Spink County
South Dakota

PRE-DISASTER MITIGATION PLAN

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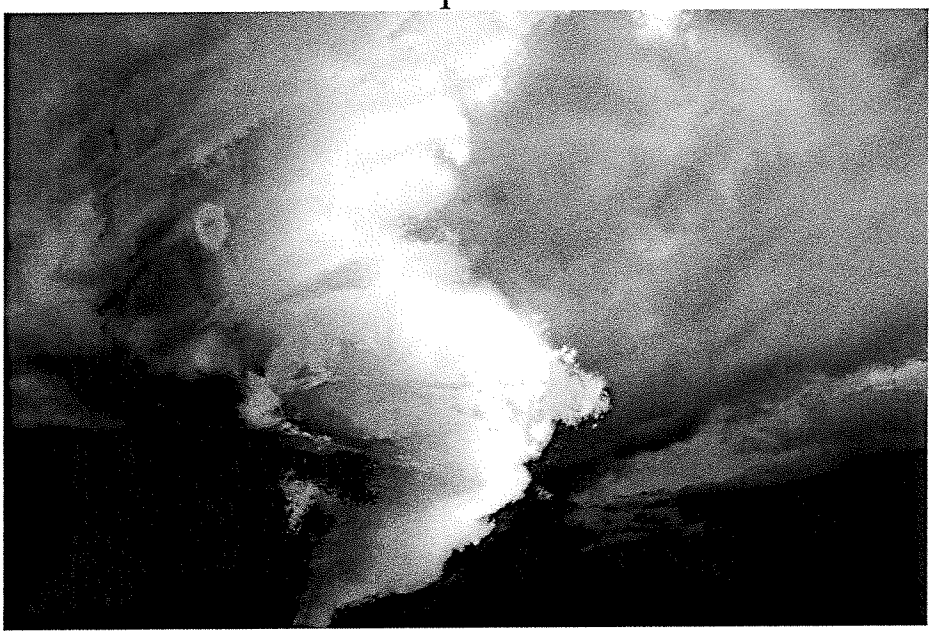

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I. INTRODUCTION

CHANGES/REVISIONS TO INTRODUCTION:

INTRODUCTION

Spink County is vulnerable to natural, technological, and man-made hazards that have the possibility of causing serious threat to the health, welfare, and security of our citizens. The cost of response and recovery, in terms of potential loss of life, property, and infrastructure from natural hazards can be reduced when attention is turned to mitigating the impacts of natural hazards before they occur.

Mitigation planning is a process which identifies areas of vulnerability and potential risk in relationship to known natural hazards that occur in the planning area, followed by the creation of a strategy to reduce the likelihood of loss of life, loss or damage to property and infrastructure caused by natural hazards. With increased attention to mitigating natural hazards, communities can reduce threats to existing developments and prevent creating new risks by limiting and/or regulating future development. Many mitigation actions can be implemented at minimal or no cost. Improved focus on land use planning and smart design is one of the most effective mitigation tools for City and County governments.

This plan is not an emergency response or emergency management plan. Certainly, the plan can be used to identify weaknesses and refocus emergency response planning. Enhanced emergency response planning is an important mitigation strategy. However, the focus of this plan is to support better decision making directed toward avoidance of future risks and the implementation of activities or projects that will eliminate or reduce the risk for those that may already have exposure to a natural hazard threat.

PURPOSE OF THE PRE-DISASTER MITIGATION PLAN

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 that local governments, as a condition of receiving federal disaster mitigation funds, have a natural hazard mitigation plan in place. 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.

The purpose of this plan is to meet the natural hazard mitigation planning needs for Spink County and participating entities. Consistent with the Federal Emergency Management Agency's guidelines, this plan will review all possible activities related to disasters to reach efficient solutions, link hazard management policies to specific

activities, educate and facilitate communication with the public, build public and political support for mitigation activities, and develop implementation and planning requirements for future hazard mitigation projects.

PURPOSE

The purpose of this plan is to fulfill federal, state, and local hazard mitigation planning responsibilities; to promote mitigation measures; implement short/long range strategies that minimize suffering, loss of life, and damage to property resulting from hazardous or potentially hazardous conditions to which citizens and institutions within the county are exposed; and to eliminate or minimize conditions which would have an undesirable impact on the citizens, economy, environment, and the well-being of the County. This plan will aid city, township, and county agencies and officials in enhancing public awareness to the threat hazards have on property and life, and what can be done to help prevent or reduce the vulnerability to risks of each Spink County jurisdiction.

PLAN USE

First, the plan should be used to help local elected and appointed officials plan, design and implement programs and projects that will help reduce their community's vulnerability to natural hazards. Second, the plan should be used to facilitate inter-jurisdictional coordination and collaboration related to natural hazard mitigation planning and implementation. Finally, when adopted, the plan will bring communities in compliance with the Disaster Mitigation Act of 2000.

SCOPE

1. Provide opportunities for public input and encourage participation and involvement regarding the mitigation plan.
2. Identify hazards and vulnerabilities within the county and local jurisdictions.
3. Combine risk assessments with public and emergency management ideas.
4. Develop goals based on the identified hazards and risks.
5. Review existing mitigation measures for gaps and establish projects to sufficiently fulfill the goals.
6. Prioritize and evaluate each strategy/objective.
7. Review other plans for cohesion and incorporation with mitigation planning.
8. Establish guidelines for updating and monitoring the plan.
9. Present the plan to Spink County and the participating communities within the county for adoption.

LOCAL GOALS

These ideas form the basis for the development of the mitigation plan and are shown from highest priority, at the top of the list, to those of lesser importance nearer the bottom.

- Protection of life before, during, and after the occurrence of a disaster;
- Protection of emergency response capabilities (critical infrastructure);
- Establish and maintain communication and warning systems;
- Protection of critical facilities and public infrastructure (built environment);

- Government continuity;
- Protection of developed property, homes and businesses, industry, education opportunities and the cultural fabric of a community, by combining hazard loss reduction with the community's environmental, social, and economic needs; and
- Protection of natural resources and the environment, when considering mitigation measures.

LONG-TERM GOALS

- 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 finding 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 or identified hazards;
- Accomplish mitigation strategies in such a way that negative environmental impacts are minimized;
- Provide a basis for funding of projects outlined as hazard mitigation strategies; and
- 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 has the effect of reducing, limiting, or preventing vulnerability of people, property, and the environment to potentially damaging, harmful, or costly hazards. Hazard mitigation measures, which can be used to eliminate or minimize the risk to life and property, fall into three categories. First are those that keep the hazard away from people, property, and structures. Second are those that keep people, property, and structures away from the hazard. Third are those that do not address the hazard at all but rather reduce the impact of the hazard on the victims such as insurance. This mitigation plan has strategies that fall into all three categories.

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 improvements 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 of a community. Once a capital facility is in place, very few opportunities will present themselves over the useful life of the facility to correct any errors in location or construction with respect to hazard vulnerability. It is for these reasons that zoning and other ordinances, which manage development in high vulnerability areas, and building codes, which ensure that new buildings and infrastructure are built to avoid or withstand the damaging forces of

hazards, are often the most useful mitigation approaches local governments can implement.

Previously, mitigation measures have been the most neglected programs within emergency management. 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, however, if accurate information is portrayed through complete hazard identification and impact studies, followed by effective mitigation management. Hazard mitigation is the key to eliminating long-term risk to people and property in South Dakota from hazards and their effects. Preparedness for all hazards includes: response and recovery plans, training, development, management of resources, and mitigation of each jurisdictional hazard.

This plan evaluates the impacts, risks and vulnerabilities of natural hazards within the jurisdictional area of the entire county. The plan supports, provides assistance, identifies and describes mitigation projects for each of the local jurisdictions who participated in the plan update. The suggested actions and plan implementation 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 coordinated partnership with emergency managers, political entities, public works officials, community planners and other dedicated individuals working to implement this program.

SPINK COUNTY PROFILE

GEOGRAPHIC BACKGROUND

The geographic area of Spink County is 1,504 square miles, with an elevation of 1,322 feet. The water area within the county is 6.2 square miles. Spink County is located near the North end of "Tornado Alley" (44°50'N, 98°25'W). The county is relatively flat with less than twelve feet of general elevation deviation, except for the James River Valley, which contributes to an area of lightly rolling hills. The James River zigzags through the county bisecting it north to south, it takes approximately 100 miles of river to cover the 50 miles of distance across the county, and is the destination for the entire run off water in the county. Areas along the river are subject to occasional flooding problems. There are additional water areas within the county that equal approximately 6.2 square miles. Soil types range from the rich deep river bottom lands along the river to the rolling high plain clay based soils in the western portions of the county. Land uses include heavy crop lands near the river and hay and pasture land to the west.

Because of its communities and early development around the railroads, major highways bisect the area. Highways 37 and 281 are major North-South routes through the county while Highways 212, 20, 26, and 28 are major East-West routes through the county. At this point in time, only one major railway is still in use in the county – the Burlington Northern Santa Fe Railroad (BNSF) which runs north-south through Tulare, Redfield, and Mellette. While Spink County is rural, high voltage electrical lines run through the county.

Development of the Dakota Access crude oil pipeline, which crosses through Spink County, is one change that has occurred since the last update of the mitigation plan. The nearly $4 billion pipeline carries crude oil almost 1,200 miles from western North Dakota to Illinois. From there it connects to another line carrying oil from the Bakken in North Dakota to Gulf Coast refineries. In April 2011, the County started conversations about the pipeline and the following statement was provided in regards to those discussions:

> *At a regular meeting of the Spink County Planning and Zoning Board held on April 5, 2011, the Board decided not to proceed with the writing of a hazardous materials pipeline ordinance for Spink County. This was not an easy decision to make, and a great deal of research and consideration went into this decision.*
>
> *The Spink County Planning and Zoning Board took several steps to write an ordinance that would protect our citizens, our natural resources, and our roads, while at the same time adhering to State and Federal guidelines regarding pipeline construction and safety. Pipeline ordinances from other counties across the nation were compiled and studied, as were case studies, safety statistics, articles, and numerous other types of research. Contacts from the local, State, and Federal levels were consulted regarding the feasibility of writing a pipeline ordinance, the rights of the county to enforce certain measures pertaining to pipeline construction and location versus existing State and Federal regulations. Since so many concerns of the county are already covered by State and Federal entities, the Planning and Zoning Board does not feel that it would be in the county's best interest to write an ordinance that simply reiterated what the State and Federal government have already dictated.*
>
> *The Planning and Zoning Board will explore measures to negotiate haul road agreements, conditional use permits, and noise buffer requirements in the event that a hazardous materials pipeline would be run through Spink County.*

Essentially, the County chose not approve their own ordinance due to the belief that they are already covered by the State and Federal regulations that are to be adhered by the Dakota Access Pipeline.

POPULATION DEMOGRAPHICS

According to the Census Bureau, in 2010 the County had a population of 6,415, a decline of 13.9 percent from the 2000 census. Population estimate for 2018 was 6,495, a density of 4.26 people per square mile. Within Spink County lies one city, Redfield, which has a population of 2,333 in 2010. Ten other incorporated communities lie within the County including: Ashton (pop. 122); Brentford (pop. 77); Conde (pop. 140); Doland (pop. 180); Frankfort (pop. 149); Hitchcock (pop. 91), Mellette (pop. 210); Northville (pop. 143); Tulare (pop. 207); and Turton (pop. 48). In addition, two unincorporated municipalities lie in Spink County: Athol (pop. 10)* and Mansfield (pop.60)*. Besides the communities, Spink County is comprised of 37 townships. According to the 2010 Census, the County is predominately white (97.1%) and has a nearly 1-1 male to female ratio. Most of the residents within the County fall into the low-moderate income category. Agriculture and ag-related businesses remain the major source of employment for the area.

*The Town of Hitchcock is located mainly in Beadle County (approximately 95%) and was included in the Beadle County Pre-Disaster Mitigation Plan. The unincorporated areas of Athol and Mansfield do not have actual Census statistics because they are counted and included in the township numbers.

ECONOMIC PROFILE

The Spink County economy has historically been very reliant upon the agriculture industry. Although farming is still very important, the decline of the small family farm and the declining population in most of the Spink County communities has forged a significant decline in employment within the farm industry. Twenty percent, or 1,283 of the population is 65 years or older. The county seat is Redfield, situated at the intersection of US Highway 281 and US Highway 212. It has a population of 2,333, which makes up about 36 percent of the total population in Spink County.

CLIMATE

Spink County is located in the James River Valley, known to have some of the largest temperature variances in the world, from a negative 50 degrees Fahrenheit in the winter to 120 degrees Fahrenheit above 0, in the summer. The annual precipitation average is 20 inches. The months with the most precipitation are March through early June and October.

TRANSPORTATION

Transportation planning for streets and roads begins with understanding the relationship between land use and road network. Streets and roads balance functions of mobility and land access. On one side, such as interstate highways, mobility is the primary function of the network. On the other side, such as local roads, land access to farms and residences is the primary service. In between these two extremes, mobility and land access varies depending on the function of the road network.

Functional classification is the process of grouping streets and roads into classes according to the function they are intended to provide. Listed below is Spink County's functional classification system. The classification is according to the rural systems classification as developed by the Federal Highway Administration.

1. Principal Arterials – serve longer strips of a statewide or interstate nature, carry the highest traffic volumes, connect larger urban areas, provide minimal land access, and include both interstate and non-interstate principal arterial highways.

2. Minor Arterials – interconnect the principal arterials, provide less mobility and slightly more land access, and distribute travel to smaller towns, and major resorts attracting longer trips.

3. Major Collectors – provide both land access and traffic circulation connecting county seats not served by arterials and connect intracounty traffic generators like schools, shipping points, county parks, and important mining and agricultural areas.

4. Minor Collectors – collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road.

5. Local Roads – provide direct access to adjacent land and to the highest classified roads and serve short trips.

A Major Street Plan includes a current and future hierarchy of street classifications for use in identifying and prioritizing transportation needs of Spink County.

NATIONAL FLOOD INSURANCE PROGRAM PARTICIPATION

Five jurisdictions located within Spink County participate in the National Flood Insurance Program (NFIP): Spink County, Ashton, Doland, Redfield and Tulare. The remaining towns currently do not participate in the NFIP: Brentford, Conde, Frankfort, Mellette, Northville, and Turton. Table 1.1 lists population, latitude and longitude, elevation, and NFIP status of communities within the county. Population statistics were taken from Census 2010 and location and elevation were taken from Google Earth. NFIP status was provided by the State NFIP Coordinator.

Table 1.1: Spink County Municipalities Overview

Name	Pop. (2010)	Location	Elevation	NFIP
Cities/Towns				
Redfield	2,333	44° 52' 33.06" N 98° 31' 07.41" W	1305 ft	Yes
Ashton	122	44° 59' 41.93" N 98° 29' 52.36" W	1292 ft	Yes
Athol**	10	45° 00' 31.88" N 98° 35' 47.38" W	1293 ft	No
Brentford	77	45° 09' 36.89" N 98° 19' 22.35" W	1301ft	No
Conde	170	45° 09' 25.88" N 98° 05' 51.31" W	1322 ft	No
Doland	180	44° 53' 44.91" N 98° 06' 02.36" W	1351ft	Yes
Frankfort	149	44° 52' 35.97" N 98° 18' 13.30" W	1298 ft	No
Mansfield**	60	45° 14' 34.72" N 98° 33' 46.86" W	1298 ft	No
Mellette	210	45° 09' 15.95" N 98° 29' 51.32" W	1297 ft	No
Northville	143	45° 09' 14.17" N 98° 34' 57.01" W	1299 ft	No
Tulare	207	44° 44' 16.84" N 98° 30' 35.36" W	1316 ft	Yes
Turton	48	45° 02' 58.86" W 98° 05' 44.41" N	1331 ft	No

Table 1.2 lists the Spink County Townships by population:

Township	Population	Township	Population
Antelope	58	Jefferson	61
Athol	65	Lake	104
Belle Plaine	79	La Prairie	40
Belmont	65	Lincoln	241
Benton	27	Lodi	80
Beotia	31	Mellette	130
Buffalo	56	Northville	192
Capitola	138	Olean	31
Clifton	43	Prairie Center	81
Conde	27	Redfield	463
Cornmwall	45	Richfield	25
Crandon	73	Spring	32
Exline	54	Sumner	11
Frankfort	39	Tetonka	58
Garfield	55	Three Rivers	91
Great Bend	44	Tulare	48
Groveland	42	Turton	25
Harmony	63	Union	51
Harrison	38		

II. PREREQUISITES

CHANGES/REVISIONS TO PREREQUISITES:
The plan participants table was updated to reflect the current participants in the Plan. Record of participation was updated.

ADOPTION BY LOCAL GOVERNING BODY

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

MULTI-JURISDICTIONAL PLAN PARTICIPATION

This plan is a multi-jurisdictional plan which serves the entire geographical area located within the boundaries of Spink County, South Dakota. Spink County has ten incorporated municipalities. Most of the municipalities located within Spink County elected to participate in the planning process and the update of the existing Spink County Natural Hazard Mitigation Plan. The participating local jurisdictions include the following municipalities:

Table 2.1: Plan Participants

New Participants	Continuing Participants	Not Participating
Cottonwood Lake Assc	Ashton	Athol
Doland	Conde	Mansfield
Mellette	Northville	Hitchcock
	Redfield	Turton
	Tulare	Frankfort
		Brentford

**changes to New Participants: removed Redfield Energy, SDDC, Northern Electric, Northwestern School, Conde Township, Northville Township, Great Bend Township, added Doland, Mellette, Cottonwood Lake Association.

The non-participants include Hitchcock and Turton who chose not to participate as well as the unincorporated communities of Athol, Mansfield, and Cottonwood Lake. The non-participating communities will be given the option to complete the requirements for the plan and to formally adopt the plan during the annual update of the plan. Hitchcock which has a boundary that runs into Spink County, is located primarily in Beadle County and has participated in and adopted the Beadle County Mitigation Plan.

The new participants include communities that did not participate in the past and Cottonwood Lake Association who decided to participate due to the number of

reoccurrences of flooding at the lake and for possible assistance with the shoreline stabilization project they are working on. Cottonwood Lake is located just 12 miles from of Redfield and has experienced growth in the last decade, with an estimated 40 year-round residents as well as many seasonal residents.

Athol is located north of Redfield approximately 13 miles and has a population of 10 people or less. Approximately 60 people live in the unincorporated area of Mansfield which is on the northern border of Spink County and partially located in Brown County. Neither are incorporated communities, therefore, they do not have the resources or control needed to complete any type of mitigation activity or project.

The Spink County Commission and each of the listed participating municipalities will pass resolutions to adopt the updated Plan.

Several townships and private businesses who participated in the planning activities in the past did not participate this time around.

The Spink County Natural Hazard Mitigation Plan will be adopted by resolution by the participating incorporated municipalities, Cottonwood Lake Association, and the Spink 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 2.2.

Table 2.2: Dates of Plan Adoption by Jurisdiction

Jurisdiction	Date of Adoption
Spink County Commission	
Ashton	
Brentford	Not participating
Conde	
Doland	
Frankfort	Not participating
Mellette	
Northville	
Redfield	
Tulare	
Turton	Not participating

All of the participating jurisdictions were involved in the plan update. Participants updated their information and provided feedback on new developments and changes since the last update.

Representatives also provided information to their respective councils and presented the progress of the plan update on a regular basis. The local jurisdictions have also

presented the Resolution of Adoption to their councils and will pass the resolutions upon FEMA approval of the plan. The resolutions are included in Appendix A.

Table 2.3 was derived to help define "participation" for the local jurisdictions who intend on adopting the plan. Out of ten categories, each jurisdiction must have at least seven of the participation requirements fulfilled.

Table 2.3. Record of Participation

Nature of Participation	Ashton	Brentford	Conde	Doland	Frankfort	Mellette	Northville	Redfield	Tulare	Turton
Attended Meetings or work sessions (a minimum of 2 meetings will be considered satisfactory).	☒	☐	☒	☒	☐	☒	☒	☒	☒	☐
Submitted inventory and summary of reports and plans relevant to hazard mitigation.	☐	☐	☒	☒	☐	☒	☒	☒	☒	☐
Submitted Risk Assessment Worksheet.	☒	☐	☒	☒	☐	☒	☒	☒	☒	☐
Submitted description of what is at risk (including local critical facilities and infrastructure at risk from specific Hazards) Worksheet 3A		☐	☒	☒	☐	☒	☒	☒	☒	☐
Submitted a description or map of local land-use patterns (current and proposed/expected).	C	C	C	C	C	C	C	☒	C	C
Developed goals for the community.	☒	☐	☒	☒	☐	☒	☒	☒	☒	☐
Developed mitigation actions with an analysis/explanation of why those actions were selected.	☒	☐	☒	☒	☐	☒	☒	☒	☒	☐
Prioritized actions emphasizing relative cost-effectiveness.	☒	☐	☒	☒	☐	☒	☒	☒	☒	☐
Reviewed and commented on draft Plan.	☒	☐	☒	☒	☐	☒	☒	☐	☒	☐
Hosted opportunities for public involvement (allowed time for public comment at a city council meetings after giving a status report on the progress of the Plan update)	☐	☐	☒	☒	☐	☒	☒	☒	☒	☐

III. PLANNING PROCESS

CHANGES/REVISIONS TO PLANNING PROCESS:
Planning Process was revised due to changes in recent years to the process.

DOCUMENTATION OF THE PLANNING PROCESS

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

Public meetings were held at the Spink County Courthouse and City Offices to inform the public about the required plan update. The Spink County Emergency Manager worked with NECOG staff to organize resources. After the informational meetings were held, the municipalities started working through the existing mitigation strategies for their jurisdictions and made corrections and updates. The meeting minutes and agendas for each of the meetings were published in the local newspaper.

SELECTION OF THE PLANNING TEAM [§201.6(c)(1)]

The Spink County Emergency Manager and staff from Northeast Council of Governments led the development of the plan update. Participating Municipalities were also instrumental in leading the discussions at the planning meetings. The local jurisdictions were represented by city council members and/or finance officers who attended the meetings. The council members then took the information from the work sessions back to their jurisdictions and discussed the progress of the plan at their council meetings. There were three external contributors such as contractors or private businesses, which include South Dakota Developmental Center, Redfield Energy, and Community Memorial Hospital. Those who attended the initial planning meeting for the plan update were asked to volunteer to serve on the planning committee. The planning committee was tasked with reviewing the drafts and providing comments after Northeast Council of Governments initiated changes to the existing plan. Each of the local jurisdictions had a member of their respective councils represent the municipalities in the plan. Those representatives are listed by jurisdiction:

Table 3.1: Plan Representatives for Local Jurisdictions

Ashton	Bobbi Jo Lahr, City Finance Officer
Brentford	Did no participate
Conde	Julie Bruckner, Finance Officer
Doland	Kam Deslauriers, Finance Officer
Frankfort	Non responsive, did not participate
Mellette	Brian Bauer, Mayor & Christi Weideman, FO
Northville	Clayton Blachford, President
Redfield	Adam Hansen, Finance Officer & Jayme Akin, Mayor
Tulare	Gene Stellmacher, City Council
Turton	Did not participate

Participating municipalities were asked to share the progress of the plan at their monthly council/board meetings and to ensure that those attending the meetings were aware that

they are invited to make comments on and participate in the process of updating the new plan. Comments provided by local residents at the city council meetings were collected and incorporated into the plan.

