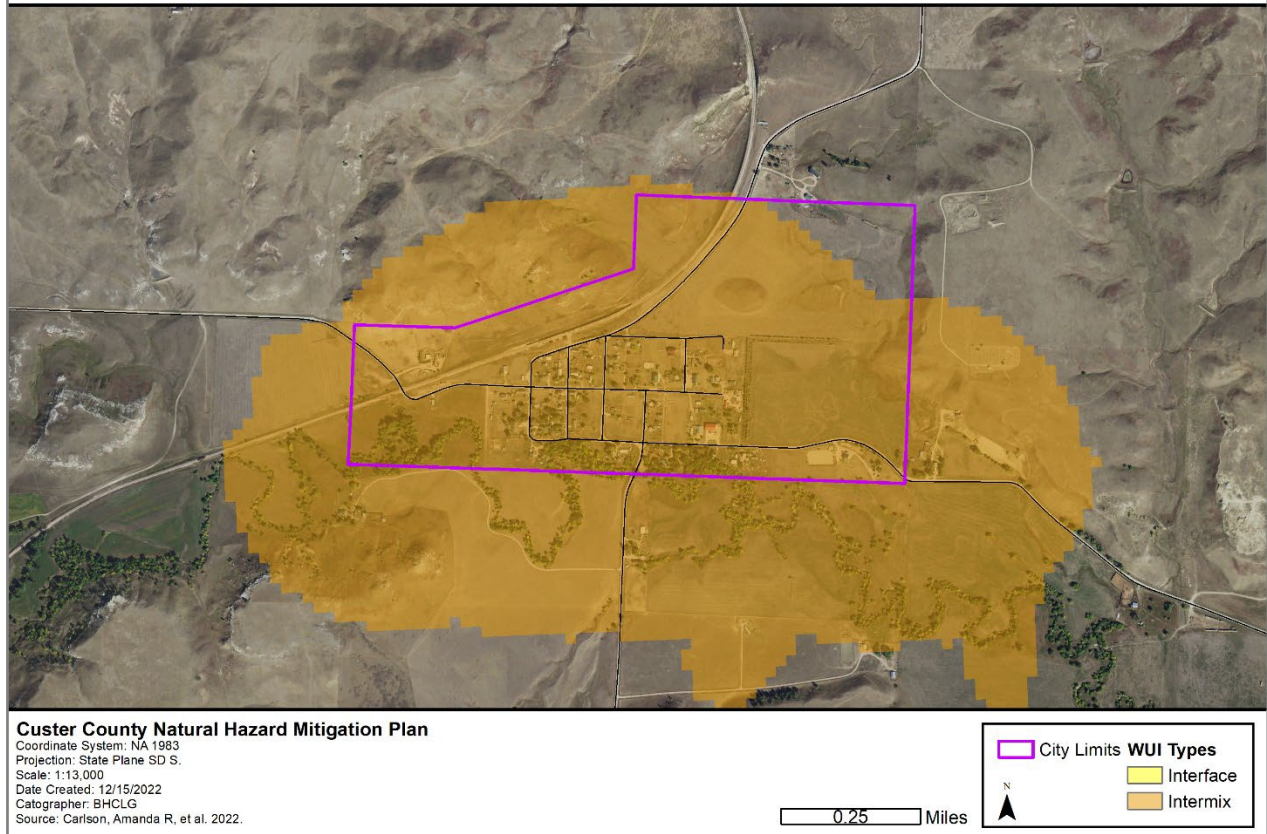
**Table 4.58.** Fire Risk Summary. Fairburn. (Risk Factor. 2022. Fire Factor).

<sup>124</sup> Gabbert, Bill. 2021



# FAIRBURN, SD

## WUI - 500m Neighborhood Radius



**Figure 4.17.** Fairburn WUI. 500m neighborhood radius WUI. (Amanda R, et al. 2022).

### Town of Hermosa

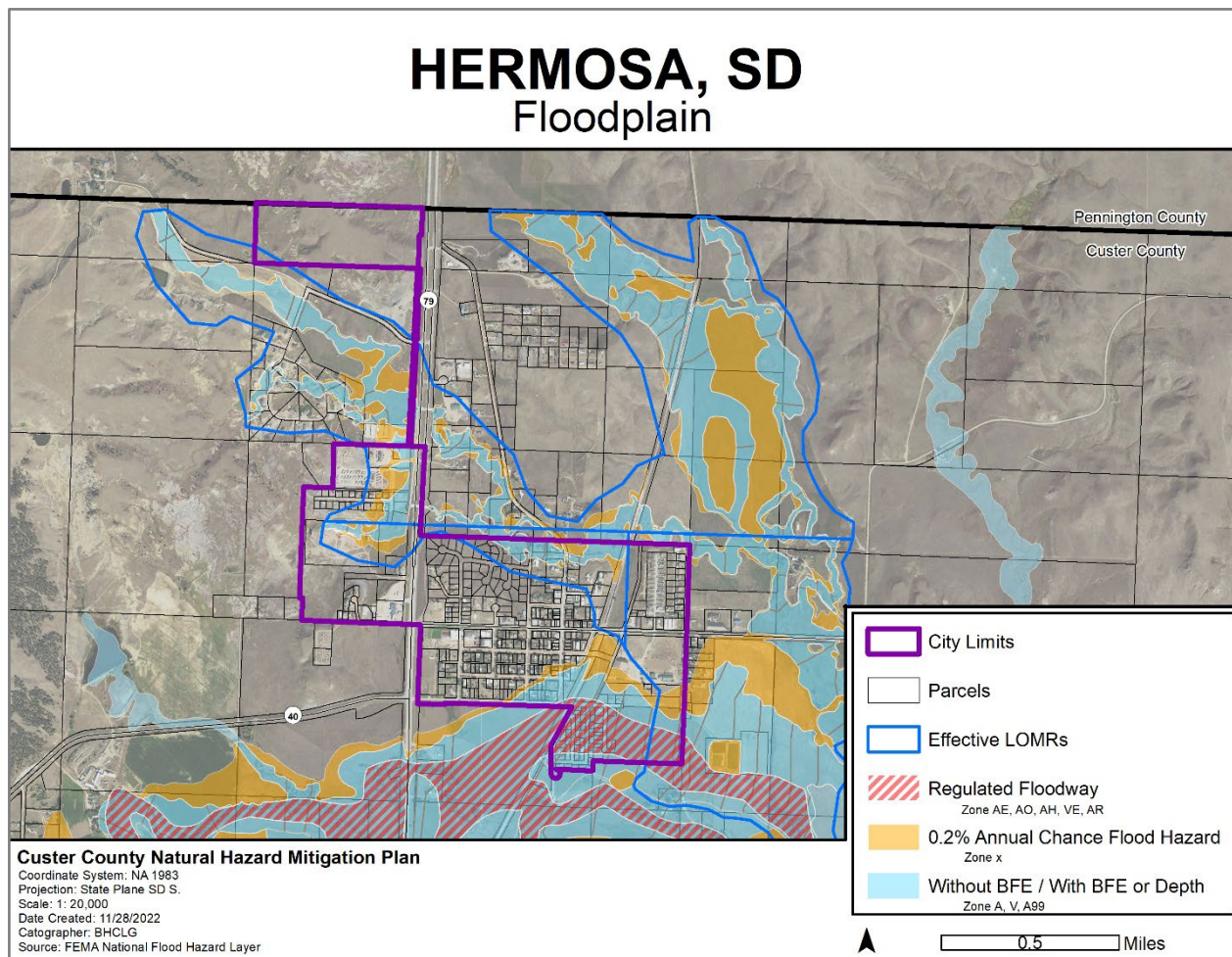
The town of Hermosa has a Flood Insurance Rate Map (FIRM) that was identified and made effective on January 6, 2012. The FEMA FIRM shows that the majority of the flood areas are in the south and eastern part of town. A small part of northeast Hermosa is also designated a floodplain. Topography and elevation have a very important effect upon stream flow drainage and low land flooding. The Town's comprehensive plan makes a recommendation for Hermosa to look into participating in FEMA's CRS program. The Town representative explained that they have researched the program and concluded that at the time they did not have the capacity to maintain with the program requirements.

#### Town of Hermosa Comprehensive Plan:

A possible non-structural option is for Hermosa to join FEMA's Community Rate System Program...Investigation of this program should be done in cooperation with the Custer County Office of Emergency Management as the benefits may extend beyond municipal limits.

Flood Factor: Flooding risk over the next 30 years	
Category Type	Risk
Overall, Hermosa	Minor
Residential	Minor
Road	Minor
Commercial	Minimal
Critical Infrastructure	Minimal
Social	Minimal

**Table 4.59.** Flood Factor Summary. Hermosa, SD. (Risk Factor, 2022, Flood Factor).



**Figure 4.18.** Hermosa floodplain. FEMA Flood Hazard Layer.

Battle Creek, a major drainage system, enters Hermosa from the southwest and meanders through the lower portion exiting from the east. The creek comes from the west and includes a drainage area of 178sqmi. Highway 79 and Highway 40 on the west side of Hermosa are at 3,390ft elevation. Highway 40 and DM&E railroad tracks on the east side of town are at 3,310ft elevation. Ferguson St. and Donna St. on the southeast side of town sit at 3,298ft. The highest point in Hermosa is listed as 3,400ft. There is a difference of approximately 100ft. elevation between the highest point and the lower end of Ferguson St.<sup>125</sup> The creek is approximately 680-750ft. from the Ferguson Subdivision to the east.<sup>126</sup>

On August 17, 2007, Hermosa saw a major flooding event. Battle Creek saw 1-3 inches of rainfall from roughly seven miles west of Hermosa, prompting a flash flood warning for the area. Rain events continued on through most of the evening. It was estimated the Hermosa area saw 5-7 inches of rainfall, in Battle Creek and Grace Coolidge Creek.<sup>127</sup> Radar estimated that a 100 square mile area received 2 inches of rain and a 50 square miles area received 4-7 inches. Rain gages in Hermosa reported 8/10 inch in fifteen minutes. USGS the stream gage on Battle Creek reported a rise in water of 12 feet in an hour and a half. A rain gage in Ghost Canyon, west of Hermosa, recorded five inches of rain.<sup>128</sup> The stream depth was 2.98 feet, and the crest was recorded at 14.91 feet. The flood stage is 8 feet, with major flooding occurring at 13 feet. The record stage for this gage system was 17.7ft.<sup>129</sup>

<sup>125</sup> Custer County Pre-Disaster Mitigation Plan. 2018

<sup>126</sup> Ibid. Custer County Pre-Disaster Mitigation Plan

<sup>127</sup> National Weather Service. (2022). Hermosa, SD, Flash Flooding of August 17, 2007.

<sup>128</sup> Ibid. Custer County Pre-Disaster Mitigation Plan

<sup>129</sup> Ibid. Custer County Pre-Disaster Mitigation Plan.



The 2007 flood started in the southwestern portion of Hermosa closest to Battle Creek. The eastern part of Whitney St. [*lowest east-west street*], the southern parts of 2<sup>nd</sup> St. and 3<sup>rd</sup> St. [*lowest north-south streets*], and eastern Manning St [*one block above Whitney St.*] all sustained flood damage. There is only a few feet elevation difference between this housing area and Battle Creek under normal conditions. The impacted area is also fairly close to the DM&E (currently RCP&E) railroad grade.<sup>130</sup>



**Image 4.6.** Aftermath of Aug 2007 flood in Hermosa. Image provided by Town of Hermosa.

The sudden release of impounded flood water and debris created damage and destruction to several homes located on both sides of the railroad grade. Three houses were destroyed and at least 30 were flooded. This number was increased to 6-7 destroyed and 49 flooded after engineers did individual property surveys. One home on the west side of the railroad grade was destroyed but the majority of damage occurred on the east side. The house located on Ferguson St. and Donna St. of the Ferguson Subdivision in southeast Hermosa are a mixture of stick built and modular construction. Houses classified as uninhabitable mostly sustained a combination of foundation damage and severe water

damage to the interior. The Town explained, this subdivision is believed to not have basements, as it has always been in the floodplain. Flood damage to other houses varied from minor foundation repair to wet crawl and soaked insulation to interior flood and wall damage.<sup>131</sup>

The Small Business Administration, at the request of state and local officials, made low interest loans available to homeowners and businesses. With fourteen homes loans totaling \$661,700, and three business loans totaling \$193,400.<sup>132</sup>

Flood waters from Battle Creek generated a considerable amount of debris. Highway crews from the State of South Dakota and Custer County removed over 326 tons of debris within seven days of the event. Debris was removed from Highways 79, 40, and 36 as well as Lane Johnny Creek area and Ghost Canyon. Debris from the Ferguson Subdivision was also removed with state and local governments and National Guard manpower and equipment. In addition, Custer County Highway Department spent eleven days in conjunction with the West River Incident Management Team removing flood debris and transporting the material to the Rapid City Landfill.<sup>133</sup>



**Image 4.7.** Aftermath of Aug 2007 flood in Hermosa. DM&E railroad system damage. Image provided by Town of Hermosa.

The DM&E railroad system was heavily damaged by Battle Creek. Water hit the railroad grade washing about 4 feet off the top of a 6-foot-high bed. Approximately ½ mile of rail system was damaged with about 1,000 feet of track washed off the top of the grade. A wooded trestle was severely damaged and had to be replaced. The rail system carries daily traffic both ways and was out of service for about ten days. Estimated damages were \$800,000.<sup>134</sup>

In 2009, Ferber Engineering conducted an H&H study of the drainage of Billover Creek and Old Dairy tributary. The project included the creation of a master drainage plan and topographic

<sup>130</sup> *Custer County Pre-Disaster Mitigation Plan. 2018*

<sup>131</sup> *Ibid. Custer County Pre-Disaster Mitigation Plan*

<sup>132</sup> *Ibid. Custer County Pre-Disaster Mitigation Plan*

<sup>133</sup> *Ibid. Custer County Pre-Disaster Mitigation Plan*

<sup>134</sup> *Ibid. Custer County Pre-Disaster Mitigation Plan*



modeling. The Town explained a drainage study was not completed for Battle Creek. In 2013, a Conditional Letter of Map Revision was accepted by FEMA.

The Town created the *Hermosa Emergency Shelter Management* pamphlet to help educate the public on preparedness for severe storms. The pamphlet provides information on basic steps to prepare for severe storms, and methods to stay informed about severe weather conditions. Hermosa has included this information on several occasions in their monthly newsletter, which circulates around 300 printed copies and 115 electronic copies. Information has also been distributed on Facebook, at City Hall, and local churches.

The Town's comprehensive plan also mentions that there are unstable shale soils in the area. Currently neither the Town of Hermosa nor the County have documentation showing the exact locations of these shale soils. The comprehensive plan encourages working towards identifying these areas of concern. The Town's ordinance on subdivision regulations may require additional data on areas believed to have certain soil characteristics.

**Town of Hermosa Ordinance  
Chapter 154.22**

9. *Other supplemental data.* If the property involves areas where the soil characteristics, terrain, drainage, geology, ground cover or location imposes unusual requirements, the Planning and Zoning Commission may request additional supplementary data to demonstrate the feasibility of subdividing the land.

**Town of Hermosa Zoning Ordinance Chapter 155.37**

Flood Way District:

- (A) This district is for the protection of drainage ways to permit the unimpeded flow of surface runoff without endangering life and health or causing property damage due to flooding. Specific uses and occupancies in the flood way district are governed by the Town of Hermosa Flood Plain Regulations, Chapter 151.
- (B) No building or development is allowed in the Flood Way.

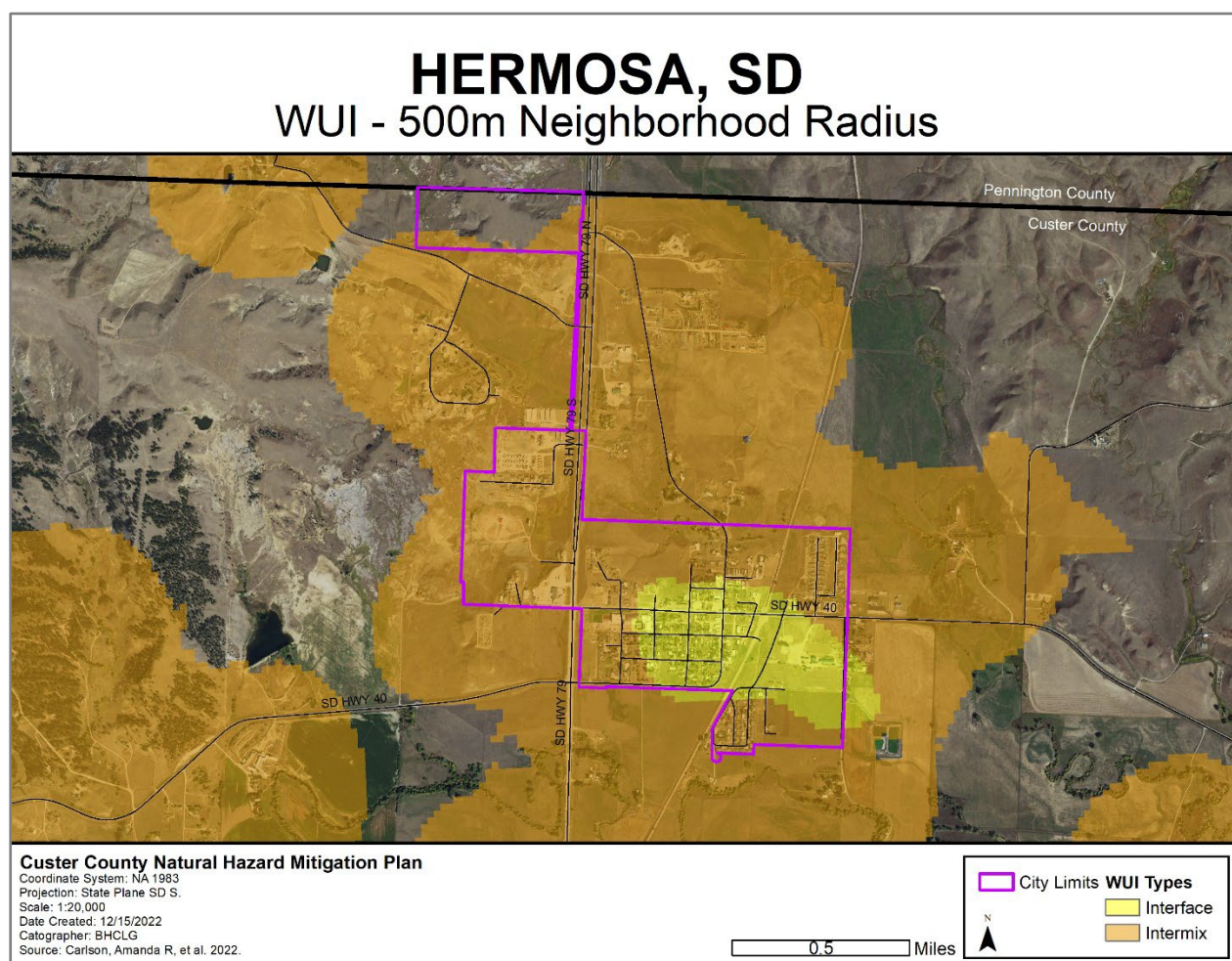
**Town of Hermosa Zoning Ordinance Chapter 154.39**

- (A) The governing body may require a drainage plan for any proposed subdivision. Adequate provision shall be made within each subdivision to provide for needed drainage facilities, and these provisions shall account for the ultimate development within the tributary area.
- (B) A storm sewer plan shall be prepared prior to other utility plans. These plans shall give preferential engineering considerations to gravity flow improvements.
- (C) Off-premise drainage easement and improvements shall be designed to provide for subdivision runoff into a natural channel
- (D) Low areas subject to periodic inundation or that fall within an area of special flood hazards as identified by FEMA, shall not be developed until evidence is provided to the governing body that:
  - 1) The nature of the land use will not impede surface water runoff and that the land will not be subject to appreciable damage by inundation.
  - 2) he area may be filled or improved in a manner so as to prevent the periodic inundation, provided that the fill does not retard the flow of surface waters or result in the increase of water level endangering life and property of others;
  - 3) Base flood elevations shall be established where not delineated by FEMA flood insurance rate maps; and
  - 4) Lowest floor elevations will be established to prevent damage to any structures.
  - 5) The governing body may require additional engineering information if they deem it necessary to make decisions regarding areas of questionable drainage.

Like all jurisdictions Hermosa is also susceptible to wildfire. Historically there have been several wildfires with a potential to pose a risk to the town of Hermosa, such as the Ghost Fire and the Agate Bed Fire. Shifts of strong winds can quickly change the direction of wildfires. It is possible that had there been a significant wind shift these fires could have moved towards the town.

Fire Factor: Wildfire risk over the next 30 years	
Category Type	Risk
Overall, Hermosa	Extreme
Residential	Extreme
Commercial	Extreme
Critical Infrastructure	Severe
Social	Extreme

**Table 4.60.** Fire Risk Summary. Hermosa, SD. (Risk Factor. 2022. Fire Factor).



**Figure 4.19.** Hermosa WUI. 500m neighborhood radius WUI. (Amanda R, et al. 2022).



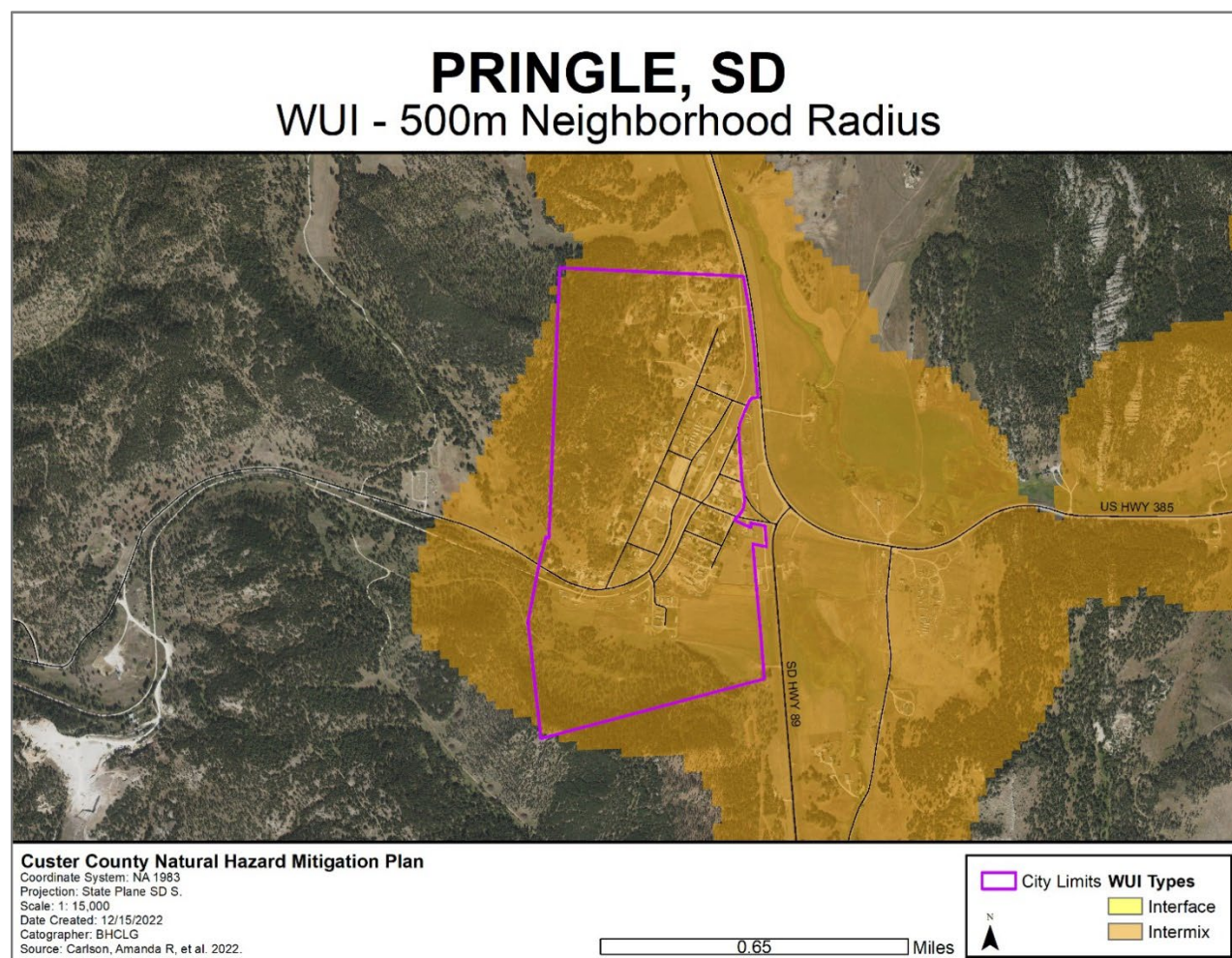
## Town of Pringle

The town of Pringle is currently unmapped by FEMA. The Town explained that there are no flooding issues within city limits. Beaver Creek runs next to the town but has never caused an issue to their knowledge.

Flood Factor: Flooding risk over the next 30 years	
Category Type	Risk
Overall, Pringle	Moderate
Residential	Moderate
Road	Moderate
Commercial	Moderate
Critical Infrastructure	Minimal
Social	NA

**Table 4.61.** Flood Factor Summary. Pringle, SD. (Risk Factor, 2022, Flood Factor).

Wildfires are perhaps one of the greatest risks for Pringle. The Myrtle Fire, 2012, is the most recent large fire to come near town limits. The fire started roughly three miles east of the Pringle, causing evacuations of the surrounding areas outside of town.<sup>135</sup> A total of 10,080 acres were burned. Pringle's representative explained the north-west of town was logged in 2021, and south of town roughly two to three years prior.



**Figure 4.20.** Pringle WUI. 500m neighborhood radius WUI. (Amanda R, et al. 2022).

<sup>135</sup> Gabbert, Bill. 2012

Fire Factor: Wildfire risk over the next 30 years	
Category Type	Risk
Overall, Pringle	Severe
Residential	Severe
Commercial	Severe
Critical Infrastructure	Severe
Social	NA

**Table 4.62.** Fire Risk Summary. Pringle, SD. (Risk Factor: 2022. Fire Factor).

<p align="center"><b>Ordinance No. 30</b></p> <p align="center"><b>Prohibiting Open Fires Except with Permit, Prescribing Types of Incinerators and Burners, Authorizing Granting of Permits and Providing Penalties:</b></p> <p>It shall be unlawful for any person to start any fires or burn any materials within any open space within the Town of Pringle, South Dakota, whether or not upon private property unless same be burned within an incinerator or burner constructed of non-combustible fire resistance materials in such a manner as to prevent burning matter to be emitted or blown there from, provided however, that permits for burning rubbish, rubble, weeds, grass and other substances may be issued by the Fire Chief.</p>
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## V. MITIGATION STRATEGY

**Changes/Revisions:** The mitigation strategy has been completely reformatted to include specific goals, objectives, and projects for not only the County but also each jurisdiction. Goals and projects from the previous Plan have been addressed in other sections of this Plan. Goals and projects that were completed have been removed from the list. Goals that were considered to be response and recovery were also removed. This reformatting looks at mitigation actions and projects that are specific to each hazard identified in the risk assessment.

### MITIGATION 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.*

### MITIGATION OVERVIEW

The *State of South Dakota Hazard Mitigation Plan* addresses several mitigation categories including warning and forecasting, community planning, and infrastructure reinforcement<sup>136</sup>. After meeting with the local jurisdictions, stakeholders and public input, a series of mitigation goals were established to best aid the County and jurisdictions in reducing the impact of hazards. Projects previously identified in the Plan were discussed to determine which of the projects had enough merit to be included in the updated Plan and to determine if the projects met the hazard mitigation needs of the County and jurisdictions. These projects were evaluated based on a preliminary evaluation of cost/benefit and priority based on either historical damages or anticipated damage. A *high* priority classification means the project should be implemented as soon as possible and would

<sup>136</sup> *State of South Dakota Hazard Mitigation Plan*. 2019

minimize losses at a very efficient rate. A *moderate* classification means the project should be carefully considered and completed after the high priority projects have been completed. A *low* priority means the project should not be considered in the near future. However, it is a potential solution and should not be eliminated until further evaluation can be completed. Such projects may be completed considering the failures of all other projects striving toward the same goal.

A timeframe for completion, oversight, funding sources, and any other relevant issues were addressed. These implementation strategies are geared toward the specific goal and area. Often, these projects will not encounter any resistance from environmental agencies, legal authorities, and political entities. Where these are a concern, address is made. Due to the amount of federal and state land in Custer County several projects listed may require collaboration with these entities.

## Custer County

### Custer County – Dam Failure

#### Goal 1: Reduce impact of possible Dam Failure in Custer County

**Project 1:** Continue 5-year inspections of High-Risk Dams in Custer County

Priority	Funding Source	Timeframe	Oversight
High	State DANR Resources/Staff	Ongoing	County, State, Federal

**Project 2:** Evaluate the possibility of relocating structures located within the downstream hazard of High-Risk Dams.

Priority	Funding Source	Timeframe	Oversight
Low	County; State; Federal	Ongoing	County, State

### Custer County – Drought

#### Goal 1: Reduce impact of Drought in Custer County

**Project 1:** Continue monitoring drought conditions throughout Custer County.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	County, State

**Project 2:** Consider adopting water conservation measures during extreme drought conditions.

Priority	Funding Source	Timeframe	Oversight
High	County	Ongoing	County

**Project 3:** Prepare public information packet to increase awareness of drought hazards and measures that may be taken to reduce health and safety risks.

Priority	Funding Source	Timeframe	Oversight
Med	County	Ongoing	County

\*Consider deliver methods that will reach vulnerable populations in the County.



## Custer County – Extreme Temperatures

### Goal 1: Reduce impact of Extreme Temperatures in Custer County

**Project 1:** Provide public information and education materials on personal safety during extreme temperatures.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	County
*Consider deliver methods that will reach vulnerable populations in the County.			

## Custer County - Flooding Hazards

### Goal 1: Reduce impact of flooding in Custer County

**Project 1:** Relocate East Custer Sanitary & Water District sewer lines located in a hazard prone area.

Priority	Funding Source	Timeframe	Oversight
High	State; Federal	1-3 years	County
*The pipes are not owned by the County.			

**Project 2:** Continue enforcing Ordinance #6 Revised Flood Damage Prevention

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	County

**Project 3:** Ensure that the County has at least two staff formally trained in floodplain administration.

Priority	Funding Source	Timeframe	Oversight
Med	County; Federal	1-5 years	County

**Project 4:** Work with Custer City and other agencies to implement strategies created in the French Creek Mitigation Plan

Priority	Funding Source	Timeframe	Oversight
High	Custer City; County; State, Federal	1-2 years	County; Custer City

**Project 5:** Identify areas in the county that may require additional flood gages and update gages to have satellite monitoring capabilities

Priority	Funding Source	Timeframe	Oversight
Med	County	1-2 years	County

**Project 6:** Explore options to relocate the Highland's Fire Hall.

Priority	Funding Source	Timeframe	Oversight
High	County, Federal	1-5 years	County
*Highland's Fire Hall currently sits in a low laying area. County Roads to the south and north are known to be subject to flash flooding. In the event both roads are flooded and impassable the Fire Department would be unable to respond to any calls.			

**Project 7:** Upgrade culvert and abutments near Battle Creek Rd and Tiffany Lane.

Priority	Funding Source	Timeframe	Oversight
High	County	1-5 years	County
*The crossing is maintained by the County but the road is not.			

**Project 8:** Evaluate flooding concerns on 7-11 Rd and possible transfer ownership of the road to SD DOT

Priority	Funding Source	Timeframe	Oversight
High	County	1-5 years	County
*This road was identified as still having flooding issues. Several issues arise, increased tourist traffic on this road, due digital routing as an alternative route to Wild Cave National Park, and environmentally sensitive areas for trout spawning.			

**Project 9:** Relocate flood prone areas of Dewey Rd.

Priority	Funding Source	Timeframe	Oversight
Med	County; Federal	1-5 years	County; Federal
*This project would require collaboration with BLM			

## Custer County - Geological

### Goal 1: Reduce impact of geological hazards in Custer County

**Project 1:** Work to create a digital soils layer in the County's GIS to identify areas of unstable soils and restrict development in those areas.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	County
*State of South Dakota Mitigation Plan 2019 shows areas with gypsum and areas of landslide risk. Appendix B shows map of areas of risk.			

**Project 2:** Establish (and enforce) definitive criteria for Geotech report requirements for new development

Priority	Funding Source	Timeframe	Oversight
High	No cost other than County time and resources	1-2 years	County

## Custer County – High Wind Hazards

### Goal 1: Mitigate the effects of Summer Storm conditions upon people and property

**Project 1:** Research and consider adopting County building codes...

Priority	Funding Source	Timeframe	Oversight
Med	County resources, staff time	1-5 years	County

**Project 2:** Research and consider adopting mobile home ordinance to ensure HUD wind standards on newly placed mobile homes.

Priority	Funding Source	Timeframe	Oversight
Med	County resources, staff time	1-5 years	County

## Custer County - Summer Storm Hazards

### Goal 1: Mitigate the effects of Summer Storm conditions upon people and property

**Project 1:** Continue maintenance of warning systems throughout Custer County

Priority	Funding Source	Timeframe	Oversight
High	County; State; Federal	Ongoing	County

**Project 2:** Equip critical facilities with generators.

Priority	Funding Source	Timeframe	Oversight
High	County, State, Federal	1-5 years	County

**Project 3:** Continue exploring different warning system options for coverage of Custer County.

Priority	Funding Source	Timeframe	Oversight
High	County	1-5 years	County

\*Encourage coordinate dissemination of warning information with other governmental agencies, businesses, and essential service providers. System currently under consideration: Integrated Public Alert & Warning System (IPAWS) through FEMA, OnSolv (Code Red, and Everbridge (Nixie & Public Warning. Consider warning systems that will be able to serve vulnerable populations.

**Project 4:** Provide public information and education materials on personal safety during summer storm events.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	County

\*Consider deliver methods that will reach vulnerable populations in the County.

## Custer County - Wildfires

### Goal 1: Reduce the impact of Wildfire in Custer County.

**Project 1:** Update the Custer County Community Wildfire Protection Plan

Priority	Funding Source	Timeframe	Oversight
High	County; Federal	1-2 years	County

\*BLM has potential funding for CWPP update

**Project 2:** Continue to enforce fire restrictions during periods of drought to reduce the risk of wildland fires.

Priority	Funding Source	Timeframe	Oversight
High	County	Ongoing	County

\*Notes: County will continue to monitor periods of drought and establish fire restrictions when necessary.

**Project 3:** Create and maintain WUI map for Custer County

Priority	Funding Source	Timeframe	Oversight
High	County, State, Federal	1-2 years	County

**Project 4:** Identify access routes in the WUI to determine if reinforcement of existing roads or adding fire breaks are needed/necessary.

Priority	Funding Source	Timeframe	Oversight
High	County, State, Federal	1-5 years	County

**Project 5:** Identify additional water sources for engines and tenders

Priority	Funding Source	Timeframe	Oversight
Med	County, State, Federal	1-5 years	County

**Project 6:** Provide public information on FireWise practices

Priority	Funding Source	Timeframe	Oversight
High	NA	1-5 years	County

**Project 7:** Consider adopting requirements for secondary access and egress for subdivisions and identify subdivisions that have access/egress limitations and establish a plan to correct deficiencies.

Priority	Funding Source	Timeframe	Oversight
High	County	1-5 years	County

**Project 8:** Consider requiring a Wildfire Mitigation Plan when platting new subdivisions.

Priority	Funding Source	Timeframe	Oversight
High	County	1-5 years	County

\*A Wildfire Mitigation Plan can promote survival space, and fire-wise building practices for new development in the County. Lawrence County, SD has recently added Wildfire Mitigation Plan requirements to their subdivision ordinance.

**Project 9:** Address concerns of timber removal in ROW on County maintained roads in the Cooperative Agreement between USFS and Custer County.

Priority	Funding Source	Timeframe	Oversight
High	County, Federal	1-5 years	County

\*Timber removal in the ROW lacks clear definition in the current agreement. This needs to be further addressed to ensure that hazardous trees can be removed to help mitigate wildfire.

**Project 10:** Look at developing alternative routes around Custer City to help alleviate traffic flow in the event of evacuation.

Priority	Funding Source	Timeframe	Oversight
High	County	1-5 years	County

\*This project could also help in the event of a flooding evacuation.

**Project 11:** Continue collaborative efforts with USFS, BLM, US National Park Service, SD Wildland Fire, South Dakota Game, Fish and Parks, Conservation District, and private landowners to continue wildfire mitigation projects and treatments throughout the County.

Priority	Funding Source	Timeframe	Oversight
High	County, Federal	1-5 years	County

### Wildfire Agencies Past and Planned Future Project Areas

Fire groups from federal, state, and local agencies have been working to help mitigate wildfire around the WUI. Some of the issues that the different agencies face are that the WUI areas are often on private land, which agencies excluding NRCS, are limited on their ability to do any treatments. Despite this, the fire groups have a healthy relationship in trying to work toward treating areas of threat in their own jurisdictions. One of the more difficult issues faced with collaboration is that different agencies receive funding at different times, making it difficult to work on specific areas together at the same time. Wildfire agencies explained that they have also struggled in getting public response to education outreach for wildfire safety. This was especially concerning with the number of new homeowners in the WUI area. USFS is rolling out a program called PODs, which will hopefully help address jurisdictional boundary issues for future mitigation projects.

#### United States Forest Service:

The USFS Black Hills Forest provided a map of project areas, the map can be found in Appendix F.

#### South Dakota Game, Fish and Parks – Custer State Park:

Custer State Park occasionally will conduct prescribed burns. Focus can often be fuels breaks by highway

**U.S. National Parks Service:**

The National Park Service mostly conducts prescribed burns around but Wind Cave National Park and Jewel Cave National Park.

**Bureau of Land Management:**

The Bureau of Land Management in 2021 has a project near Schenk Canyon, south of Jewel Cave off Mann Road, there 52 acres underwent a mastication mechanical treatment. For either the fall of 2022 or spring of 2023, BLM plans to do 2,650 acres of prescribed burns in the same area. This includes BLM, USFS, and private land.

**Conservation District:**

The Conservation District has been working with private land owners for mitigation treatments. The district and its partners worked to create six areas that they determined were priority areas for thinning. Areas include Argyle, Bowman Ridge, Carroll Creek, Custer Highland's Elk Mountain, Ghost and Box Canyon, and Little Italy – Mica Ridge (Appendix F). Since 2014 the district has supported thinning with State grants of 224 acres in Argyle, 140 acres in Ghost and Box Canyon, and 6 acres in Elk Mountain (all non-commercial). In addition, there is a grant through NRCS that is supporting the thinning of 260 acres in Elk Mountain, Bowman Ridge, Carroll Creek, and potential other areas. The work is expected to be completed in 2024/2025. The Conservation District is also working with USFS to thin 60-80 acres of non-commercial timber in the Black Hills National Forest in the Elk Mountain area. The work is still ongoing but is expected to be complete spring of 2023.

**South Dakota Wildland Fire Division:**

The South Dakota Wildland Fire Division provided a map of areas of past, present, and future fuel reduction treatments in Custer County, the map can be found in Appendix F.

## Custer County - Winter Storm Hazards

**Goal 1: Reduce the impact of Winter Storms**

**Project 1:** Evaluate the need of adoption and enforcement of a Building Code for the County.

Priority	Funding Source	Timeframe	Oversight
High	No cost other than County time and resources	1-5 years	County

**Project 2:** Equip critical facilities with backup generators to ensure services can continue during power outages

Priority	Funding Source	Timeframe	Oversight
Med	County, State, Federal	1-5 years	County

**Project 3:** Provide public information and education materials on personal safety during winter storms.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	County

\*Consider deliver methods that will reach vulnerable populations in the County.



## Town of Buffalo Gap

### Goal 1: Reduce the impact of flooding in Buffalo Gap

**Project 1:** Consider enrollment into the NFIP program

Priority	Funding Source	Timeframe	Oversight
High	Town, State	1-5 years	Town

### Goal 2: Reduce the impact of summer storms and winter storms in Buffalo Gap

**Project 1:** Equip critical facilities with backup generators to ensure services can continue during power outages

Priority	Funding Source	Timeframe	Oversight
High	Town, State, Federal	1-5 years	Town

**Project 2:** Evaluate the need for a saferoom to be used as shelter against tornados

Priority	Funding Source	Timeframe	Oversight
High	Town resources, staff time	1-5 years	Town

### Goal 3: Reduce impact of Natural Hazards in Buffalo Gap

**Project 1:** Provide public information and education materials on personal safety.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	Town

\*Consider delivery methods that will reach vulnerable populations in town. Work with Custer County in developing or obtaining public information materials

## City of Custer

### Goal 1: Reduce the impact of flooding in Custer City

**Project 1:** Relocate exposed pipes in flood prone area.

Priority	Funding Source	Timeframe	Oversight
High	City; State; FEMA	1-5 years	City

**Project 2:** Encourage the floodplain administrator to attend FEMA trainings for floodplain development.

Priority	Funding Source	Timeframe	Oversight
High	City; State; FEMA	1-5 years	City

\*The Emergency Management Institute in Maryland offers weeklong trainings a few times a year. The State of South Dakota occasionally offers trainings.

**Project 3:** Work with Custer County and other agencies to implement strategies created in the French Creek Mitigation Plan

Priority	Funding Source	Timeframe	Oversight
High	Custer City; County; State, Federal	1-2 years	City; County

**Project 4:** Acquire flood prone properties and repetitive loss properties located in the floodway.

Priority	Funding Source	Timeframe	Oversight
High	Custer City; State, Federal	2-10 years	City

## Goal 2: Reduce the impact of wildfire in Custer City

**Project 1:** Continue fuel mitigation efforts inside the Custer City.

Priority	Funding Source	Timeframe	Oversight
High	City resources, staff time	Ongoing	City
* Identified locations for fuels mitigation are north of the Boothill Subdivision, The corner of Willow Creek Rd. and Sylvan Lake Rd. and west of Pageant Hill.			

**Project 2:** Continue the development of a Forestry Plan for Custer City.

Priority	Funding Source	Timeframe	Oversight
High	City resources, staff time	Ongoing	City

## Goal 3: Reduce the impact of summer and winter storms in Custer City

**Project 1:** Continue enforcement of building codes.

Priority	Funding Source	Timeframe	Oversight
High	City resources, staff time	Ongoing	City

**Project 2:** Equip critical facilities with backup generators to ensure services can continue during power outages

Priority	Funding Source	Timeframe	Oversight
High	City, State, Federal	1-5 years	City

**Project 3:** Evaluate the need for a saferoom to be used as shelter against tornados

Priority	Funding Source	Timeframe	Oversight
High	City resources, staff time	1-5 years	City

**Project 4:** Work to ensure waring siren coverage as new development is added.

Priority	Funding Source	Timeframe	Oversight
High	City	Ongoing	City

## Goal 4: Reduce impact of Natural Hazards in Custer City

**Project 1:** Provide public information and education materials on personal safety.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	City
*Consider delivery methods that will reach vulnerable populations in the city. Work with Custer County in developing or obtaining public information materials.			

## Town of Fairburn

## Goal 1: Reduce the impact of flooding in Fairburn

**Project 1:** Consider enrollment into the NFIP program.

Priority	Funding Source	Timeframe	Oversight
Med	Town, State	1-5 years	Town
*The town of Fairburn is currently sanctioned. However, the Town expressed they currently don't have the capacity to enforce the requirements for this program.			

## Goal 2: Reduce the impact of summer and winter storms on the community

**Project 1:** Equip critical facilities with backup generators to ensure services can continue during power outages.

Priority	Funding Source	Timeframe	Oversight
High	Town, State, Federal	1-5 years	Town

**Project 2:** Evaluate the need for a saferoom to be used as shelter against tornados

Priority	Funding Source	Timeframe	Oversight
High	Town	1-5 years	Town

**Project 3:** Ensure siren coverage for the town of Fairburn

Priority	Funding Source	Timeframe	Oversight
High	Town	1-5 years	Town

## Goal 3: Reduce the impact of wildfire on the community

**Project 1:** Continue enforcing fire restriction ordinance on open burning.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	Town

## Goal 4: Reduce impact of natural hazards in Fairburn

**Project 1:** Provide public information and education materials on personal safety.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	Town

\*Consider delivery methods that will reach vulnerable populations in the town. Work with Custer County in developing or obtaining public information materials.

## Town of Hermosa

## Goal 1: Reduce the impact of Flooding in the Town of Hermosa

**Project 1:** Acquire, relocate, or elevate flood prone properties and repetitive loss properties located in the floodway.

Priority	Funding Source	Timeframe	Oversight
High	Town; State; FEMA	2-10 years	Town

**Project 2:** Continue to enforce title XV Chapter 151: Flood Damage Prevention.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	Town

**Project 3:** Conduct a Hydrologic and Hydraulic Study or Drainage Master Plan

Priority	Funding Source	Timeframe	Oversight
High	Town; State; FEMA	1-5 years	Town

\*Hermosa has completed the *Hermosa Area Floodplain Enhancement Plan*; however, this plan did not address Battle Creek. \*This Plan was unavailable for review at the time of updating the Custer County Natural Hazard Mitigation Plan 2023.

**Project 4:** Encourage the floodplain administrator to attend FEMA trainings for floodplain development.

Priority	Funding Source	Timeframe	Oversight
High	Town; State; FEMA	1-5 years	Town
*The Emergency Management Institute in Maryland offers weeklong training a few times a year. The State of South Dakota occasionally offers training opportunities.			

**Project 5:** Consider enrolling in CRS program

Priority	Funding Source	Timeframe	Oversight
High	Town; State; FEMA	1-5 years	Town
*The Town of Hermosa's Comprehensive Plan recommends the Town looks into the CRS program. At this time the Town does not have the capacity to meet the requirements for the program.			

## Goal 2: Reduce the impact of summer and winter storms in Hermosa

**Project 1:** Equip critical facilities with backup generators to ensure services can continue during power outages

Priority	Funding Source	Timeframe	Oversight
High	Town, State, Federal	1-5 years	Town

**Project 2:** Continue enforcement of building codes.

Priority	Funding Source	Timeframe	Oversight
High	Town resources, staff time	Ongoing	Town

**Project 3:** Work to ensure waring siren coverage as new development is added.

Priority	Funding Source	Timeframe	Oversight
High	Town	1-5 years	Town

**Project 4:** Evaluate the need for a saferoom to be used as shelter against tornados

Priority	Funding Source	Timeframe	Oversight
High	Town resources, staff time	1-5 years	Town

## Goal 3: Reduce the impact of geological hazards in Hermosa

**Project 1:** Identify and record areas of unstable soils, as engineering reports detect them.

Priority	Funding Source	Timeframe	Oversight
High	Town	Ongoing	Town

## Goal 4: Reduce the impact of drought in Hermosa

**Project 1:** Continue water conservation measures during extreme drought conditions.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	Town

## Goal 5: Reduce the impact of wildfires in Hermosa

**Project 1:** Consider adopting requirements for secondary access and egress for subdivisions and identify subdivisions that have access/egress limitations and establish a plan to correct deficiencies.

Priority	Funding Source	Timeframe	Oversight
High	Town resource, staff time	1-5 years	Town

## Goal 6: Reduce impact of natural hazards in Hermosa

**Project 1:** Provide public information and education materials on personal safety.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	Town
*Consider delivery methods that will reach vulnerable populations in the town. Work with Custer County in developing or obtaining public information materials.			

## Town of Pringle

## Goal 1: Reduce the impact of wildfire in Pringle

**Project 1:** Continue to enforce Ordinance 30

Priority	Funding Source	Timeframe	Oversight
High	Town	ongoing	Town

## Goal 2: Reduce the impact of summer and winter storms in Pringle

**Project 1:** Equip critical facilities with backup generators to ensure services can continue during power outages

Priority	Funding Source	Timeframe	Oversight
High	Town, State, Federal	1-5 years	Town

**Project 2:** Construct a storm shelter or retrofit an existing building to be used as a storm shelter

Priority	Funding Source	Timeframe	Oversight
High	Town	1-5 years	Town
*Storm shelter to be used in the event of summer and winter storm events. (May not be suitable for shelter against tornados)			

**Project 3:** Evaluate the need for a saferoom to be used as shelter against tornados

Priority	Funding Source	Timeframe	Oversight
High	Town	1-5 years	Town

**Project 4:** Ensure siren coverage for the town of Pringle

Priority	Funding Source	Timeframe	Oversight
High	Town	1-5 years	Town

## Goal 3: Reduce impact of natural hazards in Pringle

**Project 1:** Provide public information and education materials on personal safety.

Priority	Funding Source	Timeframe	Oversight
High	NA	Ongoing	Town
*Consider delivery methods that will reach vulnerable populations in the town. Work with Custer County in developing or obtaining public information materials.			

## PRIORITIZATION OF MITIGATION ACTIVITIES

Requirement 201.6(c)(3)(iv) & Requirement 201.6 (c)(3)(iii)

The County and the jurisdictions had specific goals in mind they were trying to achieve to mitigate risks. Those communities prioritized projects based on the number of people who would benefit from the project and also by the estimated or approximate total project cost. Some projects may



be too large of an undertaking and therefore those projects were moved down the priority list. The Plan participants were instructed a complete Benefit Cost Analysis would be required at the time of application and the Plan author advised specific details of each project could be analyzed in closer detail during the application period.

## NATIONAL FLOOD INSURANCE PROGRAM PARTICIPATION

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

Custer County participates in the National Flood Insurance Program. The County, Custer City, and Hermosa will continue to participate and ensure compliance of the participating local jurisdictions located within the floodplain. The Towns of Buffalo Gap and Fairburn are currently sanctioned. The Town of Buffalo Gap showed interest in learning more about the NFIP program. The Town of Pringle is unmapped by FEMA.

Custer County NFIP Participation	
Participants	Non-participants
Custer County	Buffalo Gap
Custer City	Fairburn
Hermosa	Pringle

**Table 5.1** NFIP participants for the County and Jurisdictions.

The Custer County Planning Department and GIS Department maintain the flood zone maps and utilize DFIRMS for all planning mechanisms occurring in the county, specifically development of new homes and businesses and all new construction.

## IMPLEMENTATION OF MITIGATION ACTIONS

*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.*

Upon adoption of the updated Plan, each jurisdiction will become responsible for implementing its own mitigation actions. Those who do not participate or adopt the Plan will be required to coordinate all mitigation actions with the County. The planning required for implementation is the sole responsibility of the local jurisdictions that have participated in the Plan update. Some municipalities indicated that they do not have the financial capability to move forward with projects identified in the Plan at this time, however, they will consider applying for funds through the State and Federal Agencies once such funds become available. If and when the municipalities are able to secure funding for the mitigation projects, they will move forward with the projects identified.

# VI. PLAN MAINTENANCE PROCESS

## MONITORING, EVALUATING, AND UPDATING THE PLAN

*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.*

Custer County and all of the participating local jurisdictions thereof will incorporate the findings and projects of the Plan in all planning areas as appropriate. Periodic monitoring and reporting of the Plan are required to ensure the goals and objectives for the *Custer County Natural Hazard Mitigation Plan* are kept current and local mitigation efforts are being carried out.

During the process of implementing mitigation strategies, Custer County, or communities within may experience lack of funding, budget cuts, staff turnover, and/or a general failure to implement projects. These scenarios are not in themselves a reason to discontinue and fail to update the Natural Hazard Mitigation Plan. A good plan needs to provide for periodic monitoring and evaluation of its successes and failures and allow for appropriate changes to be made.

### **Annual Reporting Procedures**

The Plan shall be reviewed annually, as required by the County's Emergency Manager, or as the situation dictates, such as following a disaster declaration. The Custer County Emergency Manager will review the Plan annually in June and ensure the following:

1. The County elected body will receive an annual report and/or presentation on the implementation status of the Plan;
2. The report will include an evaluation of the effectiveness and appropriateness of the mitigation actions proposed in the Plan; and
3. The report will recommend, as appropriate, any required changes or amendments to the Plan.
4. The report will include budget needs for any upcoming projects that require local match.

### **Five Year Plan Review**

Every five years the Plan will be reviewed, and a complete update will be initiated. All information in the Plan will be evaluated for completeness and accuracy based on new information or data sources. New property development activities will be added to the Plan and evaluated for impacts. New or improved sources of hazard related data will also be included.

In future years, if the Custer County relies on grant dollars to hire a contractor to write the mitigation Plan update, the County will initiate the process of applying for and securing such funding in the third year of the Plan to ensure the funding is in place by the fourth year of the Plan. The fifth year will then be used to write the Plan update, which in turn will prevent any lapse in time where the County does not have a current approved Plan on file.

The goals, objectives, and mitigation strategies will be readdressed and amended as necessary based on new information, additional experience, and the implementation progress of the Plan. The approach to this Plan update effort will be essentially the same as the one used for the original Plan development.

The Custer County's Emergency Manager will meet with the Custer County Commission and Plan participants for review and approval prior to final submission of the updated Plan.

### **Plan Amendments**

Plan amendments will be considered by the Custer County's Emergency Manager, during the Plan's annual review, to take place in June. All affected local jurisdictions (cities, towns, and counties) will be required to hold a public hearing and adopt the recommended amendment by resolution prior to considerations by the steering committee.

## INCORPORATION INTO EXISTING PLANNING MECHANISMS

*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.*

Custer County, Custer City, and Hermosa have their own comprehensive plans. The Towns of Buffalo Gap, Fairburn, and Pringle do not have the resources, staff, funding, or need for such planning mechanisms. The County and the jurisdictions will consider the mitigation requirements, goals, actions, and projects when it considers and reviews the other existing planning documents such as the comprehensive plans. Mitigation projects will be considered and prioritized in conjunction with non-mitigation projects, such as water and wastewater infrastructure improvements, new constructions of schools, libraries, parks, roads, etc.

The Towns of Buffalo Gap, Fairburn, and Pringle cannot incorporate the requirements of the mitigation plan into other planning mechanisms because they do not have any other planning mechanisms currently exist. Absence of such mechanisms creates a problem for the local jurisdictions because ideas, projects, and actions identified as a result of the Plan update process often never move forward because they are forgotten about, and no mechanism exists to initiate the process of completing such projects. Thus, the Towns identified one unrelated mechanism: municipalities are required by State law to prepare budgets for the upcoming year and typically consider any expenditure for the upcoming year during time. South Dakota Codified Law 9-21-2 provides that:

The governing body of each municipality shall, no later than its first regular meeting in September of each year or within ten days thereafter, introduce the annual appropriation ordinance for the ensuing fiscal year, in which it shall appropriate the sums of money necessary to meet all lawful expenses and liabilities of the municipality....an annual budget for these funds shall be developed and published no later than December thirty-first of each year.

### Potential Funding Sources

Although all mitigation techniques will likely save money by avoiding losses, many projects are costly to implement. The Potential Funding Sources section was included so the local jurisdictions can work towards securing funding for the projects. Inevitably, due to the small tax base and small population for some of the participating jurisdictions they may not have the ability to generate enough revenue to support anything beyond the basic needs of the community, which is why many of the mitigation actions are focused on planning mechanisms such as enforcing ordinances that do not cost anything.

The Custer County jurisdictions will continue to seek outside funding assistance for mitigation projects in both the pre- and post-disaster environment. Primary Federal and State grant programs have been identified and briefly discussed, along with local and non-governmental funding sources, as a resource for the local jurisdiction

#### **Federal**

The following federal grant programs have been identified as funding sources which specifically target hazard mitigation projects:

<b>Title: Building Resilient Infrastructure and Communities</b> Agency: Federal Emergency Management Agency
Through the Disaster Mitigation Act of 2000, Congress approved the creation of a national program to provide a funding mechanism that is not dependent on a Presidential Disaster Declaration. The Building Resilient Infrastructure and Communities (BRIC) Program provides funding to states and communities for cost-effective hazard mitigation activities that complement

a comprehensive mitigation program and reduce injuries, loss of life, and damage and destruction of property.

The funding is based upon a 75% Federal share and 25% non-Federal share. The non-Federal match can be fully in-kind or cash, or a combination there of. Special accommodations will be made for “small and impoverished communities”, who will be eligible for 90% Federal share/10% non-Federal.

FEMA provides BRIC grants to states that, in turn, can provide sub-grants to local governments for accomplishing the following eligible mitigation activities: State and local hazard mitigation planning, technical assistance (e.g. risk assessments, project development), mitigation projects, acquisition or relocation of vulnerable properties, Hazard retrofits, Minor structural hazard control or protection projects, and community outreach and education (up to 10% of State allocation).

**Title: Flood Mitigation Assistance Program**  
Agency: Federal Emergency Management Agency

FEMA's Flood Mitigation Assistance program (FMA) provides funding to assist states and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program (NFIP). FMA was created as part of the National Flood Insurance Reform Act of 1994 (42 USC 4101) with the goal of reducing or eliminating claims under the NFIP.

FMA is a Natural Hazard grant program and is available to states on an annual basis. This funding is available for mitigation planning and implementation of mitigation measures only and is based upon a 75% Federal share/25% non-Federal share. States administer the FMA program and are responsible for selecting projects for funding from the applications submitted by all communities within the state. The state then forwards selected applications to FEMA for an eligibility determination. Although individuals cannot apply directly for FMA funds, their local government may submit an application on their behalf.

**Title: Hazard Mitigation Grant Program**  
Agency: Federal Emergency Management Agency

The Hazard Mitigation Grant Program (HMGP) was created in November 1988 through Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. The HMGP assists states and local communities in implementing long-term mitigation measures following a Presidential disaster declaration.

To meet these objectives, FEMA can fund up to 75% of the eligible costs of each project. The state or local cost-share match does not need to be cash; in-kind services or materials may also be used. With the passage of the Hazard Mitigation and Relocation Assistance Act of 1993, federal funding under the HMGP is now based on 15% of the federal funds spent on the Public and Individual Assistance programs (minus administrative expenses) for each disaster.

The HMGP can be used to fund projects to protect either public or private property, so long as the projects in question fit within the state and local governments overall mitigation strategy for the disaster area and comply with program guidelines. Examples of projects that may be funded include the acquisition or relocation of structures from hazard-prone areas, the retrofitting of existing structures to protect them from future damages; and the development of state or local standards designed to protect buildings from future damages.

Eligibility for funding under the HMGP is limited to state and local governments, certain private non-profit organizations or institutions that serve a public function, Native-American tribes, and authorized tribal organizations. These organizations must apply for HMPG project funding on

behalf of their citizens. In turn, applicants must work through their state since the state is responsible for setting priorities for funding and administering the program.

**Title: Public Assistance (Infrastructure) Program, Section 406**

Agency: Federal Emergency Management Agency

FEMA's Public Assistance Program, through Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, provides funding to local governments following a Presidential Disaster Declaration for mitigation measures in conjunction with the repair of damaged public facilities and infrastructure. The mitigation measures must be related to eligible disaster related damages and must directly reduce the potential for future, similar disaster damages to the eligible facility. These opportunities usually present themselves during the repair or replacement efforts.

Proposed projects must be approved by FEMA prior to funding. They will be evaluated for cost effectiveness, technical feasibility, and compliance with statutory, regulatory, and executive order requirements. In addition, the evaluation must ensure that the mitigation measures do not negatively impact a facility's operation or risk from another hazard.

Public facilities are operated by state and local governments, Native-American tribes or authorized tribal organizations and include:

- Roads, Bridges & Culverts
- Draining & Irrigation Channels
- Schools, City Halls & Other Buildings
- Water, Power & Sanitary
- Airports & Parks

Private nonprofit organizations are groups that own or operate facilities that provide services otherwise performed by a government agency and include, but are not limited to the following:

- Universities and Other Schools
- Custodial Care & Retirement Facilities
- Volunteer Fire & Ambulance
- Power Cooperatives & Utilities
- Hospitals & Clinics
- Museums & Community Centers

**Title: SBA Disaster Assistance Program**

Agency: US Small Business Administration

The SBA Disaster Assistance Program provides low-interest loans to businesses following a Presidential disaster declaration. The loans target businesses to repair or replace uninsured disaster damages to property owned by the business, including real estate, machinery and equipment, inventory, and supplies. Businesses of any size are eligible, along with non-profit organizations' loans can be utilized by their recipients to incorporate mitigation techniques into the repair and restoration of their business.

**Title: Community Development Block Grants**

Agency: US Department of Housing and Urban Development

The Community Development Block Grant (CDBG) program provides grants to local governments for community and economic development projects that primarily benefit low- and moderate-income people. The CDBG program also provides grants for post-disaster hazard mitigation and recovery following a Presidential Disaster Declaration. Funds can be used for activities such as acquisition, rehabilitation or reconstruction of damaged properties and facilities and for the redevelopment of disaster areas.

**State:**



**Title: Consolidated Water Facilities Construction Program**  
Agency: Department of Agriculture and Natural Resources (DANR)

The CWFCP program provides grants to local governments for drinking water and wastewater infrastructure projects that provide safe drinking water and sanitary sewer service to residents. Grants up to \$2,000,000 are awarded to eligible applicants. Cities, Counties, Water Districts, Sanitary Districts, and Rural Water Districts are eligible to apply. CWFCP funds are typically awarded at a percentage of total project cost and often paired with loans from DANR's SRF Loan program.

**Title: State Revolving Loan Fund (DWSRF and CWSRF)**  
Agency: Department of Agriculture and Natural Resources (DANR)

The SRF program provides low interest loans with extended terms to local governments for drinking water and wastewater infrastructure projects that include rehabilitation or replacement of existing infrastructure. Loans are awarded on ability to debt service and are sometimes given in the form of principle forgiveness. Cities, Counties, Water Districts, Sanitary Districts, and Rural Water Districts are eligible to apply. SRF funds are awarded quarterly.

**Local**

Local governments depend upon local property taxes as their primary source of revenue. These taxes are typically used to finance services that must be available and delivered on a routine and regular basis to the general public. If local budgets allow, these funds are used to match Federal or State grant programs when required for large-scale projects.

**Non-Governmental**

Another potential source of revenue for implementing local mitigation projects are monetary contributions from non-governmental organizations, such as private sector companies, churches, charities, community relief funds, the Red Cross, hospitals, Land Trusts, and other non-profit organizations.

**CONTINUED PUBLIC PARTICIPATION/INVOLVEMENT**

*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.*

During interim periods between the five-year update, efforts will be continued to encourage and facilitate public involvement and input. The Plan will be available for public view and comment at the Custer County's Courthouse and the Black Hills Council of Local Governments office. Comments will be received in writing, by letter or by e-mail.

All ongoing workshops and training courses will be open to the public and appropriately advertised. Ongoing press releases and interviews will help disseminate information to the general public and encourage participation.

As implementation of the mitigation strategies continues in each local jurisdiction, the primary means of public involvement will be the jurisdiction's own public comment and hearing process. State law, as it applies to municipalities and counties, requires this as a minimum for many of the proposed implementation measures. Effort will be made to encourage cities, towns, and counties to go beyond the minimum required to receive public input and engage stakeholders.

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# **Appendix A**

Meeting Documentation

# Town of Pringle Monthly Meeting

October 11, 2022 5:30pm

Call to Order

Approve minutes of September meeting

Bills:

Black Hills Electric	350.23	AWD
Custer Chronicle	24.48	CKH/1996

Receipts:

Water	52.50	✓
State of South Dakota	4400.66	✓
Custer County	681.92	✓

New Business :Black Hills Council of Local Government

Re: Custer City Hazard Mitigation Plan  
+ COUNTY

APPOINTED TONY BOGGS AND  
ROBERT MORGAN TO  
REPRESENT TOWN OF  
PRINGLE

Old Business

Adjourn

**10/11/2022 at 5:30pm Pringle Town Hall**

Appendix A: 2



**Custer County Commission Meeting**

**Wednesday, October 12, 2022**

**1881 Courthouse Museum**

**411 Mount Rushmore Rd.**

**Custer, SD 57730**

**\*\*PLEASE NOTE CHANGE OF MEETING LOCATION\*\***

**A. Call to Order at 8:00 AM**

1. Pledge of Allegiance

**B. Approve Agenda**

**C. Consent Agenda**

1. Minutes of September 28, 2022 Commission Meeting
2. Vouchers
3. Monthly Reports

**D. Conflict of Interest Declarations**

**E. Maintenance**

1. Request to surplus old UPS system.

**F. Highway Department**

1. 2022 Bridge Inspection report—Brosz Engineering

**G. Planning Department**

1. Final Plat Lot K-1 and Lot K-2 of Meyers Subdivision—Simonson & Stonelake
2. Final Plat Lot 3 Revised, Tract 2A and Tract 2B, all of Shirttail Subdivision—Dejong
3. Final Plat Lot 29, Star Tract 2 and Reyelts Tract of Star Valley Estates Subdivision—Nielsen Entities, LLC
4. Variance Request –Parcel 4480, Lewis

**H. Veteran's Service**

1. VSO 3<sup>rd</sup> Quarter 2022 Report

**I. Weed & Pest/Conservation**

1. Request auto-supplement \$3000 as follows: 101-4-615-426.00 Supplies \$1500; 101-4-615-426.50 gas, oil & tires \$1500.

**J. Library**

1. Discuss Hermosa Library

**K. Crazy Horse Memorial**

1. Request Commission approval for annual motorcycle raffle pursuant to SDCL 22-25-25. Raffle to be held September 6, 2023.

**L. Black Hills Council of Local Governments**

1. Kailey Snyder to present Custer County Natural Hazard Mitigation Plan Update contract for Commission approval and signature.

**M. Public Comment**

Meetings of the Board of Commissioners are open to the public. The audience will be allowed to comment on specific agenda items during the time allotted on the agenda for those items, according to established procedures of the Commission. This is a time for members of the public to express concerns or discuss issues having relevance to the County. Anyone wishing to address the Commission during this time shall be asked to identify themselves. The number of presentations and time allotted to individuals may be limited by the Chairman and individuals shall refrain from discussing personalities. The Chairman, at his discretion, may recognize patrons at other times during the Board meeting. No action will be taken by the Commission on any issue raised without being first placed on a future agenda, by the Commission, to allow for proper notice.

**N. Old Business**

**O. Commission**

1. Mail call
2. Meeting schedule
3. Meeting reports

**P. Adjourn**

1. Adjourn the meeting

**Next Meeting Date:** November 26, 2022

Custer County fully subscribes to the Americans with Disabilities Act. If you desire to attend this public meeting and are in need of accommodations, please notify the Commissioners' Office at (605) 673-8173 at least 24 hours prior to the meeting so that appropriate services and auxiliary aids are available.



# Custer County – Mitigation Planning Meeting (Custer County Commission)

10/12/2022 at 8:00am 1881 Courthouse Museum

Name	Representing (City, County, Dept, etc)	Round-trip miles traveled	Phone	Email	Do you want to receive email updates on the plan status and future meeting dates?
Craig Hinkle	Custer County	12	605-673-1526	chinkle@custercountysd.com	
Mike Lindberg	Custer Co	0	605-673-1503	MLINDBERG@CUSTER.CO.SD	
Jim Lintz	Custer Co	0	605-255-4269	JLintz@CusterCo.SD	
Mark Hartman	Custer Co	0	605-673-1362	hartmanconstruct@aol.com	
Trevi Bries	Custer Co	65	605-390-0888	bries.trevi@yahoo.com	
Joe Panza	Custer Co		605-440-0472	jpanza@custercountysd.com	
Tenri Kester	Custer Co		605-673-1698	TKester@custercountysd.com	
Laura Rosore	Custer Co		605-390-7333	lrosore@custercountysd.com	
Teri Morgan	Custer Co		605-440-0645	TMORGAN@CUSTERCOUNTYSD.COM	
Peg Ryan	Custer Co	0	605-517-1664	ULTRAPEG@YAHOO.COM	
Kevin Trebas	Custer County		605-673-5678	KTrebas@custercountysd.com	
Mike Baldwin	Custer Co		605-673-5680	mbaldwin@custercountysd.com	
Lee Anne Muhlaker	Custer Co	8	605-673-4639	Lee@goldenwest.net	
J. N. K. S. C.	Custer	0	605-673-2708	csdirector@gate.net	
Jodi W. P. L. L.	Custer	1	605-673-2591	biola@gwtc.net	No
Teresa DeMauro	Custer Co	16	605-440-8941	tdemauro@custercountysd.com	No
Rosanna Richardson	Custer Co	1	605-673-4907	rosanna@co.s.d.	No
Diane Geeting	Custer Co	15	605-673-2522	dikea1@me.com	No
Gerald Kallis	Custer, SD	0	605-673-2660	gen.kallis@gmail.com	No
Arlene Kallis	Custer Co	0	605-673-2660	N/A	No

## **Minutes of the Custer County Commission Meeting Wednesday, October 12, 2022.**

### **Members present:**

Commissioners Jim Lintz, Mark Hartman, Mike Linde, Craig Hindle, Travis Bies and Dawn McLaughlin, Finance Officer. Commission Legal Counsel, Susan Anderson, was not present. The meeting was held at the 1881 Courthouse Museum at 411 Mt. Rushmore Road, Custer, SD.

### **A. Commission Meeting was called to order at 8:00 AM followed by the Pledge of Allegiance.**

### **B. Adopting of the agenda**

1. Request to amend Agenda as follows:
  - a) remove Item No. 2 under Planning "Final Plat-Dejong"
  - b) add Auditor heading after "K-Crazy Horse Memorial"

Motion to approve Agenda as amended made by Linde; seconded by Hindle; vote taken, all aye; motion carried.

### **C. Consent Agenda**

1. Motion to approve Consent Agenda made by Bies; seconded by Hartman; vote taken, all aye; motion carried.

Vouchers approved as follows:

**PAYROLL:** 10-7-2022 Payroll: Commissioners \$8,210.62; Election \$488.46; Auditor \$5,478.24; Treasurer \$12,455.70; Info Systems & Technology \$3,005.27; State's Attorney \$13,298.46; Courthouse Building \$7,049.42; Equalization \$18,031.25; Register of Deeds \$4,839.24; Veteran's Service \$2,171.20; Human Resources \$2,493.03; Sheriff \$39,849.45; Coroner \$657.45; Nurse \$912.05; Library \$9,110.64; Conservation \$505.56; Weed & Pest \$3,514.28; Planning \$6,802.04; County Road & Bridge \$40,851.31; Emergency Management \$2,646.73; 24/7 Sobriety \$1,007.77; Emergency Line F \$17,057.31

**COMMISSIONERS:** Sam's Club \$76.25; Walmart \$23.20; FD Supplies \$23.43; Verizon \$82.18; Fleet \$32.28; A&B Business \$151.17; Southern Hills Publishing \$644.97; Catastrophic Legal Exp. \$548; Golden West Telecom \$29.41

**COURT APPOINTED ATTORNEY:** Grey & Eisenbraun \$474; Angela Colbath \$416.70; Hustead Law Office \$1,084

**AUDITOR:** A&B Business \$609.77; Amazon \$52.80; Office Depot \$18.09; Golden West Telecom \$136.41; Tracy Fish \$2,796.

**TREASURER:** Amazon \$275.94; A&B Business \$382.33; Office Depot \$27.67; Southern Hills Publishing \$76.50; Golden West Telecom \$139.

**ELECTION:** CCUP Election Training \$64.90; Southern Hills Publishing \$1,410.66

**STATE'S ATTORNEY:** A&B Business \$178.11; Amazon \$111.23; LexisNexis \$370; Golden West Telecom \$136.41; CAN Surety \$50; Culligan \$31.50; RC Police Dept. \$125.

**MAINTENANCE:** Verizon \$41.99; Fleet \$32.38; Amazon \$89.36; Golden West Telecom \$27.28

**DIRECTOR OF EQUALIZATION:** Hilton Car Rental \$-318.40 credit; Fleet \$101.10; A&B Business \$101.10; Oasis Fuel \$80.04; Southern Hills Publishing \$106.40; Cholik Signs \$175; Golden West Telecom \$190.98; Ramkota \$2,940.

**REGISTER OF DEEDS:** A&B Business \$144.89; US Bank \$126.50; Golden West Telecom \$54.57; State of SD \$31.50

**VETERANS SERVICES:** A&B Business \$146.12; Golden West Telecom \$27.28

**INFO TECHNOLOGY:** GoDaddy Domain \$41.34; Golden West Telecom \$64.57; Golden West Technologies \$7,744.01

**HUMAN RESOURCES:** Business Mgr \$422.81; Verizon \$16.44; Golden West Telecom \$27.28; Evergreen Office \$51.25

**SHERIFF:** Verizon \$427.67; A&B Business \$184.95; Country Inn \$322.80; LexisNexis \$87; Peavey \$170.65; MC Hotel Network \$-12.91 credit; Amazon \$69.60; USPS \$11.75; Ruthless Mtr \$305; Ace Hdwe \$36.94; BHEC \$50.68; Southern Hills Publishing \$94; Golden West Technologies \$129.84; McLeod's Printing \$299.90; TriTech Software \$3,611.40; Liberty Superstores \$887.68; Innovative Office \$16.31; Golden West Telecom \$564.79; L&A Welding \$395.22; A-Z Shredding \$5.30; Creative Product \$1,421.09

**PRISONER CARE:** 10-8 Video \$3,523; Pennington Co. Jail \$331.44; Mary Seifert \$200; Care Campus \$452; SD Public Health \$240.

**AIRPORT:** Brenden Hendrickson \$3,850; Sam's \$78.79; Custer Ace Hdwe \$22.99; Golden West Telecom \$113.48; Airnav \$70.

**LIBRARY:** Amazon \$598.30; Mt. Rushmore Telephone \$134.05; Golden West Telecom \$115.95.

**EXTENSION:** A&B Business \$147.15; Golden West Telecom \$117.67; Fall River County \$1,638.66

**WEED & PEST:** A&B Business \$154.84; Fleet \$32.38; Dept Ag \$35.88; USPS \$7.85; Nutrien Ag Solutions \$2,491.24; Golden West Telecom \$27.28; Culligan \$13.

**PLANNING:** Fleet \$16.19; A&B Business \$182.81; Sam's \$84.48; Amazon \$287.28; Golden West Telecom \$112.15

**COUNTY ROAD & BRIDGE:** Fleet \$372.37; A&B Business \$164.51; Sam's \$839.17; Amazon \$227.20; A&B Welding \$12.09; BH Energy \$82.36; Southern Hills Publishing \$33.44; Floyd's

Truck Center \$465.15; French Crk. Supply \$2,526.56; Godfrey Brake \$426.01; Mt. Rushmore Telephone \$119.30; S&B Motor Parts \$310.21; Servall \$128.65; Snap On Tools \$71.75; BH Gravel \$12,780; Custer Ace Hdwe \$85.92; Golden West Telecom \$196.88; Running's Supply \$107.32; Dale's Tire \$282.32; Matco Tools \$48.95; Nebraska Salt \$2,587.76; Great Western Tire \$2,819.45; Forward Dist \$17.15

**EMERGENCY MANAGEMENT:** Verizon \$46.99; A&B Business \$154.58; Custer Car Wash \$18.25; BH Energy \$25.23; Golden West Telecom \$44.53

**SEARCH & RESCUE:** Amazon \$151.13; Fix My Toy \$65.99; Menard's \$829.78; TriTech \$251.08; Expert Voice \$894.97; BH Powersports \$365.43; Autozone \$109.20; Sam's \$566.67; Big Pine \$600; BH Energy \$210.71; Custer Do It Best \$12.73; French Crk Supply \$136.99; Lynn's Dakotamart \$582.98; Sander Sanitation \$19.10; Golden West Telecom \$93.95; Romeo Barrera \$337.49; Nelson's Oil & Gas \$48.

**COUNTY BUILDINGS:** A&B Pure Water \$75.39; Amazon \$796.68; Sam's \$331.89; Menard's \$198.02; Select Blinds \$196.79; Do It Best \$163.63; BH Energy \$3,611.18; BH Chemical \$303.96; Freeman's Electric \$2,279.93; Custer Ace Hdwe \$37.54; K2 Masonry \$13,265.33; A-Z Shredding 44.68; B&H Asphalt Paving \$10,920.94

**EMERGENCY LINE:** A&B Business \$155.31; Range Telephone \$27.39; Rushmore Communications \$275; Tritech Software \$43,000; Golden West Telecom \$463.

**NURSE:** SD Dept Health \$1,395.

**PREDATORY ANIMAL:** \$872.30

#### **D. Conflict of Interest Declarations – none**

#### **E. Maintenance**

1. Maintenance supervisor, Joe Panza, requested Commission approval to surplus old UPS system. Panza noted he discovered the system is obsolete and of no monetary value as an auction item and recommended surplus.

UPS System consists of:

- 1 Legacy Herytage converter \*Model: H3kVa \*SN: HH030001312001
- 1 Best Power Battery Cabinet \*Model: CAB-Q
- 16 Data safe HX800-FR lead acid batteries \*June 2016
- 1 Best Power transfer switch \*Mod: BPE-02-MBB-1A

Motion to approve surplus of UPS system made by Hindle; seconded by Linde; vote taken, all aye; motion carried.

#### **F. Highway**

1. Bruce Wilsey, Brosz Engineering, Inc. presented the Commission with the 2022 Bridge Inspection Report. Mr. Wilsey noted that the bridges are generally in very good shape and well-maintained; however, there are two bridges that need attention, as follows:

a) STR. #17-379-260 located in Buffalo Gap. This bridge is a 37' bridge constructed in 1971. It was noted this structure shows significant decay and distress to the treated lumber and abutment caps. While repair or replacement of these caps is an option, it would not be cost effective and total structure replacement is recommended. Brosz also recommends reducing the load limit to 50% until replacement is completed.

b) STR. #17-496-252 is a 695' structure also located in the Buffalo Gap area. This bridge as constructed in 2014 and is showing cracking and spalling of the concrete abutment backwalls between the concrete girders. Wilsey stated that while these defects are not considered structurally significant, patching of the areas will inhibit corrosion to exposed reinforcing steel and is recommended.

## **G. Planning**

1. Planning Director, Terri Kester presented the Commission with the Final Plat of Lot K-1 and Lot K-2 of Meyers Subdivision re: Simonson and Stonelake and recommended approval. Motion to approve made by Hartman; seconded by Bies; vote taken, all aye; motion carried.

2. Kester also presented Final Plat of Lot 29, Star Tract 2 and Reyelts Tract of Star Valley Estates Subdivision—Nielsen Entities, LLC. Motion to approve contingent upon filing and receipt of certified documentation made by Hindle; seconded by Hartman; vote taken, all aye; motion carried.

3. Kester presented the Commission with a variance request re: Joseph & Judy Lewis and recommended approval. The applicants propose construction of a 30x24' garage 10' from the east property boundary. Motion to approve made by Hindle; seconded by Linde; vote taken, all aye; motion carried.

## **H. Veteran's Service**

1. Todd Fish, VSO, presented the Custer County VSO 3<sup>rd</sup> Quarter 2022 report. Fish stated that since January 1, 2022 44 new veterans have been registered in Custer County, with a total of 863 registered county veterans. Fish noted there are 63 claims in progress, with 36 active claims for compensation or pension and 7 open active appeals. He stated that hearings can now be held with a judge in Custer County rather than having to travel to Meade County. To date in 2022, there are 117 approved new awards for \$1,652,807 totaling 340 claims for \$5M as annual disability income to Custer County veterans. Fish also updated the Commission noting that there are still 13 veterans with unmarked grave sites in Custer County; 7 headstones completed; 1 submitted to National Monument Service for headstone and 5 require additional research for death certificate, service and service dates.

## **I. Weed & Pest/Conservation**

1. Michael Baldwin, Weed & Pest Supervisor, requested auto-supplement of \$3,000 as follows: 101-4-615-426.00 supplies \$1,500; 101-4-615-426.50 gas, oil and tires \$1,500. These monies are funded by USFS compensation from Buffalo Gap National Grasslands. Motion to approve made by Hartman; seconded by Hindle; vote taken, all aye; motion carried.

## **J. Library**



1. Library Director, Jessie Phelps, appeared before the Commission and stated she met with the Hermosa Town Board regarding the Hermosa library. Noting a discrepancy regarding the library's lease, Phelps conducted some research and discovered that Custer County's lease with the Town of Hermosa was renewed in 2019 and remains in effect until 2029. Terms of that lease state that the building will house the library rent-free until the end of the lease. The Town of Hermosa was operating under a "proposed" lease that hadn't been accepted by Custer County, so the terms of that "proposed" agreement are not in effect. Phelps stated that the Custer library board has committed to contributing \$200/month toward the electricity charges at the Hermosa location, which would be implemented by supplementing the library's 2023 budget. Motion to approve the library board's \$200/month contribution made by Hartman; seconded by Hindle; vote taken, all aye; motion carried.

#### **K. Crazy Horse Memorial**

1. The Commission was presented with a request to approve its annual motorcycle raffle pursuant to SDCL 22-25-25, which will be held September 6, 2023. Motion to approve made by Bies; seconded by Linde; vote taken, all aye; motion carried.

#### **L. Auditor**

1. Dawn McLaughlin, Finance Officer, requested approval of new hire, Walter Krol, in the Treasurer's office. This is a full-time, benefitted position at \$15/hour with a start date of October 3, 2022. Motion to approve made by Linde; seconded by Hindle; vote taken, all aye; motion carried.

2. McLaughlin also presented the Commission with a request for approval to apply for LATCF (Local Assistance and Tribal Consistency Funds), which are a general revenue replacement through ARPA in the amount of \$635,919.07. Motion to approve McLaughlin to apply for LATCF made by Hindle; seconded by Linde; vote taken, all aye; motion carried.

#### **M. Black Hills Council of Local Governments**

1. Kailey Snyder presented the Commission with Custer County Natural Hazard Mitigation Plan update and contract for approval and signature. Snyder explained that the current Custer County plan expires in 2023. She noted that EMS Director, Steve Esser, has attended several meetings relating to completion of the Mitigation Plan. She stated that some of the plans are multi-jurisdictional and that a stakeholder meeting will be held in November, 2022. Snyder requested the plan to be written and completed by January as the time frame for the state and FEMA to review is 40-60 days. She also stated that this program also helps pay for a portion of the EMS director's salary. Snyder also had those in attendance sign in, and document mileage as this also helps cover county costs. Motion to approve and sign contract made by Hartman; seconded by Bies; vote taken, all aye; motion carried.

#### **N. Public Comment –**

1. Dan Holsworth, Town of Hermosa, spoke before the Commission to discuss Hermosa's previous request for ARPA funding to be used to drill a new well in Hermosa. Holsworth noted that this funding is much-needed and provides a lifeline for the WRT system and helps to keep a second well functioning. He noted that both a second well and new lagoon are a necessity for expansion of the Town of Hermosa, as well. He requested that Custer County keep full-funding of the project available by committing ARPA monies to the Town of Hermosa. He

requested the assignment of funds by October 26, 2022, but was informed that those funds will not be received by Custer County until October 27, 2022.

2. LeaAnne McWhorter shared that there will be a tax committee meeting held in Pierre October 20, 2022. She also noted she has various "VOTE" signs available to residents who would like to display them for the November 8, 2022 election.

3. Rick Wheeler, 1881 Museum, presented a brief history of the Courthouse Museum, where today's Commission meeting was held. Wheeler stated that the courthouse was constructed in 1881 and served as the County Courthouse until 1973-74 when the current courthouse was built. Wheeler shared a brief history of some notable trials held in the museum's courtroom; including a trial that resulted in a notorious riot. He noted approximately 45-50 volunteers keep the museum functioning. Wheeler thanked the Commission for Custer County's support in providing a new roof, flooring, exterior upkeep and general maintenance for the building possible. Wheeler He also thanked the Commission for holding it's meeting in the 1881 Museum. Commissioner Hartman, in turn, thanked Wheeler for hosting today's meeting.

#### **O. Commission**

1. Mail call – none
2. Meeting Reports –
  - a) Hindle and Lintz attended Library/Board meeting in Hermosa.
  - b) Bies attended BH Advisory Board meeting last week with USFS.
  - c) Hartman attended annual Housing meeting and noted they are in the planning stages of providing senior housing.
  - d) Chairman Lintz attended a Fair Board meeting and stated they procured a 20'x20' garage to be moved to the ball field and used for concessions for a price of \$12K. He noted it will need some work to be suitable, but is a cost-saving measure for the Fair Board.

#### **P. Old Business --- None**

#### **Q. Adjourn**

Motion by Linde and seconded by Hindle to adjourn the meeting at 9:07 AM. The next meeting will be at 8:00 AM, October 26, 2022 in the Commissioner's Room in the Custer County Courthouse.

---

Jim Lintz, Chairman

Attest: \_\_\_\_\_

Barbara Cox, Custer County Deputy Auditor

Published once at the total approximate cost of \_\_\_\_\_.

**CITY OF CUSTER CITY  
CITY COUNCIL  
October 17, 2022 – City Hall Council Chambers  
5:30 PM**

1. Call to Order - Roll Call - Pledge of Allegiance
2. Approval of Agenda
3. Approval of Minutes
  - a. October 3rd, 2022 Council Meeting
4. Declaration of Conflict of Interest
5. Public Hearings
6. Public Comments (Not to include agenda related items, 3-minute max. per person, with total public comment period not to exceed 15 minutes)
7. Old Business
  - a. Phase 3A Effluent Force Main Construction Bids (WWTF Improvements Project)
  - b. Phase 3B Transfer Force Main and Lift Station Construction Bids (WWTF Improvements Project)
8. Ordinance and Resolutions
  - a. Resolution #10-17-22A - Dissolving TIF #5
9. New Business
  - a. Furnishing Pipe, Fittings & Appurtenances WWTF Project Change Order #1-Core and Main
  - b. Hometown Hero Banners Update
  - c. Custer County Hazard Mitigation Plan - Black Hills Council of Local Government
  - d. Preliminary Plat - A Plat of Groat Tract West and Groat Tract East
  - e. Final Plat - A Plat of Duke Tract West and Duke Tract East of Kranzler Sub
  - f. Plan Review Contract - Lookout Plan + Code Consulting
  - g. Temporary Part-Time Employee
10. Presentation of Claims
  - a. 10.17.22 Claims List
11. Department Head Discussion & Committee Reports
12. Possible Executive Session – Personnel (1&4), Proposed/Pending Litigation (3), & Contract Negotiations (3) (SDCL 1-25-2(1,2,3,4,5,6))
13. Adjournment

**Please join my meeting from your computer, tablet or smartphone.**

**<https://meet.goto.com/836876445>**

**You can also dial in using your phone.**

**United States (Toll Free): [1 866 899 4679](tel:18668994679)**

ADA Compliance: The City of Custer City fully subscribes to the provisions of the Americans with Disabilities Act. If you desire to attend this public meeting and are in need of special accommodations, please notify the Finance Office 24 hours prior to the meeting so that appropriate services are available.

All City Council Meetings are recorded.

United States: [+1 \(571\) 317-3116](tel:+15713173116)  
Access Code: 836-876-445

**10/17/2022 – 5:30 at City Council Chambers**

Appendix A: 14



**CITY OF CUSTER CITY  
CITY COUNCIL MINUTES  
October 17, 2022 – City Hall Council Chambers  
5:30 PM**

**Call to Order - Roll Call - Pledge of Allegiance**

Council President Nina Nielsen called to order the meeting of the Common Council on October 17, 2022 at 5:30 pm. Present at roll call were Councilpersons Pechota, Jenniges, Ryan, Nielsen, Fischer and Whittaker (remotely). Mayor Brown and Attorney Williams were present remotely. The Pledge of Allegiance was stated.

**Approval of Agenda**

Councilperson Pechota moved, with a second by Councilperson Jenniges, to approve the agenda. The motion unanimously carried.

**Approval of Minutes**

October 3rd, 2022 Council Meeting

Councilperson Ryan moved, with a second by Councilperson Fischer, to approve the minutes from the October 3rd, 2022 Council Meeting. The motion unanimously carried.

**Declaration of Conflict of Interest**

No conflicts of interest were stated.

**Public Comments (Not to include agenda related items, 3-minute max. per person, with total public comment period not to exceed 15 minutes)**

No public comments were received.

**Old Business**

**Phase 3A Effluent Force Main Construction Bids (WWTF Improvements Project)**

Councilperson Ryan moved to approve awarding the Wastewater Treatment Facilities Improvements Project Phase 3A Effluent Force Main Construction contract to Quinn Construction in the amount of \$4,162,691.15 contingent upon receipt of all contract documents in proper form and approval from the funding agency. Seconded by Councilperson Fischer, the motion carried with Councilperson Pechota, Jenniges, Ryan, Nielsen, Fischer and Whittaker voting yes.

**Phase 3B Transfer Force Main and Lift Station Construction Bids (WWTF Improvements Project)**

Councilperson Jenniges moved to approve awarding the Wastewater Treatment Facilities Improvements Project Phase 3B Transfer Force Main and Lift Station Construction contract to RCS Construction in the amount of \$2,565,922.77 contingent upon receipt of all contract documents in proper form and approval from the funding agency. Seconded by Councilperson Fischer, the motion carried with Councilperson Jenniges, Ryan, Nielsen, Fischer, Whittaker and Pechota voting yes.

**Ordinance and Resolutions**

**Resolution #10-17-22A - Dissolving TIF #5**

Councilperson Ryan moved to adopt Resolution #10-17-22A, Dissolving TIF #5. Seconded by Councilperson Pechota, the motion unanimously carried.

**RESOLUTION NO. 10-17-22A**

## **RESOLUTION TO DISSOLVE TAX INCREMENT FINANCING DISTRICT #5**

WHEREAS, the Common Council of the City of Custer City on March 3, 2008, created by resolution Tax Increment Financing District Number Five of the City of Custer with boundaries designated as following described parcel:

*Lots 1 of Tract Talbot, Custer Lumber Industrial Site Subdivision, Section 24, T3S, R4E, BHM, Custer County, South Dakota*  
including any rights-of-way therein as well as any rights-of-way adjoining the above-described parcels; and

WHEREAS, per the Contract for Private Development for Tax Incremental District Number Five, payment of final positive tax increment payment authorized in the Project Plan is defined as a portion of the total amount being assessed in the year 2021, and payable in the second one-half of the year 2022.

NOW THEREFORE BE IT RESOLVED by the Common Council of the City of Custer City, that Tax Incremental Financing District Number Five be dissolved in accordance with South Dakota Codified Law (SDCL) 11-9-46 and any money remaining be allocated as specified by SDCL 11-9-45 effective November 30, 2022.

Dated this 17<sup>th</sup> day of October, 2022.

City of Custer City

Nina Nielsen, Council President

Attest: Laurie Woodward, Finance Officer

### **New Business**

#### **Furnishing Pipe, Fittings & Appurtenances WWTF Project Change Order #1-Core and Main**

Councilperson Fischer moved to approve the WWTF Project Furnishings Pipe, Fittings & Appurtenances Change Order #1 with Core and Main for an increase of \$104,891.18. Seconded by Councilperson Ryan, the motion carried with Councilperson Ryan, Nielsen, Fischer, Whittaker, Pechota and Jenniges voting yes.

#### **Hometown Hero Banners Update**

Kathy Johnson gave an update on the Hometown Hero Banners. They currently have 43 banners with room for 63 total. The cost of the banners will increase to \$120 from the previous \$110.

#### **Custer County Hazard Mitigation Plan - Black Hills Council of Local Government**

Kailey Snyder with Black Hills Council of Local Government and Steve Esser, Custer County Emergency Management Director, gave the Council an overview of the Custer County Hazard Mitigation Plan and the process of updating such plan, which the City will be participating in.

#### **Preliminary Plat - A Plat of Groat Tract West and Groat Tract East**

Councilperson Ryan moved to approve the preliminary plat of A Plat of Groat Tract West and Groat Tract East contingent upon all property owners signing a typed document regarding the installation of a separate water line to the second parcel with a set completion date. Seconded by Councilperson Fischer, the motion unanimously carried.

#### **Final Plat - A Plat of Duke Tract West and Duke Tract East of Kranzler Sub**

Councilperson Fischer moved to approve the final plat of A Plat of Duke Tract West and Duke Tract East of Kranzler Subdivision. Seconded by Councilperson Jenniges, the motion unanimously carried.

#### **Plan Review Contract - Lookout Plan + Code Consulting**

Councilperson Ryan moved to approve the Plan Review Contract with Lookout Plan + Code Consulting from November 1st, 2022 through December 31st, 2023 at 20% of building permit fee for

Commercial and Residential Projects and \$75 per hour for code consulting. Seconded by Councilperson Pechota, the motion carried with Councilperson Nielsen, Fischer, Whittaker, Pechota, Jenniges and Ryan voting yes.

### **Presentation of Claims**

#### **10.17.22 Claims List**

Councilperson Fischer moved, with a second by Councilperson Ryan to approve the following claims. The motion unanimously carried.

Adobe Inc, Supplies, \$15.96  
Amazon, Supplies, \$28.94  
Black Hills Chemical, Supplies, \$416.89  
Black Hills Energy, Utilities, \$6,985.87  
Butler Machinery, Repairs & Maintenance, \$1,316.01  
Culligan, Repairs & Maintenance, \$20.00  
Chronicle, Publishing Fees, \$922.08  
Custer County Treasurer, Law Enforcement Contract, \$101,250.00  
Custer Ace Hardware, Supplies, Repairs & Maintenance, \$795.46  
DGR Engineering, Capital Improvements, \$32,180.94  
Discovery Benefits, Supplies, \$30.00  
Dollar General, Supplies, \$5.33  
First Interstate Bank, Supplies, \$502.95  
French Creek Supply, Supplies, Repairs & Maintenance, \$393.35  
Golden West Telecommunications, Supplies, \$528.18  
Golden West Technologies, Professional Fees, \$2,592.40  
GFOA, Membership, \$160.00  
Hills Toilet Service, Maintenance, \$835.00  
J.P, Cooke, Supplies, \$69.75  
Jenner Equipment, Repairs & Maintenance, \$7,270.99  
Kimball Midwest, Supplies, \$820.24  
Log Me In, Supplies, \$51.12  
Lynn's Dakotamart, Supplies, \$158.73  
McDonnell Chantel, BID Board, \$500.00  
McGas, Repairs & Maintenance, \$122.00  
Midcontinent Testing Labs, Professional Fees, \$917.50  
Nelson Oil & Gas, Supplies, \$1,569.96  
Quill, Supplies, \$218.69  
Rapid Delivery, Professional Fees, \$89.70  
Servall, Supplies, \$290.16  
State Long Distance, Utilities, \$23.21  
SD One Call, Supplies, \$147.00  
The Hartford, Insurance, \$119.34  
Unemployment Insurance Division of SD, \$67.41  
Verizon Wireless, Utilities, \$530.35  
Total Claims \$161,945.51

### **Department Head Discussion & Committee Reports**

Various committee reports were given in addition to the department head giving an update.

### **Possible Executive Session – Personnel (1&4), Proposed/Pending Litigation (3), & Contract Negotiations (3) (SDCL 1-25-2(1,2,3,4,5,6))**

Councilperson Fischer moved to go into and out of executive session for personnel and contract negotiations per SDCL 1-25-2(1,2,3,4,5,6) at 6:20 pm with the Attorney and Finance Officer present.

Seconded by Councilperson Ryan, the motion unanimously carried. The Council came out of executive session at 6:45 pm, with no action taken.

**Adjournment**

With no further business, Councilperson Pechota moved to adjourn the meeting at 6:45 pm. Seconded by Councilperson Jenniges, the motion carried unanimously.

ATTEST:

CITY OF CUSTER CITY

Laurie Woodward  
Finance Officer

Nina Nielsen  
Council President

FAIRBURN TOWN BOARD  
REGULAR MEETING  
Fairburn Civic Center  
Wednesday Oct.19, 2022 @ 7pm

1. Call to Order:
2. Roll Call:
3. Additions or changes to the agenda:
4. Conflict of Interest Declaration:
5. Approval of the Regular Minutes of September21, 2022
6. Approval of financials and checks written

Black Hills electric C... -split-	\$287.00
Building - 85.00	
Street Lights -202.00	
IRS EFTP (941 Payroll Tax)	\$195.06
Fairburn Water Asso.	
Utilities: Water	\$30.00
Southern Hills Publish...	
Advertising: Publication...	
Payroll Expenses: Wag...	\$392.49
Kieffer Sanitation	\$31.21
Credit Card (Pronto Auto c/c (plow Trk.))	\$843.95
SDPAA Garage Liability Ins.	\$2973.30

7. OLD BUSINESS
  - a.) Status of Plow Truck
  - b.) Lawn Service, Spray for weeds
8. NEW BUSINESS
  - a.) Kailey Snyder; BH Council of Local Governments.  
Custer County Hazard Mitigation Plan
  - b.) Approval of SDPAA ins.
  - c.) Abatements

9. Motion to adjourn at \_\_\_\_\_



# Fairburn Town Meeting 10/19/22 @ 7:00 City Hall

Name	Email	Phone	Organization
Joan Harris	Joeharris.news@gmail.com town of fairburn@yahoo.com	605 484-5307	Fairburn Finance Officer
Dean Weekley	dean 927 @ Rocket mail .com	605 430 1919	
Merissa Kremer	sdcountrygal52@pro.com	605-255-5494	
Sally Nordstrom	salinsodaK9@hotmail.com	605-355-4807	Fairburn Town Board
Tony Parker	Shoanee1@hotmail.com	605-891-8628	
Ronda Parker	''		

TOWN OF FAIRBURN  
Regular Meeting  
October 19, 2022

The Fairburn Town Meeting was called to order by Mellissa Kremer, at 7:00pm at the Fairburn Town Hall. Present were Board members Melissa Kremer, Dean Weekley, Sally Nordstrom, and Finance Officer, Kailey Snyder (BH Council of Local Governments,) and Steve Esser (Custer County Emergency Management,) along with two citizens.

Motion made and seconded approve agenda as presented. Vote all AYE, Motion carried. No conflict of interest was stated. Motion made and seconded approve minutes of September 21, 2022. Vote; All Aye; Motion carried. Motion made and seconded to approve financials and checks written. Vote; All Aye; Fairburn Water Association \$30.00, Kieffer Sanitation \$31.46, B.H. Electric Co-Op \$287.00, Payroll \$392.49, So. Hills Publishing \$17.45, IRS 941 Payroll Tax \$195.06, Pronto Auto \$843.95, SDPAA Ins. \$2973.30. Vote; All Aye; Motion carried.

Old Business; Weekley updated the Board on the status of the plow truck, Nordstrom said she would call concerning weed spraying.

New Business; Kailey Snyder of B.H. Council of Local Government, gave a presentation concerning her work with Custer County on their new Hazard Mitigation Plan. Steve Esser updated the Town Board on why this was important and how Fairburn could help. Snyder requested a volunteer to attend the county meetings. The Board agreed one of them would attend, depending on who was available and also to provide the requested material.

Motion made and seconded to approve SDPAA insurance rates. Vote; all Aye, Motion Carried. Motion made and seconded to send two abatement letters. Vote; all Aye, Motion carried. Motion made and seconded to adjourn at 8:05pm. Vote; all Aye, Motion carried.

Published once at the approximate cost of \_\_\_\_\_

Town of Fairburn  
Joan Harris, Finance Officer

**HERMOSA TOWN BOARD  
WORK SESSION  
Tuesday, October 25, 2022 – Following P&Z Meeting**



- 1) **ROLL CALL:**
  - A) BOT Roll Call: Henrichsen, Holsworth, Kramer, Schumack & Thomason
  - B) P&Z Roll Call: Harris, Waltman, Irvine, Stockham & Klaski
  - C) Acknowledgement of other attendees
- 2) **CALL FOR CHANGES:**
  - A) Review current agenda items
  - B) Motion to accept the agenda as presented/amended
- 3) **NEW BUSINESS:**
- 4) **WORK SESSION ITEMS**
  - A) Black Hills Council of Local Government, Hazard Mitigation – Kailey Snyder
  - B) Annexation: Gumbo Lily, Fairgrounds Place, McDermant Street.
  - C) Chapter 52: Garbage and Refuse – Review fees for illegal dumping and proposed signage updates.
  - D) Update sign next to yard waste dumpsters
- 5) **ITEMS FROM CITIZENS:** No action will be taken (3-minute time limit per speaker)  
Meetings of the Board of Trustees are open to the public. The audience may be allowed to comment on specific agenda items during the time allotted on the agenda for those items, according to established procedures of the Board. This is a time for members of the in-town municipal boundary citizens to express concerns or discuss issues having relevance to the town. Anyone wishing to address the Town Board during this time shall be asked to identify themselves. The number of presentations and time allotted to individuals may be limited by the board president and individuals shall refrain from discussing personalities. The president at his discretion, may recognize patrons at other times during the board meeting. No action will be taken by the board on any issue related without being first placed on a future agenda, by the board, to allow for proper notice.
- 6) **TRUSTEE INPUT:**
- 7) **EXECUTIVE SESSION:**
  - A. Motion to enter Executive Session allowable by SDCL 1-25-2.1 – Legal/Personnel/Contract
  - B. Motion to exit out of Executive Session
  - C. Motions resulting from Executive Session
- 8) **ADJOURN:**  
Motion by \_\_\_\_\_; second by \_\_\_\_\_ to adjourn the meeting at \_\_\_\_\_ pm.

ATTEST:

\_\_\_\_\_  
Gail Boddicker  
Finance Officer

\_\_\_\_\_  
Dan Holsworth  
Town Board President

**10/25/2022 – 6:00 at Town Hall**

[illegible]

**HERMOSA TOWN BOARD  
MINUTES OF JOINT WORK  
SESSION  
Tuesday, October 25, 2022**

**ROLL CALL:**

The meeting was called to order at 6:20pm. Present were BOT members Holsworth, Kramer, and Thomason. Henrichsen and Schumack were absent. P&Z members present were Harris, Waltman, Irvine, Stockham & Klaski along with Finance Officer Boddicker. Also in attendance were Monica Seviss newly hired finance officer, Kaylee Snyder of Black Hills Council of Local Government and Steve Esser of Custer County Emergency Management.

**CALL FOR CHANGES:**

Motion made and seconded to accept the agenda as presented. Vote all Aye; Motion carried.

**WORK SESSION ITEMS**

Kaylee Snyder of Black Hills Council of Local Government, and Steve Esser of Custer County Emergency Management spoke on the Custer County Hazard Mitigation Plan, which must be reviewed, updated, and accepted by Feb. 28, 2023 when it expires. They discussed its scope of use, emergency preparation, prevention, response, recovery, grants, and how it relates to our community. Questionnaires were handed out with a request they be returned by Dec. 1, 2022. Also discussed were upcoming meeting to learn more about the needs and history of each community. Harris was asked to be a representative for Hermosa at the core meetings. A work session was setup for Tuesday November 8, 2022 following the P&Z meeting to complete the questionnaire.

There was general annexation discussion of Gumbo Lily, Fairgrounds Place, and McDermand Street. A presentation letter was submitted by Harris, with requests for additions and changes. It was agreed members would forward all comments to Gail who would compile them into one list and email to Harris to incorporate into the letter and bring back to the next work session.

Garbage and Refuse fees were reviewed for illegal dumping and proposed signage updates. Sign suggestions were made, Stockham volunteered to update the sign and forward to Jill and members to review for a decision at the next work session.

**ADJOURN:**

Motion and seconded to adjourn at 8:20 pm

Submitted by  
Joan Harris  
Pres. Hermosa Planning  
& Zoning

Dan Holsworth  
Town Board President



**Town of Buffalo Gap Municipality**  
**AGENDA Regular meeting**

1) Call To Order **November 8th 2022 at 6 PM**

2) Approve Agenda

3) Pledge of Allegiance

4) Treasurers Report

- a. Approve Minutes from October regular meeting.
- b. Approve Bills (See List of Bills)

5) Sanitation Board Report

6) Water Report

7) Water infrastructure plan

- A. Engineer Proposal
- . B. State offer
- . C. Resolution
- . D. Public input and board vote

8) Animal control report (Deines.)

10) Nuisance Ordinance Recorder

11) Grounds Maintenance

12) Building Maintenance

13) Roads and Alley

14) Board Member Reports

Food Bank, SD Feeds, Pancake Feed, Upcoming  
Voting

15) Old Business:

A. Rural Route Mailboxes

16) New Business:

A. Risk Mitigation-BH council of local  
governments speaker

B. Alcohol license renewals if available.

17) Public Time (5 min limit per citizen)

18) Next REGULAR Meeting: Town Hall  
December 5th

**11/07/2022 – 6:00 at Town Hall**

27/11

**TOWN BOARD MEETING PROCEEDINGS**  
**Buffalo Gap, South Dakota**  
**November 7th, 2022**

The board of the Town of Buffalo Gap met in regular session at 6:00 p.m. on November 7th, , 2022 at the town hall/bank building. Members present were: Trustees Kizer, Hussey, and President Friedan and Finance Officer Clyde. President calls a meeting to order. Motion by Hussey and seconded by Kizer to approve agenda as presented. Pledge of Allegiance was conducted. Clyde reports financials and account balances. Motion by Hussey and seconded by Kizer to approve October minutes. Motion by Hussey and seconded by Kizer to pay the following bills. Salaries and reimbursements-\$2593.51, Cheyenne Sanitation-\$1223.25, Southern Hills Publishing-\$28.78, FRWUD-\$253.50, BH Forests-\$100, SD one Call-\$7.35, Golden West-\$42.92, BH Energy-\$1004.89, FMHA (water loan)-\$483.00, Verizon-\$200.04, Amazon-\$105.41 ( supplies). Clyde reports on recent activities and the finance department. She states she will need authorization to open a secondary account with First interstate Bank for the surcharge funds if resolutions are passed. Motion by Hussey, seconded by Friedan to authorize opening new account for the water surcharge upon resolution passing and surcharge going into effect. **Sanitation Report:** No meeting or report at this time. **Water:** Water operator available to discuss testing and certification. All up to date and sitting well. New meter for the well house is anticipated to be in this month and installed. Water operator met with a new employee from Rural Water and he updated him on a number of resources and options at towns disposal in the future. Operator will be going to a certification exam later this month. Discussion on pumping water for the roads. Planning to do so again in the future. Will attempt to notify users prior. Discussion on engineer contract. After discussion was determined to table the contract for time being so the lawyer can more thoroughly examine and offer his input as well as have engineers available to answer questions. Board presents no issues regarding the contract at this point. Board decides to hold a special meeting on 14th to discuss the contract as well as move the upcoming two resolutions along. One resolution has not been received and will be tabled until a later meeting. **Resolution 2022-02: Titled: RESOLUTION GIVING APPROVAL TO CERTAIN DRINKING WATER FACILITIES IMPROVEMENTS; GIVING APPROVAL TO THE ISSUANCE AND SALE OF A REVENUE BOND TO FINANCE, DIRECTLY OR INDIRECTLY, THE IMPROVEMENTS TO THE FACILITIES; APPROVING THE FORM OF THE LOAN AGREEMENT AND THE REVENUE BOND AND PLEDGING PROJECT REVENUES AND COLLATERAL TO SECURE THE PAYMENT OF THE REVENUE BOND; AND CREATING SPECIAL FUNDS AND ACCOUNTS FOR THE ADMINISTRATION OF FUNDS FOR OPERATION OF THE SYSTEM AND RETIREMENT OF THE REVENUE BOND AND PROVIDING FOR A SEGREGATED SPECIAL CHARGE OR SURCHARGE FOR THE PAYMENT OF THE BONDS** was read in its entirety. After reading, motion by Hussey, seconded by Kizer to pass resolution on for second reading at next meeting. **Animal control:** nothing. **Nuisance enforcer:** no new reports **Building/Grounds:** nothing. **Mailboxes:** Hussey still intends. **Road & St:** Discussion held on the alleys. Mark Wynia will be going into surgery and unable to haul for sometime. **Board member reports:** Feeding SD, Community Food pantry, community wide garage sale, halloween party were all discussed. Trailer being upgraded in town was presented to the board for approval. All in favor. **Risk Mitigation:** Guests from BHCLG and the county were available to discuss the risk mitigation efforts for the county and inclusion of Buffalo Gap. After their presentation, any questions were able to be asked and volunteers desired for their project. Board will be including the rodeo grounds in the risk mitigation plan to help add it in event of a major hazard destroying it. Other town infrastructures will be included in the plan. **Malt Beverage License:** Clyde presents on behalf of Cadillac Ranch and Last Chance, their malt beverage license for consideration. After discussion; motion by Hussey and seconded by Kizer to approve the renewal of said establishments malt beverage license. Clyde will forward on the application to state for final approval. **Public Time:** Inquires into the alleyways were made. With no further discussion; motion by Kizer to adjourn. Next regular meeting will be held November 5th 2022 at 6:00 PM at town hall. (Note: special meeting was rescheduled from 11/14 to 11/21 but eventually canceled)

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/s/ Finance Officer Heather Besco-Clyde

**HERMOSA TOWN BOARD  
WORK SESSION  
Tuesday, November 8, 2022 – Following P&Z Meeting**



- 1) **ROLL CALL:**
  - A) BOT Roll Call: Henrichsen, Holsworth, Kramer, Schumack
  - B) P&Z Roll Call: Harris, Waltman, Irvine, Stockham & Klaski
  - C) Acknowledgement of other attendees
  
- 2) **CALL FOR CHANGES:** Request: 4A) be moved to 4C) and Annexation moves up to 4a) & Sign moves to 4b) since these should be quick. Hazrd Mitigation will take longer
  - A) Review current agenda items
  - B) Motion to accept the agenda as presented/amended
  
- 3) **NEW BUSINESS:**
  
- 4) **WORK SESSION ITEMS**
  - A) Hazard Mitigation
  - B) Annexation: Gumbo Lily, Fairgrounds Place, McDermand Street.
  - C) Update sign next to yard waste dumpsters.
  
- 5) **ITEMS FROM CITIZENS:** No action will be taken (3-minute time limit per speaker)

Meetings of the Board of Trustees are open to the public. The audience may be allowed to comment on specific agenda items during the time allotted on the agenda for those items, according to established procedures of the Board. This is a time for members of the in-town municipal boundary citizens to express concerns or discuss issues having relevance to the town. Anyone wishing to address the Town Board during this time shall be asked to identify themselves. The number of presentations and time allotted to individuals may be limited by the board president and individuals shall refrain from discussing personalities. The president at his discretion, may recognize patrons at other times during the board meeting. No action will be taken by the board on any issue related without being first placed on a future agenda, by the board, to allow for proper notice.
  
- 6) **TRUSTEE INPUT:**
  
- 7) **EXECUTIVE SESSION:**
  - A. Motion to enter Executive Session allowable by SDCL 1-25-2.1 – Legal/Personnel/Contract
  - B. Motion to exit out of Executive Session
  - C. Motions resulting from Executive Session
  
- 8) **ADJOURN:**

Motion by \_\_\_\_\_; second by \_\_\_\_\_ to adjourn the meeting at \_\_\_\_\_ pm.

ATTEST:

\_\_\_\_\_  
Gail Boddicker  
Finance Officer

\_\_\_\_\_  
Dan Holsworth  
Town Board President

(date) – \_\_\_\_\_ (time) at Town Hall

[illegible]

**HERMOSA TOWN BOARD  
WORK SESSION  
Tuesday, November 8, 2022 – Following P&Z Meeting**



- 1) **ROLL CALL:**  
Holsworth called the meeting to order following P&Z meeting at 6.15 pm. Roll Call: Henrichsen, Holsworth, Kramer, Schumack (Absent). P&Z roll Call: Harris, Waltman, Irvine, Stockham (Absent) & Klaski.
- 2) **CALL FOR CHANGES:**  
A) Motion to move work session item A) Hazard mitigation to the last item in the work session.  
B) Motion made and seconded to approve the agenda as amended; vote; all eyes, motion carried.
- 3) **NEW BUSINESS:** No new business.
- 4) **WORK SESSION ITEMS**  
A) Review of an updated sign next to yard waste dumpsters. Adjustments made to add: “NO: Out of town residents usage”  
B) Annexation: Gumbo Lily, Fairgrounds Place, McDermand Street. Review of Voluntary annexation letter to be sent out by Certified mail. Adjustments made and accepted.  
C) Hazard Mitigation: Reviewed, discussed and edited the “Hazard Mitigation Packet”.
- 5) **ITEMS FROM CITIZENS:** No citizen input
- 6) **TRUSTEE INPUT:** No Trustee input
- 7) **EXECUTIVE SESSION:** No executive session.
- 8) **ADJOURN:**  
Motion made and second to adjourn at 8.00 pm; unanimous

ATTEST:

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Monika Serviss  
Finance Officer

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Dan Holsworth  
Town Board President



**Custer County Fire Service Advisory Board Meeting**  
**Thursday, November 17, 2022 – 6:00 PM**  
**Custer County Courthouse – Commission Conference Room (2<sup>nd</sup> Floor)**  
**HOSTS: Custer County Commission**

**AGENDA**

Pledge of Allegiance

Call the Meeting to Order

Emergency Management: Steve Esser & Kailey Snyder, BHCLG

- Custer County Hazard Mitigation Plan

Custer County Commission:

- Fire District Plan and Election – June 2023
- Excess Funding Allocations for 2023
- Temporary Fire Coordinator Consulting Position(s)

New Business:

- 911 Address/Building Permit Processes – Concerns of Fire & Emergency Response if No 911 Address

Old Business:

- Grant Updates/2023 Planning
- Auto-Aid
- City of Custer Emergency Sirens

Fire Department Updates/Discussion

Custer County – Mitigation Planning Meeting (Fire Meeting)

11/17/2022 – 6:00 at Custer County Courthouse

Name	Representing (City, County, Dept, etc)	Round-trip miles traveled	Phone	Email	Do you want to receive email updates on the plan status and future meeting dates?
Matt Spring	Custer VFD	5	605-440-1299	matthcusterfire@yahoo.com	NO
David Uhrig	Folsom VFD	~ 100 miles	605-342-2449	douhrig@yahoo.com	NO
Selena Spring	Custer VFD	5	605-440-0205	springselena78@gmail.com	No
Brandon Zapp	Custer VFD	5	605-617-0116	brandon.zapp@sd.com	NO
Scott Edoff	Folsom	100 miles	605-555-4262		NO
Kristen Pittenger	Fairburn	70 miles	605-431-6253	knpittenger@gmail.com	Yes
Garrett Dixon	Battle Creek	54 miles	605-380-5153	battlecreekfire@gmail.com	Yes
Oave Lindblom	Battle Creek	—	605-390-4328	olindblom500@gmail.com	Yes
Jim Strain	Fairburn	70 miles	605-381-9966	jimstrain9966@hotmail.com	Yes
Matt White	Custer VFD	5	307-399-6793	matthewwhite@gmail.com	Yes
Robert Morgan Sr	Pringle VFD	11	605-673-1615	morganbob@gate.net	Yes
Bob Brown	Custer City	1	787-3319	Mayor P.C. City of Custer, com	yes
Todd Fish		14	605-517-3957	Todd.J.Fish@gmail.com	NO
Susan Anderson	Custer County	50	605-201-1087	sandersonsusan@custercountysd.com	Yes
Dawn McLaughlin	Custer County		605-1440-1424	dawnlaughlin@custercountysd.com	Yes
Craig Humble	Custer County	24	605-673-1526	chumble@custercountysd.com	Yes
John Jantz	Hermosa	—	605-391-7535	JLantz@CusterCountySD.com	
Mike Linde	Custer County	20	605-673-1503		NO
Mark Hartman	Custer Co.	10	605-673-1362		No
Casey Brazell	Angyle VFD	35	605-517-1616	caseybrazell00@gmail.com	Yes
Jim Allen	Custer VFD	12	605-517-1761	allens@gate.net	No
Robert Morgan Jr	Pringle		440-0662	bobterimorgan@yahoo.com	Yes
Charles Schuch	Pringle	75	605-992		
Luke Carter	Highlands	64	307-629-0316	lukecarter@hotmail.com	Yes

## Custer County – Mitigation Planning Meeting (Fire Meeting)

[illegible]

**Custer County Fire Advisory Board Meeting Minutes**  
**DATE: November 17, 2022 at 6 PM (MNT)**  
**VENUE: Custer County Courthouse, Commission Conference Room**  
**HOST: Custer County Commission**  
**ATTENDEES: See Attached**

The meeting was called to order by FAB Chairman Matt Spring followed by the Pledge of Allegiance. Susan Anderson, Custer County Commission Legal Counsel served as secretary for the meeting.

**CUSTER COUNTY HAZARD MITIGATION PLAN:** Steve Esser, Emergency Management Director, and Kailey Snyder, HGCLG, presented the draft Custer County Hazard Mitigation Plan and handouts. They provided a summary of the planning steps taken, public meetings held, and public input taken to draft the latest hazard mitigation plan for Custer County. A discussion followed and input taken to revise the draft plan.

**CUSTER COUNTY COMMISSION – Custer County Fire District Project:** Commissioners Lintz, Hartman, Hindle and Linde were present at this meeting, as well as Dawn McLaughlin, Finance Officer, and Todd Fish, VSO.

Chairman Spring provided history and background of preparation and studies that have been conducted regarding presenting a Custer County Fire District to a vote. Jim Strain gathered tax information and other budgetary information for this project. There are areas of the county that do not have the tax base to support a fire district, such as Folsom and Buffalo Gap, and Commission Chairman Lintz acknowledged that the county is still responsible to support fire protection in those areas that may not be included in the fire district project. The Dewey area is supported by Edgemont by contract, and the Highlands VFD provide coverage to part of the Dewey area. Chairman Lintz also stated that the SD GF&F needs to be approached to provide more funding of fire, law enforcement and other emergency response services as a payment similar to PILT. The departments that would be included in the proposed fire district would be Custer, Pringle, Argyle and Highlands. Further discussion followed.

**Temporary Fire District Coordinator:** Commissioner Hartman has had discussions with Tim Behlings of the possibility of the county to contract with Behlings to provide leadership to move the fire district project to a vote in June 2023. Mr. Behlings has expressed interest and provided a summary of his experience that may be helpful to this project. Jim Strain also stated that he had some time to assist Mr. Behlings with the project. Additionally, Selena Spring is willing to provide administrative and social media support for this project. A discussion followed. It was also recommended that each fire department would designate a representative to assist in the educating voters in their respective areas of the benefits of the fire district project prior to the June 2023 vote.

**MOTION** by Dave Lindblom and seconded by Klinton Rittberger to support Tim Behlings as the contracted Fire District Coordinator and Selena Spring as assistant and have at least one representative from each department to be members of the committee for the Custer County Fire District Project, with appropriate hourly pay for Behlings and Spring and per diem and mileage expenses to be paid by Custer County. A discussion followed and vote taken, motion passed.

**Excess Funding Allocations:** There is approximately \$78,000 in previously allocated excess fire funding. Custer VFD requested \$25,000 to be used for new extraction equipment and then to surplus its current

extraction equipment to another VFD. A discussion followed. Casey Brazell suggested that a county-wide grant be sought for extraction equipment. A discussion followed noting that Folsom and Buffalo Gap do not have extraction equipment currently.

**MOTION** by Luke Caster and seconded by Casey Brazell to allocate \$25,000 to Custer VFD for new extraction equipment and for Custer VFD to surplus its current extraction equipment to Buffalo Gap; vote taken and motion passed.

**Excess Funding Allocation for 2023:** The request for \$690,000 will be brought to the Custer County Commission at its next meeting.

**NEW BUSINESS: 911 Address/Building Permit Process:** Mr. Strain asked how 911 addresses are requested and determined by Custer County. Fairburn has noticed new home construction without a 911 address and what are the implications if a fire call is made with no 911 address. A discussion followed. It was decided that fire departments should contact the Custer County Planning Department if they notice construction activity and no 911 address attached.

**OLD BUSINESS: Grant Updates/2023 Planning:** Mr. Esser asked for ideas for the 2023 Homeland Security Grant, and extraction equipment was discussed as an immediate need county-wide. Other grant opportunities and needs were discussed, including SCBA equipment, hoses, and extraction equipment.

**Homeland Security Grant for 2022:** \$67,000 was awarded for new radios, and Mr. Esser has ordered radios. Bob Fisher is the radio coordinator and discussed east/west mutual aid zones by adding channels.

#### **FIRE DEPARTMENT DISCUSSION/UPDATES:**

Mr. Fisher reported that the SD Fire Fighter Chiefs Conference will be in Deadwood on December 2 – 4, 2022. Only Argyle has registered to date.

Mr. Brazell asked about the process of allowing new volunteers on their rosters. A discussion followed. Suggestions included background checks and requiring attendance to meetings to retain member status.

There being no further business. Motion by Luke Caster and seconded by Scott Edoff to adjourn the meeting at 7:40 PM (MTN). Vote taken and motion carried.

**NEXT MEETING: Thursday, January 12, 2023 at 6 PM (MTN) at the Custer County Courthouse.**

**Custer County – Mitigation Planning Meeting (Planning Team Meeting 1)**  
**11/21/2022 – 4:00 at Custer County courthouse**

The Planning Team met to discuss the mitigation plan update. The meeting consisted of discussion of what a mitigation plan is, the purpose, process of the update, and reviewing the 2018 Plan risk and vulnerabilities. Team members discussed risk and vulnerability to their community. Lastly the team was asked to provide feedback on the stakeholders list for the upcoming stakeholders meeting. Meeting ended at 5:00.



**11/21/2022 – 4:00 at Custer County Courthouse**

Appendix A: 37

**HERMOSA TOWN BOARD**  
**Special Meeting**  
**Tuesday, November 29, 2022 @ 6:00pm**



- 1) **ROLL CALL:**
  - A) BOT Roll Call: Henrichsen, Holsworth, Kramer, Schumack
  - B) P&Z Roll Call: Harris, Waltman, Irvine, Stockham & Klaski
  - C) Acknowledgement of other attendees
- 2) **CALL FOR CHANGES:**
  - A) Review current agenda items
  - B) Motion to accept the agenda as presented/amended
- 3) **NEW BUSINESS:**
  - A) Lagoon design & expansion
  - B) Surplus funding through Custer County
  - C) DANR penalty
  - D) Ferguson Construction invoice #147226 – review
  - E) Citizen input-BOT agenda – review of language.
- 4) **WORK SESSION ITEMS**
  - A) Hazard Mitigation - Pending
  - B) Annexation: Gumbo Lily, Fairgrounds Place, McDermant Street. - Pending
  - C) Update sign next to yard waste dumpsters. Pending quotes due by December 8, 2022
- 5) **ITEMS FROM CITIZENS:** No action will be taken (3-minute time limit per speaker)  
Meetings of the Board of Trustees are open to the public. The audience may be allowed to comment on specific agenda items during the time allotted on the agenda for those items, according to established procedures of the Board. This is a time for members of the in-town municipal boundary citizens to express concerns or discuss issues having relevance to the town. Anyone wishing to address the Town Board during this time shall be asked to identify themselves. The number of presentations and time allotted to individuals may be limited by the board president and individuals shall refrain from discussing personalities. The president at his discretion, may recognize patrons at other times during the board meeting. No action will be taken by the board on any issue related without being first placed on a future agenda, by the board, to allow for proper notice.
- 6) **TRUSTEE INPUT:**
- 7) **EXECUTIVE SESSION:**
  - A. Motion to enter Executive Session allowable by SDCL 1-25-2.1 – Legal/Personnel/Contract
  - B. Motion to exit out of Executive Session
  - C. Motions resulting from Executive Session
- 8) **ADJOURN:**  
Motion by \_\_\_\_\_; second by \_\_\_\_\_ to adjourn the meeting at \_\_\_\_\_pm.

ATTEST:

\_\_\_\_\_  
Monika Serviss  
Finance Officer

\_\_\_\_\_  
Dan Holsworth  
Town Board President

**Custer County – Mitigation Planning Meeting (Town of Hermosa Meeting)**

1/1.29.22 (date) - 6 pm (time) at Town Hall

[illegible]

HERMOSA TOWN BOARD

WORK SESSION

Tuesday, November 29, 2022 @6:00pm

1) **ROLL CALL:**

Board of Trustee members present were Holsworth, and Kramer, P&Z members present were Harris, Waltman, Stockham, & Klaski. Along with Finance Officer Monica Serviss.

2.) **CALL FOR CHANGES:**

No motions were made, however the title was changed from Special meeting to Work Session as originally specified.

5) **WORK SESSION ITEMS**

A) **Hazard Mitigation**, Harris provided an update on the progress of the Custer County Hazard Mitigation Plan and Hermosa's involvement, along with an update on the upcoming Stakeholders meeting and future core meetings. There was general discussion concerning egress and future developments.

B) **Annexation: Gumbo Lily**, Fairgrounds Place, McDermand Street. - Pending

C) **Update sign next to yard waste dumpsters**. Pending quotes due by December 8, 2022

6) **ITEMS FROM CITIZENS**: No action will be taken (3-minute time limit per speaker)

Meetings of the Board of Trustees are open to the public. The audience may be allowed to comment on specific agenda items during the time allotted on the agenda for those items, according to established procedures of the Board. This is a time for members of the in-town municipal boundary citizens to express concerns or discuss issues having relevance to the town. Anyone wishing to address the Town Board during this time shall be asked to identify themselves. The number of presentations and time allotted to individuals may be limited by the board president and individuals shall refrain from discussing personalities. The president at his discretion, may recognize patrons at other times during the board meeting. No action will be taken by the board on any issue related without being first placed on a future agenda, by the board, to allow for proper notice.

7) **TRUSTEE INPUT**: All thought it was a very productive meeting.

9) **Meeting ended at 9:15pm.**

**Custer County – Mitigation Planning Meeting (Planning and Equalization Meeting)  
11/30/2022 – 1:00 at Custer County Courthouse**

Black Hills Council of Local Governments met with the Custer County's Director of Planning and Director of Equalization. The meeting involved going through some of the pages in the Mitigation Packet, including plans, studies, documents that needed reviewed and getting the estimated value of structures in the County to evaluate vulnerability. Meeting ended at 2:00.

**11/30/2022 – 1:00 at Custer County Courthouse**

1hr  
30 min





**Custer County Commission Meeting**  
**Wednesday,**  
**420 Mount Rushmore Rd.**  
**Commission Meeting Room**  
**Custer, SD 57730**

**A. Call to Order at 8:00 AM**

1. Pledge of Allegiance

**B. Approve Agenda**

**C. Consent Agenda**

1. Minutes of November 22 and November 30, 2022 Commission Meetings.
2. Vouchers
3. Monthly Reports

**D. Conflict of Interest Declarations**

**E. Maintenance**

1. Discuss elevator at 1881 Courthouse Museum.

**F. Planning Department**

1. Final Plat of: MURRAY TRACT AND DAVIS TRACT OF STAR VALLEY ESTATES SUBDIVISION, LOCATED IN SECTION 14, T4S, R4E, BHM, CUSTER COUNTY, SOUTH DAKOTA re: Maxwell & Cenera Davis.
2. Final Plat of: TRACT G-1 AND TRACT G-2 OF KREITZ SUBDIVISION, LOCATED IN THE GOVERNMENT LOT 11 IN THE NE 1/4, SE 1/4, NE 1/4, SE 1/4, AND NW 1/4 OF SECTION 6, T3S, R4E, BHM, CUSTER COUNTY, SOUTH DAKOTA re: Daniel Welsh & Grant McNeilus.
3. Request for variance to Ordinance #2, Article IV, Section 1, 7, C re: Wesdak Welding & Diesel, LLC Parcel #005837.
4. 2023 Custer County Planning Department Fees and Permit Rates
5. 2023 Custer County Planning Commission meeting schedule

**G. Sheriff**

1. Contract with National Park Service re: dispatch services via Custer County \$15K/annually

**H. Caitlyn Green**

1. Custer County employee blood drive

**I. Equalization**

1. Letter from Wendy Semmler, Director of Property Tax Division, DOR

**J. Treasurer**

1. Delinquent Tax List

**K. Emergency Management**

1. Custer County Pre-Disaster Hazard Mitigation Plan update.
2. Discuss funding from BLM re: Community Wildfire Protection Plan for Custer County.

**L. Airport**

1. Agreement of Intent for Direct Sale between United States of America, Forest Service and Custer County Board of Commissioners

**M. Safety Officer**

1. Sam Smolnisky to discuss recommendation for new safety officer appointment.

**N. Public Comment**

Meetings of the Board of Commissioners are open to the public. The audience will be allowed to comment on specific agenda items during the time allotted on the agenda for those items, according to established procedures of the Commission. This is a time for members of the public to express concerns or discuss issues having relevance to the County. Anyone wishing to address the Commission during this time shall be asked to identify themselves. The number of presentations and time allotted to individuals may be limited by the Chairman and individuals shall refrain from discussing personalities. The Chairman, at his discretion, may recognize patrons at other times during the Board meeting. No action will be taken by the Commission on any issue raised without being first placed on a future agenda, by the Commission, to allow for proper notice.

**O. Town of Hermosa**

1. Request for additional funding for meters, fencing and lighting in Town of Hermosa.

**P. Hermosa Water User's Association**

1. Moritz Espy to present update on water project.

**Q. Custer Area Economic Development Corporation**

1. Phil Abernathy to request funding.

**R. Old Business**

1. Streff request to vacate section line re: Resolution 2022-16
2. Letter of Support re: Joe Raver/hand sanitizer manufacturing and distribution venture.
3. Letter of Support re: Todd Konechne-French Creek
4. Ken and Vivian Couch—7-11 and Red Valley Road

**S. Commission**

1. Mail call
2. Meeting schedule
3. Meeting reports

**T. Adjourn**

1. Adjourn the meeting

**Next Meeting Date: December 28, 2022**

Custer County fully subscribes to the Americans with Disabilities Act. If you desire to attend this public meeting and are in need of accommodations, please notify the Commissioners' Office at (605) 673-8173 at least 24 hours prior to the meeting so that appropriate services and auxiliary aids are available.

**\*\*\*\*PLEASE NOTE\*\*\*\***

**CUSTER COUNTY  
COMMISSION MEETING  
HAS BEEN POSTPONED  
TO FRIDAY, DEC 16<sup>TH</sup>  
AT 8:00 AM**

**THANK YOU**

**Custer County – Mitigation Planning Meeting (County Commissioners Meeting)**  
**12/16/2022 – 8:00 at Custer County Courthouse**

[illegible]

**Custer County – Mitigation Planning Meeting (County Commissioners Meeting)**  
**12/16/2022 – 8:00 at Custer County Courthouse**

[illegible]

## **Minutes of the Custer County Commission Meeting—Friday, December 16, 2022.**

### **Members present:**

Commissioners Jim Lintz, Mark Hartman, Mike Linde, Craig Hindle, Travis Bies and Commission Legal Counsel Susan Anderson and Dawn McLaughlin, Finance Officer.

### **A. Commission Meeting was called to order at 8:00 AM followed by the Pledge of Allegiance.**

### **B. Adopting of the agenda**

### **E. Approve Agenda**

1. Amend Agenda to table item "E" Maintenance until 12/28/22; amend Agenda to add "Auditor" heading to discuss HSA plan. Motion to approve Agenda as amended made by Linde; seconded by Hindle; vote taken, all aye; motion carried.

### **C. Consent Agenda**

1. Motion to approve made by Linde; seconded by Bies; vote taken, all aye; motion carried.

Vouchers approved as follows:

**PAYROLL:** 12-5-22 Payroll: Commissioners \$8,142.61; Election \$287.12; Auditor \$5,478.24; Treasurer \$13,543.18; Info Systems & Technology \$3,005.27; State's Attorney \$13,298.46; Courthouse Building \$6,976.74; Director of Equalization \$18,814.40; Register of Deeds \$4,839.25; Veteran's Service \$2,187.76; Human Resources \$2,493.04; Sheriff \$51,103.46; Coroner \$657.45; Nurse \$852.37; Library \$9,088.18; Conservation \$505.57; Weed & Pest \$2,022.21; Planning \$6,777.78; County Road & Bridge \$43,058.90; Emergency Management \$2,704.85; 24/7 Sobriety \$2,102; Emergency Line F \$19,895.68

**COMMISSIONERS:** Southern Hills Publishing \$330.52; Pitney Bowes \$278.85; Quill \$3.12; Golden West Telecom \$27.65; Verizon \$82.18; Fleet \$32.38; A&B Business \$1244; Lynn's Dakotamart \$40.06

**ELECTION:** Southern Hills Publishing \$682.39; Election Systems \$2,748.49; Mt. Rushmore Telephone \$6.76; DS Solutions \$175.

**COURT:** Juror Fees \$604.05

**AUDITOR:** Quill \$178.29; Golden West Telecom \$138.34; Tracy Fish \$2,220; Tyler Technologies \$395; A&B Business \$664.82; Library \$10.86; Register of Deeds \$29.27

**TREASURER:** Quill \$178.47; Golden West Telecom \$135.46; AM Dymo \$42.18; A&B Business \$366.30; Don's Sinclair \$9.76

**STATE'S ATTORNEY:** Golden West Technologies \$1,138.83; Lexis Nexis \$370; Tyler White Crane \$105.68; Harold Sallee \$40.40; Culligan \$31.50; A&B Business \$178.67; Amazon \$15.98



**COURT-APPOINTED ATTORNEY:** Garland Goff \$1,322.85; Grey & Eisenbraun \$771.50; Southern Hills Law, PLLC \$1.80; Hustead Law \$658.30

**MAINTENANCE/COURTHOUSE BLDG:** Golden West Technologies \$349; Golden West Telecom \$26.99; G&R Controls \$1,964.03; Verizon \$41.90; Fleet \$32.38; Menards \$9.99; Amazon \$14.99; Lynn's Dakotamart \$10.63; BHPE \$912.84

**DIRECTOR OF EQUALIZATION:** Quill \$170.88; Golden West Telecom \$188.94; Fleet \$16.19; A&B Business \$125.44; IAAO \$375; Coffee Cup Fuel \$113.10

**REGISTER OF DEEDS:** Golden West Telecom \$54.23; A&B Business \$168.21; Don's Sinclair \$19.52

**VETERANS SERVICES:** Golden West Telecom \$26.99; A&B Business \$146.60

**INFO TECHNOLOGY:** Golden West Telecom \$63.98; Golden West Technologies \$7,754.51; Pitney Bowes \$462.57

**HUMAN RESOURCES:** Golden West Telecom \$26.99; Verizon \$16.44; Family Dollar \$70.54; Southern Hills Publishing \$50; Miner's Cup \$20

**SHERIFF:** BHEC \$74.43; French Crk Supply \$70.76; Pheasantland Industries \$136; Quill \$1,211.54; S&B Motors \$701.26; Galls \$301.91; Innovative Office \$107.68; Golden West Telecom \$508.88; LN Curtis & Sons \$18.95; Dale's Tire \$1,103.40; A&B Pure Water \$54.98; L&A Welding \$776.33; JT Vehicle Systems \$654.90; SD Sheriff's Assn \$749.54; A-Z Shredding \$10.80; Great Western Tire \$1,079.92; Creative Product \$1,481.31; Verizon \$454; A&B Business \$194.24; Lexis Nexis \$89.50; Bob's \$131.74; Teex-Field Training \$160; USPS \$17.15;

**PRISONER CARE:** Mary Seifert \$75; Ruth Airheart \$75; Ann Allen \$75; Satellite Tracking \$91; Hapsie Nutley \$75

**24/7 SOBRIETY:** Pharmchem, Inc. \$156.75

**AIRPORT:** Brenden Hendrickson \$3,950; Golden West Telecom \$113.48; MG Oil \$8,263.50

**LIBRARY:** Mt. Rushmore Telephone \$134.05; Bywater Solutions \$515; Golden West Telecom \$115.95; Amazon \$1,310.32; Country Inn \$251.28; Walmart \$123.48

**FAIR:** Custer County Fair Assn \$8,000.

**EXTENSION:** Golden West Telecom \$117.67; Fall River County \$1,016.10; A&B Business \$147.61

**WEED & PEST:** Dan Debuhr \$61.88; French Crk Supply \$47.84; SD Assn of County Weed & Pest \$75; Warne Chemical \$338.23; Nutrien Ag Solutions \$4,918.74; Golden West Telecom \$26.99; Fleet \$32.38; A&B Business \$153.12; SDSU \$37.22

**PLANNING:** Southern Hills Publishing \$46.25; Quill \$96.41; Golden West Telecom \$107.97; Fleet \$16.19; A&B Business \$180.32; Vector \$11.98; USPS \$8.36

**COUNTY ROAD & BRIDGE:** A&B Welding \$12.09; D-Ware, Inc. \$4,350; French Crk Supply \$147.79; Interstate Batteries \$141.95; Mt. Rushmore Telephone \$119.30; Power House \$173.36; S&B Motor Parts \$261.67; SD Property \$30; Black Hills Gravel \$19,170; Golden West Telecom \$196.88; Stern \$403.05; Runnings Supply \$597.43; Culligan Water \$52; Nelsons Oil & Gas \$2,355.51; Forward Distributing \$19.65; Fleet \$372.37; A&B Business \$181.06; Amazon \$14.61; Stan Equipment \$104.03

**FIRE PROTECTION:** Argyle Fire Dept \$11,000; Buffalo Gap Fire Dept \$5,000; Custer VFD \$36,500; Dewey Fire Dept \$2,500; Folsom Fire Dept \$5,750; Highlands Fire Dept \$7,500; Pringle Fire Dept \$8,000.

**EMERGENCY MANAGEMENT:** BHEC \$25.12; Quill \$864.22; S&B Motors \$290.27; Golden West Telecom \$44.54; Genpro \$799.39; Verizon \$46.90; A&B Business \$161.67; Super 8 \$247.98; Big D \$82.52; Caseys \$68.37; Holiday \$57.95

**SAFETY OFFICER:** Custer Ambulance Service \$1,050.

**SEARCH & RESCUE:** BHEC \$553.79; Sander Sanitation \$19.10; Golden West Telecom \$93.95; Amazon \$140.22; McGas \$89; Expertvoice \$116.45

**POOR/INDIGENT:** Chamberlain McColley's \$2,000.

**MENTAL ILLNESS BOARD:** Yankton County Treasurer \$194.40

**COUNTY BUILDINGS:** BHEC \$4,903.13; O'Connor Company \$1,463.37; Custer Ace Hdwe \$64.76; Buckhorn Equipment \$650; A-Z Shredding \$7.50; A&B Pure Water \$75.39; Amazon \$895.26; Sam's \$258.42; Menards \$67.25; Hobby Lobby \$25.54; Lowe's \$170.58

**EMERGENCY LINE:** Powerphone, Inc. \$1,387; Golden West Telecom \$422.69; A&B Pure Water \$54.97; A&B Business \$152.20; Range Telephone \$50.58; Holiday Inn \$200.18

TREASURER DISBURSEMENTS  
NOVEMBER 2022

I-MSP MYERS CEDORAH	MSP CHECK DEBAN CREDIT MAYT FCB	X 11/01/2022	1,707.99	000481	1,707.99
I-GVPT GARY HINGAKER	OVERPAYMENT ON PARCEL #014354	X 11/01/2022	269.83	016053	269.83
I-SOM OCT 2022	SOM FOR OCTOBER 2022 MOTOR V	X 11/01/2022	235,283.26	016056	235,283.26
I-OTA JOSEPH PILGRIM	PD 2ND HALF TAXES	X 11/02/2022	2,932.41	000482	2,932.41
I-FAIRBANKS FIRE DEPT	FAIRBANKS FIRE DEPT EXHIBIT PLAT	X 11/02/2022	21.00	016057	21.00
I-GVPT DENNY SELTING	OVERPAYMENT OF PARCEL#00840	X 11/03/2022	62.23	016058	62.23
I-GVPT DIANE CASPERSEN	OVERPAYMENT OF TAX #14467	X 11/03/2022	18.42	016059	18.42
I-OTA JACK HALDEFORD	PAID THE 2ND HALF 21 TAX #8944	X 11/04/2022	630.26	000483	630.26
I-GVPT RIGGI JOHN	OVERPAYMENT TAX PARCEL #7844	X 11/04/2022	19.81	016060	19.81
I-REFUND J&J ENTERPRISES	REFUND ON TITLE #11200617	X 11/04/2022	189.38	016061	189.38
I-MC KARENDA LARNA	REFUND ON #222031331 GYM	X 11/07/2022	84.00	016062	84.00
I-REFUND NEW INC FLEET	REFUND NC FEES FORD #221030480	X 11/07/2022	84.00	016063	84.00
I-OCT 2022 FEES	80 FUEL BILL FOR OCT 2022 FEES	X 11/08/2022	5,000.80	000484	5,000.80
I-MSP KERRAN CHECK	KERRAN MSP NORTHEAST CUMM CREDIT	X 11/08/2022	111.83	000485	111.83

I-CUMM CHARLES, SAMUEL	1998 FORD F250 #202975409 PER	H 11/10/2022	111.00	016064	111.00
I-MSP MATTHEW RENT ACCOUNT	MSP RENT ROUNDBANK	H 11/16/2022	2,161.94	000486	2,161.94
I-SEPT 2022 FEES	SERVICE CHARGES FROM 1ST INTER	H 11/18/2022	87.49	000488	87.49
I-TS EMPIRE INVESTMENTS	4 TS 21-81/146/178/116	H 11/18/2022	6,899.79	016065	6,899.79
I-GVPT JOHNSON ALAN	OVFC TAXES PARCEL# 003832	H 11/21/2022	18.00	016066	18.00
I-GVPT LUTHER ST CLOUD SURANO	OVFC ON TITLE FOR 2019 RAM	H 11/22/2022	24.67	016067	24.67

[illegible]

CUSTER COUNTY TREASURER		12/02/2022 2:17 PM	
REF: 00105273 12/02/2022		CITY: 04 1206: 000	
REF: 006504		PAID BY: CUSTER CO TREASURY	
TRAC: 400,000.00		NISC RECEIPT	
DECL: 1406 CUSTER CO SHERIFF		SUM - NOVEMBER 2022	
ACCOUNT 101342, 10		\$120.00	
ACCOUNT 101341, 10		\$50.00	
ACCOUNT 101342, 11		\$120.00	
SHERIFF FEES & FINE		\$5.00	
ACCOUNT 201361, 00		TOTAL: 300.00	
THRU: 1,441.60		CHECK	
APPL: 1,441.60		APPLIED:	
CHRG: 0.00		CHARGE:	

**D. Conflict of Interest Declarations – None.**

**E. Planning**

1. Planning Director, Terri Kester, requested approval of Final Plat of: MURRAY TRACT AND DAVIS TRACT OF STAR VALLEY ESTATES SUBDIVISION, LOCATED IN SECTION 14, T4S, R4E, BHM, CUSTER COUNTY, SOUTH DAKOTA re: Maxwell & Cenera Davis. Motion to approve made by Hartman; seconded by Hindle; vote taken, all aye; motion carried.

2. Kester also presented and requested Final Plat of: TRACT G-1 AND TRACT G-2, OF KREITZ SUBDIVISION, LOCATED IN THE GOVERNMENT LOT 11 IN THE NE 1/4 SE 1/4, NE 1/4, NE 1/4, SE 1/4, AND NW 1/4 OF SECTION 6, T3S, R4E, BHM, CUSTER COUNTY, SOUTH DAKOTA re: Daniel Welsh & Grant McNeilus. Discussion was held regarding access and it was determined there was an error in the Staff Report, but the Plat is correct. Motion to approve the *Plat only* made by Bies; seconded by Linde; vote taken, all aye; motion carried. Further discussion was held and a motion made to amend the previous motion and approve as presented, with changes to the Staff Report, by Bies; seconded by Linde; vote taken, all aye; motion carried.

3. Kester also presented a request for variance to Ordinance #2, Article IV, Section 1, 7, C re: Wesdak Welding & Diesel, LLC Parcel #005837 and recommended approval. Kester noted the Staff Report will be corrected and that a Plat will be forthcoming once the Variance is approved. Motion to approve Variance, with change in Staff Report, made by Linde; seconded by Hartman; vote taken, all aye; motion carried.

4. Director Kester presented 2023 Custer County Planning Department fees and permit rates for approval. It was noted that fees remained the same as the 2022 rates, with the exception

of lot line adjustment and lot line consolidation fees, which are now \$250. Motion to approve made by Hindle; seconded by Linde; vote taken, all aye; motion carried.

5. The 2023 Custer County Planning Commission schedule was presented and acknowledged by the Commission.

#### **F. Sheriff**

1. Sheriff Marty Mechaley presented the Commission with an updated contract for dispatch services between Custer County and the National Park Service, which encompasses both Jewel Cave and Wind Cave National Park. Mechaley noted the length of the contract is 3 years at a total of \$45,000. (\$15,000/per year) Mechaley's signature validates the contract.

#### **G. Auditor**

1. Proposal for a new HSA provider and servicer was presented for Commission approval. The previous servicer (First National Bank of Pierre) no longer accepts new HSA accounts and has significantly raised its fee for existing accounts. It was decided to move all existing accounts to Health Equity, who accepts new accounts, as well at a greatly reduced service fee. Motion to approve the change of benefit plan to Health Equity and authorize Chairman Lintz to sign agreement made by Hartman; seconded by Hindle; vote taken, all aye; motion carried.

#### **H. Caitlyn Green**

1. Caitlyn Green has organized a Custer County Blood Drive to be held January 9, 2022 from 10:00 AM – 2:00 PM in the courthouse basement. Commissioners agreed that Custer County employees wishing to donate would not have to use vacation time to do so.

#### **H. Equalization**

1. Director Leah Vissia presented a letter from Wendy Semmler, Director of Property Tax Division, DOR, thanking Custer County for the GIS information provided.

#### **I. Treasurer**

1. Finance Officer, Dawn McLaughlin, presented the Delinquent Real Estate List, as well as the Delinquent Mobile Home Tax List; both of which were published in the Custer County Chronicle on December 14, 2022.

2. McLaughlin also stated the Tax Certificate Auction will be held December 19, 2022 at 9:00 AM in the Commission Room. There will be a \$50 non-refundable fee per certificate purchased in addition to the price paid for each certificate. She noted there are currently 200 tax delinquent properties this year compared to 190 in 2021. The auction was acknowledged by the Commission. Hartman inquired about name changes on sold parcels/transfers being more timely and was told departments are working together to expedite the process.

#### **K. Emergency Management**

1. Director Steve Esser presented an update on the Custer County Pre-Disaster Mitigation Plan and noted that things are moving ahead. Esser stated he will need the insured values of critical buildings within the county. He noted there will be a community stakeholder meeting on December 20, 2022 at 2:00 PM at the Custer VFD fire hall to discuss identifying risks and hazards.

2. Esser noted that he is hopeful that Custer County will receive a 25K grant from BLM to cover costs of rewriting the Community Wildfire Protection Plan for Custer County, which has



not been updated in some time. He said the plan is reviewed by FEMA, Homeland Security and EMS.

#### **L. Airport**

1. Legal Counsel, Susan Anderson, presented an Agreement of Intent for Direct Sale between United States of America, Forest Service and Custer County Board of Commissioners for approval and Chairman's signature. Anderson referred to the December 12, 2021 letter of intent to purchase and stated there is a timeline of what needs to be done to push the sale through. She noted congressional staff is working to help complete the process. Motion to approve Chairman's signature made by Linde; seconded by Bies; vote taken, all aye; motion carried.

#### **M. Safety Officer**

1. EMS Director Steve Esser presented former Safety Officer, Sam Smolnisky's recommendation for his replacement, noting that Theresa Obenauer has expressed interest in the position. It was noted that this position should be open and offered to employees interested before making a decision.

#### **I. Public Comment**

1. Dan Holsworth, Town of Hermosa, stated he is looking forward to speaking at today's meeting and appreciates the work between Hermosa and Custer County.

#### **J. Town of Hermosa**

1. Dan Holsworth appeared before the Commission with a request from the Town of Hermosa for additional funding for automated meters at an approximate cost of \$50K; fencing around the well and lower pump house at approximately \$45; and street lighting at an estimated cost of \$25K. He asked that the Commission to consider adding these items to the priority funding list. Finance Officer McLaughlin stated the priority list will be further considered after the next audit is conducted. Commissioner Hartman asked Holsworth if Hermosa is using the Custer County Housing TIF and was told no, and that the existing TIF expires in one year. Holsworth anticipates a new development will be included in the TIF, as well.

#### **K. Hermosa Water User's Association**

1. Moritz Espy provided the Commission with an update on the association's current water project. Espy stated that the materials are beginning to arrive and installation is scheduled for this summer. He thanked the Commission for help in funding this project. He stated they have not received any formal requests for water hookups from incoming developers, noting the main use is for livestock, but the association would be willing to sell water to others. Espy was asked if there were any plans to install fire hydrants. It was also noted that the Hermosa water board would support a water source for fire preventing and suppression.

#### **L. Custer Area Economic Development Corporation**

1. Phil Abernathy appeared before the Commission as Treasurer of the CAEDC and presented two funding requests. First is a request for \$2500 to help fund a current housing study; noting that the last study was conducted in 2018. He stated this study is focused mainly in the Custer City area, but at Chairman Lintz' request, will push to include all communities in Custer County. Motion to approve \$2500 to CAEDC for housing study made by Hartman;

seconded by Hindle; vote taken, Hartman and Hindle aye; Bies and Linde nay; Chairman Lintz voted aye; motion carried.

2. Abernathy also shared the CAEDC would like to hire a part-time executive director, as the current staff is comprised of volunteers. He asked the Commission to reconsider his previous request for \$10K to help fund a director. It was noted that the CAEDC has presented the same request to the City of Custer, but their decision rests on whether or not Custer County contributes first. Commissioner Hartman stated that there are a lot of organizations within Custer County that depend solely on volunteer directors and that Custer County does not have the means fund all of the director positions. Chairman Lintz and Commissioner Bies agreed.

## **M. Old Business**

1. Legal Counsel, Susan Anderson, presented request to vacate section line re: Streff (Resolution 2022-16). This request was previously denied, but upon further review and other similar requests obtaining approval, it was decided to hold further discussion regarding the matter. Planning Director Kester noted that the Planning Commission had previously approved the request and stated that all adjoining properties have utilities. Streff stated there is a structure located on the section line and is in need of replacement; therefore the section line needs to be vacated. Commissioner Bies said he would rather grant a variance for new construction rather than vacate the section line. Streff noted that the section line does not affect adjoining properties and sees no need for the line. Commissioner Hartman asked why the vacation would be denied as the County has granted many other similar requests. Further discussion was held. Motion to approve vacation of section line made by Hartman; seconded by Hindle, vote taken; Hartman and Hindle aye; Bies and Linde nay; Chairman Lintz aye; motion carried.

2. Letter of support re: Joe Raver/hand sanitizer manufacturing and distribution venture was discussed. Legal Counsel Anderson previously drafted a letter of support/statement stating Custer County has no zoning ordinances preventing the venture from moving forward within Custer County. However, Chairman Lintz stated since first presented, more information has come to his attention regarding the matter. Lintz stated that Custer County was not given full and accurate information; the proposed building was not sold, nor a purchase agreement in effect; no corporation has been formed or filed; no funding requirements have been met and thusly he is not in favor of a letter of support. Chairman Lintz stated he feels Custer County was mislead at the previous meeting and presentation. Motion to table until a later date made by Bies; seconded by Hindle; vote taken, all aye; motion carried.

3. Letter of support re: Todd Konechne—French Creek was presented and discussed. Mr. Konechne drafted a letter and provided a copy to the Commission. It was requested that Julie-Frye Mueller and Trish Ladner be copied in, as well. Konechne stated he is asking for support of the Commission as representatives of Custer County residents and that he doesn't feel that studies nor notifications were properly executed. He stated he is not opposed to the project, but rather, the location of wastewater. He feels this will negatively affect French Creek and its residents, as well as those using the creek recreationally. Peg Ryan spoke on behalf of the City of Custer and stated that by drafting a letter of support, it is pitting Custer County against the City of Custer and felt it would be detrimental. Ryan stated that all requirements have been met; that many meetings have been held regarding this project over the past three years and asked why there are objections at this point. Ryan requested the Commission to rethink the letter of support. Also present was engineer Dana Foreman, KLJ Engineering. Foreman stated that all requirements and regulations for the project have been met, including wastewater

treatment and water quality and asked that the Commission not support Konechne's letter. Further discussion was held and as a result, motion to table until December 28, 2022 Commission meeting was made by Bies; seconded by Linde; vote taken, all aye; motion carried.

4. Ken and Vivian Couch, although not in attendance, requested the Commission address their concerns regarding trucks hauling on 7-11 Road creating excessive dust. The Couches inquired about the FLAP (Federal Land Access Program) and Custer County's role in the program. Highway Superintendent, Jesse Doyle, stated neither Custer County nor Wind Cave National Park are participants in the program. Doyle noted that Custer County is a pass-through agency for Friends of Wind Cave and that the haul road runs through the Couch's property. Doyle also stated he was in touch with the contractor and requested the haul trucks maintain a lower speed when passing through the property.

#### **J. Commission**

1. Mail call – none
2. Meeting Schedule –
  - a) Chairman Lintz noted the December 9, 2022 employee dinner was very good and had a high turnout.
3. Meeting Reports –
  - a) Commissioners Linde and Hindle attended a meeting at Custer City Hall on Tuesday.
4. Finance Officer, Dawn McLaughlin, requested Commissioners attend a short presentation to be held in the Commission room immediately following the December 28, 2022 meeting.

#### **K. Adjourn**

Motion by Linde and seconded by Bies to adjourn the meeting at 10:04 AM. The next meeting will be at 8:00 AM, December 28, 2022, in the Commissioner's Room in the Custer County Courthouse.

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Jim Lintz, Chairman

Attest: \_\_\_\_\_

Barbara Cox, Custer County Deputy Auditor

Published once at the total approximate cost of \_\_\_\_\_.

**Custer County – Mitigation Planning Meeting (Pringle Meeting)**  
**12/16/2022 – 1:00 at Custer County Courthouse**

Black Hills Council of Local Governments and the Custer County Emergency Manager met with a representative of the town of Pringle, Robert Morgan Sr., to discuss risks, vulnerabilities, and mitigation projects for the Town. The Town also discussed critical facilities, past projects, and historic hazard events that impacted the town. The meeting concluded at 2:30.

**12/16/2022 – 1:00 at Custer County Courthouse**

Appendix A: 59

**Custer County – Mitigation Planning Meeting (Stakeholders Meeting)**  
**12/20/2022 – 2:00 at Custer VFD**

Black Hills Council of Local Governments and the Custer County Emergency Manager met with stakeholders to discuss the Custer County Natural Hazard Mitigation Plan update. There was a total of twenty-five participants from various agencies: National Weather Service, SD Wildland Fire, Magellan Pipeline, Custer County staff and elected officials, Custer State Park, USFS, Custer Hospital, SDOEM, Custer County Housing, Black Hills Electric Coop, Custer County Search & Rescue, Custer Senior Center, Custer County Conservation District, SD DOT, Hermosa Water Users Association. The discussion included a brief introduction about what mitigation planning is, the purpose of mitigation plans, and the overall process. BHCLG lead participants through each identified hazard in the County and asked them to provide any information about risk (including specific locations risk areas), vulnerability (including discussion of vulnerable populations), and possible mitigation strategies. Meeting was scheduled to end at 3:00; but discussion continued; and meeting formally ended at 3:30.



**Custer County – Mitigation Planning Meeting (Stakeholder)**

**12/20/2022 – 2:00 at Custer VFD**

Name	Representing (City, County, Dept, etc)	Round-trip miles traveled	Phone	Email	Do you want to receive email updates on the plan status and future meeting dates?
Melissa Smith	National Weather Service	N/A	605-419-271	m.lissa.smith@noaa.gov	yes
Susan Sanders	Natl Weather Service	N/A	605-341-9271	Susan.Sanders@noaa.gov	yes
John Haskvitz	SD Wildland Fire		605-577-2432	john.haskvitz@state.sd.us	yes
Will Wasserburger	Magellan Pipeline		605-212-4018	William.Wasserburger@magellanlp.com	yes
Mark Johring	Magellan Pipeline		605-390-7867	mark.johring@magellanlp.com	yes
Jim Lintz	Custer Co		605-218-7555	J.Lintz@CusterCountySD.com	
Jason Goodier	CUSTER STATE PARK		605-515-3991	Jason.Goodier@state.sd.us	YES
Logan Brown	SD Wildland Fire		605-394-2581	Logan.brown@state.sd.us	YES
Brian Dault	USFS		605-890-2238	brian.dault@usda.us	YES
Moritz Espy	FURF & HUNA	50	605-430-7471	MoritzE@777hisonaach.com	YES
Mike Livore	Custer Co	15	605-673-1503	MLIVORE@CusterCountySD.com	
James Bachelor	SD Wildland Fire		605-431-3121	james.bachelor@state.sd.us	yes
Ann Allen	Custer Hospital		605-517-1995	allene.monument.health	YES
Tara Chomauer	Custer County	25	605-440-7241	Theracourt@custercounty.sd.com	yes
Brandy Peterson	SDOEM	90	605-280-4182	brandy.peterson@state.sd.us	yes
Jim Gould	Custer County Housing	1	605-673-629-0282	main@custercounty-4-evergreen.net	yes
Mike Baldwin	Custer County	4	605-673-5680	mbaldwin@custercounty.sd.com	yes
Jesse Sorenson	Black Hills Electric Coop	4	605-673-4461	j.sorenson@bhcc.coop	yes
Sam Smolinsky	Custer County SAR		605-951-8102	samsmolinsky@gmail.com	YES
Jodi Niksic	Custer Senior Center	0	605-673-2708	esdirector@custe.net	yes
Dave Thom	Custer Co. Cons		605-673-3953	dthom@custe.net	yes
Ron Remley	Custer Co.			rremley@custercounty.sd.com	
Leah Vissia	Custer County		605-673-8170	lvissia@custercounty.sd.com	yes
Jess Doyle	Custer County		605-673-5678	jdoyle@custercounty.sd.com	yes

**12/20/2022 – 2:00 at Custer VFD**

Appendix A: 62

**HERMOSA PLANNING & ZONING BOARD  
REGULAR MEETING  
December 27, 2022 @ 6:00pm**



- 1) **ROLL CALL:**
  - a) Waltman, Irvine, Stockham, Klaski, Harris, BOT Liaison
  - b) Pledge of Allegiance to be led by Harris
- 2) **CALL FOR CHANGES:**
  - a) Motion by \_\_\_\_\_ seconded by \_\_\_\_\_ to accept the agenda as presented or amended.
- 3) **CONSENT CALENDAR:**
  - a) Approval of November 8, 2022, minutes.
- 4) **CONFLICT OF INTEREST DECLARATION**
- 5) **OLD BUSINESS:**
  - a) Update on Custer County Hazard Mitigation Plan.
- 6) **NEW BUSINESS:**
  - a) Permit 2022-38 – Digging/Grading 202 3<sup>rd</sup>. St. – Mt. Rushmore Telephone – trench in cable
- 7) **REVIEW BOT MINUTES:**
  - a) November 15, 2022
  - b) December 6, 2022
  - c) December 20, 2022 – Presented at meeting
- 8) **ORDINANCE REVIEW & WORK ITEMS:**
  - a) Review 2018 Comprehensive Plan; Review of updates – update from Kailey Snyder, Pending
  - b) Formal Written Emergency Plan, to accompany pamphlet.
- 9) **COMPLETED WORK ITEMS SENT TO BOT:**
- 10) **TRUSTEE INPUT:**
- 11) **ITEMS FROM CITIZENS:** No action will be taken (3-minute time limit per speaker)  
Meetings of the Planning & Zoning board are open to the public. The audience will be allowed to comment on specific agenda items during the time allotted on the agenda for those items, according to established procedures of the Board. This is a time for members of the public to express concerns or discuss issues having relevance to the town. Anyone wishing to address the Board during this time shall be asked to identify themselves. The number of presentations and time allotted to individuals may be limited by the board president and individuals shall refrain from discussing personalities. The president at his discretion, may recognize patrons at other times during the board meeting. No action will be taken by the board on any issue related without being first placed on a future agenda, by the board, to allow for proper notice.
- 12) **ADJOURN:** Motion by \_\_\_\_\_; Second by \_\_\_\_\_ to adjourn the meeting at \_\_\_\_\_ pm.

12-27-22 (date) - 6:00 PM (time) at Town Hall

Appendix A: 64

**HERMOSA PLANNING & ZONING BOARD  
REGULAR MEETING  
December 27, 2022 @ 6:00pm**



3a

ROLL CALL: Harris called the meeting to order at 6:06pm with the following members present; Harris, Waltman, Irvine, Stockham, Klaski absent. Pledge of Allegiance led by Harris.

CALL FOR CHANGES: Motion made; seconded to approve the agenda as presented. Vote; all aye; motion carried.

CONSENT CALENDAR: Motion made; seconded to approve the November 8, 2022, meeting minutes; vote; all aye; motion carried.

OLD BUSINESS:

Custer County Hazard Mitigation Plan. – Joan provided revised information on the plan. The stakeholder's meeting was on December 20<sup>th</sup> and Joan was unable to attend. Joan is still waiting on updated notes from Kailey Snyder. December 28<sup>th</sup> the last Core Meeting is scheduled. P&Z board will work on an Action Plan/Emergency Plan and items we need to expand on. Plans are to schedule some future work sessions to update plan. Hermosa will adopt Custer Counties Plan. We will need to identify our specific needs for our town to be included in Hermosa's plan. The Town will need to establish an emergency contact list, a list of personnel, designate responsibilities and a chain of command.

NEW BUSINESS:

Permit 2022-38- Digging/Grading 203 3<sup>rd</sup> St., Mt. Rushmore Telephone – Motion made; seconded to approve, vote; aye; motion carried.