PUBLIC INVOLVEMENT [§201.6(b)(1)]

The public was provided several opportunities to comment on the plan during the drafting stages at City Council Meetings during the public forum. No one from the public showed up to comment on the plan. The municipalities put the plan update on the agenda at their council meetings and allowed people to comment at the meetings. After the plan was drafted it was posted on the Spink County Website, City of Redfield Website, and emailed to all of the participants and to the emergency managers in the neighboring counties of: Clark, Day, Edmunds, Faulk, Hand, Beadle, and Brown. Everyone who received an email copy of the plan draft was allowed 32 days to comment on the draft.

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

The review and incorporation of existing plans, studies, reports and technical information was completed by the local jurisdictions. Each of the communities were asked to provide a list of existing documents that they have available. Many of the smaller communities do not have such documents. Additionally, the 2013 Plan was used as a resource for the new plan because most of the natural hazard profile research had already been completed when it was drafted. In addition to the 2013 Plan, the plan author reviewed several other existing documents including but not limited to the South Dakota State Hazard Mitigation Plan (April 2019), Spink County Hazmat Plan, Spink County Shelter Plan, the City of Redfield Zoning Ordinances and Comprehensive Plan, County Zoning Ordinances, the flood damage prevention ordinance, and Flood Insurance Rate Maps for the local jurisdictions. In Spink County, all of the municipalities except for Redfield are covered under the County Zoning Ordinances and Comprehensive Plan therefore they do not have their own individual zoning or planning documents. Enforcement of the county zoning is also managed by the County. Floodplain management is handled by the Spink County Emergency Manager. A summary of the technical review and incorporation of existing plans is included in Table 3.2.

Table 3.6 :Record of Review (Summary)

Existing Program/Policy/ Technical Documents	Local Jurisdiction									
	Ashton	Brentford	Conde	Doland	Frankfort	Mellette	Northville	Redfield	Tulare	Turton
Comprehensive Plan	C	C	C	C	C	C	C	O	C	C
Growth Management Plan	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flood Damage Prevention Ordinance	✓	NA	NA	✓	NA	NA	NA	✓	✓	NA
Floodplain Management Plan	NA	NA	NA	NA	NA	NA	NA	✓	NA	NA
Flood Insurance Studies or Engineering studies for streams	✓	NA	NA	NA	NA	NA	NA	✓	NA	NA
Hazard Vulnerability Analysis (by the local Emergency Management Agency)	C	C	C	C	C	C	C	C	C	C
Emergency Operations Plan	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zoning Ordinance	C	C	C	C	C	C	C	✓	C	C
Building Code	C	C	C	C	C	C	C	C	C	C
Drainage Ordinance	NA	NA	NA	NA	NA	NA	NA	✓	NA	NA
Critical Facilities maps	NA	NA	NA	NA	NA	NA	NA	✓	NA	NA
Existing Land Use maps	NA	NA	NA	NA	NA	NA	NA	✓	NA	NA
Elevation Certificates	NA	NA	NA	NA	NA	NA	NA	✓	NA	NA
State Hazard Mitigation Plan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HAZUS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA : the jurisdiction does not have this program/policy/technical document

O : the jurisdiction has the program/policy/technical document, but did not review/incorporate it in the mitigation plan

C : the jurisdiction is regulated under the County's policy/program/technical document

✓ : the jurisdiction reviewed the program/policy/technical document

REVIEW OF THE 2013 PLAN

The planning committee reviewed and analyzed each section of the 2013 plan and sections were revised on an as needed basis as part of the update process. Most of the information was relevant and could be remain in the plan. Specific areas that needed improvement or changes include the mitigation strategy, risk assessment, and the existing planning documents. Additionally, the new data from FEMA that includes Base Level Engineering (BLE) has been reviewed and incorporated into the plan update.

In the past, a steering committee has been formed to complete the review of the plan and make appropriate updates. However, the steering committee were almost entirely made up of council members and finance officers from participating jurisdictions and rarely had participation from the general public. Members of the past steering committees would travel to the Spink County Courthouse and attend meetings for mitigation planning. Due to lack of interest from the public and the burden of time and travel commitment for steering committee members, the process was changed to allow mitigation discussion to take place in the communities at their regular City Council meetings. This style of organization was anticipated to improve involvement and participation from residents by bringing the information to them locally, rather than requiring people to travel. In this part of the region, it is not unusual to have little or no participation from residents at the public meetings. However, the local jurisdictions still put the information on their agendas had allowed people to discuss mitigation at their meetings if they wanted to. Each participating jurisdiction provided an opportunity for public comment as identified below.

June 1, 2019 Cottonwood Lake Association Annual Meeting
June 25, 2019 City of Redfield (finance officer met with NECOG at City Hall)
August 5, 2019 City Council meetings (everyone who meets 1st Monday)
August 15, 2019 Spink County Emergency Manager met with NECOG regarding changes to zoning and comprehensive planning documents
August 19, 2019 City of Conde Finance Officer met with NECOG staff regarding critical structures in the City of Conde
August 28, 2019 City of Northville (mayor met with NECOG staff in Aberdeen)
September 4, 2019 City of Conde City Council meeting discussion
September 16, 2019 Town of Tulare (mayor met with NECOG staff in Aberdeen)
September 18, 2019 Town of Ashton (FO provided correspondence to NECOG)
September 19, 2019 City of Redfield (finance officer, Helms Engineering, and city water superintendent met at City Hall)
September 19, 2019 Spink County Emergency Manager met with NECOG to address additional grade raise projects in the County
October 7, 2019 City of Mellette, public hearing at City Council Meeting (all council members, finance officer, mayor, Helms Engineering, NECOG were present)
November TBD

The meeting minutes from each of the council meetings and agendas are included as Appendix A.

IV. RISK ASSESSMENT

CHANGES/REVISIONS TO RISK ASSESSMENT:

- The Hazard Profile was reorganized; hazard event data was removed from the narrative and included as an appendix.
- Repetitive Loss Properties information was updated.
- Values of the structures included in this section were updated whenever information was available.
- Probability of future occurrences was updated to show a percentage.
- Development trends and processes were updated to reflect the processes used. Unique and varied risk section was expanded to provide additional information for each jurisdiction.

IDENTIFYING HAZARDS [§201.6(c)(2)(i)]

The National Oceanic Atmosphere Administration (NOAA) and the Spatial Hazard Events and Losses Database for the United States (SHELDUS) were used to research natural hazards and disasters that have occurred within the last 10 years within the geographic location covered under the Spink County Plan. A summary of the findings for significant hazard occurrences from the past 10 years is provided in Table 4.1:

Table 4.1: Significant Hazard Occurrences 2009-2018

Type of Hazard	# of days with an event Since 2009	Source
Drought	11	NOAA
Wildfire/ Forest Fire	0	NOAA
Flood/ Flash Flood	36	NOAA
Hail	32	NOAA & SHELDUS
Lightning	0	NOAA
Tornado	4	NOAA & SHELDUS
Temperature Extremes	17	NOAA
Winter Storm	48	NOAA
Thunderstorm and High Wind	9	NOAA & SHELDUS

Documented hazard occurrences in Spink County found on the NOAA and SHELDUS websites were incomplete. Therefore, other sources were contacted whenever possible. Specifically, NOAA had zero occurrence listed for wildfires in Spink County. However, the State Fire Marshall's Office was contacted to verify that information. Doug Hinkle, the Chief Deputy Fire Marshal, said their information is derived from the reports submitted by the local fire departments who respond to the fires. He also explained that since many of the fire departments in Spink County are Volunteer Fire Departments many times wildfires are extinguished and reports are never filed with the State. Thus, the information provided by the State Fire Marshal's office is not entirely complete either. For the purpose of this plan we have used the numbers provided by the State Fire Marshal's Office as a point of reference in determining the likelihood of fire hazard occurrence within the jurisdiction. The information provided identifies 36 structure fires, 32 vehicle fires, and 104 other fires reported between 2008 and 2018. The cause of the other fires is not listed, so it is not known for certain whether all or some of these fires resulted due to a natural hazard occurrence or as a result of human behavior. From 2008-2018 the total dollar loss accumulated was $1,526,870. Additionally, the State Fire Marshall provided information about the number of injuries and fatalities reported as a result of these fires. According to their records, 1 civilian injury and zero civilian fatalities were reported and zero firefighter injuries were reported since 2008.

Lightning is also reported as zero occurrences in the NOAA database for weather events. Lightning is a common occurrence in Spink County, with numerous storm events each year producing lighting. Lightning has been reported as the cause to numerous fires in this region and is especially dangerous during drought years. The County acknowledges that the information provided by NOAA for this particular hazard is inaccurate but does not have another source for more accurate information.

The NOAA database has numerous different categories for winter weather hazards to include: Blizzard, Extreme Cold, Heavy Snow, Winter Storm, Winter Weather, Cold/Wind Chill, Extreme Cold/Wind Chill. The number of days with events reported in Table 4.1 is the total reported for all of these categories. Due to the regular nature of winter weather events in Spink County, local officials believe this number is underreported as well.

Table 4.2 was derived from the FEMA worksheets provided in the planning handbook for mitigation planning. Every possible hazard or disaster was evaluated and then the disasters were placed in three separate columns depending on the likelihood of the disaster occurring in the planning jurisdiction. 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 listed on the worksheets and discussed briefly during the completion of the worksheets, the steering committee 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.

Table 4.2: Natural Hazards Categorized by Likelihood of Occurrence		
High Probability	**Low Probability**	**Unlikely to Occur**
Communication Disruption	Aircraft Accident	Avalanche
Drought	Biological	Coastal Storm
Extreme Cold	Civil Disorder	Hurricane
Extreme Heat	HAZMAT	Volcanic Ash
Dam Failure	Landslide	Volcanic Explosion
Flood	National Emergency	Tsunami
Freezing Rain/Sleet/Ice	Radiological	
Hail	Subsidence	
Heavy Rain	Earthquake***	
Heavy Snow		
Ice Jam		
Lightning	***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. ** Utility interruptions are not a natural hazard but often occur as a result of natural hazards such as ice storms and strong winds.	
Rapid Snow Melt		
Strong Winds		
Thunderstorm		
Tornado		
Transportation		
Urban Fire		
Utility Interruption**		
Wild Fire		

Due to the topographical features of the County and the nature of the natural hazards that affect the geographical area covered by this plan, most areas of the county have similar likelihood of being affected by the natural hazards identified. 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 4.3 below identifies the hazards that will be addressed in the plan throughout the planning process.

Hazards were identified for this plan in several ways, including: observing development patterns, interviews from towns and townships, public meetings, planning worksessions, previous disaster declarations, consulting the State Hazard Mitigation Plan and research of the history of hazard occurrences located within Spink County.

Table 4.3: Overall Summary of Vulnerability by Jurisdiction

Natural Hazards Identified	Spink Co	Ashton	Brentfort	Conde	Doland	Frankfort	Mellette	Northville	Redfield	Tulare	Turton
Drought	M	H	L	M	O	L	O	L	L	L	O
Extreme Cold	H	M	L	H	O	M	O	L	L	M	O
Extreme Heat	L	H	L	M	O	L	O	L	L	M	O
Flood	H	H	M	M	O	H	O	H	H	M	O
Freezing Rain/Sleet	H	H	H	H	O	M	O	M	M	M	O
Hail	L	H	M	M	O	L	O	M	M	H	O
Heavy Rain	M	H	M	H	O	M	O	M	M	M	O
Ice Jam	M	M	L	L	O	L	O	L	M	L	O
Landslides	M	NA	NA	NA	O	NA	O	NA	H	NA	O
Lightning	M	M	L	L	O	L	O	L	L	L	O
Heavy Snow	H	H	M	H	O	M	O	M	M	M	O
Strong Winds	H	H	H	M	O	M	O	M	M	M	O
Earthquakes	L	L	L	L	O	L	O	L	L	L	O
Tornadoes	M	H	H	H	O	L	O	H	H	H	O
Wildfire	L	M	M	L	O	L	O	L	L	M	O

NA : Not applicable; not a hazard to the jurisdiction
L : Low risk; little damage potential (minor damage to less than 5% of the jurisdiction)
M : Medium risk; moderate damage potential (causing partial damage to 5-10% of the jurisdiction, and irregular occurrence)
H : High risk; significant risk/major damage potential (for example, destructive, damage to more than 10% of the jurisdiction and/or regular occurrence)
O : Jurisdiction did not fill out risk assessment worksheet

NATURAL HAZARDS IN THE PLAN JURISDICTION

Descriptions of the natural hazards likely to occur in the planning jurisdiction were taken directly from the 2014 Spink County Mitigation Plan. Some of the descriptions were revised for better clarity. For the purpose of consistency throughout the plan, additional definitions were included to reflect all of the hazards that have a chance of occurring in the area and all of the hazards are alphabetized. For all of the hazards identified the probability of future occurrence is expected to be the same for all of the jurisdictions covered in the Plan.

Blizzards are a snow storm 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.

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 overflowing. 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. The County has 3 dams and all 3 have the potential to endanger lives and damage property.

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.

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," however, Eastern South Dakota is prone to much more extreme temperatures than other areas in the country. Temperatures typically range between zero degrees Fahrenheit and 100 degrees Fahrenheit, so extreme cold could be defined in the Spink County plan jurisdiction area as temperatures below zero.

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. Temperatures in Spink County have a very wide range typically between 0-100 degrees Fahrenheit, therefore anything outside those ranges could be considered extreme. The term is applied both to routine weather variations and to extraordinary spells of heat which may occur only once a century.

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 Spink County.

1. Inundation flooding occurs most often in the spring. The greatest risks are realized typically during a rapid snowmelt, before ice is completely off all of the rivers. The river system throughout Spink County consists of the James River and its two tributaries, the Turtle Creek and Snake Creek. The three waterways converge in the east-central portion of the county, all within several miles of the county's largest city of Redfield. The James River Basin (which includes a large portion of Spink County) is the largest of the East River Basin Systems, covering a substantial portion of Eastern South Dakota. It is bordered on the east by highlands of the Coteau de Prairie and on the west by the high ground of the Coteau de Missouri. The valley is a nearly flat stretch of land about 216 miles long and averaging 60 miles wide. It is only in the southern portion that the topography becomes steeper. There is little variance in the elevation of the basin. At Columbia, where the river basin forms in South Dakota, the elevation is 1,290 feet. At the southern terminus of the basin near Yankton, the elevation is 1,162 feet.

2. *Flash Flooding* is more typically realized during the summer months. This flooding is primarily localized, though enough rain can be produced to cause inundation flooding in areas along the James River. Heavy, slow moving thunderstorms often produce large amounts of rain. Spink County is a relatively flat area, allowing moisture to remain in low-lying areas. The threat of flooding would be increased during times of high soil moisture. In addition, debris carried by floodwaters can significantly compromise the effectiveness of otherwise adequately designed bridges, dams, culverts and other structures. Spink County has been a part of a number of past flooding events that have hit the region. They are too numerous to mention. However, several events are specific to the county and worth mention. In the spring of 1993, snow melt caused $500K property damage in the county. In the spring of 1998, snow melt resulted in flooding that cost the county $3.8 million in property damage. Summer flash floods have also occurred. In July 1994, the Frankfort area experienced a flash flood resulting in $500K property damage and $50 million in crop damage. A year later, many areas throughout the county saw a flash flood as tremendous rains pummeled the area. In July of 1997, Conde had a similar experience to Frankfort several years earlier. Past history has suggested that this area is of concern for flooding. In future years, major projects not included in this plan may be considered, and the plan will be updated to include such hazards. Due to the flat land in Eastern South Dakota and the various climates, it is difficult to predict what disasters may affect Spink County and participating entities.

Freezing Rain/Ice occurs when temperatures drop below 30 degrees Fahrenheit and rain starts to fall. Freezing rain covers objects with ice, creating dangerous conditions due to slippery surfaces, platforms, sidewalks, roads, and highways. Sometimes ice is unnoticeable, and is then referred to as black ice. Black ice 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. Generally 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 is 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. Accumulations in dry years can be as little as 5-10 inches, while wet years can

see yearly totals between 110-120 inches. 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, are not uncommon in the area. Winds over 50 m/h can be expected twice each summer. Strong winds can cause destruction of property and create a safety hazards 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, ground-water related, and seasonal effects.

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. 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:

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

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.

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 the updated plan. Most of the hazards identified have the potential of occurring anywhere in the County. Previous occurrences are listed individually by the type of hazard and by location in the following tables. Table 4.4 identifies the Latitude and Longitude of the local jurisdictions along with the population, elevation, and number occupied homes according to the 2010 US Census.

Table 4.4: Latitude/Longitude of Communities within the County

City	Population	Location	Elevation	Occupied Units
Ashton	122	44° 59' 41.93" N 98° 29' 52.36" W	1292 ft	52
Brentford	77	45° 09' 36.89" N 98° 19' 22.35" W	1301ft	30
Conde	140	45° 09' 25.88" N 98° 05' 51.31" W	1322 ft	76
Doland	180	44° 53' 44.91" N 98° 06' 02.36" W	1351ft	95
Frankfort	149	44° 52' 35.97" N 98° 18' 13.30" W	1298 ft	61
Mellette	130	45° 09' 15.95" N 98° 29' 51.32" W	1297 ft	90
Northville	143	45° 09' 14.17" N 98° 34' 57.01" W	1299 ft	52
Redfield	2,333	44° 52' 33.06" N 98° 31' 07.41" W	1305 ft	1,057
Tulare	207	44° 44' 16.84" N 98° 30' 35.36" W	1316 ft	90
Turton	48	45° 02' 58.86" W 98° 05' 44.41" N	1331 ft	26

Population and Occupied Units information was collected from US Census Bureau website: http://factfinder2.census.gov

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 in the following tables. While the planning

committee reviewed all hazard occurrences that have been reported in the last 69 years, the list for some of the hazards was extremely long. The information provided in the tables is not a complete history, but rather an overview of the hazard events which have occurred over the last ten years. The planning committee felt the hazard trend for the last 10 years could be summarized in this section and decided to include any new occurrence that have taken place since the previous plan was drafted. The complete history can be found in Appendix B.

DAM FAILURE

Dam breach or failure is of lesser concern for the citizens of Spink County than flooding due to the location of the dams in the County. Dam Failure is usually associated with intense rainfall or a prolonged flood condition (rainy day), or it can occur anytime (clear day). Dam failure can be caused by a variety of sources, to include: faulty design, construction and operational inadequacies, intentional breaches, or a flood event larger than 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.

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 and utilities and even loss of life; as well as similar consequences to a small dam failure: loss of irrigation water for a season and extreme financial hardship to many farmers. More severe consequences of dam failure can include loss of income, disruption of services and environmental devastation.

Redfield Dam Data

Spink County has one high-risk dam identified by the National Inventory of Dams: Redfield Dam. The Redfield Dam is owned by South Dakota Game, Fish and Parks. It has a height of 27 feet and capacity of 12,000 acres feet. The Redfield Dam has surface area acreage of 1900 and a hazard rating of one.

In general, Redfield Dam is in reasonably good structural condition. It is, however, seriously inadequate hydrological because the dam is capable of passing about 30 percent of the Probable Maximum Flood (PMF). Since Redfield Dam is an intermediate size dam with a Category I hazard classification, the minimum spillway design flood is 50 percent of the PMF. The Redfield Dam Emergency Preparedness Plan has been included in Addendum J.

The locations of the dams are found in Table 4.5:

4.5 Dam Locations in Spink County

ID	Name	Owner	Location (Lat/Long)	Hazard	Height	Storage
SD0000	Cemetery Dam	GF&P	44.8816396 -98.2203696	H		
SD0000	Dudley Dam	GF&P	44.8449747 -98.2870372			
SD0000	Mirage Dam	GF&P	44.7849732 -98.0987028			
SD0000	Redfield Lake	City of Redfield	44.8780317 -98.529262	M	27ft	12,000

DROUGHT AND WILDFIRE

South Dakota's climate is characterized by cold winters and warm to hot summers. There is usually light moisture in the winter and marginal to adequate moisture for the growing season for crops in the eastern portion of the state. Semi-arid conditions prevail in the western portion. This combination of hot summers and limited precipitation in a semi-arid climatic region places South Dakota present a potential position of suffering a drought in any given year. The climatic conditions are such that a small departure in the normal precipitation during the hot peak growing period of July and August could produce a partial or total crop failure.

South Dakota's economy is closely tied to agriculture and only magnifies the potential loss which could be suffered by the state's economy during drought conditions. Drought history can be found in Appendix B, page 20. Roughly every 50 years a significant drought is experienced within the county, while many less severe droughts can occur at times every three years.

A strong possibility exists for simultaneous emergencies during droughts. Wildfires are the most common. As mentioned on page 18 of this plan, the accuracy of the fire history is questionable, because the State Fire Marshall's Office collects information from the County, thus the accuracy of the information reported relies on the local fire departments, some of which are volunteer fire departments that are responsible for filing the reports.

FLASH FLOOD

Since 1997 there have been 8 occurrences of flash floods in Spink County. While it is possible to make a general statement about probability by dividing the number of occurrences by the number of years, 8/23=0.3478, this does run the risk of overstating the probability of flash flood occurrence in a given year. The NOAA storm database does not have documentation of occurrences prior to 1997. This is likely due to lack of reporting that occurred prior to that time.

One of the more notable flash flood occurrences took place on April 6, 2006, resulting in heavy rains of 3 to 6 inches. Rain fell from around midday through the afternoon hours causing flash flooding across parts of Spink, Clark, and Day counties. Many county and township roads were flooded with several of the roads damaged or completely washed out. Areas around Frankfort, Doland, Turton, Conde, Crandall, Raymond, Butler, and Bristol were most affected. Many roads were closed. Several basements were flooded and sewers backed up into homes. The NOAA storm database reported $15,000 of damage during this event, however, it is likely that the actual cost in damages was much higher. It is typical for private businesses, homeowners, and landowners, not to report damages, resulting in understated damage estimates. More information about this event and other flash flood occurrences can be found in Appendix B, page 5.

FLOOD

Flooding is a temporary overflow of water onto lands not normally covered by water producing measurable property damage or forcing 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 a road. Disruption of

communication, transportation, electric service, and community services, along with contamination of water supplies and transportation accidents are very possible.

Numerous flood events have occurred in Spink County over the course of the past two decades. Full flood history can be found in Appendix B, page 5. The NOAA Storm Database reports 59 occurrences of flooding in Spink County over 50 years, from 1969 to 2019, resulting in probability of future occurrence of 118% in any year (59/50=1.18). While this information is valuable in showing the likelihood of future flood events, the information collected from the NOAA website appears to be incomplete as it does not show values in the property and crop damage column. It also does not document any flood events prior to 1997, dating all the way back to 1950. It would be reasonable to assume that damage was caused in each event listed but for whatever reason was not reported in dollars lost or damaged. For the purpose of mitigation planning future damage was estimated based on the historical evidence that flooding will occur in Spink County on a regular basis. One should note that the type of flooding is not always a result of an overflowing body of water but usually a result of high ground water table which leaves the ground saturated and unable to absorb any additional water from rainfall or snowmelt.

NFIP: **[§201.6(c)(2)(ii)]**
Currently 25 properties in Spink County, 12 located in Redfield, and 1 property in Doland, participate in the NFIP program. The Flood Plain Manager is constantly encouraging new communities to participate in the National Flood Insurance Program. Spink County was also mapped in October of 2010 and new DFIRMS are available. Specific areas that are or could be prone to flooding are designated in the DFIRMS which are available for purchase online found on the Map Service Center website.

CRS Program:
Spink County and the communities within, are not part of the Community Rating System program at this time. The Flood Plain Administrator is aware of the program and plans on eventually taking part in it.