REVIEW BOT MINUTES:

November 17, 2022  
December 6, 2022  
December 20, 2022

ORDINANCE REVIEW & WORK ITEMS:

Review of 2018 Comprehensive Plan; Pending  
Formal written Emergency Plan, to accompany pamphlet.

TRUSTEE INPUT:

Chuck Irvine will be taking some classes to get certified.

CITIZEN INPUT:

ADJOURN: Motion made, seconded to adjourn the meeting at 6:45pm; Vote; all aye; motion carried.

\_\_\_\_\_  
Joan Harris, Planning & Zoning Board President

\_\_\_\_\_  
Jill Dybvig, Administrative Assistant

FAIRBURN TOWN BOARD  
REGULAR MEETING  
Fairburn Civic Center  
Wednesday Dec.28, 2022 @ 7pm

1. Call to Order:
2. Roll Call:
3. Additions or changes to the agenda:
4. Conflict of Interest Declaration:
5. Approval of the Regular Minutes of November 16, 2022; Motion to approve or amend
6. Approval of financials and checks written; Motion to approve or amend

Motion to approve transfer of \$5,650.38 from HWY & Bridge to General Account

Black Hills electric C... -split-	\$308.32
Building - 106.32	
Street Lights -202.00	
Fairburn Water Assoc..	
Utilities: Water	\$30.00
Southern Hills Publish...	\$30.64
Advertising: Publication...	
Payroll Expenses:	\$1914.94
Kieffer Sanitation	\$36.51
Credit Card (Time Equipment Rental)	\$41.95

7. OLD BUSINESS
  - a.) Status of Plow Truck
  - b.) Custer County Hazard Mitigation Plan
  - c.) Abatement/Attorney (request attendance at Jan. meeting.)

8. NEW BUSINESS
  - a.) .

9. COMMENTS FROM THE PUBLIC

10. Motion to adjourn at \_\_\_\_\_



12.28.22 (date) - 7pm (time) at Town Hall

[illegible]

TOWN OF FAIRBURN  
Regular Meeting  
December 28, 2022

The Fairburn Town Meeting was called to order by Mellissa Kremer, at 7:00pm at the Fairburn Town Hall. Present were Board members Melissa Kremer, Dean Weekley, and Finance Officer, along with one citizen. Motion made and seconded approve agenda as presented. Vote all AYE, Motion carried. There was no conflict of interest stated. Motion made and seconded approve minutes of November 16, 2022. Vote; All Aye; Motion carried. Motion made and seconded to approve financials and checks written. Vote; All Aye; Fairburn Water Association \$30.00, Kieffer Sanitation \$36.51, B.H. Electric Co-Op \$305.32 Payroll \$1,1914.94, So. Hills Publishing \$30.64, Time Equipment Rental \$41.95, Reimbursement for snow plow repair \$1771.86 Vote; All Aye; Motion carried.

Old Business; Weekley completed repairs on the snow plow and was reimbursed. Finance Officer gave a update on the Custer County Hazard Mitigation Plan. Motion made and seconded to request attorney to the January 2023 meeting. Vote; All Aye. Motion carried. Abatement issues were discussed,

New Business; There was discussion concerning street lights and the brightness of the new Led lights Motion made and seconded to have Finance Officer call electric company for further information. Vote; all Aye, Motion carried. Motion made and seconded to adjourn at 7:31pm Vote; all Aye, Motion carried

Published once at the approximate cost of \_\_\_\_\_

Town of Fairburn  
Joan Harris, Finance Officer

**Custer County – Mitigation Planning Meeting (Planning Team Meeting 2)**  
**12/28/2022 – 1:00 at Custer County Courthouse**

Black Hills Council of Local Governments met with the planning team to discuss the mitigation goals and strategies. The meeting involved going over the previous plan's goals for updates and creating new goals based on findings throughout the process.

**12/28/2022 – 1:00 at Custer County Courthouse**

Appendix A: 70

**Custer County – Mitigation Planning Meeting (Buffalo Gap Meeting)**  
**12/30/2022 – 2:30 at Town Hall**

Black Hills Council of Local Governments and the Custer County Emergency Manager met with the planning team representative from Buffalo Gap to discuss risks, vulnerabilities, and mitigation projects for the Town. The Town also discussed critical facilities, past projects, and historic hazard events that impacted the town. The meeting concluded at 3:30.

**12/30/2022 – 2:30 at Buffalo Gap Town Hall**

Appendix A: 72



# **Appendix B**

Weather Event History & Areas of Risk Map

Dam Name	Other Name	Former Name	Nat StateID	NationalID	Quarter	Section	Township	Range	County	Downstream	Owner	Type	Emergency
BARTA CROOKED DAM			SD01216	SD01216	SWSE	33	006S	09E	Custer	Low	Private	Not Required	
BISMARK LAKE			SD01116	SD01116	SENW	22	003S	05E	Custer	High	Federal	No	
BROPHY BIG DAM			SD01387	SD01387	SENE	16	004S	09E	Custer	Low	Private	Not Required	
C. PETERSON			SD01370	SD01370	NWSE	26	002S	10E	Custer	Low	Private	Not Required	
CENTER LAKE DAM			SD02149	SD02149	SWSW	9	003S	06E	Custer	High	State	Yes	
CIRCLE C NO.1			SD01371	SD01371	SWNW	27	003S	11E	Custer	Low	Private	Not Required	
CIRCLE C NO.2			SD01372	SD01372	NENW	22	003S	11E	Custer	Significant	Private	Not Required	
COUNTY LINE DAM			SD01215	SD01215	SWSE	33	006S	09E	Custer	Low	Private	Not Required	
EARL WITTE NO.1			SD01368	SD01368	SWSE	33	002S	11E	Custer	Low	Private	Not Required	
ENGLEBRECHT DAM			SD01386	SD01386	SWSW	9	006S	07E	Custer	Low	Private	Not Required	
EVANS NO.1			SD01369	SD01369	NENW	34	002S	09E	Custer	Low	Private	Not Required	
EVANS NO.2			SD01367	SD01367	SWNW	31	002S	10E	Custer	Low	Private	Not Required	
G. FLIER			SD01366	SD01366	NESW	32	002S	11E	Custer	Low	Private	Not Required	
GREGORSON NO.1			SD01379	SD01379	SESW	34	004S	07E	Custer	Significant	Private	Not Required	
HARRISON NO.1			SD01374	SD01374	NENW	28	003S	08E	Custer	Low	Private	Not Required	
LAKOTA (BILTMORE			SD01136	SD01136	NENW	27	002S	06E	Custer	High	Federal	No	
LEGION LAKE DAM			SD02150	SD02150	SESE	25	003S	05E	Custer	High	State	Yes	
M. SCISM NO.1			SD01041	SD01041	SENW	7	003S	11E	Custer	Low	Private	Not Required	
M. SCISM NO.2			SD01373	SD01373	NESW	26	003S	10E	Custer	Low	Private	Not Required	
PAT BROWN			SD02444	SD02444	SWNW	5	003S	12E	Custer	Low	Private	Not Required	
RASMUSSEN NO.1			SD01375	SD01375	SWNW	1	004S	07E	Custer	Significant	Private	Not Required	
RAY E. SMITH DAM			SD01380	SD01380	SESW	4	006S	08E	Custer	Low	Private	Not Required	
SCHNOSE DAM NO.1			SD01383	SD01383	SWNE	30	005S	07E	Custer	Low	Private	Not Required	
SCHNOSE DAM NO.2			SD01384	SD01384	NWSE	31	005S	07E	Custer	Low	Private	Not Required	
SMITH NO.1			SD01376	SD01376	SWNE	34	004S	07E	Custer	Significant	Private	Not Required	
STOCKADE LAKE DAM			SD02152	SD02152	NWNW	27	003S	05E	Custer	High	State	Yes	
STREETER DAM			SD01385	SD01385	NWNW	12	006S	06E	Custer	Significant	Private	Not Required	
SYLVAN LAKE DAM			SD02151	SD02151	SWNE	30	002S	05E	Custer	High	State	Yes	
TRIPLE 7 RANCH DAM			SD02338	SD02338	SWNE	13	004S	08E	Custer	Low	Private	Not Required	
TRIPLE SEVEN NO.1			SD01377	SD01377	NESW	19	004S	09E	Custer	Low	Private	Not Required	
TRIPLE SEVEN NO.2			SD01378	SD01378	SESW	10	004S	08E	Custer	Low	Private	Not Required	
WILSON RANCH DAM			SD01381	SD01381	NESW	21	005S	09E	Custer	Low	Private	Not Required	

Inspection Date	Inspection	River Stream	Nearest City	Distance	Owner Name	Dam Design	Dam Type	Purposes	Year Comp	Dam Length
ed	0	TRIBUTARY NONE			0 A.J. BARTA RANCH	RE		S	1950	950
12/8/1976	0	BISMARCK C CUSTER SD			2 USDA FS	RE		RO	1937	350
ed	0	TR-CHEYEN NONE			0 RANDALL RANCH	RE		S	1945	850
ed	0	TR-CHEYEN NONE			0 CECIL PETERSON	RE		S	1958	735
11/5/2020	3	GRACE CO			0 GF&P	RE		R	1935	406
ed	0	TR-CHEYEN NONE			0 KELLY FORTUNE	RE		S	1951	600
8/6/1979	0	TR-CHEYEN NONE			0 LOREN SUNDQUIST	RE		S	1956	390
ed	0	TRIBUTARY NONE			0 A.J. BARTA RANCH	RE		S	1945	950
ed	0	TR-CHEYEN NONE			0 EARL WITTE	RE		SI	1960	780
ed	0	TRIBUTARY NONE			0 P. ENGELBRECHT	RE		S	1945	780
ed	0	TR-CHEYEN NONE			0 JOHN T. COLGAN	RE		S	1951	555
ed	0	TR-CHEYEN NONE			0 IRVIN M. EVANS	RE		S	1960	555
ed	0	TR-CHEYEN NONE			0 HERMAN BLOOM	RE		I	1958	645
ed	0	TR-CHEYEN NONE			0 MILDRED CLINE	RE		S	1973	450
ed	0	TR-CHEYEN NONE			0 WESLEY HARRISON	RE		S	1959	450
7/26/1977	0	IRON CREE HAYWARD			4 USDA FS	RE		R	1962	245
11/5/2020	3	GALENA CF			0 GF&P	RE		R	1934	207
ed	0	TR-CHEYEN NONE			0 RANDALL DAVIS	RE		I	1973	314
ed	0	TR-CHEYEN NONE			0 MARIE SCISM	RE		S	1946	200
ed	0	TRIB. SPRING			0 PAT BROWN	USDA NRC		FP	1998	200
ed	0	DRY DRAW			0 PAUL RASMUSSEN	RE		SI	1943	300
ed	0	COTTONWOOD			0 LUCILE HARTSHORN	RE		S	1954	350
ed	0	TRIBUTARY NONE			0 PAUL SCHNOSE	RE		S	1945	380
ed	0	TRIBUTARY NONE			0 PAUL SCHNOSE	RE		S	1947	555
ed	0	TR-CHEYEN NONE			0 GLENN R. SMITH	RE		S	1972	420
11/5/2020	3	FRENCH CR			0 GF&P	RE		R	1930	440
ed	0	TRIBUTARY BUFFALO C			5 CHARLES STREETER	RE		S	1945	280
11/5/2020	3	TRIB-SPRING HILL CITY			8 GF&P	VA		R	1906	57
ed	0	DRY CREEK			0 DAKOTA PARTNERSHIP	RE		PI	1963	1200
ed	0	TR-CHEYEN NONE			0 HILLENBRAND INDUSTRIES	RE		S	1947	900
ed	0	TR-CHEYEN NONE			0 HILLENBRAND INDUSTRIES	RE		S	1947	800
ed	0	TRIBUTARY NONE			0 FRANK D. WILSON	RE		S	1940	600

Dam	Height	Max Discharge	Max Storage	Normal Stc	Surface Area	Drainage Area	State Regu	Rating
19	2100	320	220	0	0	0	Yes	
38	4482	396	297	0	4	4	No	
28	2200	336	288	0	0	0	Yes	
25	840	120	84	0	0	0	Yes	
56	19300	705	432	25	9	9	Yes	F
18	630	57	28	0	0	0	Yes	
30	262	85	48	2	2	2	Yes	
26	1890	780	660	0	0	0	Yes	
21	1365	90	54	0	0	0	Yes	
18	1300	63	48	0	0	0	Yes	
21	1080	50	20	0	0	0	Yes	
15	900	50	27	0	0	0	Yes	
19	2100	84	48	0	0	0	Yes	
34	2100	163	93	0	0	0	Yes	
23	2100	92	53	0	0	0	Yes	
41	2610	234	97	11	11	11	No	
38	5944	198	59	12	2	2	Yes	F
28	1225	160	88	0	0	0	Yes	
27	680	20	10	0	0	0	Yes	
28	280	20	10	2	1	1	Yes	
30	880	60	15	0	0	0	Yes	
18	1100	72	56	0	0	0	Yes	
14	1320	56	42	0	0	0	Yes	
15	1300	74	58	0	0	0	Yes	
28	2635	112	56	0	0	0	Yes	
53	6000	2605	1820	130	76	76	Yes	F
22	78	70	55	0	0	0	Yes	
37	2880	240	214	17	1	1	Yes	F
32	2900	2000	1320	0	0	0	Yes	
18	2835	115	67	0	0	0	Yes	
23	2100	165	101	0	0	0	Yes	
24	1760	129	98	0	0	0	Yes	

EVENT_ID	CZ_NAME_STR	BEGIN_DATE	BEGIN_TIV	EVENT_TYF	DEATHS	INJURIES	DAMAGE_ID	DAMAGE_STATE	DAMAGE_ABE
5570617	SOUTHERN BLACK HILLS (ZONE)	1/17/1996	100	Blizzard	0	0	0	0	SD
5570618	CUSTER CO PLAINS (ZONE)	1/17/1996	100	Blizzard	0	0	0	0	SD
5548263	SOUTHERN BLACK HILLS (ZONE)	3/23/1996	1800	Blizzard	0	0	0	0	SD
5548264	CUSTER CO PLAINS (ZONE)	3/23/1996	1800	Blizzard	0	0	0	0	SD
5584652	CUSTER CO PLAINS (ZONE)	1/9/1997	400	Blizzard	0	0	0	0	SD
5593396	CUSTER PLAINS (ZONE)	4/5/1997	0	Blizzard	0	0	0	0	SD
5593406	SOUTHERN BLACK HILLS (ZONE)	4/5/1997	0	Blizzard	0	0	0	0	SD
5635085	CUSTER PLAINS / X E CUSTER (ZONE)	2/24/1998	1200	Blizzard	0	0	0	0	SD
5138189	CUSTER PLAINS (ZONE)	3/7/2000	2100	Blizzard	0	0	0	0	SD
5141141	SOUTHERN BLACK HILLS (ZONE)	4/18/2000	2000	Blizzard	0	0	0	0	SD
5141055	CUSTER PLAINS (ZONE)	4/19/2000	30	Blizzard	0	0	0	0	SD
141544	HERMOSA FOOTHILLS (ZONE)	11/5/2008	2100	Blizzard	0	0	100000	0	SD
141522	CUSTER CO PLAINS (ZONE)	11/5/2008	2100	Blizzard	0	0	100000	0	SD
157975	SOUTHERN BLACK HILLS (ZONE)	3/23/2009	800	Blizzard	0	0	0	0	SD
157976	CUSTER CO PLAINS (ZONE)	3/23/2009	1200	Blizzard	0	0	100000	0	SD
157987	HERMOSA FOOTHILLS (ZONE)	3/23/2009	1200	Blizzard	0	0	0	0	SD
206450	HERMOSA FOOTHILLS (ZONE)	12/25/2009	300	Blizzard	0	0	0	0	SD
206432	CUSTER CO PLAINS (ZONE)	12/25/2009	300	Blizzard	0	0	0	0	SD
480037	SOUTHERN BLACK HILLS (ZONE)	10/3/2013	2000	Blizzard	0	0	0	0	SD
480038	CUSTER CO PLAINS (ZONE)	10/4/2013	300	Blizzard	0	0	0	0	SD
480049	HERMOSA FOOTHILLS (ZONE)	10/4/2013	300	Blizzard	0	0	0	0	SD
500660	CUSTER CO PLAINS (ZONE)	3/31/2014	700	Blizzard	0	0	0	0	SD
665748	CUSTER CO PLAINS (ZONE)	12/25/2016	1400	Blizzard	0	0	0	0	SD
665774	HERMOSA FOOTHILLS (ZONE)	12/25/2016	1400	Blizzard	0	0	0	0	SD
742822	HERMOSA FOOTHILLS (ZONE)	4/13/2018	100	Blizzard	0	0	0	0	SD
802877	CUSTER CO PLAINS (ZONE)	3/13/2019	900	Blizzard	0	0	0	0	SD
809468	CUSTER CO PLAINS (ZONE)	4/10/2019	1100	Blizzard	0	0	0	0	SD
861268	HERMOSA FOOTHILLS (ZONE)	11/29/2019	2100	Blizzard	0	0	0	0	SD
861214	CUSTER CO PLAINS (ZONE)	11/29/2019	2200	Blizzard	0	0	0	0	SD
945527	SOUTHERN BLACK HILLS (ZONE)	3/14/2021	400	Blizzard	0	0	0	0	SD
945567	HERMOSA FOOTHILLS (ZONE)	3/14/2021	900	Blizzard	0	0	0	0	SD

EVENT_ID	ID	CZ_NAME_STR	BEGIN_BEGIN_DATE	BEGIN_TIV_EVENT_TYF	DEATHS_D	INJURIES_I	DAMAGE_I	DAMAGE_STATE_ABE
5584822		SOUTHERN BLACK HILLS (ZON	1/9/1997	1200 Cold/Wind	0	0	0	0 SD
5584823		CUSTER PLAINS (ZONE)	1/9/1997	1200 Cold/Wind	0	0	0	0 SD
731258		CUSTER CO PLAINS (ZONE)	12/30/2017	1800 Cold/Wind	0	0	0	0 SD
731261		HERMOSA FOOTHILLS (ZONE]	12/30/2017	1800 Cold/Wind	0	0	0	0 SD
731271		SOUTHERN BLACK HILLS (ZON	12/30/2017	1800 Cold/Wind	0	0	0	0 SD
731345		CUSTER CO PLAINS (ZONE)	1/1/2018	0 Cold/Wind	0	0	0	0 SD
731350		HERMOSA FOOTHILLS (ZONE]	1/1/2018	0 Cold/Wind	0	0	0	0 SD
731369		SOUTHERN BLACK HILLS (ZON	1/1/2018	0 Cold/Wind	0	0	0	0 SD
939228		SOUTHERN BLACK HILLS (ZON	2/14/2021	0 Cold/Wind	0	0	0	0 SD
939230		HERMOSA FOOTHILLS (ZONE]	2/14/2021	0 Cold/Wind	0	0	0	0 SD
939234		CUSTER CO PLAINS (ZONE)	2/14/2021	0 Cold/Wind	0	0	0	0 SD



EVENT_ID	ID	CZ_NAME_STR	BE	BEGIN_DATE	BEGIN_TM	EVENT_TYPE	DEATHS	D	INJURIES	E	DAMAGE_I	DAMAGE_C
665418		SOUTHERN BLACK HILLS (ZON		12/16/2016	2000	Extreme Cold/Wind Chill	0		0		0	0
665419		CUSTER CO PLAINS (ZONE)		12/16/2016	2100	Extreme Cold/Wind Chill	0		0		0	0
665432		HERMOSA FOOTHILLS (ZONE)		12/16/2016	2100	Extreme Cold/Wind Chill	0		0		0	0

EVENT_ID	CZ_NAME	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIV	EVENT_TYPE	DEATHS	D_INJURIES	I_DAMAGE	F_DAMAGE	STATE	ABECZ	TIMEZC
5554824	CUSTER CO	HERMOSA	5/30/1996	1700	Flash Flood	0	0	0	0	SD		MST
5709229	CUSTER CO	COUNTY WIDE	6/18/1999	1445	Flash Flood	0	0	0	0	SD		MST
5709562	CUSTER CO	EAST PORTION	6/19/1999	30	Flash Flood	0	0	0	0	SD		MST
5709560	CUSTER CO	FAIRBURN	6/29/1999	1250	Flash Flood	0	0	0	0	SD		MST
5719832	CUSTER CO	CENTRAL PORT	8/7/1999	1201	Flash Flood	0	0	115000	0	SD		MST
5265934	CUSTER CO	CUSTER	8/12/2001	1800	Flash Flood	0	0	0	0	SD		MST
5304864	CUSTER CO	PRINGLE	7/5/2002	1619	Flash Flood	0	0	0	0	SD		MST
5378095	CUSTER CO	DEWEY	8/17/2003	1915	Flash Flood	0	0	0	0	SD		MST
5449740	CUSTER CO	BUFFALO GAP	5/6/2005	2115	Flash Flood	0	0	50000	0	SD		MST
48170	CUSTER CO	CUSTER	8/17/2007	1800	Flash Flood	0	0	0	0	SD		MST-7
48026	CUSTER CO	HERMOSA	8/17/2007	1800	Flash Flood	0	0	3000000	0	SD		MST-7
134190	CUSTER CO	JEWEL CAVE N/	8/10/2008	1500	Flash Flood	0	0	0	0	SD		MST-7
185347	CUSTER CO	PRINGLE	6/14/2009	1800	Flash Flood	0	0	0	0	SD		MST-7
230455	CUSTER CO	CUSTER STATE	5/24/2010	1502	Flash Flood	0	0	200000	0	SD		MST-7
313737	CUSTER CO	JEWEL CAVE N/	5/23/2011	1800	Flash Flood	0	0	10000	0	SD		MST-7
469278	CUSTER CO	ARGYLE	7/8/2013	300	Flash Flood	0	0	0	0	SD		MST-7
630183	CUSTER CO	CUSTER	5/20/2016	1928	Flash Flood	0	0	2000	0	SD		MST-7
855549	CUSTER CO	CUSTER	8/2/2019	1500	Flash Flood	0	0	1000000	0	SD		MST-7
904934	CUSTER CO	CUSTER	6/25/2020	1250	Flash Flood	0	0	0	0	SD		MST-7

EVENT_ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIME	EVENT	DEATHS	D_INJURIES	C_DAMAGE	I_DAMAGE	STATE	ABECZ	TIMEZC	MAGNITUDE
5554803	SOUTHERN		5/27/1996	700	Flood	0	0	0	0	SD		MST	
5554804	CUSTER CO		5/27/1996	700	Flood	0	0	0	0	SD		MST	
5455338	SOUTHERN		6/12/2005	2100	Flood	0	0	0	0	SD		MST	
102924	CUSTER CO FOLSOM		5/23/2008	1000	Flood	0	0	0	0	SD		MST-7	
230468	CUSTER CO HERMOSA		5/24/2010	1900	Flood	0	0	0	0	SD		MST-7	
234926	CUSTER CO CUSTER ST,		6/20/2010	510	Flood	0	0	10000	0	SD		MST-7	
480071	CUSTER CO HERMOSA		10/11/2013	1645	Flood	0	0	0	0	SD		MST-7	
577530	CUSTER CO HERMOSA		5/24/2015	1100	Flood	0	0	0	0	SD		MST-7	
577511	CUSTER CO HERMOSA		5/24/2015	1700	Flood	0	0	0	0	SD		MST-7	
587207	CUSTER CO HERMOSA		6/1/2015	0	Flood	0	0	0	0	SD		MST-7	
587484	CUSTER CO HERMOSA		6/7/2015	2000	Flood	0	0	0	0	SD		MST-7	
590940	CUSTER CO HERMOSA		6/25/2015	1715	Flood	0	0	0	0	SD		MST-7	
630184	CUSTER CO CUSTER		5/20/2016	2300	Flood	0	0	0	0	SD		MST-7	
769581	CUSTER CO HERMOSA		7/18/2018	400	Flood	0	0	0	0	SD		MST-7	
831812	CUSTER CO HERMOSA		5/21/2019	2100	Flood	0	0	100000	0	SD		MST-7	
831901	CUSTER CO BUFFALO G		5/28/2019	1100	Flood	0	0	100000	0	SD		MST-7	
854742	CUSTER CO DEWEY		7/3/2019	1725	Flood	0	0	0	0	SD		MST-7	
855550	CUSTER CO CUSTER		8/2/2019	1645	Flood	0	0	0	0	SD		MST-7	

EVENT_ID	CZ_NAME	BEGIN_DATE	BEGIN_TIME	EVENT_MAGNITUDE	DEATHS	D_INJURIES	D_DAMAGE	I_DAMAGE	STATE	ABECZ_TIME	ZC
10111004	CUSTER CO	6/1/1955	1155	Hail	1.75	0	0	0	0	SD	CST
10112127	CUSTER CO	8/7/1956	1900	Hail	3.5	0	0	0	0	SD	CST
10113245	CUSTER CO	7/28/1957	1300	Hail	1.75	0	0	0	0	SD	CST
10111330	CUSTER CO	6/20/1960	1700	Hail	1.75	0	0	0	0	SD	CST
10113375	CUSTER CO	7/16/1962	1800	Hail	2.75	0	0	0	0	SD	CST
10112660	CUSTER CO	6/22/1968	1845	Hail	6	0	0	0	0	SD	CST
10110922	CUSTER CO	7/15/1969	2130	Hail	2	0	0	0	0	SD	CST
10110929	CUSTER CO	7/23/1969	1800	Hail	1	0	0	0	0	SD	CST
10113227	CUSTER CO	8/6/1970	1800	Hail	0.75	0	0	0	0	SD	CST
10113995	CUSTER CO	7/23/1975	1600	Hail	0.75	0	0	0	0	SD	CST
10113878	CUSTER CO	8/8/1977	1820	Hail	1.75	0	0	0	0	SD	CST
10123445	CUSTER CO	7/22/1981	302	Hail	2.75	0	0	0	0	SD	CST
10123446	CUSTER CO	7/22/1981	325	Hail	2.75	0	0	0	0	SD	CST
10123447	CUSTER CO	7/22/1981	400	Hail	1.75	0	0	0	0	SD	CST
10123458	CUSTER CO	7/22/1981	1800	Hail	1.75	0	0	0	0	SD	CST
10125737	CUSTER CO	7/14/1982	1710	Hail	1.5	0	0	0	0	SD	CST
10124400	CUSTER CO	9/5/1982	1815	Hail	1.5	0	0	0	0	SD	CST
10124630	CUSTER CO	5/6/1983	1630	Hail	1	0	0	0	0	SD	CST
10125806	CUSTER CO	7/29/1983	1420	Hail	1	0	0	0	0	SD	CST
10126987	CUSTER CO	7/7/1984	1716	Hail	1.75	0	0	0	0	SD	CST
10127015	CUSTER CO	7/25/1984	1310	Hail	0.75	0	0	0	0	SD	CST
10124886	CUSTER CO	6/16/1987	1730	Hail	1	0	0	0	0	SD	CST
10124689	CUSTER CO	6/22/1988	1659	Hail	0.75	0	0	0	0	SD	CST
10126078	CUSTER CO	7/1/1989	1454	Hail	1.75	0	0	0	0	SD	CST
10126082	CUSTER CO	7/3/1989	1630	Hail	1.75	0	0	0	0	SD	CST
10127181	CUSTER CO	8/16/1989	1800	Hail	1.75	0	0	0	0	SD	CST
10127196	CUSTER CO	8/24/1989	1852	Hail	1.75	0	0	0	0	SD	CST
10127225	CUSTER CO	5/24/1990	1800	Hail	1.75	0	0	0	0	SD	CST
10123918	CUSTER CO	5/11/1991	1826	Hail	1.75	0	0	0	0	SD	CST
10123920	CUSTER CO	5/11/1991	1840	Hail	2.75	0	0	0	0	SD	CST
10124415	CUSTER CO	6/8/1991	1546	Hail	1.25	0	0	0	0	SD	CST
10124426	CUSTER CO	6/9/1991	1546	Hail	1.25	0	0	0	0	SD	CST
10126224	CUSTER CO	7/10/1991	1810	Hail	2.75	0	0	0	0	SD	CST

10127352	CUSTER CO	8/5/1991	1200 Hail	2.5	0	0	0	0 SD	CST
10154546	CUSTER CO	6/21/1992	1535 Hail	1.5	0	0	0	0 SD	CST
10158273	CUSTER CO	7/26/1992	1545 Hail	1	0	0	0	0 SD	CST
10158300	CUSTER CO	7/29/1992	1305 Hail	1.75	0	0	0	0 SD	CST
10158301	CUSTER CO	7/29/1992	1420 Hail	1.75	0	0	0	0 SD	CST
10346325	CUSTER CO Hermc	5/21/1993	1930 Hail	1	0	0	500	0 SD	MST
10346326	CUSTER CO Hermc	5/29/1993	1350 Hail	1.75	0	0	500	0 SD	MST
10346328	CUSTER CO Buffalc	5/22/1994	1345 Hail	1	0	0	0	0 SD	MDT
10346329	CUSTER CO Pringle	6/4/1994	1724 Hail	0.75	0	0	0	0 SD	MDT
10346330	CUSTER CO Custer	6/8/1994	1330 Hail	0.75	0	0	0	0 SD	MDT
10346331	CUSTER CO Fairbu	6/8/1994	1359 Hail	1	0	0	0	0 SD	MDT
5551082	CUSTER CO HERM	6/11/1996	1710 Hail	1.75	0	0	0	0 SD	MST
5551714	CUSTER CO CUSTE	6/20/1996	1920 Hail	1.75	0	0	0	0 SD	MST
5551719	CUSTER CO HERM	6/22/1996	1740 Hail	0.25	0	0	0	0 SD	MST
5558071	CUSTER CO HERM	7/6/1996	30 Hail	0.75	0	0	0	0 SD	MST
5559132	CUSTER CO HERM	7/20/1996	2115 Hail	2	0	0	0	0 SD	MST
5559135	CUSTER CO FAIRBI	7/26/1996	1445 Hail	0.75	0	0	0	0 SD	MST
5559282	CUSTER CO MOUN	7/31/1996	1326 Hail	2	0	0	0	0 SD	MST
5564081	CUSTER CO CUSTE	8/9/1996	1425 Hail	0.75	0	0	0	0 SD	MST
5564083	CUSTER CO CUSTE	8/9/1996	1515 Hail	0.75	0	0	0	0 SD	MST
5564084	CUSTER CO PRING	8/9/1996	1515 Hail	0.75	0	0	0	0 SD	MST
5563900	CUSTER CO WIND	8/9/1996	1600 Hail	0.75	0	0	0	0 SD	MST
5564361	CUSTER CO HERM	9/2/1996	1025 Hail	0.75	0	0	0	0 SD	MST
5564362	CUSTER CO HERM	9/2/1996	1028 Hail	1	0	0	0	0 SD	MST
5603821	CUSTER CO CUSTE	6/29/1997	1534 Hail	1.75	0	0	0	0 SD	MST
5610538	CUSTER CO CUSTE	7/19/1997	1630 Hail	2	0	0	0	0 SD	MST
5610545	CUSTER CO HERM	7/24/1997	1600 Hail	1.75	0	0	0	0 SD	MST
5614408	CUSTER CO FAIRBI	8/1/1997	1530 Hail	1	0	0	0	0 SD	MST
5614428	CUSTER CO CUSTE	8/18/1997	1740 Hail	0.75	0	0	0	0 SD	MST
5698659	CUSTER CO DEWE	5/21/1999	1620 Hail	0.75	0	0	0	0 SD	MST
5698661	CUSTER CO CUSTE	5/22/1999	521 Hail	1	0	0	0	0 SD	MST
5698662	CUSTER CO FAIRBI	5/22/1999	555 Hail	1	0	0	0	0 SD	MST
5698663	CUSTER CO CUSTE	5/22/1999	625 Hail	0.75	0	0	0	0 SD	MST
5709151	CUSTER CO PRING	6/7/1999	1812 Hail	1.75	0	0	0	0 SD	MST

5709225	CUSTER CO CUSTE	6/12/1999	1606	Hail	1.75	0	0	0	0	0	SD	MST
5709246	CUSTER CO HERM	6/12/1999	1620	Hail	1	0	0	0	0	0	SD	MST
5709340	CUSTER CO WIND	6/27/1999	1930	Hail	1	0	0	0	0	0	SD	MST
5709243	CUSTER CO BUFFA	6/27/1999	1930	Hail	1.75	0	0	0	0	0	SD	MST
5709763	CUSTER CO CUSTE	7/15/1999	1830	Hail	0.75	0	0	0	0	0	SD	MST
5709774	CUSTER CO CUSTE	7/20/1999	1530	Hail	0.75	0	0	0	0	0	SD	MST
5709775	CUSTER CO HERM	7/24/1999	1330	Hail	1	0	0	0	0	0	SD	MST
5153940	CUSTER CO HERM	6/23/2000	1613	Hail	1.75	0	0	0	0	0	SD	MST
5176561	CUSTER CO BUFFA	7/21/2000	1155	Hail	1.75	0	0	0	0	0	SD	MST
5170114	CUSTER CO CUSTE	8/1/2000	1418	Hail	0.75	0	0	0	0	0	SD	MST
5170209	CUSTER CO CUSTE	8/22/2000	1230	Hail	0.75	0	0	0	0	0	SD	MST
5170213	CUSTER CO HERM	8/23/2000	1427	Hail	1.75	0	0	0	0	0	SD	MST
5170214	CUSTER CO FAIRBI	8/23/2000	1510	Hail	1	0	0	0	0	0	SD	MST
5170215	CUSTER CO FAIRBI	8/23/2000	1600	Hail	0.75	0	0	0	0	0	SD	MST
5246922	CUSTER CO PRING	5/9/2001	1550	Hail	1.75	0	0	0	0	0	SD	MST
5246923	CUSTER CO PRING	5/9/2001	1600	Hail	1	0	0	0	0	0	SD	MST
5246924	CUSTER CO WIND	5/9/2001	1605	Hail	0.75	0	0	0	0	0	SD	MST
5246925	CUSTER CO WIND	5/9/2001	1610	Hail	0.75	0	0	0	0	0	SD	MST
5247022	CUSTER CO BUFFA	5/9/2001	1635	Hail	0.75	0	0	0	0	0	SD	MST
5254034	CUSTER CO HERM	6/9/2001	1722	Hail	0.75	0	0	0	0	0	SD	MST
5253917	CUSTER CO CUSTE	6/30/2001	1548	Hail	1.75	0	0	0	0	0	SD	MST
5253918	CUSTER CO BLUE f	6/30/2001	1550	Hail	1.75	0	0	0	0	0	SD	MST
5253926	CUSTER CO BLUE f	6/30/2001	1637	Hail	0.75	0	0	0	0	0	SD	MST
5260032	CUSTER CO CUSTE	7/7/2001	1827	Hail	1.75	0	0	0	0	0	SD	MST
5260038	CUSTER CO HERM	7/8/2001	1415	Hail	2	0	0	0	0	0	SD	MST
5260044	CUSTER CO CUSTE	7/8/2001	1520	Hail	0.75	0	0	0	0	0	SD	MST
5260046	CUSTER CO CUSTE	7/8/2001	1538	Hail	1.5	0	0	0	0	0	SD	MST
5260045	CUSTER CO BLUE f	7/8/2001	1544	Hail	0.88	0	0	0	0	0	SD	MST
5260155	CUSTER CO CUSTE	7/13/2001	1254	Hail	1	0	0	0	0	0	SD	MST
5260156	CUSTER CO CUSTE	7/13/2001	1326	Hail	0.75	0	0	0	0	0	SD	MST
5260157	CUSTER CO PRING	7/13/2001	1355	Hail	0.75	0	0	0	0	0	SD	MST
5260158	CUSTER CO WIND	7/13/2001	1415	Hail	1.75	0	0	0	0	0	SD	MST
5260277	CUSTER CO BLUE f	7/19/2001	1752	Hail	0.88	0	0	0	0	0	SD	MST
5260399	CUSTER CO BLUE f	7/27/2001	1512	Hail	0.75	0	0	0	0	0	SD	MST

5265933	CUSTER CO CUSTE	8/12/2001	1625	Hail	1	0	0	0	0	SD	MST
5265953	CUSTER CO CUSTE	8/28/2001	1330	Hail	0.88	0	0	0	0	SD	MST
5297441	CUSTER CO ARGYL	6/2/2002	1955	Hail	1.75	0	0	0	0	SD	MST
5297443	CUSTER CO WIND	6/2/2002	2008	Hail	0.75	0	0	0	0	SD	MST
5304865	CUSTER CO CUSTE	7/6/2002	1210	Hail	1.25	0	0	0	0	SD	MST
5306394	CUSTER CO CUSTE	7/7/2002	1220	Hail	0.88	0	0	0	0	SD	MST
5306400	CUSTER CO CUSTE	7/8/2002	1850	Hail	1	0	0	0	0	SD	MST
5306401	CUSTER CO BLUE E	7/8/2002	1954	Hail	1.25	0	0	0	0	SD	MST
5304765	CUSTER CO HERM	7/26/2002	1540	Hail	1	0	0	0	0	SD	MST
5304766	CUSTER CO HERM	7/26/2002	1610	Hail	0.88	0	0	0	0	SD	MST
5310824	CUSTER CO CUSTE	8/26/2002	1444	Hail	1.75	0	0	0	0	SD	MST
5310825	CUSTER CO PRING	8/26/2002	1512	Hail	1.75	0	0	0	0	SD	MST
5310826	CUSTER CO WIND	8/26/2002	1535	Hail	1.5	0	0	0	0	SD	MST
5310827	CUSTER CO BUFFA	8/26/2002	1558	Hail	0.75	0	0	0	0	SD	MST
5363954	CUSTER CO CUSTE	6/13/2003	1230	Hail	0.75	0	0	0	0	SD	MST
5363955	CUSTER CO CUSTE	6/13/2003	1330	Hail	0.75	0	0	0	0	SD	MST
5363956	CUSTER CO PRING	6/13/2003	1455	Hail	0.88	0	0	0	0	SD	MST
5363957	CUSTER CO ARGYL	6/13/2003	1520	Hail	0.88	0	0	0	0	SD	MST
5363965	CUSTER CO CUSTE	6/15/2003	1500	Hail	0.88	0	0	0	0	SD	MST
5363946	CUSTER CO DEWE'	6/23/2003	2010	Hail	0.88	0	0	0	0	SD	MST
5363947	CUSTER CO CUSTE	6/23/2003	2023	Hail	1	0	0	0	0	SD	MST
5363948	CUSTER CO CUSTE	6/23/2003	2032	Hail	1.5	0	0	0	50000	SD	MST
5363949	CUSTER CO CUSTE	6/23/2003	2040	Hail	0.75	0	0	0	0	SD	MST
5363950	CUSTER CO HERM	6/23/2003	2048	Hail	1	0	0	0	0	SD	MST
5363951	CUSTER CO HERM	6/23/2003	2053	Hail	1	0	0	0	0	SD	MST
5364853	CUSTER CO HERM	6/24/2003	1803	Hail	1	0	0	0	0	SD	MST
5373330	CUSTER CO HERM	7/5/2003	1348	Hail	1.5	0	0	0	0	SD	MST
5373331	CUSTER CO HERM	7/5/2003	1354	Hail	1	0	0	0	0	SD	MST
5372757	CUSTER CO HERM	7/5/2003	1430	Hail	2	0	0	0	0	SD	MST
5372873	CUSTER CO FAIRBI	7/15/2003	1831	Hail	0.75	0	0	0	0	SD	MST
5375995	CUSTER CO HERM	7/17/2003	1506	Hail	2.5	0	0	0	0	SD	MST
5375996	CUSTER CO FAIRBI	7/17/2003	1520	Hail	1.5	0	0	0	0	SD	MST
5376351	CUSTER CO HERM	7/17/2003	1600	Hail	1	0	0	0	0	SD	MST
5376428	CUSTER CO FAIRBI	7/17/2003	1609	Hail	2	0	0	0	0	SD	MST



5376429	CUSTER CO BUFFA	7/17/2003	1630 Hail	1.75	0	0	0	0 SD	MST
5376433	CUSTER CO CUSTE	7/17/2003	1653 Hail	1.25	0	0	0	0 SD	MST
5376434	CUSTER CO BLUE f	7/17/2003	1725 Hail	0.88	0	0	0	0 SD	MST
5372782	CUSTER CO HERM	7/29/2003	1046 Hail	0.75	0	0	0	0 SD	MST
5377133	CUSTER CO BUFFA	8/3/2003	1905 Hail	0.75	0	0	0	0 SD	MST
5378076	CUSTER CO CUSTE	8/7/2003	1717 Hail	1	0	0	0	0 SD	MST
5378077	CUSTER CO BLUE f	8/7/2003	1757 Hail	0.75	0	0	0	0 SD	MST
5378078	CUSTER CO PRING	8/7/2003	1820 Hail	0.88	0	0	0	0 SD	MST
5378083	CUSTER CO CUSTE	8/8/2003	1315 Hail	0.75	0	0	0	0 SD	MST
5378084	CUSTER CO CUSTE	8/9/2003	1210 Hail	1.75	0	0	0	0 SD	MST
5378085	CUSTER CO CUSTE	8/9/2003	1440 Hail	0.88	0	0	0	0 SD	MST
5378086	CUSTER CO WIND	8/9/2003	1530 Hail	1	0	0	0	0 SD	MST
5378094	CUSTER CO ARGYL	8/17/2003	1735 Hail	1	0	0	0	0 SD	MST
5390016	CUSTER CO CUSTE	3/26/2004	2136 Hail	1	0	0	0	0 SD	MST
5390017	CUSTER CO CUSTE	3/26/2004	2140 Hail	0.75	0	0	0	0 SD	MST
5398469	CUSTER CO DEWE	5/10/2004	2130 Hail	0.75	0	0	0	0 SD	MST
5398668	CUSTER CO WIND	5/23/2004	1543 Hail	0.88	0	0	0	0 SD	MST
5406560	CUSTER CO HERM	6/3/2004	1500 Hail	1	0	0	0	0 SD	MST
5406653	CUSTER CO PRING	6/20/2004	1455 Hail	0.75	0	0	0	0 SD	MST
5412338	CUSTER CO BLUE f	7/2/2004	1530 Hail	0.75	0	0	0	0 SD	MST
5412349	CUSTER CO HERM	7/3/2004	1400 Hail	1	0	0	0	0 SD	MST
5412354	CUSTER CO HERM	7/4/2004	1440 Hail	0.75	0	0	0	0 SD	MST
5412465	CUSTER CO CUSTE	7/14/2004	1400 Hail	0.75	0	0	0	0 SD	MST
5412466	CUSTER CO CUSTE	7/14/2004	1425 Hail	1	0	0	0	0 SD	MST
5412467	CUSTER CO CUSTE	7/14/2004	1425 Hail	1	0	0	0	0 SD	MST
5412468	CUSTER CO CUSTE	7/14/2004	1430 Hail	1	0	0	0	0 SD	MST
5412568	CUSTER CO CUSTE	7/29/2004	1545 Hail	1.75	0	0	0	0 SD	MST
5412569	CUSTER CO CUSTE	7/29/2004	1550 Hail	0.88	0	0	0	0 SD	MST
5417604	CUSTER CO CUSTE	8/2/2004	1610 Hail	1	0	0	0	0 SD	MST
5417605	CUSTER CO FAIRBI	8/2/2004	1625 Hail	1	0	0	0	0 SD	MST
5417606	CUSTER CO FAIRBI	8/2/2004	1640 Hail	0.88	0	0	0	0 SD	MST
5422440	CUSTER CO HERM	9/10/2004	1915 Hail	1	0	0	0	0 SD	MST
5455150	CUSTER CO BUFFA	6/7/2005	1615 Hail	1	0	0	0	0 SD	MST
5455149	CUSTER CO BUFFA	6/7/2005	1615 Hail	1	0	0	2000	0 SD	MST

5463989	CUSTER CO CUSTE	7/1/2005	1220	Hail	1.5	0	0	0	0	SD	MST
5463990	CUSTER CO CUSTE	7/1/2005	1236	Hail	1	0	0	0	0	SD	MST
5463991	CUSTER CO CUSTE	7/1/2005	1350	Hail	0.75	0	0	0	0	SD	MST
5463992	CUSTER CO CUSTE	7/1/2005	1425	Hail	1	0	0	0	0	SD	MST
5463993	CUSTER CO WIND	7/1/2005	1505	Hail	0.75	0	0	0	0	SD	MST
5464000	CUSTER CO CUSTE	7/1/2005	1930	Hail	0.75	0	0	0	0	SD	MST
5463997	CUSTER CO JEWEL	7/1/2005	1930	Hail	0.75	0	0	0	0	SD	MST
5463998	CUSTER CO JEWEL	7/1/2005	1940	Hail	0.75	0	0	0	0	SD	MST
5464001	CUSTER CO PRING	7/1/2005	2005	Hail	0.75	0	0	0	0	SD	MST
5464101	CUSTER CO CUSTE	7/5/2005	1330	Hail	1	0	0	0	0	SD	MST
5464103	CUSTER CO HERM	7/5/2005	1357	Hail	0.75	0	0	0	0	SD	MST
5464104	CUSTER CO BLUE F	7/5/2005	1400	Hail	1.75	0	0	20000	0	SD	MST
5464107	CUSTER CO CUSTE	7/5/2005	1435	Hail	0.88	0	0	0	0	SD	MST
5464108	CUSTER CO BUFFA	7/5/2005	1535	Hail	0.88	0	0	0	0	SD	MST
5464212	CUSTER CO CUSTE	7/7/2005	1505	Hail	0.88	0	0	0	0	SD	MST
5464235	CUSTER CO CUSTE	7/14/2005	1350	Hail	0.75	0	0	0	0	SD	MST
5464314	CUSTER CO HERM	7/20/2005	1535	Hail	2	0	0	0	0	SD	MST
5464315	CUSTER CO HERM	7/20/2005	1535	Hail	1.75	0	0	0	0	SD	MST
5464316	CUSTER CO FOLSO	7/20/2005	1540	Hail	2.75	0	0	0	0	SD	MST
5463104	CUSTER CO HERM	7/24/2005	2230	Hail	0.88	0	0	0	0	SD	MST
5469614	CUSTER CO CUSTE	8/12/2005	1720	Hail	0.88	0	0	0	0	SD	MST
5469615	CUSTER CO JEWEL	8/12/2005	1730	Hail	0.88	0	0	0	0	SD	MST
5469618	CUSTER CO ARGYL	8/12/2005	1815	Hail	1.75	0	0	0	0	SD	MST
5469620	CUSTER CO CUSTE	8/15/2005	1508	Hail	1.5	0	0	0	0	SD	MST
5508437	CUSTER CO PRING	5/28/2006	1720	Hail	0.88	0	0	0	0	SD	MST
5508438	CUSTER CO CUSTE	5/28/2006	1740	Hail	0.88	0	0	0	0	SD	MST
5514219	CUSTER CO CUSTE	6/4/2006	2200	Hail	0.88	0	0	0	0	SD	MST
5514220	CUSTER CO BUFFA	6/7/2006	545	Hail	1	0	0	0	0	SD	MST
5514081	CUSTER CO CUSTE	6/9/2006	1125	Hail	1	0	0	0	0	SD	MST
5516007	CUSTER CO FAIRBI	6/13/2006	1640	Hail	1	0	0	0	0	SD	MST
5514091	CUSTER CO HERM	6/14/2006	1452	Hail	0.75	0	0	0	0	SD	MST
5520657	CUSTER CO CUSTE	7/2/2006	1320	Hail	0.75	0	0	0	0	SD	MST
5530376	CUSTER CO HERM	8/8/2006	1300	Hail	0.88	0	0	0	0	SD	MST
5530377	CUSTER CO HERM	8/8/2006	1309	Hail	1.5	0	0	0	0	SD	MST

5530379	CUSTER CO HERM	8/8/2006	1315 Hail	1.5	0	0	0	0 SD	MST
5529735	CUSTER CO CUSTE	8/15/2006	1420 Hail	0.88	0	0	0	0 SD	MST
5530033	CUSTER CO CUSTE	8/20/2006	1220 Hail	1	0	0	0	0 SD	MST
5530034	CUSTER CO CUSTE	8/20/2006	1221 Hail	1	0	0	0	0 SD	MST
5530032	CUSTER CO FAIRBI	8/20/2006	1230 Hail	0.88	0	0	0	0 SD	MST
5531699	CUSTER CO CUSTE	9/6/2006	1420 Hail	0.75	0	0	0	0 SD	MST
22533	CUSTER CO CUSTE	5/19/2007	1450 Hail	1	0	0	0	0 SD	MST-7
22535	CUSTER CO PRING	5/19/2007	1530 Hail	1.25	0	0	0	0 SD	MST-7
25028	CUSTER CO BUFFA	5/28/2007	1736 Hail	1.5	0	0	0	0 SD	MST-7
27368	CUSTER CO CUSTE	6/17/2007	1530 Hail	1.75	0	0	0	0 SD	MST-7
33056	CUSTER CO CUSTE	6/21/2007	1450 Hail	1	0	0	0	0 SD	MST-7
33061	CUSTER CO CUSTE	6/21/2007	1532 Hail	1.5	0	0	0	0 SD	MST-7
33063	CUSTER CO PRING	6/21/2007	1545 Hail	1.75	0	0	0	0 SD	MST-7
33067	CUSTER CO DEWE	6/21/2007	1640 Hail	1.5	0	0	0	0 SD	MST-7
33068	CUSTER CO DEWE	6/21/2007	1715 Hail	0.75	0	0	0	0 SD	MST-7
33102	CUSTER CO CUSTE	6/22/2007	1415 Hail	0.88	0	0	0	0 SD	MST-7
33103	CUSTER CO FAIRBI	6/22/2007	1445 Hail	0.88	0	0	0	0 SD	MST-7
34121	CUSTER CO PRING	7/3/2007	1445 Hail	0.75	0	0	0	0 SD	MST-7
34190	CUSTER CO HERM	7/9/2007	1909 Hail	0.88	0	0	0	0 SD	MST-7
35415	CUSTER CO CUSTE	7/18/2007	1330 Hail	1	0	0	0	0 SD	MST-7
35417	CUSTER CO WIND	7/18/2007	1350 Hail	2.75	0	0	100000	0 SD	MST-7
35418	CUSTER CO BUFFA	7/18/2007	1400 Hail	2.5	0	0	3000	0 SD	MST-7
35427	CUSTER CO DEWE	7/18/2007	1545 Hail	0.75	0	0	0	0 SD	MST-7
39037	CUSTER CO CUSTE	7/25/2007	1330 Hail	1	0	0	0	0 SD	MST-7
43167	CUSTER CO FAIRBI	8/3/2007	1950 Hail	0.75	0	0	0	0 SD	MST-7
39971	CUSTER CO PRING	8/4/2007	1510 Hail	1	0	0	0	0 SD	MST-7
39970	CUSTER CO PRING	8/4/2007	1510 Hail	0.88	0	0	0	0 SD	MST-7
43266	CUSTER CO PRING	8/14/2007	1725 Hail	1	0	0	0	0 SD	MST-7
44337	CUSTER CO CUSTE	8/17/2007	1740 Hail	0.75	0	0	0	0 SD	MST-7
44340	CUSTER CO HERM	8/17/2007	1745 Hail	1	0	0	0	0 SD	MST-7
92673	CUSTER CO BUFFA	5/31/2008	1430 Hail	0.75	0	0	0	0 SD	MST-7
92674	CUSTER CO BUFFA	5/31/2008	1430 Hail	1	0	0	0	0 SD	MST-7
94824	CUSTER CO HERM	6/1/2008	1247 Hail	1	0	0	0	0 SD	MST-7
94825	CUSTER CO HERM	6/1/2008	1313 Hail	1.75	0	0	0	0 SD	MST-7

94831	CUSTER CO HERM	6/1/2008	1335 Hail	1.5	0	0	0	0 SD	MST-7
94833	CUSTER CO HERM	6/1/2008	1350 Hail	4.25	0	0	0	0 SD	MST-7
94834	CUSTER CO FAIRB	6/1/2008	1421 Hail	1	0	0	0	0 SD	MST-7
94838	CUSTER CO FOLSO	6/1/2008	1435 Hail	0.88	0	0	0	0 SD	MST-7
95115	CUSTER CO CUSTE	6/17/2008	1630 Hail	1	0	0	0	0 SD	MST-7
95127	CUSTER CO CUSTE	6/18/2008	325 Hail	0.88	0	0	0	0 SD	MST-7
100486	CUSTER CO CUSTE	6/19/2008	146 Hail	1	0	0	0	0 SD	MST-7
100485	CUSTER CO CUSTE	6/19/2008	152 Hail	1	0	0	0	0 SD	MST-7
100533	CUSTER CO CUSTE	6/19/2008	1345 Hail	0.75	0	0	0	0 SD	MST-7
100622	CUSTER CO CUSTE	6/23/2008	1225 Hail	1	0	0	0	0 SD	MST-7
100625	CUSTER CO CUSTE	6/23/2008	1445 Hail	1.75	0	0	0	0 SD	MST-7
100632	CUSTER CO CUSTE	6/23/2008	1804 Hail	0.88	0	0	0	0 SD	MST-7
112936	CUSTER CO CUSTE	6/23/2008	1814 Hail	0.88	0	0	0	0 SD	MST-7
112938	CUSTER CO WIND	6/23/2008	1840 Hail	0.75	0	0	0	0 SD	MST-7
116961	CUSTER CO PRING	7/18/2008	300 Hail	0.75	0	0	0	0 SD	MST-7
122542	CUSTER CO HERM	7/22/2008	1810 Hail	2.75	0	0	0	0 SD	MST-7
122582	CUSTER CO HERM	7/23/2008	1325 Hail	1	0	0	0	0 SD	MST-7
122594	CUSTER CO BUFFA	7/23/2008	1452 Hail	1	0	0	0	0 SD	MST-7
122787	CUSTER CO CUSTE	7/24/2008	1620 Hail	1.75	0	0	0	0 SD	MST-7
122903	CUSTER CO CUSTE	8/3/2008	1800 Hail	0.75	0	0	0	0 SD	MST-7
123698	CUSTER CO CUSTE	8/5/2008	1915 Hail	0.75	0	0	0	0 SD	MST-7
123753	CUSTER CO CUSTE	8/10/2008	1240 Hail	0.75	0	0	0	0 SD	MST-7
123754	CUSTER CO PRING	8/10/2008	1320 Hail	0.75	0	0	0	0 SD	MST-7
123756	CUSTER CO WIND	8/10/2008	1423 Hail	1	0	0	0	0 SD	MST-7
134045	CUSTER CO CUSTE	8/11/2008	1152 Hail	1	0	0	0	0 SD	MST-7
134047	CUSTER CO CUSTE	8/11/2008	1205 Hail	1	0	0	0	0 SD	MST-7
123763	CUSTER CO CUSTE	8/11/2008	1210 Hail	0.88	0	0	0	0 SD	MST-7
123829	CUSTER CO CUSTE	8/13/2008	1712 Hail	0.88	0	0	0	0 SD	MST-7
163666	CUSTER CO CUSTE	6/6/2009	1420 Hail	1	0	0	0	0 SD	MST-7
179368	CUSTER CO CUSTE	6/6/2009	1425 Hail	0.88	0	0	0	0 SD	MST-7
179378	CUSTER CO CUSTE	6/6/2009	1440 Hail	0.88	0	0	0	0 SD	MST-7
165004	CUSTER CO FOLSO	6/13/2009	1712 Hail	1.75	0	0	0	0 SD	MST-7
165007	CUSTER CO JEWEL	6/13/2009	1849 Hail	1	0	0	0	0 SD	MST-7
169810	CUSTER CO FAIRBI	6/25/2009	1620 Hail	1.75	0	0	3000	0 SD	MST-7

170244	CUSTER CO CUSTE	7/1/2009	1120 Hail	1.5	0	0	5000	0 SD	MST-7
170304	CUSTER CO HERM	7/2/2009	1246 Hail	1	0	0	0	0 SD	MST-7
171696	CUSTER CO HERM	7/8/2009	1715 Hail	1	0	0	0	0 SD	MST-7
171698	CUSTER CO HERM	7/8/2009	1725 Hail	0.88	0	0	0	0 SD	MST-7
171358	CUSTER CO HERM	7/11/2009	508 Hail	1	0	0	0	0 SD	MST-7
177641	CUSTER CO PRING	7/13/2009	1820 Hail	1.25	0	0	0	0 SD	MST-7
177643	CUSTER CO FAIRBI	7/13/2009	1840 Hail	1	0	0	0	0 SD	MST-7
223934	CUSTER CO FOLSO	5/24/2010	1136 Hail	2	0	0	3000	0 SD	MST-7
223935	CUSTER CO BUFFA	5/24/2010	1200 Hail	4	0	0	75000	0 SD	MST-7
223937	CUSTER CO HERM	5/24/2010	1228 Hail	1	0	0	0	0 SD	MST-7
223945	CUSTER CO FOLSO	5/24/2010	1346 Hail	1	0	0	0	0 SD	MST-7
233621	CUSTER CO FOLSO	5/24/2010	1445 Hail	0.75	0	0	0	0 SD	MST-7
230497	CUSTER CO FAIRBI	6/16/2010	1946 Hail	1	0	0	0	0 SD	MST-7
230538	CUSTER CO WIND	6/19/2010	2200 Hail	1	0	0	0	0 SD	MST-7
231888	CUSTER CO HERM	6/20/2010	1530 Hail	1	0	0	0	0 SD	MST-7
231887	CUSTER CO FOLSO	6/20/2010	1555 Hail	1	0	0	0	0 SD	MST-7
232438	CUSTER CO CUSTE	7/10/2010	1500 Hail	0.88	0	0	0	0 SD	MST-7
232459	CUSTER CO CUSTE	7/11/2010	1135 Hail	1.5	0	0	50000	0 SD	MST-7
232463	CUSTER CO CUSTE	7/11/2010	1137 Hail	1	0	0	0	0 SD	MST-7
232466	CUSTER CO CUSTE	7/11/2010	1152 Hail	1	0	0	0	0 SD	MST-7
239669	CUSTER CO PRING	7/19/2010	1615 Hail	1	0	0	0	0 SD	MST-7
239942	CUSTER CO CUSTE	8/1/2010	1515 Hail	1	0	0	0	0 SD	MST-7
239943	CUSTER CO CUSTE	8/1/2010	1525 Hail	0.75	0	0	0	0 SD	MST-7
246986	CUSTER CO BUFFA	8/3/2010	1306 Hail	1	0	0	0	0 SD	MST-7
247028	CUSTER CO FAIRBI	8/9/2010	1320 Hail	0.88	0	0	0	0 SD	MST-7
247030	CUSTER CO FAIRBI	8/9/2010	1325 Hail	0.88	0	0	0	0 SD	MST-7
257825	CUSTER CO BUFFA	8/16/2010	1325 Hail	0.75	0	0	0	0 SD	MST-7
257821	CUSTER CO FAIRBI	8/16/2010	1330 Hail	0.75	0	0	0	0 SD	MST-7
250727	CUSTER CO PRING	9/9/2010	1820 Hail	1	0	0	0	0 SD	MST-7
250729	CUSTER CO WIND	9/9/2010	1825 Hail	1	0	0	0	0 SD	MST-7
250730	CUSTER CO HERM	9/9/2010	1850 Hail	1	0	0	0	0 SD	MST-7
290889	CUSTER CO FAIRBI	5/9/2011	2035 Hail	1	0	0	0	0 SD	MST-7
306204	CUSTER CO CUSTE	6/11/2011	2032 Hail	0.88	0	0	0	0 SD	MST-7
306215	CUSTER CO FAIRBI	6/12/2011	1530 Hail	0.88	0	0	0	0 SD	MST-7

Appendix B: 18

[illegible]



Appendix B: 20

Appendix B: 21

592200	CUSTER CO CUSTE	7/24/2015	1914 Hail	1.5	0	0	100000	0 SD	MST-7
592203	CUSTER CO CUSTE	7/24/2015	1919 Hail	1	0	0	0	0 SD	MST-7
592204	CUSTER CO FAIRBI	7/24/2015	1935 Hail	1	0	0	0	0 SD	MST-7
596302	CUSTER CO CUSTE	7/24/2015	1935 Hail	0.88	0	0	0	0 SD	MST-7
592206	CUSTER CO FAIRBI	7/24/2015	1956 Hail	1	0	0	0	0 SD	MST-7
592327	CUSTER CO HERM	7/25/2015	1522 Hail	1	0	0	0	0 SD	MST-7
593542	CUSTER CO JEWEL	7/27/2015	1550 Hail	1	0	0	0	0 SD	MST-7
593544	CUSTER CO CUSTE	7/27/2015	1609 Hail	1	0	0	0	0 SD	MST-7
593532	CUSTER CO CUSTE	7/27/2015	1615 Hail	1.5	0	0	0	0 SD	MST-7
593545	CUSTER CO (CUT)C	7/27/2015	1620 Hail	1	0	0	0	0 SD	MST-7
627205	CUSTER CO HERM	5/20/2016	1655 Hail	2	0	0	0	0 SD	MST-7
627206	CUSTER CO CUSTE	5/20/2016	1700 Hail	1.5	0	0	0	0 SD	MST-7
627209	CUSTER CO CUSTE	5/20/2016	1739 Hail	1.25	0	0	0	0 SD	MST-7
628270	CUSTER CO JEWEL	6/8/2016	1400 Hail	1	0	0	0	0 SD	MST-7
639585	CUSTER CO CUSTE	6/13/2016	1501 Hail	1.75	0	0	0	0 SD	MST-7
639586	CUSTER CO HERM	6/13/2016	1505 Hail	1.5	0	0	0	0 SD	MST-7
641120	CUSTER CO CUSTE	6/27/2016	1505 Hail	1	0	0	0	0 SD	MST-7
641121	CUSTER CO WIND	6/27/2016	1542 Hail	1	0	0	0	0 SD	MST-7
641122	CUSTER CO WIND	6/27/2016	1600 Hail	0.75	0	0	0	0 SD	MST-7
641133	CUSTER CO CUSTE	6/28/2016	1452 Hail	1.75	0	0	0	0 SD	MST-7
641295	CUSTER CO HERM	7/3/2016	1515 Hail	1	0	0	0	0 SD	MST-7
641296	CUSTER CO HERM	7/3/2016	1535 Hail	1.5	0	0	0	0 SD	MST-7
641299	CUSTER CO FOLSO	7/3/2016	1600 Hail	0.75	0	0	0	0 SD	MST-7
649083	CUSTER CO CUSTE	7/18/2016	1625 Hail	0.75	0	0	0	0 SD	MST-7
645134	CUSTER CO CUSTE	7/26/2016	1608 Hail	1	0	0	0	0 SD	MST-7
645138	CUSTER CO WIND	7/26/2016	1638 Hail	2	0	0	0	0 SD	MST-7
645292	CUSTER CO BUFFA	7/29/2016	1250 Hail	1	0	0	0	0 SD	MST-7
645305	CUSTER CO CUSTE	7/29/2016	1450 Hail	2.75	0	0	0	0 SD	MST-7
645307	CUSTER CO CUSTE	7/29/2016	1509 Hail	1.5	0	0	0	0 SD	MST-7
645308	CUSTER CO CUSTE	7/29/2016	1510 Hail	1	0	0	0	0 SD	MST-7
653743	CUSTER CO HERM	8/9/2016	1631 Hail	1.75	0	0	0	0 SD	MST-7
653758	CUSTER CO PRING	8/9/2016	1637 Hail	1	0	0	0	0 SD	MST-7
655042	CUSTER CO FAIRBI	8/11/2016	1441 Hail	1	0	0	0	0 SD	MST-7
655069	CUSTER CO CUSTE	8/15/2016	1325 Hail	1	0	0	0	0 SD	MST-7

655072	CUSTER CO ARGYL	8/15/2016	1626	Hail	1	0	0	0	0	0	SD	MST-7
655080	CUSTER CO FOLSO	8/26/2016	1848	Hail	1.25	0	0	0	0	0	SD	MST-7
689971	CUSTER CO CUSTE	5/13/2017	1700	Hail	0.88	0	0	0	0	0	SD	MST-7
697036	CUSTER CO FAIRBI	6/28/2017	1316	Hail	1	0	0	0	0	0	SD	MST-7
697056	CUSTER CO HERM	6/28/2017	1645	Hail	1	0	0	0	0	0	SD	MST-7
700033	CUSTER CO FOLSO	7/11/2017	1449	Hail	0.75	0	0	0	0	0	SD	MST-7
704768	CUSTER CO BUFFA	7/17/2017	1307	Hail	1	0	0	0	0	0	SD	MST-7
704771	CUSTER CO WIND	7/17/2017	1750	Hail	1	0	0	0	0	0	SD	MST-7
709916	CUSTER CO HERM	8/26/2017	1231	Hail	2	0	0	0	0	0	SD	MST-7
709921	CUSTER CO HERM	8/26/2017	1238	Hail	1.5	0	0	0	0	0	SD	MST-7
709922	CUSTER CO FAIRBI	8/26/2017	1255	Hail	1.5	0	0	0	0	0	SD	MST-7
709924	CUSTER CO FAIRBI	8/26/2017	1255	Hail	1	0	0	0	0	0	SD	MST-7
709987	CUSTER CO FAIRBI	8/26/2017	1307	Hail	1.5	0	0	0	0	0	SD	MST-7
743224	CUSTER CO PRING	4/29/2018	1600	Hail	1	0	0	0	0	0	SD	MST-7
743225	CUSTER CO FAIRBI	4/29/2018	1635	Hail	0.75	0	0	0	0	0	SD	MST-7
747351	CUSTER CO DEWE	5/17/2018	1400	Hail	1	0	0	0	0	0	SD	MST-7
747352	CUSTER CO ARGYL	5/17/2018	1439	Hail	1	0	0	0	0	0	SD	MST-7
748805	CUSTER CO FOLSO	5/25/2018	1345	Hail	1	0	0	0	0	0	SD	MST-7
751474	CUSTER CO HERM	6/8/2018	1515	Hail	1.25	0	0	0	0	0	SD	MST-7
756750	CUSTER CO HERM	6/22/2018	1415	Hail	2	0	0	0	0	0	SD	MST-7
756751	CUSTER CO FOLSO	6/22/2018	1445	Hail	1	0	0	0	0	0	SD	MST-7
761345	CUSTER CO JEWEL	6/29/2018	1619	Hail	1	0	0	0	0	0	SD	MST-7
761346	CUSTER CO FAIRBI	6/29/2018	1722	Hail	1	0	0	0	0	0	SD	MST-7
761349	CUSTER CO BUFFA	6/29/2018	1744	Hail	1.5	0	0	0	0	0	SD	MST-7
761405	CUSTER CO CUSTE	7/3/2018	2015	Hail	1	0	0	0	0	0	SD	MST-7
761993	CUSTER CO CUSTE	7/16/2018	1525	Hail	1.5	0	0	0	0	0	SD	MST-7
765336	CUSTER CO CUSTE	7/17/2018	1529	Hail	1	0	0	0	0	0	SD	MST-7
765337	CUSTER CO FAIRBI	7/17/2018	1550	Hail	1.5	0	0	0	0	0	SD	MST-7
765360	CUSTER CO FOLSO	7/18/2018	1425	Hail	1	0	0	0	0	0	SD	MST-7
769423	CUSTER CO HERM	7/27/2018	1711	Hail	1	0	0	0	0	0	SD	MST-7
769485	CUSTER CO PRING	7/27/2018	1728	Hail	1	0	0	0	0	0	SD	MST-7
770122	CUSTER CO WIND	7/29/2018	1230	Hail	1	0	0	0	0	0	SD	MST-7
772799	CUSTER CO FOLSO	8/23/2018	1500	Hail	1.75	0	0	0	0	0	SD	MST-7
817026	CUSTER CO HERM	6/2/2019	1240	Hail	1.25	0	0	0	0	0	SD	MST-7

817027	CUSTER CO HERM	6/2/2019	1248	Hail	2	0	0	0	0	0	SD	MST-7
817030	CUSTER CO HERM	6/2/2019	1300	Hail	2.5	0	0	0	0	0	SD	MST-7
817032	CUSTER CO FAIRB	6/2/2019	1303	Hail	1.5	0	0	0	0	0	SD	MST-7
817034	CUSTER CO FAIRB	6/2/2019	1306	Hail	2.25	0	0	0	0	0	SD	MST-7
817035	CUSTER CO FAIRB	6/2/2019	1320	Hail	1.5	0	0	0	0	0	SD	MST-7
817037	CUSTER CO FAIRB	6/2/2019	1330	Hail	1.75	0	0	0	0	0	SD	MST-7
817038	CUSTER CO FAIRB	6/2/2019	1338	Hail	2.5	0	0	0	0	0	SD	MST-7
817039	CUSTER CO FAIRB	6/2/2019	1355	Hail	1	0	0	0	0	0	SD	MST-7
817040	CUSTER CO BUFFA	6/2/2019	1442	Hail	1	0	0	0	0	0	SD	MST-7
832320	CUSTER CO DEWE	7/3/2019	1631	Hail	1.75	0	0	0	0	0	SD	MST-7
832322	CUSTER CO PRING	7/3/2019	1700	Hail	1.5	0	0	0	0	0	SD	MST-7
832323	CUSTER CO BUFFA	7/3/2019	1715	Hail	1	0	0	0	0	0	SD	MST-7
832340	CUSTER CO DEWE	7/3/2019	1720	Hail	1	0	0	0	0	0	SD	MST-7
832343	CUSTER CO DEWE	7/3/2019	1748	Hail	1	0	0	0	0	0	SD	MST-7
844699	CUSTER CO JEWEL	7/30/2019	1646	Hail	1	0	0	0	0	0	SD	MST-7
844757	CUSTER CO HERM	8/5/2019	1351	Hail	1.5	0	0	0	0	0	SD	MST-7
844758	CUSTER CO HERM	8/5/2019	1400	Hail	1	0	0	0	0	0	SD	MST-7
844759	CUSTER CO HERM	8/5/2019	1436	Hail	1	0	0	0	0	0	SD	MST-7
846253	CUSTER CO FAIRB	8/10/2019	1420	Hail	1.25	0	0	0	0	0	SD	MST-7
846265	CUSTER CO JEWEL	8/10/2019	1802	Hail	0.88	0	0	0	0	0	SD	MST-7
882995	CUSTER CO HERM	5/3/2020	1800	Hail	1	0	0	0	0	0	SD	MST-7
891668	CUSTER CO JEWEL	6/4/2020	1950	Hail	1	0	0	0	0	0	SD	MST-7
893710	CUSTER CO CUSTE	6/25/2020	1203	Hail	1	0	0	0	0	0	SD	MST-7
893715	CUSTER CO CUSTE	6/25/2020	1232	Hail	1.75	0	0	0	0	0	SD	MST-7
902532	CUSTER CO CUSTE	6/28/2020	1820	Hail	1.25	0	0	0	0	0	SD	MST-7
902535	CUSTER CO CUSTE	6/28/2020	1830	Hail	1.25	0	0	0	0	0	SD	MST-7
902538	CUSTER CO CUSTE	6/28/2020	1833	Hail	1.75	0	0	0	0	0	SD	MST-7
902932	CUSTER CO HERM	7/2/2020	1400	Hail	1	0	0	0	0	0	SD	MST-7
902933	CUSTER CO HERM	7/2/2020	1406	Hail	1.5	0	0	0	0	0	SD	MST-7
903070	CUSTER CO CUSTE	7/4/2020	1501	Hail	1	0	0	0	0	0	SD	MST-7
903160	CUSTER CO HERM	7/5/2020	1522	Hail	1.5	0	0	0	0	0	SD	MST-7
903161	CUSTER CO HERM	7/5/2020	1526	Hail	1.75	0	0	0	0	0	SD	MST-7
903163	CUSTER CO HERM	7/5/2020	1526	Hail	2	0	0	0	0	0	SD	MST-7
906027	CUSTER CO FOLSO	7/6/2020	1930	Hail	2.5	0	0	0	0	0	SD	MST-7

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971952	CUSTER CO HERM	8/14/2021	1415 Hail	1.75	0	0	0	0 SD	MST-7
971960	CUSTER CO HERM	8/14/2021	1425 Hail	1	0	0	0	0 SD	MST-7
971962	CUSTER CO FAIRBI	8/14/2021	1446 Hail	2	0	0	0	0 SD	MST-7
972421	CUSTER CO CUSTE	8/30/2021	1556 Hail	1	0	0	0	0 SD	MST-7
972427	CUSTER CO FAIRBI	8/30/2021	1635 Hail	1	0	0	0	0 SD	MST-7
972428	CUSTER CO FAIRBI	8/30/2021	1705 Hail	1	0	0	0	0 SD	MST-7
1011093	CUSTER CO DEWE	4/22/2022	1855 Hail	0.88	0	0	0	0 SD	MST-7
1011094	CUSTER CO PRING	4/22/2022	1906 Hail	1.5	0	0	0	0 SD	MST-7
1011096	CUSTER CO (CUT)C	4/22/2022	1914 Hail	1.75	0	0	0	0 SD	MST-7
1011097	CUSTER CO CUSTE	4/22/2022	1915 Hail	1.25	0	0	0	0 SD	MST-7
1011098	CUSTER CO CUSTE	4/22/2022	1920 Hail	2	0	0	0	0 SD	MST-7
1011099	CUSTER CO CUSTE	4/22/2022	1925 Hail	1.75	0	0	0	0 SD	MST-7
1011143	CUSTER CO FAIRBI	4/22/2022	2030 Hail	1	0	0	0	0 SD	MST-7
1011144	CUSTER CO WIND	4/22/2022	2033 Hail	1.75	0	0	0	0 SD	MST-7
1020702	CUSTER CO CUSTE	6/4/2022	1250 Hail	1	0	0	0	0 SD	MST-7
1020704	CUSTER CO CUSTE	6/4/2022	1310 Hail	1	0	0	0	0 SD	MST-7
1020716	CUSTER CO DEWE	6/6/2022	1405 Hail	1	0	0	0	0 SD	MST-7
1022581	CUSTER CO HERM	6/11/2022	2155 Hail	1	0	0	0	0 SD	MST-7
1022582	CUSTER CO HERM	6/11/2022	2200 Hail	1.75	0	0	0	0 SD	MST-7
1024846	CUSTER CO ARGYL	6/13/2022	1955 Hail	1.75	0	0	0	0 SD	MST-7
1025285	CUSTER CO FAIRBI	6/24/2022	1700 Hail	1	0	0	0	0 SD	MST-7
1025288	CUSTER CO FAIRBI	6/24/2022	1710 Hail	1.75	0	0	0	0 SD	MST-7
4557000									



EVENT_ID	ID	CZ_NAME	BEGIN_DATE	BEGIN_TIME	EVENT_TYF	MAGNITUDE	TOR_F_SC	DEATHS_D	INJURIES_I	DAMAGE_I	DAMAGE_STATE	ABE
5521300	HERMOSA	7/15/2006	700	Heat			0	0	0	0	SD	
5521297	CUSTER CO	7/15/2006	700	Heat			0	0	0	0	SD	

EVENT_ID	ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIN	EVENT_TYF	DEATHS_D	INJURIES_C	DAMAGE_I	DAMAGE_J	DAMAGE_K	STATE_ABE	CZ_TIME	ZEZC	MAGNITUDE
5530381		CUSTER CO HERMOSA	8/8/2006	1300	Heavy Rain	0	0	0	0	0	0	SD	MST		
122245		CUSTER CO HERMOSA	6/1/2008	1230	Heavy Rain	0	0	0	0	0	0	SD	MST-7		
707775		CUSTER CO (CUT) CUST	7/27/2017	500	Heavy Rain	0	0	0	0	0	0	SD	MST-7		
707776		CUSTER CO JEWEL CAV	7/27/2017	700	Heavy Rain	0	0	0	0	0	0	SD	MST-7		
855551		CUSTER CO CUSTER	8/2/2019	1224	Heavy Rain	0	0	0	0	0	0	SD	MST-7		

EVENT_ID	CZ_NAME	STF BE BEGIN	DATE BEGIN	TIV EVENT	TYF DEATHS	D INJURIES	I DAMAGE	F DAMAGE	STATE	ABECZ	TIMEZC	MAGNITUDE
5543381	SOUTHERN BL		4/11/1996	900 Heavy Snoi	0	0	0	0	SD		MST	
5579528	SOUTHERN BL		12/21/1996	600 Heavy Snoi	0	0	0	0	SD		MST	
5579529	SOUTHERN BL		12/25/1996	200 Heavy Snoi	0	0	0	0	SD		MST	
5628309	SOUTHERN BL		1/8/1998	1500 Heavy Snoi	0	0	0	0	SD		MST	
5639323	SOUTHERN BL		3/4/1998	400 Heavy Snoi	0	0	0	0	SD		MST	
5230557	SOUTHERN BL		2/14/2001	300 Heavy Snoi	0	0	0	0	SD		MST	
5275174	SOUTHERN BL		11/26/2001	840 Heavy Snoi	0	0	0	0	SD		MST	
5286278	CUSTER PLAIN		3/18/2002	45 Heavy Snoi	0	0	0	0	SD		MST	
5499225	SOUTHERN BL		3/12/2006	0 Heavy Snoi	0	0	0	0	SD		MST	
5497524	HERMOSA FOC		3/12/2006	200 Heavy Snoi	0	0	0	0	SD		MST	
5499226	CUSTER CO PL		3/12/2006	200 Heavy Snoi	0	0	0	0	SD		MST	
5504481	SOUTHERN BL		4/6/2006	2000 Heavy Snoi	0	0	0	0	SD		MST	
70407	SOUTHERN BL		12/7/2007	1000 Heavy Snoi	0	0	0	0	SD		MST-7	
224358	SOUTHERN BL		5/11/2010	1900 Heavy Snoi	0	0	0	0	SD		MST-7	
434459	SOUTHERN BL		3/22/2013	1000 Heavy Snoi	0	0	0	0	SD		MST-7	
439726	SOUTHERN BL		4/21/2013	1900 Heavy Snoi	0	0	0	0	SD		MST-7	
439738	HERMOSA FOC		4/21/2013	2000 Heavy Snoi	0	0	0	0	SD		MST-7	
499146	SOUTHERN BL		3/22/2014	500 Heavy Snoi	0	0	0	0	SD		MST-7	
540302	SOUTHERN BL		9/10/2014	2100 Heavy Snoi	0	0	0	0	SD		MST-7	
800813	HERMOSA FOC		3/6/2019	2200 Heavy Snoi	0	0	0	0	SD		MST-7	
810706	SOUTHERN BL		4/30/2019	0 Heavy Snoi	0	0	0	0	SD		MST-7	
811039	SOUTHERN BL		5/1/2019	0 Heavy Snoi	0	0	0	0	SD		MST-7	
817049	SOUTHERN BL		5/20/2019	2000 Heavy Snoi	0	0	0	0	SD		MST-7	
918913	SOUTHERN BL		9/7/2020	1800 Heavy Snoi	0	0	0	0	SD		MST-7	
939329	SOUTHERN BL		3/9/2021	2300 Heavy Snoi	0	0	0	0	SD		MST-7	

EVENT_ID	CZ_NAME_STR	BEGIN	BEGIN_DATE	BEGIN_TIV_EVENT_TYPE	MAGNITUDE	DEATHS	D_INJURIES	DAMAGE_I	DAMAGE_J	STATE_ABE	CZ_TIME	EZC
5537360	CUSTER CO PLAI	2/10/1996	300 High Wind	55	0	0	0	0	0	SD	MST	
5543554	SOUTHERN BLAI	4/24/1996	1500 High Wind	55	0	0	0	0	0	SD	MST	
5543555	CUSTER CO PLAI	4/24/1996	1500 High Wind	58	0	0	0	0	0	SD	MST	
5610377	CUSTER PLAINS	7/1/1997	900 High Wind	50	0	0	0	0	0	SD	MST	
5610388	SOUTHERN BLAI	7/1/1997	900 High Wind	70	0	2	0	0	0	SD	MST	
5622955	SOUTHERN BLAI	10/12/1997	1000 High Wind	50	0	0	0	0	0	SD	MST	
5622943	CUSTER PLAINS	10/12/1997	1000 High Wind	50	0	0	0	0	0	SD	MST	
5670470	CUSTER PLAINS	10/4/1998	2000 High Wind	65	0	0	0	0	0	SD	MST	
5670473	CUSTER PLAINS	10/4/1998	2000 High Wind	65	0	0	0	0	0	SD	MST	
5682282	CUSTER PLAINS	2/3/1999	930 High Wind	53	0	0	0	0	0	SD	MST	
5687352	CUSTER PLAINS	3/16/1999	1600 High Wind	50	0	0	0	0	0	SD	MST	
5698427	CUSTER PLAINS	5/5/1999	800 High Wind	55	0	0	0	0	0	SD	MST	
5723192	CUSTER PLAINS	10/31/1999	1730 High Wind	60	0	0	0	0	0	SD	MST	
5720966	CUSTER PLAINS	11/18/1999	1300 High Wind	35	0	0	0	0	0	SD	MST	
5724646	CUSTER PLAINS	12/18/1999	800 High Wind	35	0	0	0	0	0	SD	MST	
5141046	CUSTER PLAINS	4/2/2000	700 High Wind	52	0	0	0	0	0	SD	MST	
5141536	CUSTER PLAINS	4/5/2000	600 High Wind	52	0	0	0	0	0	SD	MST	
5162295	CUSTER PLAINS	11/1/2000	800 High Wind	52	0	0	0	0	0	SD	MST	
5162289	CUSTER PLAINS	11/28/2000	900 High Wind	36	0	0	0	0	0	SD	MST	
5177386	CUSTER PLAINS	12/28/2000	230 High Wind	52	0	0	0	0	0	SD	MST	
5228210	CUSTER PLAINS	1/30/2001	900 High Wind	60	0	0	0	0	0	SD	MST	
5280454	CUSTER PLAINS	2/11/2002	1200 High Wind	39	0	0	0	0	0	SD	MST	
5290140	CUSTER PLAINS	4/23/2002	1600 High Wind	52	0	0	0	0	0	SD	MST	
5291565	CUSTER PLAINS	5/3/2002	1720 High Wind	37	0	0	0	0	0	SD	MST	
5310362	CUSTER CO PLA	8/16/2002	1707 High Wind	64	0	0	0	0	0	SD	MST	
5310918	HERMOSA FOOT	8/16/2002	1715 High Wind	52	0	0	0	0	0	SD	MST	
5310921	SOUTHERN BLAI	8/16/2002	1715 High Wind	63	0	0	0	0	0	SD	MST	
5341110	HERMOSA FOOT	1/4/2003	530 High Wind	52	0	0	0	0	0	SD	MST	
5428629	CUSTER CO PLA	12/11/2004	2100 High Wind	52	0	0	0	0	0	SD	MST	
5479691	HERMOSA FOOT	11/14/2005	2200 High Wind	35	0	0	0	0	0	SD	MST	
5479628	CUSTER CO PLA	11/14/2005	2200 High Wind	35	0	0	0	0	0	SD	MST	
5483994	CUSTER CO PLA	12/14/2005	900 High Wind	35	0	0	0	0	0	SD	MST	
5504492	HERMOSA FOOT	4/18/2006	600 High Wind	52	0	0	0	0	0	SD	MST	

5504488	CUSTER CO PLA	4/19/2006	600 High Wind	52	0	0	0	0	0 SD	MST
5531063	CUSTER CO PLA	9/17/2006	1200 High Wind	35	0	0	0	0	0 SD	MST
5531068	HERMOSA FOO	9/17/2006	1200 High Wind	35	0	0	0	0	0 SD	MST
810	HERMOSA FOO	10/30/2006	1000 High Wind	35	0	0	0	0	0 SD	MST-7
802	CUSTER CO PLA	10/30/2006	1100 High Wind	35	0	0	0	0	0 SD	MST-7
11308	CUSTER CO PLA	2/16/2007	1100 High Wind	52	0	0	0	0	0 SD	MST-7
11326	HERMOSA FOO	2/16/2007	1100 High Wind	52	0	0	0	0	0 SD	MST-7
11611	HERMOSA FOO	3/2/2007	900 High Wind	52	0	0	0	0	0 SD	MST-7
11606	CUSTER CO PLA	3/2/2007	900 High Wind	52	0	0	0	0	0 SD	MST-7
60611	CUSTER CO PLA	10/18/2007	500 High Wind	35	0	0	0	0	0 SD	MST-7
64042	HERMOSA FOO	11/12/2007	2000 High Wind	83	0	0	0	0	0 SD	MST-7
76106	HERMOSA FOO	1/27/2008	1800 High Wind	83	0	0	0	0	0 SD	MST-7
76103	SOUTHERN BLA	1/27/2008	1900 High Wind	52	0	0	10000	0	0 SD	MST-7
135473	CUSTER CO PLA	10/26/2008	1000 High Wind	35	0	0	0	0	0 SD	MST-7
141497	CUSTER CO PLA	11/14/2008	800 High Wind	53	0	0	0	0	0 SD	MST-7
142687	HERMOSA FOO	12/29/2008	2000 High Wind	62	0	0	0	0	0 SD	MST-7
142692	CUSTER CO PLA	12/30/2008	1100 High Wind	52	0	0	0	0	0 SD	MST-7
146156	CUSTER CO PLA	1/12/2009	400 High Wind	61	0	0	0	0	0 SD	MST-7
163045	CUSTER CO PLA	5/13/2009	1300 High Wind	35	0	0	0	0	0 SD	MST-7
163043	SOUTHERN BLA	5/13/2009	1315 High Wind	50	0	0	0	0	0 SD	MST-7
195651	CUSTER CO PLA	9/27/2009	1300 High Wind	35	0	0	0	0	0 SD	MST-7
198752	HERMOSA FOO	10/1/2009	1000 High Wind	35	0	0	0	0	0 SD	MST-7
198747	CUSTER CO PLA	10/1/2009	1000 High Wind	35	0	0	0	0	0 SD	MST-7
198754	CUSTER CO PLA	10/2/2009	900 High Wind	35	0	0	0	0	0 SD	MST-7
230442	HERMOSA FOO	5/24/2010	1400 High Wind	52	0	0	0	0	0 SD	MST-7
230426	SOUTHERN BLA	5/24/2010	1500 High Wind	52	0	0	0	0	0 SD	MST-7
230427	CUSTER CO PLA	5/24/2010	1600 High Wind	52	0	0	0	0	0 SD	MST-7
263006	CUSTER CO PLA	10/26/2010	600 High Wind	35	0	0	0	0	0 SD	MST-7
263016	HERMOSA FOO	10/26/2010	600 High Wind	35	0	0	0	0	0 SD	MST-7
285242	HERMOSA FOO	3/11/2011	300 High Wind	50	0	0	0	0	0 SD	MST-7
285240	SOUTHERN BLA	3/11/2011	600 High Wind	50	0	0	0	0	0 SD	MST-7
297087	CUSTER CO PLA	4/22/2011	1400 High Wind	35	0	0	0	0	0 SD	MST-7
297732	CUSTER CO PLA	4/30/2011	1100 High Wind	52	0	0	0	0	0 SD	MST-7
297778	HERMOSA FOO	4/30/2011	1300 High Wind	61	0	0	0	0	0 SD	MST-7

356860	HERMOSA FOOT	12/31/2011	1000 High Wind	35	0	0	0	0 SD	MST-7
356858	CUSTER CO PLA	12/31/2011	1300 High Wind	35	0	0	0	0 SD	MST-7
356866	CUSTER CO PLA	1/22/2012	500 High Wind	35	0	0	0	0 SD	MST-7
365670	SOUTHERN BLA	3/26/2012	1630 High Wind	54	0	0	0	0 SD	MST-7
365734	HERMOSA FOOT	3/26/2012	1630 High Wind	61	0	0	0	0 SD	MST-7
365671	CUSTER CO PLA	3/26/2012	1700 High Wind	61	0	0	0	0 SD	MST-7
370454	CUSTER CO PLA	4/2/2012	800 High Wind	52	0	0	0	0 SD	MST-7
402864	CUSTER CO PLA	8/15/2012	700 High Wind	35	0	0	0	0 SD	MST-7
416343	HERMOSA FOOT	10/17/2012	700 High Wind	39	0	0	0	0 SD	MST-7
478113	CUSTER CO PLA	10/11/2013	800 High Wind	35	0	0	0	0 SD	MST-7
478123	HERMOSA FOOT	10/11/2013	1000 High Wind	51	0	0	0	0 SD	MST-7
487289	CUSTER CO PLA	1/16/2014	900 High Wind	52	0	0	0	0 SD	MST-7
487319	HERMOSA FOOT	1/16/2014	900 High Wind	50	0	0	0	0 SD	MST-7
487644	CUSTER CO PLA	1/24/2014	1300 High Wind	35	0	0	0	0 SD	MST-7
488035	CUSTER CO PLA	1/26/2014	1000 High Wind	52	0	0	0	0 SD	MST-7
488048	HERMOSA FOOT	1/26/2014	1200 High Wind	54	0	0	0	0 SD	MST-7
506276	CUSTER CO PLA	4/29/2014	800 High Wind	35	0	0	0	0 SD	MST-7
506284	HERMOSA FOOT	4/29/2014	800 High Wind	52	0	0	0	0 SD	MST-7
558921	SOUTHERN BLA	3/28/2015	1800 High Wind	50	0	0	0	0 SD	MST-7
558930	HERMOSA FOOT	3/29/2015	130 High Wind	52	0	0	0	0 SD	MST-7
605306	CUSTER CO PLA	11/16/2015	2200 High Wind	35	0	0	0	0 SD	MST-7
605247	CUSTER CO PLA	11/18/2015	900 High Wind	61	0	0	0	0 SD	MST-7
605244	SOUTHERN BLA	11/18/2015	1000 High Wind	52	0	0	0	0 SD	MST-7
605273	HERMOSA FOOT	11/18/2015	1500 High Wind	35	0	0	0	0 SD	MST-7
613801	CUSTER CO PLA	2/7/2016	700 High Wind	68	0	0	0	0 SD	MST-7
613817	HERMOSA FOOT	2/7/2016	800 High Wind	61	0	0	0	0 SD	MST-7
613800	SOUTHERN BLA	2/7/2016	900 High Wind	56	0	0	0	0 SD	MST-7
613821	CUSTER CO PLA	2/13/2016	1700 High Wind	37	0	0	0	0 SD	MST-7
613823	HERMOSA FOOT	2/13/2016	1700 High Wind	56	0	0	0	0 SD	MST-7
614880	HERMOSA FOOT	2/18/2016	2100 High Wind	56	0	0	0	0 SD	MST-7
614867	CUSTER CO PLA	2/18/2016	2200 High Wind	60	0	0	0	0 SD	MST-7
614866	SOUTHERN BLA	2/18/2016	2300 High Wind	52	0	0	0	0 SD	MST-7
618938	CUSTER CO PLA	4/5/2016	1600 High Wind	59	0	0	0	0 SD	MST-7
618937	SOUTHERN BLA	4/5/2016	2100 High Wind	52	0	0	0	0 SD	MST-7

618951	HERMOSA FOOT	4/5/2016	2100 High Wind	54	0	0	0	0	0 SD	MST-7
661783	HERMOSA FOOT	11/29/2016	1100 High Wind	52	0	0	0	0	0 SD	MST-7
726894	SOUTHERN BLA	12/8/2017	100 High Wind	55	0	0	0	0	0 SD	MST-7
734602	CUSTER CO PLA	3/5/2018	1200 High Wind	62	0	0	0	0	0 SD	MST-7
795843	CUSTER CO PLA	1/28/2019	0 High Wind	52	0	0	0	0	0 SD	MST-7
795901	HERMOSA FOOT	1/28/2019	200 High Wind	56	0	0	0	0	0 SD	MST-7
856512	SOUTHERN BLA	10/20/2019	1600 High Wind	73	0	0	0	0	0 SD	MST-7
856515	HERMOSA FOOT	10/20/2019	1600 High Wind	55	0	0	0	0	0 SD	MST-7
923735	SOUTHERN BLA	11/13/2020	2200 High Wind	61	0	0	0	0	0 SD	MST-7
930029	CUSTER CO PLA	12/23/2020	100 High Wind	66	0	0	0	0	0 SD	MST-7
930028	SOUTHERN BLA	12/23/2020	200 High Wind	56	0	0	0	0	0 SD	MST-7
930041	HERMOSA FOOT	12/23/2020	400 High Wind	57	0	0	0	0	0 SD	MST-7
932632	CUSTER CO PLA	1/13/2021	1800 High Wind	71	0	0	0	0	0 SD	MST-7
932644	HERMOSA FOOT	1/13/2021	1900 High Wind	60	0	0	0	0	0 SD	MST-7
932631	SOUTHERN BLA	1/13/2021	2300 High Wind	57	0	0	0	0	0 SD	MST-7
943041	HERMOSA FOOT	3/29/2021	330 High Wind	56	0	0	0	0	0 SD	MST-7
943015	CUSTER CO PLA	3/29/2021	800 High Wind	63	0	0	0	0	0 SD	MST-7
943014	SOUTHERN BLA	3/29/2021	900 High Wind	54	0	0	0	0	0 SD	MST-7
984074	CUSTER CO PLA	10/13/2021	830 High Wind	56	0	0	0	0	0 SD	MST-7
987693	CUSTER CO PLA	11/11/2021	1200 High Wind	57	0	0	0	0	0 SD	MST-7
987729	CUSTER CO PLA	11/13/2021	1400 High Wind	59	0	0	0	0	0 SD	MST-7
990056	CUSTER CO PLA	12/15/2021	1000 High Wind	68	0	0	0	0	0 SD	MST-7
994377	CUSTER CO PLA	1/4/2022	1100 High Wind	53	0	0	0	0	0 SD	MST-7
994886	CUSTER CO PLA	1/14/2022	500 High Wind	60	0	0	0	0	0 SD	MST-7
994890	HERMOSA FOOT	1/14/2022	1200 High Wind	50	0	0	0	0	0 SD	MST-7
1008502	CUSTER CO PLA	3/29/2022	1200 High Wind	61	0	0	0	0	0 SD	MST-7
1011167	SOUTHERN BLA	4/6/2022	0 High Wind	59	0	0	0	0	0 SD	MST-7
1011165	CUSTER CO PLA	4/7/2022	700 High Wind	61	0	0	0	0	0 SD	MST-7
1011172	HERMOSA FOOT	4/7/2022	700 High Wind	61	0	0	0	0	0 SD	MST-7
1014735	CUSTER CO PLA	4/23/2022	600 High Wind	59	0	0	0	0	0 SD	MST-7
1014741	HERMOSA FOOT	4/23/2022	900 High Wind	50	0	0	0	0	0 SD	MST-7
1014747	CUSTER CO PLA	4/30/2022	830 High Wind	50	0	0	0	0	0 SD	MST-7
1015918	CUSTER CO PLA	5/19/2022	900 High Wind	57	0	0	0	0	0 SD	MST-7



EVENT_ID	ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIME	EVENT_TYF	MAGNITUDE	TOR_F_SC	DEATHS_D	INJURIES_I	DAMAGE_F	DAMAGE_I	STATE_ABE
5658404		CUSTER CO	CUSTER	7/19/1998	2300	Lightning			0	0	0	0	SD
5265960		CUSTER CO	CUSTER	8/1/2001	0	Lightning			0	0	500000		SD
5268076		CUSTER CO	PRINGLE	9/1/2001	2200	Lightning			0	0	0	0	SD
524101		CUSTER CO	BUFFALO	5/27/2014	1515	Lightning			0	1	0	0	SD

EVENT_ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIV	EVENT_TYF	MAGNITUDE	DEATHS	D_INJURIES	L_DAMAGE	F_DAMAGE	STATE	ABE	CZ_TIME	ZC
10113623	CUSTER CO		7/6/1963	1500	Thunderstc		87	0	0	0	0 SD		CST	
10113967	CUSTER CO		6/25/1975	1840	Thunderstc		0	0	0	0	0 SD		CST	
10125464	CUSTER CO		6/5/1982	2300	Thunderstc		0	0	0	0	0 SD		CST	
10125465	CUSTER CO		6/5/1982	2300	Thunderstc		0	0	0	0	0 SD		CST	
10125780	CUSTER CO		7/20/1983	1607	Thunderstc		81	0	0	0	0 SD		CST	
10125781	CUSTER CO		7/20/1983	1609	Thunderstc		59	0	0	0	0 SD		CST	
10125782	CUSTER CO		7/20/1983	1615	Thunderstc		78	0	0	0	0 SD		CST	
10125783	CUSTER CO		7/20/1983	1630	Thunderstc		69	0	0	0	0 SD		CST	
10125784	CUSTER CO		7/20/1983	1645	Thunderstc		69	0	0	0	0 SD		CST	
10126986	CUSTER CO		7/7/1984	1715	Thunderstc		0	0	0	0	0 SD		CST	
10123637	CUSTER CO		9/6/1984	1645	Thunderstc		0	0	0	0	0 SD		CST	
10346353	CUSTER CO	Custer	7/15/1995	2115	Thunderstc		0	0	0	0	0 SD		CST	
10346333	CUSTER CO	Wind Cave	7/15/1995	2115	Thunderstc		0	0	0	0	0 SD		CST	
5558072	CUSTER CO	HERMOSA	7/6/1996	30	Thunderstc		70	0	0	0	0 SD		MST	
5610524	CUSTER CO	CUSTER	7/18/1997	1825	Thunderstc		60	0	0	0	0 SD		MST	
5653181	CUSTER CO	FAIRBURN	6/24/1998	1724	Thunderstc		52	0	0	50000	0 SD		MST	
5653182	CUSTER CO	HERMOSA	6/24/1998	1734	Thunderstc		54	0	0	0	0 SD		MST	
5658129	CUSTER CO	HERMOSA	7/20/1998	2230	Thunderstc		70	0	0	0	0 SD		MST	
5170124	CUSTER CO	WIND CAVI	8/4/2000	2040	Thunderstc		66	0	0	0	0 SD		MST	
5254032	CUSTER CO	HERMOSA	6/9/2001	1711	Thunderstc		75	0	0	0	0 SD		MST	
5260034	CUSTER CO	CUSTER CO	7/7/2001	1913	Thunderstc		55	0	0	0	0 SD		MST	
5260037	CUSTER CO	CUSTER	7/8/2001	1630	Thunderstc		98	0	0	0	0 SD		MST	
5260050	CUSTER CO	PRINGLE	7/8/2001	1810	Thunderstc		63	0	0	5000	0 SD		MST	
5260490	CUSTER CO	HERMOSA	7/30/2001	1800	Thunderstc		57	0	0	0	0 SD		MST	
5297442	CUSTER CO	BUFFALO G	6/2/2002	2000	Thunderstc		52	0	0	0	0 SD		MST	
5304759	CUSTER CO	CUSTER	7/20/2002	1932	Thunderstc		61	0	0	0	0 SD		MST	
5310619	CUSTER CO	FAIRBURN	8/8/2002	1514	Thunderstc		52	0	0	0	0 SD		MST	
5310624	CUSTER CO	HERMOSA	8/8/2002	1539	Thunderstc		52	0	0	0	0 SD		MST	
5364078	CUSTER CO	PRINGLE	6/20/2003	1704	Thunderstc		52	0	0	0	0 SD		MST	
5364090	CUSTER CO	CUSTER	6/20/2003	1715	Thunderstc		61	0	0	0	0 SD		MST	
5364085	CUSTER CO	HERMOSA	6/20/2003	1730	Thunderstc		52	0	0	0	0 SD		MST	
5364086	CUSTER CO	HERMOSA	6/20/2003	1745	Thunderstc		52	0	0	0	0 SD		MST	
5373952	CUSTER CO	FOLSOM	7/4/2003	1520	Thunderstc		61	0	0	0	0 SD		MST	

5377134	CUSTER CO BUFFALO G	8/3/2003	1905 Thunderstc	61	0	0	0	0	0 SD	MST
5378079	CUSTER CO FAIRBURN	8/7/2003	1858 Thunderstc	52	0	0	0	0	0 SD	MST
5412350	CUSTER CO HERMOSA	7/3/2004	1400 Thunderstc	61	0	0	0	0	0 SD	MST
5417607	CUSTER CO FAIRBURN	8/2/2004	1655 Thunderstc	61	0	0	0	0	0 SD	MST
5422442	CUSTER CO CUSTER	9/19/2004	1530 Thunderstc	65	0	0	0	0	0 SD	MST
5422443	CUSTER CO CUSTER	9/19/2004	1625 Thunderstc	52	0	0	0	0	0 SD	MST
5455053	CUSTER CO FAIRBURN	6/6/2005	1720 Thunderstc	52	0	0	0	0	0 SD	MST
5463999	CUSTER CO CUSTER	7/1/2005	1950 Thunderstc	52	0	0	0	0	0 SD	MST
5508439	CUSTER CO HERMOSA	5/28/2006	1805 Thunderstc	52	0	0	0	0	0 SD	MST
5514089	CUSTER CO BUFFALO G	6/14/2006	1442 Thunderstc	52	0	0	0	0	0 SD	MST
5514090	CUSTER CO CUSTER	6/14/2006	1445 Thunderstc	52	0	0	0	0	0 SD	MST
5514092	CUSTER CO HERMOSA	6/14/2006	1450 Thunderstc	63	0	0	1000	0	0 SD	MST
5520655	CUSTER CO BUFFALO G	7/1/2006	1615 Thunderstc	52	0	0	0	0	0 SD	MST
5530378	CUSTER CO HERMOSA	8/8/2006	1309 Thunderstc	61	0	0	0	0	0 SD	MST
5530380	CUSTER CO HERMOSA	8/8/2006	1340 Thunderstc	52	0	0	0	0	0 SD	MST
5529736	CUSTER CO HERMOSA	8/15/2006	1453 Thunderstc	52	0	0	0	0	0 SD	MST
43171	CUSTER CO FAIRBURN	8/3/2007	1930 Thunderstc	52	0	0	0	0	0 SD	MST-7
43170	CUSTER CO FAIRBURN	8/3/2007	1950 Thunderstc	70	0	0	5000	0	0 SD	MST-7
43271	CUSTER CO PRINGLE	8/14/2007	1730 Thunderstc	52	0	0	0	0	0 SD	MST-7
43273	CUSTER CO BUFFALO G	8/14/2007	1803 Thunderstc	52	0	0	0	0	0 SD	MST-7
44331	CUSTER CO HERMOSA	8/17/2007	1721 Thunderstc	52	0	0	0	0	0 SD	MST-7
44360	CUSTER CO HERMOSA	8/17/2007	1805 Thunderstc	52	0	0	0	0	0 SD	MST-7
44356	CUSTER CO HERMOSA	8/17/2007	1805 Thunderstc	56	0	0	0	0	0 SD	MST-7
44365	CUSTER CO FAIRBURN	8/17/2007	1840 Thunderstc	52	0	0	0	0	0 SD	MST-7
48000	CUSTER CO FAIRBURN	9/2/2007	1721 Thunderstc	52	0	0	0	0	0 SD	MST-7
100487	CUSTER CO HERMOSA	6/19/2008	220 Thunderstc	52	0	0	0	0	0 SD	MST-7
100678	CUSTER CO DEWEY	6/24/2008	2110 Thunderstc	52	0	0	0	0	0 SD	MST-7
100697	CUSTER CO FAIRBURN	6/25/2008	1910 Thunderstc	61	0	0	0	0	0 SD	MST-7
101458	CUSTER CO CUSTER	6/26/2008	1925 Thunderstc	52	0	0	0	0	0 SD	MST-7
122828	CUSTER CO CUSTER	7/26/2008	1815 Thunderstc	52	0	0	0	0	0 SD	MST-7
123736	CUSTER CO JEWEL CAV	8/5/2008	1945 Thunderstc	52	0	0	0	0	0 SD	MST-7
123700	CUSTER CO HERMOSA	8/5/2008	1950 Thunderstc	52	0	0	0	0	0 SD	MST-7
169811	CUSTER CO FAIRBURN	6/25/2009	1620 Thunderstc	52	0	0	0	0	0 SD	MST-7
170245	CUSTER CO CUSTER	7/1/2009	1125 Thunderstc	61	0	0	0	0	0 SD	MST-7

177640	CUSTER CO PRINGLE	7/13/2009	1820 Thunderstc	52	0	0	0	0	0 SD	MST-7
177644	CUSTER CO FAIRBURN	7/13/2009	1845 Thunderstc	52	0	0	0	0	0 SD	MST-7
178972	CUSTER CO FOLSOM	8/4/2009	1910 Thunderstc	52	0	0	0	0	0 SD	MST-7
223953	CUSTER CO FOLSOM	5/24/2010	1445 Thunderstc	52	0	0	0	0	0 SD	MST-7
230543	CUSTER CO BUFFALO G	6/19/2010	2230 Thunderstc	52	0	0	0	0	0 SD	MST-7
231916	CUSTER CO FAIRBURN	6/21/2010	1945 Thunderstc	52	0	0	0	0	0 SD	MST-7
231919	CUSTER CO FOLSOM	6/21/2010	2030 Thunderstc	52	0	0	0	0	0 SD	MST-7
232244	CUSTER CO HERMOSA	6/22/2010	1850 Thunderstc	52	0	0	0	0	0 SD	MST-7
239882	CUSTER CO HERMOSA	7/29/2010	1415 Thunderstc	52	0	0	0	0	0 SD	MST-7
239895	CUSTER CO ARGYLE	7/29/2010	1640 Thunderstc	52	0	0	0	0	0 SD	MST-7
246987	CUSTER CO BUFFALO G	8/3/2010	1306 Thunderstc	52	0	0	0	0	0 SD	MST-7
247031	CUSTER CO FAIRBURN	8/9/2010	1325 Thunderstc	52	0	0	0	0	0 SD	MST-7
247035	CUSTER CO BUFFALO G	8/9/2010	1350 Thunderstc	61	0	0	0	0	0 SD	MST-7
250731	CUSTER CO HERMOSA	9/9/2010	1850 Thunderstc	52	0	0	0	0	0 SD	MST-7
297174	CUSTER CO HERMOSA	6/6/2011	1730 Thunderstc	52	0	0	0	0	0 SD	MST-7
306216	CUSTER CO FAIRBURN	6/12/2011	1530 Thunderstc	52	0	0	0	0	0 SD	MST-7
306217	CUSTER CO FAIRBURN	6/12/2011	1540 Thunderstc	52	0	0	0	0	0 SD	MST-7
306218	CUSTER CO FOLSOM	6/12/2011	1605 Thunderstc	61	0	0	0	0	0 SD	MST-7
309388	CUSTER CO JEWEL CAV	6/25/2011	1805 Thunderstc	52	0	0	0	0	0 SD	MST-7
309406	CUSTER CO FAIRBURN	6/25/2011	1910 Thunderstc	52	0	0	0	0	0 SD	MST-7
310022	CUSTER CO FAIRBURN	7/2/2011	1757 Thunderstc	52	0	0	0	0	0 SD	MST-7
310065	CUSTER CO HERMOSA	7/6/2011	1008 Thunderstc	61	0	0	0	0	0 SD	MST-7
330871	CUSTER CO HERMOSA	7/25/2011	1450 Thunderstc	52	0	0	0	1000	0 SD	MST-7
330877	CUSTER CO HERMOSA	7/25/2011	1505 Thunderstc	52	0	0	0	20000	0 SD	MST-7
337241	CUSTER CO FOLSOM	7/27/2011	1751 Thunderstc	52	0	0	0	0	0 SD	MST-7
338228	CUSTER CO FAIRBURN	8/5/2011	1630 Thunderstc	52	0	0	0	0	0 SD	MST-7
345366	CUSTER CO FAIRBURN	10/6/2011	1500 Thunderstc	52	0	0	0	0	0 SD	MST-7
397901	CUSTER CO FOLSOM	6/2/2012	1930 Thunderstc	52	0	0	0	0	0 SD	MST-7
380865	CUSTER CO CUSTER	6/22/2012	1800 Thunderstc	61	0	0	0	10000	0 SD	MST-7
380893	CUSTER CO HERMOSA	6/25/2012	1700 Thunderstc	52	0	0	0	0	0 SD	MST-7
380895	CUSTER CO FAIRBURN	6/25/2012	1701 Thunderstc	52	0	0	0	0	0 SD	MST-7
380896	CUSTER CO FAIRBURN	6/25/2012	1710 Thunderstc	52	0	0	0	0	0 SD	MST-7
380897	CUSTER CO HERMOSA	6/25/2012	1730 Thunderstc	52	0	0	0	0	0 SD	MST-7
381863	CUSTER CO FAIRBURN	7/5/2012	1710 Thunderstc	52	0	0	0	5000	0 SD	MST-7

381868	CUSTER CO ARGYLE	7/5/2012	1940 Thunderstc	52	0	0	0	0	0 SD	MST-7
402863	CUSTER CO BUFFALO G	7/23/2012	2015 Thunderstc	61	0	0	25000	0	0 SD	MST-7
391863	CUSTER CO JEWEL CAV	7/24/2012	1945 Thunderstc	52	0	0	0	0	0 SD	MST-7
397310	CUSTER CO CUSTER	8/10/2012	1845 Thunderstc	52	0	0	0	0	0 SD	MST-7
463853	CUSTER CO HERMOSA	7/8/2013	1720 Thunderstc	65	0	0	0	0	0 SD	MST-7
463865	CUSTER CO FAIRBURN	7/8/2013	1800 Thunderstc	52	0	0	5000	0	0 SD	MST-7
463923	CUSTER CO FOLSOM	7/10/2013	1718 Thunderstc	61	0	0	1000	0	0 SD	MST-7
463922	CUSTER CO FAIRBURN	7/10/2013	1720 Thunderstc	52	0	0	0	0	0 SD	MST-7
463924	CUSTER CO FOLSOM	7/10/2013	1720 Thunderstc	61	0	0	2000	0	0 SD	MST-7
466799	CUSTER CO FAIRBURN	7/23/2013	1520 Thunderstc	72	0	0	50000	0	0 SD	MST-7
469623	CUSTER CO FAIRBURN	8/3/2013	310 Thunderstc	52	0	0	0	0	0 SD	MST-7
470119	CUSTER CO FAIRBURN	8/9/2013	1705 Thunderstc	61	0	0	0	0	0 SD	MST-7
470777	CUSTER CO DEWEY	8/28/2013	1900 Thunderstc	52	0	0	0	0	0 SD	MST-7
470783	CUSTER CO FAIRBURN	8/28/2013	2030 Thunderstc	52	0	0	0	0	0 SD	MST-7
472229	CUSTER CO HERMOSA	8/30/2013	1435 Thunderstc	52	0	0	0	0	0 SD	MST-7
518127	CUSTER CO FOLSOM	6/14/2014	455 Thunderstc	52	0	0	0	0	0 SD	MST-7
526961	CUSTER CO PRINGLE	6/17/2014	2019 Thunderstc	52	0	0	0	0	0 SD	MST-7
531380	CUSTER CO PRINGLE	6/17/2014	2019 Thunderstc	52	0	0	0	0	0 SD	MST-7
520749	CUSTER CO WIND CAVI	6/25/2014	1800 Thunderstc	52	0	0	0	0	0 SD	MST-7
527407	CUSTER CO FAIRBURN	7/12/2014	1443 Thunderstc	52	0	0	0	0	0 SD	MST-7
527410	CUSTER CO FAIRBURN	7/18/2014	1520 Thunderstc	52	0	0	0	0	0 SD	MST-7
576244	CUSTER CO JEWEL CAV	6/4/2015	120 Thunderstc	56	0	0	0	0	0 SD	MST-7
576255	CUSTER CO FOLSOM	6/6/2015	1315 Thunderstc	52	0	0	0	0	0 SD	MST-7
576442	CUSTER CO JEWEL CAV	6/17/2015	2145 Thunderstc	61	0	0	0	0	0 SD	MST-7
590830	CUSTER CO HERMOSA	6/25/2015	1235 Thunderstc	61	0	0	0	0	0 SD	MST-7
590832	CUSTER CO FAIRBURN	6/25/2015	1247 Thunderstc	64	0	0	0	0	0 SD	MST-7
592133	CUSTER CO HERMOSA	7/14/2015	1842 Thunderstc	52	0	0	0	0	0 SD	MST-7
592138	CUSTER CO HERMOSA	7/14/2015	1855 Thunderstc	52	0	0	0	0	0 SD	MST-7
592159	CUSTER CO JEWEL CAV	7/15/2015	1800 Thunderstc	52	0	0	0	0	0 SD	MST-7
592208	CUSTER CO HERMOSA	7/24/2015	2045 Thunderstc	52	0	0	0	0	0 SD	MST-7
593543	CUSTER CO JEWEL CAV	7/27/2015	1550 Thunderstc	52	0	0	0	0	0 SD	MST-7
643299	CUSTER CO CUSTER	6/13/2016	1455 Thunderstc	61	0	0	0	0	0 SD	MST-7
641135	CUSTER CO CUSTER	6/28/2016	1448 Thunderstc	52	0	0	0	0	0 SD	MST-7
641134	CUSTER CO WIND CAVI	6/28/2016	1514 Thunderstc	64	0	0	0	0	0 SD	MST-7

644386	CUSTER CO JEWEL CAV	7/16/2016	1455 Thunderstc	54	0	0	0	0 SD	MST-7
649023	CUSTER CO JEWEL CAV	7/16/2016	1500 Thunderstc	55	0	0	0	0 SD	MST-7
648590	CUSTER CO JEWEL CAV	7/16/2016	1500 Thunderstc	52	0	0	0	0 SD	MST-7
644627	CUSTER CO PRINGLE	7/18/2016	1634 Thunderstc	54	0	0	0	0 SD	MST-7
644629	CUSTER CO HERMOSA	7/18/2016	1706 Thunderstc	52	0	0	0	0 SD	MST-7
645404	CUSTER CO JEWEL CAV	7/30/2016	1900 Thunderstc	52	0	0	0	0 SD	MST-7
645406	CUSTER CO HERMOSA	7/30/2016	1920 Thunderstc	52	0	0	0	0 SD	MST-7
645412	CUSTER CO FAIRBURN	7/30/2016	1940 Thunderstc	52	0	0	0	0 SD	MST-7
657573	CUSTER CO JEWEL CAV	9/23/2016	1643 Thunderstc	56	0	0	0	0 SD	MST-7
696928	CUSTER CO JEWEL CAV	6/27/2017	1529 Thunderstc	56	0	0	0	0 SD	MST-7
696930	CUSTER CO CUSTER CO	6/27/2017	1557 Thunderstc	60	0	0	0	0 SD	MST-7
696931	CUSTER CO CUSTER	6/27/2017	1600 Thunderstc	61	0	0	0	0 SD	MST-7
696933	CUSTER CO CUSTER	6/27/2017	1600 Thunderstc	61	0	0	0	0 SD	MST-7
696937	CUSTER CO FAIRBURN	6/27/2017	1608 Thunderstc	61	0	0	0	0 SD	MST-7
699502	CUSTER CO HERMOSA	6/27/2017	1615 Thunderstc	52	0	0	0	0 SD	MST-7
696939	CUSTER CO FAIRBURN	6/27/2017	1617 Thunderstc	54	0	0	0	0 SD	MST-7
700034	CUSTER CO FOLSOM	7/11/2017	1449 Thunderstc	61	0	0	0	0 SD	MST-7
748708	CUSTER CO WIND CAVI	5/22/2018	1720 Thunderstc	52	0	0	0	0 SD	MST-7
748822	CUSTER CO JEWEL CAV	5/27/2018	1920 Thunderstc	51	0	0	0	0 SD	MST-7
748827	CUSTER CO FAIRBURN	5/27/2018	2023 Thunderstc	63	0	0	0	0 SD	MST-7
748828	CUSTER CO FAIRBURN	5/27/2018	2027 Thunderstc	61	0	0	0	0 SD	MST-7
749181	CUSTER CO FAIRBURN	6/5/2018	1650 Thunderstc	52	0	0	0	0 SD	MST-7
761348	CUSTER CO FAIRBURN	6/29/2018	1724 Thunderstc	50	0	0	0	0 SD	MST-7
761367	CUSTER CO DEWEY	7/3/2018	1717 Thunderstc	52	0	0	0	0 SD	MST-7
761402	CUSTER CO DEWEY	7/3/2018	1935 Thunderstc	52	0	0	0	0 SD	MST-7
765338	CUSTER CO FAIRBURN	7/17/2018	1605 Thunderstc	52	0	0	0	0 SD	MST-7
765361	CUSTER CO FOLSOM	7/18/2018	1425 Thunderstc	52	0	0	0	0 SD	MST-7
769484	CUSTER CO CUSTER	7/27/2018	1630 Thunderstc	52	0	0	0	0 SD	MST-7
769425	CUSTER CO FAIRBURN	7/27/2018	1741 Thunderstc	61	0	0	0	0 SD	MST-7
772608	CUSTER CO FAIRBURN	8/6/2018	1440 Thunderstc	52	0	0	0	0 SD	MST-7
772802	CUSTER CO FOLSOM	8/23/2018	1504 Thunderstc	52	0	0	0	0 SD	MST-7
840336	CUSTER CO ARGYLE	7/16/2019	1800 Thunderstc	52	0	0	0	0 SD	MST-7
846314	CUSTER CO FAIRBURN	8/11/2019	1725 Thunderstc	58	0	0	0	0 SD	MST-7
849503	CUSTER CO (CUT)CUST	8/25/2019	1953 Thunderstc	51	0	0	0	0 SD	MST-7

882308	CUSTER CO BUFFALO G	4/30/2020	1915 Thunderstc	52	0	0	0	0	0 SD	MST-7
882307	CUSTER CO FAIRBURN	4/30/2020	1918 Thunderstc	53	0	0	0	0	0 SD	MST-7
884054	CUSTER CO JEWEL CAV	5/20/2020	1644 Thunderstc	50	0	0	0	0	0 SD	MST-7
893533	CUSTER CO JEWEL CAV	6/6/2020	1644 Thunderstc	65	0	0	0	0	0 SD	MST-7
893534	CUSTER CO JEWEL CAV	6/6/2020	1649 Thunderstc	52	0	0	0	0	0 SD	MST-7
893536	CUSTER CO (CUT)CUST	6/6/2020	1702 Thunderstc	55	0	0	0	0	0 SD	MST-7
893538	CUSTER CO FAIRBURN	6/6/2020	1724 Thunderstc	62	0	0	0	0	0 SD	MST-7
905883	CUSTER CO JEWEL CAV	7/5/2020	1819 Thunderstc	67	0	0	0	0	0 SD	MST-7
905915	CUSTER CO ARGYLE	7/5/2020	1840 Thunderstc	52	0	0	0	0	0 SD	MST-7
905917	CUSTER CO (CUT)CUST	7/5/2020	1857 Thunderstc	53	0	0	0	0	0 SD	MST-7
912292	CUSTER CO FAIRBURN	8/8/2020	1733 Thunderstc	54	0	0	0	0	0 SD	MST-7
912293	CUSTER CO HERMOSA	8/8/2020	1736 Thunderstc	52	0	0	0	0	0 SD	MST-7
912294	CUSTER CO FAIRBURN	8/8/2020	1737 Thunderstc	52	0	0	0	0	0 SD	MST-7
912298	CUSTER CO BUFFALO G	8/8/2020	1755 Thunderstc	52	0	0	0	0	0 SD	MST-7
951966	CUSTER CO WIND CAVI	5/21/2021	213 Thunderstc	56	0	0	0	0	0 SD	MST-7
951969	CUSTER CO PRINGLE	5/23/2021	1500 Thunderstc	52	0	0	0	0	0 SD	MST-7
951971	CUSTER CO (CUT)CUST	5/23/2021	1505 Thunderstc	59	0	0	0	0	0 SD	MST-7
951973	CUSTER CO HERMOSA	5/23/2021	1530 Thunderstc	52	0	0	0	0	0 SD	MST-7
955895	CUSTER CO BUFFALO G	6/10/2021	2115 Thunderstc	61	0	0	0	0	0 SD	MST-7
963387	CUSTER CO JEWEL CAV	7/5/2021	1603 Thunderstc	54	0	0	0	0	0 SD	MST-7
969231	CUSTER CO FAIRBURN	7/13/2021	2205 Thunderstc	51	0	0	0	0	0 SD	MST-7
1011089	CUSTER CO JEWEL CAV	4/22/2022	1819 Thunderstc	63	0	0	0	0	0 SD	MST-7
1022583	CUSTER CO FAIRBURN	6/11/2022	2207 Thunderstc	50	0	0	0	0	0 SD	MST-7
1024861	CUSTER CO FOLSOM	6/13/2022	2034 Thunderstc	52	0	0	0	0	0 SD	MST-7



EVENT_ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	MAGNITUDE	TOR_F_SC	DEATHS_D	INJURIES_I	DAMAGE_I	DAMAGE_C	STATE_ABE
10112228	CUSTER CO		6/22/1961	1435	Tornado		0 F2	0	0	2500		0 SD
10112504	CUSTER CO		6/14/1962	1845	Tornado		0 F1	0	0	0		0 SD
10111169	CUSTER CO		6/11/1965	1650	Tornado		0 F2	0	0	2500		0 SD
10111440	CUSTER CO		6/22/1966	1600	Tornado		0 F2	0	0	25000		0 SD
10110920	CUSTER CO		7/15/1969	1900	Tornado		0 F1	0	0	25000		0 SD
10346324	CUSTER CO Fairburn		5/5/1993	1850	Tornado		0 F0	0	0	500		0 SD
10346327	CUSTER CO Buffalo Gap		8/13/1993	1955	Tornado		0 F0	0	0	50		50 SD
10346332	CUSTER CO Custer		6/29/1994	1545	Tornado		0 F0	0	0	5000		0 SD
5260031	CUSTER CO CUSTER		7/7/2001	1743	Tornado		F0	0	0	0		0 SD
398193	CUSTER CO ARGYLE		6/7/2012	1355	Tornado		EF1	0	0	1000		0 SD
476085	CUSTER CO FOLSOM		8/30/2013	1444	Tornado		EF0	0	0	0		0 SD
856500	CUSTER CO DEWEY		7/3/2019	1530	Tornado		EF0	0	0	0		0 SD
952080	CUSTER CO PRINGLE		5/23/2021	1455	Tornado		EF1	0	0	0		0 SD
952081	CUSTER CO CUSTER		5/23/2021	1504	Tornado		EF1	0	0	0		0 SD

EVENT_ID	ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DEATHS	INJURIES	DAMAGE_E	DAMAGE_F	DAMAGE_STATE	ABE_CZ	TIMEZC	MAGNITUDE
5176172		CUSTER CO WIND CAVI	7/14/2000	1000	Wildfire	0	0	0	0	0	SD		MST	
5169785		CUSTER CO CUSTER	8/24/2000	1330	Wildfire	0	0	0	0	0	SD		MST	

# Summary By Incident Type

## Report Parameters:

Report Period: From 01/01/2011 to 12/31/2021

State: SD      Version: All      Status: All      Released: All

## Report Filters:

NOTE: Report Filter Groups are applied to the report SQL as "AND" conditions (i.e. Group 1 AND Group2 and Group 3 etc...)

Report FDIDs: 21501, 21006, 21005, 21003, 21002, 21001, 21012, 21011, 21010, 21009, 21008, 21007

# Summary By Incident Type

Report Period: From 01/01/2011 to 12/31/2021

All Selected Fire Departments

## Calls By Incident Type

FIRES	Frequency	Percent Of Total Calls	Mutual Aid			Other Aid Given	Invalid Aid Flag	Exposures	Total Incidents
			Aid None	Aid Given	Aid Received				
Structure Fires (110-118, 120-123)	28	5.32 %	14	13	14	0	0	0	41
Vehicle Fires (130-138)	17	3.23 %	10	2	7	0	0	0	19
Other Fires (100, 140-173)	90	17.11 %	40	65	48	2	0	0	155
Total Fires	135	25.67 %	64	80	69	2	0	0	215
Pressure Ruptures, Explosion, Overheat (200-251)	1	0.19 %	1	2	0	0	0	0	3
RESCUE CALLS									
Emergency Medical Treatment (300-	98	18.63 %	54	98	42	2	0	0	196
All Others (331-381)	4	0.76 %	2	5	2	0	0	0	9
Total Rescue Calls	102	19.39 %	56	103	44	2	0	0	205
Hazardous Condition Calls (400-482)	23	4.37 %	17	1	5	1	0	0	24
Service Calls (500-571) .....	83	15.78 %	75	6	8	0	0	0	89
Good Intent Calls (600-671) .....	61	11.60 %	56	12	5	0	0	0	73
Severe Weather or Natural Disaster Calls (800-815)	7	1.33 %	7	0	0	0	0	0	7
Special Incident Calls (900-911) .....	3	0.57 %	3	0	0	0	0	0	3
Unknown Incident Type (UUU) .....	0	0.00 %	0	0	0	0	0	0	0
FALSE CALLS									
Malicious Calls (710-715, 751)	0	0.00 %	0	0	0	0	0	0	0
Other False Calls (700, 721-746)	111	21.10 %	102	2	9	0	0	0	113
Total False Calls	111	21.10 %	102	2	9	0	0	0	113
TOTAL CALLS	526	100.00 %	381	206	140	5	0	0	732

Total Incidents With Exposure Fires

\$ 2,487,775.00

Total Exposure Fires

\$ 3,203,775.00

Casualty Summary

Civilian

Fire Service

Fire Related Injuries

0

Non-Fire Injuries

0

Fire Related Deaths

0

Non-Fire Deaths

0

Containmen	ControlDat	DailyAcres	DiscoveryA	EstimatedC	FireCause	reCause	FireDiscov	FireOutDat	FireStrate	IncidentNa	IncidentTy
2014-06-19	2014-06-20	3.2	0	0	0	0	2014-06-12		0 WABASH	0	WF
2014-07-19	2014-07-19	0.1	0	0	0	Natural	2014-06-19	2014-12-01	0 Bowman	0	WF
2014-07-19	2014-07-19	0.1	0	0	0	Natural	2014-07-19	2014-12-01	0 BUCKHORN	0	WF
							2014-08-11	2014-12-01	0 SINGLE TREE	0	WF
2014-09-01	2014-09-01	0.1	0	0	0	Natural	2014-09-01	2014-12-01	0 RIDGE ROAD	0	WF
							2014-09-02		0 REEDE	0	WF
							2014-09-04		0 408	0	WF
							2014-09-20		0 SOLAR PANEL	0	WF
							2014-10-25		0 GARBAGE PIT	0	WF
							2014-11-29		0 LIGHTNING CREEK	0	WF
		250	0	5000	Human		2014-12-07		0 WILDLIFE LOOP	0	WF
			0	0	0		2014-12-22		0 BLUE BELL	0	WF
			0	0	0		2014-12-22		0 BATTLE	0	WF
			0	0	0		2014-12-22		0 LADY C	0	WF
			0	0	0		2015-01-26		0 385 SOUTH	0	WF
			0	0	0		2015-02-13		0 SKYLINE	0	WF
			0	0	0		2015-03-07		0 HARPER ROAD	0	WF
			0	0	0		2015-03-07		0 LIMESTONE	0	WF
			0	0	0		2015-03-10		0 NORTH POLE	0	WF
			0	0	0		2015-03-11		0 TURKEY RIDGE	0	WF
			0	0	0		2015-03-31		0 FISHERMAN FLATS	0	WF
2015-03-31	2015-03-31	0	0	0	0		2015-03-31	2015-04-28	0 BUCKHORN	0	WF
2015-04-17	2015-04-22	5448	0	0	Human		2015-04-13	2015-05-13	0 COLD BROOK	0	WF
2015-06-10	2015-06-10	0.1	0.1	0	Human		2015-06-10	2015-06-15	0 Mica	0	WF
2015-06-27	2015-06-27	6.5	0.1	0	Natural		2015-06-26	2015-07-01	0 Wildcat	0	WF
2015-07-02	2015-07-02	0.1	0.1	0	Natural		2015-07-02	2015-07-16	0 HAY STACK CA	0	WF
2015-07-10	2015-07-10	0.1	0.1	0	Human		2015-07-10	2015-07-13	0 CUSTER MOUNTAIN	0	WF
2015-07-12	2015-07-14	0.1	0.1	0	Human		2015-07-12	2015-07-14	0 Sunday	0	WF
2015-07-27	2015-07-27	0.6	0.5	0	Human		2015-07-26	2015-07-30	0 Highline	0	WF
2015-07-28	2015-07-28	0.1	0	0	Natural		2015-07-27	2015-12-01	0 Red Butte	0	WF
2015-08-06	2015-08-06	1.14	0.5	0	Natural		2015-08-06	2015-08-08	0 NORTH FLAT TOP	0	WF
2015-08-06	2015-08-07	0.51	0.51	0	Natural		2015-08-06	2015-08-11	0 Hat	0	WF
2015-08-07	2015-08-07	0.1	0.1	0	Natural		2015-08-06	2015-08-10	0 Griffis Well	0	WF
2015-08-07	2015-08-07	1	1	0	Natural		2015-08-06	2015-08-13	0 VALLEY CREEK	0	WF
2015-08-07	2015-08-07	36	36	0	Natural		2015-08-06	2015-08-11	0 PUTNAM DAM	0	WF
2015-08-06	2015-08-06	0.1	0.1	0	Natural		2015-08-06	2015-08-08	0 Cobb	0	WF
2015-08-06	2015-08-06	0.1	0.1	0	Natural		2015-08-06	2015-08-08	0 TRIANGLE	0	WF
2015-08-06	2015-08-06	2.79	1.5	0	Natural		2015-08-06	2015-08-08	0 Sleeper	0	WF
2015-08-06	2015-08-06	0.1	0.1	0	Natural		2015-08-06	2015-08-08	0 LAGOON	0	WF
2015-08-06	2015-08-06	0.1	0.1	0	Natural		2015-08-06	2015-08-08	0 WEST	0	WF
2015-08-06	2015-08-06	0.1	0.1	0	Natural		2015-08-06	2015-08-10	0 TRIANGLE FLATS	0	WF

2015-08-16	2015-08-16	12.5	0 Natural	2015-08-16	2015-08-25	0 PASS CREEK	WF
2015-08-16	2015-08-16	7.8	0 Natural	2015-08-16	2015-08-19	0 WINDMILL	WF
2015-08-16	2015-08-16	1.33	0 Natural	2015-08-16	2015-08-16	0 ROUGH ROAD	WF
2015-08-27	2015-08-27	0.1	0 Natural	2015-08-27	2015-08-30	0 SQUAW CREEK	WF
2015-09-25	2015-09-25	0.1	0 Natural	2015-09-25	2015-09-28	0 WATER DRAW	WF
2015-09-28	2015-09-28	0.1	0 Natural	2015-09-28	2015-10-01	0 Hood	WF
2015-10-02	2015-10-02	0.1	0 Natural	2015-10-02	2015-10-06	0 MCKENNA	WF
2015-10-02	2015-10-02	0.1	0 Natural	2015-10-02	2015-10-06	0 Muddy	WF
2015-10-29	2015-10-29	0	0 Human	2015-10-20		0 Apple Tree RX	RX
2015-11-18	2015-11-19	0.1	0 Natural	2015-10-29	2015-11-02	0 Beaver	WF
2015-12-09	2015-12-10	5	0 Human	2015-11-18	2015-11-30	0 Argyle Road	WF
		0.4	0 Human	2015-12-09	2015-12-17	0 Rock Chimney	WF
		0.1	0 Human	2015-12-17	2015-12-29	0 Wind Cave Maintenan RX	
2015-12-20	2015-12-20	9.9	0 Human	2015-12-19	2015-12-31	0 GHOST CANYON	WF
2016-01-11	2016-01-11	0.3	0 Human	2016-01-11	2016-01-14	0 Rimfire Rd	WF
2016-01-19	2016-01-19	0.1	0 Human	2016-01-19	2016-01-25	0 Custer Mountain	WF
2016-01-29	2016-01-29	2	0 Human	2016-01-29	2016-02-03	0 Movie Draw	WF
2016-02-07	2016-02-16	1	0 Human	2016-02-07	2016-02-23	0 SMOKEY RIDGE	WF
2016-02-16	2016-02-16	28.7	0 Human	2016-02-07	2016-02-23	0 GHOST CANYON	WF
2016-02-11	2016-02-12	0.3	0 Human	2016-02-10	2016-02-17	0 Ridge	WF
2016-02-10	2016-02-12	1	0 Human	2016-02-10	2016-02-17	0 Big Valley	WF
2016-02-19	2016-02-19	0.1	0 Human	2016-02-18	2016-02-23	0 BOBCAT	WF
2016-02-26	2016-02-27	0.63	0 Human	2016-02-26	2016-03-03	0 HAZELRODT	WF
2016-02-26	2016-02-27	0.2	0 Human	2016-02-26	2016-03-01	0 385	WF
2016-03-04	2016-03-04	6.43	0 Human	2016-03-03	2016-03-05	0 Dudley CA	WF
2016-03-22	2016-03-22	0.3	0 Human	2016-03-22	2016-03-31	0 Airport	WF
2016-03-28	2016-03-28	95.3	0 Human	2016-03-27	2016-03-31	0 Lame Johnny	WF
2016-03-28	2016-03-28	2	0 Human	2016-03-27	2016-04-07	0 Penial	WF
2016-04-10	2016-04-21	1895	1350000 Human	2016-04-02	2016-05-09	0 Cold	WF
2016-04-06	2016-04-06	18.72	0 Human	2016-04-05	2016-04-12	0 DRAW	WF
2016-04-10	2016-04-10	8.6	0 Human	2016-04-10	2016-04-12	0 Bronco	WF
		200	0 Human	2016-04-13	2016-11-28	0 APPLE TREE RX	RX
2016-05-10	2016-05-11	0.39	0 Human	2016-05-10	2016-05-13	0 Argyle Rd	WF
2016-06-03	2016-06-03	0.1	0 Human	2016-06-03	2016-06-03	0 MM46	WF
2016-06-11	2016-06-11	0.65	0 Natural	2016-06-10	2016-06-14	0 PLEASANT	WF
2016-06-10	2016-06-10	0.12	0 Natural	2016-06-10	2016-06-15	0 RICHARDSON	WF
2016-06-12	2016-06-12	10.2	0 Natural	2016-06-10	2016-06-15	0 MCKENNA	WF
2016-06-16	2016-06-17	2	0 Natural	2016-06-14	2016-06-20	0 MYRTLE ANN	WF
2016-06-16	2016-06-16	0.38	0 Natural	2016-06-15	2016-06-20	0 FANNY	WF
2016-06-16	2016-06-16	1.03	0 Natural	2016-06-16	2016-06-19	0 ELK MOUNTAIN	WF
2016-06-17	2016-06-17	3.15	0 Natural	2016-06-16	2016-06-22	0 S & G	WF
2016-06-20	2016-06-20	1	0 Human	2016-06-20	2016-06-24	0 7-11	WF

2016-06-28	2016-06-28	0.1	0.1	0 Natural	2016-06-27	2016-07-03	0 Buckhorn	WF
2016-06-29	2016-06-29	0.1	0.1	0 Natural	2016-06-29	2016-07-02	0 NORTH ANTELOPE	WF
2016-06-30	2016-06-30	12.5	0.1	0 Natural	2016-06-29	2016-07-05	0 COMPTON	WF
2016-06-29	2016-06-29	0.17	0.1	0 Natural	2016-06-29	2016-06-30	0 FRENCH CREEK	WF
2016-06-29	2016-06-30	0.26	0.1	0 Natural	2016-06-29	2016-07-02	0 WELLS	WF
2016-06-30	2016-06-30	1.7	1.5	0 Natural	2016-06-30	2016-07-04	0 STREETER	WF
2016-07-05	2016-07-06	2.5	0.1	0 Natural	2016-07-05	2016-07-09	0 PUTNAM	WF
2016-07-07	2016-07-07	0.1	0.1	0 Natural	2016-07-06	2016-07-10	0 CALLAN	WF
2016-07-07	2016-07-07	0.1	0.1	0 Natural	2016-07-07	2016-07-10	0 TEPEE	WF
2016-07-08	2016-07-08	1.3	0.1	0 Natural	2016-07-07	2016-07-12	0 MOONDANCE	WF
2016-07-07	2016-07-07	0.1	0.1	0 Natural	2016-07-07	2016-07-10	0 WHITE ELEPHANT	WF
2016-07-08	2016-07-08	0.3	0.25	0 Natural	2016-07-07	2016-07-12	0 WITCH SPRING	WF
2016-07-12	2016-07-13	14.6	1.5	0 Natural	2016-07-09	2016-07-15	0 RED CANYON	WF
2016-07-16	2016-07-18	71.4	10	0 Human	2016-07-15	2016-07-27	0 HWY 36	WF
2016-07-17	2016-07-17	0.1	0.1	0 Natural	2016-07-16	2016-07-17	0 SHANNON	WF
2016-07-18	2016-07-18	0.1	0.1	0 Natural	2016-07-18	2016-07-21	0 Bear	WF
2016-07-26	2016-07-26	0.1	0.1	0 Natural	2016-07-26	2016-07-29	0 Bachelor Draw	WF
2016-07-26	2016-07-26	0.1	0.1	0 Natural	2016-07-26	2016-07-26	0 Boland	WF
2016-07-28	2016-07-29	12.2	0.5	0 Natural	2016-07-27	2016-08-18	0 WILDCAT	WF
2016-07-30	2016-07-30	17.89	0.1	0 Natural	2016-07-29	2016-07-30	0 AGATE	WF
2016-08-04	2016-08-04	0.1	0.1	0 Natural	2016-08-03	2016-08-09	0 ELK RIDGE	WF
2016-08-04	2016-08-04	0.1	0.1	0 Natural	2016-08-03	2016-08-06	0 BOWMAN	WF
2016-08-10	2016-08-10	0.27	0.29	0 Natural	2016-08-10	2016-08-15	0 Hopkins Flats	WF
2016-08-10	2016-08-11	0.1	0.1	0 Natural	2016-08-10	2016-08-13	0 French	WF
2016-08-11	2016-08-11	0.1	0.1	0 Natural	2016-08-11	2016-08-14	0 Potato Gulch	WF
2016-08-11	2016-08-12	1.31	0.1	0 Natural	2016-08-11	2016-08-14	0 BALD HILL	WF
2016-08-15	2016-08-15	0.17	0.25	0 Natural	2016-08-14	2016-08-17	0 WOODCOCK	WF
2016-08-18	2016-08-19	0.16	2	0 Natural	2016-08-18	2016-08-21	0 MISSILE ROAD	WF
2016-09-05	2016-09-05	0.4	0.75	0 Natural	2016-09-04	2016-09-10	0 HAVEN	WF
2016-09-04	2016-09-04	0.1	0.1	0 Natural	2016-09-04	2016-09-12	0 Power Pole	WF
2016-09-05	2016-09-05	0.1	0.1	0 Natural	2016-09-05	2016-09-09	0 Shank	WF
2016-09-05	2016-09-05	0.1	0.1	0 Natural	2016-09-05	2016-09-10	0 Windmill	WF
2016-09-06	2016-09-10	33.16	50	0 Natural	2016-09-05	2016-09-14	0 Pass Creek Well	WF
2016-09-07	2016-09-07	0.25	0.1	0 Natural	2016-09-07	2016-09-11	0 Deer	WF
2016-09-07	2016-09-07	0.1	0.1	0 Human	2016-09-07	2016-09-11	0 Buffalo	WF
2016-09-17	2016-09-17	0.6	0.1	0 Natural	2016-09-16	2016-09-20	0 308	WF
2016-09-16	2016-09-16	7.7	0.1	0 Natural	2016-09-16	2016-09-19	0 Warren	WF
2016-10-06	2016-10-06	0.25	0.25	0 Human	2016-10-06	2016-11-01	0 HAY STACK	WF
2016-10-13	2016-10-13	0.1	0.1	0 Human	2016-10-13	2016-10-14	0 HWY 89	WF
		1454	863	0 Human	2016-10-21	2016-11-30	0 Anti-Horse RX	RX
2016-11-06	2016-11-06	0.1	0.1	0 Human	2016-11-06	2016-11-06	0 Y4	WF
2016-11-09	2016-11-09	0.1	0.1	0 Human	2016-11-09	2016-11-11	0 RIFLE PIT TOO	WF



2016-11-13	2016-11-13	0.1	0.1	0 Human	2016-11-13	2016-11-13	0 Hill Top	WF
2016-12-08	2016-12-08	0.1	0.1	0 Human	2016-12-08	2016-12-14	0 MICA	WF
2017-02-16	2017-02-16	0.8	0.5	0 Human	2017-02-16	2017-02-22	0 Hwy 16 A	WF
2017-02-18	2017-02-21	24.03	0.1	0 Human	2017-02-17	2017-03-13	0 Playhouse	WF
2017-02-17	2017-02-17	0.9	1	0 Human	2017-02-17	2017-02-22	0 Elliott	WF
2017-02-21	2017-02-22	0.1	0.1	0 Human	2017-02-21	2017-03-01	0 Compost	WF
2017-03-08	2017-03-08	0.6	0.25	0 Human	2017-03-07	2017-03-10	0 Lakota	WF
2017-03-10	2017-03-16	249.93	10	20000 Human	2017-03-08	2017-04-05	0 WHITETAIL	WF
2017-03-27	2017-03-27	0.1	0.1	0 Human	2017-03-27	2017-03-28	0 MM 34	WF
		15	0.1	0 Human	2017-03-30	2017-06-19	0 Coolidge Creek	RX
2017-05-12	2017-05-12	0.1	0.1	0 Natural	2017-05-12	2017-05-23	0 Mountain Goat	WF
2017-05-22	2017-05-22	0.1	0.1	0 Natural	2017-05-15	2017-05-22	0 Wildcat Peak	WF
2017-05-29	2017-05-29	0.9	0.1	0 Natural	2017-05-29	2017-06-02	0 Pilger Mtn	WF
2017-06-07	2017-06-07	9.4	2	0 Natural	2017-06-06	2017-06-12	0 Bear Gulch	WF
2017-06-06	2017-06-06	0.1	0.1	0 Natural	2017-06-06	2017-06-08	0 Cobb	WF
2017-06-08	2017-06-08	0.68	0.25	0 Natural	2017-06-08	2017-06-16	0 King Tut	WF
2017-06-09	2017-06-09	0.1	0.1	0 Natural	2017-06-09	2018-06-19	0 Buck	WF
2017-06-09	2017-06-09	0.1	1	0 Natural	2017-06-09	2017-06-17	0 Tatanka	WF
2017-06-13	2017-06-13	0.1	0.1	0 Natural	2017-06-13	2017-06-16	0 Big Tree	WF
2017-06-13	2017-06-13	0.1	0.1	0 Natural	2017-06-13	2017-06-16	0 Flynn Creek	WF
2017-06-15	2017-06-15	0.32	0.1	0 Natural	2017-06-14	2017-06-20	0 Horse Camp	WF
2017-06-15	2017-06-15	0.2	0.25	0 Natural	2017-06-15	2017-06-20	0 Ruby	WF
2017-06-24	2017-06-24	2.4	0.1	0 Human	2017-06-24	2017-06-24	0 Cottonwood CA	WF
2017-06-28	2017-06-28	0.5	0.1	0 Human	2017-06-28	2017-07-02	0 Mica	WF
2017-06-28	2017-06-29	0.25	0.1	0 Human	2017-06-28	2017-07-02	0 Beecher	WF
2017-06-29	2017-06-29	2.02	1	0 Natural	2017-06-28	2017-07-04	0 Jewel	WF
		0	0	0	2017-06-30		0 SD-WCP / NPS WICA	WF
2017-07-02	2017-07-02	0.2	0.1	0 Human	2017-07-01	2017-07-03	0 Downen	WF
2017-07-03	2017-07-03	0.1	0.1	0 Natural	2017-07-03	2017-07-09	0 Freeland	WF
2017-07-03	2017-07-03	4	0.5	0 Natural	2017-07-03	2017-07-07	0 Painter	WF
2017-07-04	2017-07-05	0.1	0.1	0 Natural	2017-07-04	2017-07-08	0 Bobcat	WF
2017-07-05	2017-07-05	0.1	1	0 Natural	2017-07-04	2017-07-08	0 West Slope	WF
2017-07-05	2017-07-05	0.1	0.1	0 Human	2017-07-05	2017-07-08	0 Sidney Park	WF
2017-07-07	2017-07-09	2.16	1.5	0 Natural	2017-07-07	2017-07-11	0 PRAIRIE DOG	WF
2017-07-07	2017-07-08	0.5	0.25	0 Natural	2017-07-07	2017-07-12	0 Pass	WF
2017-07-09	2017-07-10	9.57	0.1	0 Natural	2017-07-08	2017-07-14	0 Apple Tree	WF
2017-07-08	2017-07-08	0.1	0.1	0 Natural	2017-07-08	2017-07-10	0 Old Mike	WF
2017-07-08	2017-07-09	0.7	0.5	0 Natural	2017-07-08	2017-07-14	0 Bison	WF
2017-07-12	2017-07-12	0.18	0.3	0 Human	2017-07-12	2017-07-15	0 HOTSHOT	WF
2017-07-13	2017-07-13	0.1	0.1	0 Natural	2017-07-13	2017-07-16	0 French	WF
2017-07-14	2017-07-14	0.1	0.1	0 Natural	2017-07-13	2017-07-17	0 Twin Sisters	WF
2017-07-14	2017-07-14	1.6	0.5	0 Natural	2017-07-13	2017-07-17	0 Cow	WF

2017-07-18	2017-07-18	0.1	0.1	0 Natural	2017-07-18	2017-07-20	0 Needles	WF
2017-07-19	2017-07-19	5.18	0.1	0 Natural	2017-07-18	2017-07-25	0 Lyman	WF
2017-07-18	2017-07-19	0.2	0.1	0 Natural	2017-07-18	2017-07-21	0 Griffiths	WF
2017-07-19	2017-07-20	3.45	0.1	0 Natural	2017-07-19	2017-07-23	0 Hell Canyon	WF
		0	0	0	2017-07-20		0 WICA - STEP UP PP	WF
2017-07-22	2017-07-23	8.25	0.1	0 Natural	2017-07-21	2017-08-25	0 Martin	WF
2017-07-23	2017-07-23	0.1	0.1	0 Human	2017-07-23	2017-07-27	0 Hylle	WF
2017-07-25	2017-07-25	0.1	0.1	0 Natural	2017-07-25	2017-08-04	0 Fairburn CA	WF
2017-07-27	2017-07-27	0.1	0.1	0 Natural	2017-07-27	2017-07-30	0 Granite	WF
2017-07-29	2017-07-29	0.1	0.1	0 Natural	2017-07-28	2017-07-31	0 Custer Mountain	WF
2017-08-02	2017-08-03	1	0.1	0 Natural	2017-08-02	2017-08-07	0 Metz	WF
2017-08-15	2017-08-15	0.1	0.1	0 Natural	2017-08-15	2017-08-17	0 Lemming	WF
2017-08-18	2017-08-18	50	7.5	0 Natural	2017-08-17	2017-08-20	0 Pass Creek	WF
2017-08-18	2017-08-19	2.5	0.1	0 Natural	2017-08-18	2017-08-23	0 Putnam Dam	WF
		0	0	0	2017-08-18		0 LONE BALE	WF
2017-09-02	2017-09-08	225	60	500000 Natural	2017-08-30	2017-10-02	0 Elk Run	WF
2017-08-31	2017-08-31	0.1	0.5	0 Natural	2017-08-31	2017-09-03	0 Woodpecker	WF
2017-09-16	2017-09-20	2133	0.1	5000000 Natural	2017-09-11	2017-10-02	0 Rankin	WF
2017-09-11	2017-09-11	0.2	0.25	0 Human	2017-09-11	2017-09-26	0 Italy	WF
2017-09-13	2017-09-13	155.01	200	0 Natural	2017-09-12	2017-09-16	0 East 40	WF
2017-09-18	2017-10-02	330.24	50	1100000 Natural	2017-09-13	2017-10-06	0 Beaver	WF
2017-09-14	2017-09-14	0.55	1	0 Natural	2017-09-13	2017-09-20	0 Dry Creek	WF
		0.1	0.1	0 Undetermin	2017-10-16		0 Antihorse RX	RX
		0.1	0.1	0 Human	2017-10-17		0 Apple Tree RX	RX
2017-11-19	2017-11-20	17	10	0 Human	2017-11-18	2017-11-21	0 Stagecoach	WF
2017-11-22	2017-11-27	291.1	0.1	0 Human	2017-11-22	2017-11-27	0 Dry Creek CA	WF
2017-12-19	2017-12-22	54023	1	2200000 Human	2017-12-11	2018-01-23	0 Legion Lake	WF
2017-12-12	2017-12-12	12.5	1	0 Human	2017-12-11	2017-12-19	0 Bug	WF
2018-01-19	2018-01-19	0.9	1	0 Human	2018-01-19	2018-01-25	0 Willow	WF
2018-04-17	2018-04-17	0.1	0.1	0 Human	2018-04-17	2018-04-17	0 Limestone	WF
2018-05-10	2018-05-10	37	10	0 Human	2018-05-09	2018-05-18	0 Lyman	WF
2018-05-18	2018-05-18	0.1	0.1	0 Natural	2018-05-18	2018-05-21	0 Bachelor	WF
2018-05-18	2018-05-18	0.1	0.1	0 Natural	2018-05-18	2018-05-21	0 Loop	WF
2018-07-17		30	30	0 Natural	2018-07-17		0 Section	WF
2018-07-26	2018-07-26	0.1	0.1	0 Natural	2018-07-26	2018-07-31	0 Shepard Draw	WF
2018-08-26	2018-08-27	0.5	0.5	0 Natural	2018-08-26	2018-09-03	0 HAVEN CANYON	WF
2018-09-09	2018-09-09	0.1	0.1	0 Natural	2018-09-09	2018-09-12	0 Tepee	WF
2018-09-16	2018-09-17	2.04	2	0 Human	2018-09-16	2018-09-21	0 Carroll	WF
2018-09-27	2018-09-27	0.61	0.6	0 Human	2018-09-27	2018-10-01	0 Bluebird	WF
2018-12-17	2018-12-17	44.9	15	0 Human	2018-12-17	2018-12-27	0 Dry Creek CA	WF
		0	0	0	2019-01-04		0 NPS SUPPORT 2019	WF
		20.5	0	0 Human	2019-01-28		0 Coolidge PB	RX

185	0	0 Human	2019-02-08	0 Playhouse PB	RX
130	0	0 Human	2019-03-12	0 Parker Canyon PB	RX
5	5	0 Human	2019-04-13	0 Star	WF
140	5	0 Natural	2019-04-17	0 High Plains	WF
0.1	0.1	0 Human	2019-05-13	0 Tunnel Draw	WF
0.1	0.1	0 Natural	2019-06-06	0 Coon Creek	WF
0.1	0.1	0 Natural	2019-06-06	0 Buck	WF
0.5	0.1	0 Natural	2019-06-09	0 Hop Springs	WF
0.2	0.2	0 Human	2019-06-11	0 Alamo	WF
0.1	0.1	0 Human	2019-06-26	0 Stagg	WF
3.2	0.1	0 Natural	2019-07-25	0 Fork	WF
0.1	0.1	0 Human	2019-07-27	0 Pit	WF
0.25	0.3	0 Natural	2019-07-31	0 Dewey	WF
0.2	0.1	0 Natural	2019-08-04	0 Missile Road	WF
0.1	0.1	0 Natural	2019-08-06	0 Four Mile	WF
0.1	0.1	0 Natural	2019-08-07	0 Dry	WF
0.1	0.1	0 Natural	2019-08-11	0 Lithograph	WF
4.25	0.5	0 Natural	2019-09-15	0 Broken Top	WF
0	0	0 Human	2019-11-26	0 Camp Remington PB	RX
30	1	0 Human	2020-01-08	0 Playhouse PB	RX
10	1	0 Human	2020-01-08	0 Camp Remington PB	RX
3	1	0 Human	2020-01-09	0 Cooper PB	RX
0	0	0 Unknown	2020-01-10	0 Admin PB	RX
1	1	0 Human	2020-02-03	0 Badger Clark PB	RX
950	0	0 Human	2020-02-03	0 Wabash PB	RX
1	1	0 Human	2020-02-03	0 Legion Lake PB	RX
250	1	0 Human	2020-02-24	0 Spokane/Norbeck PB	RX
0.5	1	0 Human	2020-02-25	0 Grace Coolidge Trailh	RX
2.86	1	0 Human	2020-03-05	0 Fisherman Flats	WF
192.43	50	0 Unknown	2020-03-06	0 Hwy 40	WF
0	0	0	2020-03-09	0 Anti-Horse	RX
1	1	0 Human	2020-03-09	0 Anti-Horse RX	RX
0.5	0	0 Human	2020-03-16	0 Wind Cave Disposal F	RX
21	10	0 Human	2020-03-21	0 French Creek	WF
0.1	0.1	0 Human	2020-04-24	0 Beaver Lake	WF
0.84	1	0 Human	2020-04-27	0 Beaver Den	WF
0.1	0.1	0 Human	2020-04-28	0 Pleasant Valley	WF
2	1	0 Human	2020-05-04	0 Blue Bell Live Fire	RX
0.1	0.1	0 Natural	2020-05-14	0 Gurney	WF
0.1	0.1	0 Human	2020-06-04	0 Mile High	WF
0.1	0.1	0 Human	2020-06-08	0 Sidney	WF
0.1	0.1	0 Human	2020-06-22	0 Limestone	WF

2020-06-25	2020-06-29	60	0.1	250000	Human	Other H	2020-06-24	2020-07-08	0 Mine Draw	WF
2020-06-27	2020-06-27	1.1	0.3	0	Natural	Lightnin	2020-06-26	2020-07-02	0 Metz Spring	WF
2020-06-26	2020-06-26	0.1	0.1	0	Human	Debris/C	2020-06-26	2020-06-26	0 Lime	WF
2020-06-26	2020-06-27	0.25	0.1	0	Natural	Lightnin	2020-06-26	2020-06-30	0 Long Draw	WF
2020-06-28	2020-06-28	1	0.3	0	Natural	Lightnin	2020-06-27	2020-07-02	0 Schenk	WF
2020-06-29	2020-06-29	0.2	0.2	0	Natural	Lightnin	2020-06-29	2020-07-05	0 Tepee Canyon	WF
2020-07-05	2020-07-05	0.1	0.1	0	Natural	Lightnin	2020-07-05	2020-07-08	0 Bismark	WF
2020-07-05	2020-07-05	1.5	0.5	0	Natural	Lightnin	2020-07-05	2020-07-14	0 Freeland	WF
2020-07-05	2020-07-05	0.3	0.5	0	Natural	Lightnin	2020-07-05	2020-07-09	0 Lyman	WF
2020-07-06	2020-07-06	0.1	1	0	Natural	Lightnin	2020-07-06	2020-07-09	0 Needles	WF
2020-07-06	2020-07-06	0.1	0.1	0	Human	Utilities	2020-07-06	2020-07-09	0 Glen Erin	WF
2020-07-08	2020-07-08	0.29	0.2	0	Natural	Lightnin	2020-07-07	2020-07-10	0 Pilger	WF
2020-07-08	2020-07-08	4.5	3	0	Natural	Lightnin	2020-07-07	2020-07-14	0 Hawkright	WF
2020-07-18	2020-07-18	2	0.5	0	Natural	Lightnin	2020-07-17	2020-07-21	0 Holey	WF
2020-07-17	2020-07-17	0.1	0.1	0	Human	Other H	2020-07-17	2020-07-21	0 Pleasant	WF
2020-07-18	2020-07-18	1.2	0.1	0	Human	Utilities	2020-07-18	2020-07-20	0 Sage	WF
2020-07-21	2020-07-21	0.2	0.1	0	Natural	Lightnin	2020-07-20	2020-07-23	0 Ellis Spring	WF
2020-07-20	2020-07-20	0.1	0.1	0	Natural	Lightnin	2020-07-20	2020-07-23	0 Flynn	WF
2020-07-21	2020-07-21	0.1	0.1	0	Natural	Lightnin	2020-07-21	2020-07-24	0 Compton Spring	WF
2020-07-22	2020-07-22	0.1	0.1	0	Natural	Lightnin	2020-07-21	2020-07-24	0 Barrel Spring	WF
2020-07-31	2020-07-31	0	0	0	Natural	Lightnin	2020-07-31	2020-07-24	0 Keeline	WF
2020-07-31	2020-07-31	0.1	0.1	0	Natural	Lightnin	2020-07-31	2020-08-02	0 Atlantic	WF
2020-08-02	2020-08-02	0.1	0.1	0	Natural	Lightnin	2020-08-02	2020-08-04	0 Hazelrodt	WF
2020-08-03	2020-08-03	0.1	0.1	0	Unknown	Cause ε	2020-08-03	2020-08-03	0 55	WF
2020-08-03	2020-08-04	2	0.1	0	Natural	Lightnin	2020-08-03	2020-08-07	0 Lady Ranch	WF
2020-08-10	2020-08-10	0.45	0.8	0	Natural	Lightnin	2020-08-09	2020-08-13	0 Red Rock	WF
2020-08-09	2020-08-09	0.1	0.1	0	Human	Other H	2020-08-09	2020-08-13	0 Hopkins Flat	WF
2020-08-09	2020-08-10	4	0.1	0	Natural	Lightnin	2020-08-09	2020-08-12	0 Sullivan	WF
2020-08-10	2020-08-10	0.75	0.1	0	Natural	Lightnin	2020-08-09	2020-08-12	0 Cedar	WF
2020-08-21	2020-08-21	1	1	0	Natural	Lightnin	2020-08-20	2020-08-24	0 Schenk Canyon	WF
2020-08-21	2020-08-21	0.1	1	0	Natural	Lightnin	2020-08-21	2020-08-21	0 Spur	WF
2020-08-28	2020-08-29	18.17	2	0	Natural	Lightnin	2020-08-26	2020-09-08	0 Clark	WF
2020-08-30	2020-09-01	28	1	0	Natural	Lightnin	2020-08-28	2020-09-08	0 Rankin	WF
2020-08-28	2020-08-28	0.1	1	0	Natural	Lightnin	2020-08-28	2020-08-31	0 Farmer	WF
2020-08-28	2020-08-28	0.1	1	0	Natural	Lightnin	2020-08-28	2020-08-31	0 Rifle	WF
2020-08-30	2020-08-30	0.1	0.1	0	Natural	Lightnin	2020-08-30	2020-08-31	0 Loop D	WF
2020-10-11	2020-10-11	10.7	1	0	Human	Equipm	2020-10-10	2020-10-16	0 West	WF
2020-10-15	2020-10-15	0.1	0.1	0	Human	Debris/C	2020-10-15	2020-10-15	0 Paper	WF
2020-11-06	2020-11-06	0.1	0.1	0	Human	Other H	2020-11-06	2020-11-06	0 Forest Park	WF
2020-11-27	2020-11-27	18.7	1	0	Human	Other H	2020-11-18	2020-12-08	0 Gumbo Lilly CA	WF
2020-12-14	2020-12-14	0.34	1	0	Human	Debris/C	2020-11-27	2020-12-08	0 Ridgeview	WF
		0.1	1	0	Human	Other H	2020-12-14	2020-12-18	0 Wolf	WF

2020-12-23	2020-12-23	0.1	0 Human	Utilities	2020-12-23	2020-12-28	0 Court	WF
2020-12-25	2021-01-04	50.26	0 Human	Utilities	2020-12-23	2021-01-13	0 American Center	WF
		6200	0 Human		2021-01-08	2021-03-30	0 Hell Canyon PB	RX
2021-01-12	2021-01-13	1.26	0 Human	Equipm	2021-01-12	2021-01-15	0 Buffalo	WF
2021-01-14	2021-01-14	0.1	0 Human	Debris/C	2021-01-14	2021-01-20	0 Snowy	WF
		10	0 Human		2021-01-22		0 Legion Lake PB	RX
		11	0 Human		2021-01-22	2021-03-18	0 Highway 87 PB	RX
		0.1	0 Human		2021-01-25	2021-03-23	0 Jewel Cave Maintenar	RX
2021-02-01	2021-02-01	0.54	0 Human	Debris/C	2021-01-30	2021-02-12	0 Aspen	WF
2021-02-05	2021-02-08	53.1	0 Unknown	Investig	2021-02-03	2021-02-23	0 Hazelrodt	WF
		24	0 Human		2021-02-05		0 Bluebell PB	RX
		1	0 Human		2021-02-08	2021-03-18	0 Shop Draw PB	RX
		4.4	0 Human		2021-02-08	2021-03-01	0 Highlands PB	RX
		21	0 Human		2021-02-08	2021-03-18	0 Parker Canyon Machir	RX
		90	0 Human		2021-02-08	2021-03-18	0 Stockade Machine Pile	RX
		5.25	0 Human		2021-02-10	2021-03-12	0 Tatanka Barracks PB	RX
		23	0 Human		2021-02-16		0 WIlsons Corner PB	RX
		1	0 Human		2021-02-17	2021-02-19	0 Wind Cave Debris PB	RX
		2	0 Human		2021-02-27	2021-03-18	0 Cooper GPA PB	RX
2021-03-01	2021-03-01	6.3	0 Human	Debris/C	2021-02-28	2021-03-05	0 L H	WF
2021-03-05	2021-03-05	6.01	0 Human	Debris/C	2021-03-04	2021-03-17	0 Dry	WF
2021-03-09	2021-03-11	2546	120000 Human	Equipm	2021-03-06	2021-04-22	0 Agate Bed	WF
2021-03-29	2021-03-30	3.15	0 Human	Utilities	2021-03-29	2021-04-02	0 Argyle	WF
		0	0		2021-04-20		0 BHWIT 2021	WF
2021-05-14	2021-05-14	0.1	0 Natural	Lightnin	2021-05-14	2021-05-18	0 Medicine	WF
2021-05-14	2021-05-15	2.38	0 Natural	Lightnin	2021-05-14	2021-05-19	0 Highland	WF
2021-05-18	2021-05-18	8.1	0 Natural	Lightnin	2021-05-17	2021-05-21	0 Bear Springs	WF
2021-05-18	2021-05-18	0.1	0 Natural	Lightnin	2021-05-18	2021-05-21	0 Alkali	WF
2021-05-21	2021-05-21	0.1	0 Natural	Lightnin	2021-05-21	2021-05-25	0 Lower Dugout	WF
2021-05-25	2021-05-25	0.14	0 Human	Utilities	2021-05-25	2021-05-28	0 Cicero	WF
2021-06-10	2021-06-11	3.04	0 Human		2021-06-02	2021-06-27	0 Blue Bell Live Fire Exe	RX
2021-06-03	2021-06-03	0.1	0 Human	Equipm	2021-06-03	2021-06-03	0 Juniper	WF
2021-06-11	2021-06-11	0.25	0 Natural	Lightnin	2021-06-11	2021-06-14	0 Putnam	WF
2021-06-12	2021-06-12	1.44	0 Natural	Lightnin	2021-06-11	2021-06-15	0 Haven	WF
2021-06-15	2021-06-15	0.1	0 Natural		2021-06-15	2021-06-16	0 Cold	WF
2021-06-15	2021-06-15	1.2	0 Natural	Lightnin	2021-06-15	2021-06-19	0 Ridgetop	WF
2021-06-16	2021-06-16	2.4	0 Natural	Lightnin	2021-06-15	2021-06-21	0 Rifle	WF
2021-06-22	2021-06-22	0.1	0 Human	Other H	2021-06-22	2021-06-27	0 Crazy	WF
2021-06-27	2021-06-27	0.1	0 Natural	Lightnin	2021-06-27	2021-06-29	0 Elephant	WF
2021-06-28	2021-06-28	0.1	0 Natural	Lightnin	2021-06-28	2021-06-30	0 Beaver	WF
2021-07-03	2021-07-03	0.1	0 Human	Campin	2021-07-03	2021-07-03	0 Jewel	WF
2021-07-05	2021-07-05	0.16	0 Natural	Lightnin	2021-07-04	2021-07-08	0 Roby	WF