Prior to the last plan update Spink County was awarded an HMGP grant to purchase and install generators and sirens for several different locations throughout out the County. The project was completed shortly after the completion of the 2014 plan approval. The generators provide backup power for lift stations, shelters, and other vital structures that are necessary for preventing further damage when power is lost during a natural hazard event. The sirens ensure that there is adequate warning of severe weather for residents in small communities and rural areas throughout the County.

Other mitigation activities have included:

1. The City of Ashton recently completed a sanitary and storm sewer project that consisted of installing new sanitary sewer lines throughout the City and routing storm water through the old sanitary sewer lines to a ditch system on the outskirts of town. Prior to this project the City did not have a separate storm sewer and sanitary sewer which was causing the sanitary sewer system to become overloaded and forcing water into basements and low-lying areas. The City of Ashton also completed a project where they replaced the underground cistern that was located behind the City Office and Fire Department building. The cistern was a drowning hazard to the residents due

to the lack of a top hatch, leaving the cistern which fills automatically with water from artesian wells, completely open with no way to climb out if someone were to fall in.

2. Two properties in rural Spink County that are located right next to the James River, one near Ashton and one near Mellette have recently looked into the possibility of relocating the homes to location that is outside the flood zone. The homeowners have looked into using mitigation funds for the relocation but at this time are leaning towards the option of completing their relocation projects with funds obtained from the Increased Cost of Compliance (ICC) coverage which is included in their NFIP flood insurance policies. ICC will provide up to $30,000 to bring the structure into compliance with the established flood plain ordinance which requires that structures be elevated to at least one foot above the base flood elevation. Since the last plan update, neither of the homeowners participated in HMGP to acquire or relocate their homes. There is still potential for a mitigation project.

3. The City of Frankfort recently expanded the size of their existing wastewater treatment facility and the original design did not meet the requirements of the flood plain ordinance. The Flood Plain Administrator ensured that the construction of the new berm was above the established flood plain. The design was updated and thus the potential for flooding of the facility is reduced. Since the last plan update, the City of Frankfort has not complied with the Federal requirements of the funding they received for this project. They have failed to submit their annual financial reports to USDA and continue to be non-responsive when asked for the information.

4. Fisher's Grove Campground will be relocated to the other side of the bridge in 2013 due to continuous problems with flooding of the Fisher's Grove Bridge which is currently the only way to access the campsites. The park and campground were closed for all of 2010 and 2011 due to flooding. Fisher's Grove is one of the only campgrounds in the area. The bridge will be left in place but will be converted to a walking bridge only. This park is owned by the South Dakota GFP and the State will be responsible for the work to be completed, however, they will have to get approval from the Spink County Flood Plain Administrator before construction commences.

5. The City of Redfield has several properties that are located in the flood zone. One of the properties recently sold to a new owner and they have had severe issues with water draining on to their property from the State School and Turtle Creek. The City has had conversations with the homeowners regarding a possible acquisition. The homeowners are interested in the program as they currently cannot live in the home due to the septic tank on the property being forced upward by the high ground water and forcing all of the sewage into the basement of the home. The application process has been started, along with environmental consultation with the NEPA agencies, however, the homeowners have been slow to provide the required information needed for the application.

These are just a few examples of how having a qualified Flood Plain Administrator is a mitigation activity in itself. Requiring that new construction meets the flood plain

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.

CURRENT FLOODING CONDITIONS:
Flooding in Spink County continues to be a challenge to the residents and property owners who are affected each year. Mitigation for flooding is always a priority. The current situation is severe, due to numerous roads being flooded out during the 2019 Spring, Summer, and Fall. Numerous roads are damaged, some entirely under water, throughout the year. The County Highway Superintendent, Jeff Haessig, said there were over 160 areas that were damaged or underwater in 2019, he mentioned that he has 50 areas left to repair.

HAIL
Hail occurrences are common in Spink County and a full history by location throughout the county can be found in Appendix B, pages 6 through 10. The NOAA Storm Database reports 124 occurrences for hail in Spink County over 69 years, from 1950 to 2019, resulting in probability of future occurrence of 179% in any year (124/69=1.7971). Obviously, with such a high number of occurrences it is reasonable to expect that 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 that such damage was not reported because it was believed to be insignificant at the time, or because those responsible for reporting such information did not report to the proper agencies. Unfortunately the total damages for each event are not available but hopefully in the near future a method for collecting this data will evolve so that it can be made available to local governments for mitigation planning.

HIGH/SEVERE WIND
Severe wind events are common in eastern South Dakota. Several times a year the residents of Spink County can expect to experience strong winds in excess of 40 mph. Gusts of wind in excess of 100 mph have also been recorded for the area. The NOAA Storm Database reports 20 occurrences of high/strong wind in Spink County since 1996. No information is reported in NOAA's database for Spink County prior to 1996. From 1996 to 2019, there were 20 occurrences resulting in probability of future occurrence of 87% in any year (20/23=0.8695). Local officials and participation jurisdictions believe this number is understated. High and severe wind history for Spink County can be found in Appendix B, page 12. Thunderstorm wind occurrences can be found in Appendix B, pages 13-16.

LIGHTNING
The extent or severity of lightening 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. People who leave shelter during thunderstorms to watch or follow lightening also have the possibility of being struck by lightning. The lightning history for the past 10 years shows zero occurrences listed on the NOAA website. Since lightning is common in this region of the United States and in Spink County it is evident that the information reported in the NOAA website is inaccurate and incomplete. Since no information was provided a table showing location, date, time, and magnitude was not included in the plan. It is reasonable to believe that lightning can occur anywhere in the County and has 100% chance of occurrence in any given year.

TORNADOS

The annual risk for intense summer storms is very high. All of Spink County is susceptible to summer storms. Warning time for summer storms is normally several hours, sufficient for relocation and evacuation if necessary. However, tornadoes may occur with little or no warning. The NOAA Storm Database reports 29 occurrences of tornados in Spink County over 69 years, from 1950 to 2019, resulting in probability of future occurrence of 42% in any year (29/69=0.4202). Documentation of tornado activity in Spink County can be found in Appendix B.

The tornados reported in Tulare on September 1, 2010 illustrate how several tornados can occur very close together in the same area. While the 10-year history for Spink County does not indicate that tornados occur very often and when they do the tornados many times do not touch down, or cause any damage; many of the neighboring counties have had severe damage caused by tornado so it is reasonable to expect that similar tornado events can occur in Spink County.

On June 23, 2002, a powerful supercell thunderstorm produced six tornados from eastern McPherson County and across northern Brown County during the evening hours. The first weak tornado (F0) touched down briefly 6.4 miles northeast of Leola and resulted in no damage. The second tornado (F1) touched down 8.5 miles northeast of Leola and crossed over into Spink County where it dissipated 9 miles northwest of Barnard. This tornado brought down many trees and a barn and caused damage to the siding and the roof of a farmhouse in McPherson County and caused no damage in Brown County. A third weak satellite tornado (F0) occurred following the dissipation of the second tornado and resulted in no damage.

A fourth strong tornado (F3) developed 6 miles west of Barnard and moved east and dissipated 3 miles southeast of Barnard. This tornado brought down some high power lines along with a support tower and tossed a pickup truck 100 yards into a group of trees. The pickup truck was totaled. The tornado caused extensive damage to two farmhouses, several farm buildings, and farm equipment. One farmhouse lost its garage and most of its roof with many trees completely snapped off down low and debarked.

The fifth tornado developed 5 miles southeast of Barnard and became a violent tornado (F4). This tornado caused damage to one farmhouse, several outbuildings, trees, and equipment as it moved northeast and strengthened. The tornado then completely demolished two unoccupied homes, several outbuildings, numerous trees, along with destroying or damaging some farm equipment before dissipating 7.6 miles northeast of Barnard. Also, a sixth weak satellite tornado (F0) occurred with this violent tornado and caused no damage. This was the first F4 tornado recorded in Brown county and one of few recorded in South Dakota.

The total estimated property loss exceeded a million dollars. This is just one example of the extent and severity of a tornado; however, gathering historical data on tornadoes and thunderstorms is very difficult due to the number of occurrences and unconfirmed reports. Each year, many storms and a few tornadoes affect the county. Summer storms in Spink County usually produce a wide range of damage making damage estimates very difficult. A complete listing of all summer storms having occurred within the county is not possible due to inaccurate reporting. The National Weather Service reports online were the primary source for this information.

EXTREME TEMPERATURES

Extreme temperatures in Spink County are common occurrences. It is expected that at least two times each year there will be extreme heat or extreme cold in the area. The following information was found on the SHELDUS and NOAA websites. It is possible that people in the area have adapted to this type of extreme temperatures and thus such weather events are not reported as often as they occur. It is also possible that the information has only in recent years been tracked or reported. The NOAA Storm Database reports 23 occurrences of extreme cold / wind chill, three days of excessive, and two days of heat in Spink County since 2006, or 13 years, resulting in probability of future occurrence of 176% in any year (23/13=1.769). It is likely that extreme temperatures have only been documented in recent years. The location for extreme temperatures is not specifically identified by jurisdiction due to the vast area across the State of South Dakota affected by extreme temperatures.

On January 13, 2009, after a clipper system dropped from 1 to 4 inches of snow, Arctic air and blustery north winds pushed into the area. The coldest air and the lowest wind chills of the season spread across much of central and northeast South Dakota. Wind chills fell to 35 to 50 degrees below zero late in the evening of the 13th and remained through the 14th and into the mid morning hours of the 15th.

Across northeast South Dakota, wind chills were as low as 60 degrees below zero by the morning of the 15th. Many vehicles did not start because of the extreme cold and several schools had delayed starts. The Arctic high pressure area settled in on the morning of the 15th bringing the coldest temperatures to the region in many years. The combination of a fresh and deep snow pack, clear skies, and light winds allowed temperatures to fall to record levels at many locations on the 15th. Daytime highs remained well below zero across the area.

This was one of the coldest days that most areas experienced since the early 1970s. The records were broken by 1 to as much as 7 degrees. Some of the record lows included, -30 degrees at Kennebec; -31 degrees at Sisseton; -32 degrees at Milbank; -33 degrees at Mobridge; -35 degrees at Andover and near Summit; -38 degrees at Eureka; -39 degrees 8 miles north of Columbia and Castlewood; -42 degrees at Aberdeen; and -47 degrees at Pollock. Some near record low temperatures included, -24 degrees at Pierre; -29 degrees at Redfield and Victor; -32 degrees at Roscoe; and -34 degrees at Watertown. In Aberdeen, the low temperature of -42 degrees tied the third coldest temperature ever recorded. The coldest temperature ever recorded in Aberdeen was -46 degrees. With these types of temperature extremes the biggest concern for people is exposure because prolonged exposure means almost certain death.

The counterpart to extreme cold is extreme heat which also has dangerous implications to humans, livestock, and critical structures and facilities if certain conditions are present. On July 23, 2007, high heat indices along with very little wind contributed to the deaths of over 2800 cattle in Brown, Spink, Day, and Marshall Counties. Most of the cattle deaths occurred on July 23rd. The high heat indices continued through the 25th with some more cattle deaths but protective measures kept the death count down. Most of the cattle that died were on feedlots. The total loss was around 3 million dollars.

Another temperature extreme occurrence took place in July 2006 when record heat and high humidity affected central, north central, and northeast South Dakota. Heat indices rose to 105 to 115 degrees across the area. Record high temperatures were set at Pierre, Mobridge, Kennebec, Timber Lake, and Aberdeen. Aberdeen set a record high of 106 on July 30, 2006.

WINTER STORMS

Winter storms are common in Spink County. 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 to the County and are routine procedures in Spink 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. All of the storms identified in Appendix B, were considered to have occurred countywide. Due to the multiple occurrences of winter storms each year, an exhaustive compilation is not possible. The NOAA Storm Database reports 25 occurrences of winter storms, 2 occurrences of winter weather, 3 occurrences of ice storms, in Spink County over the past 13 years, from 1996 to 2019, resulting in probability of future occurrence of 231% in any year (30/13 = 2.3076). Documentation of winter storm activity in Spink County can be found in Appendix B, page 19. This probability statistic does not include the occurrences of blizzards. The NOAA Storm Database reports 42 occurrences of blizzards in Spink County over 13 years, from 1996 to 2019, resulting in probability of future occurrence of 323% in any year (42/13=3.2307). Documentation of location, date and time can be found in Appendix B, pages 1 and 2.

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.

THUNDERSTORMS

Thunderstorms and high wind occurrences in the County are also very common. The County continues to educate residents of the dangers of such storms through public service announcements and other printed media. The NOAA Storm Database reports 94 occurrences of thunderstorm wind in Spink County over 61 years, from 1958 to 2019, resulting in probability of future occurrence of 152% in any year (94/61=1.5409). History of thunderstorm winds in Spink County can be found in Appendix B, page 13-16.

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 (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. Spink 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 Spink 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.

Drought can be defined as a period of prolonged lack of moisture. High temperatures, high winds, and low relative humidity all result from droughts and are caused by droughts. A decrease in the amount of precipitation can adversely affect stream flows and reservoirs, lakes, and groundwater levels. Crops and other vegetation are harmed when moisture is not present within the soil.

South Dakota's climate is characterized by cold winters and warm to hot summers. There is usually light moisture in the winter and marginal to adequate moisture for the growing season for crops in the eastern portion of the state. Semi-arid conditions prevail in the western portion. This combination of hot summers and limited precipitation in a semi-arid climatic region present a potential position of suffering a drought in any given year. The climatic conditions are such that a small departure in the normal precipitation during the hot peak growing period of July and August could produce a partial or total crop failure. In fact South Dakota's economy is closely tied to agriculture only magnifies the potential loss which could be suffered by the state's economy during drought conditions. Roughly every 50 years a significant drought is experienced within the county, while less severe droughts have occurred as often as every three years.

Earthquakes occur in the area, but have not had a great enough magnitude or intensity in the past 10 years to be reported. The magnitude and intensity of an earthquake is measured by the Richter scale and the Mercalli scale. An earthquake of noteworthy magnitude has not occurred in the County for decades, but it would be reasonable to expect that a large earthquake would have comparative impact on Spink County as it would anywhere else. Spink County does not have skyscrapers or very many tall buildings other than grain elevators, but it also does not have building codes in place that require homes or buildings to be retrofitted. If earthquakes were a regular occurrence in Spink County, the County would be extremely vulnerable because of the lack of building requirements but since the likelihood of an earthquake is minimal, the risk is also considered low.

Extreme Cold temperatures often accompany a winter storm, so you may have to cope with power failures and icy roads. Whenever temperatures drop decidedly 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 in 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 in masses.

Extreme Heat: Severe heat waves have caused 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. Both have an effect on quality of life, however, neither are detrimental to the existence of the population of Spink County.

Flooding: 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 a road. Disruption of communication, transportation, electric service, and community services, along with contamination of water supplies and transportation accidents are very possible.

The flooding of township and county roads is a concern for the entire county. Concern areas are addressed in the Mitigation Section of this plan.

Freezing Rain causes adverse conditions such as slippery surfaces and extra weight 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. Spink 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 can not 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 the adverse conditions.

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

Heavy Rain causes damage to property such as homes and roads. Often when heavy rains occur in Spink County it causes sewers to backup in homes due to excess water entering the wastewater collection lines. The excess water sometimes has no place to go and thus basements fill up with water which results in damage to water heaters, furnaces, and damage to living quarters for people who live in basement apartments. Roads and bridges can be washed out, thus causing traffic hazards for travelers and commuters. Many times the roads have to be closed causing rural traffic to have to take alternate routes which can sometimes be an additional 5-10 miles out of the way. All areas of the County are vulnerable when heavy rains occur. Storm sewers are built for the typical storm and therefore do not accommodate for excessive or heavy rains.

Ice Jams cause damage to bridges, roads, and culverts due to water currents pushing large chunks of ice under or through small openings. There are four locations in the

County which are at risk of ice jams: at the intersections of Turtle Creek and Highways 24 and 26, and at the intersections of Snake Creek and Highways 19 and 14. There are also many other unspecified areas throughout the county that are vulnerable to ice jams.

Landslides have a low chance of occurring in Spink County due to the relatively flat topography. There is one area of concern along Turtle Creek which runs through the City of Redfield. The embankment has been falling into the creek on the north part of Main Street and one house is mere inches away from sliding into the creek. The erosion worsens every time the City experiences heavy rain. The City of Redfield has hired Clark Engineering Corporation out of Aberdeen, South Dakota to complete a study of the bank in which several alternatives were outlined to correct the problem. The City has prioritized the bank stabilization project as one of its top priorities, however the project is expensive and the City will need funding assistance in order to be able to complete the project.

Lightning often strikes the tallest objects within the area. 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. Since the entire county is vulnerable to lightning strikes and subsequent fires, these fires will be treated under the fire section of this plan.

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, concluding lightning strikes catch them off guard.

Severe Winter Storms have a high risk of occurrence. Approximately five snowstorms each resulting in 5-10 inches of snow occur in the Spink County area annually. 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.

Additionally, winter storms often result in some forms of utility mishaps. High voltage electric transmission/distribution lines run the length of Spink County. These lines are susceptible to breaking under freezing rain and icy conditions and severing during high blizzard winds. Within the county, particularly within Redfield, there are fiber optics associated with phone transmissions that are the lifeline to communications. Any electrical complications bring associated risk of food spoilage, appliance burnout, loss of water, and potential harm for in-house life support users. Limited loss of power is not uncommon on an annual basis. A typical power interruption lasts from 1 to 3 hours. Most residents are prepared to deal with this type of inconvenience.

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.

Snow Drifts are caused by wind blowing snow and cold temperatures. These drifts can be small finger drifts on roadways causing cautionary driving, or 20-40 foot high drifts that block entire highways, roads, and farmyards for several days.

Populations at highest vulnerability for this type of hazard are rural homeowners, which account for approximately 57 percent of the county, and the elderly. As with any weather event, those dependent upon healthcare supplies and other essentials will also bear the brunt of highway closures and slowed transportation due to snow and ice. Emergency services will also be delayed during winter storms.

Snow removal policies and emergency response is at excellent performance and no projects will be considered in this area. Generators provide back-up power to many critical facilities within Redfield and in rural areas. However, some of the critical facilities that could be utilized in disaster situations do not have backup generators. Also, some facilities have generators that only power a portion of operations.

Strong Winds can be detrimental to the area. Trees, poles, power lines, and weak structures are all susceptible and vulnerable to strong winds. When strong winds knock down trees, poles, power lines, and structures it creates additional traffic hazards for travelers and commuters. Strong winds are a common occurrence in all parts of Spink County. The farming community tends to be vulnerable because many old farm sites have weak, dilapidated, or crumbling structures or structures such as grain bins which can easily be blown over. Another area of particular vulnerability would be those areas with dense tree growth where dead or decaying trees lose their stability and can be blown over or knocked down easily.

Subsidence is a hazard that has a very low probability of occurring in the area. Therefore the jurisdictions do not consider themselves particularly vulnerable to such a hazard.

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".

Tornadoes 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 percent of occurrence) is from 11 am to midnight. Within this time frame, most tornadoes occur between 4 pm and 6 pm. The annual risk for intense summer storms is very high. Often associated with summer storms are utility problems. High voltage electrical transmission lines run the length of Spink County. These lines are susceptible to breaking during high winds and hail. Tall trees located near electrical lines can be broken in wind or by lightning strikes and land on electrical lines, severing connections. Any electrical complications bring associated risk of food spoilage, appliance burnout, loss of water, and potential harm to in-house life support dependents. Limited loss of power is common on an annual basis. Typical power interruptions last around 1 to 3 hours. Most residents are prepared to deal with this.

Wildfires occur primarily during drought conditions. Wildfires can cause extensive damage, both to property and human life, and can occur anywhere in the county. 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 frequent wildfires may cause other negative ecological effects. 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.

Since there are no remote forested regions in Spink County, wildfires can be easily spotted and are capable of being maintained. Spink County does not have any areas that are considered Wildland-urban interface because property outside city limits is primarily agricultural land, thus, there are no urban interface areas at risk in Spink County. In addition, fire interference with traffic on highways is not a major concern. The most important factor in mitigating against wildfires continues to be common sense and adherence to burning regulations and suggestions disseminated by the County.

Moisture amounts have the biggest impact on fire situations. During wet years, fire danger is low. 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 34-29B and 34-35.

Hunting season brings thousands of hunters to the area. Shots have the potential to ignite dry grassland, hay bales, or storage areas. This is a risk that is addressed in hunting education and safety.

ADDRESSING VULNERABILTY: REPETITIVE LOSS PROPERTIES

Requirement §201.6(c)(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. Spink County does not keep an official record of repetitive loss properties however; the State NFIP Coordinator, Marc Macy, provided a listing of eight properties that qualify as repetitive loss properties, one located in the City of Redfield with $85,943 in payouts, and seven located in Spink County with $382,075 in payouts. FEMA's new database does not provide specific addresses anymore, but none of the properties have been mitigated at this time. In previous years (2011-2013), Spink County was working to acquire/relocate one property due to repetitive loss threat which is located on the James River near Mellette, however more information was needed at that time to complete the benefit cost analysis for the application to HMGP. Recent changes in the BCA requirements for HMGP applications would possibly help this project move forward; due to the $276,000 total project cost threshold for acquisitions, this property may qualify for mitigation without a BCA and could be reconsidered if the property owners are interested in participating.

ASSESSING VULNERABILITY: IDENTIFYING STRUCTURES

Requirement §201.6(c)(2)(ii)(A): The plan should describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area…

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 as a result of severe summer or winter storms, a terrorist attack, or a hazardous materials incident, Spink County and participating entities want to ensure they have the ability to prevent further loss of life by generator powered critical facilities and shelters. The City of Redfield has many structures that are vital to emergency operations including the County's only hospital, a nursing home, the Spink County Courthouse which also serves as the local emergency operations center when needed. Table 4.6 is a list of critical facilities that would cause the greatest distress in the county if destruction occurred. The table is organized alphabetically by location (column 1) and then alphabetically by structure name (column 5).