2021-07-10	2021-07-11	0.1	1	0 Natural	Lightnin	2021-07-09	2021-07-13	0 Garbage	WF
2021-07-10	2021-07-10	0.1	0.1	0 Natural	Lightnin	2021-07-10	2021-07-16	0 McKenna	WF
2021-07-10	2021-07-10	0.12	1	0 Natural	Lightnin	2021-07-10	2021-07-15	0 Ghost Canyon	WF
2021-07-16	2021-07-16	0.1	1	0 Natural	Lightnin	2021-07-16	2021-07-16	0 Echo	WF
2021-07-19	2021-07-19	0.1	0.1	0 Natural	Lightnin	2021-07-19	2021-07-21	0 Bismarck	WF
2021-07-19	2021-07-19	0.1	0.1	0 Natural	Lightnin	2021-07-19	2021-07-21	0 Willow	WF
2021-07-19	2021-07-19	0.46	1	0 Natural	Lightnin	2021-07-19	2021-07-26	0 Badger	WF
2021-07-19	2021-07-20	1.1	0.3	0 Natural	Lightnin	2021-07-19	2021-07-25	0 French Creek	WF
2021-07-22	2021-07-22	0.1	1	0 Natural	Lightnin	2021-07-21	2021-07-24	0 Pleasant Valley	WF
2021-07-22	2021-07-22	0.1	0.1	0 Human	Debris/C	2021-07-22	2021-07-24	0 Mica	WF
2021-07-24	2021-07-24	0.1	0.1	0 Human	Debris/C	2021-07-24	2021-07-27	0 Glen Erin	WF
2021-07-25	2021-07-25	0.1	1	0 Natural	Lightnin	2021-07-24	2021-07-29	0 Laughing	WF
2021-07-30	2021-07-31	0.3	1	0 Natural	Lightnin	2021-07-30	2021-08-03	0 Hazelrodt Spring	WF
2021-08-01	2021-08-02	21.6	21.6	0 Natural	Lightnin	2021-08-01	2021-08-05	0 Lyman	WF
2021-08-08	2021-08-08	1.19	1	0 Natural	Lightnin	2021-08-06	2021-08-12	0 Iron	WF
2021-08-07	2021-08-07	0.1	0.1	0 Natural	Lightnin	2021-08-07	2021-08-09	0 South Highlands	WF
2021-08-08	2021-08-09	13.74	20	0 Natural	Lightnin	2021-08-07	2021-08-13	0 Bennett Canyon	WF
2021-08-17	2021-08-17	0.1	0.1	0 Human	Equipm	2021-08-17	2021-08-24	0 Carroll Creek	WF
2021-08-21	2021-08-21	0.5	1	0 Natural	Lightnin	2021-08-21	2021-08-24	0 Iron Shoe	WF
2021-09-04	2021-09-05	0.4	1	0 Natural	Lightnin	2021-09-04	2021-09-09	0 Layton	WF
2021-09-05	2021-09-05	6.3	2	0 Natural	Lightnin	2021-09-04	2021-09-08	0 Signal	WF
2021-09-05	2021-09-05	0.1	1	0 Human	Campin	2021-09-04	2021-09-07	0 Antelope Ridge	WF
2021-09-15	2021-09-15	0.1	1	0 Human	Debris/C	2021-09-14	2021-09-15	0 Elliott	WF
2021-09-15	2021-09-16	0.6	1	0 Natural	Lightnin	2021-09-15	2021-09-19	0 Bowman Ridge	WF
2021-09-17	2021-09-17	0.1	1	0 Human	Equipm	2021-09-16	2021-09-19	0 Bluebird	WF
2021-09-21	2021-09-21	0.25	1	0 Natural	Lightnin	2021-09-21	2021-09-24	0 Freeland	WF
2021-09-25	2021-09-25	0.1	0.1	0 Human	Debris/C	2021-09-25	2021-09-25	0 Skyline	WF
2021-09-27	2021-09-27	0.1	0.1	0 Human	Campin	2021-09-27	2021-09-29	0 Bob Marshall	WF
		309	1	0 Human		2021-10-27	2021-11-16	0 Hilltop RX	RX
		308	1	0 Human		2021-11-04	2021-11-16	0 Headquarters RX	RX
	2021-11-30	11	1	0 Human		2021-11-04	2021-12-03	0 Putnam Irrigation Ditch	RX
	2021-11-12	58	2	0 Human	Utilities	2021-11-12	2021-12-02	0 Badger Clark	WF
2022-01-29	2022-02-07	860	1	0 Human		2022-01-04		0 Hell Canyon Piles	RX
		0.75	1	0 Human	Equipm	2022-01-29	2022-02-07	0 Horse Barn	WF
		1	1	0 Human		2022-03-09		0 Bluebell PB	RX
2022-03-13	2022-03-13	0.1	0.1	0 Human	Debris/C	2022-03-12	2022-03-21	0 Renegade	WF
2022-03-16	2022-03-16	0.1	1	0 Human		2022-03-16	2022-03-17	0 Loop	WF
2022-03-18	2022-03-18	0.1	1	0 Human	Equipm	2022-03-17	2022-03-18	0 Night	WF
		2760	1	0 Human		2022-03-17		0 Anthorse RX	RX
2022-04-05	2022-04-08	0.99	0.5	0 Human		2022-04-05	2022-04-14	0 Rifle	WF
2022-04-06	2022-04-06	0.26	0.1	0 Human		2022-04-06	2022-04-14	0 Needles	WF
2022-04-08	2022-04-09	111	0.1	0 Human		2022-04-07	2022-05-19	0 Wabash Spring	WF

2022-05-14	2022-05-14	0.5	0.1	0 Human	2022-04-11	2022-05-09	0 Legion CA	WF
2022-05-21	2022-05-21	0.1	0.1	0 Natural	2022-05-14	2022-05-18	0 Glen Erin	WF
2022-06-01	2022-05-21	0.45	0.25	0 Human	2022-05-21	2022-05-31	0 Calamity	WF
2022-06-01	2022-06-01	0.1	0.1	0 Undetermin	2022-06-01	2022-06-01	0 Mile Marker 58	WF
2022-06-08	2022-06-08	0.1	0.1	0 Natural	2022-06-08	2022-06-11	0 Riflepit	WF
2022-06-28	2022-06-28	1.22	0.1	0 Human	2022-06-28		0 Taylor Trail	WF
2022-06-29	2022-06-29	0.16	0.2	0 Human	2022-06-29	2022-07-04	0 Beecher	WF
2022-06-29	2022-07-01	5	2	0 Natural	2022-06-29	2022-07-06	0 Highland	WF
2022-06-30	2022-07-01	4.98	3	0 Human	2022-06-29	2022-07-05	0 Elephant	WF
2022-06-30	2022-06-30	0.32	0.5	0 Natural	2022-06-30	2022-07-06	0 Norbeck	WF
2022-07-03	2022-07-03	9.15	8	0 Natural	2022-07-02	2022-07-10	0 Grace Creek	WF
2022-07-03	2022-07-03	3.2	0.5	0 Natural	2022-07-02	2022-07-07	0 Cold Brook	WF
2022-07-03	2022-07-03	0.1	0.1	0 Natural	2022-07-02	2022-07-07	0 Needles Eye	WF
2022-07-02	2022-07-02	0.1	0.1	0 Natural	2022-07-02	2022-07-07	0 Hawkwright	WF
2022-07-10	2022-07-10	0.1	0.1	0 Natural	2022-07-10	2022-07-13	0 Bonanza	WF
2022-07-11	2022-07-11	0.4	0.5	0 Natural	2022-07-11	2022-07-17	0 Pass Creek	WF
2022-07-16	2022-07-16	0.1	0.1	0 Natural	2022-07-16		0 Clifton Gap	WF
2022-07-17	2022-07-17	0.44	0.25	0 Natural	2022-07-16	2022-07-20	0 Shirttail	WF
2022-07-28	2022-07-28	1	1	0 Natural	2022-07-28	2022-07-31	0 Dead Horse	WF
2022-08-07	2022-08-07	0.1	0.1	0 Natural	2022-08-07	2022-08-10	0 Roby Canyon	WF
2022-08-14	2022-08-14	0.1	0.1	0 Natural	2022-08-14	2022-08-16	0 Hells Canyon	WF
2022-08-15	2022-08-15	0.1	0.1	0 Natural	2022-08-15	2022-08-18	0 Hawk	WF
2022-08-19	2022-08-19	0.1	0.1	0 Undetermin	2022-08-19	2022-08-21	0 Illegal Burning 2	WF
2022-08-19	2022-08-19	0.1	0.1	0 Human	2022-08-19	2022-08-21	0 Illegal Burning	WF
2022-08-25	2022-08-25	0.1	0.1	0 Natural	2022-08-24	2022-08-28	0 Needle	WF
2022-09-04	2022-09-04	0.1	0.1	0 Human	2022-09-04	2022-09-07	0 Crow Creek	WF
2022-09-10	2022-09-10	0.37	1	0 Natural	2022-09-10		0 Wright	WF
2022-09-15	2022-09-15	0.1	0.1	0 Natural	2022-09-15	2022-09-19	0 Tenderfoot	WF
2022-09-17	2022-09-17	0.1	0.1	0 Natural	2022-09-17	2022-09-19	0 Lost	WF
2022-10-04	2022-10-04	0.1	0.1	0 Natural	2022-10-04	2022-10-07	0 Power	WF
		1	1	0 Undetermin	2022-10-12		0 Wind Cave Headquart	WF

CAUSE	SIZE	YEAR	STARTDATED	CONTRDATED	OUTDATED	JTALACRE	FireName_A
Human	A	1980	1980-04-28	1980-04-28			0.1 BEAVER LAKE
Human	A	1980	1980-05-01	1980-05-01			0.1 SAWMILL DRAW #4
Human	A	1980	1980-05-01	1980-05-01			0.1 SAWMILL DRAW #3
Human	A	1980	1980-05-01	1980-05-01			0.1 SAWMILL DRAW #2
Human	A	1980	1980-05-26	1980-05-26			0.1 FLATT
Human	A	1980	1980-05-27	1980-05-27			0.1 HAY BALE
Natural	A	1980	1980-05-28	1980-05-29			0.1 CEMETARY RIDGE
Natural	A	1980	1980-05-28	1980-05-29			0.1 PIECE OF CAKE
Natural	A	1980	1980-05-29	1980-05-29			0.1 FIFTEEN MINUTE
Natural	A	1980	1980-06-05	1980-06-07			0.1 HARD TO FIND
Natural	A	1980	1980-06-21	1980-06-21			0.1 ROBIE'S
Natural	A	1980	1980-06-22	1980-06-22			0.1 COLD DUCK
Human	A	1980	1980-07-04	1980-07-05			0.1 ROCKET
Natural	A	1980	1980-07-05	1980-07-05			0.1 BONEYARD
Natural	A	1980	1980-07-12	1980-07-13			0.1 SUNDAY TWO
Natural	A	1980	1980-07-12	1980-07-13			0.1 SUNDAY
Natural	A	1980	1980-07-12	1980-07-13			0.1 CAMERA
Natural	A	1980	1980-07-12	1980-07-14			0.1 BERGER
Natural	A	1980	1980-07-12	1980-07-12			0.1 SYLVAN
Natural	A	1980	1980-07-17	1980-07-17			0.1 ROMNEY
Natural	A	1980	1980-07-17	1980-07-17			0.1 GOLD FISH
Natural	A	1980	1980-07-17	1980-07-17			0.1 MUD HOLE
Natural	A	1980	1980-07-17		1980-07-30		0.1 RANKIN RID
Natural	A	1980	1980-07-17	1980-07-17	1980-07-30		0.1 BADGER FR
Natural	A	1980	1980-07-17	1980-07-17	1980-07-30		0.1 BUFFALO CO
Natural	A	1980	1980-07-18	1980-07-19			0.1 BEAVER CREEK
Natural	A	1980	1980-07-18	1980-07-19			0.1 MIRROR
Natural	A	1980	1980-07-18	1980-07-19			0.1 SIGNAL HILL
Natural	A	1980	1980-07-18	1980-07-19			0.1 TELEPHONE LINE
Natural	A	1980	1980-07-18	1980-07-18	1980-07-31		0.1 CONCRETION
Natural	A	1980	1980-07-20	1980-07-20			0.1 CARTER
Natural	A	1980	1980-07-20	1980-07-20	1980-07-27		0.1 ELM TREE
Natural	A	1980	1980-07-23	1980-07-23	1980-07-31		0.1 SNAG
Human	A	1980	1980-07-31	1980-07-31			0.1 MCCLAREN
Human	A	1980	1980-07-31	1980-07-31			0.1 OVER PASS
Human	A	1980	1980-08-05	1980-08-05			0.1 CRAZY HORSE #3
Human	A	1980	1980-08-05	1980-08-05			0.1 CRAZY HORSE #2
Human	A	1980	1980-08-05	1980-08-05			0.1 CRAZY HORSE #1
Human	A	1980	1980-08-06	1980-08-06			0.1 TENDERFOOT
Natural	A	1980	1980-08-09	1980-08-11			0.1 MONKEY
Natural	A	1980	1980-08-10	1980-08-10	1980-08-18		0.1 CLIFFHANGR
Natural	A	1980	1980-08-19	1980-08-19			0.1 RAVER
Natural	A	1980	1980-08-19	1980-08-20			0.1 CRAZY HORSE #4
Human	A	1980	1980-09-30	1980-09-30			0.1 DUBBELDE
Human	A	1980	1980-10-09	1980-10-09			0.1 TIE
Human	A	1980	1980-11-09	1980-11-09			0.1 PETTIBONE
Human	A	1981	1981-02-06	1981-02-06			0.1 PATSY
Human	A	1981	1981-03-29	1981-03-29			0.1 GOOD QUESTION
Human	A	1981	1981-04-01	1981-04-01			0.1 BIG PINE
Human	A	1981	1981-04-11	1981-04-11			0.1 BELL
Human	A	1981	1981-04-25	1981-04-25			0.1 TWIN ROCKS
Natural	A	1981	1981-05-02	1981-05-02			0.1 WET
Human	A	1981	1981-06-05	1981-06-05			0.1 KITTY
Natural	A	1981	1981-06-14	1981-06-14			0.1 SWITCH BACK
Natural	A	1981	1981-06-20	1981-06-21			0.1 JECA WEST
Human	A	1981	1981-06-20	1981-06-21			0.1 KANSAS
Human	A	1981	1981-06-23	1981-06-23			0.1 STEICHEN
Natural	A	1981	1981-07-07	1981-07-08			0.1 ALL NIGHT
Natural	A	1981	1981-07-07	1981-07-08			0.1 SUMP RESEVOIR
Natural	A	1981	1981-07-07	1981-07-08			0.1 ANNUAL LEAVE
Natural	A	1981	1981-07-07	1981-07-07			0.1 CRAWFORD



Natural	A	1981	1981-07-08	1981-07-08		0.1 LUCKY STRIKE
Natural	A	1981	1981-07-09	1981-07-09		0.1 LINDE
Human	A	1981	1981-07-19	1981-07-19		0.1 JECA WEST #2
Natural	A	1981	1981-07-30	1981-07-30		0.1 NINE MILE
Natural	A	1981	1981-07-30	1981-07-31		0.1 NOONER
Human	A	1981	1981-08-05	1981-08-05		0.1 LITHOGRAPH #2
Human	A	1981	1981-08-12	1981-08-12		0.1 PETTIBONE
Human	A	1981	1981-08-17	1981-08-17		0.1 SUTHERLAND
Human	A	1981	1981-08-29	1981-08-29		0.1 THOMPSON
Human	A	1981	1981-09-01	1981-09-01		0.1 NEWBERG
Human	A	1981	1981-09-25	1981-09-25		0.1 SMOKE BOMB
Human	A	1981	1981-10-17	1981-10-17		0.1 BITTER
Human	A	1981	1981-11-16	1981-11-16		0.1 BUSH
Human	A	1981	1981-12-07	1981-12-07		0.1 BRADEEN
Human	A	1982	1982-06-06	1982-06-06		0.1 CIRCUS #1
Human	A	1982	1982-06-06	1982-06-06		0.1 CIRCUS #2
Human	A	1982	1982-06-06	1982-06-06		0.1 CENTER
Human	A	1982	1982-06-06	1982-06-06		0.1 LOT #10
Natural	A	1982	1982-06-21	1982-06-23		0.1 GREEN GRASS
Natural	A	1982	1982-06-21	1982-06-23		0.1 WABASH
Human	A	1982	1982-06-27	1982-06-27		0.1 GRATE
Natural	A	1982	1982-07-12	1982-07-13		0.1 PLUM
Natural	A	1982	1982-07-12	1982-07-13		0.1 BEECHER ROCK
Natural	A	1982	1982-07-16	1982-07-16		0.1 BOLES
Natural	A	1982	1982-07-23	1982-07-24		0.1 BIG ONE
Natural	A	1982	1982-07-23	1982-07-23		0.1 S & G
Natural	A	1982	1982-07-23	1982-07-23		0.1 GOLD
Natural	A	1982	1982-07-23	1982-07-23		0.1 ROCKY RIDGE
Natural	A	1982	1982-07-23	1982-07-24		0.1 BLACKTAIL
Human	A	1982	1982-07-23	1982-07-23		0.1 DUBBELDE
Human	A	1982	1982-07-23	1982-07-23		0.1 FRENCH CREEK
Natural	A	1982	1982-07-23	1982-07-24		0.1 TINA'S
Natural	A	1982	1982-07-23	1982-07-23	1982-07-26	0.1 DRY CREEK
Natural	A	1982	1982-07-24	1982-07-25		0.1 COOPER
Natural	A	1982	1982-08-16	1982-08-17		0.1 NORTH ANTELOPE
Natural	A	1982	1982-08-17	1982-08-18		0.1 PARKER
Natural	A	1982	1982-08-18	1982-08-18		0.1 BEEBE
Natural	A	1982	1982-08-26	1982-08-26		0.1 CUT OFF
Natural	A	1982	1982-08-28	1982-08-28		0.1 CAMERON
Human	A	1982	1982-11-25	1982-11-25		0.1 OTTER
Human	A	1983	1983-01-03	1983-01-03		0.1 BEAVER
Human	A	1983	1983-02-03	1983-02-03		0.1 LOREZ
Human	A	1983	1983-04-25	1983-04-25		0.1 GOLF
Natural	A	1983	1983-05-31	1983-06-03		0.1 HOLEY
Natural	A	1983	1983-06-10	1983-06-10		0.1 STEPHAN #2
Natural	A	1983	1983-06-30	1983-07-01		0.1 BUSSKOHL
Natural	A	1983	1983-07-02	1983-07-03		0.1 TUCKER
Natural	A	1983	1983-07-08	1983-07-09		0.1 BRASH
Natural	A	1983	1983-07-20	1983-07-20		0.1 LINN
Human	A	1983	1983-07-20	1983-07-20		0.1 BAILEY
Natural	A	1983	1983-07-27	1983-07-28		0.1 FREEMAN
Natural	A	1983	1983-07-28	1983-07-28		0.1 BUG TOWN
Natural	A	1983	1983-07-28	1983-07-28	1983-07-29	0.1 BUFFALO
Natural	A	1983	1983-08-02	1983-08-03		0.1 HOLTHUS
Natural	A	1983	1983-08-02	1983-08-02		0.1 MOHAWK
Natural	A	1983	1983-08-16	1983-08-16		0.1 LONG DRAW
Natural	A	1983	1983-08-16	1983-08-16		0.1 LITTLE GUY
Natural	A	1983	1983-08-17	1983-08-18		0.1 ELEPHANT
Natural	A	1983	1983-09-14	1983-09-15		0.1 TAIL
Human	A	1984	1984-04-16	1984-04-16		0.1 WAGEL
Human	A	1984	1984-04-21	1984-04-22		0.1 WILD
Human	A	1984	1984-05-31	1984-05-31		0.1 STOLP

Human	A	1984	1984-06-06	1984-06-06	1984-06-06	0.1 PRAIRIE DO
Natural	A	1984	1984-06-13	1984-06-14		0.1 PRINGLE
Natural	A	1984	1984-06-22	1984-06-22		0.1 BAYOU
Human	A	1984	1984-06-26	1984-06-26		0.1 RIFLE PIT
Natural	A	1984	1984-07-07	1984-07-07		0.1 TONGAN
Natural	A	1984	1984-07-07	1984-07-07	1984-07-07	0.1 SPOT #1
Natural	A	1984	1984-07-14	1984-07-15		0.1 BARRY'S
Natural	A	1984	1984-08-06	1984-08-07		0.1 OLSEN
Human	A	1984	1984-08-07	1984-08-07		0.1 HORSE
Human	A	1984	1984-08-15	1984-08-15		0.1 YELLOW JACKET
Natural	A	1984	1984-08-15	1984-08-16	1984-08-19	0.1 SANCTUARY
Human	A	1984	1984-08-23	1984-08-23		0.1 HOLE
Human	A	1984	1984-09-03	1984-09-04		0.1 FLYNN
Human	A	1985	1985-03-26	1985-03-26		0.1 ASH
Human	A	1985	1985-04-08	1985-04-10		0.1 CCC
Natural	A	1985	1985-05-25	1985-05-25		0.1 BENTON
Human	A	1985	1985-06-20	1985-06-20		0.1 OUTLAW
Natural	A	1985	1985-06-20	1985-06-21		0.1 TOLL GATE
Human	A	1985	1985-06-23	1985-06-24		0.1 FLYNN CREEK
Natural	A	1985	1985-06-24	1985-06-24		0.1 LOWE
Natural	A	1985	1985-06-30	1985-06-30		0.1 JENKINS
Natural	A	1985	1985-06-30	1985-07-01		0.1 DAVIS
Natural	A	1985	1985-07-01	1985-07-02		0.1 TEPEE
Human	A	1985	1985-07-07	1985-07-07	1985-07-09	0.1 SIREN
Natural	A	1985	1985-07-09	1985-07-10		0.1 BAG
Natural	A	1985	1985-07-09	1985-07-10		0.1 BIRTHDAY
Natural	A	1985	1985-07-09	1985-07-10		0.1 HANK'S
Natural	A	1985	1985-07-11	1985-07-12		0.1 ANTELOPE
Natural	A	1985	1985-07-14	1985-07-14		0.1 CASEY
Natural	A	1985	1985-07-15	1985-07-16		0.1 WHITE
Natural	A	1985	1985-07-15	1985-07-16		0.1 SIVEDLUND
Natural	A	1985	1985-07-15	1985-07-16		0.1 CATTLES
Natural	A	1985	1985-07-15	1985-07-15	1985-07-15	0.1 WIRE
Natural	A	1985	1985-07-16	1985-07-21		0.1 STEEP
Natural	A	1985	1985-07-16	1985-07-17		0.1 PIGLET
Natural	A	1985	1985-07-16	1985-07-16		0.1 STAG
Natural	A	1985	1985-07-17	1985-07-18		0.1 SIX PACK
Natural	A	1985	1985-07-20	1985-07-21		0.1 JUNK
Natural	A	1985	1985-07-26	1985-07-26		0.1 STINK
Natural	A	1985	1985-07-28	1985-07-28		0.1 MONDAY
Natural	A	1985	1985-08-02	1985-08-03		0.1 SAUER
Natural	A	1985	1985-08-06	1985-08-06	1985-08-08	0.1 CURLEY
Natural	A	1985	1985-08-19	1985-08-20	1985-08-22	0.1 REAVES #2
Natural	A	1985	1985-08-26	1985-08-26		0.1 RIFLE
Natural	A	1985	1985-08-26	1985-08-26		0.1 HORN
Natural	A	1985	1985-08-26	1985-08-26		0.1 SWAMP
Natural	A	1985	1985-08-26	1985-08-26		0.1 JANETTE
Natural	A	1985	1985-08-26	1985-08-26		0.1 SOD
Natural	A	1985	1985-08-26	1985-08-26		0.1 EGGS
Natural	A	1985	1985-08-26	1985-08-26		0.1 BUCKHORN
Natural	A	1985	1985-08-26	1985-08-26	1985-08-26	0.1 ELK MTN
Natural	A	1985	1985-08-27	1985-08-27		0.1 ALVIN
Natural	A	1985	1985-08-27	1985-08-28		0.1 LICENSE
Natural	A	1985	1985-08-27	1985-08-27		0.1 FORT
Natural	A	1985	1985-08-27	1985-08-27		0.1 MEEKER
Human	A	1985	1985-08-28	1985-08-28		0.1 PANIC
Natural	A	1985	1985-08-29	1985-08-29	1985-08-30	0.1 JUNCTION
Natural	A	1985	1985-09-03	1985-09-04		0.1 WASH BASIN
Natural	A	1985	1985-09-04	1985-09-05		0.1 GHOST
Natural	A	1986	1986-03-24	1986-03-24	1986-03-25	0.1 KINNAMON
Natural	A	1986	1986-05-02	1986-05-02	1986-05-05	0.1 ANKENY
Natural	A	1986	1986-05-05	1986-05-06	1986-05-08	0.1 POWER

Human	A	1986	1986-05-29	1986-05-30	1986-06-02	0.2 HANSON
Natural	A	1986	1986-06-12	1986-06-13	1986-06-16	0.1 NORBECK
Natural	A	1986	1986-06-19	1986-06-19	1986-06-21	0.1 WOODWARD
Natural	A	1986	1986-06-19	1986-06-19	1986-06-22	0.1 FISHERMAN
Natural	A	1986	1986-06-27	1986-06-28	1986-07-03	0.2 HIDE
Natural	A	1986	1986-06-28	1986-06-28	1986-06-29	0.1 PASS CREEK
Natural	A	1986	1986-06-28	1986-06-28	1986-06-29	0.1 NIGHT HAWK
Natural	A	1986	1986-07-08	1986-07-08	1986-07-10	0.1 NEGRO
Natural	A	1986	1986-07-10	1986-07-10	1986-07-12	0.1 NORTH BNDY
Human	A	1986	1986-07-30	1986-07-30	1986-08-05	0.1 SARDINE
Natural	A	1986	1986-07-30	1986-07-30	1986-08-05	0.1 NORMAN
Human	A	1986	1986-07-31	1986-07-31	1986-08-01	0.1 NEWTON
Natural	A	1986	1986-08-01	1986-08-01	1986-08-05	0.1 NO WAY
Natural	A	1986	1986-08-01	1986-08-02	1986-08-05	0.1 WALKER
Natural	A	1986	1986-08-01	1986-08-01	1986-08-04	0.1 SHIRTAIL
Natural	A	1986	1986-08-01	1986-08-01	1986-08-04	0.1 WATERTANK
Natural	A	1986	1986-08-08	1986-08-08	1986-08-15	0.1 FLORENCE
Human	A	1986	1986-08-11	1986-08-12	1986-08-15	0.1 MUGGY
Natural	A	1986	1986-08-11	1986-08-12	1986-08-13	0.1 COAST
Natural	A	1986	1986-08-11	1986-08-12	1986-08-20	0.1 PARK
Human	A	1986	1986-08-11	1986-08-12	1986-08-13	0.1 RED BUTTE
Natural	A	1986	1986-08-11	1986-08-12	1986-08-14	0.1 SJ
Human	A	1986	1986-08-11	1986-08-12	1986-08-14	0.1 TED'S
Natural	A	1986	1986-08-11	1986-08-13	1986-08-20	0.1 SOB
Natural	A	1986	1986-08-11	1986-08-12	1986-08-20	0.1 HORSE
Human	A	1986	1986-08-12	1986-08-13	1986-08-14	0.1 HAGEDORN
Natural	A	1986	1986-08-12	1986-08-13	1986-08-18	0.1 MAHRT
Natural	A	1986	1986-08-13	1986-08-15	1986-08-21	0.1 DRIVE INN
Human	A	1986	1986-08-23	1986-08-24	1986-08-24	0.1 HOTDOG
Natural	A	1986	1986-08-23	1986-08-24	1986-08-27	0.1 GURNEY
Human	A	1987	1987-04-04	1987-04-04	1987-04-06	0.1 RISKY
Natural	A	1987	1987-04-09	1987-04-09	1987-04-10	0.1 TROEC SH
Natural	A	1987	1987-05-01	1987-05-01	1987-05-02	0.1 LEWIS
Human	A	1987	1987-05-01	1987-05-01	1987-05-04	0.1 WILDERNESS
Natural	A	1987	1987-05-03	1987-05-03	1987-05-03	0.1 POLE
Natural	A	1987	1987-05-15	1987-05-15	1987-05-18	0.2 OLIVE
Human	A	1987	1987-05-16	1987-05-16	1987-05-16	0.1 LOST BUFFALO
Human	A	1987	1987-06-06	1987-06-07	1987-06-10	0.1 SPECIAL
Natural	A	1987	1987-06-13	1987-06-13	1987-06-13	0.1 WHITETAIL
Natural	A	1987	1987-06-16	1987-06-16	1987-06-20	0.1 GREANY
Natural	A	1987	1987-06-16	1987-06-16	1987-06-20	0.2 ECHO
Human	A	1987	1987-06-16	1987-06-16	1987-06-19	0.1 T.J.
Human	A	1987	1987-06-16	1987-06-16	1987-06-18	0.1 TRUCK
Natural	A	1987	1987-06-23	1987-06-23	1987-06-24	0.1 GOLF
Human	A	1987	1987-06-28	1987-06-28	1987-07-01	0.1 ARSON
Natural	A	1987	1987-07-07	1987-07-08	1987-07-09	0.1 BRESNE
Natural	A	1987	1987-07-07	1987-07-07	1987-07-10	0.1 KEY
Natural	A	1987	1987-07-07	1987-07-08	1987-07-09	0.1 RED BUTTE
Human	A	1987	1987-07-16	1987-07-16	1987-07-20	0.1 NATIVES
Human	A	1987	1987-07-17	1987-07-18	1987-07-19	0.1 STONY POINT
Natural	A	1987	1987-07-21	1987-07-21	1987-07-28	0.1 SHOCKER
Natural	A	1987	1987-07-24	1987-07-24	1987-07-26	0.1 COLD BROOK II
Natural	A	1987	1987-07-30	1987-07-30	1987-08-04	0.1 AUSTIN
Natural	A	1987	1987-08-02	1987-08-03	1987-08-04	0.1 A
Natural	A	1987	1987-08-02	1987-08-03	1987-08-07	0.1 HOUSTON
Natural	A	1987	1987-08-02	1987-08-03	1987-08-07	0.1 POTENTIAL
Natural	A	1987	1987-08-06	1987-08-06	1987-08-10	0.1 CARLSON
Natural	A	1987	1987-08-07	1987-08-08	1987-08-11	0.1 PORKEY
Human	A	1987	1987-08-11	1987-08-11	1987-08-13	0.1 TURKEY
Natural	A	1987	1987-08-13	1987-08-13	1987-08-21	0.1 JINX
Natural	A	1987	1987-09-02	1987-09-03	1987-09-04	0.1 CALIFORNIA
Natural	A	1987	1987-09-02	1987-09-02	1987-09-02	0.1 HAYSTACK BUTTE

Human	A	1987	1987-09-27	1987-09-28	1987-09-30	0.1 JACKSON-5
Human	A	1987	1987-09-28	1987-09-28	1987-09-28	0.1 SHAFT
Natural	A	1987	1987-10-05	1987-10-05	1987-10-07	0.1 WOOD
Natural	A	1988	1988-02-28	1988-02-28	1988-03-04	0.2 ARROW
Natural	A	1988	1988-03-21	1988-03-21	1988-03-25	0.2 MUCKLER
Human	A	1988	1988-04-13	1988-04-14	1988-04-17	0.1 TUT HILL
Human	A	1988	1988-04-27	1988-04-29	1988-05-02	0.1 LUCHAU
Human	A	1988	1988-05-06	1988-05-06	1988-05-12	0.1 BAUMANN
Natural	A	1988	1988-05-06	1988-05-06	1988-05-09	0.1 MCDILL
Natural	A	1988	1988-05-21	1988-05-21	1988-05-24	0.1 MCCLANAMAN
Natural	A	1988	1988-05-22	1988-05-22	1988-05-25	0.2 HONDA
Natural	A	1988	1988-05-25	1988-05-25	1988-05-26	0.1 GOLD RUN
Natural	A	1988	1988-06-11	1988-06-12	1988-06-13	0.1 BOOTS
Natural	A	1988	1988-06-12	1988-06-13	1988-06-16	0.1 HARRY
Human	A	1988	1988-06-20	1988-06-20	1988-06-21	0.1 SCOTT
Natural	A	1988	1988-06-20	1988-06-21	1988-06-22	0.1 FINALLY
Natural	A	1988	1988-06-20	1988-06-20	1988-06-23	0.1 BACON
Natural	A	1988	1988-06-20	1988-06-20	1988-06-23	0.1 SWINE
Human	A	1988	1988-06-20	1988-06-20	1988-06-23	0.1 EVANS
Human	A	1988	1988-06-20	1988-06-21	1988-06-22	0.1 HILLSHIRE
Natural	A	1988	1988-06-20	1988-06-20	1988-06-23	0.1 RODEO
Human	A	1988	1988-06-20	1988-06-21	1988-06-26	0.1 LEG
Human	A	1988	1988-06-22	1988-06-22	1988-06-26	0.1 BOAR
Human	A	1988	1988-06-22	1988-06-22	1988-06-26	0.1 CHOP
Human	A	1988	1988-06-22	1988-06-22	1988-06-26	0.1 CUTLET
Human	A	1988	1988-06-22	1988-06-23	1988-06-26	0.1 SOW
Natural	A	1988	1988-06-22	1988-06-23	1988-06-26	0.2 SWEATHOG
Natural	A	1988	1988-06-23	1988-06-23	1988-06-25	0.1 CIRCLE
Human	A	1988	1988-06-24	1988-06-24	1988-06-25	0.1 RAZOR BACK
Natural	A	1988	1988-06-28	1988-06-29	1988-07-02	0.1 PIGLET
Natural	A	1988	1988-07-03	1988-07-04	1988-07-07	0.1 SIDEPOCK
Human	A	1988	1988-07-03	1988-07-04	1988-07-07	0.1 PEGGY
Natural	A	1988	1988-07-04	1988-07-05	1988-07-05	0.1 HOLEY
Natural	A	1988	1988-07-04	1988-07-05	1988-07-06	0.1 TEPEE
Natural	A	1988	1988-07-04	1988-07-05	1988-07-08	0.1 HOGWASH
Natural	A	1988	1988-07-04	1988-07-05	1988-07-10	0.2 HEADCHEESE
Natural	A	1988	1988-07-04	1988-07-04	1988-07-05	0.1 WELLS
Natural	A	1988	1988-07-10	1988-07-10	1988-07-11	0.1 CLOCK
Natural	A	1988	1988-07-14	1988-07-14	1988-07-20	0.1 WIENER
Natural	A	1988	1988-07-14	1988-07-15	1988-07-20	0.2 ARNOLD
Human	A	1988	1988-07-16	1988-07-17	1988-07-18	0.1 HASART
Natural	A	1988	1988-07-16	1988-07-17	1988-07-20	0.1 RUNT
Human	A	1988	1988-07-22	1988-07-22	1988-07-27	0.1 JAVELINA
Natural	A	1988	1988-07-22	1988-07-22	1988-07-27	0.1 SNOT
Natural	A	1988	1988-07-27	1988-07-27	1988-07-28	0.1 DAY OFF
Natural	A	1988	1988-08-02	1988-08-03	1988-08-04	0.1 CORNER
Natural	A	1988	1988-08-15		1988-08-16	0.1 RANKIN
Human	A	1988	1988-09-01	1988-09-01	1988-09-05	0.2 THIESFIELD
Natural	A	1988	1988-09-07	1988-09-07	1988-09-10	0.1 ESCORT
Natural	A	1988	1988-09-10	1988-09-10	1988-09-13	0.1 PEANUT
Human	A	1988	1988-09-10	1988-09-10	1988-09-12	0.2 IVORY TOOTH
Natural	A	1988	1988-09-10	1988-09-14	1988-09-15	0.1 WELLS PIT
Natural	A	1988	1988-09-27	1988-09-29	1988-10-04	0.1 TIP TOP
Natural	A	1988	1988-09-27	1988-09-29	1988-10-04	0.2 CINCH
Natural	A	1988	1988-10-12	1988-10-12	1988-10-16	0.1 FIFTY-SEVEN
Human	A	1988	1988-10-13	1988-10-13	1988-10-16	0.1 CRAZY
Natural	A	1988	1988-10-13	1988-10-13	1988-10-16	0.1 HORSE
Natural	A	1989	1989-01-16	1989-01-16	1989-01-19	0.1 ELTON
Natural	A	1989	1989-05-17	1989-05-17	1989-05-18	0.1 PICNIC
Natural	A	1989	1989-06-06	1989-06-07	1989-06-09	0.1 NO CONTACT
Natural	A	1989	1989-06-16	1989-06-17	1989-06-22	0.2 SNOOPY
Natural	A	1989	1989-06-16	1989-06-18	1989-06-18	0.1 SADDLE HORSE

Human	A	1989	1989-07-10	1989-07-11	1989-07-17	0.1 BOOTS
Natural	A	1989	1989-07-10	1989-07-10	1989-07-14	0.1 SPOT
Human	A	1989	1989-07-10	1989-07-11	1989-07-17	0.1 SPIKE
Human	A	1989	1989-07-10	1989-07-12	1989-07-17	0.1 TRAMP
Natural	A	1989	1989-07-10	1989-07-11	1989-07-17	0.2 MARMADUKE
Natural	A	1989	1989-07-12	1989-07-16	1989-07-18	0.1 RALPH
Natural	A	1989	1989-07-13	1989-07-14	1989-07-16	0.1 RUFFUS
Natural	A	1989	1989-07-21	1989-07-21	1989-07-24	0.1 JOSHUA
Natural	A	1989	1989-08-04	1989-08-04	1989-08-07	0.1 PETE
Natural	A	1989	1989-08-10	1989-08-10	1989-08-14	0.2 CHIP
Natural	A	1989	1989-08-10	1989-08-11	1989-08-14	0.1 CRUISER
Human	A	1989	1989-08-15	1989-08-16	1989-08-24	0.1 AMBER
Natural	A	1989	1989-08-19	1989-08-19	1989-08-21	0.1 SPOTLIGHT
Natural	A	1989	1989-08-24	1989-08-25	1989-08-30	0.1 NOWHERE
Natural	A	1989	1989-08-24	1989-08-25	1989-09-01	0.2 OSCAR
Natural	A	1989	1989-09-03	1989-09-03	1989-09-08	0.1 ELMER
Human	A	1989	1989-09-06	1989-09-07	1989-09-13	0.1 SUNSHINE
Natural	A	1989	1989-09-06	1989-09-07	1989-09-13	0.1 KUDA
Natural	A	1989	1989-09-06	1989-09-07	1989-09-13	0.1 MISERY
Human	A	1989	1989-09-07	1989-09-07	1989-09-08	0.1 SPOKANE
Natural	A	1990	1990-01-25	1990-01-25	1990-01-26	0.1 BAKER
Natural	A	1990	1990-06-23	1990-06-24	1990-06-29	0.1 HUEY
Human	A	1990	1990-06-23	1990-06-24	1990-06-29	0.2 DEWEY
Human	A	1990	1990-07-03	1990-07-03	1990-07-08	0.1 LOUIE #3
Natural	A	1990	1990-07-03	1990-07-03	1990-07-08	0.1 LOUIE #2
Natural	A	1990	1990-07-06	1990-07-06	1990-07-11	0.1 BULLWINLKE
Natural	A	1990	1990-07-07	1990-07-07	1990-07-14	0.1 SYLVESTER
Natural	A	1990	1990-07-15	1990-07-15	1990-07-16	0.1 TOBY
Natural	A	1990	1990-07-15	1990-07-15	1990-07-16	0.1 LOST
Natural	A	1990	1990-07-18	1990-07-19	1990-07-25	0.1 TWEETIE
Natural	A	1990	1990-07-28	1990-07-29	1990-08-03	0.1 ODIE
Natural	A	1990	1990-08-04	1990-08-05	1990-08-06	0.1 SAWYER
Natural	A	1990	1990-08-14	1990-08-14	1990-08-17	0.1 MCDUCK
Human	A	1990	1990-08-16	1990-08-16	1990-08-21	0.1 SNOOPY
Natural	A	1990	1990-09-20	1990-09-20	1990-09-24	0.1 TWEETY #2
Natural	A	1991	1991-04-03	1991-04-04	1991-04-09	0.1 BOOKER
Human	A	1991	1991-04-03	1991-04-04	1991-04-09	0.1 BUCK
Natural	A	1991	1991-04-03	1991-04-05	1991-04-11	0.1 GOAT HORN
Human	A	1991	1991-06-06	1991-06-06	1991-06-08	0.1 STUMP
Human	A	1991	1991-06-06	1991-06-06	1991-06-08	0.2 CABIN
Natural	A	1991	1991-07-11	1991-07-11	1991-07-13	0.2 BOBLESS
Natural	A	1991	1991-07-15	1991-07-16	1991-07-29	0.2 FIRST
Natural	A	1991	1991-07-15	1991-07-16	1991-07-16	0.1 NO
Natural	A	1991	1991-07-15	1991-07-16	1991-07-17	0.2 SNAPSHOT
Human	A	1991	1991-07-15	1991-07-15	1991-07-18	0.1 HLAUGHING
Natural	A	1991	1991-08-01	1991-08-02	1991-08-03	0.1 PORTAL
Natural	A	1991	1991-08-01	1991-08-01	1991-08-02	0.1 EL NINO
Natural	A	1991	1991-08-02	1991-08-02	1991-08-02	0.1 PEEWEE
Natural	A	1991	1991-08-06	1991-08-07	1991-08-08	0.1 BIG BUCKS
Natural	A	1991	1991-08-06		1991-08-06	0.1 WET
Natural	A	1991	1991-08-07	1991-08-08	1991-08-09	0.1 SNAKE
Human	A	1991	1991-08-20	1991-08-20	1991-08-21	0.1 TIMBCO
Human	A	1991	1991-08-22	1991-08-22	1991-08-23	0.1 BORDERLINE
Natural	A	1992	1992-06-22	1992-06-22	1992-06-22	0.1 HIGHLAND
Natural	A	1992	1992-06-22	1992-06-22	1992-06-23	0.1 PIGTAIL
Natural	A	1992	1992-07-28	1992-07-30	1992-08-01	0.1 WOODPECKER
Human	A	1992	1992-07-29	1992-07-31	1992-08-01	0.1 GETTY'S
Natural	A	1992	1992-09-01	1992-09-01	1992-09-01	0.1 TWO WET
Natural	A	1992	1992-09-04	1992-09-05	1992-09-09	0.2 CEDAR HILL
Natural	A	1992	1992-09-04	1992-09-05	1992-09-09	0.1 PRINGLE #2
Natural	A	1992	1992-09-04	1992-09-05	1992-09-09	0.2 SEVEN-MILE
Natural	A	1992	1992-09-04	1992-09-05	1992-09-07	0.1 PATROL

Human	A	1992	1992-09-04	1992-09-05	1992-09-09	0.1 BUCKHORN
Natural	A	1992	1992-09-13	1992-09-14	1992-09-18	0.1 Y-4
Natural	A	1993	1993-05-02	1993-05-02	1993-05-02	0.1 CAMPFIRE
Human	A	1993	1993-07-03	1993-07-04	1993-07-07	0.1 BREW
Natural	A	1993	1993-07-09	1993-07-09	1993-07-14	0.2 ROGER'S SHACK
Natural	A	1993	1993-07-12	1993-07-12	1993-07-15	0.1 WILLOW
Human	A	1993	1993-07-21	1993-07-22	1993-07-23	0.1 MCKENNA
Human	A	1993	1993-08-10	1993-08-11	1993-08-14	0.1 YELLOW JACKET SPRING
Human	A	1993	1993-09-24	1993-09-24	1993-09-24	0.1 MOBILE
Human	A	1994	1994-04-10	1994-04-10	1994-04-14	0.1 PUPPY
Natural	A	1994	1994-05-13	1994-05-13	1994-05-14	0.1 KEN'S FIRE
Natural	A	1994	1994-05-13	1994-05-13	1994-05-14	0.1 KENNY #2
Natural	A	1994	1994-06-04	1994-06-05	1994-06-08	0.2 CLIFTON
Natural	A	1994	1994-06-04	1994-06-04	1994-06-06	0.1 RAINBOW
Natural	A	1994	1994-06-04	1994-06-05	1994-06-07	0.1 BUCK SPRING
Natural	A	1994	1994-06-04	1994-06-07	1994-06-11	0.2 BUFFALO
Human	A	1994	1994-06-30	1994-06-30	1994-06-30	0.1 ASH
Human	A	1994	1994-07-03	1994-07-03	1994-07-05	0.1 GOLDEN DRAFT
Natural	A	1994	1994-07-06	1994-07-08	1994-07-12	0.1 BEAR SPRINGS
Human	A	1994	1994-07-07	1994-07-07	1994-07-10	0.1 SMITH MINE
Natural	A	1994	1994-07-10	1994-07-11	1994-07-14	0.1 WEED
Human	A	1994	1994-07-11	1994-07-12	1994-07-15	0.1 TWENTY MILE
Natural	A	1994	1994-07-13	1994-07-14	1994-07-17	0.1 COMMUNITY
Natural	A	1994	1994-07-14	1994-07-15	1994-07-18	0.2 SIDNEY
Human	A	1994	1994-07-24	1994-07-24	1994-07-28	0.1 ISSUEWOOD
Natural	A	1994	1994-08-03	1994-08-05	1994-08-09	0.2 MCKENNA
Natural	A	1994	1994-08-04	1994-08-05	1994-08-09	0.1 LONG DRAW #2
Human	A	1994	1994-08-11	1994-08-11	1994-08-16	0.1 ROGER'S SHACK SPRING
Natural	A	1994	1994-08-29	1994-08-29	1994-08-30	0.2 GETTYSBURG
Human	A	1994	1994-09-12	1994-09-12	1994-09-16	0.1 BOWMAN DRAW
Human	A	1995	1995-06-25	1995-06-25	1995-06-28	0.1 PAPER
Natural	A	1995	1995-07-09	1995-07-09	1995-07-12	0.1 TENT
Natural	A	1995	1995-07-24	1995-07-26	1995-07-29	0.1 COMPTON SPRING
Natural	A	1995	1995-08-22	1995-08-22	1995-08-31	0.1 TWIN PINES
Natural	A	1995	1995-08-25	1995-08-26	1995-08-30	0.1 SPRING
Natural	A	1995	1995-08-25	1995-08-27	1995-08-30	0.1 FLAG SNAG
Natural	A	1995	1995-08-28	1995-08-28	1995-08-31	0.1 BISON CORR
Natural	A	1995	1995-09-04	1995-09-04	1995-09-07	0.1 TEPEE CANYON
Natural	A	1995	1995-09-05	1995-09-05	1995-09-06	0.1 ROUND
Natural	A	1995	1995-09-29	1995-09-30	1995-10-03	0.1 CATTLE DRIVE
Natural	A	1996	1996-06-11	1996-06-12	1996-06-15	0.1 NINE MILE
Natural	A	1996	1996-06-11	1996-06-12	1996-06-15	0.1 LOOKOUT
Natural	A	1996	1996-06-16	1996-06-17	1996-06-19	0.1 BOWMAN DRAW
Natural	A	1996	1996-06-16	1996-06-16	1996-06-17	0.2 CARMAT
Natural	A	1996	1996-07-03	1996-07-04	1996-07-07	0.1 FOUR HOUR
Natural	A	1996	1996-07-05	1996-07-06	1996-07-09	0.1 BULL SPRING
Human	A	1996	1996-07-18	1996-07-18	1996-07-19	0.1 VAN
Natural	A	1996	1996-07-27	1996-07-28	1996-08-01	0.1 MICHELE PEAK
Natural	A	1996	1996-07-28	1996-07-29	1996-08-03	0.2 HAVEN
Natural	A	1996	1996-08-02	1996-08-03	1996-08-06	0.1 MOHAWK
Natural	A	1996	1996-08-03	1996-08-04	1996-08-07	0.1 NITCHE SPRING
Natural	A	1996	1996-08-09	1996-08-09	1996-08-12	0.1 ELK MOUNTAIN
Natural	A	1996	1996-08-13	1996-08-14	1996-08-17	0.1 DRY DAM
Natural	A	1996	1996-08-13	1996-08-14	1996-08-17	0.2 JUNIPER
Natural	A	1996	1996-08-14	1996-08-15	1996-08-18	0.1 BLACK ELK
Natural	A	1996	1996-08-15	1996-08-15	1996-08-18	0.1 WOODPECKER
Natural	A	1996	1996-08-17	1996-08-18	1996-08-21	0.2 SOUTH GURNEY
Natural	A	1996	1996-08-19	1996-08-20	1996-08-20	0.1 THREE BIRDS
Natural	A	1996	1996-08-20	1996-08-22	1996-08-25	0.1 NORTH LYMAN
Natural	A	1996	1996-08-20	1996-08-22	1996-08-26	0.2 WHITE STAKE
Human	A	1996	1996-08-21	1996-08-21	1996-08-24	0.1 BOWMAN
Natural	A	1996	1996-08-25	1996-08-26	1996-08-30	0.1 TRIANGLE

Natural	A	1996	1996-08-28	1996-08-29	1996-09-01	0.1 RICHARDSON
Human	A	1997	1997-02-23	1997-02-23	1997-02-26	0.1 COMANCHE
Natural	A	1997	1997-06-22	1997-06-22	1997-06-25	0.1 ISSUEWOOD
Human	A	1997	1997-07-01	1997-07-01	1997-07-04	0.1 BUNKHOUSE
Natural	A	1997	1997-07-06	1997-07-07	1997-07-11	0.2 MELON
Natural	A	1997	1997-07-24	1997-07-25	1997-07-28	0.2 TWIN
Human	A	1997	1997-08-31	1997-08-31	1997-09-04	0.1 HOMESTEAD
Human	A	1997	1997-09-06	1997-09-07	1997-09-10	0.1 PAINTER DAM
Human	A	1997	1997-11-26	1997-11-26	1997-11-26	0.1 SNICKERS
Human	A	1997	1997-12-14	1997-12-14	1997-12-18	0.2 CARROLL CREEK
Natural	A	1998	1998-05-19	1998-05-20	1998-05-28	0.1 ELLIOTT
Natural	A	1998	1998-05-20	1998-05-20	1998-05-23	0.1 LOG
Natural	A	1998	1998-06-13	1998-06-13	1998-06-16	0.1 BOWMAN
Natural	A	1998	1998-06-24	1998-06-25	1998-06-30	0.2 CARROLL CREEK
Natural	A	1998	1998-07-01	1998-07-02	1998-07-05	0.1 TWISTER
Natural	A	1998	1998-07-04	1998-07-05	1998-07-08	0.1 SUTHERLAND
Natural	A	1998	1998-07-19	1998-07-20	1998-07-28	0.2 STOCKADE
Natural	A	1998	1998-08-09	1998-08-09	1998-08-13	0.1 YELLOW BUTTE
Natural	A	1998	1998-08-14	1998-08-14	1998-08-14	0.1 COLD BROOK
Natural	A	1998	1998-09-19	1998-09-19	1998-09-22	0.2 LAST CALL
Human	A	1998	1998-11-24	1998-11-24	1998-11-27	0.1 POWERLINE
Natural	A	1999	1999-04-08	1999-04-08	1999-04-09	0.1 SHEEP
Human	A	1999	1999-05-27	1999-05-27	1999-05-31	0.1 HOOT OWL
Human	A	1999	1999-07-05	1999-07-05	1999-07-08	0.1 VALLEY PLACER #2
Human	A	1999	1999-07-05	1999-07-05	1999-07-08	0.1 VALLEY PLACER
Natural	A	1999	1999-07-16	1999-07-16	1999-07-21	0.1 HOPS
Natural	A	1999	1999-07-20	1999-07-21	1999-07-25	0.2 SOUTH WABASH
Natural	A	1999	1999-07-30	1999-07-30	1999-08-03	0.1 LOST SPRING
Human	A	1999	1999-08-01	1999-08-02	1999-08-06	0.1 FLYNN CREEK
Natural	A	1999	1999-09-18	1999-09-18	1999-09-20	0.1 ANTELOPE
Human	A	1999	1999-09-22	1999-09-22	1999-09-24	0.1 BOB MARSHALL
Human	A	1999	1999-10-20	1999-10-20	1999-10-22	0.1 GRIFFIS #2
Human	A	2000	2000-02-21	2000-02-21	2000-02-24	0.1 PRESIDENT
Human	A	2000	2000-03-01	2000-03-01	2000-03-02	0.2 CLIFF
Human	A	2000	2000-04-23	2000-04-23	2000-04-27	0.1 SKINNER II
Human	A	2000	2000-05-17	2000-05-17	2000-05-21	0.1 UPPER BEAVER CREEK
Human	A	2000	2000-05-28	2000-05-28	2000-05-30	0.1 KEG
Human	A	2000	2000-06-09	2000-06-09	2000-06-14	0.1 ECHO VALLEY
Natural	A	2000	2000-06-12	2000-06-12	2000-06-16	0.1 SCHENK
Natural	A	2000	2000-06-12	2000-06-12	2000-06-16	0.2 TEPEE
Natural	A	2000	2000-06-17	2000-06-17	2000-06-21	0.1 CLASSIC
Natural	A	2000	2000-07-02	2000-07-02	2000-07-07	0.1 ROGER
Natural	A	2000	2000-07-04	2000-07-15	2000-07-18	0.1 FOUND
Natural	A	2000	2000-07-05	2000-07-06	2000-07-10	0.1 BOWMAN II
Natural	A	2000	2000-07-08	2000-07-08	2000-07-12	0.1 MALTESE CROSS
Natural	A	2000	2000-07-09	2000-07-09	2000-07-14	0.1 THUNDERBIRD
Natural	A	2000	2000-07-10	2000-07-11	2000-07-15	0.1 SUNDANCE II
Natural	A	2000	2000-07-14	2000-07-16	2000-07-19	0.1 PRONGHORN
Natural	A	2000	2000-07-14	2000-07-14	2000-07-19	0.1 BOLESBY
Natural	A	2000	2000-07-14	2000-07-14	2000-07-18	0.2 GILLETTE CANYON
Natural	A	2000	2000-07-18	2000-07-19	2000-07-22	0.1 BALDWIN
Natural	A	2000	2000-07-18	2000-07-19	2000-07-23	0.1 RED BUTTE
Natural	A	2000	2000-07-21	2000-07-22	2000-07-27	0.1 GLEN ERIN
Natural	A	2000	2000-07-21	2000-07-21	2000-07-24	0.1 DEADHORSE
Natural	A	2000	2000-07-27	2000-07-27	2000-07-30	0.1 CARROLL CREEK II
Natural	A	2000	2000-07-27	2000-07-27	2000-07-30	0.1 7 MILE
Natural	A	2000	2000-07-27	2000-07-27	2000-07-30	0.1 MEDICINE MTN
Natural	A	2000	2000-07-29	2000-07-29	2000-08-01	0.1 REDBIRD
Natural	A	2000	2000-07-31	2000-07-31	2000-08-03	0.1 LOST SPRING
Natural	A	2000	2000-07-31	2000-08-01	2000-08-01	0.1 QUICK SILVER
Natural	A	2000	2000-08-01	2000-08-02	2000-08-09	0.2 HAVEN
Natural	A	2000	2000-08-04	2000-08-05	2000-08-09	0.1 HAZELRODT

Natural	A	2000	2000-08-05	2000-08-05	2000-09-19	0.2 BIG ELK
Natural	A	2000	2000-08-12	2000-08-12	2000-08-12	0.1 MIN LICK
Natural	A	2000	2000-08-13	2000-08-14	2000-08-17	0.1 HELL
Natural	A	2000	2000-08-26	2000-08-26	2000-08-29	0.1 PAGE
Natural	A	2000	2000-08-26	2000-08-26	2000-09-19	0.2 ALOHA
Natural	A	2000	2000-08-26	2000-08-27	2000-09-19	0.1 STUMPHOLE
Natural	A	2000	2000-09-01	2000-09-02	2000-09-05	0.1 STAR
Natural	A	2000	2000-09-01	2000-09-01	2000-09-05	0.1 NORTH FORK
Natural	A	2000	2000-09-05	2000-09-05	2000-09-19	0.1 BUCKHORN MTN
Natural	A	2000	2000-09-05	2000-09-05	2000-09-06	0.1 WIND RIDGE
Natural	A	2000	2000-09-05		2000-09-19	0.1 KEYHOLE
Human	A	2000	2000-09-12	2000-09-12	2000-09-19	0.1 LINDSTROM
Human	A	2001	2001-03-23	2001-03-23	2001-03-26	0.1 BUNGALOW
Human	A	2001	2001-04-01	2001-04-01	2001-04-03	0.1 SIDNEY
Natural	A	2001	2001-06-17	2001-06-18	2001-06-22	0.1 RICHARDSON
Natural	A	2001	2001-07-06	2001-07-06	2001-07-09	0.1 TEPEE
Natural	A	2001	2001-07-08	2001-07-09	2001-07-13	0.1 RIM ROCK
Human	A	2001	2001-07-17	2001-07-18	2001-07-21	0.1 NORTH POLE V
Human	A	2001	2001-07-17	2001-07-18	2001-07-21	0.1 NORTH POLE IV
Human	A	2001	2001-07-17	2001-07-18	2001-07-21	0.1 NORTH POLE III
Human	A	2001	2001-07-17	2001-07-18	2001-07-21	0.1 NORTH POLE II
Human	A	2001	2001-07-17	2001-07-18	2001-07-21	0.1 NORTH POLE 1
Natural	A	2001	2001-07-25	2001-07-25	2001-07-29	0.1 WOODPECKER RIDGE
Natural	A	2001	2001-07-30	2001-07-31	2001-08-04	0.2 ROBY SPRING
Natural	A	2001	2001-07-30	2001-07-31	2001-08-05	0.1 BOLES
Human	A	2001	2001-08-01	2001-08-01	2001-08-04	0.1 HARD SCRATCH
Natural	A	2001	2001-08-08	2001-08-09	2001-08-12	0.2 BOOKER
Natural	A	2001	2001-08-08	2001-08-08	2001-08-11	0.1 SEVEN MILE
Natural	A	2001	2001-08-11	2001-08-12	2001-08-15	0.1 GLADYS NELL
Natural	A	2001	2001-08-11	2001-08-12	2001-08-17	0.1 REDBIRD
Natural	A	2001	2001-08-11	2001-08-12	2001-08-17	0.2 GETTY
Human	A	2001	2001-08-14	2001-08-15	2001-08-18	0.1 WABASH SPRING
Natural	A	2001	2001-08-16	2001-08-18	2001-08-22	0.2 ATLANTIC
Natural	A	2001	2001-08-21	2001-08-23	2001-08-26	0.2 GRIFFIS
Natural	A	2001	2001-08-22	2001-08-22	2001-08-25	0.1 NUMBER NINE
Natural	A	2001	2001-08-28	2001-08-28	2001-08-31	0.1 VIRGINIA MINE
Natural	A	2001	2001-08-28	2001-08-28	2001-08-31	0.1 GIMLET
Natural	A	2001	2001-08-28	2001-08-28	2001-08-29	0.1 LINWOOD
Natural	A	2001	2001-08-28	2001-08-28	2001-08-31	0.1 HAVEN
Natural	A	2001	2001-08-28	2001-08-28	2001-08-31	0.1 HOEDOWN
Natural	A	2001	2001-08-28	2001-08-28	2001-08-31	0.1 HAZELRODT
Natural	A	2001	2001-08-28	2001-08-28	2001-08-30	0.1 GHOST
Natural	A	2001	2001-09-01	2001-09-01	2001-09-04	0.1 LIGHTNING CREEK
Natural	A	2001	2001-09-01	2001-09-02	2001-09-06	0.2 CROWN
Human	A	2001	2001-10-28	2001-10-28	2001-11-15	0.1 WIND SONG
Human	A	2002	2002-04-27	2002-04-28	2002-05-02	0.1 STEEL BELT
Human	A	2002	2002-05-13	2002-05-14	2002-05-17	0.1 WARD RESERVOIR
Human	A	2002	2002-05-29	2002-05-29	2002-06-02	0.1 GRIFFIS CANYON
Natural	A	2002	2002-05-31	2002-06-01	2002-06-04	0.2 TWIN BUTTES
Natural	A	2002	2002-05-31	2002-06-02	2002-06-05	0.1 LONE TREE
Natural	A	2002	2002-05-31	2002-06-01	2002-06-05	0.2 GURNEY SPRING
Natural	A	2002	2002-06-01	2002-06-01	2002-06-03	0.1 COLD SPRG
Natural	A	2002	2002-06-04	2002-06-06	2002-06-09	0.1 VIRGINIA 2
Human	A	2002	2002-06-28	2002-06-29	2002-07-05	0.1 WABASH
Natural	A	2002	2002-07-05	2002-07-06	2002-07-10	0.1 NORTH POLE
Natural	A	2002	2002-07-05	2002-07-05	2002-07-09	0.2 WARREN GULCH
Natural	A	2002	2002-07-06	2002-07-06	2002-07-10	0.1 SCHENK
Human	A	2002	2002-07-15	2002-07-15	2002-07-19	0.1 HIWAY 89
Human	A	2002	2002-08-02	2002-08-02	2002-08-05	0.2 FORD
Natural	A	2002	2002-08-05	2002-08-05	2002-08-09	0.1 TEPEE
Natural	A	2002	2002-08-05	2002-08-07	2002-08-10	0.1 CUSTER MTN II
Natural	A	2002	2002-08-07	2002-08-08	2002-08-11	0.1 BUTCHER



Human	A	2002	2002-08-16	2002-08-17	2002-08-19	0.1 ROLLOVER
Natural	A	2002	2002-08-21	2002-08-21	2002-08-24	0.1 BEECHER ROCK
Natural	A	2002	2002-08-23	2002-08-24	2002-08-27	0.1 TWIN BUTTES II
Natural	A	2002	2002-08-23	2002-08-24	2002-08-27	0.1 GETTYS
Natural	A	2002	2002-08-24	2002-08-25	2002-08-30	0.1 SYLVAN PEAK
Natural	A	2002	2002-08-25	2002-08-26	2002-08-29	0.2 TWIN SISTERS
Natural	A	2002	2002-08-28	2002-08-29	2002-09-02	0.1 HAZELRODT SPRING
Human	A	2003	2003-06-10	2003-06-10	2003-06-15	0.1 CALICO
Natural	A	2003	2003-07-15	2003-07-16	2003-07-19	0.1 HIDDEN SPRINGS
Natural	A	2003	2003-07-19	2003-07-19	2003-07-22	0.1 HAZELTON
Natural	A	2003	2003-07-29	2003-07-29	2003-08-02	0.1 MOUNTAIN ROAD
Natural	A	2003	2003-08-08	2003-08-08	2003-08-12	0.1 GLEN ERIN
Natural	A	2003	2003-08-18	2003-08-19	2003-08-22	0.1 COLD SPRING
Natural	A	2003	2003-08-25	2003-08-25	2003-08-28	0.1 BALD
Natural	A	2003	2003-08-25	2003-08-25	2003-08-28	0.1 TOWER
Natural	A	2003	2003-09-08	2003-09-08	2003-09-11	0.1 ROSE QUARTZ
Natural	A	2003	2003-09-08	2003-09-08	2003-09-12	0.1 FRENCH CREEK
Natural	A	2003	2003-10-14		2003-10-14	0.1 BLACK
Human	A	2004	2004-02-20	2004-02-20	2004-02-27	0.1 EAST BEECHER
Human	A	2004	2004-05-18	2004-05-19	2004-05-22	0.1 FLYNN CREEK
Natural	A	2004	2004-05-28	2004-05-28	2004-06-01	0.2 ECHO
Natural	A	2004	2004-06-04	2004-06-05	2004-06-09	0.1 OLD MIKE
Human	A	2004	2004-06-08	2004-06-08	2004-06-11	0.1 SIDNEY PARK
Natural	A	2004	2004-06-29	2004-06-29	2004-07-02	0.1 WILLOW CREEK
Natural	A	2004	2004-07-02	2004-07-03	2004-07-06	0.1 NOVEMBER
Natural	A	2004	2004-07-02	2004-07-02	2004-07-06	0.1 WINDY
Natural	A	2004	2004-07-11	2004-07-11	2004-07-14	0.1 TEPEE
Natural	A	2004	2004-07-13	2004-07-13	2004-07-16	0.1 SCA
Natural	A	2004	2004-08-22	2004-08-22	2004-08-25	0.1 DIAMOND G
Natural	A	2004	2004-08-22	2004-08-23	2004-08-28	0.1 GLADYS NELLS MINE
Natural	A	2004	2004-08-22	2004-08-24	2004-08-28	0.1 BEAR
Natural	A	2004	2004-09-03	2004-09-04	2004-09-08	0.1 ROSE
Natural	A	2004	2004-09-03	2004-09-04	2004-09-08	0.1 QUARTZ
Human	A	2004	2004-09-03	2004-09-03	2004-09-08	0.1 DANBY
Natural	A	2004	2004-09-08	2004-09-08	2004-09-11	0.1 TEPEE AGATE
Natural	A	2004	2004-09-08	2004-09-08	2004-09-11	0.1 FORKS
Natural	A	2004	2004-09-12	2004-09-13	2004-09-15	0.1 CICERO PEAK
Human	A	2004	2004-09-15	2004-09-16	2004-09-23	0.2 WESTVIEW
Human	A	2004	2004-09-23	2004-09-24	2004-10-01	0.1 LONG DRAW
Human	A	2005	2005-05-20	2005-05-20	2005-05-23	0.1 WILLOW CREEK
Human	A	2005	2005-05-28	2005-05-28	2005-06-03	0.1 CALAMITY
Human	A	2005	2005-06-04	2005-06-05	2005-06-08	0.1 WABASH
Human	A	2005	2005-06-05	2005-06-05	2005-06-07	0.1 BISMARK
Natural	A	2005	2005-06-06	2005-06-06	2005-06-09	0.1 LUCKY STRIKE
Natural	A	2005	2005-06-07	2005-06-07	2005-06-10	0.1 NEEDLES
Natural	A	2005	2005-06-11	2005-06-11	2005-06-14	0.1 WHITE ELEPHANT
Human	A	2005	2005-06-22	2005-06-22	2005-06-26	0.1 ELLIOT
Human	A	2005	2005-07-03	2005-07-03	2005-07-05	0.1 NORTH POLE
Natural	A	2005	2005-07-07	2005-07-07	2005-07-11	0.1 HOLY LAND
Natural	A	2005	2005-07-24	2005-07-25	2005-07-28	0.1 GLADY'S NELLS
Natural	A	2005	2005-07-24	2005-07-25	2005-07-28	0.1 ROSE QUARTZ
Natural	A	2005	2005-07-25	2005-07-27	2005-07-30	0.1 BOWMAN
Natural	A	2005	2005-08-01	2005-08-02	2005-08-05	0.1 PASS CREEK
Natural	A	2005	2005-08-07	2005-08-07	2005-08-11	0.1 GRAHAM
Natural	A	2005	2005-08-07	2005-08-08	2005-08-11	0.1 HERBERT DRAW
Natural	A	2005	2005-08-07	2005-08-07	2005-08-11	0.1 YELLOW JACKET
Natural	A	2005	2005-08-07	2005-08-08	2005-08-11	0.1 FROG POND
Natural	A	2005	2005-08-07	2005-08-08	2005-08-11	0.1 FRENCH
Natural	A	2005	2005-08-07	2005-08-07	2005-08-11	0.1 TWIN SISTERS
Natural	A	2005	2005-08-07	2005-08-07	2005-08-10	0.1 MEADOW DRAW
Natural	A	2005	2005-08-09	2005-08-10	2005-08-13	0.1 REDBIRD
Natural	A	2005	2005-08-11	2005-08-12	2005-08-15	0.1 GRAHAM MOUNTAIN

Natural	A	2005	2005-08-12	2005-08-12	2005-08-16	0.1 PLENTY STAR
Natural	A	2005	2005-08-12	2005-08-13	2005-08-16	0.1 WARREN
Natural	A	2005	2005-09-25	2005-09-26	2005-09-26	0.1 NORBECK OVERLOOK
Human	A	2005	2005-10-02	2005-10-02	2005-10-04	0.1 WHITETAIL MINE
Human	A	2006	2006-03-04	2006-03-04	2006-04-13	0.1 SYLVAN LAKE RD.
Human	A	2006	2006-05-24	2006-05-24	2006-05-24	0.1 LITHOGRAPH
Human	A	2006	2006-06-05	2006-06-05	2006-06-08	0.1 BISMARCK
Natural	A	2006	2006-06-09	2006-06-09	2006-06-11	0.1 ST. LOUIS
Natural	A	2006	2006-06-22	2006-06-23	2006-06-26	0.1 ROBY
Natural	A	2006	2006-06-28	2006-06-28	2006-07-02	0.1 RED BUTTE
Natural	A	2006	2006-06-30	2006-07-01	2006-07-05	0.2 TWIN SISTERS
Natural	A	2006	2006-07-01	2006-07-02	2006-07-05	0.1 CICERO
Natural	A	2006	2006-07-01	2006-07-01	2006-07-03	0.1 RAINBOW
Natural	A	2006	2006-07-03	2006-07-04	2006-07-08	0.1 PUTNAM DAM
Natural	A	2006	2006-07-06	2006-07-07	2006-07-10	0.1 COLD SPRINGS
Natural	A	2006	2006-07-06	2006-07-07	2006-07-10	0.1 APPLE
Natural	A	2006	2006-07-07	2006-07-07	2006-07-10	0.1 FLYNN
Human	A	2006	2006-07-12	2006-07-13	2006-07-15	0.1 SIDNEY
Natural	A	2006	2006-08-08	2006-08-08	2006-08-11	0.1 WOODPECKER
Natural	A	2006	2006-09-01	2006-09-03	2006-09-06	0.1 WILLOW
Human	A	2006	2006-09-03	2006-09-04	2006-09-09	0.1 BUGTOWN
Natural	A	2006	2006-09-11	2006-09-11	2006-09-16	0.1 FRENCH CREEK
Natural	A	2007	2007-05-12	2007-05-12	2007-05-16	0.1 FLAG HILL
Human	A	2007	2007-05-16	2007-05-17	2007-05-19	0.1 BUGTOWN
Natural	A	2007	2007-05-20	2007-05-21	2007-05-24	0.1 PASS CREEK
Natural	A	2007	2007-05-25	2007-05-25	2007-05-30	0.1 WEISER
Natural	A	2007	2007-05-28	2007-05-28	2007-06-01	0.1 WEST SHIRTTAIL
Natural	A	2007	2007-06-24	2007-06-24	2007-06-28	0.2 HELL CANYON
Natural	A	2007	2007-06-24	2007-06-24	2007-06-28	0.2 YELLOW BUTTE
Human	A	2007	2007-06-29	2007-06-29	2007-07-01	0.1 ONYX
Natural	A	2007	2007-07-07	2007-07-08	2007-07-10	0.1 LAUGHING WATER
Natural	A	2007	2007-07-08	2007-07-09	2007-07-13	0.1 SPAR SPRING
Natural	A	2007	2007-07-08	2007-07-08	2007-07-11	0.1 WILLOW
Natural	A	2007	2007-07-18	2007-07-19	2007-07-21	0.1 LAKOTA LAKE
Natural	A	2007	2007-08-04	2007-08-05	2007-08-09	0.1 KING TUT
Natural	A	2007	2007-08-05	2007-08-05	2007-08-08	0.1 APPLE VALLEY
Natural	A	2007	2007-08-05	2007-08-05	2007-08-08	0.1 NORBECK
Natural	A	2007	2007-08-14	2007-08-14	2007-08-18	0.1 WABASH
Natural	A	2007	2007-08-17	2007-08-18	2007-08-21	0.1 PLUM CANYON
Natural	A	2007	2007-08-17	2007-08-17	2007-08-20	0.1 COLD BROOK
Natural	A	2007	2007-08-17	2007-08-17	2007-08-21	0.1 DOC
Natural	A	2007	2007-09-02	2007-09-02	2007-09-06	0.1 LIME KILN
Natural	A	2007	2007-09-02	2007-09-03	2007-09-05	0.1 FRENCH CREEK
Natural	A	2007	2007-09-06	2007-09-06	2007-09-09	0.1 GRAHAM
Natural	A	2008	2008-04-23	2008-04-24	2008-04-28	0.1 RANKIN
Human	A	2008	2008-05-17	2008-05-18	2008-05-21	0.1 WOODCOCK
Natural	A	2008	2008-06-30	2008-07-01	2008-07-04	0.1 COLD SPRING
Natural	A	2008	2008-07-01	2008-07-01	2008-07-04	0.1 GRAHAM
Natural	A	2008	2008-07-01	2008-07-01	2008-07-04	0.1 ANCIENT
Natural	A	2008	2008-09-01	2008-09-01	2008-09-04	0.1 PLENTY STAR
Natural	A	2008	2008-09-04	2008-09-04	2008-09-08	0.1 MIXUP
Natural	A	2008	2008-09-04	2008-09-04	2008-09-08	0.1 BEAVER CREEK
Human	A	2009	2009-05-29	2009-05-30	2009-06-03	0.1 ARGYLE
Natural	A	2009	2009-05-30	2009-05-31	2009-06-04	0.1 RED BIRD
Natural	A	2009	2009-07-24	2009-07-24	2009-07-28	0.1 WILLOW
Natural	A	2009	2009-07-26	2009-07-29	2009-07-30	0.1 ROBY
Natural	A	2009	2009-07-27	2009-07-29	2009-08-01	0.1 BEAVER VALLEY
Natural	A	2009	2009-08-04	2009-08-04	2009-08-07	0.1 ELK
Natural	A	2009	2009-08-04	2009-08-05	2009-08-09	0.1 STAGG
Natural	A	2009	2009-08-04	2009-08-04	2009-08-07	0.2 VC
Natural	A	2009	2009-08-06	2009-08-06	2009-08-09	0.1 HERBERT
Natural	A	2009	2009-08-07	2009-08-08	2009-08-10	0.1 HAZELRODT

Natural	A	2009	2009-09-10	2009-09-11	2009-09-14	0.1 TRIANGLE
Natural	A	2009	2009-09-15	2009-09-15	2009-09-18	0.1 MIX
Natural	A	2010	2010-04-18	2010-04-18	2010-04-26	0.1 TRIANGLE
Natural	A	2010	2010-06-07	2010-06-08	2010-06-11	0.1 HELICOPTER MINE
Natural	A	2010	2010-08-01	2010-08-02	2010-08-05	0.1 WILLOW
Human	A	2010	2010-08-03	2010-08-03	2010-08-05	0.1 FRENCH CREEK
Natural	A	2010	2010-08-06	2010-08-07	2010-08-10	0.1 GILLETTE CANYON
Natural	A	2010	2010-10-07	2010-10-08	2010-10-12	0.1 CORAL SPRINGS
Human	A	2010	2010-10-20	2010-10-20	2010-10-23	0.1 TRIPLE T
Natural	A	2011	2011-06-25	2011-06-26	2011-06-28	0.1 FLYNN CREEK
Natural	A	2011	2011-07-18	2011-07-18	2011-07-22	0.1 SCHENK II
Natural	A	2011	2011-07-18	2011-07-19	2011-07-22	0.1 HELL CANYON
Natural	A	2011	2011-07-19	2011-07-19	2011-07-22	0.1 270
Natural	A	2011	2011-07-19	2011-07-19	2011-07-22	0.1 458
Natural	A	2011	2011-07-19	2011-07-19	2011-07-22	0.1 JEWEL
Natural	A	2011	2011-07-20	2011-07-21	2011-07-25	0.1 TEPEE
Natural	A	2011	2011-08-01	2011-08-01	2011-08-04	0.1 NEEDLES
Natural	A	2011	2011-08-05	2011-08-05	2011-08-09	0.1 CHRISTMAS TREE
Human	A	2011	2011-08-08	2011-08-08	2011-08-11	0.1 FANNY
Natural	A	2011	2011-08-10	2011-08-10	2011-08-14	0.1 TWIN
Human	A	2011	2011-08-14	2011-08-15	2011-08-18	0.1 BUCKHORN
Natural	A	2012	2012-04-06	2012-04-06	2012-04-09	0.1 WHITE ELEPHANT
Human	A	2012	2012-04-10	2012-04-11	2012-04-12	0.01 FRENCH CREEK
Natural	A	2012	2012-05-17	2012-05-17	2012-05-25	0.1 HELL CANYON
Natural	A	2012	2012-05-17	2012-05-17	2012-05-30	0.1 SYLVAN PEAK
Natural	A	2012	2012-06-10	2012-06-11	2012-06-14	0.2 SCHENK CANYON
Natural	A	2012	2012-06-22	2012-06-22	2012-06-25	0.1 MUD SPRINGS
Natural	A	2012	2012-07-20	2012-07-20	2012-07-25	0.1 DITCH CREEK
Natural	A	2012	2012-07-21	2012-07-21	2012-07-26	0.1 COLD BROOK
Natural	A	2012	2012-07-21	2012-07-21	2012-07-25	0.1 COON CREEK
Natural	A	2012	2012-07-21	2012-07-22	2012-07-25	0.18 BULL SPRING
Natural	A	2012	2012-07-24	2012-07-25	2012-07-31	0.1 SULLIVAN
Natural	A	2012	2012-07-24	2012-07-24	2012-07-27	0.1 ROCK POINT
Natural	A	2012	2012-07-25	2012-07-25	2012-07-29	0.1 RICHARDSON
Natural	A	2012	2012-08-09	2012-08-09	2012-08-12	0.01 POTATO
Natural	A	2012	2012-08-10	2012-08-10	2012-08-14	0.1 TRIANGLE PARK
Natural	A	2012	2012-09-10	2012-09-11	2012-09-12	0.2 CHEYENNE
Human	A	2012	2012-10-22	2012-10-22	2012-10-25	0.1 JEWEL
Human	A	2013	2013-03-25	2013-03-25	2013-03-29	0.1 TIMBCO
Natural	A	2013	2013-05-28	2013-05-28	2013-06-12	0.1 COON
Natural	A	2013	2013-07-04	2013-07-04	2013-07-07	0.1 RED STAR
Human	A	2013	2013-07-04	2013-07-04	2013-07-06	0.1 PICNIC
Natural	A	2013	2013-07-05	2013-07-05	2013-07-10	0.1 RICHARDSON
Natural	A	2013	2013-07-20	2013-07-20	2013-07-23	0.1 BUCK SPRINGS
Natural	A	2013	2013-07-31	2013-08-01	2013-08-05	0.1 DEADWOOD TRAIL
Natural	A	2013	2013-08-09	2013-08-10	2013-08-13	0.1 BUCKHORN
Natural	A	2013	2013-09-04	2013-09-05	2013-09-09	0.1 SHEEP WAGON
Natural	A	2013	2013-09-04	2013-09-04	2013-09-07	0.1 TRAILHEAD
Natural	A	2013	2013-09-22	2013-09-22	2013-09-26	0.1 CAVE
Natural	A	2014	2014-05-18	2014-05-18	2014-05-22	0.1 COON
Natural	A	2014	2014-07-19	2014-07-19	2014-07-22	0.1 BUCKHORN
Natural	A	2014	2014-07-19	2014-07-19	2014-07-24	0.1 SINGLE TREE
Natural	A	2014	2014-07-22	2014-07-22	2014-07-26	0.1 SIDE CAMP
Natural	A	2014	2014-07-22	2014-07-22	2014-07-25	0.1 FANNY
Natural	A	2014	2014-09-01	2014-09-01	2014-09-05	0.1 REEDE
Human	A	2014	2014-10-25	2014-10-25	2014-10-25	0.1 LIGHTNING CREEK
Human	A	2015	2015-03-30		2015-04-28	6.6 BUCKHORN
Human	A	2015	2015-07-10		2015-07-13	0.1 CUSTER MOUNTAIN
Natural	A	2015	2015-07-27		2015-07-30	0.1 RED BUTTE
Natural	A	2015	2015-08-05		2015-08-10	0.1 TRIANGLE FLATS
Natural	A	2015	2015-08-06		2015-08-10	1.37 GRIFFIS WELL
Natural	A	2015	2015-09-24		2015-09-28	4.5 WATER DRAW