Table 4.6: Critical Structures in Spink County

Location	Value	Contents	Type	Structure Name	Owner Type
Brentford	$40,000	0	Govt Structures	Ball Field, Park, Tennis	City
Brentford	125,000	350,000	Fire Dept	Firehall	Public
Brentford	$40,000	$40,000	Govt Bldg	Post Office	Public
Brentford	1,000,000	0	Govt Structure	Sewer Lagoon	City
Brentford	$30,000	$30,000	Govt Bldg	Storage Garage	City

Conde	$10,000	0	Govt Equip	2 On-demand generators	City
Conde	$350,000	$50,000	Govt Structure	Pumphouse & Generator	City
Conde	$773,951	$6,525	Govt Bldg	City Hall (in school)	City
Conde	$1,651,861	0	Govt Bldg	Community Center	City
Conde	$2,681	0	Govt Structure	High Band Radio Ant.	Public
Conde	$501,443	$15,900	Govt Bldg	Municipal Bldg	City
Conde	$77,442	$11,255	Govt Bldg	Municipal Shop	City
Conde	$25,000	$25,000	Govt Structure	New Lift Station	City
Conde	$436,656	$5,000	Govt Structure	Ground Storage (Water)	City
Frankfort	$40,000	0	Govt Structure	City Park, Ball Fields	Public
Frankfort	$350,000	$350,000	Govt Bldg	Fire Station	Public
Frankfort	$50,000	$50,000	Govt Structure	Lift Station	City
Frankfort	$150,000	$20,000	Govt Bldgs	Post Office, City Hall	City
Mellette	6,800,000	$825,000	School	Northwestern Area School	Public
Mellette		$500,000	Fire Hall	Fire Hall	Public
Mellette		$50,000	Govt Structure	Lift Station	City
Mellette		$500,000	Govt Structure	Lagoon	City
Mellette		$200,000	Govt Structure	Water Storage	City
Mellette		$150,000	Govt Bldg	Pump House	City
Mellette		$735,000	Govt Bldg	Community Center	City
Northville	$100,000	$50,000	Govt Bldg	City Pump House	City
Northville	$110,000	$45,000	Govt Structure	Lift Station	City
Northville	$375,000	$190,000	Govt Structure	Fire Station	City
Northville	$75,000	$30,000	Govt Structure	City Shop	City
Northville	$600,000	$50,000	Community Building	Community Bldg, Gym, Post office	Assoc.
Redfield	525000	14721	Govt Bldg	Bathouse Pool Bldg	Public
Redfield	672300	127500	Govt Bldg	City Hall	City
Redfield	54000	1082	Govt Bldg	Comfort Station	Public
Redfield	37800	1082	Govt Bldg	Comfort Station	Public
Redfield	15870020	2610696	Hospital	Community Memorial (4 buildings)	City
Redfield	1,016,500	$541,216	Govt Bldg	Depot	Public
Redfield	15000	0	Govt Structure	Emergency Sirens	Public
Redfield	43260	5412	Govt Structure	Have-A-Rest Campground	Public
Redfield	1380000	687344	Govt Bldg	Historic Carnegie Library	Public
Redfield	8085	1082	Govt Bldg	Landfill Bldg	City
Redfield	5523		Govt Structure	Lift Station	Public
Redfield	25000	0	Govt Structure	Lift Station (1300 E 3rd)	City
Redfield	25000	0	Govt Structure	Lift Station (912 W 4th)	City
Redfield	Unknown	Unknown	Private Bldg	Nursing Home	Private

Redfield	37800	32473	Govt Bldg	Pipe Storage Bldg	Public
Redfield	10000	0	Govt Bldg	Pump House	Public
Redfield	95000	37142	Govt Bldg	Pump House	City
Redfield	Unknown	Unknown	Govt Bldgs	Redfield Schools	Public
Redfield	Unknown	Unknown	Govt Structure	Redfield/Cemetary Dams	Public
Redfield	Unknown	Unknown	Govt Bldg	SDDC Campus	State
Redfield	8000	3247	Govt Bldg	Sewer Piper Storage	Public
Redfield	Unknown	Unknown	Govt Bldg	Spink County Courthouse	County
Redfield	Unknown	Unknown	Govt Bldg	Spink County Hwy Shop	County
Redfield	50000	21648	Govt Bldg	Truck Storage	Public
Redfield	107600	0	Govt Structure	Water Slide	Public
Redfield	300000	0	Govt Bldg	Water Storage Building	City
Redfield	1066700	64945	Govt Bldg	Water storage warehouse	City
Redfield	500000	0	Govt Structure	Water Tower	City
Redfiled	211200	42448	Govt Bldg	New Street Shop	Public
Spink Co.	$150,000	$150,000	Redfield Energy	Admin Office Bldg	Private
Spink Co.	$5,000,000		Redfield Energy	Cooling Tower	Private
Spink Co.	$25,000,000		Redfield Energy	Energy Center	Private
Spink Co.	$10,000,000	$500,000	Redfield Energy	Grain Rec Bldg, DDG	Private
Spink Co.	$20,000,000	$12,000,000	Redfield Energy	Grain Storage	Private
Spink Co.	$10,000,000	$2,000,000	Redfield Energy	Misc Storage Tanks	Private
Spink Co.	$100,000	$20,000	Redfield Energy	NH3 Tank	Private
Spink Co.	$25,000,000	0	Redfield Energy	Process Bldg	Private
Spink Co.	$5,000,000	$5,000,000	Redfield Energy	Tank Farm	Private
Tulare	$50,000		Non-profit	American Legion	Public
Tulare	$100,000		Private	Bank	Private
Tulare	$100,000		Religious	Baptist Church	Private
Tulare	$75,000		Private	Café	Private
Tulare	$100,000		Govt Bldg	City hall, fire hall	City
Tulare	$35,000		Govt Bldg	County Shop	Public
Tulare	$80,000		Private	Day Care	Private
Tulare	$100,000		Private	Gas Station	Private
Tulare	$75,000		Private	Grocery Store	Private
Tulare	$25,000		Non-profit	GROW SD	Private
Tulare	$100,000		Private	Meat Locker	Private
Tulare	$40,000		Private	Pool Hall/Bar	Private
Tulare	$20,000		Govt Bldg	Post Office	Public
Tulare	$75,000		Religious	Salem Church	Private
Tulare	$3,000,000		Govt Bldg	School	Public
Tulare	$3,000,000			SDWG	
Tulare	$150,000		Religious	United Church	Private
Tulare	$2,000,000		Govt Structure	Water Tower, pump house, lift station	City

The information provided in Table 4.6 was originally taken from the Inventory Assets Worksheet #3B that was given to all of the plan participants to fill out and return in the planning sessions that took place in the last plan revision. This table was emailed to each of the plan jurisdictions and stakeholders and the information was requested to be updated and revised as each jurisdiction deemed necessary. Some of the communities responded back with "no changes or revisions needed" and others made minor adjustments. In the process of updating the mitigation plan previously, the participants were instructed 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 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 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.

While the information may not be comprehensive it does give FEMA, SDOEM, and any other readers of the Plan an idea of how communities in rural South Dakota feel about certain structures. For example, FEMA may not view a City Park as a "critical" structure, however, in many small communities the City Park or baseball field is the hub of where activities take place and may also be the only thing that attracts tourists and people from outside the community. So it may be the case that without these "landmarks" the communities' existence would be at stake. Also, parks are often built near bodies of water such as streams, creeks, lakes, or dams, for the purpose of creating attraction to these areas but also for the purpose of creating green space that can take on extra water during heavy rain events, or rapid snow melt. These areas are vital to the protection of other built environments such as housing developments or business districts merely for their ability to hold excess water. In northeast South Dakota, soccer fields are often used as retention ponds in years of high or excessive precipitation.

Tulare's plan representative provided information on numerous structures including the replacement value of many private businesses, but did not collect information for the contents value.

The two private businesses that participated in the previous plan update did not participate this time around. Redfield Energy was involved during the planning process in 2013-2014 and was able to provide as much information as requested and from the table. Their facility is very complex and would also be very expensive to replace in the event of total or partial loss caused by a natural hazard. Redfield Energy also documented that several of their structures contain massive quantities of stored hazardous materials, so in the event of a natural hazard such as a tornado or wildfire there is definitely capability of large scale damages not just in nearby communities but throughout the entire county and possibly neighboring counties as well. The reason for lack of participation this time around is unclear. In the future, the planning committee will continue to engage stakeholders and private business owners. For this plan update, the information provided previously will remain in the plan for future reference.

As for SDDC, the campus is actually owned and operated by the State of South Dakota. When the SDDC Plan representative requested specific information in regards to the values of the buildings on SDDC campus, he was advised that the State was not comfortable providing that information. Due to the number and size of the structures one could assume that the value of a campus with multiple buildings with specialized purposes would be in excess of ten million dollars. Additionally because many of the buildings house individuals you could also expect that the potential for loss of lives exists in the event of a tornado, fire, or other severe weather. Since the previous plan was drafted the City has purchased some of the outlier buildings at the SDDC campus. One of the buildings is in poor condition and known to have asbestos. The City has not determined what they will use the building for at this time but discussion has taken place to use it for training fire fighters. Another building is being used as a maintenance shed. The roof needs to be replaced. The City has purchased the shingles for it but is still in the process of hiring a contractor to do the work. Another building that was acquired has not been given a new purpose but the City is working with local economic development agencies to determine a good use for it.

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 information provided in the following tables was collected from the local jurisdictions by the representatives from each community. The Spink County Emergency Manager provided the information for Spink County and representatives from the private participating businesses as well as the local jurisdictions provided information regarding their vulnerabilities. Inconsistencies and missing information result from lack of existing mechanisms, plans, and technical documents available to the communities and also a result of people who are serving their communities on a volunteer basis as opposed to many other areas in the nation which have larger communities who pay salaried professionals to represent them during the mitigation planning process. Each of the communities provided the best available data considering the lack of resources in which to access the information. This section of the plan was new in 2013 and the information was scarce. Participating communities were requested to provide more complete data during the 2019 update; however, many of them struggled to provide the information requested.

The assessor's office provided the assessed valuation of properties within the municipalities. All properties with structures, whether owner occupied or not were included in the valuations provided in Tables 4.7 through 4.17. Tables 4.18 and 4.19 represent private partners who participated in the previous planning process for the plan update however they did not participate this time around so the information was left in the plan but was not changed or updated. The reports provided by the assessor's office did not include the number of structures or the number of people in each structure; thus, many of the tables are missing this information. Those tables that do have number of structures or number of people listed are a result of the municipalities providing the information. Some of the communities did not provide any information even after numerous attempts.

4.7 Spink County Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in County	# in HA	% in HA	$ in County	$ in HA	% in HA	# in County	# in HA	% in HA
Residential	3122	3122	100%	$122,936,468	$122,936,468	100%	6415	6415	100%
Commercial	408	408	100%	$30,468,815	$30,468,815	100%			
Industrial									
Agricultural	1334	1334	100%	$14,723,780	$14,723,780	100%			
Religious	26	26	100%	unknown					
Government	37	37	100%	unknown					
Education	4	4	100%	unknown					
Utilities									
Total	**4931**	**4931**	**100%**	**$153,405,283+**	**$153,405,283+**	**100%**	**6415**	**6415**	**100%**

4.8 Ashton Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in County	# in HA	% in HA
Residential	70	70	100%	$1,714,623	$1.714M	100%	122	122	100%
Commercial	11	11	100%	$180,386	$180,386	100%			
Industrial	0	0		0	0				
Agricultural	0	0		0	0				
Religious	0	0		0	0				
Government	2	2	100%	$100,000	$100,000	100%			
Mobile Homes	8	8	100%	$49,663	$49,663				
Utilities									
Total	**91**	**91**	**100%**	**$2,044,672**	**$2,044,672**	**100%**	**122**	**122**	**100%**

4.9 Brentford Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential	38	38	100%	1,000,000	1,000,000	100%	77	77	100%
Commercial	3	3	100%	400,000	400,000	100%			
Industrial									
Agricultural									
Religious	1	1	100%	70,000	70,000	100%			
Government									
Education									
Utilities	1	1		600,000					
Total	**43**	**43**	**100%**	**$2,070,000**	**$2,070,000**	**100%**	**77**	**77**	**100%**

4.10 Conde Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential	125			$3,797,821					100%
Commercial	27			$484,020					
Industrial	0			0	0				
Agricultural	1			$74,330					
Religious	1			632,400					
Government	11			$3,300,000					
Education	0			0	0				
Utilities									
Total	**155**			**$7,893,970**	**$7,893,970**	**100**	**140**	**140**	**100%**

4.11 Doland Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential							180	180	
Commercial									
Industrial									
Agricultural									
Religious									
Government									
Education									
Utilities									
Total									

4.12 Frankfort Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential	90	90	100%	2,787,000	2,787,000	100%	149	149	100%
Commercial	1	1	100%	unknown					
Industrial									
Agricultural	2	2	100%	unknown		100%	2	2	100%
Religious	1	1	100%	100,000	100,000	100%	25	25	100%
Government	1	1	100%	unknown		100%	2	2	100%
Education									
Utilities									
Total	**95**	**95**	**100%**	**$2,887,000+**	**$2,887,000**	**100%**	**178**	**178**	**100%**

4.13 Mellette Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential							130	130	100%
Commercial									
Industrial									
Agricultural									
Religious									
Government									
Education									
Utilities									
Total									

4.14 Northville Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential	59	17	29%	$5,605,000	1,600,000	29%	143	39	27%
Commercial	3	1	33%	unknown		33%			
Industrial									
Agricultural	2	0		$6,300,000					
Religious	1	1	100%	$120,000	$120,000				
Government	1	1	100%	$50,000	$50,000				
Education									
Utilities									
Total	66	66		$12,075,000	$1,770,000+		143	39	27%

4.15 Redfield Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential	918	918	100%	$47,618,060	$47,618,060	100%	2,333	2,333	100%
Commercial	187	187	100%	$18,915,376	$18,915,376	100%			
Industrial									
Agricultural									
Religious									
Government	66	66	100%	$27,587,257	$27,587,257	100%			
Education	4	4		$10,027,000	$10,027,000	100%			
Utilities									
Total	**1,175**		**100%**	**$104,147,693**	**$104,147,693**	**100%**	**2,333**	**2,333**	**100%**

4.16 Tulare Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential	89	89	100				207	207	100
Commercial	16	16	100						
Fire Dept									
Agricultural									
Religious	5	5	100						
Government	4	4	100						
Education	3	3	100						
Utilities	1	1	100						
Total	**118**	**118**	**100%**				**207**	**207**	**100%**

4.17 Turton Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential							48	48	
Commercial									
Industrial									
Agricultural									
Religious									
Government									
Education									
Utilities									
Total							**48**	**48**	

4.18 Redfield Energy Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential									
Commercial	40	40	100%	100,000,000+	100,000,000+	100%	42	42	100%
Industrial									
Agricultural									
Religious									
Government									
Education									
Utilities									
Total	**40**	**40**	**100%**	**$100,000,000**	**100,000,000+**	**100%**	**42**	**42**	**100%**

4.19 SDDC Estimated Potential Dollar Losses to Vulnerable Structures									
Type of Structure	Number of Structures			Value of Structures			Number of People		
	# in City	# in HA	% in HA	$ in City	$ in HA	% in HA	# in City	# in HA	% in HA
Residential									
Commercial									
Industrial									
Agricultural									
Religious									
Government	28	28	100%	Unknown	Unknown	100%	140	140	100%
Education									
Utilities									
Total	**28**	**28**	**100%**	**Est. $10M +**			**140**	**140**	**100%**

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 the representatives from each of the jurisdictions. None of the communities in Spink County are experiencing any growth at this time are as all of the jurisdictions have experienced declining populations over the past 10 years and at this time are focused on maintaining the population they have. Due to the declining populations the smaller jurisdictions do not maintain plans for growth and development. The County approves all building permits located outside the City Limits of Redfield. All other communities coordinate development through the county planning and zoning office. The Spink County Emergency Manager is the also the floodplain administrator and he also approves.

Any construction that takes place in the county requires a building permit. Anyone who intends on building (or having something built) is required to go to the equalization office to apply for a building permit. The Director of Equalization checks the floodplain map to determine if the location of the proposed construction site is located in a flood zone. If the proposed construction is located in the floodplain, the applicant is required to get a floodplain permit from the floodplain administrator. After the foundation is built the floodplain administrator does an onsite inspection to ensure that the conditions of the floodplain permit have been met.

The Spink County Commissioners also act as the Planning Commission and the Drainage Board. The Drainage Board is responsible for the permitting process for drain tile. Drain tile is the only construction activity that can occur in the floodplain that is not approved by the floodplain administrator. Installation of drain tile in the flood plain is exempt from the flood plain permitting process. The floodplain administrator does not get involved with drain tile permitting, however, he does help with complaint work for the Drainage Board whenever needed.

The floodplain administrator follows the National Floodplain Management Guidelines for his permitting process. There's no building allowed in the floodplain unless there's a

special need to do so. Building in the floodway fringe is allowed but construction must meet floodplain standards.

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, the group decided that all areas of the county have an equal chance of a natural hazard occurrence in their area. While the extent to which each jurisdiction is affected by such hazards varies slightly between the local jurisdictions, the implications are the same. Flood risk is managed primarily by the process described on page 48. The county emergency manager who is also the floodplain manager is responsible for floodplain management in all areas of the county other than the City of Redfield. The City of Redfield finance officer is the designated floodplain administrator. Even though he is responsible for floodplain administration with the City limits of Redfield he still consults with the Spink County Emergency Manager on all activities within the floodway.

The City of Ashton does not have any major concerns regarding flooding. The constructed a storm drainage system about ten years ago and it has helped alleviate much of the flooding they used to experience. Ashton has numerous homes that could be considered unsafe for the purpose of taking shelter during severe wind or tornado events which they have addressed in their mitigation strategy.

The Town of Brentford did not participate.

The Town of Conde has a few concerns with water that passes through culverts under Highway 37. The City of Conde recently replaced their water tower with a ground water storage tank, replaced all of the water and sewer lines in town and made improvements at their lift station and wastewater treatment facility. They have a few homes in town that are fire hazards. The City has experienced a recent house fire that resulted in death. The primary issue was the poor condition of the home.

The Town of Doland has properties located on the floodplain fringe. They work directly with the floodplain administrator when work is planned in those areas. Doland has recently replaced all of their water and sewer infrastructure and roads. They are in the process of building a new splash park which will replace the tennis and basketball courts at their city park. They have had discussion about the need for a possible storm shelter at the splash park, but have not made any plans to build one. A new school was also built in 2019.

Town of Frankfort did not participate.

Town of Mellette has drainage issues that have been addressed in the mitigation strategy section of the plan. They have also started the process to address the issue of high ground water that is impacting their pumps at the lift station.

Northville has issues with drainage on the west side of town. More information about the problem can be found in the mitigation strategy.

City of Redfield has several significant features that make the risks unique and/or varied from the neighboring communities in Spink County. First the City of Redfield has a population over 2,000. All of the other communities have less than 500 people. Additionally, the City of Redfield owns and operates the only hospital in the County. The City of Redfield also has the Redfield Dam which is considered a high hazard dam. Turtle Creek also flows through the City of Redfield and there are numerous properties located within the floodplain.

Tulare has a lot of issues with drainage. The installed storm sewer in the south part of town over a decade ago and they realize the need for storm sewer in the north part of town but are very concerned about the cost. The Town has three storm drains that drain to the west slough which in turn drains to Mud Lake north of town. They have plans to hire an engineer to complete an engineering study to determine what the best alternative is. Currently due to the saturated ground and high water table, every residence with a basement has to rely on sump pumps to keep the water out. If power is lost, basements will flood. The ditches in town are filled with water, however the streets are not currently inundated or covered by water. The Town does have a need for a generator at the fire hall and community room.

Turton did not participate.

V. MITIGATION STRATEGY

CHANGES/REVISIONS TO THE MITIGATION SECTION:

Additional projects submitted by individual communities were added at the end of the mitigation section as well as Project #6 and #7 under Section I Mitigation Activities for Summer Storms. Several projects were eliminated due to completion and/or reconsideration by the Steering Committee. Those projects are identified under their original Project #.

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 Hazard Mitigation Plan addresses several mitigation categories including warning and forecasting, community planning, and infrastructure reinforcement. Spink County and participating entity's greatest needs are mitigating flood hazards, backup generators for critical infrastructure and storm shelters, and public awareness.

After meetings with the local jurisdictions and opportunities for public input, a series of mitigation goals were devised to best aid the County in reducing the effects 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 meet the hazard mitigation needs of the County. These projects were evaluated based on a cost/benefit ratio and priority. A *high* priority classification means that the project should be implemented as soon as possible and would minimize losses at a very efficient rate. A *moderate* classification means that the project should be carefully considered and completed after the high priority projects have been completed. A *low* priority means that 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 in light of 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.

SPINK COUNTY MITIGATION ACTIVITIES FOR FLOODING HAZARDS

Goal #1: Reduce the impact of flooding in Spink County

Project #1: County Road 15 improvements (T117N R64W Sec. 23 & 24). There has been a loss of this road due to the erosion of the river bank. The bridge is the only bridge between Ashton and Redfield that will hold the regular traffic and is therefore vital to both communities. The goal of the project is to stop the erosion of the bank on the north side of the road and to build up the bank. Total length of the project is 700 to 800 feet.

Priority:	High
Funding Sources:	County, State, FEMA
Timeframe:	ASAP
Oversight:	County
Cost:	The cost of building up the road and shoulders would be around $45,000. There would need to be a traffic flow study done to determine exactly how much the road is utilized and how the improvements should be carried out.

Project #2: Improve bridges throughout the county. The following is a list of bridges that are graded as structurally or functionally deficient (Having a sufficiency rating of 50.00 or lower).

Bridge ID#	Facility Carried	Sufficiency Rating
58018150	163rd St.	19.20
58062270	175th St.	21.30
58011010	149th St.	22.30
58284160	164th St.	22.40
58060158	382nd Ave.	22.60
58025370	185th St.	24.40
58091180	166th St.	26.80
58051310	179th St.	27.30
58029170	165th St.	29.90
58296380	186th St.	29.90
58124140	162nd St.	30.40
58280394	404th Ave.	31.00
58010376	375th Ave.	32.90
58061080	156th St.	32.90
58023390	187th St.	33.50
58280159	404th Ave.	33.90
58270319	403rd Ave.	34.90
58050330	379th Ave.	35.50
58117190	167th St.	35.80
58323060	154th St.	35.80
58052070	155th St.	36.70
58060075	382nd Ave.	36.90
58018030	151st St.	38.60
58109240	172nd St.	38.90

58019030	151st St.	39.10
58061140	162nd St.	40.00
58031230	171st St.	40.50
58220375	398th Ave.	41.00
58270148	403rd Ave.	41.90
58250190	167th St.	42.20
58021400	188th St.	42.90
58030259	377th Ave.	42.60
58290388	405th Ave.	43.00
58239250	173rd St.	43.50
58275100	158th St.	44.60
58218360	184th St.	44.60
58050340	379th Ave.	44.90
58305370	185th St.	45.50
58252170	165th St.	46.10
58029050	153rd St.	46.20
58280325	404th Ave.	46.20
58120231	388th Ave.	47.60
58020164	376th Ave.	48.60

A study will need to be done to determine the exact benefit of each bridge reconstruction or improvement. Traffic flows, proximity to towns, and age must all be taken into consideration. Costs will vary from $5000 per bridge for simple improvement to $50,000 for complete reconstruction of larger bridges.

Project #3: Clean out the James River and its tributaries. A study should be conducted to determine areas in which debris and earth build up causing the river to backup and flood land. While dredging projects run into a lot of problems regarding environmental issues, studies which can be used to determine valuable projects that are fairly easily conducted.

Priority:	Low
Funding Sources:	County, State, Federal, JRWDD
Timeframe:	Several years
Oversight:	Army Corps of Engineers
Cost/	A study would be fairly cost effective to complete and would serve as a basis for projects. An actual dredging could cost over $1,000,000. A cost/benefit would be conducted with the study.

Project #4: Use HAZUS software to determine flood risk throughout the county. A minimal cost would be incurred in purchasing the correct software; however office time spent would be more costly. This office time would include analysis and practical application of the data gathered. Funding of approximately $1,500 should serve the purpose of analyzing level 1 flood data. More detailed level 2 and 3 data would require considerable more time, but would serve the County well. A cost of $10,000 would provide ample time to compile more detailed flood data for specific portions of the county

SPINK COUNTY MITIGATION ACTIVITIES FOR SUMMER STORM HAZARDS

Goal #1: Reduce the impact of severe summer storms in the County

Project #1: Construct storm shelters wherever needed throughout the county and place signage along major thoroughfares where travelers can see the locations of the nearest shelters.

Project #2: Evaluate existing shelters and other structures, such as schools, to determine usefulness (and accessibility) as community shelters. Retrofitting these facilities should be considered. Although it does not appear that any currently existing buildings, particularly in the smaller communities, are sufficient to serve as shelters. Retrofitting old schools and other like buildings should be considered if sufficient cost savings justifies the project over building new.