Natural	A	2015	2015-10-02		2015-10-06	2.5 MCKENNA
Natural	A	2015	2015-10-02		2015-10-06	0.01 MUDDY
Natural	A	2015	2015-10-28		2015-11-02	0.1 BEAVER
Natural	A	2016	2016-06-10	2016-06-15	2016-06-15	0.12 RICHARDSON
Natural	A	2016	2016-06-27	2016-06-27	2016-07-03	0.1 BUCKHORN
Natural	A	2016	2016-06-29	2016-06-29	2016-07-02	0.1 NORTH ANTELOPE
Natural	A	2016	2016-07-05	2016-07-06	2016-07-10	0.1 CALLAN
Natural	A	2016	2016-07-05	2016-07-06	2016-07-10	0.1 WHITE ELEPHANT
Natural	A	2016	2016-07-07	2016-07-07	2016-07-10	0.1 TEPEE
Natural	A	2016	2016-07-17	2016-07-18	2016-07-21	0.1 BEAR
Natural	A	2016	2016-07-25	2016-07-25	2016-07-26	0.1 BOLAND
Natural	A	2016	2016-08-03	2016-08-03	2016-08-06	0.1 BOWMAN
Natural	A	2016	2016-08-11	2016-08-11	2016-08-14	0.1 POTATO GULCH
Natural	A	2016	2016-08-14	2016-08-14	2016-08-17	0.17 WOODCOCK
Natural	A	2016	2016-09-03	2016-09-12	2016-09-12	0.1 POWER POLE
Natural	A	2016	2016-09-04	2016-09-10	2016-09-10	0.1 WINDMILL
Natural	A	2016	2016-09-07	2016-09-09	2016-09-11	0.25 DEER
Human	B	1980	1980-03-13	1980-03-13		5 KIRK
Human	B	1980	1980-04-30	1980-05-01		1 4TH OF JULY DRAW
Human	B	1980	1980-05-04	1980-05-04		1 DOMAGATA
Human	B	1980	1980-05-08	1980-05-08		1 PRINGLE
Natural	B	1980	1980-05-27	1980-05-28		9 JASPER RESEVOIR
Natural	B	1980	1980-05-31	1980-06-03		1 RATTLESNAKE
Natural	B	1980	1980-06-01	1980-06-03		1 LITHOGRAPH
Natural	B	1980	1980-06-14	1980-06-17		1 MANN ROAD
Natural	B	1980	1980-06-14	1980-06-17		2 FAWN
Natural	B	1980	1980-06-15	1980-06-18		1 BH
Natural	B	1980	1980-06-20	1980-06-21		2 SECTION LINE
Natural	B	1980	1980-07-03	1980-07-03		1 LEMMING
Natural	B	1980	1980-07-05	1980-07-05		3 DEAD HORSE SPRING
Natural	B	1980	1980-07-05	1980-07-05		1 ANTELOPE
Natural	B	1980	1980-07-05	1980-07-06		1 SPOKANE
Natural	B	1980	1980-07-14	1980-07-14		1 STUDY PLOT
Natural	B	1980	1980-07-17	1980-07-17		1 WOODWARD
Natural	B	1980	1980-07-18	1980-07-19		2 BENNETT
Natural	B	1980	1980-07-18	1980-07-19		1 TEPEE WEST
Natural	B	1980	1980-07-18	1980-07-19		1 RESORT
Natural	B	1980	1980-07-24	1980-07-24		1 FREEZE OUT
Natural	B	1980	1980-07-26	1980-07-29		4 RIFLE RANGE
Human	B	1980	1980-08-08	1980-08-08		1 GOULD
Natural	B	1980	1980-08-10	1980-08-11		3 LITTLE FLATS
Human	B	1981	1981-02-23	1981-02-23		1 KIESEL
Human	B	1981	1981-03-16	1981-03-16		2 FAIRYLAND
Human	B	1981	1981-03-21	1981-03-25		1 FORT
Human	B	1981	1981-06-02	1981-06-02	1981-06-02	1 OLD BOUNDR
Natural	B	1981	1981-06-03	1981-06-06		1 SATURDAY NIGHT
Natural	B	1981	1981-07-07	1981-07-08		1 ANTELOPE RIDGE
Natural	B	1981	1981-07-07	1981-07-08		1 DEAD HORSE
Natural	B	1981	1981-07-08	1981-07-08	1981-07-08	1 LITHOGRAPH
Natural	B	1981	1981-07-14	1981-07-16	1981-07-17	2 WEST SIDE
Natural	B	1981	1981-07-19	1981-07-19		1 FREELAND
Natural	B	1981	1981-07-21	1981-07-21		1 PEANUT BUTTER
Human	B	1981	1981-08-19	1981-08-20		1 SURVEY
Natural	B	1982	1982-05-04	1982-05-05		5 ARGYLE #3
Human	B	1982	1982-05-14	1982-05-14		1 CALAMITY PEAK
Human	B	1982	1982-07-15	1982-07-16		2 WILDCAT
Natural	B	1982	1982-07-15	1982-07-16		4 LIGHTNING CREEK
Natural	B	1982	1982-07-16	1982-07-16		6 GREENTREE
Human	B	1982	1982-07-16	1982-07-16		1 TEPEE SPRING
Human	B	1982	1982-07-19	1982-07-19		1 JEWEL CAVE
Natural	B	1982	1982-07-22	1982-07-22		1 PASS CREEK
Natural	B	1982	1982-07-22	1982-07-23		1 GILLETTE RIDGE

Natural	B	1982	1982-08-16	1982-08-16		3 SUTHERLAND
Natural	B	1982	1982-08-23	1982-08-26		1 INDIAN SPRINGS
Natural	B	1982	1982-08-28	1982-08-30		1 COLD SPRINGS
Natural	B	1982	1982-08-30	1982-08-30	2000-08-30	1 WEST BOUND
Human	B	1983	1983-01-06	1983-01-06		3 SIGN
Human	B	1983	1983-02-25	1983-02-25		2 PEPIN
Human	B	1983	1983-04-25	1983-04-25		1 WHITE
Human	B	1983	1983-05-05	1983-05-05		1 STEPHAN #1
Natural	B	1983	1983-05-21	1983-05-23		1 RIFLE PIT
Natural	B	1983	1983-05-27	1983-05-27		1 LINDE
Human	B	1983	1983-05-28	1983-05-28		6 BULL #2
Human	B	1983	1983-05-28	1983-05-28		2 BULL #1
Natural	B	1983	1983-06-11	1983-06-13		3 A
Natural	B	1983	1983-06-19	1983-06-20		4 DAD'S
Natural	B	1983	1983-06-20	1983-06-21		2 WATER DRAW
Natural	B	1983	1983-07-03	1983-07-05		1 WILDCAT
Natural	B	1983	1983-07-08	1983-07-09		2 HARD HAT
Natural	B	1983	1983-07-20	1983-07-21		2 GREENWOOD
Natural	B	1983	1983-07-20	1983-07-21		1 MICHAUD
Natural	B	1983	1983-07-20	1983-07-21		1 BED SPRINGS
Natural	B	1983	1983-07-27	1983-07-28		1 ABOUT TIME
Natural	B	1983	1983-07-29	1983-08-01		1 ELK
Natural	B	1983	1983-08-17	1983-08-18		3 BROWN
Natural	B	1983	1983-08-22	1983-08-22	1983-08-23	1 RANKIN
Natural	B	1983	1983-08-30	1983-09-01		4 SURE BET
Human	B	1983	1983-09-25	1983-09-25		1 WINDMILL #1
Human	B	1984	1984-04-15	1984-04-15		3 GAUSMAN
Human	B	1984	1984-04-16	1984-04-16		4 MILLS
Natural	B	1984	1984-05-22	1984-05-23		3 DRIZZLE
Natural	B	1984	1984-05-23	1984-05-23		1 GREANY
Natural	B	1984	1984-05-23	1984-05-23		1 KIRK
Natural	B	1984	1984-05-23	1984-05-24		6 APPLE
Natural	B	1984	1984-05-23	1984-05-24	1984-05-28	1 CORRAL
Natural	B	1984	1984-07-03	1984-07-03	1984-07-05	1 LOST SHEEP
Natural	B	1984	1984-07-03	1984-07-03	1984-07-05	1 SECTION 13
Natural	B	1984	1984-07-14	1984-07-16		1 GREEN TRAIL
Natural	B	1984	1984-07-21	1984-07-22		2 BLOODY NOSE
Human	B	1984	1984-09-02	1984-09-02		3 SHEEPHERDER
Human	B	1984	1984-09-02	1984-09-03		2 LABOR
Natural	B	1984	1984-09-06	1984-09-07		1 COWBOY
Human	B	1984	1984-09-09	1984-09-09		1 HUNTER
Natural	B	1984	1984-09-21	1984-09-21		1 COLD BROOK
Human	B	1984	1984-11-24	1984-11-24		1 PIERCE
Natural	B	1985	1985-04-19	1985-04-21		2 PLEASANT
Natural	B	1985	1985-05-10	1985-05-10		2 CAPTINS
Natural	B	1985	1985-05-25	1985-05-26		1 PARKER
Natural	B	1985	1985-05-25	1985-05-29		4 VIRGINIA
Natural	B	1985	1985-05-25	1985-05-28		3 BUSTED
Natural	B	1985	1985-05-26	1985-05-27	1985-05-30	1.7 REAVES #1
Natural	B	1985	1985-06-24	1985-06-25		4 HAZARD
Natural	B	1985	1985-06-24	1985-06-24		1 ANTELOPE RIDGE
Natural	B	1985	1985-06-24	1985-06-24		1 GRIZZLY
Natural	B	1985	1985-07-01	1985-07-03		3 COW
Natural	B	1985	1985-07-07	1985-07-08		1 BRUNNER
Natural	B	1985	1985-07-11	1985-07-12		1 WOODCOCK
Natural	B	1985	1985-07-15	1985-07-16		1 DECOY
Natural	B	1985	1985-07-15	1985-07-16		1 BLACKTAIL WELL
Natural	B	1985	1985-07-15	1985-07-17		2 MARKER
Natural	B	1985	1985-07-16	1985-07-17		6 TOM'S
Natural	B	1985	1985-07-16	1985-07-17		1 B & B
Natural	B	1985	1985-07-16	1985-07-18		1 TANKER
Natural	B	1985	1985-07-17	1985-07-17	1985-07-17	6 HIGHLAND

Natural	B	1985	1985-08-11	1985-08-12		2 DORAN
Natural	B	1985	1985-08-11	1985-08-11	1985-08-14	0.7 BISON FLAT
Human	B	1985	1985-08-12	1985-08-12		2 HIGH CENTER
Natural	B	1985	1985-08-19	1985-08-20		1 SHEP
Natural	B	1985	1985-08-26	1985-08-27		2 RINELLA
Natural	B	1985	1985-08-26	1985-08-27		1 WATER GAP
Natural	B	1985	1985-09-04	1985-09-05		1 POTLUCK
Natural	B	1986	1986-03-01	1986-03-01	1986-03-10	2 FIRST
Human	B	1986	1986-06-19	1986-06-20	1986-06-24	0.5 BETSY
Human	B	1986	1986-07-04	1986-07-07	1986-07-08	0.5 POPLAR
Natural	B	1986	1986-07-30	1986-07-31	1986-08-05	0.7 BRAKE
Natural	B	1986	1986-07-31	1986-07-31	1986-08-02	0.5 PADLOCK
Natural	B	1986	1986-08-11	1986-08-12	1986-08-19	1 WAHA
Natural	B	1986	1986-08-12	1986-08-13	1986-08-21	3 STAGELINE
Natural	B	1986	1986-08-23	1986-08-24	1986-08-31	0.3 FINGER
Natural	B	1986	1986-09-01	1986-09-04	1986-09-05	0.5 ROCK
Human	B	1987	1987-01-26	1987-01-26	1987-01-26	1 RED SHIRT
Human	B	1987	1987-04-08	1987-04-08	1987-04-10	5 LARIMER
Natural	B	1987	1987-05-01	1987-05-02	1987-05-07	3 VFD
Human	B	1987	1987-06-06	1987-06-07	1987-06-11	0.5 VW
Natural	B	1987	1987-06-12	1987-06-13	1987-06-19	1 CONVOY
Human	B	1987	1987-06-12	1987-06-13	1987-06-16	0.5 FREELAND
Natural	B	1987	1987-07-07	1987-07-09	1987-07-14	0.3 LOPE
Natural	B	1987	1987-07-27	1987-07-29	1987-08-03	1 DREAM
Natural	B	1987	1987-07-31	1987-07-31	1987-08-07	0.8 WYLIE
Natural	B	1987	1987-07-31	1987-07-31	1987-08-02	2 GOBBLER
Natural	B	1987	1987-08-01	1987-08-01	1987-08-04	1 FORT
Natural	B	1987	1987-08-12	1987-08-13	1987-08-22	0.5 TANNER
Human	B	1987	1987-08-13	1987-08-15	1987-08-19	1.8 CLIFF
Natural	B	1987	1987-08-13	1987-08-15	1987-08-19	0.6 SNUFFY
Natural	B	1987	1987-09-02	1987-09-03	1987-09-07	0.3 PATCH
Natural	B	1987	1987-09-16	1987-09-16	1987-09-18	0.5 FOX
Natural	B	1987	1987-10-07	1987-10-07	1987-10-14	6 BRUSHHOG
Natural	B	1987	1987-10-28	1987-10-28	1987-11-04	3 ARABIAN
Natural	B	1988	1988-03-20	1988-03-20	1988-03-24	1.5 HARVEY
Natural	B	1988	1988-03-21	1988-03-21	1988-03-25	0.3 HAUF
Human	B	1988	1988-04-08	1988-04-08	1988-04-13	1 TYE
Natural	B	1988	1988-04-30	1988-04-30	1988-05-02	0.4 FLOCKE
Natural	B	1988	1988-05-08	1988-05-10	1988-05-13	5 IRON
Natural	B	1988	1988-05-17	1988-05-17	1988-05-18	1.1 FLATS
Human	B	1988	1988-06-11	1988-06-12	1988-06-13	1 ROOKIE
Human	B	1988	1988-06-12	1988-06-12	1988-06-15	0.3 PRACTICE
Natural	B	1988	1988-06-13	1988-06-16	1988-06-21	1.5 PORKER
Human	B	1988	1988-06-21	1988-06-21	1988-06-21	2.5
Human	B	1988	1988-06-21	1988-06-21	1988-06-22	1
Human	B	1988	1988-06-22	1988-06-26	1988-06-29	1.5 SIZZLEAN
Natural	B	1988	1988-06-22	1988-06-25	1988-07-01	0.3 SOO-EE
Natural	B	1988	1988-06-26	1988-06-28	1988-06-29	0.5 HOUND DOG
Human	B	1988	1988-07-03	1988-07-04	1988-07-07	0.3 PIGSKIN
Natural	B	1988	1988-07-04	1988-07-05	1988-07-06	0.8 U-JOINT
Human	B	1988	1988-07-04	1988-07-07	1988-07-11	1.2 BACOBITS
Human	B	1988	1988-07-07	1988-07-08	1988-07-09	1.5 SQUEAL
Human	B	1988	1988-07-09	1988-07-09	1988-07-11	0.3 GILT
Human	B	1988	1988-07-21	1988-07-22	1988-07-27	0.5 PIGTAIL
Natural	B	1988	1988-07-22	1988-07-23	1988-07-25	2 DWEEB
Natural	B	1988	1988-09-27	1988-09-29	1988-10-04	0.7 RAINBOW
Human	B	1988	1988-10-12	1988-10-12	1988-10-26	7 THOMPCKINS
Natural	B	1989	1989-03-27	1989-03-27	1989-03-30	0.5 ROVER
Human	B	1989	1989-05-27	1989-05-28	1989-06-02	3 DOBERMAN
Natural	B	1989	1989-06-16	1989-06-16	1989-06-21	0.8 REX
Human	B	1989	1989-06-16	1989-06-17	1989-06-23	0.8 GREYHOUND
Human	B	1989	1989-06-16	1989-06-18	1989-06-22	1 LEMMING

Natural	B	1989	1989-06-19	1989-06-19	1989-06-25	1.5 WINSTON
Natural	B	1989	1989-07-01	1989-07-01	1989-07-04	0.6 WALDO
Human	B	1989	1989-07-12	1989-07-16	1989-07-20	0.5 NO WAY
Natural	B	1989	1989-07-27	1989-07-28	1989-08-01	2.5 DOGG
Natural	B	1989	1989-08-04	1989-08-05	1989-08-09	0.7 DURK
Natural	B	1989	1989-08-19	1989-08-20	1989-08-24	0.7 TANNA
Natural	B	1989	1989-09-03	1989-09-04	1989-09-11	0.5 MACK
Human	B	1989	1989-09-06	1989-09-07	1989-09-13	2.5 JAKE
Natural	B	1989	1989-09-06	1989-09-07	1989-09-13	0.6 NICKEL
Natural	B	1989	1989-09-06	1989-09-07	1989-09-13	0.7 DAISY
Natural	B	1990	1990-02-20	1990-03-01	1990-03-07	0.7 PETTIT
Human	B	1990	1990-04-20	1990-04-21	1990-05-02	5 MCGRUFF
Natural	B	1990	1990-07-03	1990-07-03	1990-07-08	0.5 LOUIE
Natural	B	1990	1990-08-04	1990-08-05	1990-08-08	0.5 ROCK SAW
Natural	B	1990	1990-09-04	1990-09-04	1990-09-10	0.3 FOGHORN
Natural	B	1990	1990-10-28	1990-10-28	1990-11-05	8 STAR
Natural	B	1991	1991-03-07	1991-03-07	1991-03-10	0.3 WHEEL
Natural	B	1991	1991-05-06	1991-05-07	1991-05-10	0.3 BLEVE
Natural	B	1991	1991-07-15	1991-07-16	1991-07-20	2 BOOMS CANYON
Natural	B	1991	1991-07-16	1991-07-18	1991-07-29	2 HARNEY VIEW
Natural	B	1991	1991-07-16	1991-07-16	1991-07-17	1.5 BLINDBINKY
Natural	B	1991	1991-07-29	1991-07-30	1991-08-01	0.3 UNO
Natural	B	1991	1991-08-01	1991-08-03	1991-08-09	2 BLOWOUT
Human	B	1991	1991-08-01	1991-08-02	1991-08-09	0.7 JEWEL
Natural	B	1991	1991-08-01	1991-08-02	1991-08-04	2 BUCK
Natural	B	1991	1991-08-09	1991-08-10	1991-08-11	4 DREW ROAD
Human	B	1991	1991-08-30	1991-08-30	1991-09-08	8 HELL CANYON
Human	B	1992	1992-02-13	1992-02-13	1992-02-13	3 REDSHIRT
Natural	B	1992	1992-05-08	1992-05-08	1992-05-12	1.6 BECK MINE
Natural	B	1992	1992-07-31	1992-08-02	1992-08-06	1 HELLS ROAR
Natural	B	1992	1992-09-04	1992-09-08	1992-09-12	0.5 EIGHTEEN MILE
Natural	B	1992	1992-09-04	1992-09-05	1992-09-09	0.5 LOWER LIGHTNING
Natural	B	1992	1992-09-15	1992-09-15	1992-09-17	0.3 ANTELOPE
Natural	B	1993	1993-05-29	1993-05-30	1993-06-02	8 FREE MAN
Human	B	1993	1993-06-28	1993-06-29	1993-07-06	0.3 LONE
Human	B	1993	1993-06-30	1993-07-01	1993-07-06	1.2 VENTLING RESERVOIR
Natural	B	1994	1994-04-17	1994-04-17	1994-04-21	5.1 FRENCH CREEK
Natural	B	1994	1994-04-20	1994-04-22	1994-04-29	2 BEECHER ROCK
Natural	B	1994	1994-05-17	1994-05-17	1994-05-22	0.5 BEECHER JR.
Human	B	1994	1994-05-24	1994-05-24	1994-05-30	8 MARTIN DRAW
Natural	B	1994	1994-06-03	1994-06-04	1994-06-09	6 GUZZLER
Human	B	1994	1994-06-04	1994-06-05	1994-06-09	0.5 WEST VIRGINIA
Natural	B	1994	1994-07-01	1994-07-01	1994-07-05	1 OLD MIKE MINE
Natural	B	1994	1994-07-01	1994-07-01	1994-07-05	0.5 NEEDLES
Natural	B	1994	1994-07-05	1994-07-06	1994-07-10	0.5 THORNBURG
Human	B	1994	1994-07-10	1994-07-11	1994-07-14	0.5 PAHA SAPA
Natural	B	1994	1994-08-04	1994-08-05	1994-08-09	0.5 LONG DRAW #1
Human	B	1994	1994-08-10	1994-08-10	1994-08-16	0.5 RICHARDSON
Human	B	1994	1994-09-12	1994-09-13	1994-09-19	1.5 UPPER HAND
Natural	B	1994	1994-09-13	1994-09-14	1994-09-19	1.5 RICHARDSON #2
Human	B	1994	1994-09-13	1994-09-14	1994-09-19	2 CHAUNCY
Natural	B	1994	1994-09-13	1994-09-14	1994-09-18	1 BLOW OUT
Natural	B	1995	1995-04-27	1995-04-27	1995-05-01	0.5 BIG FOOT
Natural	B	1995	1995-07-24	1995-07-24	1995-07-27	1 SUTHERLAND SPRING
Natural	B	1995	1995-08-05	1995-08-06	1995-08-11	0.5 LAGOON
Natural	B	1995	1995-08-22	1995-08-23	1995-08-26	4 LEMMING
Natural	B	1995	1995-08-24	1995-08-24	1995-08-27	2 ARGYLE
Natural	B	1995	1995-08-25	1995-08-26	1995-08-31	0.7 PLUM
Natural	B	1995	1995-08-25	1995-08-27	1995-08-31	0.8 HELL CANYON
Natural	B	1995	1995-08-26	1995-08-27	1995-09-01	0.5 BEAVER CREEK #1
Human	B	1995	1995-10-19	1995-10-19	1995-10-26	3 HAZELRODT
Natural	B	1996	1996-07-03	1996-07-04	1996-07-08	1.5 ROCKY ROAD

Natural	B	1996	1996-07-04	1996-07-05	1996-07-08	2 SCHENCK CANYON
Natural	B	1996	1996-07-13	1996-07-15	1996-07-18	0.7 RED
Natural	B	1996	1996-07-19	1996-07-20	1996-07-27	2 WILDCAT
Natural	B	1996	1996-08-01	1996-08-02	1996-08-06	0.5 HAY
Natural	B	1996	1996-08-02	1996-08-03	1996-08-07	2 HAY DRAW
Natural	B	1996	1996-08-03	1996-08-04	1996-08-07	0.5 LYMAN
Natural	B	1996	1996-08-09	1996-08-10	1996-08-13	0.5 MAYO
Human	B	1996	1996-09-01	1996-09-01	1996-09-01	4.5 KAISER 2
Natural	B	1996	1996-09-04	1996-09-05	1996-09-10	8 PILGER II
Natural	B	1996	1996-09-04	1996-09-04	1996-09-07	0.3 NORTH MCKENNA
Human	B	1997	1997-04-14	1997-04-14	1997-04-15	1 FIRECRACKR
Human	B	1997	1997-04-25	1997-04-25	1997-04-28	0.5 CALAMITY PEAK
Natural	B	1997	1997-06-27	1997-06-28	1997-07-02	2 MIDDLE FORK
Natural	B	1997	1997-07-07	1997-07-09	1997-07-13	2 WATER DRAW
Natural	B	1997	1997-08-24	1997-08-26	1997-08-31	0.3 SHIRTTAIL
Natural	B	1997	1997-08-27	1997-08-28	1997-09-10	2.5 RICHARDSON
Natural	B	1997	1997-09-03	1997-09-04	1997-09-07	1.5 TWIN BUTTES
Natural	B	1997	1997-09-11	1997-09-12	1997-09-17	1.5 RAND CANYON
Natural	B	1998	1998-05-19	1998-05-19	1998-05-22	1 BEECHER
Natural	B	1998	1998-07-19	1998-07-20	1998-07-26	0.3 BUCKHORN
Natural	B	1998	1998-08-09	1998-08-09	1998-08-13	0.3 FLAG
Natural	B	1998	1998-08-19	1998-08-19	1998-08-23	2 RICHARDSON
Human	B	1999	1999-03-16	1999-03-17	1999-03-21	5 DUGOUT
Natural	B	1999	1999-06-25	1999-06-26	1999-06-27	1.5 RED
Human	B	1999	1999-10-20	1999-10-20	1999-10-26	1.5 AIRPORT
Human	B	1999	1999-10-23	1999-10-24	1999-10-29	1.5 WOODROW
Human	B	1999	1999-11-12	1999-11-12	1999-11-22	2 ROADSIDE
Human	B	1999	1999-12-06	1999-12-06	1999-12-09	0.3 BOWMAN DRAW
Human	B	2000	2000-03-10	2000-03-14	2000-03-20	2.5 ATLANTIC
Human	B	2000	2000-03-21	2000-03-27	2000-03-30	0.3 EVERGREEN
Human	B	2000	2000-04-23	2000-04-23	2000-04-27	2 SKINNER I
Natural	B	2000	2000-05-10	2000-05-15	2000-05-21	1.5 BARREL
Human	B	2000	2000-05-18	2000-05-18	2000-05-22	4 LAYTON #1
Natural	B	2000	2000-06-09	2000-06-09	2000-06-17	0.7 BOWMAN
Natural	B	2000	2000-06-11	2000-06-11	2000-06-17	3 HAWKWRIGHT
Natural	B	2000	2000-06-12	2000-06-13	2000-06-16	2 PUTNAM
Natural	B	2000	2000-06-24	2000-06-24	2000-06-29	0.5 BOWMAN II
Natural	B	2000	2000-07-02	2000-07-03	2000-07-05	1 BENNETT CANYON
Natural	B	2000	2000-07-03	2000-07-04	2000-07-07	3 PASS
Natural	B	2000	2000-07-03	2000-07-04	2000-07-09	2 ANTELOPE
Natural	B	2000	2000-07-10	2000-07-12	2000-07-15	1 HOLEY
Natural	B	2000	2000-07-18	2000-07-19	2000-07-25	1 TEPEE CANYON
Natural	B	2000	2000-07-18	2000-07-19	2000-07-23	0.5 WELL
Natural	B	2000	2000-07-27	2000-07-27	2000-07-31	0.5 LAYTON II
Natural	B	2000	2000-07-31	2000-08-02	2000-08-05	4 PILGER
Natural	B	2000	2000-07-31	2000-08-02	2000-08-05	8 RED POINT
Natural	B	2000	2000-08-02	2000-08-03	2000-08-10	0.5 18 MILE WELL
Natural	B	2000	2000-08-02	2000-08-04	2000-08-12	4 MARTIN
Natural	B	2000	2000-08-04	2000-08-05	2000-08-09	2 HARRY MILLS
Natural	B	2000	2000-08-05	2000-08-06	2000-08-11	1 MARTIN II
Natural	B	2000	2000-08-05	2000-08-06	2000-08-11	3 GURNEY SPRING
Natural	B	2000	2000-08-05	2000-08-06	2000-09-19	4 REEVES
Human	B	2000	2000-08-09	2000-08-09	2000-08-14	4 ROGERS SHACK
Natural	B	2000	2000-08-14	2000-08-14	2000-08-17	0.5 COUNTY LINE
Natural	B	2000	2000-09-17	2000-09-18	2000-09-21	1.5 HORSE CRAMP
Natural	B	2000	2000-10-01	2000-10-02	2000-10-06	0.5 TURKEY
Human	B	2001	2001-04-23	2001-04-24	2001-04-28	3.7 BOWMAN
Human	B	2001	2001-04-25	2001-04-25	2001-04-30	6 HAND SPRING
Human	B	2001	2001-05-08	2001-05-08	2001-05-13	7 JOE GULCH
Human	B	2001	2001-05-24	2001-05-25	2001-05-29	1 WEAVER ROAD
Natural	B	2001	2001-06-17	2001-06-18	2001-06-22	8 HERBERT DRAW
Natural	B	2001	2001-06-17	2001-06-17	2001-06-21	0.5 GRIZZLY CREEK



Natural	B	2001	2001-06-24	2001-06-26	2001-06-30	3 BOWMAN II
Natural	B	2001	2001-06-25	2001-06-26	2001-06-29	0.5 UPPER HAND SPRING II
Natural	B	2001	2001-07-02	2001-07-03	2001-07-06	0.5 JUMP OFF
Natural	B	2001	2001-07-08	2001-07-08	2001-07-11	5.8 WINDY PT
Natural	B	2001	2001-07-10	2001-07-13	2001-07-17	0.5 PASS CREEK
Natural	B	2001	2001-08-08	2001-08-09	2001-08-15	3 WARD RESERVOIR
Natural	B	2001	2001-08-22	2001-08-22	2001-08-23	4.7 LAST DANCE
Human	B	2002	2002-01-13	2002-01-13	2002-01-17	1.5 DEER MEADOW
Human	B	2002	2002-01-15	2002-01-20	2002-01-25	0.5 HAZELRODT
Human	B	2002	2002-04-07	2002-04-07	2002-04-11	4 CARROLL CREEK
Natural	B	2002	2002-05-31	2002-06-01	2002-06-01	0.3 LUCKY STRIKE
Natural	B	2002	2002-05-31	2002-06-02	2002-06-07	6 HOPKINS FLATS
Natural	B	2002	2002-05-31	2002-06-02	2002-06-05	0.5 VIRGINIA MINE
Natural	B	2002	2002-05-31	2002-06-02	2002-06-05	3 APPLE VALLEY
Natural	B	2002	2002-05-31	2002-06-01	2002-06-04	0.5 MAYO
Natural	B	2002	2002-06-01	2002-06-01	2002-06-04	0.5 LONG DRAW
Natural	B	2002	2002-06-01	2002-06-01	2002-06-03	2 SECTION9
Natural	B	2002	2002-06-03	2002-06-05	2002-06-08	0.3 BUCK SPRINGS
Natural	B	2002	2002-06-08	2002-06-10	2002-06-16	2 DUGOUT
Natural	B	2002	2002-06-25	2002-06-25	2002-06-29	1 BUCKHORN
Natural	B	2002	2002-07-05	2002-07-06	2002-07-10	1 WITCH SPRING
Natural	B	2002	2002-07-05	2002-07-09	2002-07-13	1 REED MINE
Natural	B	2002	2002-07-05	2002-07-06	2002-07-11	0.5 SCHOOL HOUSE
Natural	B	2002	2002-07-05	2002-07-07	2002-07-10	0.5 LIGHTNING CREEK
Natural	B	2002	2002-07-05	2002-07-06	2002-07-11	0.3 FOURMILE
Natural	B	2002	2002-07-06	2002-07-06	2002-07-09	0.3 7 MILE
Natural	B	2002	2002-07-26	2002-07-27	2002-07-31	1.5 PLUM CANYON
Natural	B	2002	2002-08-09	2002-08-09	2002-08-12	0.5 BOLES
Natural	B	2002	2002-08-22	2002-08-22	2002-08-25	0.5 L DANCE II
Natural	B	2002	2002-08-24	2002-08-24	2002-08-27	0.5 RIFLE PIT
Natural	B	2002	2002-08-28	2002-08-30	2002-09-03	0.5 CICERO
Natural	B	2002	2002-08-28	2002-08-29	2002-09-01	0.3 FLYNN CREEK
Natural	B	2002	2002-08-28	2002-08-31	2002-09-07	0.8 CALAMITY PEAK
Natural	B	2002	2002-09-07	2002-09-08	2002-09-12	6 HAVEN
Human	B	2003	2003-03-04	2003-03-14	2003-03-21	0.5 LINWOOD
Natural	B	2003	2003-03-17	2003-03-22	2003-03-25	3 CARROLL CREEK
Natural	B	2003	2003-07-08	2003-07-08	2003-07-11	0.3 PLENTY STAR
Natural	B	2003	2003-07-16	2003-07-17	2003-07-20	4 HAWKWRIGHT
Natural	B	2003	2003-08-08	2003-08-08	2003-08-12	0.3 ATLANTIC HILL
Natural	B	2003	2003-08-21	2003-08-22	2003-08-27	2 BUCK SPRINGS
Natural	B	2003	2003-08-25	2003-08-26	2003-08-29	0.3 SHIRTTAIL
Natural	B	2003	2003-08-25	2003-08-26	2003-08-29	0.3 LONG DRAW
Natural	B	2003	2003-08-27	2003-08-28	2003-08-31	2 GURNEY
Natural	B	2003	2003-09-21	2003-09-23	2003-09-29	0.7 NIHART
Natural	B	2004	2004-06-29	2004-06-30	2004-07-07	0.75 NIHART
Natural	B	2004	2004-07-03	2004-07-04	2004-07-07	0.4 BEAVER CREEK
Natural	B	2004	2004-07-03	2004-07-04	2004-07-07	0.25 TENDERFOOT
Natural	B	2004	2004-07-13	2004-07-14	2004-07-18	0.5 WHITE ELEPHANT
Natural	B	2004	2004-07-21	2004-07-21	2004-07-28	0.25 NORTH FLYNN
Natural	B	2004	2004-07-30	2004-07-30	2004-08-06	3.2 DARK CANYON
Natural	B	2004	2004-07-30	2004-07-30	2004-08-01	2 WEST FRENCH CREEK
Natural	B	2004	2004-08-07	2004-08-08	2004-08-15	2.5 CARROLL CREEK SPRING
Natural	B	2004	2004-08-08	2004-08-08	2004-08-11	0.5 PASS CREEK
Natural	B	2004	2004-08-22	2004-08-23	2004-08-30	0.3 HOPKINS FLATS
Natural	B	2004	2004-08-22	2004-08-23	2004-08-27	0.5 CALLAN SPRING
Natural	B	2004	2004-08-22	2004-08-23	2004-08-27	0.5 WARD
Natural	B	2004	2004-08-22	2004-08-23	2004-08-28	0.5 LOST SPRING
Natural	B	2004	2004-08-22	2004-08-24	2004-08-27	0.5 GLEN ERIN
Natural	B	2004	2004-08-23	2004-08-23	2004-08-29	5 SOUTH SHIRTTAIL
Natural	B	2004	2004-09-12	2004-09-13	2004-09-17	2 WOODPECKER
Natural	B	2005	2005-06-01	2005-06-02	2005-06-06	0.25 IRON MOUNTAIN
Natural	B	2005	2005-06-23	2005-06-24	2005-06-28	0.75 LIMESTONE

Natural	B	2005	2005-06-24	2005-06-26	2005-06-30	1.4 NINE MILE
Natural	B	2005	2005-07-23	2005-07-24	2005-07-29	1 LIME KILN
Natural	B	2005	2005-07-24	2005-07-25	2005-07-29	2 HOPKINS
Natural	B	2005	2005-08-07	2005-08-07	2005-08-11	0.25 FLYNN CREEK DIVIDE
Natural	B	2005	2005-08-07	2005-08-08	2005-08-13	5 FLYNN CREEK
Natural	B	2005	2005-08-07	2005-08-08	2005-08-12	5.6 RED SHIRT CREEK
Natural	B	2005	2005-08-07	2005-08-08	2005-08-12	0.5 BULL
Natural	B	2005	2005-08-25	2005-08-27	2005-08-30	0.25 EAST VIRGINIA
Natural	B	2005	2005-08-26	2005-08-28	2005-09-03	1.1 MCCLURE DAM
Natural	B	2006	2006-06-30	2006-07-01	2006-07-05	3.5 RICHARDSON WELL
Natural	B	2006	2006-07-07	2006-07-08	2006-07-12	0.25 WABASH
Natural	B	2006	2006-07-20	2006-07-21	2006-07-24	0.5 SPAR SPRING
Human	B	2006	2006-08-10	2006-08-10	2006-08-14	0.25 NEWELL
Natural	B	2006	2006-08-17	2006-08-18	2006-08-21	0.5 BULL FLATS
Natural	B	2006	2006-08-17	2006-08-19	2006-08-23	0.25 VANDERLEHR
Natural	B	2007	2007-05-12	2007-05-13	2007-05-17	1 LAYTON
Natural	B	2007	2007-06-21	2007-06-21	2007-06-23	2.18 RITTBERGER
Natural	B	2007	2007-06-24	2007-06-24	2007-06-27	0.33 LITHOGRAPH
Natural	B	2007	2007-06-24	2007-06-24	2007-06-29	0.25 WILLOW CREEK
Natural	B	2007	2007-06-24	2007-06-25	2007-06-30	0.25 ATLANTIC HILL
Natural	B	2007	2007-06-24	2007-06-24	2007-06-28	0.75 TENDERFOOT
Natural	B	2007	2007-07-07	2007-07-08	2007-07-11	0.75 CALLAN SPRING
Natural	B	2007	2007-07-08	2007-07-09	2007-07-14	0.75 WIND SONG
Natural	B	2007	2007-07-20	2007-07-20	2007-07-24	0.7 CAMPGROUND
Natural	B	2007	2007-07-21	2007-07-22	2007-07-25	0.25 CARROLL CREEK
Natural	B	2007	2007-09-02	2007-09-03	2007-09-07	1 SHEEP HERDER
Natural	B	2007	2007-09-03	2007-09-04	2007-09-07	0.25 LIGHTNING CREEK
Natural	B	2008	2008-06-17	2008-06-17	2008-06-20	0.25 20 MILE
Natural	B	2008	2008-06-24	2008-06-25	2008-06-28	0.75 FIRST STRIKE
Natural	B	2008	2008-08-21	2008-08-21	2008-08-27	0.25 MEADOW DRAW
Human	B	2008	2008-08-26	2008-08-26	2008-08-30	0.25 MOHAWK
Natural	B	2009	2009-07-02	2009-07-03	2009-07-10	0.9 RANKIN RIDGE FIRE
Natural	B	2009	2009-07-24	2009-07-25	2009-07-28	0.5 BUCK SPRINGS
Natural	B	2009	2009-07-26	2009-07-27	2009-07-31	0.3 PLEASANT VALLEY
Natural	B	2009	2009-08-03	2009-08-04	2009-08-07	0.25 COLD BROOK
Natural	B	2009	2009-08-05	2009-08-07	2009-08-11	2 WATER DRAW
Natural	B	2009	2009-08-05	2009-08-07	2009-08-10	2.5 ROSE QUARTZ
Natural	B	2010	2010-04-18	2010-04-19	2010-04-30	1.5 COLD BROOK
Natural	B	2010	2010-07-30	2010-07-31	2010-08-04	0.25 GRIFFIS WELL
Natural	B	2010	2010-08-03	2010-08-06	2010-08-09	0.75 BEAR
Natural	B	2010	2010-09-05	2010-09-05	2010-09-08	1.1 GHOST
Natural	B	2010	2010-09-10	2010-09-12	2010-09-16	0.5 HAY DRAW
Human	B	2010	2010-09-29	2010-09-29	2010-10-03	0.25 PLEASANT VALLEY
Human	B	2010	2010-10-27	2010-10-27	2010-11-01	1 HAZELRODT
Human	B	2011	2011-06-07	2011-06-08	2011-06-17	9.4 DANBY
Natural	B	2011	2011-06-11	2011-06-12	2011-06-16	0.9 RICHARDSON
Natural	B	2011	2011-06-13	2011-06-14	2011-06-20	1.5 RICHARDSON 2
Natural	B	2011	2011-07-18	2011-07-19	2011-07-22	1.5 SCHENK
Natural	B	2011	2011-08-01	2011-08-01	2011-08-04	0.25 BOX ELDER
Natural	B	2011	2011-08-01	2011-08-01	2011-08-06	0.25 ECHO
Natural	B	2011	2011-08-28	2011-08-28	2011-09-02	0.25 WOLF TRAPP
Human	B	2011	2011-11-17	2011-11-18	2011-11-28	0.4 CARROLL
Human	B	2012	2012-03-29	2012-03-29	2012-03-31	0.5 HARDPAN
Natural	B	2012	2012-04-18	2012-04-21	2012-04-25	1.7 504
Human	B	2012	2012-04-27	2012-04-28	2012-05-10	0.3 LAGOON
Natural	B	2012	2012-05-17	2012-05-18	2012-05-25	0.25 AMERICAN
Natural	B	2012	2012-06-22	2012-06-23	2012-06-28	1 JUMPOFF
Natural	B	2012	2012-06-22	2012-06-25	2012-06-25	0.3 SOUTHEAST
Natural	B	2012	2012-07-12	2012-07-12	2012-07-18	1 CARROL CREEK
Natural	B	2012	2012-07-13		2012-07-18	0.4 ASPEN VALLEY
Natural	B	2012	2012-07-18	2012-07-18	2012-07-25	0.25 COOPER RIDGE
Natural	B	2012	2012-07-20	2012-07-21	2012-07-25	0.5 NORTH FORK

Natural	B	2012	2012-07-20	2012-07-21	2012-07-25	2 WEST HELL
Natural	B	2012	2012-07-21	2012-07-22	2012-08-09	3 WARD RESIVIOR
Natural	B	2012	2012-07-21	2012-07-22	2012-07-27	8.5 POPLAR SPRING
Natural	B	2012	2012-07-24	2012-07-24	2012-07-29	0.5 RATTLESNAKE
Human	B	2012	2012-09-01	2012-09-01	2012-09-06	0.5 AMERICAN CENTER
Human	B	2013	2013-03-31	2013-03-31	2013-04-08	4.5 HIGHWAY 89
Natural	B	2013	2013-04-07	2013-04-10	2013-04-29	8.8 GILLETTE CANYON
Natural	B	2013	2013-07-04	2013-07-05	2013-07-08	0.3 313
Natural	B	2013	2013-07-05	2013-07-05	2013-07-10	1.03 NINE MILE
Natural	B	2013	2013-07-24	2013-07-26	2013-08-20	2.6 GRIZZLY
Natural	B	2014	2014-06-19	2014-06-20	2014-06-26	3.2 BOWMAN
Natural	B	2015	2015-06-26		2015-07-01	0.1 WILDCAT
Natural	B	2015	2015-08-06		2015-08-11	0.1 HAT
Natural	B	2015	2015-08-06		2015-08-13	0.1 VALLEY CREEK
Natural	B	2015	2015-08-15		2015-08-19	4.8 WINDMILL
Human	B	2016	2016-02-25	2016-02-26	2016-03-03	0.63 HAZELRODT
Human	B	2016	2016-03-22	2016-03-22	2016-03-31	0.3 AIRPORT
Natural	B	2016	2016-06-10	2016-06-11	2016-06-14	0.65 PLEASANT
Natural	B	2016	2016-06-13	2016-06-16	2016-06-20	2 MYRTLE ANN
Natural	B	2016	2016-06-15	2016-06-17	2016-06-22	3.15 S & G
Natural	B	2016	2016-06-15	2016-06-16	2016-06-20	0.38 FANNY
Natural	B	2016	2016-06-15	2016-06-16	2016-06-19	1.03 ELK MOUNTAIN
Natural	B	2016	2016-06-29	2016-06-29	2016-07-02	0.26 WELLS
Natural	B	2016	2016-07-04	2016-07-05	2016-07-09	2.5 PUTNAM
Natural	B	2016	2016-07-07	2016-07-07	2016-07-11	0.3 WITCH SPRINGS
Natural	B	2016	2016-08-10	2016-08-10	2016-08-15	0.27 HOPKINS FLATS
Natural	B	2016	2016-09-03	2016-09-04	2016-09-10	0.4 HAVEN
Natural	B	2016	2016-09-16	2016-09-20	2016-09-20	0.3 308
Human	C	1980	1980-04-27	1980-04-27		13 LAUE
Natural	C	1980	1980-07-17	1980-07-18		13 SHIRTTAIL #2
Natural	C	1980	1980-07-17	1980-07-18		13 SHIRTTAIL #1
Natural	C	1980	1980-07-17	1980-07-17	1980-07-30	21 BOUNDARY
Human	C	1981	1981-03-21	1981-03-24		35 ADAMS
Natural	C	1981	1981-07-08	1981-07-08		83 LITHOGRAPH
Natural	C	1981	1981-07-30	1981-07-31		12 BOSLEY
Natural	C	1983	1983-06-30	1983-07-01		15 HOGBACK
Human	C	1985	1985-03-25	1985-03-25		33 MILLER
Human	C	1986	1986-07-30	1986-08-01	1986-08-21	37 MCKENNA
Human	C	1987	1987-08-17	1987-08-19	1987-08-19	23 SPOKANE
Natural	C	1987	1987-09-26	1987-09-26	1987-12-12	10 SEDLACEK
Human	C	1988	1988-02-22	1988-02-23	1988-02-25	10 IRON CREEK
Natural	C	1988	1988-07-17	1988-07-17	1988-07-18	19
Natural	C	1991	1991-08-15	1991-08-15	1991-08-15	44
Human	C	1993	1993-06-16	1993-06-16	1993-06-16	20
Human	C	1994	1994-07-10	1994-07-10	1994-07-14	20 EIGHTEEN-MILE
Natural	C	1994	1994-07-10	1994-07-11	1994-07-11	12 HELL CANYON
Human	C	1994	1994-07-10	1994-07-12	1994-07-22	40 LYMAN
Natural	C	1994	1994-07-29	1994-08-02	1994-08-02	70.7
Human	C	1995	1995-09-06	1995-09-06	1995-09-06	20 RAPP
Human	C	1996	1996-02-06	1996-02-10	1996-02-20	40 SLASH
Natural	C	1996	1996-08-09	1996-08-09	1996-08-10	20 D-LOOP
Human	C	1996	1996-08-28	1996-08-28	1996-08-28	18.7 KAISER
Natural	C	1996	1996-09-04	1996-09-05	1996-09-10	30 PASS CREEK
Human	C	1997	1997-05-09	1997-05-09	1997-06-25	20 LOOKOUT PT
Human	C	1998	1998-01-01	1998-01-01	1998-01-15	12 VIRGINIA
Human	C	1999	1999-12-06	1999-12-07	1999-12-10	17 AMERICNELK
Human	C	2000	2000-02-15	2000-03-24	2000-04-07	82 HELLS CANYON
Human	C	2000	2000-03-24	2000-03-24	2000-04-03	30 CARROLL CREEK
Natural	C	2000	2000-07-06	2000-07-09	2000-07-14	13.3 BEAVER CK
Natural	C	2000	2000-07-14	2000-07-15	2000-07-16	25 SCHUMACHER CANYON
Natural	C	2000	2000-08-13	2000-08-14	2000-08-15	38.6 RED SHIRT
Natural	C	2001	2001-07-06	2001-07-07	2001-07-15	15 COLD SPRINGS

Natural	C	2001	2001-08-11	2001-08-13	2001-08-15	75 PASS WELL
Natural	C	2002	2002-06-01	2002-06-01	2002-06-03	35 BOLAND
Natural	C	2002	2002-08-05	2002-08-07	2002-08-08	70 SHEEP CAMP
Natural	C	2003	2003-08-08	2003-08-08	2003-08-10	20.5 TRIPLE SEVERN
Natural	C	2003	2003-08-26	2003-08-26	2003-09-03	12 CURLEY CYN
Natural	C	2004	2004-07-30	2004-08-04	2004-08-19	65 BENNETT CANYON
Natural	C	2005	2005-07-28	2005-07-31	2005-08-04	14.5 COTTONWOOD 2
Natural	C	2005	2005-08-07	2005-08-07	2005-08-09	41 SOUTH FORK 2
Human	C	2006	2006-02-19	2006-03-01	2006-04-14	45 GRIZZLY COMPLEX
Human	C	2007	2007-07-24	2007-07-26	2007-08-06	14.2 FOSSIL
Natural	C	2009	2009-05-30	2009-05-31	2009-06-17	20.7 ELLIS
Natural	C	2009	2009-08-09	2009-08-13	2009-08-18	12.3 FOSSIL
Natural	C	2010	2010-07-21	2010-07-24	2010-07-31	97 RED SHIRT CREEK
Human	C	2010	2010-08-27	2010-08-28	2010-09-15	65 FLYNN CREEK
Natural	C	2011	2011-07-19	2011-07-20	2011-07-23	12.5 SAWMILL SPRINGS
Natural	C	2011	2011-08-25	2011-08-26	2011-08-30	58.29 FRENCH CREEK
Natural	C	2011	2011-08-25	2011-08-26	2011-08-30	22.59 FRENCH CREEK 2
Natural	C	2012	2012-05-19	2012-05-20	2012-05-30	22.1 PINE TREE
Natural	C	2012	2012-06-22	2012-06-24	2012-07-12	18 MCKENNA SPRING
Natural	C	2012	2012-07-05	2012-07-08	2012-07-10	36.9 RED SHIRT
Natural	C	2012	2012-07-17	2012-07-19	2012-07-25	11 DEADHORSE
Natural	C	2012	2012-07-24	2012-07-26	2012-08-06	59 LITTLE FLATS
Natural	C	2012	2012-09-10	2012-09-11	2012-09-13	15.12 FRENCH
Human	C	2012	2012-10-17	2012-10-19	2012-10-25	21.6 JECA
Natural	C	2015	2015-08-15		2015-08-25	0.1 PASS CREEK
Natural	C	2016	2016-06-09	2016-06-12	2016-06-15	10.2 MCKENNA
Natural	C	2016	2016-06-28	2016-06-30	2016-07-05	12.5 COMPTON
Natural	C	2016	2016-07-26	2016-07-29	2016-08-18	12.2 WILDCAT
Natural	C	2016	2016-07-29	2016-07-29	2016-07-30	17.89 AGATE
Natural	C	2016	2016-09-05	2016-09-14	2016-09-14	33.16 PASS CREEK WELL
Human	D	1981	1981-04-09	1981-04-10		257 EVANS
Human	D	1983	1983-02-23	1983-02-23	1983-02-24	145 HIGHLND CK
Human	D	1999	1999-02-26	1999-02-26	1999-03-05	101 WILDCAT
Natural	D	2000	2000-08-23	2000-08-23	2000-08-23	103 BALE
Natural	D	2001	2001-09-01	2001-09-03	2001-10-02	178 SUTHERLAND SCHOOL
Natural	D	2002	2002-06-22	2002-06-27	2002-07-01	183 REDBIRD CANYON
Human	D	2003	2003-02-20	2003-02-21	2003-02-24	231 BLACKTAIL
Human	D	2004	2004-04-01	2004-04-02	2004-04-12	147 NORTHWEST
Human	D	2008	2008-05-17	2008-05-19	2008-06-06	168 FREELAND WELL
Natural	D	2011	2011-08-19	2011-08-20	2011-09-16	127 SHEEP WAGON
Natural	D	2011	2011-08-29	2011-08-31	2011-09-16	206 BUCK
Natural	E	1980	1980-06-24	1980-06-28		553 LORING SIDING
Natural	E	1980	1980-07-19	1980-07-21		950 MUD SPRINGS
Human	E	1992	1992-01-11	1992-01-11	1992-01-21	400 RANKIN
Human	E	1997	1997-05-10	1997-05-12	1997-06-25	866 LOOKOUT PT
Human	E	1998	1998-04-30	1998-04-30	1998-04-30	300 RED SHIRT
Human	E	1999	1999-09-25	1999-09-26	1999-09-28	473 THISTLE
Natural	E	2000	2000-07-14	2000-07-19	2000-08-07	786 YELLOW BUTTE
Natural	E	2006	2006-07-26	2006-07-30	2006-08-30	633 WEST PASS CREEK
Natural	E	2012	2012-03-27	2012-04-01	2012-05-03	546 APPLE
Human	F	1988	1988-03-22	1988-03-23	1988-04-22	1150 WINDY
Natural	F	1991	1991-04-03	1991-04-08	1991-05-02	4000 SHIRT TAIL
Natural	F	2000	2000-07-14	2000-07-18	2000-07-28	1136.6 HIGHLANDCR
Natural	F	2011	2011-07-19	2011-07-24	2011-09-02	3213 BARREL
Human	F	2016	2016-04-02	2016-05-09	2016-05-09	1895 COLD
Natural	G	1988	1988-07-04	1988-07-10	1988-07-21	16667 GALENA
Human	G	1990	1990-09-12	1990-09-16	1990-10-09	14193 SWEDLUND
Human	G	2000	2000-08-24	2000-09-25	2000-10-27	83508 JASPER
Human	G	2000	2000-08-24	2000-09-25	2000-10-10	84782 JASPER
Natural	G	2003	2003-08-28	2003-09-03	2003-09-03	17594 RED POINT
Human	G	2012	2012-07-19		2012-12-19	9886 MYRTLE
Human	G	2015	2015-04-13	2015-04-22	2015-05-13	5448 COLD BROOK WF

Natural	NR	1980	1980-07-19	1980-07-19	1980-07-22	0 FANNYPEAK
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EVENT_ID	CZ_NAME	BEGI	BEGIN_DATE	BEGIN_TIV	EVENT_TYF	DEATHS_D	INJURIES_I	DAMAGE_F	DAMAGE_I	STATE	ABECZ	TIMEZC	MAGNITUDE
5573443	CUSTER PL	10/26/1996	700	Winter	Sto	0	0	10000	0	SD		MST	
5573442	SOUTHERN	10/26/1996	700	Winter	Sto	0	0	200000	0	SD		MST	
5594025	SOUTHERN	3/12/1997	100	Winter	Sto	0	0	0	0	SD		MST	
5594026	CUSTER CO	3/12/1997	100	Winter	Sto	0	0	0	0	SD		MST	
5610670	SOUTHERN	4/9/1997	1200	Winter	Sto	0	0	0	0	SD		MST	
5610664	CUSTER PL	4/9/1997	1200	Winter	Sto	0	0	0	0	SD		MST	
5622962	SOUTHERN	10/24/1997	400	Winter	Sto	0	0	0	0	SD		MST	
5624783	CUSTER PL	12/27/1997	1300	Winter	Sto	0	0	0	0	SD		MST	
5624933	SOUTHERN	12/27/1997	1300	Winter	Sto	0	0	0	0	SD		MST	
5639342	SOUTHERN	3/28/1998	400	Winter	Sto	0	0	0	0	SD		MST	
5639346	CUSTER PL	3/28/1998	700	Winter	Sto	0	0	0	0	SD		MST	
5670507	SOUTHERN	11/5/1998	2300	Winter	Sto	0	0	0	0	SD		MST	
5670513	SOUTHERN	11/9/1998	0	Winter	Sto	0	0	0	0	SD		MST	
5678863	SOUTHERN	1/6/1999	500	Winter	Sto	0	0	0	0	SD		MST	
5687343	CUSTER PL	3/10/1999	0	Winter	Sto	0	0	0	0	SD		MST	
5687342	SOUTHERN	3/10/1999	0	Winter	Sto	0	0	0	0	SD		MST	
5133999	CUSTER PL	2/25/2000	1100	Winter	Sto	0	0	0	0	SD		MST	
5230542	CUSTER PL	2/6/2001	1530	Winter	Sto	0	0	0	0	SD		MST	
5230454	SOUTHERN	2/6/2001	1530	Winter	Sto	0	0	0	0	SD		MST	
5233930	SOUTHERN	3/14/2001	1300	Winter	Sto	0	0	0	0	SD		MST	
5240810	CUSTER PL	4/22/2001	0	Winter	Sto	0	0	0	0	SD		MST	
5240809	SOUTHERN	4/22/2001	35	Winter	Sto	0	0	0	0	SD		MST	
5280438	CUSTER PL	2/9/2002	600	Winter	Sto	0	0	0	0	SD		MST	
5286154	SOUTHERN	3/13/2002	1000	Winter	Sto	0	0	0	0	SD		MST	
5286159	CUSTER PL	3/13/2002	1100	Winter	Sto	0	0	0	0	SD		MST	
5291561	SOUTHERN	5/11/2002	537	Winter	Sto	0	0	0	0	SD		MST	
5344543	HERMOSA	2/2/2003	300	Winter	Sto	0	0	0	0	SD		MST	
5352834	SOUTHERN	4/3/2003	1700	Winter	Sto	0	0	0	0	SD		MST	
5352840	SOUTHERN	4/30/2003	600	Winter	Sto	0	0	0	0	SD		MST	
5329199	HERMOSA	11/21/2003	300	Winter	Sto	0	0	0	0	SD		MST	
5329202	SOUTHERN	11/21/2003	300	Winter	Sto	0	0	0	0	SD		MST	
5388081	SOUTHERN	2/28/2004	1800	Winter	Sto	0	0	0	0	SD		MST	
5388091	HERMOSA	2/28/2004	2100	Winter	Sto	0	0	0	0	SD		MST	

5388089	CUSTER CO	2/28/2004	2100	Winter Sto	0	0	0	0	0	SD	MST
5436337	SOUTHERN	1/4/2005	300	Winter Sto	0	0	0	0	0	SD	MST
5436466	HERMOSA	1/4/2005	500	Winter Sto	0	0	0	0	0	SD	MST
5436338	CUSTER CO	1/4/2005	500	Winter Sto	0	0	0	0	0	SD	MST
5449819	SOUTHERN	5/11/2005	1500	Winter Sto	0	0	0	0	0	SD	MST
5449824	HERMOSA	5/11/2005	1800	Winter Sto	0	0	0	0	0	SD	MST
5489547	SOUTHERN	2/15/2006	500	Winter Sto	0	0	0	0	0	SD	MST
5499207	SOUTHERN	3/18/2006	2100	Winter Sto	0	0	0	0	0	SD	MST
5499208	CUSTER CO	3/18/2006	2100	Winter Sto	0	0	0	0	0	SD	MST
5499220	HERMOSA	3/18/2006	2100	Winter Sto	0	0	0	0	0	SD	MST
5504455	SOUTHERN	4/24/2006	300	Winter Sto	0	0	0	0	0	SD	MST
21639	SOUTHERN	3/29/2007	600	Winter Sto	0	0	0	0	0	SD	MST-7
108291	SOUTHERN	5/1/2008	1800	Winter Sto	0	0	0	0	0	SD	MST-7
108292	CUSTER CO	5/1/2008	2100	Winter Sto	0	0	0	0	0	SD	MST-7
108297	HERMOSA	5/1/2008	2100	Winter Sto	0	0	0	0	0	SD	MST-7
145431	SOUTHERN	12/13/2008	1600	Winter Sto	0	0	0	0	0	SD	MST-7
158020	CUSTER CO	3/30/2009	200	Winter Sto	0	0	0	0	0	SD	MST-7
158024	HERMOSA	3/30/2009	300	Winter Sto	0	0	0	0	0	SD	MST-7
158018	SOUTHERN	3/30/2009	300	Winter Sto	0	0	0	0	0	SD	MST-7
158840	SOUTHERN	4/3/2009	2100	Winter Sto	0	0	0	0	0	SD	MST-7
158841	CUSTER CO	4/3/2009	2100	Winter Sto	0	0	0	0	0	SD	MST-7
158870	HERMOSA	4/3/2009	2100	Winter Sto	0	0	0	0	0	SD	MST-7
158894	SOUTHERN	4/25/2009	1500	Winter Sto	0	0	0	0	0	SD	MST-7
158897	HERMOSA	4/25/2009	2000	Winter Sto	0	0	0	0	0	SD	MST-7
202327	SOUTHERN	10/28/2009	1100	Winter Sto	0	0	0	0	0	SD	MST-7
211657	CUSTER CO	1/6/2010	200	Winter Sto	0	0	0	0	0	SD	MST-7
215621	SOUTHERN	2/4/2010	700	Winter Sto	0	0	0	0	0	SD	MST-7
272220	HERMOSA	12/30/2010	600	Winter Sto	0	0	0	0	0	SD	MST-7
272185	SOUTHERN	12/30/2010	600	Winter Sto	0	0	0	0	0	SD	MST-7
272207	CUSTER CO	12/30/2010	600	Winter Sto	0	0	0	0	0	SD	MST-7
283657	HERMOSA	2/19/2011	2300	Winter Sto	0	0	0	0	0	SD	MST-7
283646	CUSTER CO	2/19/2011	2300	Winter Sto	0	0	0	0	0	SD	MST-7
283678	SOUTHERN	2/24/2011	0	Winter Sto	0	0	0	0	0	SD	MST-7
283687	HERMOSA	2/24/2011	200	Winter Sto	0	0	0	0	0	SD	MST-7

283679	CUSTER CO	2/24/2011	300	Winter Sto	0	0	0	0	0	SD	MST-7
354051	SOUTHERN	11/18/2011	1500	Winter Sto	0	0	0	0	0	SD	MST-7
354052	CUSTER CO	11/18/2011	1500	Winter Sto	0	0	0	0	0	SD	MST-7
354057	HERMOSA	11/18/2011	1500	Winter Sto	0	0	0	0	0	SD	MST-7
428731	SOUTHERN	1/11/2013	700	Winter Sto	0	0	0	0	0	SD	MST-7
428809	HERMOSA	1/11/2013	800	Winter Sto	0	0	0	0	0	SD	MST-7
428735	CUSTER CO	1/11/2013	800	Winter Sto	0	0	0	0	0	SD	MST-7
439090	HERMOSA	4/8/2013	1700	Winter Sto	0	0	0	0	0	SD	MST-7
439066	SOUTHERN	4/8/2013	1800	Winter Sto	0	0	0	0	0	SD	MST-7
439069	CUSTER CO	4/8/2013	1800	Winter Sto	0	0	0	0	0	SD	MST-7
439599	SOUTHERN	4/16/2013	1100	Winter Sto	0	0	0	0	0	SD	MST-7
439611	HERMOSA	4/16/2013	1500	Winter Sto	0	0	0	0	0	SD	MST-7
439601	CUSTER CO	4/16/2013	1700	Winter Sto	0	0	0	0	0	SD	MST-7
500687	HERMOSA	3/31/2014	700	Winter Sto	0	0	0	0	0	SD	MST-7
558874	SOUTHERN	3/2/2015	1700	Winter Sto	0	0	0	0	0	SD	MST-7
558875	CUSTER CO	3/2/2015	1900	Winter Sto	0	0	0	0	0	SD	MST-7
558886	HERMOSA	3/2/2015	1900	Winter Sto	0	0	0	0	0	SD	MST-7
570096	SOUTHERN	5/9/2015	1100	Winter Sto	0	0	0	0	0	SD	MST-7
570097	CUSTER CO	5/9/2015	1600	Winter Sto	0	0	0	0	0	SD	MST-7
570107	HERMOSA	5/9/2015	1600	Winter Sto	0	0	0	0	0	SD	MST-7
662827	SOUTHERN	12/16/2016	400	Winter Sto	0	0	0	0	0	SD	MST-7
662828	CUSTER CO	12/16/2016	500	Winter Sto	0	0	0	0	0	SD	MST-7
662840	HERMOSA	12/16/2016	500	Winter Sto	0	0	0	0	0	SD	MST-7
665747	SOUTHERN	12/25/2016	1200	Winter Sto	0	0	0	0	0	SD	MST-7
669016	CUSTER CO	1/24/2017	400	Winter Sto	0	0	0	0	0	SD	MST-7
669325	SOUTHERN	1/31/2017	700	Winter Sto	0	0	0	0	0	SD	MST-7
674033	SOUTHERN	2/23/2017	300	Winter Sto	0	0	0	0	0	SD	MST-7
685268	SOUTHERN	4/27/2017	2200	Winter Sto	0	0	0	0	0	SD	MST-7
729789	CUSTER CO	1/20/2018	1100	Winter Sto	0	0	0	0	0	SD	MST-7
729803	SOUTHERN	1/20/2018	1300	Winter Sto	0	0	0	0	0	SD	MST-7
733639	SOUTHERN	2/8/2018	1800	Winter Sto	0	0	0	0	0	SD	MST-7
734373	SOUTHERN	2/18/2018	1700	Winter Sto	0	0	0	0	0	SD	MST-7
734386	HERMOSA	2/18/2018	1800	Winter Sto	0	0	0	0	0	SD	MST-7
734374	CUSTER CO	2/18/2018	1900	Winter Sto	0	0	0	0	0	SD	MST-7

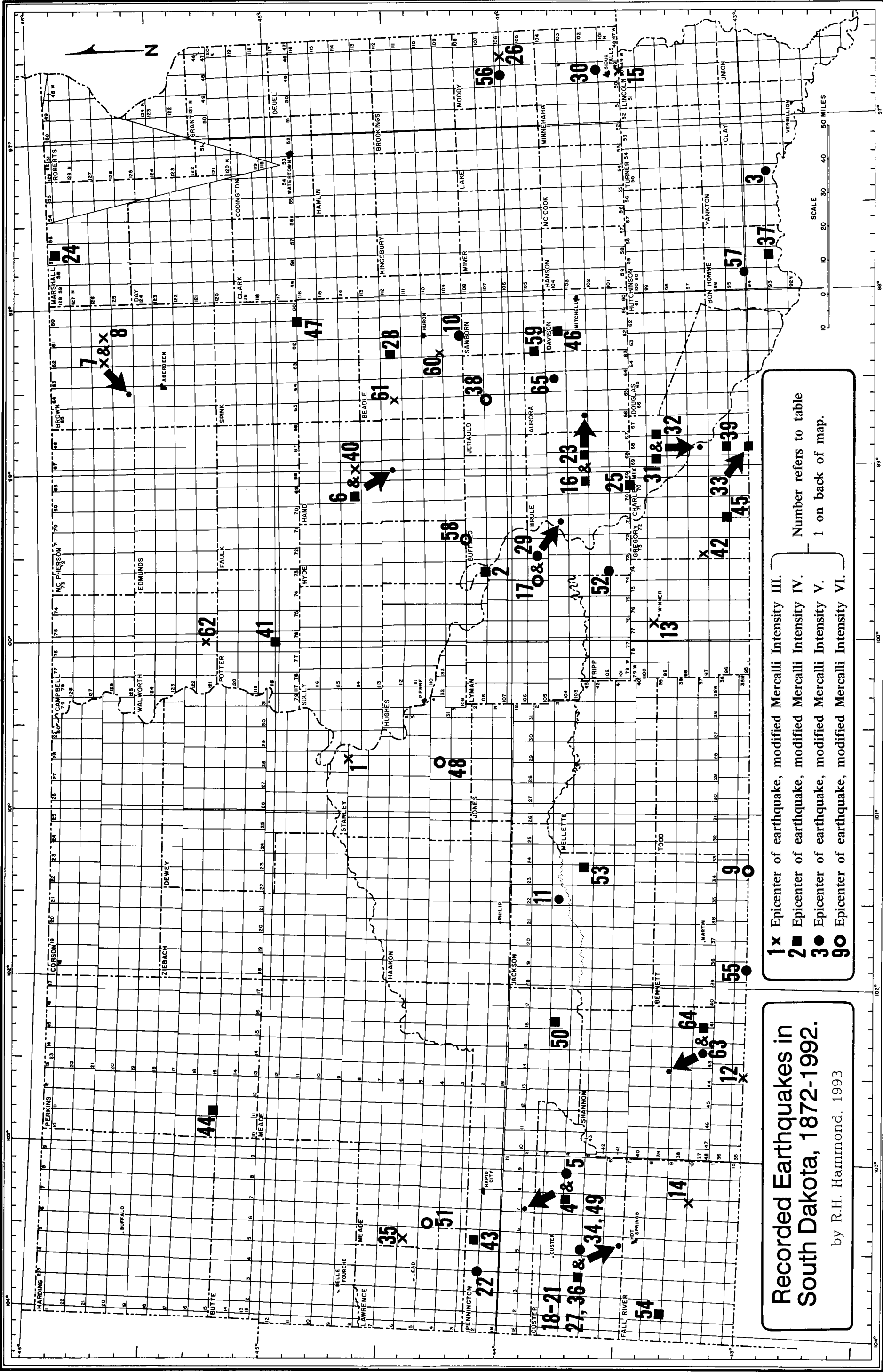


735971	HERMOSA	3/16/2018	0 Winter Sto	0	0	0	0 SD	MST-7
735949	SOUTHERN	3/16/2018	100 Winter Sto	0	0	0	0 SD	MST-7
735952	CUSTER CO	3/16/2018	200 Winter Sto	0	0	0	0 SD	MST-7
742809	CUSTER CO	4/13/2018	200 Winter Sto	0	0	0	0 SD	MST-7
742808	SOUTHERN	4/13/2018	300 Winter Sto	0	0	0	0 SD	MST-7
779867	SOUTHERN	10/13/2018	800 Winter Sto	0	0	0	0 SD	MST-7
788774	SOUTHERN	12/1/2018	500 Winter Sto	0	0	0	0 SD	MST-7
792519	SOUTHERN	12/30/2018	1600 Winter Sto	0	0	0	0 SD	MST-7
802876	SOUTHERN	3/13/2019	1000 Winter Sto	0	0	0	0 SD	MST-7
802896	HERMOSA	3/13/2019	1000 Winter Sto	0	0	0	0 SD	MST-7
809518	HERMOSA	4/10/2019	1100 Winter Sto	0	0	0	0 SD	MST-7
858711	SOUTHERN	10/9/2019	2100 Winter Sto	0	0	0	0 SD	MST-7
861201	SOUTHERN	11/29/2019	2200 Winter Sto	0	0	0	0 SD	MST-7
870857	SOUTHERN	2/24/2020	1000 Winter Sto	0	0	0	0 SD	MST-7
870861	HERMOSA	2/24/2020	1200 Winter Sto	0	0	0	0 SD	MST-7
876619	SOUTHERN	3/13/2020	1300 Winter Sto	0	0	0	0 SD	MST-7
876655	HERMOSA	3/13/2020	1300 Winter Sto	0	0	0	0 SD	MST-7
880503	SOUTHERN	4/1/2020	1800 Winter Sto	0	0	0	0 SD	MST-7
886705	SOUTHERN	4/11/2020	1500 Winter Sto	0	0	0	0 SD	MST-7
886706	CUSTER CO	4/11/2020	1600 Winter Sto	0	0	0	0 SD	MST-7
886726	HERMOSA	4/11/2020	1600 Winter Sto	0	0	0	0 SD	MST-7
945684	SOUTHERN	4/6/2021	1100 Winter Sto	0	0	0	0 SD	MST-7
946817	SOUTHERN	4/18/2021	2100 Winter Sto	0	0	0	0 SD	MST-7
991505	SOUTHERN	12/9/2021	1300 Winter Sto	0	0	0	0 SD	MST-7
991507	CUSTER CO	12/9/2021	2000 Winter Sto	0	0	0	0 SD	MST-7
991523	HERMOSA	12/9/2021	2100 Winter Sto	0	0	0	0 SD	MST-7

EVENT_ID	CZ_NAME_STR	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DEATHS	D_INJURIES	D_DAMAGE	F_DAMAGE	STATE_ABE
137959	SOUTHERN BLACK HILLS (	10/11/2008	2000	Winter Weather	0	0	0	0	0 SD
143009	SOUTHERN BLACK HILLS (	11/5/2008	1500	Winter Weather	0	0	0	0	0 SD
204476	SOUTHERN BLACK HILLS (	10/4/2009	1900	Winter Weather	0	0	0	0	0 SD
269464	CUSTER CO PLAINS (ZONE	11/21/2010	1900	Winter Weather	0	0	0	0	0 SD
269468	HERMOSA FOOTHILLS (ZC	11/21/2010	1900	Winter Weather	0	0	0	0	0 SD
269480	SOUTHERN BLACK HILLS (	11/21/2010	1900	Winter Weather	0	0	0	0	0 SD
279112	SOUTHERN BLACK HILLS (	12/23/2010	0	Winter Weather	0	0	25000	0	0 SD
279114	CUSTER CO PLAINS (ZONE	12/23/2010	0	Winter Weather	0	0	0	0	0 SD
279115	HERMOSA FOOTHILLS (ZC	12/23/2010	0	Winter Weather	0	0	20000	0	0 SD
414715	SOUTHERN BLACK HILLS (	10/5/2012	1800	Winter Weather	0	0	0	0	0 SD
419622	SOUTHERN BLACK HILLS (	11/25/2012	1300	Winter Weather	0	0	0	0	0 SD
419953	SOUTHERN BLACK HILLS (	12/24/2012	1600	Winter Weather	0	0	0	0	0 SD
494178	SOUTHERN BLACK HILLS (	2/8/2014	1000	Winter Weather	0	0	0	0	0 SD
500812	SOUTHERN BLACK HILLS (	4/2/2014	300	Winter Weather	0	0	0	0	0 SD
500813	CUSTER CO PLAINS (ZONE	4/2/2014	300	Winter Weather	0	0	0	0	0 SD
500842	HERMOSA FOOTHILLS (ZC	4/2/2014	400	Winter Weather	0	0	0	0	0 SD
544677	SOUTHERN BLACK HILLS (	11/14/2014	2100	Winter Weather	0	0	0	0	0 SD
544685	HERMOSA FOOTHILLS (ZC	11/14/2014	2100	Winter Weather	0	0	0	0	0 SD
544679	CUSTER CO PLAINS (ZONE	11/14/2014	2200	Winter Weather	0	0	0	0	0 SD
608133	HERMOSA FOOTHILLS (ZC	12/1/2015	0	Winter Weather	0	0	0	0	0 SD
608135	CUSTER CO PLAINS (ZONE	12/1/2015	0	Winter Weather	0	0	0	0	0 SD
669014	SOUTHERN BLACK HILLS (	1/24/2017	300	Winter Weather	0	0	0	0	0 SD
669029	HERMOSA FOOTHILLS (ZC	1/24/2017	400	Winter Weather	0	0	0	0	0 SD
669331	HERMOSA FOOTHILLS (ZC	1/31/2017	600	Winter Weather	0	0	0	0	0 SD
669328	CUSTER CO PLAINS (ZONE	1/31/2017	700	Winter Weather	0	0	0	0	0 SD
669737	SOUTHERN BLACK HILLS (	2/7/2017	1600	Winter Weather	0	0	0	0	0 SD
669749	HERMOSA FOOTHILLS (ZC	2/7/2017	1700	Winter Weather	0	0	0	0	0 SD
669738	CUSTER CO PLAINS (ZONE	2/7/2017	1700	Winter Weather	0	0	0	0	0 SD
674034	CUSTER CO PLAINS (ZONE	2/23/2017	400	Winter Weather	0	0	0	0	0 SD
674045	HERMOSA FOOTHILLS (ZC	2/23/2017	700	Winter Weather	0	0	0	0	0 SD
678456	SOUTHERN BLACK HILLS (	4/2/2017	2100	Winter Weather	0	0	0	0	0 SD
738538	SOUTHERN BLACK HILLS (	3/25/2018	2100	Winter Weather	0	0	0	0	0 SD
779842	SOUTHERN BLACK HILLS (	9/27/2018	2000	Winter Weather	0	0	0	0	0 SD

77980	HERMOSA FOOTHILLS (ZC)	10/13/2018	900	Winter Weather	0	0	0	0 SD
788196	SOUTHERN BLACK HILLS (	11/24/2018	800	Winter Weather	0	0	0	0 SD
788785	CUSTER CO PLAINS (ZONE	12/1/2018	400	Winter Weather	0	0	0	0 SD
788850	HERMOSA FOOTHILLS (ZC	12/1/2018	400	Winter Weather	0	0	0	0 SD
792060	CUSTER CO PLAINS (ZONE	12/26/2018	400	Winter Weather	0	0	0	0 SD
792062	HERMOSA FOOTHILLS (ZC	12/26/2018	400	Winter Weather	0	0	0	0 SD
792541	HERMOSA FOOTHILLS (ZC	12/30/2018	1900	Winter Weather	0	0	0	0 SD
792523	CUSTER CO PLAINS (ZONE	12/30/2018	2000	Winter Weather	0	0	0	0 SD
796485	SOUTHERN BLACK HILLS (	2/5/2019	2100	Winter Weather	0	0	0	0 SD
796489	HERMOSA FOOTHILLS (ZC	2/5/2019	2300	Winter Weather	0	0	0	0 SD
796503	CUSTER CO PLAINS (ZONE	2/6/2019	100	Winter Weather	0	0	0	0 SD
797895	SOUTHERN BLACK HILLS (	2/14/2019	2200	Winter Weather	0	0	0	0 SD
797906	CUSTER CO PLAINS (ZONE	2/14/2019	2300	Winter Weather	0	0	0	0 SD
797909	HERMOSA FOOTHILLS (ZC	2/14/2019	2300	Winter Weather	0	0	0	0 SD
800822	CUSTER CO PLAINS (ZONE	3/6/2019	2200	Winter Weather	0	0	0	0 SD
800892	CUSTER CO PLAINS (ZONE	3/8/2019	2000	Winter Weather	0	0	0	0 SD
809465	SOUTHERN BLACK HILLS (	4/10/2019	1200	Winter Weather	0	0	0	0 SD
810750	HERMOSA FOOTHILLS (ZC	4/30/2019	300	Winter Weather	0	0	0	0 SD
8111043	HERMOSA FOOTHILLS (ZC	5/1/2019	100	Winter Weather	0	0	0	0 SD
817051	HERMOSA FOOTHILLS (ZC	5/21/2019	1400	Winter Weather	0	0	0	0 SD
858737	HERMOSA FOOTHILLS (ZC	10/9/2019	2100	Winter Weather	0	0	0	0 SD
858712	CUSTER CO PLAINS (ZONE	10/9/2019	2200	Winter Weather	0	0	0	0 SD
859566	CUSTER CO PLAINS (ZONE	11/10/2019	1200	Winter Weather	0	0	0	0 SD
859570	HERMOSA FOOTHILLS (ZC	11/10/2019	1200	Winter Weather	0	0	0	0 SD
859579	SOUTHERN BLACK HILLS (	11/10/2019	1500	Winter Weather	0	0	0	0 SD
868086	SOUTHERN BLACK HILLS (	2/3/2020	0	Winter Weather	0	0	0	0 SD
870877	CUSTER CO PLAINS (ZONE	2/24/2020	1200	Winter Weather	0	0	0	0 SD
876661	CUSTER CO PLAINS (ZONE	3/13/2020	1300	Winter Weather	0	0	0	0 SD
880514	HERMOSA FOOTHILLS (ZC	4/1/2020	1800	Winter Weather	0	0	0	0 SD
880515	CUSTER CO PLAINS (ZONE	4/1/2020	1800	Winter Weather	0	0	0	0 SD
876669	CUSTER CO PLAINS (ZONE	4/16/2020	1700	Winter Weather	0	0	0	0 SD
919104	HERMOSA FOOTHILLS (ZC	10/24/2020	1400	Winter Weather	0	0	0	0 SD
919117	CUSTER CO PLAINS (ZONE	10/24/2020	1400	Winter Weather	0	0	0	0 SD
919107	SOUTHERN BLACK HILLS (	10/24/2020	1400	Winter Weather	0	0	0	0 SD

930011 SOUTHERN BLACK HILLS (	12/28/2020	2100 Winter Weather	0	0	0	0 SD
939157 SOUTHERN BLACK HILLS (	2/27/2021	1500 Winter Weather	0	0	0	0 SD
939337 HERMOSA FOOTHILLS (ZC	3/9/2021	2300 Winter Weather	0	0	0	0 SD
939338 CUSTER CO PLAINS (ZONE	3/9/2021	2300 Winter Weather	0	0	0	0 SD
945529 CUSTER CO PLAINS (ZONE	3/14/2021	500 Winter Weather	0	0	0	0 SD
945690 HERMOSA FOOTHILLS (ZC	4/6/2021	1400 Winter Weather	0	0	0	0 SD
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987451 SOUTHERN BLACK HILLS (	10/12/2021	1000 Winter Weather	0	0	0	0 SD
987456 HERMOSA FOOTHILLS (ZC	10/12/2021	1200 Winter Weather	0	0	0	0 SD
987554 SOUTHERN BLACK HILLS (	10/19/2021	1700 Winter Weather	0	0	0	0 SD
1001477 SOUTHERN BLACK HILLS (	2/21/2022	1300 Winter Weather	0	0	0	0 SD
1001673 SOUTHERN BLACK HILLS (	3/4/2022	2100 Winter Weather	0	0	0	0 SD
1001674 HERMOSA FOOTHILLS (ZC	3/5/2022	200 Winter Weather	0	0	0	0 SD
1001695 CUSTER CO PLAINS (ZONE	3/5/2022	200 Winter Weather	0	0	0	0 SD
1008508 SOUTHERN BLACK HILLS (	4/1/2022	0 Winter Weather	0	0	0	0 SD
1015677 SOUTHERN BLACK HILLS (	4/23/2022	500 Winter Weather	0	0	0	0 SD



Recorded Earthquakes in  
South Dakota, 1872-1992.  
by R.H. Hammond, 1993

- 1x Epicenter of earthquake, modified Mercalli Intensity III.
  - 2 Epicenter of earthquake, modified Mercalli Intensity IV.
  - 3 Epicenter of earthquake, modified Mercalli Intensity V.
  - 9o Epicenter of earthquake, modified Mercalli Intensity VI.
- Number refers to table  
1 on back of map.

Table 1. Chronological listing of earthquakes for the state of South Dakota, 1872-1992.

Map Listing	Date	Time of Event (UTC)	Latitude	Longitude	Intensity (Modified Mercalli)
1	02/09/1872	---	44.7	100.7	III
2	08/17/1876	05:25	44.1	099.6	IV
3	12/29/1879	06:30	42.9	097.3	V
4	10/11/1895	23:55	43.9	103.3	IV
5	10/12/1895	01:25	43.9	103.3	V
6	12/06/1899	12:00	44.5	099.0	IV
7	03/14/1900	03:00	45.6	098.5	III
8	03/14/1900	05:00	45.6	098.5	III
9	05/10/1906	00:27	43.0	101.3	VI
10	06/02/1911	22:34	44.2	098.2	V
11	10/23/1915	06:05	43.8	101.5	V
12	02/24/1916	04:30	43.0	102.5	III
13	06/29/1916	07:45	43.4	099.9	III
14	07/14/1920	23:00	43.2	103.2	III
15	03/16/1921	23:45	43.5	096.7	III
16	09/24/1921	00:30	43.7	098.7	IV
17	01/02/1922	14:50	43.8	099.3	VI
18	12/30/1924	22:10	43.5	103.5	IV
19	12/30/1924	22:15	43.5	103.5	IV
20	12/30/1924	22:20	43.5	103.5	IV
21	12/30/1924	22:30	43.5	103.5	IV
22	11/16/1928	13:45	44.1	103.7	V
23	01/17/1931	18:45	43.7	098.7	IV
24	01/29/1934	12:30	45.9	097.7	IV
25	08/30/1934	03:50	43.5	099.1	IV
26	11/01/1935	10:00	44.0	096.6	III
27	10/30/1936	10:30	43.5	103.5	IV
28	01/02/1938	17:05	44.5	098.3	IV
29	10/01/1938	22:15	43.8	099.3	V
30	10/11/1938	09:37	43.6	096.7	V
31	11/04/1938	22:10	43.2	098.9	IV
32	11/04/1938	22:15	43.2	098.9	IV
33	06/10/1939	18:30	43.0	098.9	IV

Map Listing	Date	Time of Event (UTC)	Latitude	Longitude	Intensity (Modified Mercalli)
34	05/25/1941	06:25	43.5	103.5	V
35	03/11/1942	17:55	44.4	103.5	III
36	05/16/1943	20:40	43.5	103.5	IV
37	11/10/1945	09:00	42.9	097.8	IV
38	07/23/1946	06:45	44.1	098.6	VI
39	08/25/1947	14:00	43.1	098.9	IV
40	05/07/1949	14:54	44.5	099.0	III
41	06/03/1949	02:06	45.0	100.0	IV
42	12/14/1949	03:15	43.2	099.5	III
43	11/14/1952	---	44.1	103.5	IV
44	12/21/1953	22:43	45.2	102.8	IV
45	12/31/1953	22:30	43.1	099.3	IV
46	12/03/1957	07:30	43.8	098.2	IV
47	01/12/1959	13:--	44.9	098.1	IV
48	12/31/1961	16:36	44.3	100.7	VI
49	03/24/1964	06:12	43.5	103.5	V
50	08/26/1964	16:58	43.8	102.2	IV
51	06/26/1966	11:59	44.3	103.4	VI
52	11/23/1967	06:23	43.6	099.6	V
53	10/19/1971	21:07	43.7	101.3	IV
54	05/16/1975	05:57	43.3	103.9	IV
55	09/13/1981	22:16	43.0	101.9	V
56	07/11/1982	19:42	44.0	096.7	V
57	11/15/1982	02:58	43.0	097.9	V
58	03/04/1983	06:32	44.2	099.4	VI
59	05/25/1986	07:13	43.9	098.3	IV
60	07/09/1987	22:06	44.3	098.3	III
61	10/15/1987	10:54	44.5	098.6	III
62	11/26/1989	01:06	45.3	100.0	III
63	01/28/1990	04:59	43.3	102.5	V
64	03/02/1990	04:15	43.3	102.5	IV
65	10/25/1990	06:25	43.8	098.5	V

Recorded Earthquakes in South Dakota, 1872-1992.

by R.H. Hammond, 1993

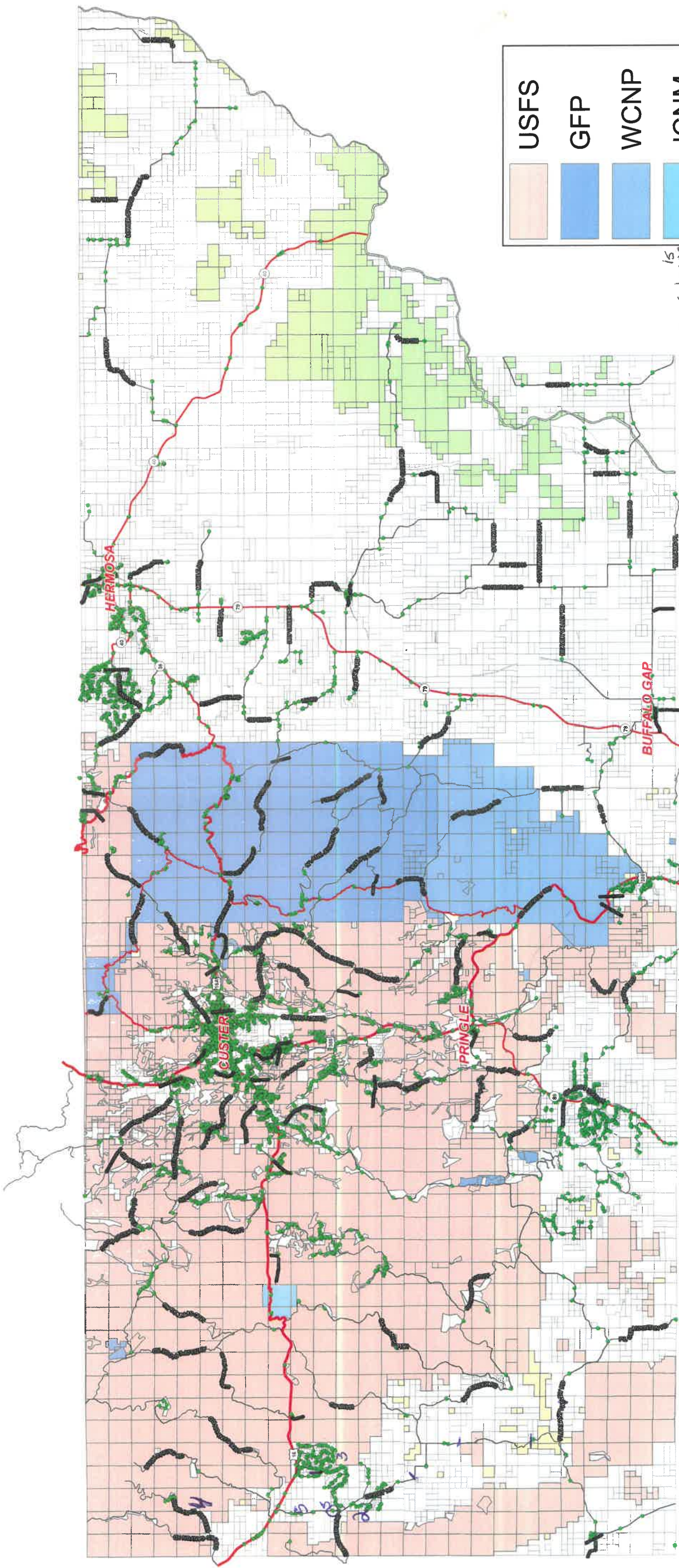
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Table 2. Comparison of Modified Mercalli Scale and Richter Scale (from Burchett, 1979).		
MODIFIED MERCALLI SCALE		
INTENSITY	EFFECT	RICHTER SCALE: MAGNITUDE
I	Not felt except by a very few under especially favorable conditions.	1.5
II	Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.	2
III	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration similar to the passing of a truck. Duration estimated.	2.5
IV	Felt indoors by many, outdoors by few during the day. At night some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.	3
V	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.	3.5
VI	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.	4
VII	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.	4.5
VIII	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture moved.	5
IX	Damage considerable in specially designed structures, well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.	5.5
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.	6
XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.	6.5
XII	Damage total. Lines of sight and level are distorted. Objects thrown into the air.	7
		7.5
		8.0

LIST OF DATA SOURCES	
Burchett, R.R., 1979, Earthquakes in Nebraska: University of Nebraska Conservation and Survey Division, Educational Circular No. 4, 20 p.	Heck, N.H., 1938, Earthquake history of the United States: U.S. Dept. of Commerce Coast and Geodetic Survey, Serial No. 609, p. 35-50.
Docekal, J., 1970, Earthquakes of the stable interior, with emphasis on the midcontinent: Unpub. Ph. D. thesis, University of Nebraska, v. 2, 332 p.	Reagor, B.G., Stover, C.W., and Algermissen, S.T., 1981, Seismicity map of the State of South Dakota: USGS Misc. Field Studies Map MF-1325.
	U.S. Dept. of the Interior, 1982-1986, Preliminary determination of epicenters: Monthly listing National Earthquake Information Service.

OBJECTID	MAPNUM	DATE_	UTC	LAT	LONG	INTENSITY	MAGNITUDE	NOTES
1	18	12/30/1924	22:10		-103.5		4	4
2	19	12/30/1924	22:15		-103.5		4	4
3	20	12/30/1924	22:20		-103.5		4	4
4	21	12/30/1924	22:30		-103.5		4	4
5	27	10/30/1936	10:30		-103.5		4	4
6	34	5/25/1941	6:25		-103.5		5	4.1
7	36	5/16/1943	20:40		-103.5		4	4
8	49	3/24/1964	6:12		-103.5		5	3.7
9	80	1/5/2004	2:53		-104		3	2.8
10	88	12/12/2013	3:43		-103.32		4	3.5





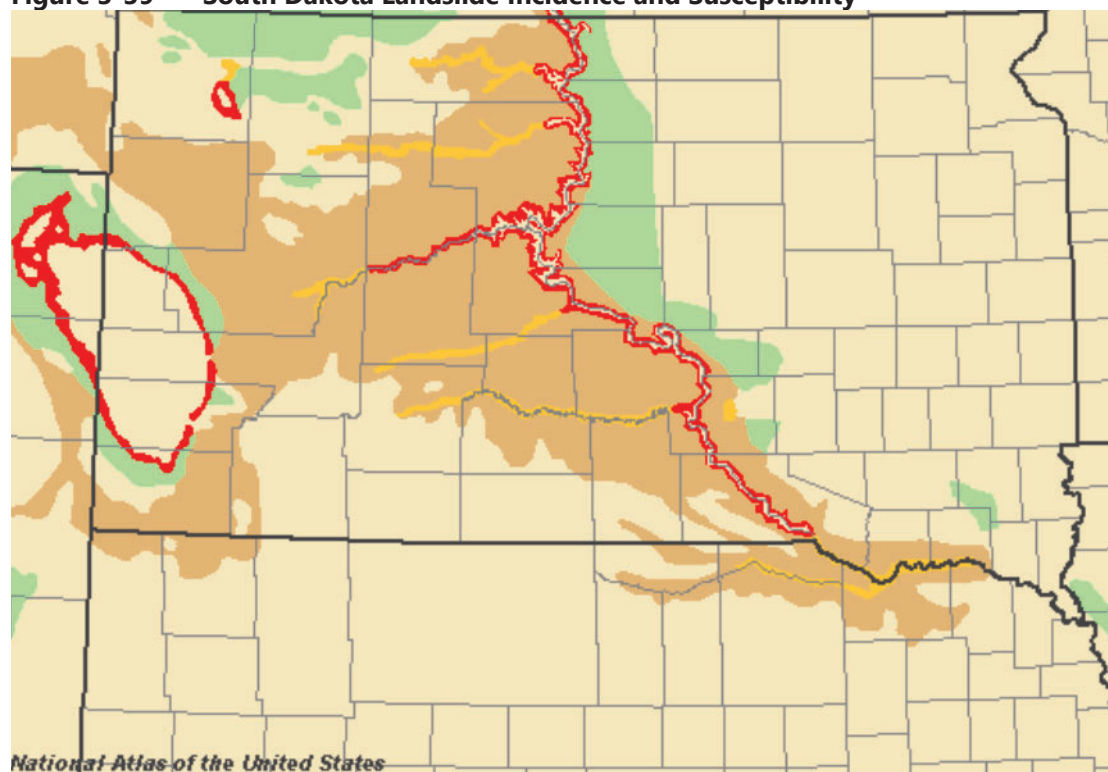
USFS	USFS
GFP	GFP
WCNP	WCNP
JCNM	JCNM
BGNG	BGNG
BLM	BLM
Address	Address

- 1- The area of Black tail CT, Turkey RR, and Antelope RD. Has many houses with no defensible space for wildfire 45 IE sections 30, 31, 32 is thick timber with hard access. just west of residences.
- 2- 45 IE sections 20, 21, 32, 24, 13, 12, This has been a concern for a long time, forest service is in the middle of doing a treatment plan on this currently.
- 3- 45 IE sections 23, 26, 25, 24, 13, 12, This has been a concern for a long time, forest service is in the middle of doing a treatment plan on this currently.
- 4- Redbird Canyon RD 35 IE sections 17, 20, 16, 9. some was part of the Jasper fire. Thick timber and steep terrain will make unburned areas of this hard to protect residences in the area.
- 5- 45 IE North west corner is our fire wall also a low spot that during heavy rain floods county RD. Also 46 IE sections 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32. East side floods during heavy rain. These are our two access to get fire trucks to our calls. If both are flooded we can't respond.
- These are our biggest areas of concern. If there is any other questions please reach out.

Custer County Public Land

Luke Caster  
(307) 639-0316



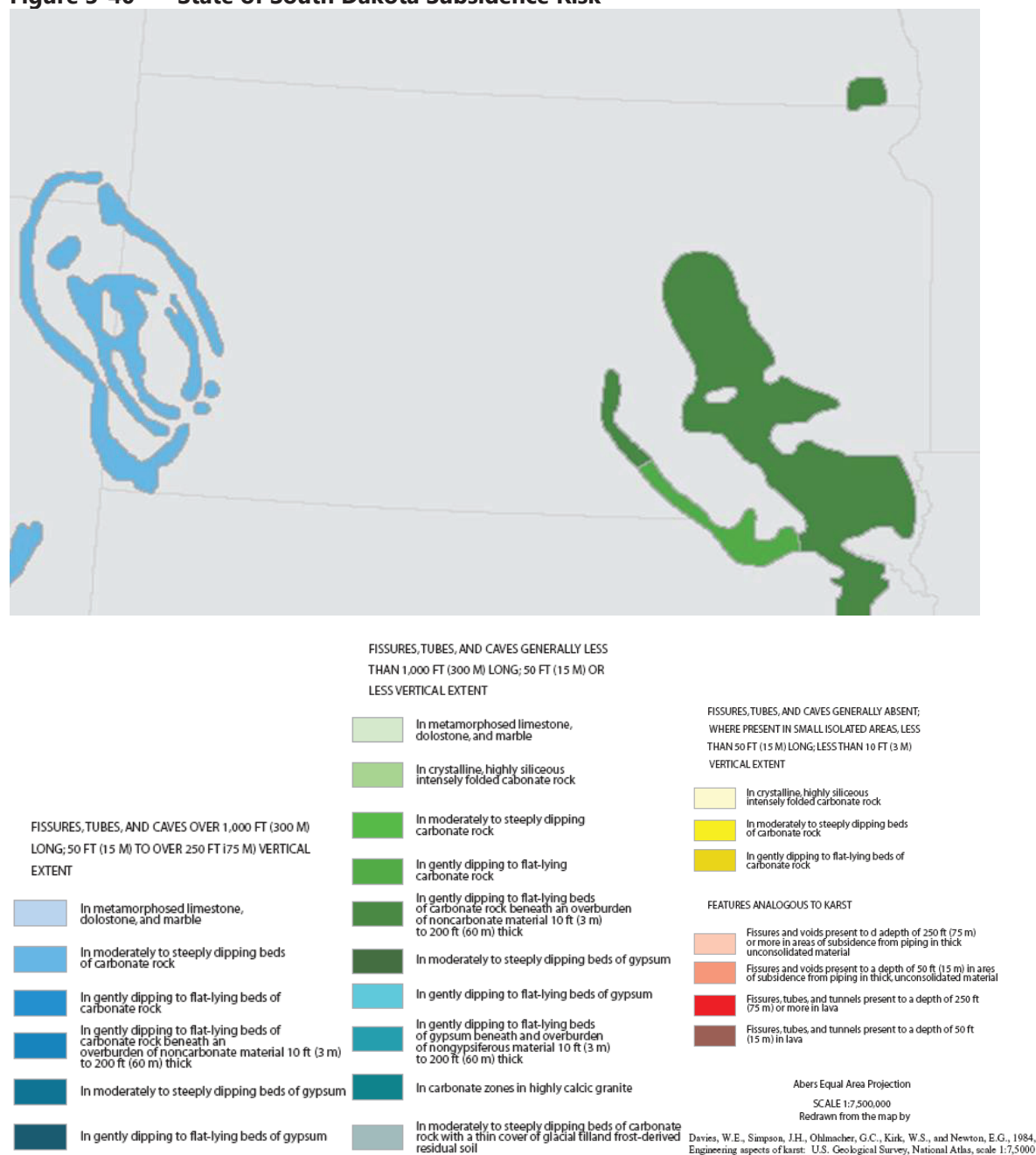
**Figure 3-39 South Dakota Landslide Incidence and Susceptibility****Landslide Incidence and Susceptibility****Landslide Incidence**

- Low (less than 1.5 % of area involved)
- Moderate (1.5%-15% of area involved)
- High (greater than 15 % of area involved)

**Landslide Susceptibility/ Incidence**

- Moderate susceptibility/low incidence
- High susceptibility/low incidence
- High susceptibility/moderate incidence

Source: U.S. Geological Survey, map generated by <https://nationalmap.gov/> [www.nationalatlas.gov](http://www.nationalatlas.gov)

**Figure 3-40 State of South Dakota Subsidence Risk**

Source: The National Karst Map [http://www.nckri.org/map/maps/engineering\\_aspects/davies\\_map\\_PDF.pdf](http://www.nckri.org/map/maps/engineering_aspects/davies_map_PDF.pdf)

# **Appendix C**

Public Comment and Emails to Emergency Managers

**From:** [Kailey Snyder](#)  
**To:** [em@frcounty.org](#); [dustinw@pennco.org](#); [niobaraem@gmail.com](#); [gnelson@westongov.com](#)  
**Subject:** Custer County Natural Hazard Mitigation Plan Update Review  
**Date:** Tuesday, January 3, 2023 10:55:00 AM  
**Attachments:** [Custer County Natural Hazard Mitigation Plan Draft.pdf](#)

---

Good morning,

My name is Kailey Snyder with the Black Hills Council of Local Governments. I am currently assisting Custer County in updating their natural hazard mitigation plan. As a neighboring County Emergency Manager, we would ask you to review this plan and provide feedback within 30 days. Attached please find the draft of the Plan for your review.

Much thanks,  
Kailey Snyder  
Community Development/Resiliency Specialist  
Black Hills Council of Local Governments  
730 E Watertown Street | Rapid City, SD 57701  
P: 605-721-6135 | E: [Ksnyder@wrbsc.com](mailto:Ksnyder@wrbsc.com)

**From:** [Kailey Snyder](#)  
**To:** [niobraracountyema@gmail.com](mailto:niobraracountyema@gmail.com)  
**Subject:** FW: Custer County Natural Hazard Mitigation Plan Update Review  
**Date:** Tuesday, January 3, 2023 11:02:00 AM  
**Attachments:** [Custer County Natural Hazard Mitigation Plan Draft.pdf](#)

---

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**From:** Kailey Snyder  
**Sent:** Tuesday, January 3, 2023 10:56 AM  
**To:** em@frcounty.org; dustinw@pennco.org; niobraraem@gmail.com; gnelson@westongov.com  
**Subject:** Custer County Natural Hazard Mitigation Plan Update Review

Good morning,

My name is Kailey Snyder with the Black Hills Council of Local Governments. I am currently assisting Custer County in updating their natural hazard mitigation plan. As a neighboring County Emergency Manager, we would ask you to review this plan and provide feedback within 30 days. Attached please find the draft of the Plan for your review.

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Kailey Snyder  
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Black Hills Council of Local Governments  
730 E Watertown Street | Rapid City, SD 57701  
P: 605-721-6135 | E: [Ksnyder@wrbsc.com](mailto:Ksnyder@wrbsc.com)





Posts

About

Photos

Mentions

**Custer County South Dakota Emergency Management**

Posted by Teresa O'Donal Obenauer

Jan 4 · 🌐

The Custer County Natural Hazzard Mitigation Plan addresses natural hazards in Custer County and ways to mitigate (lessen the impact) of these hazards to protect life, safety, and livelihoods of all of the residents and visitors in Custer County and its municipalities. This is a comprehensive plan that includes the county and all of its municipalities.

All counties are required by FEMA to have a current plan, and update that plan every 5 years to be eligible for federal money available for projects that can help to mitigate hazards posed by natural events that occur in the county. Our update has just been completed and is now available for public comment.

The 2023 Custer County Natural Hazzard Mitigation Plan Update will be available for public comment on the Custer County web page at <https://www.custercountysd.com/> and on The City of Custer's page at <https://custer.govoffice.com/>

The plan will be available for comment From January 3rd until February 2nd 2023.

Comments can Be Provided to:

Steve Esser - Custer County Emergency Management  
sesser@custercountysd.com 605.673.8152

Or

Kailey Snyder – Black Hills Council of Local Governments  
ksnyder@wrbsc.com 605.394.2681

[custer.govoffice.com](https://custer.govoffice.com)**Custer City**

Home



Watch



Notifications



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Wednesday, January 4, 2023 at 12:51 PM · 🌐

  
210



  
1



  
0



  
0







Distribution summary

Average compared to your other posts within 21+ days of publishing. [Understand your distribution](#)

Overview ⓘ

Post reach	210
Impressions	226
Engagement	6

Interactions ⓘ

<div><div></div> 1</div>	<div><div></div> 0</div>	<div><div></div> 0</div>	<div><div></div> 0</div>	<div><div></div> 0</div>	<div><div></div> 0</div>
Reactions	1				
Comments					0
Shares					0

Post actions ⓘ

Other clicks	1
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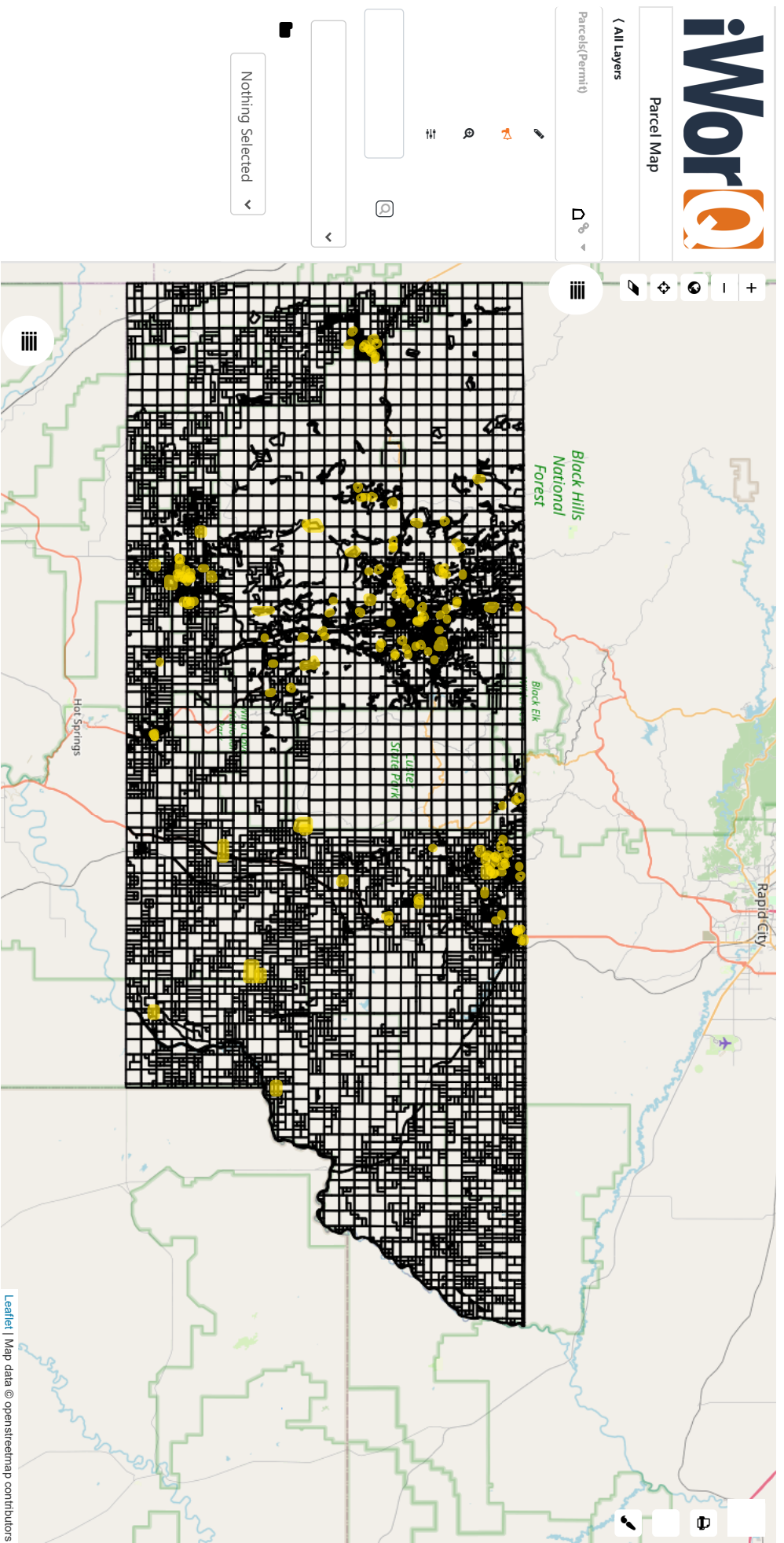
Boost post

# **Appendix D**

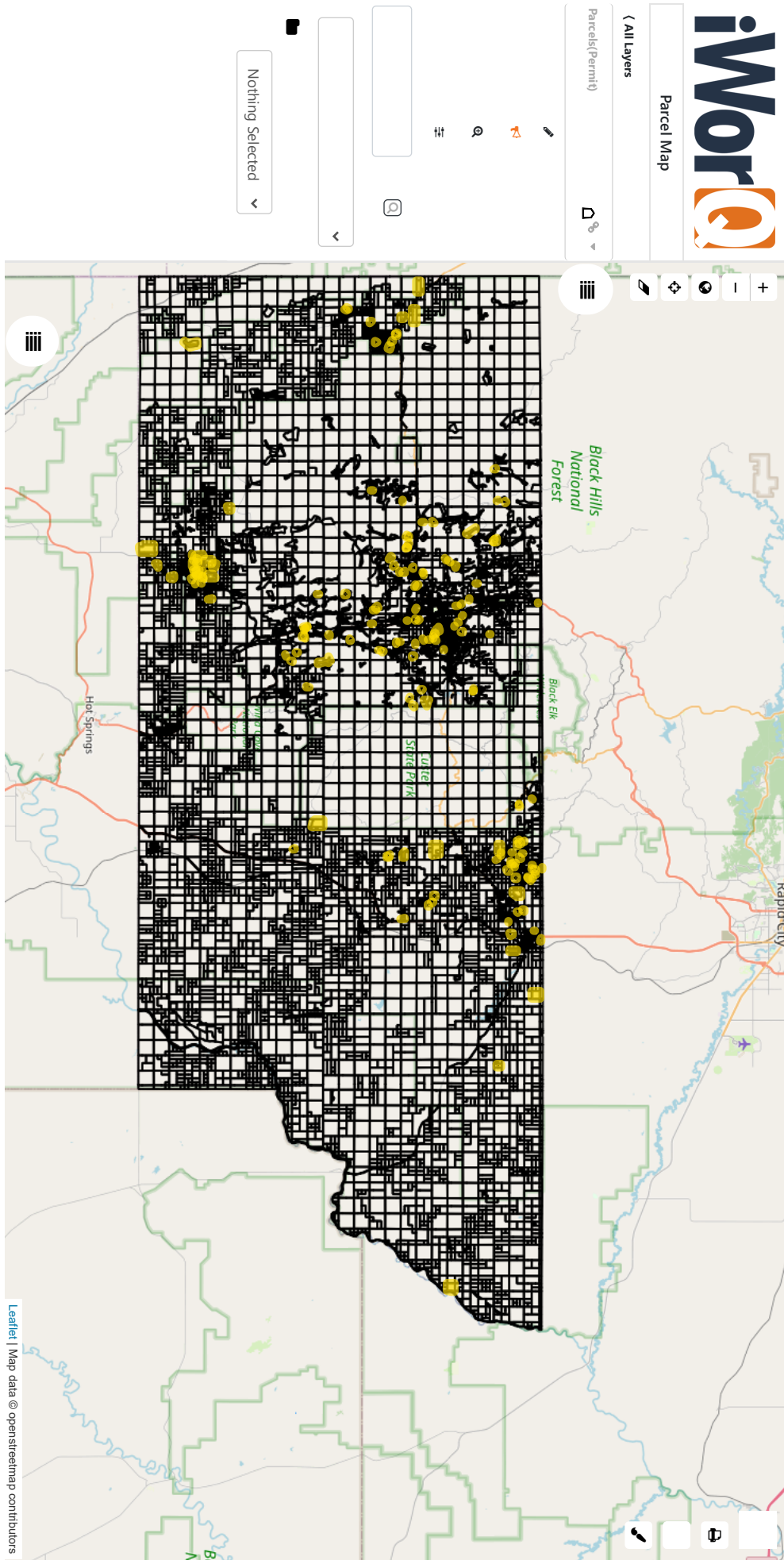
Custer County Building Permit Maps



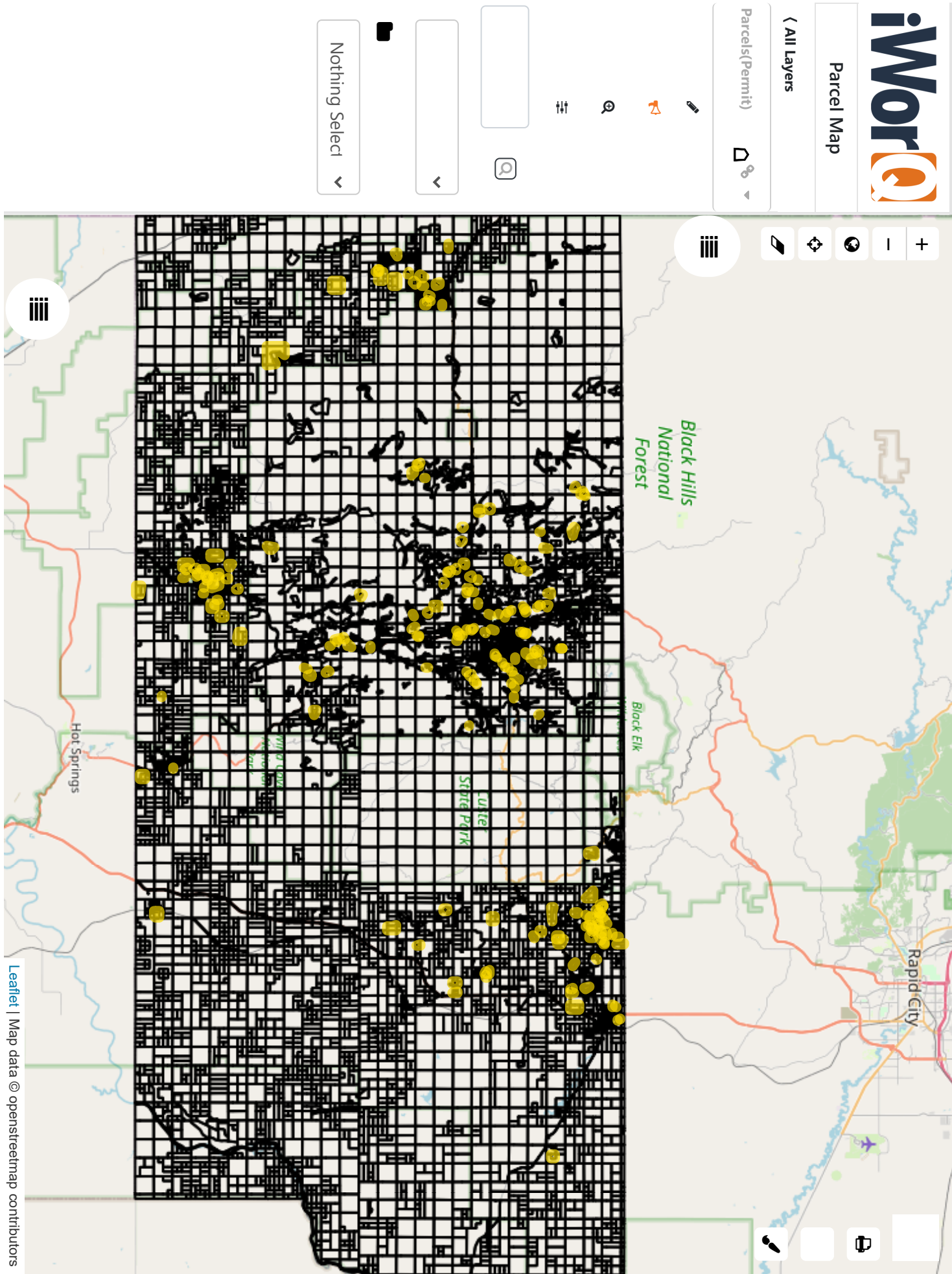
# Custer County Building Permits 2018



Custer County Building Permits 2019

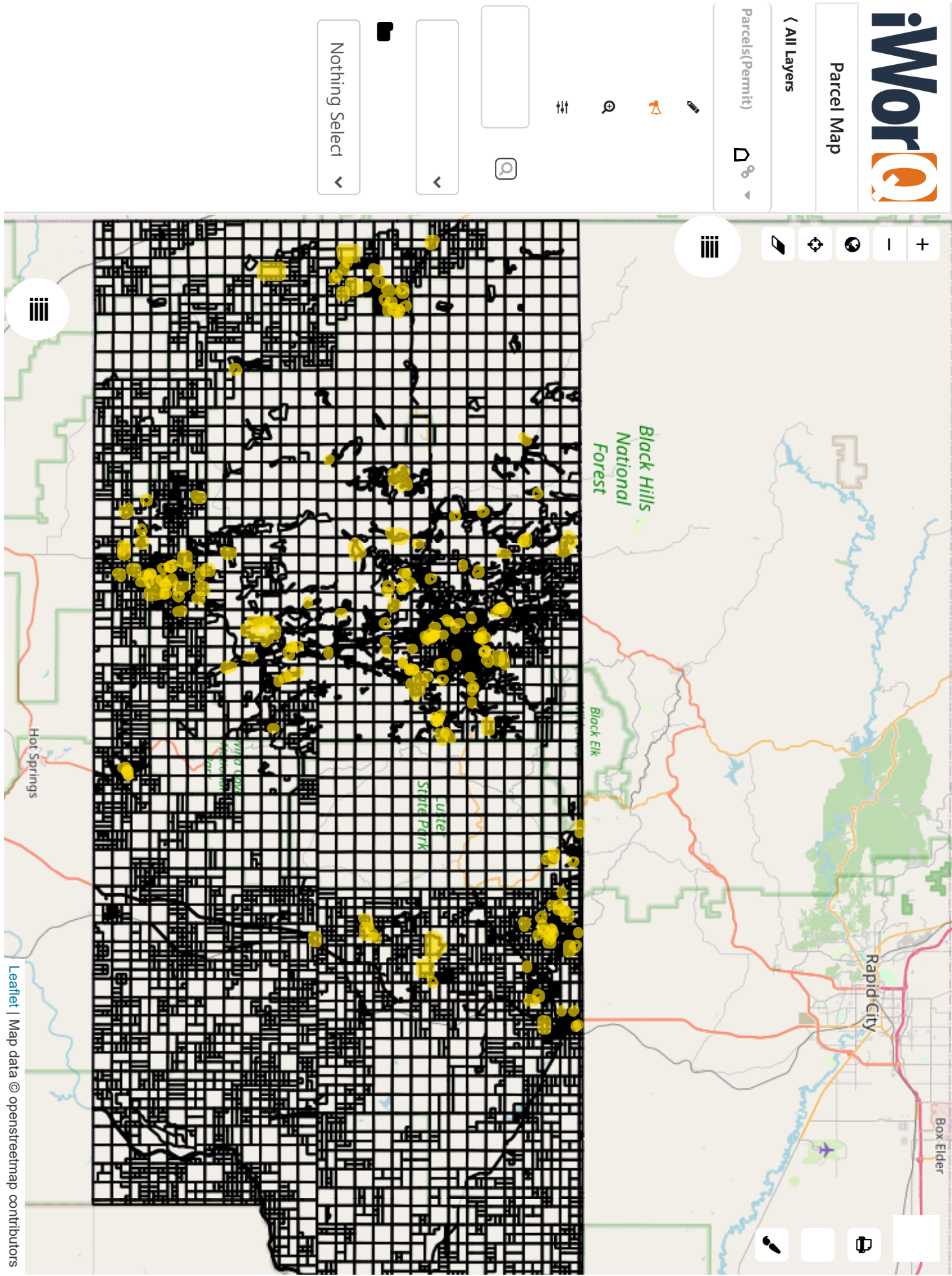


Custer County Building Permits 2020

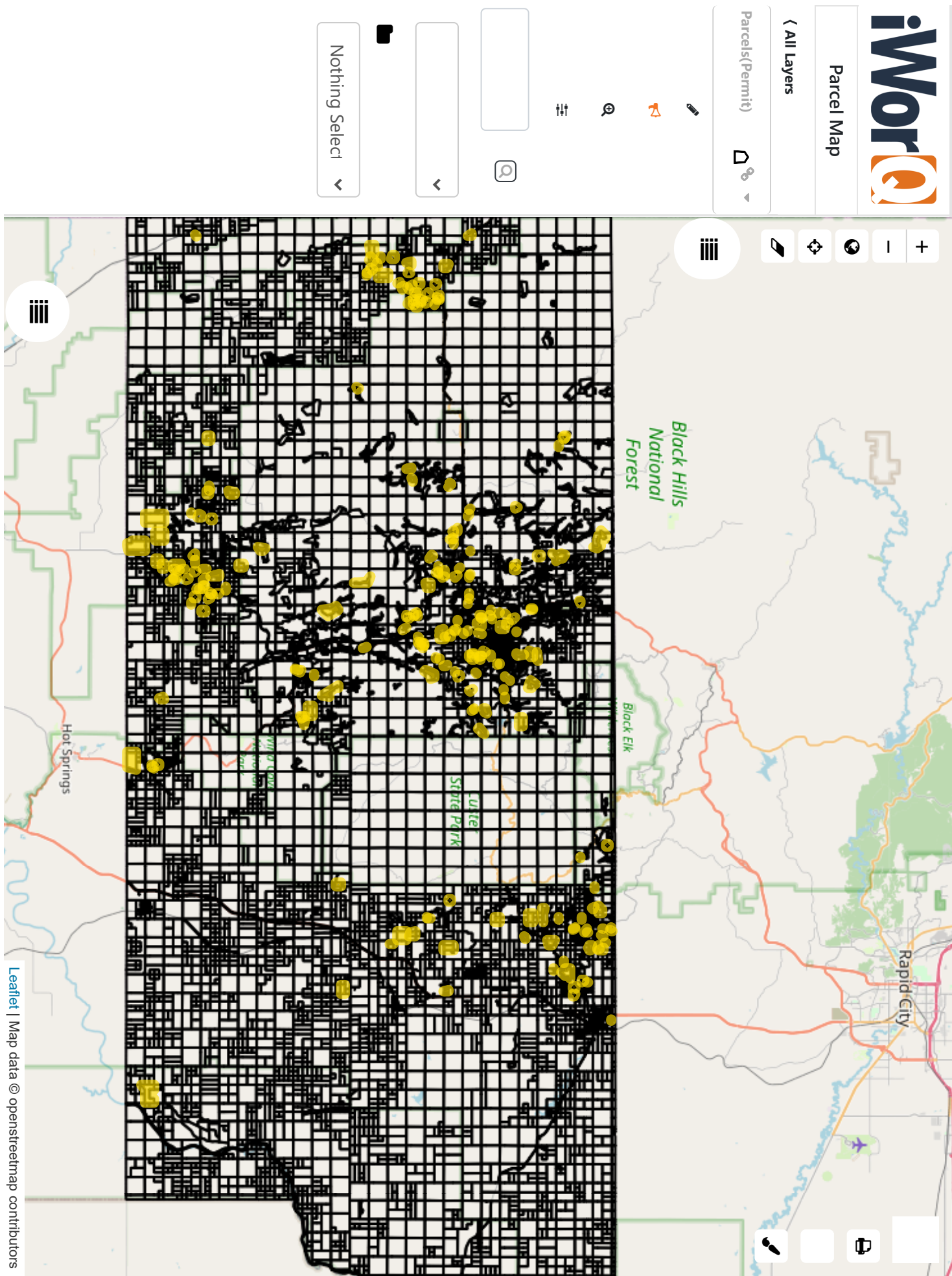




Custer County Building Permits 2021



Custer County Building Permits 2022 (1/1/18/22)



# **Appendix E**

## Hazard Definitions

## **Natural Hazards in the Plan Jurisdiction**

Blizzards are a snowstorm that lasts at least 3 hours with sustained wind speeds of 35 mph or greater, visibility of less than a quarter mile, temperatures lower than 20°F and white out conditions. Snow accumulations vary, but another contributing factor is loose snow existing on the ground which can get whipped up and aggravate the white out conditions. When such conditions arise, blizzard warnings or severe blizzard warnings are issued. Severe blizzard conditions exist when winds obtain speeds of at least 45 mph plus a great density of falling or blowing snow and a temperature of 10°F or lower.

Drought is an extended period of months or years when a region notes a deficiency in its water supply. Generally, this occurs when a region receives consistently below average precipitation. It can have a substantial impact on the ecosystem and agriculture of the affected region. Although droughts can persist for several years, even a short, intense drought can cause significant damage and harm the local economy. This global phenomenon has a widespread impact on agriculture. Local drinking water sources such as the Madison Aquifer rely on precipitation and snowmelt to recharge sufficiently, so drought can have severe impacts on the region's water supply; there's currently no secondary source of water for most of western South Dakota so problems of drought can be compounding when added to the fact that growth and development in the region are at a record high.

Dam Failure, dams' function to serve the needs of flood control, recreation, and water management. During a flood, a dam's ability to serve as a control agent may be challenged. An excessive amount of water may result in a dam breach, simply an overflow. Dams that are old or unstable, dams that receive extreme amounts of water, or dams that get debris pile-up behind their face may result in dam failure, a cracking and/or breaking.

Earthquakes are a sudden rapid shaking of the earth caused by the shifting of rock beneath the earth's surface. Earthquakes can cause buildings and bridges to collapse, disrupt gas, electric and phone lines, and often cause landslides, flash floods, fires, avalanches, and tsunamis. Larger earthquakes usually begin with slight tremors but rapidly take the form of one or more violent shocks and are followed by vibrations of gradually diminishing force called aftershocks. The underground point of origin of an earthquake is called its focus; the point on the surface directly above the focus is the epicenter.

Expansive Soils are soil types that swell and shrink depending on the moisture content. Structures built on these soils can experience damage such as shifting, cracking, and breaking due to the swelling and sinking of the soils.

Extreme Cold what constitutes extreme cold, and its effects can vary across different areas of the country. In regions relatively unaccustomed to winter weather, near freezing temperatures are considered "extreme cold."

Extreme Heat also known as a Heat Wave, is a prolonged period of excessively hot weather, which may be accompanied by high humidity. There is no universal definition of a heat wave; the term is relative to the usual weather in the area.

Flooding is an overflow of water that submerges land, producing measurable property damage or forcing evacuation of people and vital resources. Floods can develop slowly as rivers swell during an extended period of rain, or during a warming trend following a heavy snow. Even a very small

stream or dry creek bed can overflow and create flooding. Two different types of flooding hazards are present within Custer County.

Inundation Flooding:

The greatest risks are realized typically during a rapid snowmelt before ice is completely off all of the rivers.

Flash Flooding:

This flooding is primarily localized, though enough rain can be produced to cause inundation flooding in areas along rivers and streams. Heavy, slow moving thunderstorms often produce large amounts of rain. With the county made up of 40% clayey soils, the very slow permeability of these soils the runoff is rapid, increasing the risk of flash flooding.

Freezing Rain/Ice temperatures dropping below 30 degrees Fahrenheit, accompanied with rain fall, can sometimes create freezing rain or ice storms. Freezing rain covers objects with ice, creating dangerous conditions due to slippery surfaces, platforms, sidewalks, roads, and highways. Black ice, usually unnoticeable, creates dangerous conditions, especially for traffic. Additionally, a quarter inch of frozen rain can significantly damage trees, electrical wires, weak structures, and other objects due to the additional weight bearing down on them.

Hail is formed through rising currents of air in a storm. These currents carry water droplets to a height at which they freeze and subsequently fall to earth as round ice particles. Hailstones usually consist mostly of water ice and measure between 5 and 150 millimeters in diameter, with the larger stones coming from severe and dangerous thunderstorms.

Heavy Rain is defined as precipitation falling with intensity in excess of 0.30 inches (0.762 cm) per hour. Short periods of intense rainfall can cause flash flooding while longer periods of widespread heavy rain can cause rivers to overflow.

Ice Jams occur when warm temperatures and heavy rain cause snow to melt rapidly. Snow melt combined with heavy rains can cause frozen rivers to swell, which breaks the ice layer on top of the river. The ice layer often breaks into large chunks, which float downstream and often pile up near narrow passages other obstructions, such as bridges and dams.

Landslide is a geological phenomenon which includes a wide range of ground movement, such as rock falls, deep failure of slopes and shallow debris flows, which can occur in offshore, coastal, and onshore environments. Although the action of gravity is the primary driving force for a landslide to occur, there are other contributing factors build up specific sub-surface conditions that make the area/slope prone to failure, whereas the actual landslide often requires a trigger before being released.

Lightning results from a buildup of electrical charges that happens during the formation of a thunderstorm. The rapidly rising air within the cloud, combined with precipitation movement within the cloud, results in these charges. Giant sparks of electricity occur between the positive and negative charges both within the atmosphere and between the cloud and the ground. When the potential between the positive and negative charges becomes too great, there is a discharge of electricity, known as lightning. Lightning bolts reach temperatures near 50,000° F in a split second. The rapid heating and expansion and cooling of air near the lightning bolt causes thunder.



Severe Winter Storms deposit four or more inches of snow in a 12-hour period or six inches of snow during a 24-hour period. Such storms are generally classified into four categories with some taking the characteristics of several categories during distinct phases of the storm. These categories include freezing rain, sleet, snow, and blizzard. Winter storms can range from moderate snow to blizzard conditions and can occur between October and April. The months of May, June, July, August, and September could possibly see snow, though the chances of a storm are very minimal. Like summer storms, winter storms are considered a weather event not a natural hazard, and thus will not be evaluated as a natural hazard throughout this plan.

Sleet does not generally cling to objects like freezing rain, but it does make the ground very slippery. This also increases the number of traffic accidents and personal injuries due to falls. Sleet can severely slow down operations within a community. Not only is there a danger of slipping, but with wind, sleet pellets become powerful projectiles that may damage structures, vehicles, or other objects.

Snow is a common occurrence throughout the County during the months from October to April. Snow is a major contributing factor to flooding, primarily during the spring months of melting.

Strong winds are usually defined as winds over 40 m/h, which are common in the area. High winds can cause destruction of property and create a safety hazard resulting from flying debris. Strong winds also include severe localized wind blasting down from thunderstorms. These downward blasts of air are categorized as either microbursts or macrobursts depending on the amount geographical area they cover. Microbursts cover an area less than 2.5 miles in diameter and macrobursts cover an area greater than 2.5 miles in diameter.

Subsidence is defined as the motion of a surface as it shifts downward relative to a datum. The opposite of subsidence is uplift, which results in an increase in elevation. There are several types of subsidence such as dissolution of limestone, mining-induced, faulting induced, isostatic rebound, extraction of natural gas, groundwater related, and seasonal effects. Depressions, cracks, and sinkholes in the earth's surface which can threaten people and property. Subsidence depressions, which normally occur over many days to a few years, may damage structures with low strain tolerances such as dams, factories, nuclear reactors, and utility lines.

Summer Storms are generally defined as atmospheric hazards resulting from changes in temperature and air pressure which cause thunderstorms that may cause hail, lightning, strong winds, and tornados. Summer storms are considered a weather event rather than a natural hazard; therefore, summer storms are not evaluated as a natural hazard throughout this plan.

Thunderstorms are formed when moisture, rapidly rising warm air, and a lifting mechanism such as clashing warm and cold air masses combine. The three most dangerous items associated with thunderstorms are hail, lightning, and strong winds.

Tornados are violent windstorms that may occur singularly or in multiples as a result of severe thunderstorms. They develop when cool air overrides warm air, causing the warm air to rapidly rise. Tornados tend to happen in the summer. Many of these resulting vortices stay in the atmosphere, though touchdown can occur. The Fujita Tornado Damage Scale categorizes tornadoes based on their wind speed. In 2010 NOAA began transitioning to the Enhanced Fujita Scale based on the intensity of tornados:

#### Fujita Damage Scale – Prior 2010

- F0=winds less than 73 m/h
- F1=winds 73-112 m/h
- F2=winds 113-157 m/h
- F3=winds 158-206 m/h
- F4=winds 207-260 m/h
- F5=winds 261-318 m/h
- F6=winds greater than 318 m/h

#### Enhanced Fujita Scale 2010

- EFU=unknown
- EF0=winds 65-85 m/h
- EF1=winds 85-110 m/h
- EF2=winds 111-135 m/h
- EF3=winds 136-165 m/h
- EF4=winds 166-200 m/h
- EF5=winds greater than 200 m/h

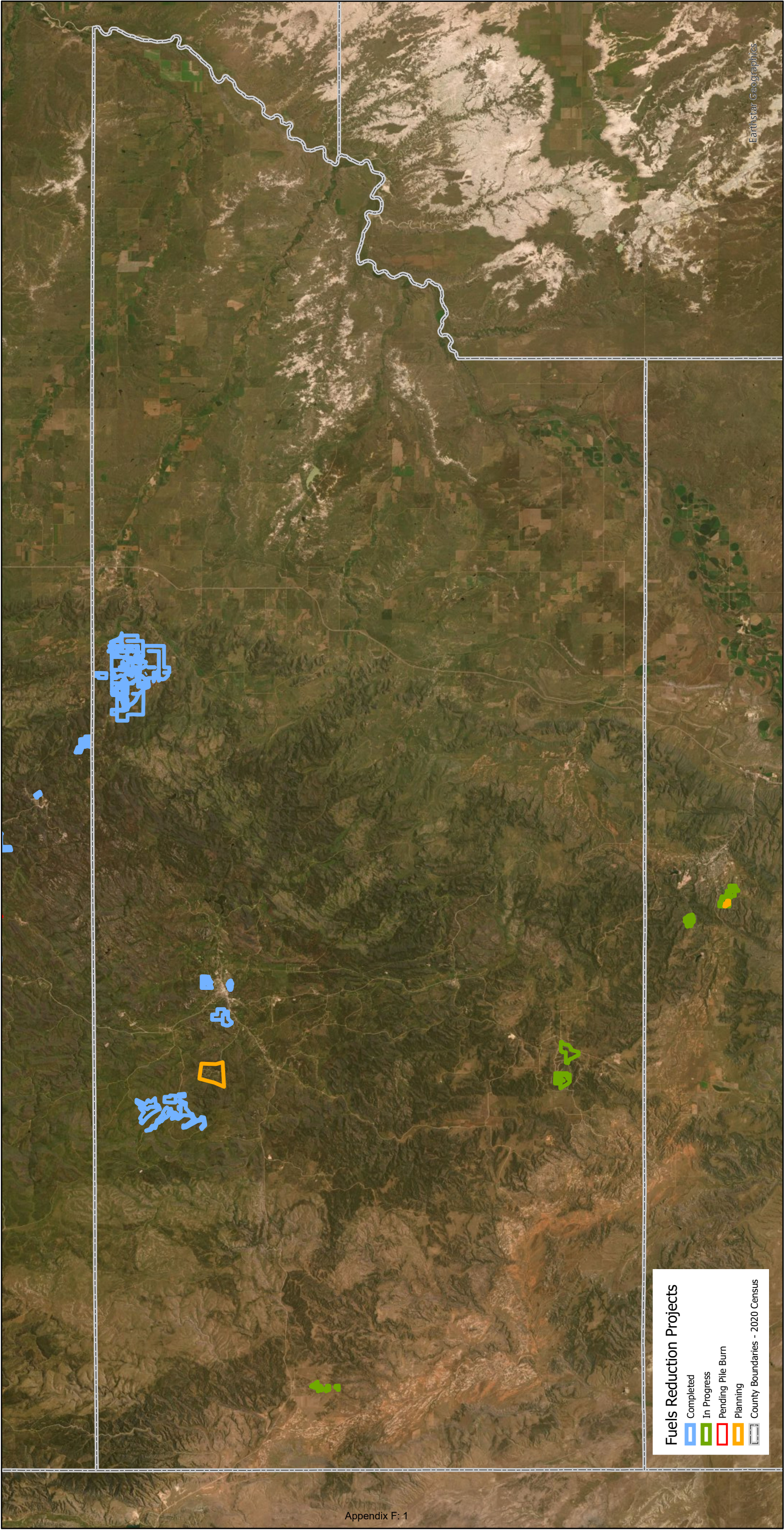
Wildland Fires are uncontrolled conflagrations that spread freely through the environment. Other names such as brush fire, bushfire, forest fire, grass fire, hill fire, peat fire, vegetation fire, and wildland fire may be used to describe the same phenomenon. A wildfire differs from the other fires by its extensive size; the speed at which it can spread out from its original source; its ability to change direction unexpectedly; and to jump gaps, such as roads, rivers, and fire breaks. Fires start when an ignition source is brought into contact with a combustible material that is subjected to sufficient heat and has an adequate supply of oxygen from the ambient air. Ignition may be triggered by natural sources such as a lightning strike or may be attributed to a human source such as discarded cigarettes, sparks from equipment, and arched power lines.

# Appendix F

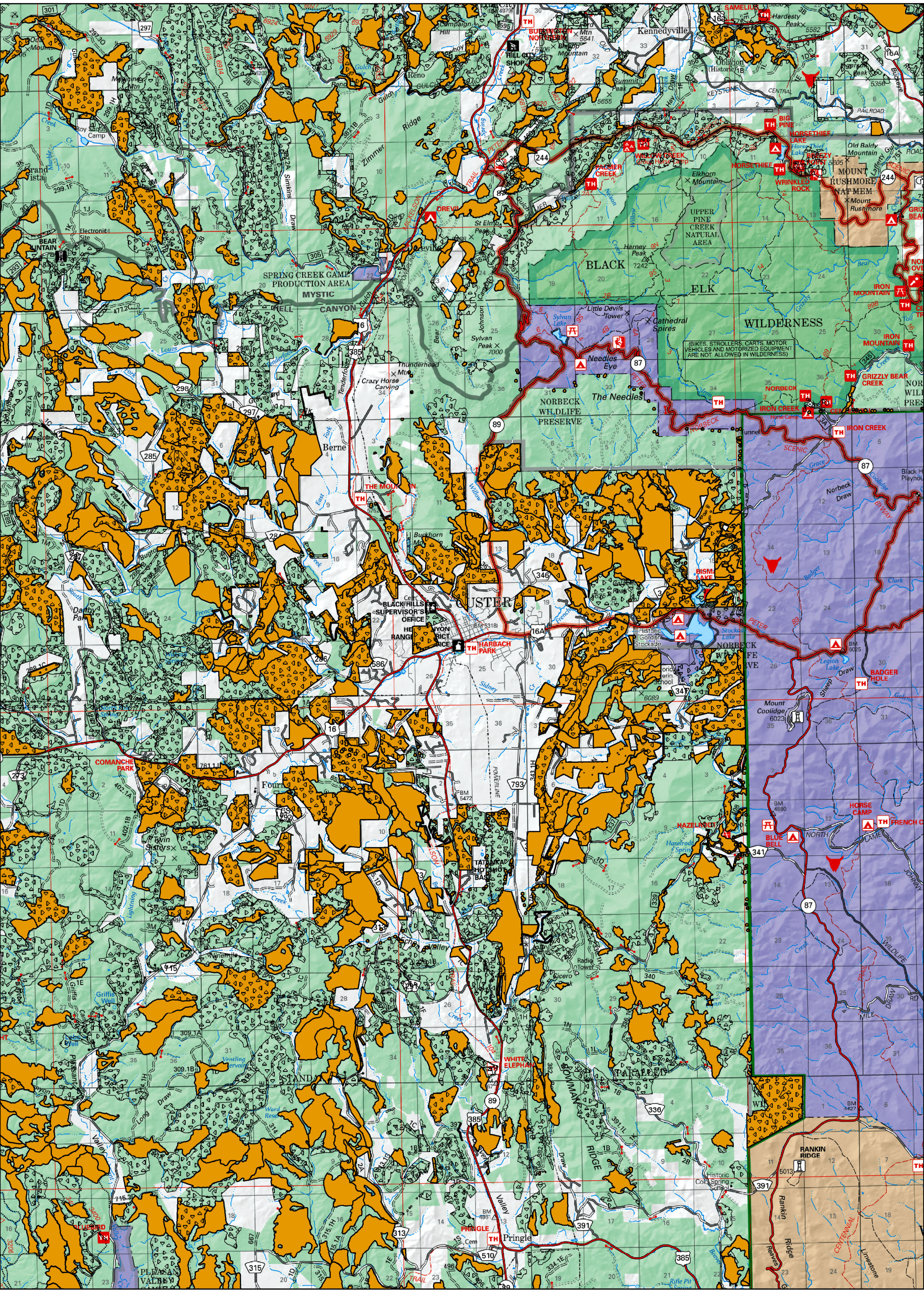
Wildfire Project Maps



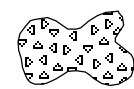
# SDWF Fuels Reduction Projects



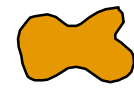




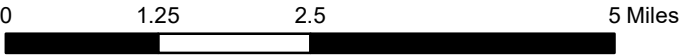
ACTIVITY



NonCommercial Treatments



Commercial Treatments



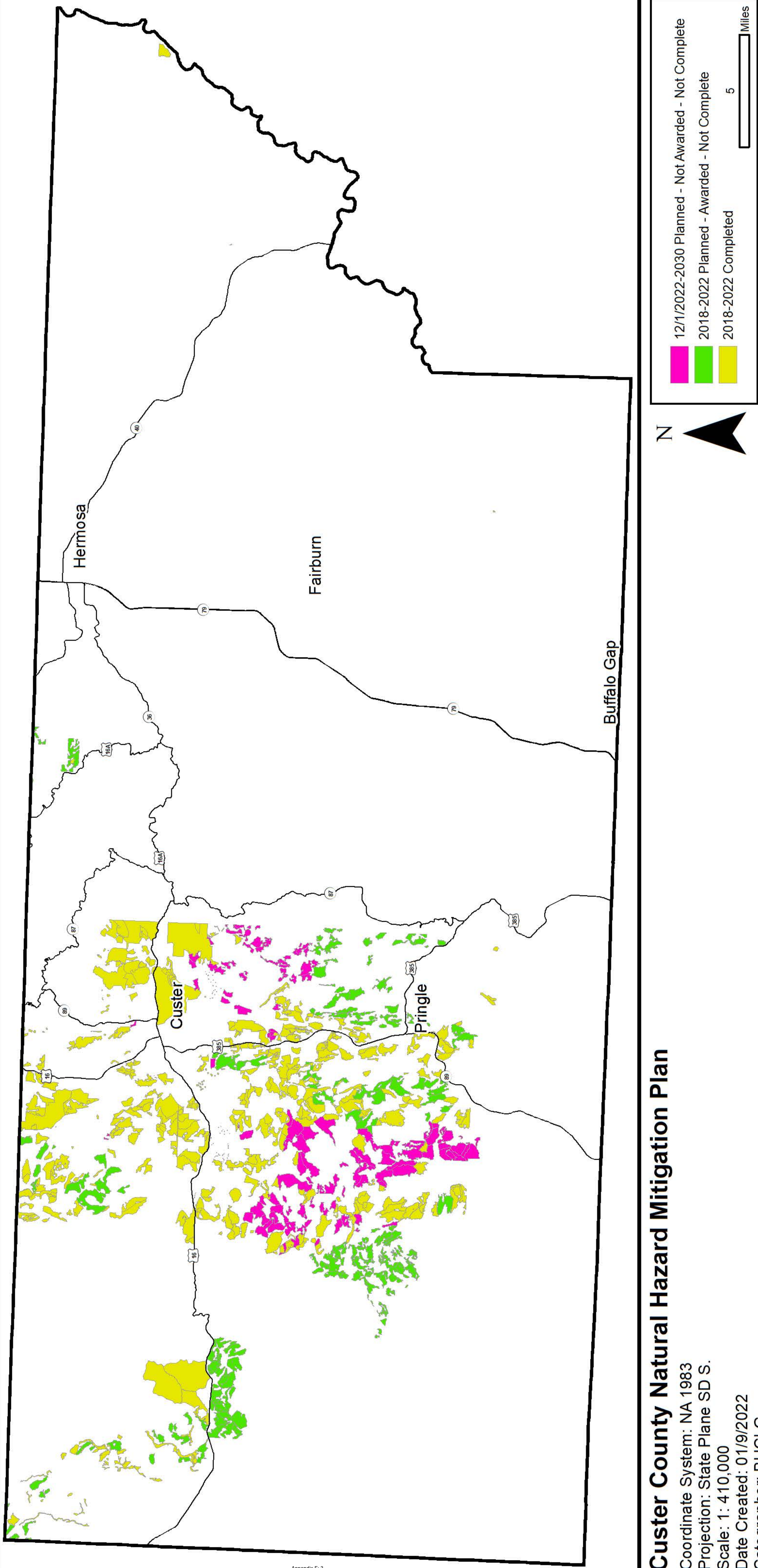
NAD83  
Appendix F: 2





# CUSTER COUNTY, SD

## USFS Past, Current, and Upcoming Project Areas



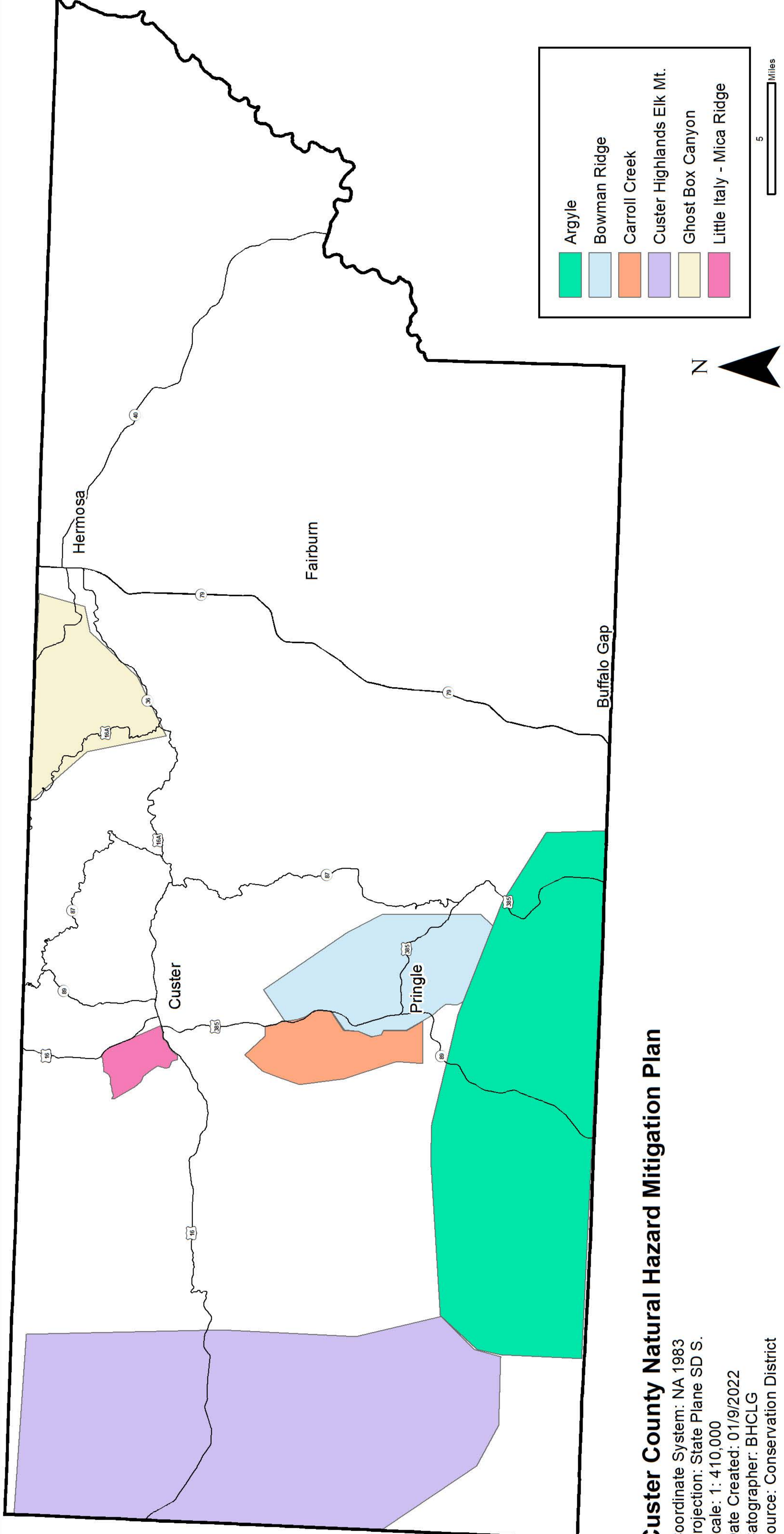
### Custer County Natural Hazard Mitigation Plan

Coordinate System: NA 1983  
Projection: State Plane SD S.  
Scale: 1: 410,000  
Date Created: 01/9/2022  
Cartographer: BHCLG  
Source: USFS



# CUSTER COUNTY, SD

## Conservation District Thinning Priority Areas



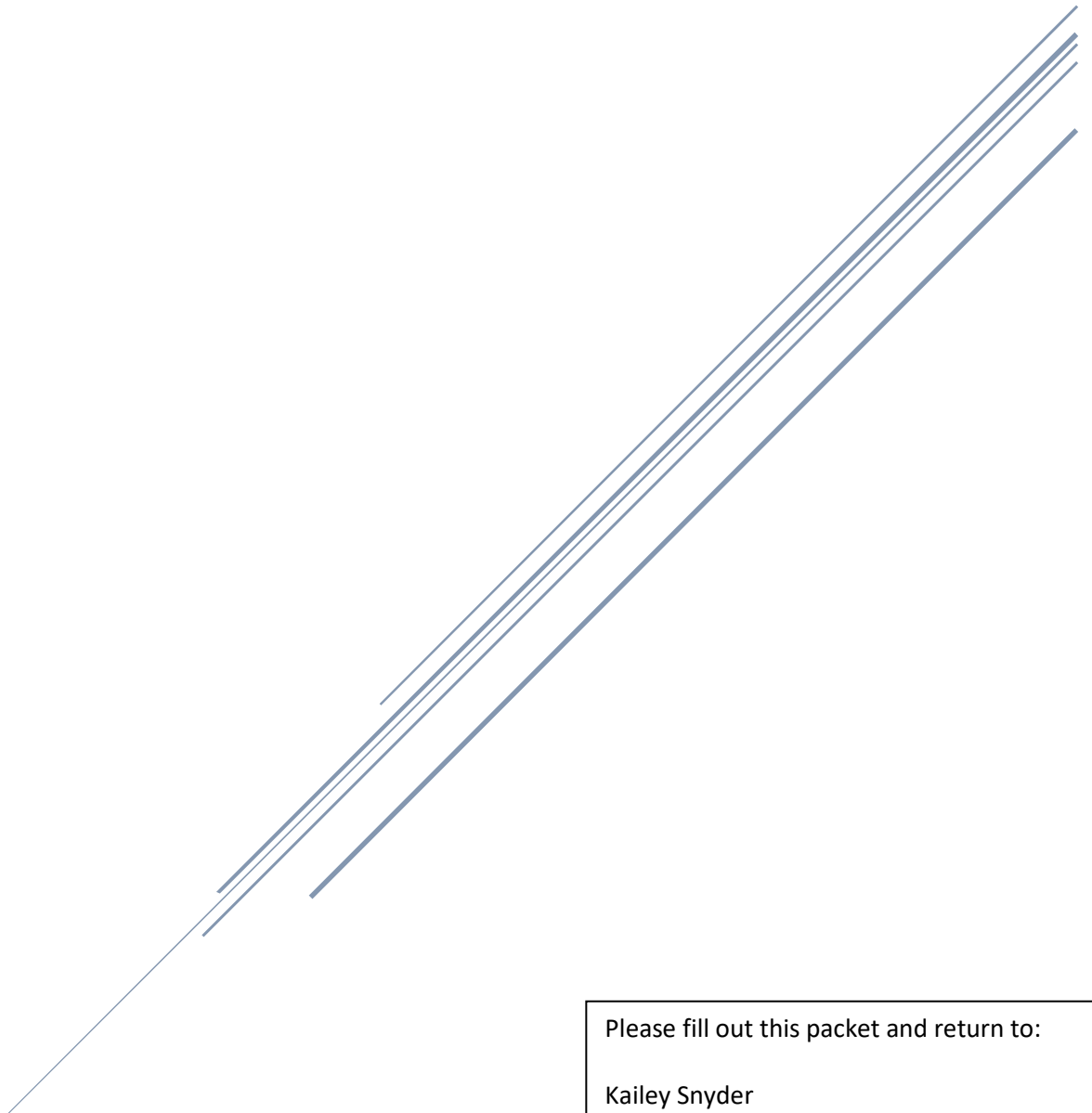
# **Appendix G**

County and Jurisdiction FEMA Worksheets



# HAZARD MITIGATION PACKET

## Custer County



Please fill out this packet and return to:

Kailey Snyder

[ksnyder@wrbc.com](mailto:ksnyder@wrbc.com)

605-394-2681 ex. 1244

**Please call or email with any questions!!**

## Part 1: Planning Documents and Studies

1. If a participant in NFIP (National Flood Insurance Program) who is your floodplain administrator and contact information?

Document Type	Yes	No	Year Adopted/Completed
Comprehensive Plan	X		2008 / 2008
Growth Management Plan			
Flood Damage Prevention Ordinance. Ordinance #6	X		1/4/2012
Floodplain Management Plan			
Flood Insurance Studies			
Hazard Vulnerability Analysis			
Emergency Operations Plan	X		09/2010 / Update 6/2022
Zoning Ordinances		X	
Building Code			
Drainage Ordinance			
Critical Facilities Map			
Structures Map			
WUI (Wildland Urban Interface) Map			
Existing Land Use Map			
Elevation Certifications			
State Hazard Mitigation Plan	X		
County 5-year Highway Improvements Plan (2023-2027)	X		9/15/2022
Drainage Study			
Transportation Plan	X		
Subdivision Ordinance Ordinance #2	X		1/30/2007 / Revised 8/27/2019
Engineering Reports (Landslides)		X	
Engineering Reports (Flooding/Drainage/Storm sewer)			
Fire Prevention Ordinance (Burn Bans) Ordinance 20	X		4/14/21 -
City Flood Maps			

Please list any additional studies/engineering/ or plans that the County/City has done not listed above:

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## Part 2: Hazard Identification

Identify Hazards that affect your County/City...

Hazard	Yes	No	Hazard Event Description (briefly describe the event; date; injuries; costs and types of damages)
Dam Failure		X	
Drought	X		
Earthquake		X	
Expansive Soils		X	
Extreme Heat		X	
Flood	X		
Hailstorm	X		
High Winds	X		
Land Subsidence		X	
Landslide			
Lightening	X		
Severe Winter Storms	X		
Tornado	X		
Wildfire	X		
Other			

## Part 2: Inventory Assets

Determine total number and value of structures in your County/City. ((County Assessor can assist in these values))

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		

Determine the number of structures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

**Hazard 1:** \_\_\_\_\_

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		

**Hazard 2:** \_\_\_\_\_

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		

### Part 3: Inventory Critical Infrastructure

Determine the types of critical infrastructure in your County/City. ((Ex. Fire Dept, City Hall, Wells, Lift Stations))

\*Replacement values and content values can be obtained for County/City owned buildings by contacting your insurance provider. For critical infrastructure not owned by County/City the values if unknown can be left blank.

Example – All Hazards									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Well house	✓				100	\$30,000	\$15,600	Pumps potable water to community	0
Maintenance shop	✓				5,800	\$290,500	\$820,300	N/A	6
Hospital	✓	✓			4ac	\$12,000,000	-	Hospital	NA
Lift Station	✓				-	\$250,000	-	N/A	0

All Hazards									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Courthouse w/ Generator	X				27,669	\$7,836,602	\$1,243,123	Courthouse Offices/Primary Emergency Operations and Dispatch Center	
Library/ Community Center	X				9,207	\$1,992,919	\$541,481	Library / Veterans Services /Community Health/ Meeting Rooms	
Custer Hwy Shop/Office w/ 100KW Generator	X				6,960	\$938,196	\$163,097	County Highway Main Maintenance Shop	
County Highway Department	X				12,960	\$365,454	\$15,000	Heated Storage	
Search & Rescue Bldg.	X				6400	\$502,232	\$10,000	Search and Rescue Building/ Backup Dispatch and Emergency Operations Center	
Fairgrounds Display Hall/ Quonset	X	X			4,000	\$114,165	\$0	Display Hall / Distribution Center	
Fairgrounds Women's Bldg.	X	X			3,200	\$136,211	\$2,690	Fairgrounds Women's Bldg./Shelter	
Beef Barn/ Display Booths	X	X			11,880	\$536,336	\$6,721	Beef Barn/ Display Booths/Shelter and Distribution	
Airport Office/ Equip Storage	X	X			2,960	\$323,824	\$13,439	Airport Office/ Equip Storage	
Airport/East Hangar	X				3,600	\$258,844	\$0	Airport East Hangar / Storage and Distribution	




Determine the number of critical infrastructures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

Hazard 1: \_\_\_\_\_

Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy




Determine the number of critical infrastructures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

Hazard 2: \_\_\_\_\_

Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy


Part 4: Hazard Probability

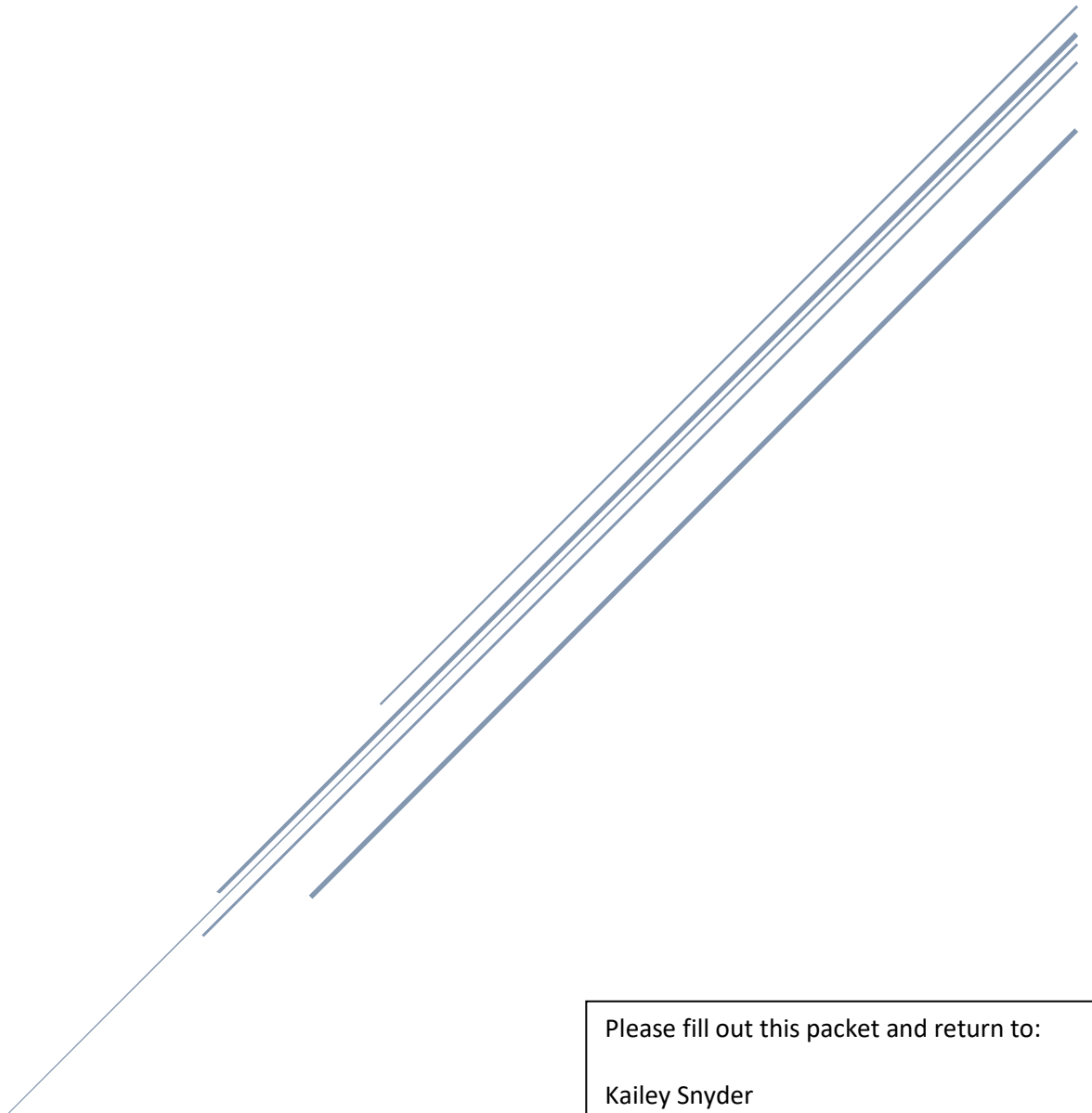
Identify Hazards Probability

Hazard Type	Probability		Frequency: Times in Last...			Population Impact			Property Impact		
	Yes	No	1 yrs	5 yrs	10 yrs +	High	Med	Low	High	Med	Low
Aircraft Accident		X	0	0	0			X			X
Communication (Disruption)	X		1	0	1		X				X
Dam Failure	X		0	0	1			X			X
Drought	X		0	1	2		X			X	
Earthquake		X	0	0	0			X			X
Extreme Cold	X		0	0	1		X				X
Extreme Heat		X	0	0	0		X				X
Flood	X		0	1	2	X				X	
Flood (rapid snow melt)		X									
Flood (Ice Jam)		X									
Flood (Heavy Rain)	X		0	1	2	X				X	
Hail	X										
Landslide		X									
Lightening	X										
Utility Interruption	X										
Subsidence		X									
Thunderstorm	X										
Tornado	X										
Wildfire	X										
Winter storm											

	X										
--	---	--	--	--	--	--	--	--	--	--	--

# HAZARD MITIGATION PACKET

## Custer City



Please fill out this packet and return to:

Kailey Snyder

[ksnyder@wrbsc.com](mailto:ksnyder@wrbsc.com)

605-394-2681 ex. 1244

**Please call or email with any questions!!**

## Part 1: Planning Documents and Studies

1. If you participant in NFIP (National Flood Insurance Program) who is your floodplain administrator and contact information?