Project #3: Removed due to completion

Project #4: Protect the public from summer storms through information and education. With existing and newly developed education materials, the public can be warned of the dangers of summer storms. Book covers, magnets, and brochures have been disseminated through severe weather campaigns. News releases and emergency checklists are also other options.

Some of the issues that may be addressed within the information would include: safety issues on downed power lines, electrical and fire dangers, the necessity for generators and advice on using them, survival strategies during storms, and purchasing of back-up power for various household and farming operations. There should also be information regarding the construction of safe rooms in new and existing houses and the designation/recognition of the safest places within houses during severe weather.

Discussion: This project is not mitigation, while it is good measure to ensure people are educated and informed this activity falls under the category of preparedness.

Project #7: Use HAZUS software to estimate losses particularly for tornados.
A minimal cost would be incurred in purchasing the correct software; however office time spent would be more costly. This office time would include analysis and practical application of the data gathered. Funding of approximately $1,500 should serve the purpose of analyzing basic datasets. Data analysis specific to homes and businesses would require considerable more time, but would serve the County and participating entities well. A cost of $10,000 would provide significant time to analyze more detailed cost-benefit data for specific portions of the county

MITIGATION ACTIVITIES FOR DAM FAILURE

After the floods of 1997 in Spink County, a Mitigation Project to remove all houses in Vinegar Flat was completed. The houses were purchased and removed from the hazard area. This addressed the main concern of the houses below the Redfield Dam being flooded. Since then, no mitigation projects concerning the high hazard dam have been necessary. In an effort to remain proactive, below are the goals for the Redfield Dam:

Goal #1: Reduce the impact of dam failure for citizens located below the dam.

Project #1: Work with Game, Fish and Parks to create a Planning Committee to review and update or rewrite the Redfield Dam Emergency Preparedness Plan and include Cemetery Dam.

Priority:	Moderate
Funding Sources:	Game, Fish and Parks; County; State; FEMA
Timeframe:	3-5 Years
Oversight:	Game, Fish and Parks; Spink County
Cost:	Unknown

Project #2: Check the dam levies and ensure that they are working properly and make any necessary repairs.

Priority:	Moderate
Funding Sources:	Game, Fish and Parks; County; State; FEMA
Timeframe:	3-5 Years
Oversight:	Game, Fish and Parks
Cost:	Unknown

Project #3: Work with Game, Fish and Parks to complete an analysis of the Redfield reservoir dam failure inundation area in order to better understand the risk downstream from the dam.

Priority:	Moderate
Funding Sources:	Game, Fish and Parks; County; State; FEMA
Timeframe:	3-5 Years
Oversight:	Game, Fish and Parks
Cost:	Unknown

MITIGATION ACTIVITIES FOR WINTER STORM HAZARDS

Goal #1: Reduce the impact of severe winter storms on the citizens of Spink County

Project #1: Removed due to completion of projects and because Northern Electric participates in the State Hazard Mitigation planning efforts and rural electrics are covered under that plan.

Project #2: Survey areas in need of snow shelterbelts and plant trees accordingly.

Priority:	Low-Moderate
Funding Sources:	FLEP, Tree City, County, Private
Timeframe:	5 years
Oversight:	Forestry Service/Cities
Cost:	A survey of needy areas would require minimal cost. A typical shelterbelt would cost several thousand dollars. The locations of structures and persons within the affected area should be included in the survey and a definite cost/benefit analysis must be conducted. Shelterbelts could benefit for rural and semi-urban areas of the county.

Project #3: Equip critical facilities with backup generators to ensure vital services can continue during power outages.

MITIGATION ACTIVITIES FOR WILDFIRES/DROUGHT

Goal #1: Reduce the impact of wildfires and drought

Project #1: Continue to receive assistance from rural homeowners trained in fire fighting and who have water tanks and other useful fire-fighting tools. **Discussion:** This project is preparedness and response, not mitigation but is important to the county and its citizens so it is being left in the plan.

Project #2: Well field development. More wells and availability of water means better sanitation, better fire fighting capabilities, and more water for homeowners during droughts. Environmental issues should be taken into consideration and appropriate actions taken as soon as possible during the process.

Project #4: Have rural fire departments locate dry fire hydrants.

Project #5: Work with the State Forester to complete a wildlife risk assessment and to create a wildlife risk map.

Priority:	Low
Funding Sources:	Undetermined
Timeframe:	T.B.D.
Oversight:	State Forester, Spink County
Cost:	Has yet to be determined

CITY OF ASHTON MITIGATION GOALS AND ACTIONS

Goal #1: Reduce the impact of fire/wildfire hazard within the City of Ashton

Project #1: project removed from plan due to completion.

Goal #2: Reduce the impact of severe storms on the community

Project #1: project removed due to completion

Project #2: construct a storm shelter or retrofit an existing building to be used as a storm shelter.

Priority:	Moderate
Funding Sources:	City; State; FEMA
Timeframe:	3-5 Years
Oversight:	City, SDOEM
Cost:	$385,000+

Discussion: there are numerous properties in town that are considered high risk during strong wind events due to the nature of the construction/materials used. The City does not have an adequate or safe place to go during a tornado or sever wind event. Most people take shelter in their homes, however, many people live in mobile homes and other structures that create additional risk.

CITY OF BRENTFORD MITIGATION GOALS AND ACTIONS

Goal #1: Reduce the impact of severe storms on the community

Project #1: Construct storm shelter in the Town of Brentford. The Town of Brentford would need to be surveyed to determine the precise need for size and location of a shelter (i.e. How many residents would use or need the shelter). There is currently no existing building within the city that is suitable or feasible to renovate.

CITY OF CONDE MITIGATION GOALS AND ACTIONS

Goal #1: Reduce the impact of flooding within the community

Project #1: removed due to completion

Project #2: Inspect culverts and determine if replacements are needed for proper flow.

Goal #2: Reduce the impact of severe summer storms

Project #1: Construct storm shelter in the City of Conde. The City of Conde would need to be surveyed to determine the precise need for size and location of a shelter (i.e. How many residents would use or need the shelter).

CONDE TOWNSHIP

Goal #1: Reduce the impact of flooding within the township

Project #1: Address flooding and drainage issues throughout the township by conducting a hydrology study to determine if culvert resizing and/or grade raises are necessary

CITY OF DOLAND MITIGATION GOALS AND ACTIONS

Goal #1: Reduce the impact of severe winter and summer storms

Project #1: Construct storm shelter in the City of Doland. The City of Doland would need to be surveyed to determine the precise need for size and location of a shelter (i.e. How many residents would use or need the shelter). See Addendum O for a proposed location. There is currently no existing building within the city that is suitable or feasible to renovate. A preliminary cost estimate would be $89,400*. Doland's population is 297. An engineer cost of $2,000 would also be incurred in determining the size and location.

CITY OF FRANKFORT MITIGATION GOALS AND ACTIONS

Goal #1: Reduce the impact of severe winter/summer storms on the community

Project #1: Construct storm shelter in the City of Frankfort. The City of Frankfort would need to be surveyed to determine the precise need for size and location of a shelter (i.e. How many residents would use or need the shelter). See Addendum O for a proposed location. The City has discussed rebuilding the entrance to the City Office building. This is a historic building built in the early 1900's with a basement under it that could be used as a storm shelter if there was a separate, outside access to the space.

Project #2: Purchase generators for emergency shelters and lift stations. Emergency shelters do not have generators in many cases. Generators suitable for this project would cost approximately $10,000 - $20,000 each. Though this cost is high, the ability for shelters to serve their purpose, persons to have continued access to sanitation, and critical facilities to maintain their function is important. A more detailed benefit analysis should be run before the actual purchasing of generators, to determine sizes needed, best locations, and other facilities that have a high necessity.

Goal #2: Reduce the impact of flood hazard within the City

Project #1: Investigate the existing storm sewer lines and make improvements where the lines have been compromised.

Project #2: Improve the flow of water by inspecting culverts and determining if replacements are needed for proper flow.

Goal #3: Reduce the impact of wildfire and structural fires within the City

Project #1: Improve fire protection by determining if fire hydrants can be installed throughout the City.

GREAT BEND and BELL PLAINS TOWNSHIPS

Goal #1: Reduce the impact of flooding within the township

Project #1: Address flooding and drainage issues throughout the township by conducting a hydrology study to determine if culvert resizing and/or grade raises are necessary.

CITY OF MELLETTE MITIGATION GOALS AND ACTIONS

Goal #1: Reduce the impact of severe storms on the community

Project #1: Construct storm shelter in the City of Mellette. The City of Mellette would need to be surveyed to determine the precise need for size and location of a shelter (i.e. How many residents would use or need the shelter). See Addendum O for a proposed location. There is currently no existing building within the city that is suitable or feasible to renovate. A preliminary cost estimate would be $74,400*. Mellette's population is 248. An engineer cost of $2,000 would also be incurred in determining the size and location.

Goal #2: Reduce the impact of flood hazard within the City

Project #1: Make improvements to the lift station that is being impacted by the high ground water and excessive amounts of snow and rain.

Priority:	High
Funding Sources:	City; State; DENR, FEMA
Timeframe:	1-2 years
Oversight:	City
Cost:	$286,000

Discussion: The City of Mellette is experiencing problems with their lift station and pumps, due to excessive infiltration and inflow coming into the system. The lift station is over 20 years old and pumps and controls are outdated. The city currently has two pumps that alternate, pushing water through one 4 inch force main. The City is proposing to install an additional 6 inch line so the pumps can run concurrently and each pump has a designated line to the wastewater treatment facility. The project will also include pump modifications, new controls/control panel, and SCADA system.

Project #2: Correct the drainage issue on 2nd Avenue by installing storm sewer or valley gutters.

Priority:	High
Funding Sources:	City; State; DENR, FEMA
Timeframe:	1-2 years
Oversight:	City
Cost:	$140,120

CITY OF NORTHVILLE MITIGATION GOALS AND ACTIONS

Goal #1: Reduce the impact of flooding on the community

Project #1: Install a permanent line between the holding pond and the drainage ditch that carries water to Snake Creek. Currently they use a flat hose and pump water into the ditch to remove excess water on the west side of town to prevent flooding of homes on South and West side of town.

Priority:	High
Funding Sources:	City; State; DENR, FEMA
Timeframe:	1-2 years
Oversight:	City
Cost:	Has not been evaluated by engineer

Project #2: Removed due to completion

Goal #1: Reduce the impact of drought and wildfire hazard in the community

Project #1: Study the drinking water system to determine if additional storage capacity is possible. Four new homes have been constructed in town and the City has to be careful not to use too much water.

Priority:	High
Funding Sources:	City; State; DENR, FEMA
Timeframe:	2-3 years
Oversight:	City
Cost:	$10,000

NORTHVILLE TOWNSHIP

(Did not participate in 2019 update)

Goal #1: Reduce the impact of flooding on the community

Project #1: Address the drainage issues caused by Snake Creek on the west and east sides of Northville through a study of the area.

CITY OF REDFIELD MITIGATION GOALS AND ACTIONS

Goal #1: Reduce the impact of heavy rains and flooding on the community

Project #1: Acquire floodprone properties and repetitive loss properties located in the flood zone.

Priority:	High
Funding Sources:	City; State; FEMA
Timeframe:	1-2 years
Oversight:	City
Cost:	$125,000

Project #2: Study storm sewers and determine if repairs or additional or larger pipe is necessary.

Priority:	High
Funding Sources:	City; State; DENR, FEMA
Timeframe:	2-5 years
Oversight:	City
Cost:	$10,000

Project #3: Complete the Turtle Creek Embankment projects that are identified in the Turtle Creek Bank Stabilization Study. (Appendix F).

Priority:	High
Funding Sources:	City; State; DENR, FEMA
Timeframe:	2-5 years
Oversight:	City
Cost:	$10,000

Goal #2: Reduce the effects of severe storms (winter and summer) within the City

Project #1: Purchase generators for emergency shelters and lift stations. Emergency shelters do not have generators in many cases. The Redfield Armory is used as a storm shelter and remains a top priority for generator-powered backup.

Priority:	High
Funding Sources:	City; State; DENR, FEMA
Timeframe:	2-5 years
Oversight:	City
Cost:	$94,000

CITY OF TULARE MITIGATION GOALS AND ACTIONS

Goal #1: Reduce the effects of severe storms (winter and summer) within the City

Project #1: Construct storm shelter in the Town of Tulare. The City of Tulare would need to be surveyed to determine the precise need for size and location of a shelter (i.e. How many residents would use or need the shelter).

Priority:	Moderate
Funding Sources:	City; State; FEMA
Timeframe:	2-5 years
Oversight:	City
Cost:	Has not been evaluated by an engineer

Goal #2: Reduce flood hazard in the City

Project #1: Study storm sewers and determine if repairs or additional or larger pipe is necessary.

Priority:	High
Funding Sources:	City; State; DENR, FEMA
Timeframe:	2-5 years
Oversight:	City
Cost:	$10,000

Project #2: Inspect culverts throughout town to determine if resizing or relocation is necessary to improve flow. This project will be addressed in the study.

CITY OF TURTON MITIGATION GOALS AND ACTIONS

Turton did not participate in the plan update, however they have adopted the mitigation plan in previous years. Their mitigation strategy has been left in the plan and Turton will have the opportunity to modify this section of the plan if they choose to adopt the plan during the annual update.

Goal #1: Reduce the impact of severe storms on the community

Project #1: Construct storm shelter in the Town of Turton. The Town of Turton would need to be surveyed to determine the precise need for size and location of a shelter (i.e. How many residents would use or need the shelter).

REDFIELD ENERGY MITIGATION GOALS AND ACTIONS

Redfield Energy did not participate in the plan update, however they have participated in the mitigation plan in previous years. Their mitigation strategy has been left in the plan and they will have the opportunity to modify this section of the plan if they choose to adopt the plan during the annual update.

Goal #1: Reduce impact of severe storms:
Project #1: Upgrade communication systems (switching analog radios to digital) purchase additional handheld radios, add a battery backup to repeater so radio communication would not be lost in the event of a power outage. Install warning siren or intercom system to alert personnel without a radio. Cost $2,000 - $5,000

Goal #2: Reduce the likelihood of manmade hazards:

Project #1: Build up the north entrance road into the plant to allow emergency response vehicles an alternate route to access the facility in the event of a chemical spill or fire. And/or purchase additional containment boom. Cost $5,000 - $10,000

Goal #3: Protect critical infrastructure from heavy rain and flooding hazards:

Project #1: Purchase larger air pumps to pump storm water from containment areas. Cost $5,000

SDDC MITIGATION GOALS AND ACTIONS

SDDC did not participate in the plan update, however they have participated in the mitigation plan in previous years. Their mitigation strategy has been left in the plan and they will have the opportunity to modify this section of the plan if they choose to adopt the plan during the annual update.

Goal #1: Protect critical infrastructure from natural hazards

Project #1: Construct storm shelter for the Horizon Homes structure. There are 6 people with special needs and one staff residing in the structure. Cost estimate, not including engineering fees would need to be figured using a quote process instead of the cost estimate formula from the Mitigation project list due to the low population of the structure.

Project #2: Construct a storm shelter for the Transitional Home. There are 3 people with special needs and one staff residing in the structure. Cost estimate, not including engineering fees would need to be figured using a quote process instead of the cost estimate formula from the Mitigation project list due to the low population of the structure.

Project #3: Construct storm shelter for the Damm/Norgello buildings. . There are 33 people with special needs and 12 staff residing in the structure. Cost estimate, not including engineering fees would need to be figured using a quote process instead of the cost estimate formula from the Mitigation project list due to the low population of the structure.

PRIORITIZATION OF MITIGATION ACTIVITIES

Requirement 201.6(c)(3)(iv) & Requirement 201.6 (c)(3)(iii)

Many of the plan participants only had one mitigation goal and one action. Many who participated had a very specific goal in mind that they were trying to achieve. Additionally, because small rural towns and townships continuously have problems accomplishing capital improvements project due to very small budgets caused by limited ability to generate revenue. Obviously, when only one project is identified, that project becomes the priority and the only other consideration to make is budgeting for the 25 percent local match requirement. Those communities that have more than one action listed prioritized 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 that a complete Benefit Cost Analysis would be required at the time of application and the plan author advised that specific details of each project could be analyzed in closer detail during the application period. Redfield prioritized projects by those that are the most urgent.

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.

Spink County participates in the National Flood Insurance Program. There are six communities located in Spink County that do not participate in NFIP. Those communities are: Brentford, Conde, Frankfort, Mellette, Northville, Turton. According to the DFIRM published October 19, 2010, the non-participating communities are zoned entirely A and X. All of the other jurisdictions participate in NFIP. Those who participate include Ashton, Doland, Redfield, Tulare, and Spink County. The county will continue to participate and ensure compliance of the participating local jurisdictions located within the flood plain.

5.1 SPINK COUNTY NFIP PARTICPATION

Participants	Non-participants
Spink County	Brentford
Ashton	Conde
Doland	Frankfort
Redfield	Mellette
Tulare	Northville
	Turton

The Spink County Director of Equalization maintains the flood zone maps and utilizes DFIRMS for all planning mechanisms occurring in the county; specifically development of new homes and businesses and all new construction. The planning and zoning department is responsible for issuing elevation certificates and flood plain development permits. The DFIRMS are used to determine where the natural drainage occurs and ensures that new development will not interrupt the natural drainage. The maps have also been a vital asset to the County in the recent drainage discussions that have taken place within the County. The James River Water Development District is currently working on a coordinated effort with all of the counties that are bisected by or that border the James River. The goal is to produce a study of the James River watershed which will be used to outline activities and/or projects that will mitigate the flooding that is occurring throughout the counties affected by the James River. The Planning and Zoning Department and Spink County Emergency Management have access to the DFIRMS in electronic format and thus will utilize and maintain the maps in the electronic format.

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 did 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 and private businesses that have participated in the plan update. All of the municipalities have indicated that they do not have the financial capability to move forward with projects identified in the plan at this time, however, all 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. Since most of the local jurisdictions only had one mitigation action/goal, prioritization was not necessary. The City of Redfield and Spink County had several mitigation projects and thus, will prioritize those projects in a manner that will ensure benefit is maximized to the greatest extent possible. A benefit cost analysis will be conducted on an individual basis after the decision is made to move forward with a project.

The 2008 Plan was approved after several revisions were recommended by FEMA and made by the plan author. At that time the plan was drafted under the requirements found in the March 2004 version of the crosswalk. Since then, FEMA has produced several planning documents to help aid in the development of local mitigation plans. Some of those documents include the July 1, 2008 crosswalk, the October 1, 2011 Plan Review Guide, and the Local Mitigation Plan Review Tool. Since disaster mitigation was a relatively new concept at that time, mitigation plans were approved with less scrutiny. The same depth of planning was not utilized in the 2008 Plan as was used for the 2012 plan update. The 2008 Plan had the "bare minimum" to meet the FEMA requirements for a mitigation plan, thus the plan lacked relevant information that could be utilized and easily integrated into the County's and Municipalities' existing planning mechanisms. Thus, the 2008 Plan was not used or incorporated into other planning documents or mechanisms. It is anticipated with the amount of time, energy, and professional guidance involved during the drafting process of the updated plan, that the County has created a document that has validity and a clear purpose which will be more likely to fit in the existing planning mechanisms that exist county-wide. Additionally, by involving most of the local jurisdictions and by bringing the plan to the attention of neighboring communities, the planning process has brought more awareness of mitigation to the people residing in the County, which will encourage further involvement in the future.

VI. PLAN MAINTENANCE

CHANGES/REVISIONS TO PLAN MAINTENANCE:
Programs were updated to reflect suggestions from FEMA.

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.

Spink 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 is required to ensure that the goals and objectives for the Spink County Natural Hazard Mitigation Plan are kept current and that local mitigation efforts are being carried out.

During the process of implementing mitigation strategies, the county or communities within the county may experience lack of funding, budget cuts, staff turnover, and/or a general failure of projects. These scenarios are not in themselves a reason to discontinue and fail to update the Pre-Disaster 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 Emergency Manager, or as the situation dictates such as following a disaster declaration. The Spink County Emergency Manager will review the plan annually in November 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.

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 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 Emergency Manager will meet with the 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 Spink County Emergency Manager, during the plan's annual review to take place the end of each county fiscal year. 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

Redfield is the only jurisdiction located in Spink County that has a comprehensive or capital improvements plan. All of the other jurisdictions do not have the resources, staff, funding, or need for such planning mechanisms. The Spink County Comprehensive plan includes all of the municipalities except the City of Redfield. The City of Redfield and Spink County will consider the mitigation requirements, goals, actions, and projects when it considers and reviews the other existing planning documents such as the capital improvements plan. The Redfield mitigation projects will be considered and prioritized in conjunction with non-mitigation projects, such as water and wastewater infrastructure improvements, new construction of schools, libraries, parks, etc.

The rest of the local jurisdictions cannot incorporate the requirements of the mitigation plan into other planning mechanisms because they do not have any other planning mechanisms that currently exist. The risk assessment which was conducted for the purpose of this plan is specific to mitigation actions and projects included in the Plan and thus is not tied into any other mechanisms that would initiate conversations or actions by the city councils to move forward with actions or projects outlined in the Plan. 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 local jurisdictions identified one unrelated mechanism that could be used to remedy the problem of mitigation projects getting lost in a bookshelf. Municipalities are required by State law to prepare budgets for the upcoming year and typically consider any expenditure for the upcoming year at that 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.

Since all of the local jurisdictions except Redfield lack planning mechanisms in which to incorporate the mitigation actions identified in this plan, it was determined that each year when the budget is prepared the municipalities will also consider the mitigation actions at that time. The local jurisdictions will post a permanent memo to their files as a reminder for them to incorporate their annual review of the mitigation actions identified into the budget preparation process. This does not require the projects be included in the budget, it merely serves as a reminder to the City officials that they have identified mitigation projects in the plan that should be considered if the budget allows for it.

POTENTIAL FUNDING SOURCES

Although all mitigation techniques will likely save money by avoiding losses, many projects are costly to implement. None of the local jurisdictions have the funds available to more forward with mitigation projects at this time, thus, the Potential Funding Sources section was included so that the local jurisdictions can work towards securing funding for the projects. Inevitably, due to the small tax base and small population most of the local jurisdictions do not have the ability to generate enough revenue to support anything beyond the basic needs of the community. Thus mitigation projects will not be completed without a large amount of funding support from State or Federal programs. The Spink 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 jurisdictions

Federal

The following federal grant programs have been identified as funding sources which specifically target hazard mitigation projects:

Title: Pre-Disaster Mitigation Program 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 Pre-Disaster Mitigation (PDM) 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. Special accommodations will be made for "small and impoverished communities", who will be eligible for 90% Federal share/10% non-Federal. FEMA provides PDM 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
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 pre-disaster 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 Assistant 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 nonprofit organizations or institutions that serve a public function, Indian 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/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, Indian tribes or authorized tribal organizations and include:

*Roads, bridges & culverts
*Draining & irrigation channels
*Schools, city halls & other buildings
*Water, power & sanitary systems
*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
*Hospitals & clinics
*Volunteer fire & ambulance
*Power cooperatives & other utilities
*Custodial care & retirement facilities
*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.SBA 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.

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 Spink County Emergency Management Office located in the Spink County Courthouse and the NECOG office. Comments will always be received whether orally, written or by e-mail.

All ongoing workshops and trainings 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.

APPENDIX A: MEETING MINUTES

ADOPTION RESOLUTIONS

RESOLUTION TO ADOPT THE SPINK COUNTY PDM PLAN

WHEREAS Spink County has experienced severe damage from strong winds, flooding, hail, heavy snow, heavy rain, and tornadoes on many occasions in the past century, resulting in property loss, loss of life, economic hardship, and threats to public health and safety;

WHEREAS a Hazard Mitigation Plan has been developed after more than one year of research and work by Spink County Emergency Management, NECOG, Northern Electric and the Pre-Disaster Mitigation Committee;

WHEREAS the Plan recommends hazard mitigation actions that will protect the people and property affected by the natural hazards that face the County;

WHEREAS a public meeting was held to review the Plan as required by law;

NOW THEREFORE BE IT RESLOVED by the Chairman and the Spink County Commission that:

1. The Hazard Mitigation Plan is hereby adopted as an official plan of Spink County,
2. The respective County official identified in the strategy of the Plan is herby directed to implement the recommended action assigned to them. This official will report annually on the activities, accomplishments, and progress to Spink County Commission, and
3. The Spink County Emergency Manager will provide annual progress reports on the status of implementation of the plan to the County Commission. This report shall be submitted to the Commission by November 1st of each year.

PASSED by the Spink County Commission this _____day of _____, 2020.

_____
Chair

ATTESTED and FILED this _____ day of _____ 2020.

_____
Auditor/Finance Officer

RESOLUTION TO ADOPT THE SPINK COUNTY PDM PLAN

WHEREAS the City of Ashton has experienced severe damage from strong winds, flooding, hail, heavy snow, heavy rain, and tornadoes on many occasions in the past century, resulting in property loss, loss of life, economic hardship, and threats to public health and safety;

WHEREAS a Hazard Mitigation Plan has been developed after more than one year of research and work by the City of Ashton, Spink County Emergency Management, NECOG, and the participating jurisdictions

WHEREAS the Plan recommends hazard mitigation actions that will protect the people and property affected by the natural hazards that face the City;

WHEREAS a public meeting was held to review the Plan as required by law;

NOW THEREFORE BE IT RESLOVED by the Mayor and Council of Ashton that:

1. The Hazard Mitigation Plan is hereby adopted as an official plan of City of Ashton,
2. The respective City official identified in the strategy of the Plan is herby directed to implement the recommended action assigned to them. These officials will report annually on the activities, accomplishments, and progress to Spink County Emergency Management,
3. The City of Ashton finance officer will provide annual progress reports on the status of implementation of the plan to the Mayor and City Council. This report shall be submitted to the City Council by November 1st of each year.

PASSED by this _____ day of _____, 2020.

_____
Mayor

ATTESTED and FILED this _____ day of _____ 2020.

_____
Auditor/Finance Officer

RESOLUTION TO ADOPT THE SPINK COUNTY PDM PLAN

WHEREAS Spink County has experienced severe damage from strong winds, flooding, hail, heavy snow, heavy rain, and tornadoes on many occasions in the past century, resulting in property loss, loss of life, economic hardship, and threats to public health and safety;

WHEREAS a Hazard Mitigation Plan has been developed after more than one year of research and work by Spink County Emergency Management, NECOG, and participating jurisdictions;

WHEREAS the Plan recommends hazard mitigation actions that will protect the people and property affected by the natural hazards that face the County;

WHEREAS a public meeting was held to review the Plan as required by law;

NOW THEREFORE BE IT RESLOVED by the Chairman and the Spink County Commission that:

1. The Hazard Mitigation Plan is hereby adopted as an official plan of Spink County,
2. The respective County official identified in the strategy of the Plan is herby directed to implement the recommended action assigned to them. This official will report annually on the activities, accomplishments, and progress to Spink County Commission, and
3. The Spink County Emergency Manager will provide annual progress reports on the status of implementation of the plan to the County Commission. This report shall be submitted to the Commission by November 1st of each year.

PASSED by the Spink County Commission this _____day of _____, 2020.

_____
Chair

ATTESTED and FILED this _____ day of _____ 2020.

_____
Auditor/Finance Officer

RESOLUTION TO ADOPT THE SPINK COUNTY PDM PLAN

WHEREAS Spink County has experienced severe damage from strong winds, flooding, hail, heavy snow, heavy rain, and tornadoes on many occasions in the past century, resulting in property loss, loss of life, economic hardship, and threats to public health and safety;

WHEREAS a Hazard Mitigation Plan has been developed after more than one year of research and work by Spink County Emergency Management, NECOG, and participating jurisdictions;

WHEREAS the Plan recommends hazard mitigation actions that will protect the people and property affected by the natural hazards that face the County;

WHEREAS a public meeting was held to review the Plan as required by law;

NOW THEREFORE BE IT RESLOVED by the Chairman and the Spink County Commission that:

1. The Hazard Mitigation Plan is hereby adopted as an official plan of Spink County,
2. The respective County official identified in the strategy of the Plan is herby directed to implement the recommended action assigned to them. This official will report annually on the activities, accomplishments, and progress to Spink County Commission, and
3. The Spink County Emergency Manager will provide annual progress reports on the status of implementation of the plan to the County Commission. This report shall be submitted to the Commission by November 1st of each year.

PASSED by the Spink County Commission this _____day of _____, 2020.

_____
Chair

ATTESTED and FILED this _____ day of _____ 2020.

_____
Auditor/Finance Officer

RESOLUTION TO ADOPT THE SPINK COUNTY PDM PLAN

WHEREAS the City of Brentford has experienced severe damage from strong winds, flooding, hail, heavy snow, heavy rain, and tornadoes on many occasions in the past century, resulting in property loss, loss of life, economic hardship, and threats to public health and safety;

WHEREAS a Hazard Mitigation Plan has been developed after more than one year of research and work by the City of Brentford, Spink County Emergency Management, NECOG, and participating jurisdictions;

WHEREAS the Plan recommends hazard mitigation actions that will protect the people and property affected by the natural hazards that face the City;

WHEREAS a public meeting was held to review the Plan as required by law;

NOW THEREFORE BE IT RESLOVED by the Mayor and Council of Brentford that:

1. The Hazard Mitigation Plan is hereby adopted as an official plan of City of Brentford,
2. The respective City official identified in the strategy of the Plan is herby directed to implement the recommended action assigned to them. These officials will report annually on the activities, accomplishments, and progress to Spink County Emergency Management,
3. The City of Brentford finance officer r will provide annual progress reports on the status of implementation of the plan to the Mayor and City Council. This report shall be submitted to the City Council by November 1st of each year.

PASSED by the City Council of _____ this _____ day of _____, 2020.

_____
Mayor

ATTESTED and FILED this _____ day of _____ 2020.

_____
Auditor/Finance Officer

RESOLUTION TO ADOPT THE SPINK COUNTY PDM PLAN

WHEREAS the City of Conde has experienced severe damage from strong winds, flooding, hail, heavy snow, heavy rain, and tornadoes on many occasions in the past century, resulting in property loss, loss of life, economic hardship, and threats to public health and safety;

WHEREAS a Hazard Mitigation Plan has been developed after more than one year of research and work by the City of Conde, Spink County Emergency Management, NECOG, and participating jurisdictions;

WHEREAS the Plan recommends hazard mitigation actions that will protect the people and property affected by the natural hazards that face the City;

WHEREAS a public meeting was held to review the Plan as required by law;

NOW THEREFORE BE IT RESLOVED by the Mayor and Council of Conde that:

1. The Hazard Mitigation Plan is hereby adopted as an official plan of City of Conde,
2. The respective City official identified in the strategy of the Plan is herby directed to implement the recommended action assigned to them. These officials will report annually on the activities, accomplishments, and progress to Spink County Emergency Management,
3. The City of Conde finance officer will provide annual progress reports on the status of implementation of the plan to the Mayor and City Council. This report shall be submitted to the City Council by November 1st of each year.

PASSED by the City Council of _____ this _____ day of _____, 2020.

_____
Mayor

ATTESTED and FILED this _____ day of _____ 2020.

_____
Auditor/Finance Officer

RESOLUTION TO ADOPT THE SPINK COUNTY PDM PLAN

WHEREAS the City of Northville has experienced severe damage from strong winds, flooding, hail, heavy snow, heavy rain, and tornadoes on many occasions in the past century, resulting in property loss, loss of life, economic hardship, and threats to public health and safety;

WHEREAS a Hazard Mitigation Plan has been developed after more than one year of research and work by the City of Northville, Spink County Emergency Management, NECOG, and participating jurisdictions;

WHEREAS the Plan recommends hazard mitigation actions that will protect the people and property affected by the natural hazards that face the City;

WHEREAS a public meeting was held to review the Plan as required by law;

NOW THEREFORE BE IT RESLOVED by the Mayor and Council of Northville that:

1. The Hazard Mitigation Plan is hereby adopted as an official plan of City of Northville,
2. The respective City official identified in the strategy of the Plan is herby directed to implement the recommended action assigned to them. These officials will report annually on the activities, accomplishments, and progress to Spink County Emergency Management,
3. The City of Northville Mayor will provide annual progress reports on the status of implementation of the plan to the Mayor and City Council. This report shall be submitted to the City Council by November 1st of each year.

PASSED by the City Council of _____ this _____ day of _____, 2020.

_____
Mayor

ATTESTED and FILED this _____ day of _____ 2020.

_____
Auditor/Finance Officer

RESOLUTION TO ADOPT THE SPINK COUNTY PDM PLAN

WHEREAS the City of Redfield has experienced severe damage from strong winds, flooding, hail, heavy snow, heavy rain, and tornadoes on many occasions in the past century, resulting in property loss, loss of life, economic hardship, and threats to public health and safety;

WHEREAS a Hazard Mitigation Plan has been developed after more than one year of research and work by the City of Redfield, Spink County Emergency Management, NECOG, and participating jurisdictions;

WHEREAS the Plan recommends hazard mitigation actions that will protect the people and property affected by the natural hazards that face the City;

WHEREAS a public meeting was held to review the Plan as required by law;

NOW THEREFORE BE IT RESLOVED by the Mayor and Council of Redfield that:

1. The Hazard Mitigation Plan is hereby adopted as an official plan of City of Redfield,
2. The respective City official identified in the strategy of the Plan is herby directed to implement the recommended action assigned to them. These officials will report annually on the activities, accomplishments, and progress to Spink County Emergency Management,
3. The City of Redfield Finance Officer will provide annual progress reports on the status of implementation of the plan to the Mayor and City Council. This report shall be submitted to the City Council by November 1st of each year.

PASSED by the City Council of _____ this _____ day of _____, 2020.

_____
Mayor

ATTESTED and FILED this _____ day of _____ 2020.

_____
Auditor/Finance Officer

RESOLUTION TO ADOPT THE SPINK COUNTY PDM PLAN

WHEREAS the City of Tulare has experienced severe damage from strong winds, flooding, hail, heavy snow, heavy rain, and tornadoes on many occasions in the past century, resulting in property loss, loss of life, economic hardship, and threats to public health and safety;

WHEREAS a Hazard Mitigation Plan has been developed after more than one year of research and work by the City of Tulare, Spink County Emergency Management, NECOG, and participating jurisdictions;

WHEREAS the Plan recommends hazard mitigation actions that will protect the people and property affected by the natural hazards that face the City;

WHEREAS a public meeting was held to review the Plan as required by law;

NOW THEREFORE BE IT RESLOVED by the Chairman and Council of Tulare that:

1. The Hazard Mitigation Plan is hereby adopted as an official plan of City of Tulare,
2. The respective City official identified in the strategy of the Plan is herby directed to implement the recommended action assigned to them. These officials will report annually on the activities, accomplishments, and progress to Spink County Emergency Management,
3. The City of Tulare finance office will provide annual status updates on implementation of the plan to the Mayor and City Council. This report shall be submitted to the City Council by November 1st of each year.

PASSED by the City Council of Tulare this _____ day of _____, 2020.

_____
Chairman

ATTESTED and FILED this _____ day of _____ 2020.

_____
Auditor/Finance Officer

Council Meeting minutes from some of participating jurisdiction had not been received at the time of submission. All will be collected prior to final adoption.

CONDE CITY COUNCIL
MEETING AGENDA

Wednesday, September 4, 2019 @ 6:00 p.m.

Call meeting to order

Roll Call

Visitors: Dale Gunderson; Doug Jensen

Approve agenda as presented

Public Comments

Action cannot be taken on items discussed unless specifically listed elsewhere on the agenda.

Maintenance Report (for August 2019)

Approve August 2019 Minutes

Approve Claims

School claims

Treasurer's Report

Unfinished Business

- Water project.
- Extra SRF loan payment.
- Add/check changes to existing ordinances.
- Code enforcement:
- Vandalism in school.
- Unpaid sewer-garbage bill.
- Culverts.
- Sewer hookups at park campsites.
- Lift station property
- Mosquito control grant.
- Vacate 3 streets west of Hwy 37.

New Business

- Spink County funding for 2020.
- 1st Reading of the 2020 Budget Ordinance.
- Spink Co Emergency Manger.
- Mitigation plan update.

- Asbestos wavier.
- Railroad right-of-way north of Birch Street.
- Surplus:
- Cats.
- Mosquito spraying during monarch migration.
- Preserving historical documents of Conde.
- Check signers for city checks.
- Haunted House.
- Delinquent water accounts update.

Correspondence/Misc.

Set date for next meeting

Adjourn

City of Conde

Auditor's Office
Conde, South Dakota 57434
605-382-5258
(fax: 605-382-5294)

Julie Bruckner
Finance Officer

Trustees
Amy Hearnen, chairman
Sara Klapperich
Austin Hearnen

Mitigation Plan Update – September 4, 2019

Sign-in sheet:

Julie Bruckner
Jamy Tolver
Austin Hearnen
Amy Hearnen
Sara Klapperich
Dlacher

"The City of Conde is an equal opportunity provider and employer. If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Sent your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov."

CONDE BOARD OF TRUSTEES PROCEEDINGS

The Conde Board of Trustees met on Wednesday, September 4, 2019 at 6:00 pm at City Hall. The meeting was called to order by Chairman Amy Hearnen at 6:10 p.m.

Roll Call:

Answering roll call were Amy Hearnen, Sara Klapperich, and Austin Hearnen. Also present were Dale Lacher (city maintenance), Julie Bruckner (FO).

Visitors: Larry Tebben; Donn Grandpre; and Doug Jensen.

Agenda

Motion by Klapperich, second by Austin Hearnen, to approve the agenda. All aye.

Public Comments: (See minutes below.)

Maintenance Report:

The maintenance report for August 2019 was provided by Dale Lacher. Motion by Austin Hearnen, second by Klapperich, to approve the maintenance report. All aye.

Minutes:

Motion by Klapperich, second by Austin Hearnen, to approve the August 2019 minutes. All aye.

Claims:

Motion by Klapperich, second by Austin Hearnen, to approve the following claims for payment. All aye. Personnel, payroll, 4,209.76; Postmaster, stamps, 165.00; Postmaster, postcard stamps, 117.00; Dale Lacher, reimburse costs to attend 3-day water class, 432.26; Helms & Associates, water project engineering (final), 763.30; SD State Treasurer, July-August 2019 sales tax on garbage, 142.48; Petty Cash, postage/supplies, 23.40; Dakota Pump, install alarm dialer at lift station, 1,103.11; SD Assn of Rural Water Systems, annual membership, 345.00; Clausen Sanitation, garbage bill, 1,050.00; Julie Bruckner, personal cell phone stipend, 25.00; Efraimson Electric, set siren on pole, 2,188.28; Dependable Sanitation, large dumpster (July), 1,536.34; SD Dept. of Health, water testing, 15.00; Runnings, supplies, 267.34; John Deere Financial, mower payment, 177.20; Farmers Union, fuel, 156.77; James Valley Telecommunications, phone bill, 239.32; SDRS, contribution for August 2019, 341.50; WEB Water, water bill, 1,398.08; A&B Business Solutions, copier maintenance contract (Sept.), 25.65; Plains Commerce Bank, snowplow truck payment, 646.46; IRS, 941 for August 2019, 1,053.12; Rural Development, wastewater loan (#1) payment, 1,598.00; Rural Development, wastewater loan (#2) payment, 283.00; NorthWestern Energy, electric bill, 1,331.97. Total: $19,634.34.

(School claims) Conde City, July 26 – Aug. 22, 2019 school wages, 18.47; NorthWestern Energy, electric bill, 288.11; Clausen Sanitation, garbage bill, 35.15; S&S Lumber, supplies, 29.97; Craig Hansen, work on security camera in gym, 150.00; James Valley Telecommunications, phone bill, 187.80. Total: $709.50.

Treasurer's Report:

Motion by Klapperich, second by Ausin Hearnen, to approve the treasurer's report. All aye.

Unfinished Business:

Regarding the water project, the Drinking Water State Revolving Fund Certificate of Completion was recently signed by the board president and returned to the DENR.

FO informed that she has not heard back yet from US Bank about making a $35,000 payment towards the SRF drinking water loan.

Proposed changes/additions to the existing Utilities ordinance (Title 8) and Health and Sanitation ordinance (Title 3) were reviewed.

Code enforcement was briefly discussed. Code officer Mike Olson will be doing an inspection in the near future and will follow up with nuisance vehicles that haven't been taken care of.

An insurance claim was submitted for the vandalism in the school that occurred in early August. The matter is being addressed by the Spink Co Sheriff's Office.

A utility bill that continues to go unpaid was discussed.

Hydro-Klean will be in town September 10th & 11th to clean out a number of culverts.

Once it dries up more, the sewer hookups at the park will be dug in by Kimlicka Construction.

The lift station property was surveyed. Results showed that it is entirely in the right-of-way so does not need to be separated from the adjoining property.

The city received its $936 grant funds from the Dept. of Health to go towards mosquito spraying costs.

City attorney still has the project to vacate the 3 streets west of Hwy 37 (all of Pine & Cedar and part of Broadway).

New Business

The funding total that can be requested from Spink County for 2020 is not yet available.

Motion by Klapperich, second Austin Hearnen, to approve the first reading of the 2020 Budget Ordinance. All aye.

Larry Tebben, Spink Co. Emergency Manager, was at the meeting to present some basic information to the board such as completing a basic ICS class if not already done, pre-disaster mitigation, and updating any board member phone numbers.

The board looked over its previous pre-mitigation disaster goals which are being updated by NECOG. It was noted that one the goals, installing a stationary standby generator for the lift station, was completed a few years ago and that some of the culverts in town are scheduled to be cleaned out next week. More will be done in the future if needed. Board member Austin Hearnen suggested that it would be a good idea if the city had a couple more trash pumps (2") to use when an emergency arises such as was experienced this summer at the lift station following a rain event. In that situation, a couple of pumps had to be borrowed from the Fire Department. FO will pass the information along to NECOG.

FO informed board that the asbestos waiver with the state was recently renewed and will run from 2020 through 2028.

Some railroad right-of-way property was discussed.

At the next meeting the city will be surplusing a Samsung printer and the old International snowplow truck. Details will be available at that time.

A problem with stray cats was brought up.

A petition regarding mosquito spraying during the monarch migration was brought in previously by Dale Gunderson. The board will try to suspend spraying when monarch butterflies are found to be in town. But they are concerned about the number of mosquitoes that are still present due to the wet weather so want to continue spraying until then. It was noted, though, that the mosquito chemical the city uses does not harm monarch butterflies. Information on this was provided by Van Diest Supply Co., the business where the city purchases it.

Donn Grandpre and Doug Jensen were at the meeting to explain their interest in preserving historical items/documents of Conde. They (and possibly Jim Waldner) asked permission to look at the city's property (Municipal Building, for example) in an exploratory process under the direction of city personnel. Motion by Austin Hearnen, second by Klapperich, to approve this. All aye. Other details will be worked out.

Tina Sanderson had sent a note asking to use the Municipal Building for the annual Haunted House. Board gave its permission. Special event insurance will need to be obtained and a copy given to the city office before the event.

Delinquent water accounts were discussed.

Correspondence/Miscellaneous

The next regular meeting of the Conde City Board will be Monday, October 7, 2019 at 6 p.m. at City Hall. A special meeting will be held on Monday, Sept. 23rd at 6 p.m.

Meeting adjourned at 8:00 p.m.

Julie Bruckner, Finance Officer

"The City of Conde is an equal opportunity provider and employer."

NORTHVILLE CITY

September 9, 2019

The Northville City Board met in regular session on September 9, 2019, at 7:00 at the Nutrien Boardroom. Board members present were Clayton Blachford, Kelly Lofswold and David Peterson. Minutes of the August 5, 2019, meeting were given. Motion by Lofswold/Peterson to approve the minutes as read. All voted "Aye", motion passed. Motion by Peterson/ Lofswold that the following bills be allowed and ordered paid. All voted "Aye" motion carried.

Linda Torrence (Salary) $391.75: NW Energy(Pump house) $74.28; (N sewer lift) $114.51; (S sewer lift) $13.33; Hwy.20 $29.40; Lagoon-$16.57; Streetlights-$329.04; Rural Development (payment) $1017.18; Joe Torrence(mowing) 410.00; Clayton Blachford(spraying) $250.00; Kelly Lofswold(mowing) $200.00; Web Water, $1494.90; Public Health Lab (water testing) $15.00; Redfield Press(public notice); Farmers Union(gas) $94.53; OCCS(code enforcement) $368.70; Runnings(supplies) $25.98; Linda Torrence(QuickBooks plus) $91.65. Paid since last meeting with approval- Lien Transportation(asphalt) $4648.35; Redfield Press(public notice) $22.10; Gillette Law(legal) $475.34.

OLD BUSINESS: Grow Spink meeting was held at the Nutrient Office and toured the new home being built. The generator has arrived and work will begin on installation next week. A home was toured by code enforcement and deemed uninhabitable. Barking dogs were again discussed. The sheriff should be called if you have a complaint.

NEW BUSINESS: President Blachford announced that Spink County is currently in the process of updating the county's natural hazard mitigation plan. Northville has participated in the planning process in the past and has been asked to review the City's mitigation strategy, discuss any changes needed, and address any risks or vulnerabilities associated with natural hazards such as flooding, tornados, winter and summer storms. There's HMGP funding available for mitigation projects identified in the plan, with a deadline for applications to be submitted by December 13, 2019. The board discussed mitigation strategy, associated risks, and potential projects to include in the plan. At this time the finance officer presented **The City of Northville 2019 Appropriation Ordinance for the year 2020**. The first reading was held. Motion to approve the ordinance made by Peterson/Lofswold and passed unanimously. The second reading will be Wednesday, September 18, 2019, at the home of the finance officer.

Motion made by Peterson/Lofswold to adjourn the meeting. All voted in favor. The next meeting will be Monday, October 7, 2019, at 7:00, at the Nutrien Boardroom. Dated this 9th day of September, 2019.

Linda Torrence
Finance Officer

Unapproved Minutes of
REDFIELD CITY COUNCIL
September 3, 2019
7:00 p.m.

The City Council met in regular session at City Hall on Tuesday, September 3, 2019 at 7:00 p.m.

MEMBERS PRESENT: Mayor Jayme Akin, Mike Siebrecht, Eileen Kearney, Randy Maddox, Darrell Ronnfeldt, Jessi Lewis, David Moeller, and Frank Schwartz

MEMBERS ABSENT: Joe Morrissette

STAFF PRESENT: Adam L. Hansen and City Attorney Kristen Kochekian

VISITORS: Sarah Jones-Lutter, Rich Gruenwald, Shiloh Appel @ 7:18 p.m., Rubiann Fisher @ 7:30 p.m.