CID# 460019; Floodplain Administrator-per Ord. 15.16.041 – City Planner/City Administration; Custer City Hall, 622 Crook St. Custer, SD 57730; 605-673-4824

Document Type	Yes	No	Year Adopted/Completed
Comprehensive Plan	X		11-02-2020
Growth Management Plan			
Flood Damage Prevention Ordinance	X		Ord 15
Floodplain Management Plan	X		Ord 15
Flood Insurance Studies	X		1-06-2012
Hazard Vulnerability Analysis			
Emergency Operations Plan			
Zoning Ordinances	X		Ord 17
Building Code	X		Ord 15
Drainage Ordinance			
Critical Facilities Map			
Structures Map			
WUI (Wildland Urban Interface) Map			
Existing Land Use Map	X		11/02/2020
Elevation Certifications	X		Floodplain Dev App 12-2018
State Hazard Mitigation Plan			
County 5-year Highway Improvements Plan			
Drainage Study		X	
Transportation Plan		X	
Subdivision Ordinance	X		Ord 16
Engineering Reports (Landslides)			
Engineering Reports (Flooding/Drainage/Storm sewer)	X		Limited documentation
Fire Prevention Ordinance (Burn Bans)	X		Ord 8.08
City Flood Maps	X		10-22-2020

Please list any additional studies/engineering/ or plans that the County/City has done not listed above:

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## Part 2: Hazard Identification

Identify Hazards that affect your County/City...

Hazard	Yes	No	Hazard Event Description (briefly describe the event; date; injuries; costs and types of damages)
Dam Failure		X	
Drought	X		Per NIDIS (drought.gov) monitoring – our area is currently experiencing drought conditions resulting in reduced water levels in the well as monitored by City water department. No costs directly associated with drought.
Earthquake	X		Earthquakes have been reported in close proximity of the City, however, as date of this report – no related damages in the city limits.
Expansive Soils		X	No known reports
Extreme Heat		X	
Flood	X		Flooding does occur due to French Creek flowing through City limits resulting in damages to homes, businesses, vehicles, and due to run-off into the City wastewater treatment plant. City cost incurred for the 2019 flood around \$50,000.
Hailstorm	X		Hailstorms are a frequent occurrence in the summer months and can result in extensive damage to buildings and vehicles. No costs available to report.
High Winds	X		High winds can occur causing to damage to buildings, trees, and powerlines. No costs available to report.
Land Subsidence		X	
Landslide		X	
Lightning	X		Lightning is a frequent occurrence in the summer months causing electrical outages when striking power stations- or striking trees that fall on power lines. No costs available to report.
Severe Winter Storms	X		Winter storms are a frequent occurrence in the winter – whether it's a blizzard, significant snow levels, or an ice storm and could cause power outages, vehicle accidents, and high cost of road, street, and sidewalk plowing and maintenance. No costs available to report.
Tornado	X		Tornadoes have been reported in close proximity of the City; however, as of the date of this report there hasn't been any direct involvement in the City limits.
Wildfire	X		Wildfires are a frequent occurrence in close proximity of the City limits. Recently, the Wabash Springs fire (4-7-2022) located within a few miles of the city limits, prompted the City to prepare to evacuate; however the fire was contained and evacuation was not necessary. The Elephant Fire (6-29-2022) was 7 miles S of the City and the City remained vigilant for any changing conditions that would require an emergency response. Any time a fire is within close proximity to the City – there will be monitoring to ensure the safety of residents and property. No costs available to report.
Other			

## Part 2: Inventory Assets

Determine total number and value of structures in your County/City. ((County Assessor can assist in these values))

Type of Structure	Number of Total Structures	Value of Total Structures
Residential	820	
Commercial	250	
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		

Determine the number of structures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

**Hazard 1:** \_\_\_\_\_

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		

**Hazard 2:** \_\_\_\_\_

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		



### Part 3: Inventory Critical Infrastructure

Determine the types of critical infrastructure in your County/City. ((Ex. Fire Dept, City Hall, Wells, Lift Stations))

\*Replacement values and content values can be obtained for County/City owned buildings by contacting your insurance provider. For critical infrastructure not owned by County/City the values if unknown can be left blank.

Example – All Hazards									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Well house	✓				100	\$30,000	\$15,600	Pumps potable water to community	0
Maintenance shop	✓				5,800	\$290,500	\$820,300	N/A	6
Hospital	✓	✓			4ac	\$12,000,000	-	Hospital	NA
Lift Station	✓				-	\$250,000	-	N/A	0

All Hazards SEE ATTACHMENT BELOW FOR CITY ASSET LIST									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Hospital/Clinic Monument	x								
Ambulance Custer County	x								
Search & Rescue Custer County	x								
Fire Dept Custer City	x								
SD Hwy Patrol	x								
SD DOT Shop	x								
Custer City Hall	x								
Custer City Swimming Pool	x								
Custer County Courthouse	x								
Assisted Living Center Monument	x								
Custer School District/Armory	x								
Custer High School	x								

All Hazards – (cont’d)									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Custer Elementary School	x								
USDA – Forest Service Supervisor’s office	x								
City Wells	x								
City Wastewater Treatment Plant	x								
Black Hills Energy and substation	x								
Black Hills Electric Cooperative	x								
Golden West Telephone Company	x								
Lynns Grocery Store	x								

Custer City Asset List	Critical Facility	Vulnerable Property	Historic
BLDG-TRAILHEAD MUSEUM			X
CABOOSE			X
CEMETERY STORAGE BLDG		X	
CITY HALL	X		
GARAGE BEHIND CITY HALL		X	
GATES PARK CONCESSION BLD		X	
GAZEBO		X	
ICE SKATE WARMING HOUSE		X	
LOG BUILDING			X
PARK SHELTER-FRENCH CK		X	
PICNIC SHELTERS-FRENCH CR		X	
PICNIC SHELTERS-HARBACK P		X	
POOL EQUIPMENT BLDG		X	
POOL-BATH HOUSE		X	
RESTROOM (TENNIS CT) IMPR		X	
RESTROOMS-TENNIS COURT		X	
ROCK SHELTER - PAGEANT HI		X	
SHELTER-PAGEANT HILL		X	
SHOP BUILDING 40'X86'		X	
STREET SHOP		X	
STREET-STORAGE BLDG		X	
STREET-STORAGE BLDG EQUIP		X	
TOILET - FR CREEK PARK		X	
TRACT HOSPITAL GARAGE		X	
WAY PARK CABIN			X
WAY PARK PUBLIC RESTROOMS		X	
PUMP HOUSE-FRENCH CK #9	X		
STORAGE BUILDING - WATER		X	
WATER DISPENSOR BUILDING	X		
WATER STORAGE TANK 150K	X		
WATER STORAGE TANK 570K	X		
WATER STORAGE TANKS X3	X		
WELL #9 ADDITION	X		
WELL HOUSE - CUSTER LUMBR	X		
WELL HOUSE - FRENCH CREEK	X		
WELL HOUSE - HARBACH	X		
WELL HOUSE 4	X		
WELL#2 (LS)BLDG IMPR 2019	X		
BUILDING-WWTP	X		
GOLF COURSE PUMP HOUSE	X		
GOLFCOURSE P. HOUSE ADDI		X	
STEEL BUILDING (NG BLDG)		X	
WW STORAGE BLDG AT SHOP		X	

<b>Custer City Asset List</b>	<b>Critical</b>	<b>Vulnerable</b>	<b>Historic</b>
2005 VAC SYS TRAILER - ST		X	
2006 MOWER		X	
2006 MOWER - STREETS		X	
2007 TYMCO ST. SWEEPER		X	
2008 CAT LOADER - GEN	X		
2015 BOBCAT SKIDSTEER	X		
2015 SCAG MOWER		X	
2018 TOOLCAT 40% PARKS		X	
2018 TOOLCAT 60% STREETS		X	
2019 LAZER 48 IN MOWER		X	
2021 ELGIN STREET SWEEPER		X	
2021 LAZER 72IN MOWER		X	
AIR COMPRESSOR UNIT 1989		X	
BACKHOE LOADER CAT 420E	X		
BOBCAT TOOLCAT 68" BROOM		X	
BOBCAT TOOLCAT 90" MOWER		X	
CATERPILLAR	X		
CHIPPER		X	
COMMUNITY CENT BOILER/CON	X		
FURNACE	X		
GATES PARK PLAYGROUND		X	
HONEYWELL COMPUTER- FO		X	
HONEYWELL COMPUTER- PB		X	
HONEYWELL COMPUTER-ST		X	
KYOCERA TASKalfa3051 COPI		X	
LOADER	X		
PHONE SYSTEM GENERAL 2020	X		
PLAYCENTER FRENCH CREEK		X	
PLAYCENTER HARBACH PARK		X	
POOL BOILERS 2012		X	
SANDER -07	X		
SERVER HP - GENERAL 2020		X	
SHOWMOBILE		X	
SIREN (FIRE HALL)	X		
SIREN SYSTEM	X		
SKATE PARK 2002		X	
SKATE PARK 2005		X	
SNOW PLOW	X		
SNOWBLOWER	X		
SOUND SYSTEM		X	
2005 VAC SYS TRAILER - W		X	
2006 MOWER - W		X	
2008 CAT LOADER - WATER	X		
COMPUTER WATER MNGMT SYS	X		

Custer City Asset List	Critical	Vulnerable	Historic
LIFT STATION	X		
PUMPS/TANKS	X		
RADIO READ HANDHELD WATER		X	
TELEMETRY		X	
WELL #2 (LS) PUMP 2018	X		
WELL #2 PUMP REPLACEMENT	X		
WELL HOUSE DEHUMIDIFACATI	X		
WELL HOUSING REMODELING	X		
WELL PUMP (#11)	X		
2005 VAC SYS TRAILER - WW		X	
2006 MOWER - WW		X	
2008 CAT LOADER - WW	X		
2017 VACTOR JET TRUCK		X	
AERATOR REPLACEMENT 2012	X		
EQUIPMENT		X	
EQUIPMENT-1		X	
GOLF COURSE PUMP	X		
HYDROMATIC WWTP - 2 PUMPS	X		
HYDROMATIC WWTP PUMP 2014	X		
PACO MOTOR		X	
PONTOON BOAT & TRAILER		X	
RADIO READ HANDHELD SEWER		X	
WWTP MECHANICAL BAR SCREE		X	
WWTP SUBMERSIBL PUMP 2017	X		
4TH STREET EAST SIDEWALK		X	
6TH STREET EAST SIDEWALK		X	
7TH STREET EAST SIDEWALK		X	
7TH STREET WEST SIDEWALK		X	
8TH & CROOK REBUILD		X	
8TH & MONTGOMERY ST CURB		X	
8TH STREET BRIDGE	X		
9TH STREET RECONSTRUCTION		X	
9TH STREET S. DRAIN PAN		X	
ASPHALT PAVEMENT		X	
BIG ROCK PARK TRAIL 2013		X	
BLUEBELL & CANAL INTERSEC		X	
BOOTHILL TIF#1 STREETS		X	
CANAL STREET PAVING		X	
CHAMBER BLDG FLOORING 11		X	
COMMUN CENTER BLDG IMPROV		X	
CURB 150' BY LEROY		X	
DISC GOLF COURSE		X	
DOG PARK		X	
DOWNTOWN TIF PROJECT		X	
DRAINAGE CHANNEL	X		

<b>Custer City Asset List</b>	<b>Critical</b>	<b>Vulnerable</b>	<b>Historic</b>
DRAINAGE IMPROVEMENT 2020		X	
GORDON STREET EXTENSION		X	
LOT & WALK		X	
MICKELSON TRAIL		X	
MICKELSON TRAIL PAVING 12		X	
MONTGOMERY & 6TH ST RECON		X	
MONTGOMERY ST MILL & OVERLAY		X	
MONTGOMERY ST TO SYLVAN		X	
OVERLAY		X	
PAD MOUNT - GATES PARK		X	
PAVING PROJECT 2007		X	
PLAYCENTER/TENNIS COURT		X	
POOL RENOVATIONS 2015		X	
REMODELING		X	
RENOVATION		X	
RINK LINER		X	
S 6TH ST SIDEWALK WESTSIDE		X	
SHERMAN & PARK INTERSECT		X	
SKYWALK TRAIL		X	
SKYWALK TRAIL PHASE II		X	
SKYWALK TRAIL PHASE III		X	
SOUTH 4TH STREET RECONSTR		X	
SOUTH 5TH STREET RECONSTR		X	
SOUTH 6TH STREET RECONSTR		X	
SPRINKLER		X	
STONEHILL TIF#2 ROAD PAVE		X	
VETERAN'S MEMORIAL PHASE 1		X	
WASHINGTON STREET - PAVED		X	
WAY PARK IMPROVEMENTS		X	
WAZI LANE IMPROVEMENTS		X	
WAZI LANE ROAD		X	
2005 USDA WATER PROJECT	X		
2005 WATER PROJECT USDA 2	X		
2005/06 USDA WATER PROJ	X		
2005/06 WATER PROJECT USDA	X		
BOOTHILL TIF#4 WATER LINE	X		
CROOK STREET UTILITY EXT	X		
GORDON STREET WATER EXTEN	X		
HEATER-1		X	
HYDRANTS	X		
KELLY WELL IMPROVEMENTS	X		
MAIN (TV) WELL IMPROVEMENT	X		
MT RUSHMORE WATER MAINS	X		
N 7TH ST WATER EXTENSION	X		
PAMIDA WATER LINE	X		

<b>Custer City Asset List</b>	<b>Critical</b>	<b>Vulnerable</b>	<b>Historic</b>
PURIFICATION	X		
SCHRINER WATER LINE EXTEN	X		
STONEHILL TIF#2 WATER LIN	X		
WATER LINE - HARROP	X		
WATER LINE S HWY 385 EXTN	X		
WATER MAIN 1	X		
WATER MAIN 10	X		
WATER MAIN 11	X		
WATER MAIN 12	X		
WATER MAIN 13	X		
WATER MAIN 14	X		
WATER MAIN 2	X		
WATER MAIN 3	X		
WATER MAIN 4	X		
WATER MAIN 5	X		
WATER MAIN 6	X		
WATER MAIN 7	X		
WATER MAIN 8	X		
WATER MAIN 9	X		
WATER PLANT #3 LIQUOR ST	X		
WATER PLANTS	X		
WATER PLANTS - TRUE VALUE	X		
WELL #11	X		
WELL #14 SUBDRIVE REPAIR	X		
WELL HOUSES	X		
WELL PUMP 1	X		
WELL PUMP 2	X		
WELL PUMP 3	X		
WELL PUMP 4	X		
WELL PUMP 5	X		
WESTSIDE ANNEXATION	X		
WESTSIDE ANNEXATION - W2	X		
1 MILE LINE	X		
12" FORCE MAIN	X		
8" FORCE MAIN	X		
AERATED LAGOONS	X		
BOOTHILL SEWER EXTEN	X		
BOOTHILL TIF #1 SEWER LIN	X		
BRADEEN SEWER MAIN RELOCA	X		
BUCKHORN LINE	X		
CEMENT MANHOLES	X		
COFFIN PIT SEWER LINE EXT	X		
COLLECTION LINE	X		
CROOK ST UTILITY EXT - WW	X		
EAST SEWER EXT.	X		



<b>Custer City Asset List</b>	<b>Critical</b>	<b>Vulnerable</b>	<b>Historic</b>
ENGINEER			
EXTENSION	X		
GOLF COURSE EFFLUENT LINE	X		
GORDON STREET SEWER EXTEN	X		
GREENWALD	X		
HARNEY LINE	X		
INTERCEPTOR	X		
IRRIGATION	X		
LAGOON	X		
LAGOON LINERS 2014	X		
LAGOONS	X		
LIFT-1TATION	X		
MAIN LINE	X		
N 7TH ST SEWER EXTENTION	X		
PAMIDA SEWER LINE	X		
PRESSURE LINE	X		
PROCESS PIPING	X		
ROAD & GIBBEONS		X	
ROAD, ECT.		X	
SEWER LINE - HARROP	X		
SEWER LINE REHAB 2014	X		
SEWER UPGRADE (8TH BRIDG)	X		
STONEHILL TIF#2 SEWER LIN	X		
SW MAIN LINE	X		
W. INTERCEPTOR	X		
WASTEWATER - BRADEEN	X		
WASTEWATER-LAUGHING WATER	X		
WAZI LANE 2021 SEWER EXTE	X		
WAZI LANE SEWER EXTENSION	X		
WESTSIDE ANNEXATION - WW	X		
WESTSIDE ANNEXATION - WW2	X		
WWTP BRIDGEREPLACEMENT	X		
WWTP CONTROL UPGRADE	X		
WWTP LIFT STATION REBUILD	X		
WWTP VFD IMPROVEMENTS	X		
YARD PIPING		X	
1989 INT DUMP TRUCK	X		
1989 INTL DUMP TRUCK	X		
1993 FORD DUMP TRUCK	X		
1996 DUMP TRUCK CTY765	X		
1998 FORD F800 VAN TRUCK	X		
2005 CHEVY 1/4 TON	X		
2005 F550 FLATBED PICKUP	X		
2008 F550 BUCKET TRUCK	X		
2010 FORD F250 - ST	X		

<b>Custer City Asset List</b>	<b>Critical</b>	<b>Vulnerable</b>	<b>Historic</b>
2014 FORD F150 STREET	X		
2015 CHEV F150 PICKUP STR	X		
2016 DODGE PICKUP STREET	X		
2016 TRAVERSE GENERAL	X		
2018 DODGE RAM 3500	X		
2020 DODGE 2500 PICKUP	X		
LOADNGO REMOV TRUCK BODY	X		
2005 CHEVY 1/4 TON - W	X		
2010 FORD F250 - WATER	X		
2014 FORD F150 WATER	X		
2015 CHEV F150 PICKUP WAT	X		
2016 DODGE 1500 WATER	X		
2016 TRAVERSE - WATER	X		
2020 DODGE 1500 WATER PIC	X		
2005 CHEVY 1/4 TON - WW	X		
2010 FORD F250 - WW	X		
2014 FORD F150 SEWER	X		
2015 CHEV F150 PICKUP SEW	X		
2016 DODGE 1500 SEWER	X		
2016 TRAVERSE - SEWER	X		
2020 DODGE 1500 SEWER PIC	X		

Determine the number of critical infrastructures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

**Hazard 1:** \_\_\_\_\_

[illegible]

Determine the number of critical infrastructures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

**Hazard 2:** \_\_\_\_\_

[illegible]

## Part 4: Hazard Probability

Identify Hazards Probability **NOTE: PROBABILITY INFO BASED ON INSIDE CITY LIMITS**

Hazard Type	Probability		Frequency: Times in Last...			Population Impact			Property Impact		
	Yes	No	1 yrs	5 yrs	10 yrs +	High	Med	Low	High	Med	Low
Aircraft Accident		X									
Communication (Disruption)	X		X					X			X
Dam Failure		X									
Drought	X							X			X
Earthquake	X							X			X
Extreme Cold	X						X				X
Extreme Heat		X									
Flood	X		1					X			X
Flood (rapid snow melt)		X									
Flood (Ice Jam)		X									
Flood (Heavy Rain)	X		1					X			X
Hail	X		VARIABLE	FREQUENT			X			X	
Landslide		X									
Lightning	X		VARIABLE	FREQUENT				X			X
Utility Interruption	X		VARIABLE	FREQUENT				X			X
Subsidence		X									
Thunderstorm	X		VARIABLE	FREQUENT				X			X
Tornado	X							X			X
Wildfire	X							X			X
Winter storm	X		VARIABLE	FREQUENT			X			X	

Fairburn SD

# HAZARD MITIGATION PACKET

Return by  
Dec 1

Please fill out this packet and return to:

Kailey Snyder

[kshyder@wrbc.com](mailto:kshyder@wrbc.com)

605-394-2681 ex. 1244

Please call or email with any questions!!

## Part 1: Planning Documents and Studies

1. If you participant in NFIP (National Flood Insurance Program) who is your floodplain administrator and contact information?

*none*

Document Type	Yes	No	Year Adopted/Completed
Comprehensive Plan		✓	
Growth Management Plan		✓	
Flood Damage Prevention Ordinance		✓	
Floodplain Management Plan		✓	
Flood Insurance Studies		✓	
Hazard Vulnerability Analysis		✓	
Emergency Operations Plan		✓	
Zoning Ordinances		✓	
Building Code		✓	
Drainage Ordinance		✓	
Critical Facilities Map		✓	
Structures Map		✓	
WUI (Wildland Urban Interface) Map		✓	
Existing Land Use Map		✓	
Elevation Certifications		✓	
State Hazard Mitigation Plan		✓	
County 5-year Highway Improvements Plan		✓	
Drainage Study		✓	
Transportation Plan		✓	
Subdivision Ordinance		✓	
Engineering Reports (Landslides)		✓	
Engineering Reports (Flooding/Drainage/Storm sewer)		✓	
Fire Prevention Ordinance (Burn Bans)	✓		
City Flood Maps		✓	

Please list any additional studies/engineering/ or plans that the County/City has done not listed above:

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## Part 2: Hazard Identification

Identify Hazards that affect your County/City...

Hazard	Yes	No	Hazard Event Description (briefly describe the event; date; injuries; costs and types of damages)
Dam Failure		✓	
Drought	✓		No statistics
Earthquake		✓	
Expansive Soils		✓	
Extreme Heat		✓	
Flood		✓	
Hailstorm	✓		2018 - major damage throughout town. \$85,000 to town Hall. Occurance every 3 to 5 years
High Winds	✓		no statistics
Land Subsidence		✓	
Landslide		✓	
Lightening		✓	
Severe Winter Storms	✓		loss of electric + down trees no statistics
Tornado		✓	
Wildfire		✓	
Other		✓	

## Part 2: Inventory Assets

GSI

Determine total number and value of structures in your County/City. ((County Assessor can assist in these values))

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		

Determine the number of structures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

Hazard 1: \_\_\_\_\_

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		

Hazard 2: \_\_\_\_\_

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		

### Part 3: Inventory Critical Infrastructure

Determine the types of critical infrastructure in your County/City. ((Ex. Fire Dept, City Hall, Wells, Lift Stations))

\*Replacement values and content values can be obtained for County/City owned buildings by contacting your insurance provider. For critical infrastructure not owned by County/City the values if unknown can be left blank.

Example – All Hazards									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Well house	✓				100	\$30,000	\$15,600	Pumps potable water to community	0
Maintenance shop	✓				5,800	\$290,500	\$820,300	N/A	6
Hospital	✓	✓			4ac	\$12,000,000	-	Hospital	NA
Lift Station	✓				-	\$250,000	-	N/A	0

All Hazards									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Fire Hall	✓								
Civic Center Town Hall	✓								
Post Office	✓								
City Hall									
Comm. Center + Museum				✓					
Metth. Church	✓								

All Hazards – (cont'd)	
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[illegible]

Determine the number of critical infrastructures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

**Hazard 1:** \_\_\_\_\_

[illegible]

Determine the number of critical infrastructures located in a hazard zone per hazard. (ex. *Flooding, Landslide, Wildfire*)

**Hazard 2:** \_\_\_\_\_

[illegible]

## Part 4: Hazard Probability

Identify Hazards Probability

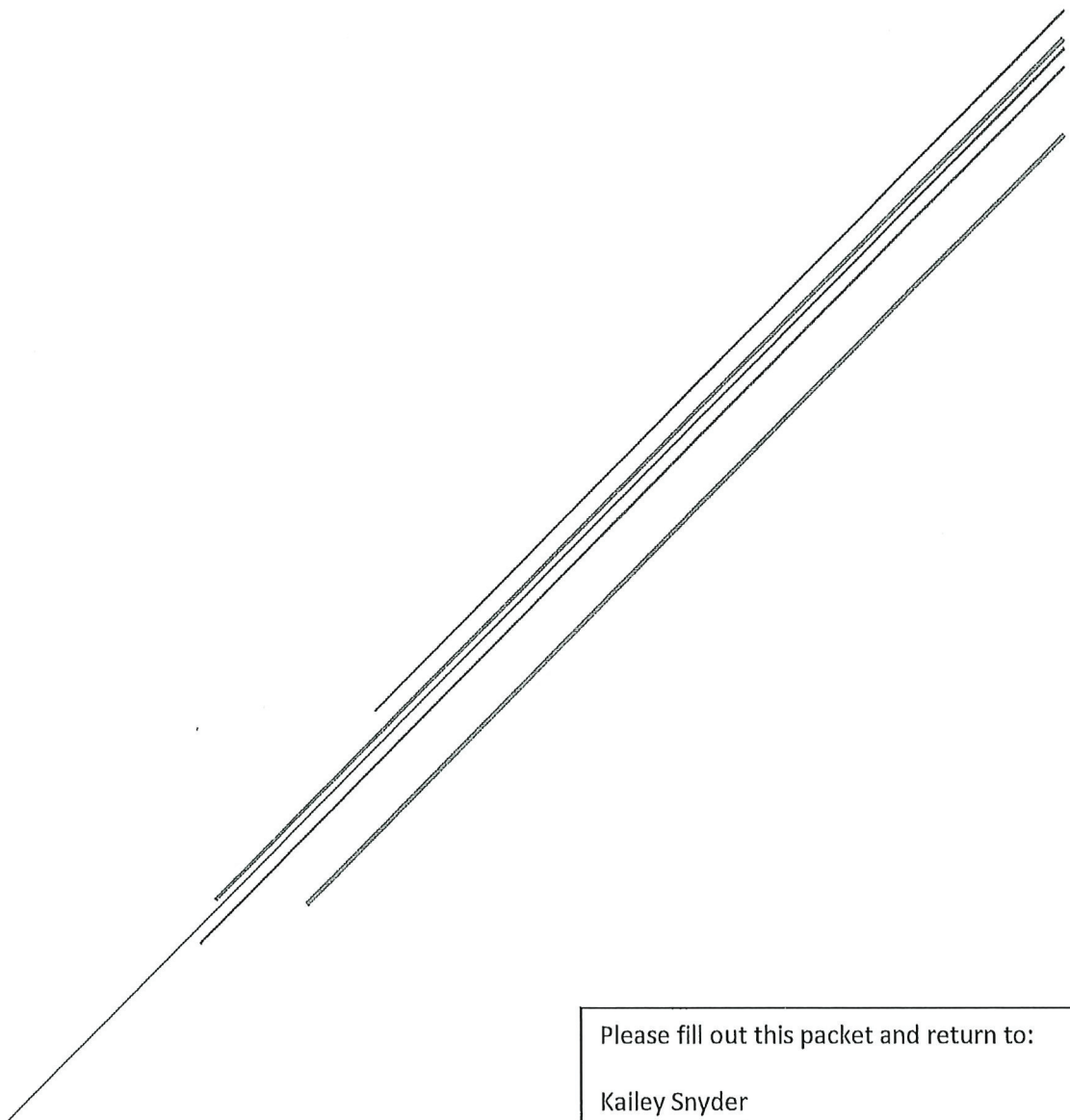
Hazard Type	Probability		Frequency: Times in Last...			Population Impact			Property Impact		
	Yes	No	1 yrs	5 yrs	10 yrs +	High	Med	Low	High	Med	Low
Aircraft Accident		✓									
Communication (Disruption)											
Dam Failure		✓									
Drought	✓		Every 3 yrs								
Earthquake		✓									
Extreme Cold	✓		Every year								
Extreme Heat	✓										
Flood		✓									
Flood (rapid snow melt)		✓									
Flood (Ice Jam)		✓									
Flood (Heavy Rain)		✓									
Hail	✓		Once a year								
Landslide		✓									
Lightening	✓		Yearly								
Utility Interruption	✓										
Subsidence		✓	3 yrs.								
Thunderstorm	✓										
Tornado		✓	Yearly								
Wildfire	✓										
Winter storm	✓		Yearly								



4a

# HAZARD MITIGATION PACKET

## HERMOSA SD



Please fill out this packet and return to:

Kailey Snyder  
[ksnyder@wrbc.com](mailto:ksnyder@wrbc.com)  
605-394-2681 ex. 1244

**Please call or email with any questions!!**

## Part 1: Planning Documents and Studies

1. If a participant in NFIP (National Flood Insurance Program) who is your floodplain administrator and contact information?

**ELMER CLAYCOMB (605)255-4049, elclaycomb@gmail.com**

Document Type	Yes	No	Year Adopted/Completed
Comprehensive Plan	X		
Growth Management Plan		X	
Flood Damage Prevention Ordinance	X		
Floodplain Management Plan		X	
Flood Insurance Studies		X	
Hazard Vulnerability Analysis		X	
Emergency Operations Plan	X		
Zoning Ordinances	X		
Building Code	X		
Drainage Ordinance		X	
Critical Facilities Map		X	
Structures Map		X	
WUI (Wildland Urban Interface) Map		X	
Existing Land Use Map	X		
Elevation Certifications	ASK		
State Hazard Mitigation Plan		X	
County 5-year Highway Improvements Plan		X	
Drainage Study		X	
Transportation Plan	X		
Subdivision Ordinance	X		
Engineering Reports (Landslides)		X	
Engineering Reports (Flooding/Drainage/Storm sewer)		X	
Fire Prevention Ordinance (Burn Bans)	X		
City Flood Maps	X		

Please list any additional studies/engineering/ or plans that the County/City has done not listed above:

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Type text here

## Part 2: Hazard Identification

GSI

Identify Hazards that affect your County/City...

Hazard	Yes	No	Hazard Event Description (briefly describe the event; date; injuries; costs and types of damages)
Dam Failure			
Drought			
Earthquake			
Expansive Soils			
Extreme Heat			
Flood			
Hailstorm			
High Winds			
Land Subsidence			
Landslide			
Lightening			
Severe Winter Storms			
Tornado			
Wildfire			
Other			

## Part 2: Inventory Assets

Determine total number and value of structures in your County/City. ((County Assessor can assist in these values))

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>	Type text here	

Determine the number of structures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

Hazard 1: \_\_\_\_\_ GSI

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		

Hazard 2: \_\_\_\_\_ GSI

Type of Structure	Number of Total Structures	Value of Total Structures
Residential		
Commercial		
Industrial		
Agricultural		
Religious		
Government		
Education		
Utilities		
<b>Total</b>		

### Part 3: Inventory Critical Infrastructure

Determine the types of critical infrastructure in your County/City. ((Ex. Fire Dept, City Hall, Wells, Lift Stations))

\*Replacement values and content values can be obtained for County/City owned buildings by contacting your insurance provider. For critical infrastructure not owned by County/City the values if unknown can be left blank.

Example – All Hazards									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
Well house	✓				100	\$30,000	\$15,600	Pumps potable water to community	0
Maintenance shop	✓				5,800	\$290,500	\$820,300	N/A	6
Hospital	✓	✓			4ac	\$12,000,000	-	Hospital	NA
Lift Station	✓				-	\$250,000	-	N/A	0

[illegible]



# HERMOSA OWNED PROPERTIES

All Hazards – (cont'd)									
Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
TOWN HALL INCLUDES LIBRARY, EMERGENCY SHELTER & FOOD BANK	X	X			2080	583,200		MEETINGS, EMERGENCY SHELTER PROVIDES FOOD	
	X								
GARAGE / RENTAL					1260	47,760		RENTAL INCOME	
PUMP HOUSE -2 UPPER & LOWER	X	X			260 132	97,850. 44,000		SUPPLIES WATER TO THE COMMUNITY	
WATER TOWER	X	X			upper lower	367,180 627,875		STORES WATER FOR THE COMMUNITY	
WATER TREATMENT	X	X			3 cells	31,000 valve 13,000 coolant		SUPPLIES SAFE WATER FOR THE COMMUNITY	
WELL & PUMP - 2 UPPER & LOWER	X	X				upper 130,478 lower 130,478		SUPPLIES WATER FOR THE COMMUNITY	
STORAGE BUILDING					22831	39,000		MISCELLANIOUS STORAGE	
BOOSTER STATIONS	X	X			100	50,200		PROVIDES A MEANS FOR SEWER TO GET TO LAGOON	
FENCING AT TWO WATER TANKS LOWER & UPPER					891	17,875		SAFETY	
EMERGENCY WARNING IRENS	X	X			east west	45,660 45,660		NOTIFICATION OF CITEZENS	
FENCING AT LOWER PUMP		X			963	5,000			
FENCEING AT LAGOON		X			1920	26,800			
STORAGE SHED AT TOWER		X			99	4,280			

Determine the number of critical infrastructures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

Hazard 1: **BUSINESS'S WITHIN THE TOWN LIMITS**

Name of Asset	Critical Facility	Vulnerable Pop.	Economic	Historic	Size (sq ft)	Replacement Value	Content Value	Function Use	Capacity/ Occupancy
HEARTLAND HAIR			X					HAIR SALON	
CUSTER COUNTY FAIRGROUNDS	X	X						PROVIDES EMERGENCY SHELTER FOR LIVESTOCK & MEALS FOR DISPLACED	
POPS GROCERY	X	X	X					GROCERY STORE	
HERMOSA COMMUNITY CT.			X					GAME ROOM	
HERMOSA ARTS & HISTORY ASSOC.				X				HISTORIC PRESERVATION OF COMMUNITY HISTORY	
UNITED CHURCH OF CHRIST								CHURCH	
MASONIC TEMPLE								MASONS MEETING BLDG.	
HERMOSA POSTOFFICE	X	X						POSTOFFICE	
HERMOSA COFFEE HOUSE			X					COFFEE STOP	
OUR SAVIORS LUTHERAN CHURCH								CHURCH	
HERMOSA SCHOOL	X	X						EDUCATION	
CORNER PANTRY TRUCK STOP	X	X						FUEL, GAS	
NELSONS OIL	X	X						PROPANE	
FIRE DEPARTMENT	X	X						SAFETY FROM FIRE	
FARMHOUSE VINTAGE DESIGNS			X					STORE	
ROYS TWIN SCREEN			X					SEASONAL, OUT DOOR MOVIE THEATER	
SO. HILLS CAMPGROUND		X	X					SEASONAL CAMPGROUND	
LAZY R		X	X					FOOD & LOUNG	
DOLLAR GENERAL	X	X	X					STORE, GROCERIES AND CLOTHING, BLANKETS, EMERGENCY NECESITIES	
WALNUT GROVE STORAGE			X					PERSONAL STORAGE	



Determine the number of critical infrastructures located in a hazard zone per hazard. (ex. Flooding, Landslide, Wildfire)

Hazard 2: RESIDENTIAL PROPERTIES

[illegible]

## Part 4: Hazard Probability

### Identify Hazards Probability

Hazard Type	Probability		Frequency: Times in Last...			Population Impact			Property Impact		
	Yes	No	1 yrs	5 yrs	10 yrs +	High	Med	Low	High	Med	Low
Aircraft Accident		X									
Communication (Disruption)	X			X		X					X
Dam Failure		X									
Drought	X		X			X			X		
Earthquake		X									
Extreme Cold	X			X			X			X	
Extreme Heat	X						X			X	
Flood	X						X		X		
Flood (rapid snow melt)	X							X			X
Flood (Ice Jam)		X									
Flood (Heavy Rain)	X					X			X		
Hail	X					X			X		
Landslide		X									
Lightening	X						X			X	
Utility interruption	X					X			X		
Subsidence		X									
Thunderstorm	X							X			X
Tornado	X							X			X
Wildfire		X									
Winter storm	X					X			X		

# Appendix H

NFIP Status



# Community Status Book Report

## Communities Participating in the National Flood Program



SOUTH DAKOTA

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal	CRS Entry Date	Curr Eff Date	Curr Class	% Disc SFHA	% Disc Non SFHA
460007#	ABERDEEN, CITY OF	BROWN COUNTY	10/05/73	06/01/78	09/29/10	06/01/78	No	10/01/17	10/01/17	9	05%	05%
460153#	ALEXANDRIA, CITY OF	HANSON COUNTY	06/27/75	09/02/09	09/02/09	01/19/10	No					
460096	ALPENA, CITY OF	JERAULD COUNTY	09/26/75		(NSFHA)	06/08/98	No					
460234	ARMOUR, CITY OF	DOUGLAS COUNTY	08/06/76	10/01/86	10/01/86(L)	10/01/86	No					
461207	ARTAS, CITY OF	CAMPBELL COUNTY			(NSFHA)	06/08/98	No					
460097#	ARTESIAN, TOWN OF	SANBORN COUNTY	08/08/75	07/22/10	(NSFHA)	02/11/85	No					
460077#	ASHTON, CITY OF	SPINK COUNTY	12/06/74	10/19/10	(NSFHA)	12/12/12	No					
460293#	AURORA COUNTY *	AURORA COUNTY		11/19/03	11/19/03	02/02/09	No					
460051#	AURORA, CITY OF	BROOKINGS COUNTY		07/16/08	07/16/08	07/16/08	No					
460154	AVON, CITY OF	BON HOMME COUNTY	10/29/76		(NSFHA)	06/08/98	No					
460058#	BALTIC, TOWN OF	MINNEHAHA COUNTY	12/06/74	11/19/80	09/02/09	11/19/80	No					
460251#	BEADLE COUNTY *	BEADLE COUNTY	01/10/78	10/01/97	06/02/09	10/01/97	No					
460012#	BELLE FOURCHE, CITY OF	BUTTE COUNTY	11/02/73	06/01/77	01/06/12	06/01/77	No					
460155A	BERESFORD, CITY OF	UNION COUNTY/LINCOLN COUNTY	07/18/75	04/02/08	01/15/21(M)	01/06/22	No					
460156#	BIG STONE CITY, CITY OF	GRANT COUNTY	11/12/76	07/01/98	11/04/09(M)	07/01/98	No					
460039#	BLUNT, CITY OF	HUGHES COUNTY	10/10/75	05/15/80	05/17/04	05/15/80	No					
460252	BON HOMME COUNTY *	BON HOMME COUNTY			(NSFHA)	06/08/98	No					
460089#	BOX ELDER, CITY OF	PENNINGTON COUNTY	10/25/74	05/15/80	06/03/13	05/15/80	No					
460296#	BRANDON,CITY OF	MINNEHAHA COUNTY	11/19/76	07/10/79	11/16/11	07/10/79	No					
460158#	BRIDGEWATER, CITY OF	MCCOOK COUNTY	11/19/76	06/18/13	(NSFHA)	07/11/11	No					
460101#	BRISTOL, CITY OF	DAY COUNTY	06/03/77	12/06/01	(NSFHA)	04/25/97	No					
460159	BRITTON, CITY OF	MARSHALL COUNTY			(NSFHA)	06/08/98	No					
460253#	BROOKINGS COUNTY*	BROOKINGS COUNTY	12/20/77	01/01/87	07/16/08(M)	01/01/87	No					
460004#	BROOKINGS, CITY OF	BROOKINGS COUNTY	03/22/74	10/17/78	07/16/08	10/17/78	No					
460006#	BROWN COUNTY *	BROWN COUNTY	12/20/74	09/30/88	09/29/10	09/30/88	No					
460005#	BRUCE, TOWN OF	BROOKINGS COUNTY	09/13/74	02/05/80	07/16/08(M)	02/05/80	No					
460284	BRULE COUNTY *	BRULE COUNTY			(NSFHA)	06/08/98	No					
460255	BUFFALO COUNTY *	BUFFALO COUNTY			(NSFHA)	06/08/98	No					
460161	BURKE, CITY OF	GREGORY COUNTY			(NSFHA)	06/08/98	No					
460236#	BUTTE COUNTY*	BUTTE COUNTY	12/20/77	01/06/12	01/06/12	01/06/12	No					
460256	CAMPBELL COUNTY *	CAMPBELL COUNTY			(NSFHA)	06/08/98	No					
460162#	CANISTOTA,CITY OF	MCCOOK COUNTY	08/13/76	06/18/13	(NSFHA)	04/25/97	No					
460102	CANOVA, TOWN OF	MINER COUNTY	05/20/77		(NSFHA)	04/25/97	No					
460047#	CANTON, CITY OF	LINCOLN COUNTY	08/16/74	09/04/85	04/02/08(M)	09/04/85	No					
460035	CASTLEWOOD, CITY OF	HAMLIN COUNTY	05/17/74	04/15/86	04/15/86(M)	04/15/86	No					
461212#	CAVOUR, TOWN OF	BEADLE COUNTY		06/02/09	06/02/09(M)	06/08/98	No					
460163A	CENTERVILLE, CITY OF	TURNER COUNTY	08/13/76	10/07/21	10/07/21(M)	06/08/98	No					
461200#	CENTRAL CITY, TOWN OF	LAWRENCE COUNTY		04/17/12	04/17/12(M)	09/24/12	No					
460164	CHAMBERLAIN, CITY OF	BRULE COUNTY	06/25/76		(NSFHA)	07/15/85	No					
460104A	CHANCELLOR, TOWN OF	TURNER COUNTY		10/07/21	(NSFHA)	06/08/98	No					
460257#	CHARLES MIX COUNTY *	CHARLES MIX COUNTY	01/10/78	07/01/98	06/02/04	07/01/98	No					
461209	CHELSEA, TOWN OF	FAULK COUNTY			(NSFHA)	06/08/98	No					
461203#	CHEYENNE RIVER INDIAN RESERVATION DEWEY	DEWEY COUNTY/ZIEBACH COUNTY		05/03/04	05/03/04	06/08/98	Yes					
460105#	CLAREMONT, TOWN OF	BROWN COUNTY	04/25/75	09/30/88	(NSFHA)	03/05/10	No					
	NSFHA COMMUNITY.											
460258	CLARK COUNTY *	CLARK COUNTY			(NSFHA)	06/08/98	No					
460013	CLARK, CITY OF	CLARK COUNTY	03/12/76	07/01/98	07/01/98(L)	07/01/98	No					
460259B	CLAY COUNTY*	CLAY COUNTY	10/18/77	04/01/87	12/30/20	04/01/87	No					
460260#	CODINGTON COUNTY*	CODINGTON COUNTY	01/24/78	02/01/86	01/16/09	02/01/86	No					
460106#	COLMAN, CITY OF	MOODY COUNTY	07/11/75	08/19/08	(NSFHA)	02/11/85	No					
460084	COLOME, CITY OF	TRIPP COUNTY	05/10/74	05/01/86	05/01/86(L)	05/01/86	No					
460166#	COLTON, CITY OF	MINNEHAHA COUNTY	08/13/76	09/02/09	(NSFHA)	06/08/98	No					
460008#	COLUMBIA, CITY OF	BROWN COUNTY	12/06/74	07/17/78	09/29/10	04/07/94	No					
460078#	CONDE, CITY OF	SPINK COUNTY	12/20/74	10/19/10	10/19/10(M)	09/21/11	No					



# Community Status Book Report

## Communities Participating in the National Flood Program



SOUTH DAKOTA

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal	CRS Entry Date	Curr Eff Date	Curr Class	% Disc SFHA	% Disc Non SFHA
460071#	CORONA, TOWN OF	ROBERTS COUNTY	02/21/75	03/04/87	07/20/09(M)	03/04/87	No					
460167	CORSICA, CITYOF	DOUGLAS COUNTY	09/26/75			08/05/20	No					
	No current FIRM or FIS. FHBM from 9/26/1975 is rescinded. Douglas County does not participate and appears to have no map.											
460237#	CORSON COUNTY*	CORSON COUNTY		05/17/04	05/17/04	06/08/98	No					
	There are no unincorporated areas in the County.											
460107	CRESBARD, TOWN OF	FAULK COUNTY	07/18/75	07/01/98	07/01/98(L)	07/01/98	No					
460314D	CROOKS, CITY OF	MINNEHAHA COUNTY		09/02/09	(NSFHA)	12/07/15	No					
460018#	CUSTER COUNTY*	CUSTER COUNTY	10/18/77	09/29/86	01/06/12	09/29/86	No					
460019#	CUSTER, CITY OF	CUSTER COUNTY	05/24/74	01/02/81	01/06/12	01/02/81	No					
460108	DALLAS, TOWN OF	GREGORY COUNTY	04/25/75		(NSFHA)	03/18/86	No					
465466#	DANTE, TOWN OF	CHARLES MIX COUNTY		06/02/04	06/02/04	01/30/13	No					
460086A	DAVIS, TOWN OF	TURNER COUNTY	05/02/75	03/18/86	10/07/21(M)	03/18/86	No					
460020#	DAVISON COUNTY*	DAVISON COUNTY	05/20/77	04/01/87	09/29/10	04/01/87	No					
460261#	DAY COUNTY *	DAY COUNTY		12/06/01	12/06/01	06/08/98	No					
460168	DE SMET, CITY OF	KINGSBURY COUNTY	07/11/75		(NSFHA)	04/25/97	No					
460045#	DEADWOOD, CITY OF	LAWRENCE COUNTY	07/11/75	04/16/90	04/17/12	02/03/82	No					
460059#	DELL RAPIDS, CITY OF	MINNEHAHA COUNTY	05/02/75	08/15/80	09/02/09	08/15/80	No					
460025	DELMONT, TOWN OF	DOUGLAS COUNTY	08/08/75	08/05/86	08/05/86(M)	08/05/86	No					
460262	DEUEL COUNTY *	DEUEL COUNTY			(NSFHA)	06/08/98	No					
460023	DEWEY COUNTY*	DEWEY COUNTY			(NSFHA)	06/08/98	No					
460079#	DOLAND, TOWN OF	SPINK COUNTY	02/07/75	10/19/10	10/19/10(M)	11/12/85	No					
460263	DOUGLAS COUNTY *	DOUGLAS COUNTY				09/21/20(E)	No					
460169	DUPREE, CITY OF	ZIEBACH COUNTY	04/25/75	07/01/98	07/01/98(L)	07/01/98	No					
460170	EAGLE BUTTE, TOWN OF	DEWEY COUNTY	11/12/76	07/01/98	07/01/98(L)	07/01/98	No					
460026#	EDGEMONT, CITY OF	FALL RIVER COUNTY	08/02/74	12/16/80	12/18/07	12/16/80	No					
460264	EDMUNDS COUNTY *	EDMUNDS COUNTY			(NSFHA)	06/08/98	No					
460061#	EGAN, TOWN OF	MOODY COUNTY	03/01/74	01/22/80	08/19/08(M)	01/22/80	No					
460171A	ELK POINT, CITY OF	UNION COUNTY		01/15/21	01/15/21(M)	02/11/21	No					
460172#	ELKTON, CITY OF	BROOKINGS COUNTY	08/22/75	07/16/08	(NSFHA)	04/25/97	No					
460110#	EMERY, CITY OF	HANSON COUNTY		09/02/09	(NSFHA)	06/03/20	No					
460036#	ESTELLINE, CITY OF	HAMLIN COUNTY	05/10/74	01/22/80	01/22/80(M)	01/22/80	No					
460111#	ETHAN, TOWN OF	DAVISON COUNTY		09/29/10	(NSFHA)	03/08/89	No					
460173	EUREKA, CITY OF	MCPHERSON COUNTY	07/16/76	10/01/86	10/01/86(L)	10/01/86	No					
460238#	FALL RIVER COUNTY*	FALL RIVER COUNTY	11/01/77	12/18/07	12/18/07	12/27/07	No					
460265	FAULK COUNTY *	FAULK COUNTY			(NSFHA)	06/08/98	No					
460175	FAULKTON, CITY OF	FAULK COUNTY	02/21/75	08/05/86	08/05/86(M)	08/05/86	No					
460062#	FLANDREAU, CITY OF	MOODY COUNTY	09/26/75	01/16/81	08/19/08	01/16/81	No					
460306#	FLORENCE, TOWN OF	CODINGTON COUNTY		01/16/09	01/16/09(M)	02/24/10	No					
465419#	FORT PIERRE, CITY OF	STANLEY COUNTY		01/12/73	05/17/04	01/12/73	No					
460009#	FREDERICK, TOWN OF	BROWN COUNTY	11/22/74	03/01/78	03/18/08	03/01/78	No					
460176#	FREEMAN, CITY OF	HUTCHINSON COUNTY		09/02/09	(NSFHA)	03/03/20	No					
460310#	FULTON, TOWN OF	HANSON COUNTY		09/02/09	09/02/09	03/23/20	No					
460177#	GARRETSON, CITY OF	MINNEHAHA COUNTY	09/26/75	09/02/09	(NSFHA)	01/30/84	No					
460112	GARY, CITY OF	DEUEL COUNTY	06/27/75	07/01/98	07/01/98(L)	07/01/98	No					
460205#	GAYVILLE, TOWN OF	YANKTON COUNTY		07/06/10	(NSFHA)	04/13/10	No					
	NON-FLOODPRONE COMMUNITY											
460299	GETTYSBURG, CITY OF	POTTER COUNTY			(NSFHA)	06/08/98	No					
460266#	GRANT COUNTY*	GRANT COUNTY	12/20/77	02/01/87	11/04/09	02/01/87	No					
460267	GREGORY COUNTY *	GREGORY COUNTY			(NSFHA)	06/08/98	No					
460178	GREGORY, CITY OF	GREGORY COUNTY	08/22/75		(NSFHA)	12/09/85	No					
461201#	GRENVILLE, TOWN OF	DAY COUNTY		12/06/01	12/06/01	06/08/98	No					





# Community Status Book Report

## Communities Participating in the National Flood Program



SOUTH DAKOTA

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal	CRS Entry Date	Curr Eff Date	Curr Class	% Disc SFHA	% Disc Non SFHA
460179#	GROTON, CITY OF	BROWN COUNTY	07/11/75	03/01/78	03/18/08	03/01/78	No					
460268	HAAKON COUNTY *	HAAKON COUNTY			(NSFHA)	06/08/98	No					
460034#	HAMLIN COUNTY*	HAMLIN COUNTY		05/15/86	05/15/86(M)	05/15/86	No					
460269	HAND COUNTY *	HAND COUNTY			(NSFHA)	06/08/98	No					
460270#	HANSON COUNTY *	HANSON COUNTY	08/16/77	07/01/98	09/02/09	07/01/98	No					
460114#	HARRISBURG, CITY OF	LINCOLN COUNTY		04/02/08	04/02/08	06/08/98	No					
460180#	HARTFORD, CITY OF	MINNEHAHA COUNTY	07/16/76	09/05/79	09/02/09(M)	04/25/97	No					
	The initial FIRM date for the City of Hartford is 09/05/1979. A request has been made to the MSC to update the initial FIRM date field. This note will remain in the CSB until that update occurs.											
460294#	HECLA, CITY OF	BROWN COUNTY		09/30/88	(NSFHA)	09/03/86	No					
460230#	HERMOSA, TOWN OF	CUSTER COUNTY	01/21/77	09/29/86	01/06/12	08/01/06	No					
	Annexed areas on Custer County FIRM panel 460018 0085 B dated 03/02/1998. Current flood zones for Hermosa are Zones A and C.											
460181	HERREID, CITY OF	CAMPBELL COUNTY	07/11/75	07/01/98	07/01/98(L)	07/01/98	No					
460182	HIGHMORE, CITY OF	HYDE COUNTY	07/11/75		(NSFHA)	01/30/84	No					
460116#	HILL CITY, CITY OF	PENNINGTON COUNTY	04/23/76	11/18/81	06/03/13	11/18/81	No					
460117	HOSMER, CITY OF	EDMUNDS COUNTY	10/29/76		(NSFHA)	04/25/97	No					
460027#	HOT SPRINGS, CITY OF	FALL RIVER COUNTY		03/17/02	12/18/07	06/30/76	No					
460183#	HOWARD, CITY OF	MINER COUNTY	07/11/75	08/19/85	08/19/85(M)	08/19/85	No					
460271#	HUGHES COUNTY *	HUGHES COUNTY	01/10/78	07/01/98	05/17/04	07/01/98	No					
460118#	HUMBOLDT, TOWN OF	MINNEHAHA COUNTY	09/05/75	09/02/09	09/02/09(M)	06/08/98	No					
460003#	HURON, CITY OF	BEADLE COUNTY	06/28/74	07/16/87	06/02/09	07/16/87	No					
460041#	HUTCHINSON COUNTY*	HUTCHINSON COUNTY	06/03/77	04/01/87	09/02/09	04/01/87	No					
460272	HYDE COUNTY *	HYDE COUNTY			(NSFHA)	06/08/98	No					
460184#	IPSWICH, CITY OF	EDMUNDS COUNTY	11/05/76	12/18/85	12/18/85(M)	12/18/85	No					
460120#	IRENE, TOWN OF	TURNER COUNTY/CLAY COUNTY/YANKTON COUNTY	07/11/75	07/06/10	07/06/10(M)	10/31/11	No					
460121#	IROQUOIS, CITY OF	KINGSBURY COUNTY/BEADLE COUNTY	07/18/75	10/15/85	10/15/85(M)	10/15/85	No					
460122	ISABEL, CITY OF	DEWEY COUNTY			(NSFHA)	06/08/98	No					
460240	JACKSON COUNTY*	JACKSON COUNTY			(NSFHA)	06/08/98	No					
460273	JERAULD COUNTY*	JERAULD COUNTY			(NSFHA)	06/08/98	No					
460185	KADOKA, CITY OF	JACKSON COUNTY	07/16/76		07/16/76	10/09/07(E)	No					
460050	KENNEBEC, TOWN OF	LYMAN COUNTY	01/17/75	08/05/86	08/05/86(M)	08/05/86	No					
460231#	KEYSTONE, TOWN OF	PENNINGTON COUNTY	01/07/77	03/04/80	06/03/13	03/04/80	No					
460275#	KINGSBURY COUNTY*	KINGSBURY COUNTY		09/18/87	(All Zone D)	09/18/87	No					
460187#	LAKE ANDES, CITY OF	CHARLES MIX COUNTY	02/07/75	06/02/04	(NSFHA)	12/09/85	No					
460276#	LAKE COUNTY *	LAKE COUNTY	06/07/77	08/05/86	09/02/09	08/05/86	No					
460124	LAKE NORDEN, CITY OF	HAMLIN COUNTY	09/19/75		(NSFHA)	04/05/11	No					
	This community is NSFHA.											
460189	LAKE PRESTON, CITY OF	KINGSBURY COUNTY	07/18/75		(NSFHA)	01/30/84	No					
460125	LANGFORD, TOWN OF	MARSHALL COUNTY	06/27/75		(NSFHA)	04/25/97	No					
460094#	LAWRENCE COUNTY *	LAWRENCE COUNTY	06/17/77	05/17/90	04/17/12	05/17/90	No					
460190#	LEAD, CITY OF	LAWRENCE COUNTY	02/07/75	04/17/12	04/17/12(M)	04/17/12	No					
460068	LEBANON, TOWN OF	POTTER COUNTY	01/03/75		(NSFHA)	07/15/85	No					
460192#	LENNOX, CITY OF	LINCOLN COUNTY	09/26/75	04/02/08	(NSFHA)	06/08/98	No					
460206#	LESTERVILLE, TOWN OF	YANKTON COUNTY		07/06/10	(NSFHA)	04/22/11	No					
460277B	LINCOLN COUNTY*	LINCOLN COUNTY	10/25/77	10/01/86	10/05/17	10/01/86	No					
460278	LYMAN COUNTY *	LYMAN COUNTY				06/08/98	No					
460044#	MADISON, CITY OF	LAKE COUNTY	08/02/74	07/05/82	09/02/09	07/05/82	No	05/01/14	05/01/14	8	10%	05%
460197A	MARION, CITY OF	TURNER COUNTY	07/02/76	10/07/21	10/07/21(M)	06/08/98	No					



# Community Status Book Report

## Communities Participating in the National Flood Program



SOUTH DAKOTA

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal	CRS Entry Date	Curr Eff Date	Curr Class	% Disc SFHA	% Disc Non SFHA
460279	MARSHALL COUNTY *	MARSHALL COUNTY			(NSFHA)	06/08/98	No					
460280#	MCCOOK COUNTY *	MCCOOK COUNTY		06/18/13	06/18/13	06/08/98	No					
460195#	MCINTOSH, CITY OF	CORSON COUNTY	09/19/75	05/17/04	(NSFHA)	06/08/98	No					
460054#	MEADE COUNTY *	MEADE COUNTY		08/01/78	09/16/11	08/01/78	No	10/01/15	10/01/15	9	05%	05%
460199#	MENNO, CITY OF	HUTCHINSON COUNTY	09/19/75	11/15/85	09/02/09(M)	11/15/85	No					
460032	MIDLAND, CITY OF	HAAKON COUNTY	09/13/74	08/05/86	08/05/86(M)	08/05/86	No					
460200#	MILBANK, CITY OF	GRANT COUNTY	08/13/76	11/04/09	11/04/09	12/09/85	No					
460201#	MILLER, CITY OF	HAND COUNTY	04/25/75	10/15/85	10/15/85(M)	10/15/85	No					
460283	MINER COUNTY *	MINER COUNTY			(NSFHA)	06/08/98	No					
460057D	MINNEHAHA COUNTY *	MINNEHAHA COUNTY	05/24/77	09/05/79	10/05/17	09/05/79	No					
460091#	MISSION HILL, TOWN OF	YANKTON COUNTY	12/13/74	06/18/80	07/06/10	06/18/80	No					
460202	MISSION, CITY OF	TODD COUNTY	06/27/75	08/05/86	08/05/86(M)	08/05/86	No					
460021#	MITCHELL, CITY OF	DAVISON COUNTY	03/22/74	02/01/79	09/29/10	02/01/79	No					
461210A	MONROE, TOWN OF	TURNER COUNTY		10/07/21	10/07/21(M)	06/08/98	No					
460052#	MONTROSE, CITY OF	MCCOOK COUNTY	12/13/74	08/05/86	06/18/13	08/05/86	No					
460235#	MOODY COUNTY *	MOODY COUNTY	04/15/77	09/04/85	08/19/08(M)	09/04/85	No					
460022#	MOUNT VERNON, CITY OF	DAVISON COUNTY		09/20/06	09/29/10	06/11/76	No					
460092#	NEW UNDERWOOD, CITY OF	PENNINGTON COUNTY	01/28/77	05/15/80	06/03/13	05/15/80	No					
460087A	NORTH SIOUX CITY, CITY OF	UNION COUNTY	11/16/73	12/01/77	01/15/21	12/01/77	No					
460129	OLDHAM, TOWN OF	KINGSBURY COUNTY	10/29/76		(NSFHA)	06/08/98	No					
460210	ONIDA, CITY OF	SULLY COUNTY	07/11/75		(NSFHA)	12/23/85	No					
461202	ORIENT, TOWN OF	FAULK COUNTY			(NSFHA)	06/08/98	No					
460211A	PARKER, CITY OF	TURNER COUNTY	06/27/75	10/07/21	10/07/21(M)	06/08/98	No					
460042#	PARKSTON, CITY OF	HUTCHINSON COUNTY	06/14/74	11/15/85	09/02/09	11/15/85	No	05/01/14	05/01/14	9	05%	05%
460064#	PENNINGTON COUNTY *	PENNINGTON COUNTY	12/27/74	12/01/81	06/03/13	12/01/81	No					
460033	PHILIP, CITY OF	HAAKON COUNTY	06/07/74	03/01/87	03/01/87(L)	03/01/87	No					
465468#	PICKSTOWN, TOWN OF	CHARLES MIX COUNTY		06/02/04	06/02/04	03/27/12	No					
461198#	PIEDMONT, CITY OF	MEADE COUNTY		09/16/11	09/16/11	09/16/11	No					
460040#	PIERRE, CITY OF	HUGHES COUNTY	06/07/74	06/04/80	05/17/04	06/04/80	No					
460001#	PLANKINTON, CITY OF	AURORA COUNTY	06/07/74	08/05/86	11/19/03	08/05/86	No					
460212#	PLATTE, CITY OF	CHARLES MIX COUNTY		06/02/04	(NSFHA)	06/08/98	No					
460132	POLLOCK, CITY OF	CAMPBELL COUNTY	06/27/75		(NSFHA)	06/08/98	No					
460285	POTTER COUNTY *	POTTER COUNTY				12/10/98(E)	No					
460297	PRESHO, CITY OF	LYMAN COUNTY	07/19/77		(NSFHA)	04/25/97	No					
465420#	RAPID CITY, CITY OF	PENNINGTON COUNTY		09/14/73	06/03/13	09/14/73	No	10/01/92	05/01/13	7	15%	05%
461205	RAYMOND, TOWN OF	CLARK COUNTY			(NSFHA)	06/08/98	No					
460081#	REDFIELD, CITY OF	SPINK COUNTY	08/02/74	11/15/85	10/19/10(M)	11/15/85	No					
460031#	REVILLO, TOWN OF	GRANT COUNTY	09/19/75	10/01/86	11/04/09(M)	10/01/86	No					
460286#	ROBERTS COUNTY*	ROBERTS COUNTY	09/12/78	10/01/86	07/20/09(M)	10/01/86	No					
460136	ROSCOE, TOWN OF	EDMUNDS COUNTY	11/12/76		(NSFHA)	06/08/98	No					
461211#	ROSHOLT, CITY OF	ROBERTS COUNTY			(NSFHA)	06/08/98	No					
460053#	SALEM, CITY OF	MCCOOK COUNTY	08/13/76	05/01/86	06/18/13(M)	05/01/86	No					
460074#	SANBORN COUNTY *	SANBORN COUNTY	10/18/77	11/15/85	01/06/12	11/15/85	No					
460213	SCOTLAND, CITY OF	BON HOMME COUNTY	09/05/75		(NSFHA)	01/30/84	No					
461206	SENECA, TOWN OF	FAULK COUNTY			(NSFHA)	06/08/98	No					
460098#	SINAI, TOWN OF	BROOKINGS COUNTY	06/27/75	07/16/08	07/16/08	07/16/08	No					
460060D	SIOUX FALLS, CITY OF	LINCOLN COUNTY/MINNEHAHA COUNTY	06/28/74	01/17/79	10/05/17	01/17/79	No	04/01/21	04/01/21	8	10%	05%
460072#	SISSETON, CITY OF	ROBERTS COUNTY	06/28/74	05/01/86	07/20/09(M)	05/01/86	No					
460046#	SPEARFISH, CITY OF	LAWRENCE COUNTY	03/29/74	09/02/81	04/17/12	09/02/81	No	05/01/14	05/01/14	9	05%	05%
460140#	SPENCER, TOWN OF	MCCOOK COUNTY	11/12/76	06/18/13	(NSFHA)	06/08/98	No					
460076#	SPINK COUNTY *	SPINK COUNTY	01/10/78	08/05/86	10/19/10	08/05/86	No					
460216	SPRINGFIELD, CITY OF	BON HOMME COUNTY	08/06/76		(NSFHA)	06/08/98	No					
461219#	STANDING ROCK INDIAN RESERVATION	CORSON COUNTY		05/17/04	05/17/04	05/04/98	Yes					





# Community Status Book Report

## Communities Participating in the National Flood Program



SOUTH DAKOTA

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal	CRS Entry Date	Curr Eff Date	Curr Class	% Disc SFHA	% Disc Non SFHA
460287#	STANLEY COUNTY *	STANLEY COUNTY		05/17/04	05/17/04	06/08/98	No					
460065#	STRATFORD, TOWN OF	BROWN COUNTY		03/18/08	(NSFHA)	03/08/10	No					
460055#	STURGIS, CITY OF	MEADE COUNTY	11/16/73	06/01/77	09/16/11	06/01/77	No					
460288	SULLY COUNTY *	SULLY COUNTY			(NSFHA)	06/08/98	No					
460316#	SUMMERSET, CITY OF	MEADE COUNTY		09/16/11	(NSFHA)	09/16/11	No					
460141#	SUMMIT, TOWN OF	ROBERTS COUNTY	07/18/75	07/20/09	(NSFHA)	05/11/11	No					
460142	TABOR, TOWN OF	BON HOMME COUNTY	06/25/76		(NSFHA)	04/25/97	No					
460143B	TEA, CITY OF	LINCOLN COUNTY	09/19/75	04/02/08	10/05/17	04/25/97	No					
460063#	TRENT, TOWN OF	MOODY COUNTY	12/06/74	06/04/80	08/19/08	06/04/80	No					
460289	TRIPP COUNTY *	TRIPP COUNTY			(NSFHA)	04/25/97	No					
460145#	TULARE, TOWN OF	SPINK COUNTY	07/25/75	10/19/10	10/19/10(M)	11/01/12	No					
460290A	TURNER COUNTY *	TURNER COUNTY		10/07/21	10/07/21(M)	06/08/98	No					
461208#	TWIN BROOKS, CITY OF	GRANT COUNTY		11/04/09	(NSFHA)	06/08/98	No					
460220	TYNDALL, CITY OF	BON HOMME COUNTY	08/06/76		(NSFHA)	04/25/97	No					
460242A	UNION COUNTY*	UNION COUNTY	05/10/77	02/01/87	01/15/21	02/01/87	No					
460244#	UTICA, TOWN OF	YANKTON COUNTY		07/06/10	07/06/10(M)	03/13/12	No					
460221#	VALLEY SPRINGS, CITY OF	MINNEHAHA COUNTY	09/26/75	07/16/80	09/02/09	07/16/80	No					
460146	VEBLEN, TOWN OF	MARSHALL COUNTY	04/25/75	05/01/86	05/01/86(L)	05/01/86	No					
460015B	VERMILLION, CITY OF	CLAY COUNTY	03/22/74	08/05/10	12/30/20(M)	01/30/84	No					
460223#	VOLGA, CITY OF	BROOKINGS COUNTY	10/08/76	07/16/08	07/16/08	09/22/11	No					
460224#	WAGNER, CITY OF	CHARLES MIX COUNTY	08/13/76	06/02/04	06/02/04	03/12/09	No					
460232B	WAKONDA, TOWN OF	CLAY COUNTY	11/12/76	08/05/10	12/30/20(M)	04/08/10	No					
	NSFHA											
460291	WALWORTH COUNTY *	WALWORTH COUNTY			(NSFHA)	06/08/98	No					
460298#	WARNER, CITY OF	BROWN COUNTY	04/22/80	03/18/08	09/29/10(M)	06/08/98	No					
460016#	WATERTOWN, CITY OF	CODINGTON COUNTY	06/28/74	07/04/89	01/16/09	07/04/89	No	05/01/17	05/01/17	8	10%	05%
460226#	WAUBAY, CITY OF	DAY COUNTY	07/23/76	12/06/01	12/06/01	04/25/97	No					
460227#	WEBSTER, CITY OF	DAY COUNTY	12/24/76	12/06/01	12/06/01	04/25/97	No					
460043	WESSINGTON SPRINGS, CITY OF	JERAULD COUNTY	10/18/74		(NSFHA)	01/30/84	No					
460011#	WESTPORT, TOWN OF	BROWN COUNTY	03/06/79	08/05/86	03/18/08	08/05/86	No					
460149	WHITE LAKE, CITY OF	AURORA COUNTY				11/17/21	No					
	The Map Service Center shows a panel 46003C0300C not printed from 11/19/2003.											
460228#	WHITEWOOD, CITY OF	LAWRENCE COUNTY	08/13/76	04/17/12	(NSFHA)	11/30/83	No					
460014#	WILLOW LAKE, TOWN OF	CLARK COUNTY	05/20/77	07/01/98	07/01/98(L)	07/01/98	No					
460303	WINNER, CITY OF	TRIPP COUNTY			(NSFHA)	06/08/98	No					
460075#	WOONSOCKET, CITY OF	SANBORN COUNTY	06/14/74	11/15/85	01/06/12	11/15/85	No					
460151#	WORTHING, CITY OF	LINCOLN COUNTY	08/22/75	04/02/08	(NSFHA)	04/25/97	No					
460088#	YANKTON COUNTY*	YANKTON COUNTY	08/16/77	10/01/86	07/06/10	10/01/86	No					
461204#	YANKTON SIOUX TRIBE	CHARLES MIX COUNTY		06/02/04	06/02/04	06/08/98	Yes					
460093#	YANKTON, CITY OF	YANKTON COUNTY	03/22/74	08/15/80	07/06/10	08/15/80	No					
460292	ZIEBACH COUNTY *	ZIEBACH COUNTY			(NSFHA)	06/08/98	No					

Summary:	
Total In Flood Program	237
Total In Emergency Program	3
Total In the Regular Program	234
Total In Regular Program with No Special Flood Hazard	84
Total In Regular Program But Minimally Flood Prone	59



Community Status Book Report  
Communities Not in the National Flood Program



SOUTH DAKOTA

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Sanction Date	Tribal	CRS Entry Date	Curr Eff Date	Curr Class	% Disc SFHA	% Disc Non SFHA
460152A	ALCESTER, CITY OF	UNION COUNTY	07/11/75	01/15/21	01/15/21	07/11/76	No					
461214#	ANDOVER, TOWN OF	DAY COUNTY		12/06/01	12/06/01	12/06/02	No					
460305#	BATESLAND, TOWN OF	SHANNON COUNTY	05/13/80		05/13/80	05/13/81	No					
460099	BISON, TOWN OF	PERKINS COUNTY	11/05/76		11/05/76	11/05/77	No					
460247#	BUFFALO GAP, TOWN OF	CUSTER COUNTY	11/05/76	01/06/12	01/06/12	11/05/77	No					
460037	BUFFALO, TOWN OF	HARDING COUNTY	11/05/76		11/05/76	11/05/77	No					
461215#	BUTLER, TOWN OF	DAY COUNTY		12/06/01	12/06/01	12/06/02	No					
460248#	FAIRBURN, TOWN OF	CUSTER COUNTY		01/06/12	01/06/12	01/06/13	No					
460048#	FAIRVIEW, TOWN OF	LINCOLN COUNTY		04/02/08	04/02/08	04/02/09	No					
460174#	FAITH, CITY OF	MEADE COUNTY		09/16/11	09/16/11	09/16/12	No					
460002#	FRANKFORT, CITY OF	SPINK COUNTY		10/19/10	10/19/10	10/19/11	No					
460312#	FRUITDALE, TOWN OF	BUTTE COUNTY		01/06/12	01/06/12	01/06/13	No					
460049#	HUDSON, TOWN OF	LINCOLN COUNTY	11/22/74	12/18/85	04/02/08	04/03/08(S)	No					
460119A	HURLEY, CITY OF	TURNER COUNTY	07/16/76	10/07/21	10/07/21	07/16/77	No					
460010#	KRANZBURG, TOWN OF	CODINGTON COUNTY		01/16/09	01/16/09	01/16/10	No					
461216#	LILY, TOWN OF	DAY COUNTY		12/06/01	12/06/01	12/06/02	No					
460209#	NEWELL, CITY OF	BUTTE COUNTY	07/18/75	01/06/12	01/06/12	07/18/76	No					
460245#	NISLAND, CITY OF	BUTTE COUNTY	02/04/77	01/06/12	01/06/12	02/04/78	No					
460080#	NORTHVILLE, TOWN OF	SPINK COUNTY	12/13/74	10/19/10	10/19/10	12/13/75	No					
460217#	OLIVET, TOWN OF	HUTCHINSON COUNTY		09/02/09	09/02/09	09/02/10	No					
460131#	PIERPONT, TOWN OF	DAY COUNTY		12/06/01	12/06/01	12/06/02	No					
460315#	QUINN, TOWN OF	PENNINGTON COUNTY		06/03/13	06/03/13	06/03/14	No					
460137#	ROSLYN, TOWN OF	DAY COUNTY	04/25/75	12/06/01	12/06/01	04/25/76	No					
460214	SELBY, CITY OF	WALWORTH COUNTY	07/25/75		11/07/78	07/25/76	No					
460188#	SOUTH SHORE, TOWN OF	CODINGTON COUNTY		01/16/09	01/16/09	01/16/10	No					
460138	ST. FRANCIS, TOWN OF	TODD COUNTY	09/19/75		09/19/75	09/19/76	No					
460139	ST. LAWRENCE, TOWN OF	HAND COUNTY	07/18/75		07/18/75	07/18/76	No					
461199#	VERDON, TOWN OF	BROWN COUNTY		09/30/88	03/18/08	09/30/89	No					
460215#	VOLIN, TOWN OF	YANKTON COUNTY		07/06/10	07/06/10	07/06/11	No					
460225#	WALL, TOWN OF	PENNINGTON COUNTY		06/03/13	06/03/13	06/03/14	No					
460250#	WASTA, TOWN OF	PENNINGTON COUNTY	12/24/76	06/03/13	06/03/13	12/24/77	No					
460147#	WESSINGTON, TOWN OF	BEADLE COUNTY	08/22/75	06/02/09	06/02/09	08/22/76	No					
460073#	WHITE ROCK, TOWN OF	ROBERTS COUNTY		07/20/09	07/20/09	07/20/10	No					
460148#	WHITE, TOWN OF	BROOKINGS COUNTY	04/30/76	07/16/08	07/16/08	04/30/77	No					
460150#	WOLSEY, TOWN OF	BEADLE COUNTY	08/13/76	06/02/09	06/02/09	08/13/77	No					

Summary:	
Total Not in Flood Program	35
Total Suspended from Emergency Program	0
Total Suspended from Regular Program	1
Total Withdrawn Communities Not In Program	0
Total Not In Program With Hazard Area Identified	35
Total Not In Program With Hazard Area Identified < 1 Year	0



CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Sanction Date	Tribal	CRS Entry Date	Curr Eff Date	Curr Class	% Disc SFHA	% Disc Non SFHA
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Legend:

- (E)Indicates Entry In Emergency Program
- NSFHANo Special Flood Hazard Area - All Zone C
- (>)Date of Current Effective Map is after the Date of This Report
- N/ANot Applicable At This Time
- (S)Suspended Community
- (W)Withdrawn Community
- (M)No Elevation Determined - All Zone A, C and X
- (L)Original FIRM by Letter - All Zone A, C and X

# **Appendix I**

Adoption Resolutions

Resolution 2023-06

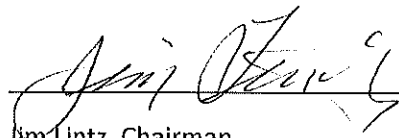
**A Resolution of the Custer County Board of Commissioners Declaring Support  
and Adoption of the Custer County Natural Hazard Mitigation Plan, 2023**

WHEREAS, the Custer County Board of Commissioners supports the contents of the Custer County Natural Hazard Mitigation Plan, 2023; and


WHEREAS, the Custer County Natural Hazard Mitigation Plan, 2023 will be utilized as a guide for planning related to FEMA Hazard Mitigation and other purposes as deemed appropriate by the Custer County Board of Commissioners.

NOW THEREFORE IT BE RESOLVED, that the Custer County Board of Commissioners hereby adopts, supports, and will facilitate the Custer County Natural Hazard Mitigation Plan, 2023 implementation.

Adopted by Custer County this 22 day of March, 2023.

  
Jim Lintz, Chairman

ATTEST:

  
Barbara Cox, Deputy Auditor



Resolution 2023-01

**Resolution Adopting Custer County Natural Hazard Mitigation Plan, 2023**

WHEREAS, the Town of Buffalo Gap supports the contents of the Custer County Natural Hazard Mitigation Plan, 2023; and

WHEREAS, the Custer County Natural Hazard Mitigation Plan, 2023 will be utilized as a guide for planning related to FEMA Hazard Mitigation and other purposes as deemed appropriate by the Town of Buffalo Gap Board of Trustees.

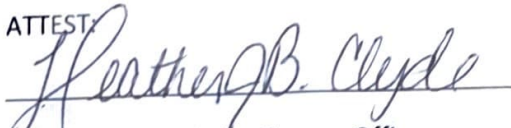
NOW THEREFORE IT BE RESOLVED, that the Town of Buffalo Gap hereby adopts, supports, and will facilitate the Custer County Natural Hazard Mitigation Plan, 2023 implementation.

Adopted by the Town of Buffalo Gap this 10 day of April, 2023.

A handwritten signature in blue ink, appearing to read "Daniel Frieden", written over a horizontal line.

Daniel Frieden, President

ATTEST:

A handwritten signature in blue ink, appearing to read "Heather Besco-Clyde", written over a horizontal line.

Heather Besco-Clyde, Finance Officer

Resolution 03-20-23A

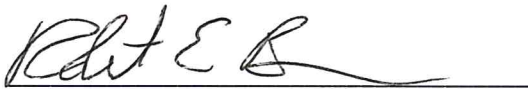
**Resolution Adopting Custer County Natural Hazard Mitigation Plan, 2023**

WHEREAS, the City of Custer City supports the contents of the Custer County Natural Hazard Mitigation Plan, 2023; and

WHEREAS, the Custer County Natural Hazard Mitigation Plan, 2023 will be utilized as a guide for planning related to FEMA Hazard Mitigation and other purposes as deemed appropriate by the City of Custer City Council.

NOW THEREFORE IT BE RESOLVED, that the City of Custer City hereby adopts, supports, and will facilitate the Custer County Natural Hazard Mitigation Plan, 2023 implementation.

Adopted by the City of Custer City this 22 day of March, 2023.



Robert Brown, Mayor

ATTEST:



Laurie Woodward, City Administrator/Finance Officer





Resolution 2023 - 02

**Resolution Adopting Ouster County Natural Hazard Mitigation Plan, 2023**

WHEREAS the Town of Fairburn supports the contents of the Ouster County Natural Hazard Mitigation Plan, 2023; and

WHEREAS the Ouster County Natural Hazard Mitigation Plan, 2023 will be utilized as a guide for planning related to FEMA Hazard Mitigation and other purposes as deemed appropriate by the Town of Fairburn Board of Trustees.

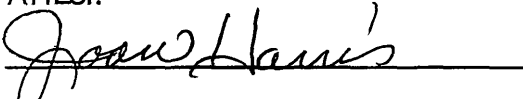
NOW THEREFORE IT BE RESOLVED, that the Town of Fairburn hereby adopts, supports, and will facilitate the Ouster County Natural Hazard Mitigation Plan, 2023 implementation.

Adopted by the Town of Fairburn this 15 day of March, 2023.



Melissa Kremer, President

ATTEST:



Jean Harris, Finance Officer

Resolution 02-2023

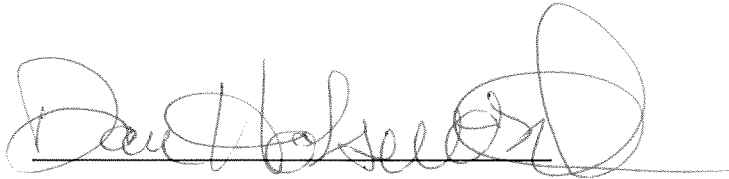
**Resolution Adopting Custer County Natural Hazard Mitigation Plan, 2023**

WHEREAS, the Town of Hermosa supports the contents of the Custer County Natural Hazard Mitigation Plan, 2023; and

WHEREAS, the Custer County Natural Hazard Mitigation Plan, 2023 will be utilized as a guide for planning related to FEMA Hazard Mitigation and other purposes as deemed appropriate by the Town of Hermosa Board of Trustees.

NOW THEREFORE IT BE RESOLVED, that the Town of Hermosa hereby adopts, supports, and will facilitate the Custer County Natural Hazard Mitigation Plan, 2023 implementation.

Adopted by the Town of Hermosa this 21 day of March, 2023.

A handwritten signature in dark ink, appearing to read "Dan Holsworth", written over a horizontal line.

Dan Holsworth, President

ATTEST:

A handwritten signature in dark ink, appearing to read "Monika Serviss", written over a horizontal line.

Monika Serviss, Finance Officer

Resolution 201

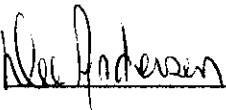
**Resolution Adopting Custer County Natural Hazard Mitigation Plan, 2023**

WHEREAS, the Town of Pringle supports the contents of the Custer County Natural Hazard Mitigation Plan, 2023; and

WHEREAS, the Custer County Natural Hazard Mitigation Plan, 2023 will be utilized as a guide for planning related to FEMA Hazard Mitigation and other purposes as deemed appropriate by the Town of Pringle Board of Trustees.

NOW THEREFORE IT BE RESOLVED, that the Town of Pringle hereby adopts, supports, and will facilitate the Custer County Natural Hazard Mitigation Plan, 2023 implementation.

Adopted by the Town of Pringle this 14<sup>th</sup> day of MARCH, 2023.



Dee Andersen, President

ATTEST:



Lisa Baertsch, Clerk