CALL TO ORDER: Mayor Akin called the meeting to order at 7:00 p.m.

ADOPT AGENDA: Motion by Siebrecht, seconded by Lewis to adopt the agenda as presented. Motion carried.

MINUTES: Motion by Lewis, seconded by Schwartz to approve the August 13, 2019 Special Meeting Minutes and the August 19, 2019 Minutes. Motion carried.

CONSENT CALENDAR:
Motion by Siebrecht, seconded by Lewis to approve the following items on the consent calendar:

A. Library Report – Minutes dated August 26, 2019
B. Building Permits – Report dated August, 2019
C. Monthly Fuel Quote
D. Temporary Malt Beverage License #15-2019 & Temporary On/Off Sale Liquor #13- 2019 for Starters Lanes & Sports Lounge for Sept. 21, 2019 for Conn/Seitz Wedding at Shanty Haven
E. Temporary Malt Beverage License #16-2019 & Temporary On/Off Sale Liquor #14- 2019 for Chrystals Bar LLC for Sept. 14, 2019 for O'Daniel/Zens wedding at Shanty Haven

Receive and place on file. Motion carried.

REPORTS:
Hospital Report – Motion by Maddox, seconded by Lewis to approve the CMH Hospital minutes dated July 25, 2019 and CMH Hospital minutes dated August 26, 2019. Motion carried.

BID OPENINGS AND AWARDS:
Commercial Lane Sewer Project– The following bids were received: Lien Transportation $234,831.70; Dahme Construction $210,747.07. Motion by Schwartz, seconded by Moeller to accept the low bid from Dahme Construction of $210,747.07. Motion carried.

VISITORS/PUBLIC TIME:

Sarah Jones-Lutter – Librarian – Jones-Lutter gave an update of her department's activities.

Exit: Jones-Lutter @ 7:11 p.m.

Rich Gruenwald – Redfield Fire Department – Gruenwald gave an update on his department's activities.

Exit: Gruenwald @ 7:18 p.m.

OLD BUSINESS:
Notice of Code Enforcement Activities – Yost's report was presented to the Council for their review. The Fine Report for August was presented.

NEW BUSINESS:
Annual Membership & Advertising 2020 State Glacial Lakes & Prairies – Motion by Ronnfeldt, seconded by Schwartz to approve the membership and advertising in the amount of $4,175.00. Motion carried.

SD Municipal League in Aberdeen, SD on Oct. 8-11, 2019 – No action taken.

Approve Park & Rec Volunteers for Workers Compensation Purposes – Motion by Schwartz, seconded by Ronnfeldt to approve the following volunteers for workers compensation purposes: Jake Hansen, Jared Kuehn, Clae Hoots, Clayton Odland, Chris Zens, Chad Moore, Amanda Evans, Chris Rude, and Jay Smith. Motion carried.

Set 2019 Free Fall Dump Dates – Motion by Lewis, seconded by Siebrecht to set free fall dump dates from September 10 through November 09, 2019. Motion carried.

Airport Wildlife Fence Grant – Motion by Lewis, seconded by Schwartz to approve the grant agreement #3-46-0049-12-2019 with the State of South Dakota and Mayor Akin as the authorized representative. Motion carried.

Economic Development Request – Motion by Ronnfeldt, seconded by Moeller to transfer $100,000 from the Industrial Development Account to RADC for economic development purposes. Motion carried.

Hire Part Time Help – Motion by Ronnfeldt, seconded by Schwartz to hire Jennifer Nuttall at the library at a salary of $10.00/hr. Motion carried.

ORDINANCES AND RESOLUTIONS:
Hansen gave the first Reading of Ordinance No. 05-2019 (2020 Appropriation Ordinance). Motion by Lewis, seconded by Maddox to adopt Ordinance No. 05-2019. Motion carried on a roll call vote with all members voting "Yes."

INFORMATION AND DISCUSSION ITEMS:
FEMA Mitigation Projects – Suggestions for mitigation projects were storm whistles, storm sewers, and treating the emerald ash borer.

Blowing Grass Into Streets – Moeller commented about how many different properties he has seen that do it. The council was concerned about it and a discussion ensued about proceeding with an ordinance.

COUNCIL MEMBER REPORTS:
Lewis commented on a piece of equipment in the city park that needs to be removed, crab grass issues at the cemetery and city park. He discussed the great job the landfill operator is doing. He was approached about allowing fowl in the city.

Maddox had a question about the status of repainting/repairing the rainbow walk bridge.

Ronnfeldt was concerned about the appearance and future use of the soccer fields and the need to fix them immediately.

Kearney relayed a concern about deer in the City. The game warden will be attending the next meeting.

Moeller would like to send all employees that have pesticide licenses to Aberdeen to a free schooling. He would also like to send Moore and Schroeder to schooling in Pierre on Sept 11-13.

PAY CLAIMS:

City Prepaid	$15,925.79
City Unpaid	$71,991.47
Hospital & Clinic Prepaid	$153,658.30
Hospital & Clinic Unpaid	$39,468.86
Additional Claims:	

Motion by Lewis, seconded by Schwartz to pay the above claims in addition to Sioux Falls Shopping News $1,145.00 for advertising package with Midwest Hunt & Fish, Dave Moeller $309.80 for lawn care, Redfield Baseball Association $150.00 for Annual Rental Advertising space, NorthWestern Energy $83.94 for electricity, GTR Properties $140.00 for Meter Deposit Refund, St. Bernards $80.00 for Meter Deposit Refund, Donna Fortin $56.00 for Meter Deposit Refund, Sam Cramer $173.00 for Meter Deposit Refund, City of Redfield $131.00 to Apply Meter Deposits to Final Bills, Glacial Lakes & Prairies Tourism $4,175.00 for membership and advertising, SD Water and Wastewater Association $280.00 for conference registration.

Motion carried on a roll call vote with all members voting "Yes."

There being no further business, meeting was adjourned at 8:09 p.m.

_____
Jayme Akin
Mayor

Adam L. Hansen
Finance Officer

Recorder: Adam L. Hansen

APPENDIX B: STORM EVENT HISTORY

Storm Events Database

Search Results for Spink County, South Dakota

Event Types: Blizzard

Spink county contains the following zones:
'Spink'

42 events were reported between 07/01/1950 and 07/31/2019 (25233 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	42
Number of Days with Event and Death:	1
Number of Days with Event and Death or Injury:	1
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								1	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/17/1996	13:00	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/24/1996	10:00	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/16/1996	10:00	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/09/1997	03:00	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/15/1997	09:00	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/04/1997	20:00	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/31/1998	12:00	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/09/1998	05:00	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/07/2000	09:00	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/16/2000	02:45	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/28/2000	09:00	CST	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/02/2007	09:45	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/10/2008	20:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/06/2008	16:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/13/2008	17:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/19/2008	21:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/12/2009	00:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/30/2009	17:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/23/2009	18:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/06/2010	17:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/25/2010	12:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/11/2010	08:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/30/2010	11:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/31/2010	11:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/01/2011	00:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/20/2011	11:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/11/2011	18:00	CST-6	Blizzard		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/29/2012	03:00	CST-6	Blizzard		0	0	0.00K	0.00K

SPINK (ZONE)	SPINK (ZONE)	SD	12/09/2012	08:00	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/10/2013	18:00	CST-6	Blizzard	1	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/18/2013	11:00	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/16/2014	08:00	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/26/2014	08:00	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/31/2014	13:00	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/03/2015	06:00	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/04/2017	16:00	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/13/2018	10:00	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/27/2018	11:30	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/31/2018	06:12	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/27/2019	22:00	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/13/2019	23:00	CST-6	Blizzard	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/11/2019	08:00	CST-6	Blizzard	0	0	0.00K	0.00K
Totals:							1	0	0.00K	0.00K

Storm Events Database

Search Results for Spink County, South Dakota

Event Types: Cold/Wind Chill

Spink county contains the following zones:
'Spink'

4 events were reported between 07/01/1950 and 07/31/2019 (25233 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	4
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/28/1996	18:00	CST	Cold/wind Chill		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/01/1996	00:00	CST	Cold/wind Chill		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/03/2007	00:00	CST-6	Cold/wind Chill		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/27/2014	07:00	CST-6	Cold/wind Chill		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Storm Events Database

Search Results for Spink County, South Dakota

Event Types: Excessive Heat

Spink county contains the following zones:
'Spink'

3 events were reported between 07/01/1950 and 07/31/2019 (25233 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	3
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	07/23/2007	12:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	07/16/2011	12:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	07/19/2016	12:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

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Storm Events Database

Search Results for Spink County, South Dakota

Event Types: Flash Flood

8 events were reported between 07/01/1950 and 07/31/2019 (25233 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	8
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	2
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	20.00K	0.00K
CONDE	SPINK CO.	SD	07/24/1997	21:00	CST	Flash Flood		0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	04/06/2006	15:11	CST	Flash Flood		0	0	15.00K	0.00K
TULARE	SPINK CO.	SD	05/05/2007	19:18	CST-6	Flash Flood		0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	06/16/2009	14:00	CST-6	Flash Flood		0	0	0.00K	0.00K
MANSFIELD	SPINK CO.	SD	07/14/2009	01:30	CST-6	Flash Flood		0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/23/2013	04:00	CST-6	Flash Flood		0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	09/18/2013	22:00	CST-6	Flash Flood		0	0	5.00K	0.00K
BRENTFORD	SPINK CO.	SD	06/18/2014	22:00	CST-6	Flash Flood		0	0	0.00K	0.00K
Totals:								0	0	20.00K	0.00K

Storm Events Database

Search Results for Spink County, South Dakota

Event Types: Hail

232 events were reported between 07/01/1950 and 07/31/2019 (25233 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	124
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Select: All Hail ▼ Sort By: Date/Time (Oldest) ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/21/1956	17:30	CST	Hail	2.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/07/1956	22:07	CST	Hail	1.00 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/10/1957	07:00	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/21/1958	19:30	CST	Hail	2.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/21/1958	20:00	CST	Hail	4.00 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/21/1958	20:00	CST	Hail	2.00 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	04/16/1967	17:20	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/13/1968	15:28	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/26/1968	18:00	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/11/1970	23:15	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	09/20/1970	15:45	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	04/24/1975	17:10	CST	Hail	1.00 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/06/1977	19:30	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/25/1980	19:43	CST	Hail	1.00 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/27/1980	17:26	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/12/1980	18:32	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/12/1980	19:55	CST	Hail	2.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/13/1982	14:10	CST	Hail	1.00 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/16/1982	23:00	CST	Hail	1.50 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	09/05/1983	16:00	CST	Hail	2.00 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/01/1985	14:00	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/01/1985	14:00	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	09/08/1985	07:50	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/19/1986	05:51	CST	Hail	2.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/19/1986	05:51	CST	Hail	2.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/28/1988	17:40	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/20/1989	21:45	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/05/1990	01:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/27/1990	16:00	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/27/1990	05:03	CST	Hail	1.50 in.	0	0	0.00K	0.00K

SPINK CO.	SPINK CO.	SD	04/26/1991	17:03	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/03/1991	14:03	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/09/1991	15:14	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/30/1991	16:27	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/30/1991	17:25	CST	Hail	0.88 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	09/08/1991	19:50	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/15/1992	17:10	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/15/1992	17:20	CST	Hail	1.00 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/16/1992	16:25	CST	Hail	2.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/16/1992	17:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/18/1992	21:20	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/06/1992	07:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/09/1992	21:18	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/18/1992	20:15	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/18/1992	20:20	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/01/1992	18:03	CST	Hail	1.00 in.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/01/1992	18:52	CST	Hail	0.75 in.	0	0	0.00K	0.00K
Turton	SPINK CO.	SD	08/14/1993	03:00	CST	Hail	0.75 in.	0	0	0.00K	0.00K
Redfield	SPINK CO.	SD	08/14/1993	03:15	CST	Hail	0.75 in.	0	0	0.00K	0.00K
Tulare	SPINK CO.	SD	08/14/1993	03:40	CST	Hail	0.75 in.	0	0	0.00K	0.00K
Redfield SD	SPINK CO.	SD	10/06/1994	15:20	CST	Hail	0.75 in.	0	0	0.00K	0.00K
Mellette	SPINK CO.	SD	07/03/1995	17:40	CST	Hail	0.75 in.	0	0	0.00K	0.00K
Frankfort at	SPINK CO.	SD	07/03/1995	17:40	CST	Hail	1.00 in.	0	0	0.00K	0.00K
Doland	SPINK CO.	SD	07/03/1995	17:42	CST	Hail	0.75 in.	0	0	0.00K	0.00K
Spink Colony	SPINK CO.	SD	07/03/1995	18:05	CST	Hail	1.25 in.	0	0	0.00K	0.00K
Redfield	SPINK CO.	SD	07/03/1995	20:15	CST	Hail	1.75 in.	0	0	0.00K	0.00K
Tulare	SPINK CO.	SD	07/03/1995	20:31	CST	Hail	0.75 in.	0	0	0.00K	0.00K
Tulare	SPINK CO.	SD	07/03/1995	20:43	CST	Hail	1.25 in.	0	0	0.00K	0.00K
Redfield	SPINK CO.	SD	07/03/1995	21:15	CST	Hail	0.75 in.	0	0	0.00K	0.00K
Redfield	SPINK CO.	SD	07/09/1995	23:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	06/05/1996	14:05	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK COLONY	SPINK CO.	SD	06/19/1996	11:20	CST	Hail	1.75 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	07/11/1996	15:05	CST	Hail	0.75 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	06/22/1997	13:05	CST	Hail	1.75 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	06/22/1997	13:11	CST	Hail	2.50 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	07/18/1997	01:49	CST	Hail	0.75 in.	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	07/25/1997	18:50	CST	Hail	2.50 in.	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	08/02/1997	15:20	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	08/02/1997	16:00	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	09/08/1997	10:45	CST	Hail	1.25 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	05/30/1998	18:05	CST	Hail	1.75 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	05/30/1998	18:10	CST	Hail	1.25 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/27/1999	17:00	CST	Hail	1.75 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	08/22/1999	21:00	CST	Hail	1.75 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	08/22/1999	21:10	CST	Hail	0.88 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	05/15/2000	17:45	CST	Hail	1.00 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	05/15/2000	18:42	CST	Hail	0.75 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	05/15/2000	18:45	CST	Hail	0.75 in.	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	07/11/2000	14:10	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	07/11/2000	14:20	CST	Hail	0.88 in.	0	0	0.00K	0.00K
MANSFIELD	SPINK CO.	SD	07/24/2000	18:00	CST	Hail	0.75 in.	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	07/24/2000	18:23	CST	Hail	0.88 in.	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	07/24/2000	18:25	CST	Hail	1.00 in.	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	07/24/2000	18:40	CST	Hail	1.75 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	07/24/2000	19:03	CST	Hail	0.88 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	07/24/2000	19:48	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	06/06/2001	14:50	CST	Hail	0.88 in.	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	06/06/2001	16:40	CST	Hail	0.75 in.	0	0	0.00K	0.00K

MELLETTE	SPINK CO.	SD	06/06/2001	16:43	CST	Hail	1.00 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	06/06/2001	17:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	06/06/2001	17:34	CST	Hail	0.75 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	06/09/2001	22:45	CST	Hail	1.00 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	06/13/2001	16:10	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	06/18/2001	15:42	CST	Hail	0.75 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/19/2001	03:57	CST	Hail	1.00 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	07/20/2001	07:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/25/2002	14:58	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	06/25/2002	15:20	CST	Hail	1.00 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	06/25/2002	15:25	CST	Hail	1.50 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	06/25/2002	15:55	CST	Hail	0.75 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/02/2002	07:20	CST	Hail	1.75 in.	0	0	0.00K	0.00K
ATHOL	SPINK CO.	SD	07/02/2002	08:20	CST	Hail	0.75 in.	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	07/02/2002	08:25	CST	Hail	1.00 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	07/02/2002	09:14	CST	Hail	0.88 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	07/02/2002	10:03	CST	Hail	1.00 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	07/02/2002	10:35	CST	Hail	0.75 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	08/11/2002	19:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	08/28/2002	14:25	CST	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	08/28/2002	14:35	CST	Hail	1.00 in.	0	0	0.00K	0.00K
ATHOL	SPINK CO.	SD	08/28/2002	14:45	CST	Hail	0.75 in.	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	06/21/2003	20:45	CST	Hail	0.75 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	06/22/2003	14:00	CST	Hail	0.88 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	07/20/2003	00:20	CST	Hail	1.00 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	07/20/2003	00:36	CST	Hail	0.75 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	07/29/2003	13:52	CST	Hail	0.88 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	07/29/2003	14:00	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	08/20/2003	16:40	CST	Hail	0.75 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	08/20/2003	16:55	CST	Hail	0.88 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	08/20/2003	16:59	CST	Hail	1.00 in.	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	04/18/2004	13:30	CST	Hail	1.00 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	04/18/2004	13:35	CST	Hail	0.75 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	06/07/2004	21:10	CST	Hail	0.75 in.	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	07/12/2004	08:35	CST	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/12/2004	09:50	CST	Hail	0.75 in.	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	05/07/2005	18:06	CST	Hail	0.75 in.	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	05/08/2005	14:20	CST	Hail	0.75 in.	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	06/20/2005	11:05	CST	Hail	0.88 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	06/20/2005	11:35	CST	Hail	1.00 in.	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	06/29/2005	12:20	CST	Hail	1.75 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	07/08/2005	06:10	CST	Hail	0.88 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/17/2005	20:33	CST	Hail	0.88 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	08/25/2005	15:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	09/07/2005	22:15	CST	Hail	1.00 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	09/07/2005	22:43	CST	Hail	1.00 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	09/07/2005	23:37	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	06/14/2006	05:56	CST	Hail	1.25 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	06/14/2006	08:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/23/2006	12:01	CST	Hail	1.75 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/27/2006	16:40	CST	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/27/2006	16:44	CST	Hail	1.00 in.	0	0	0.00K	0.00K
MANSFIELD	SPINK CO.	SD	04/20/2007	19:40	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	05/22/2007	16:15	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
ATHOL	SPINK CO.	SD	08/08/2007	16:15	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
ATHOL	SPINK CO.	SD	08/08/2007	16:15	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
ATHOL	SPINK CO.	SD	08/08/2007	16:50	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K

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ATHOL	SPINK CO.	SD	08/08/2007	16:50	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	08/08/2007	17:10	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	09/20/2007	03:52	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	07/10/2008	06:00	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
GALLUP	SPINK CO.	SD	07/16/2008	22:07	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	07/16/2008	22:45	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	08/26/2008	22:55	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	09/28/2008	14:50	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
SPINK COLONY	SPINK CO.	SD	09/28/2008	15:45	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
MANSFIELD	SPINK CO.	SD	05/31/2009	15:15	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	06/16/2009	14:00	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	05/22/2010	21:27	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
GLENDALE COLONY	SPINK CO.	SD	07/06/2010	19:30	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
BLOOMFIELD	SPINK CO.	SD	07/10/2010	17:15	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	07/23/2010	18:50	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	09/01/2010	19:40	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	09/01/2010	19:48	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	09/01/2010	19:48	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	05/21/2011	16:55	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	08/14/2011	21:59	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	08/14/2011	22:03	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	08/14/2011	22:17	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	03/25/2012	16:25	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	05/02/2012	17:05	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	05/02/2012	21:49	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	05/24/2012	15:17	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	05/24/2012	15:25	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	07/12/2012	17:43	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	08/03/2012	16:40	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	08/03/2012	17:08	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/21/2013	12:15	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/21/2013	12:27	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/21/2013	12:30	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/21/2013	12:40	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
DEITER ARPT	SPINK CO.	SD	06/21/2013	12:45	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
CRANDON	SPINK CO.	SD	06/21/2013	12:45	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/21/2013	12:55	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/21/2013	13:02	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK COLONY	SPINK CO.	SD	06/21/2013	13:10	CST-6	Hail	2.00 in.	0	0	0.00K	0.00K
CRANDON	SPINK CO.	SD	06/21/2013	13:22	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK COLONY	SPINK CO.	SD	06/21/2013	13:25	CST-6	Hail	4.00 in.	0	0	0.00K	0.00K
SPINK COLONY	SPINK CO.	SD	06/21/2013	13:25	CST-6	Hail	3.50 in.	0	0	0.00K	0.00K
SPINK COLONY	SPINK CO.	SD	06/21/2013	13:30	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
SPINK COLONY	SPINK CO.	SD	06/21/2013	13:30	CST-6	Hail	4.00 in.	0	0	0.00K	0.00K
GLENDALE COLONY	SPINK CO.	SD	06/21/2013	13:45	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	06/21/2013	14:21	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
GLENDALE COLONY	SPINK CO.	SD	06/21/2013	14:38	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	06/21/2013	14:41	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	09/18/2013	18:40	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	09/18/2013	19:15	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
CRANDON	SPINK CO.	SD	09/18/2013	20:15	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	09/18/2013	20:45	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	09/18/2013	20:45	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	09/18/2013	20:45	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	09/18/2013	20:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	05/10/2015	15:20	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	05/10/2015	15:45	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	06/22/2015	02:58	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K

NORTHVILLE	SPINK CO.	SD	07/05/2015	00:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
MANSFIELD	SPINK CO.	SD	07/17/2015	17:50	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	07/17/2015	18:00	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
ATHOL	SPINK CO.	SD	07/17/2015	18:05	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
GALLUP	SPINK CO.	SD	07/17/2015	18:25	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	07/17/2015	19:00	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	07/25/2015	17:40	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	05/30/2016	20:15	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	05/30/2016	20:22	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
ATHOL	SPINK CO.	SD	06/03/2016	13:25	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	07/10/2016	03:42	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	07/22/2016	15:05	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	07/22/2016	15:05	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	07/22/2016	15:15	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	07/22/2016	15:23	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	09/07/2016	18:06	CST-6	Hail	2.50 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	09/07/2016	18:07	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
DEITER ARPT	SPINK CO.	SD	09/07/2016	18:13	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
DEITER ARPT	SPINK CO.	SD	09/07/2016	18:20	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	09/07/2016	18:25	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	05/28/2017	16:05	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	07/05/2017	18:25	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	07/05/2017	18:55	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CRANDON	SPINK CO.	SD	07/05/2017	19:34	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	09/19/2017	19:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/16/2018	19:15	CST-6	Hail	2.75 in.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	06/29/2018	22:10	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	07/02/2018	19:05	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	07/02/2018	19:15	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Storm Events Database

Search Results for Spink County, South Dakota

Event Types: Heavy Snow

Spink county contains the following zones:
'Spink'

24 events were reported between 07/01/1950 and 07/31/2019 (25233 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	24
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/26/1996	19:00	CST	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/22/1996	15:00	CST	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/14/1996	01:00	CST	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/16/2000	03:00	CST	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/30/2000	07:00	CST	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/02/2005	12:00	CST	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/11/2006	06:00	CST	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/28/2007	01:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/01/2007	04:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/20/2008	13:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/26/2008	19:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/06/2008	10:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/09/2014	22:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/30/2015	11:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/01/2015	00:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/10/2016	11:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/16/2016	10:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/12/2017	07:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/18/2018	22:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/05/2018	04:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/08/2018	08:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	10/10/2018	01:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/18/2019	01:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/09/2019	06:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Storm Events Database

Search Results for Spink County, South Dakota

Event Types: High Wind

Spink county contains the following zones:
'Spink'

19 events were reported between 07/01/1950 and 07/31/2019 (25233 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	19
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

Wind Magnitude Definitions:
Measured Gust:'MG', Estimated Gust:'EG', Measured Sustained:'MS', Estimated Sustained:'ES'

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Select: All Wind Speeds ▼ Sort By: Date/Time (Oldest) ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/10/1996	11:00	CST	High Wind	57 kts.	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	10/29/1996	18:00	CST	High Wind	56 kts.	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/02/1997	11:00	CST	High Wind	50 kts.	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/17/1999	07:00	CST	High Wind	50 kts.	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/01/1999	09:00	CST	High Wind	44 kts.	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/05/2000	10:00	CST	High Wind	54 kts. E	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/11/2002	14:00	CST	High Wind	53 kts. E	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/23/2002	20:10	CST	High Wind	52 kts. E	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/12/2004	06:00	CST	High Wind	50 kts. EG	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/10/2005	07:00	CST	High Wind	35 kts. MS	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	10/26/2008	09:00	CST-6	High Wind	35 kts. ES	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/13/2010	15:00	CST-6	High Wind	35 kts. ES	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	10/26/2010	12:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	10/07/2011	10:00	CST-6	High Wind	35 kts. ES	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	10/11/2015	16:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/18/2015	19:20	CST-6	High Wind	50 kts. MG	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/07/2016	18:20	CST-6	High Wind	36 kts. MS	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/26/2016	02:40	CST-6	High Wind	36 kts. MS	0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/07/2017	14:30	CST-6	High Wind	35 kts. ES	0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Storm Events Database

Search Results for Spink County, South Dakota

Event Types: Thunderstorm Wind

155 events were reported between 07/01/1950 and 07/31/2019 (25233 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	94
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	1
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

Wind Magnitude Definitions:
Measured Gust:'MG', Estimated Gust:'EG', Measured Sustained:'MS', Estimated Sustained:'ES'

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Select: All Wind Speeds ▼ Sort By: Date/Time (Oldest) ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	5.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/21/1958	20:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/07/1959	21:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/23/1964	16:30	CST	Thunderstorm Wind	63 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/20/1974	21:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/20/1974	21:10	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/13/1974	16:05	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/03/1975	20:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/10/1976	19:41	CST	Thunderstorm Wind	70 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/25/1976	19:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/06/1977	20:45	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/03/1980	21:56	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/15/1980	14:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/20/1980	02:45	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/03/1981	04:45	CST	Thunderstorm Wind	60 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	09/06/1981	13:55	CST	Thunderstorm Wind	55 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	04/19/1985	19:25	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	04/19/1985	19:44	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/17/1985	16:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/22/1985	21:40	CST	Thunderstorm Wind	56 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/22/1985	21:50	CST	Thunderstorm Wind	64 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/22/1985	22:15	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/22/1985	22:40	CST	Thunderstorm Wind	56 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/17/1986	17:10	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/16/1988	20:55	CST	Thunderstorm Wind	64 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/11/1989	10:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/01/1990	20:35	CST	Thunderstorm Wind	65 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/27/1990	16:57	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K

SPINK CO.	SPINK CO.	SD	07/18/1990	18:20	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/26/1991	17:05	CST	Thunderstorm Wind	60 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/26/1991	17:35	CST	Thunderstorm Wind	57 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/03/1991	15:10	CST	Thunderstorm Wind	53 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/04/1991	15:00	CST	Thunderstorm Wind	60 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/13/1991	22:00	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	09/08/1991	18:40	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	09/08/1991	20:01	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/15/1992	18:00	PST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/16/1992	18:30	PST	Thunderstorm Wind	65 kts.	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/18/1992	19:40	PST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
Turton	SPINK CO.	SD	08/14/1993	03:00	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
Doland	SPINK CO.	SD	07/15/1994	21:15	CDT	Thunderstorm Wind	65 kts.	0	0	5.00K	0.00K
Mansfield SD	SPINK CO.	SD	10/06/1994	15:45	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
Redfield	SPINK CO.	SD	07/13/1995	23:15	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
Mellette	SPINK CO.	SD	07/13/1995	23:35	CST	Thunderstorm Wind	78 kts.	0	0	0.00K	0.00K
Ashton	SPINK CO.	SD	07/13/1995	23:40	CST	Thunderstorm Wind	70 kts.	0	0	0.00K	0.00K
Athol	SPINK CO.	SD	07/13/1995	23:40	CST	Thunderstorm Wind	70 kts.	0	0	0.00K	0.00K
Redfield	SPINK CO.	SD	07/13/1995	23:45	CST	Thunderstorm Wind	70 kts.	0	0	0.00K	0.00K
Brentford	SPINK CO.	SD	07/13/1995	23:55	CST	Thunderstorm Wind	70 kts.	0	0	0.00K	0.00K
Conde	SPINK CO.	SD	07/13/1995	23:58	CST	Thunderstorm Wind	70 kts.	0	0	0.00K	0.00K
Redfield	SPINK CO.	SD	07/27/1995	01:55	CST	Thunderstorm Wind	61 kts.	0	0	0.00K	0.00K
Redfield	SPINK CO.	SD	08/11/1995	01:30	CST	Thunderstorm Wind	56 kts.	0	0	0.00K	0.00K
Hitchcock	SPINK CO.	SD	09/05/1995	20:05	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	05/17/1996	16:00	CST	Thunderstorm Wind	70 kts.	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	06/22/1997	13:14	CST	Thunderstorm Wind	61 kts.	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	07/20/1997	02:15	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	07/25/1997	19:05	CST	Thunderstorm Wind	57 kts.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	07/25/1997	19:30	CST	Thunderstorm Wind	61 kts.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	06/26/1998	17:20	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	07/18/1998	18:03	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	07/18/1998	18:15	CST	Thunderstorm Wind	61 kts.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	07/18/1998	18:25	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
MANSFIELD	SPINK CO.	SD	06/04/1999	23:48	CST	Thunderstorm Wind	61 kts.	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	07/22/1999	19:01	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
ATHOL	SPINK CO.	SD	07/22/1999	19:54	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	07/05/2000	02:20	CST	Thunderstorm Wind	55 kts. E	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	07/11/2000	14:45	CST	Thunderstorm Wind	52 kts. E	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	07/11/2000	15:35	CST	Thunderstorm Wind	52 kts. E	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/04/2000	22:55	CST	Thunderstorm Wind	52 kts. E	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/23/2002	22:30	CST	Thunderstorm Wind	61 kts. E	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	07/21/2002	02:45	CST	Thunderstorm Wind	65 kts. M	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	07/24/2002	23:30	CST	Thunderstorm Wind	52 kts. E	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	08/11/2002	19:10	CST	Thunderstorm Wind	61 kts. E	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/29/2003	14:10	CST	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/29/2003	14:20	CST	Thunderstorm Wind	92 kts. MG	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/29/2003	14:45	CST	Thunderstorm Wind	80 kts. EG	0	0	0.00K	0.00K
ATHOL	SPINK CO.	SD	08/09/2003	16:15	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	06/07/2005	21:50	CST	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	06/07/2005	22:00	CST	Thunderstorm Wind	89 kts. MG	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	06/07/2005	22:00	CST	Thunderstorm Wind	87 kts. EG	0	0	0.00K	0.00K
MANSFIELD	SPINK CO.	SD	06/07/2005	22:00	CST	Thunderstorm Wind	87 kts. EG	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	06/29/2005	06:24	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	06/29/2005	12:20	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	06/29/2005	15:14	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/02/2005	23:50	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	05/29/2006	00:30	CST	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/10/2006	19:53	CST	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K

TULARE	SPINK CO.	SD	08/12/2006	16:30	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/18/2006	08:30	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	05/05/2007	18:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
GALLUP	SPINK CO.	SD	05/05/2007	18:55	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	06/11/2008	02:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MANSFIELD	SPINK CO.	SD	07/31/2008	03:02	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	07/31/2008	03:15	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
MANSFIELD	SPINK CO.	SD	05/12/2009	21:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	05/22/2010	03:45	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	05/24/2010	20:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/06/2010	18:10	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
DEITER ARPT	SPINK CO.	SD	07/06/2010	18:20	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
BLOOMFIELD	SPINK CO.	SD	07/06/2010	19:30	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	07/23/2010	18:49	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	09/01/2010	19:53	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/02/2011	01:55	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/02/2011	02:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	08/28/2011	05:46	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	08/03/2012	16:40	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
GALLUP	SPINK CO.	SD	08/03/2012	16:44	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
FRANKFORT	SPINK CO.	SD	08/03/2012	16:55	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	08/03/2012	16:59	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	08/03/2012	17:00	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	08/03/2012	17:03	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	08/03/2012	17:07	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	06/12/2013	02:45	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	06/12/2013	02:46	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SPINK COLONY	SPINK CO.	SD	06/21/2013	13:20	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	08/28/2013	05:05	CST-6	Thunderstorm Wind	78 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/28/2013	05:20	CST-6	Thunderstorm Wind	79 kts. MG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/28/2013	05:23	CST-6	Thunderstorm Wind	78 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/28/2013	05:25	CST-6	Thunderstorm Wind	78 kts. EG	0	0	0.00K	0.00K
CRANDON	SPINK CO.	SD	08/28/2013	05:45	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	08/28/2013	05:45	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
ASHTON	SPINK CO.	SD	06/18/2014	19:48	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	06/18/2014	20:03	CST-6	Thunderstorm Wind	75 kts. MG	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	06/18/2014	20:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	06/28/2014	00:50	CST-6	Thunderstorm Wind	50 kts. MG	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	06/22/2015	02:59	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	06/27/2015	18:41	CST-6	Thunderstorm Wind	56 kts. MG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	07/25/2015	17:39	CST-6	Thunderstorm Wind	57 kts. MG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	07/25/2015	17:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	07/25/2015	18:00	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	07/28/2015	00:15	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	08/09/2015	15:10	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/09/2015	15:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	08/09/2015	15:19	CST-6	Thunderstorm Wind	53 kts. MG	0	0	0.00K	0.00K
REDFIELD	SPINK CO.	SD	08/09/2015	15:30	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
BLOOMFIELD	SPINK CO.	SD	08/09/2015	16:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	07/22/2016	14:54	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	08/10/2016	21:00	CST-6	Thunderstorm Wind	63 kts. MG	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	08/10/2016	21:05	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	06/13/2017	16:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	06/13/2017	16:25	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	06/13/2017	16:30	CST-6	Thunderstorm Wind	54 kts. MG	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	07/05/2017	18:17	CST-6	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
NORTHVILLE	SPINK CO.	SD	07/05/2017	18:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K

REDFIELD	SPINK CO.	SD	07/21/2017	21:23	CST-6	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	07/21/2017	21:36	CST-6	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	07/21/2017	21:53	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
BRENTFORD	SPINK CO.	SD	07/21/2017	22:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	07/21/2017	22:23	CST-6	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	07/21/2017	22:42	CST-6	Thunderstorm Wind	65 kts. MG	0	0	0.00K	0.00K
MELLETTE	SPINK CO.	SD	06/01/2018	19:34	CST-6	Thunderstorm Wind	64 kts. MG	0	0	0.00K	0.00K
MANSFIELD	SPINK CO.	SD	06/05/2018	23:40	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	06/05/2018	23:45	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SPINK COLONY	SPINK CO.	SD	06/16/2018	20:18	CST-6	Thunderstorm Wind	55 kts. MG	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	07/13/2019	16:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TURTON	SPINK CO.	SD	07/28/2019	17:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
GLENDALE COLONY	SPINK CO.	SD	07/28/2019	17:32	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
Totals:								0	0	5.00K	0.00K

Storm Events Database

Search Results for Spink County, South Dakota

Event Types: Tornado

38 events were reported between 07/01/1950 and 07/31/2019 (25233 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	29
Number of Days with Event and Death:	1
Number of Days with Event and Death or Injury:	1
Number of Days with Event and Property Damage:	10
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Select: All Tornadoes ▼ Sort By: Date/Time (Oldest) ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								1	0	177.56K	0.00K
SPINK CO.	SPINK CO.	SD	05/29/1953	21:00	CST	Tornado	F1	0	0	25.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/18/1954	04:20	CST	Tornado	F1	0	0	25.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/21/1956	17:00	CST	Tornado	F2	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/21/1956	19:00	CST	Tornado	F1	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/20/1957	22:00	CST	Tornado	F2	1	0	25.00K	0.00K
SPINK CO.	SPINK CO.	SD	09/01/1957	17:30	CST	Tornado	F0	0	0	0.03K	0.00K
SPINK CO.	SPINK CO.	SD	07/07/1959	21:00	CST	Tornado	F2	0	0	25.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/23/1964	16:30	CST	Tornado	F2	0	0	25.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/24/1966	20:34	CST	Tornado		0	0	2.50K	0.00K
SPINK CO.	SPINK CO.	SD	07/25/1966	11:05	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	04/16/1967	15:15	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	04/16/1967	16:05	CST	Tornado	F1	0	0	25.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/09/1967	14:50	CST	Tornado		0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	09/20/1970	16:15	CST	Tornado		0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/08/1971	17:55	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/24/1971	09:59	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/29/1980	15:00	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/29/1980	16:13	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	05/29/1980	16:17	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	07/15/1980	13:56	CST	Tornado		0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/14/1982	10:25	CST	Tornado	F0	0	0	0.03K	0.00K
SPINK CO.	SPINK CO.	SD	06/19/1984	15:20	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/15/1987	14:20	CST	Tornado	F1	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	08/15/1987	14:22	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/09/1991	14:38	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/20/1991	18:20	CST	Tornado	F0	0	0	25.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/30/1991	16:47	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/30/1991	16:50	CST	Tornado	F0	0	0	0.00K	0.00K
SPINK CO.	SPINK CO.	SD	06/30/1991	16:52	CST	Tornado	F0	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	06/22/1997	13:45	CST	Tornado	F0	0	0	0.00K	0.00K

REDFIELD	SPINK CO.	SD	07/29/2003	14:23	CST	Tornado	F0	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	06/07/2005	22:05	CST	Tornado	F0	0	0	0.00K	0.00K
DOLAND	SPINK CO.	SD	07/23/2010	18:50	CST-6	Tornado	EF0	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	09/01/2010	19:40	CST-6	Tornado	EF0	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	09/01/2010	19:59	CST-6	Tornado	EF0	0	0	0.00K	0.00K
REDFIELD ARPT	SPINK CO.	SD	08/03/2012	16:45	CST-6	Tornado	EF0	0	0	0.00K	0.00K
CONDE	SPINK CO.	SD	08/03/2012	17:05	CST-6	Tornado	EF0	0	0	0.00K	0.00K
TULARE	SPINK CO.	SD	09/19/2017	18:46	CST-6	Tornado	EF1	0	0	0.00K	0.00K
Totals:								1	0	177.56K	0.00K

Storm Events Database

Search Results for Spink County, South Dakota

Event Types: Winter Storm

Spink county contains the following zones:
'Spink'

25 events were reported between 07/01/1950 and 07/31/2019 (25233 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	25
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/16/1996	17:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/19/1996	06:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/03/1997	12:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/03/1997	05:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/03/1997	11:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/12/1997	18:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/11/2000	18:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/29/2001	17:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/07/2001	04:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/24/2001	15:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/22/2001	06:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/26/2001	06:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	03/14/2002	07:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/02/2003	01:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/29/2005	17:00	CST	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/30/2006	01:00	CST-6	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/24/2007	07:00	CST-6	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/25/2008	06:00	CST-6	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/26/2009	02:00	CST-6	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/15/2011	02:00	CST-6	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/08/2012	13:00	CST-6	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/28/2013	13:00	CST-6	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/10/2013	20:00	CST-6	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	04/13/2013	22:00	CST-6	Winter Storm		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/13/2016	21:00	CST-6	Winter Storm		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Storm Events Database

Search Results for Spink County, South Dakota

Event Types: Drought

Spink county contains the following zones:
'Spink'

14 events were reported between 01/01/1950 and 08/31/2019 (25445 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	14
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	06/01/2002	00:00	CST	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	07/18/2006	00:00	CST	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	08/01/2006	00:00	CST	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	11/01/2012	00:00	CST-6	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	12/01/2012	00:00	CST-6	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	01/01/2013	00:00	CST-6	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	02/01/2013	00:00	CST-6	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	07/01/2017	00:00	CST-6	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	08/01/2017	00:00	CST-6	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	06/05/2018	06:00	CST-6	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	07/01/2018	00:00	CST-6	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	08/14/2018	07:00	CST-6	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	09/01/2018	00:00	CST-6	Drought		0	0	0.00K	0.00K
SPINK (ZONE)	SPINK (ZONE)	SD	10/01/2018	00:00	CST-6	Drought		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

APPENDIX C: DRAINAGE ORDINANCE

TITLE 6

Chapter 6.01 Purpose

6.01

Purpose. This Ordinance is promulgated under specific statutory authority of Chapter 46A-10A of the South Dakota Codified Laws. It is the intent of this ordinance to monitor by regulation, the drainage activity or obstruction of drainage within Spink County and to provide an impartial forum for the resolution of landowner drainage disputes. The permit requirements of this ordinance are prospective in nature and are intended to facilitate communication prior to the construction or installation of drainage works. This Ordinance shall only be applicable and enforced in the unincorporated areas of Spink County, South Dakota. Determination or awarding damages associated with permitted drainage works outside the scope of this Ordinance. Any permit to drain issued under this Ordinance constitutes permission to drain with respect to this Ordinance only. Any other State or Federal conservation or water rights programs or requirements must be met in addition to the requirements of this Ordinance.

Chapter 6.02 Definitions

6.02

Definitions. For the purpose of this Ordinance, certain terms and words are hereby defined unless the context otherwise requires. The word shall is mandatory and not discretionary.

(1) "Board," a board of county commissioners, as established in chapter 7-8;
(2) "Closed drain" or "blind drain," a man-made drain or drainage scheme utilizing pipes, tiles, or other materials and constructed in such a way that flow of water is not visible;
(3) "Commission" or "drainage commission," any county drainage commission created under the terms of this chapter;
(4) "Coordinated drainage area," a defined geographic area containing one or more parcels of real property and established under the provisions of this chapter and chapter 46A-11 by a board or commission to provide a planned network or method of natural or man-made drainage, or both, to benefit all parcels of real property involved;
(5)"Dominant estate," any parcel of real property, usually at a higher elevation, which holds a common law or statutory legal right to drain water onto other real property;
(6) "Drain," a means of draining either surface or subsurface water through a system of ditches, pipes or tiles, natural, man-made or natural with man-made improvements;
(7) "Drainage map," any map adopted by resolution of the board that delineates the extent of county drainage, a drainage project, or a coordinated drainage area;
(8)"Drainage plan," a document which may illustrate by maps, charts, and other descriptive matter the policies of the board to interrelate all man-made and natural systems and activities relating to drainage under its jurisdiction;
(9)"Drainage scheme," a plan or system by which water is drained from one or more parcels of real property onto one or more parcels of real property;
(10)"Engineer," a professional, registered engineer;

(11)"Established water course," a fixed and determinate route, either natural or man-made, by which water has flowed from one parcel of real property to another and by which water has been discharged upon a servient estate for a period of time, on such a regular basis and in such quantities as to make it a predictably continuous activity;
(12)"Governing body," a board of county commissioners, a city council, or a city commission;
(13)"Landowner" or "owner," any individual, firm, or corporation, public or private, or public agency, who has legal title to real property as shown by the records of the Register of Deeds of the county in which the real property is situated. If the real property is sold under a contract-for-deed and the contract is on record in the office of the Register of Deeds for the respective county, both the recorded owner of the real property and the purchaser as named in the contract-for-deed are deemed owners of the real property;
(14) "Lateral Drain", a drain constructed after the establishment and construction of the original drain or drainage system and which flows into such drain or drainage system;
(15)"Legal drain," a drain or drainage scheme that:

(a) Is vested under the provisions of this chapter and chapter 46A-11;
(b) Has been constructed by a person or by a unit of government under the provisions of past or present law; or
(c) Has been granted a drainage permit, if a permit is necessary under the provisions of this chapter and chapter 46A-11;

(16) "Municipality," a city or town, however organized, as defined in § 9-1-1;
(17) "Natural drain," a drainage system which operates as part of a natural water course, as defined in subdivision (15) of this section;
(18) "Natural water course," a fixed and determinate route by which water naturally flows from one parcel of real property to another due to the conformation of the land and by which water is discharged upon the land receiving the water. It is not necessary that the force of the flow of water be sufficient to form a channel having a well-defined bed or banks;
(19) "Official control," any ordinance, order, regulation, map, or procedure adopted by a board to regulate drainage;
(20)"Ordinance," any ordinance, as defined in subdivision 7-18A-1(2), adopted by a board to regulate drainage of both rural and urban areas to provide coordination of drainage projects, individual drainage efforts and drainage areas and to foster conformity with any county drainage plan;
(21)"Private drain," a drainage system or scheme designed, constructed, and maintained by a person primarily for his own benefit or a natural drain, whether or not actively maintained, that provides a benefit primarily to one person;
(22)"Rural" or "rural area," any territory outside a municipality as defined in § 9-1-1;
(23) "Surface drain", a man-made drain on the surface of the ground:
(24) "Servient estate," any parcel of real property, usually at a lower elevation, which is subject to a legal right allowing a dominant estate to drain water onto it;
(25)"Unit of local government," a municipality as defined in § 9-1-1, an irrigation district as defined in chapter 46A-4, a school district as defined in § 13-5-1, a water project district as defined in chapter 46A-18, a water user district as defined in § 46A-9-2, a township as defined in chapter 8-1, a sanitary district as defined in chapter 34A-5, a conservation district as defined in chapter 38-8 or other special district;

(26)"Vested right," a right of water drainage from one parcel of property to another which is settled or accrued to the property on the basis of state law; and
(27)"Water management board," the state board created in § 1-40-15.

Chapter 6.03 Administration and Enforcement

6.03

Administration and Enforcement. An administrative official who shall be known as the Drainage Administrator and who shall be designated by the Board of County Commissioners, shall administer the Drainage Ordinance of Spink County. The Drainage Administrator may be provided with the assistance of such other persons as the Board of County Commissioners may decide.

If the Drainage Administrator shall find that any of the provisions of the Drainage Ordinance of Spink County, South Dakota are being violated, the Drainage Administrator shall notify in writing the person(s) responsible for such violations, indicating the nature of the violation and indicating the action necessary to correct it.

Chapter 6.04 Drainage Commission Established

6.04

Drainage Commission Established. The Spink County Drainage Commission is hereby established and designated as the Spink County Drainage Board in accordance with SDCL 46A-10A-34. The Spink County Drainage Board is hereby designated to be the Board of County Commissioners. The Spink County Drainage Board shall adopt rules necessary for the conduct of its affairs and in keeping with the drainage ordinance of Spink County, South Dakota. The Spink County Drainage Board shall retain a record of all proceedings and shall meet a minimum of once every six months. All meetings shall be open to the public. A notice of each meeting shall be published in the newspaper in general circulation. The Spink County Drainage Board shall maintain minutes of its proceedings showing the vote of each member upon each question, or if absent or failure to vote, indicating such actions, all of which shall be of public record and filed with the Drainage Administrator. A majority attendance of the full membership is required to have a quorum. A majority vote of the quorum is required to decide in favor of any application or other matter before the Board. Any Spink County Drainage Board member with a personal conflict of interest concerning any drainage dispute or permit application must abstain from voting on the decision of such a dispute or permit. Disputes, because of the placement, replacement, or modification of township road culverts or township roads, shall not be heard by the Spink County Drainage Board and said disputes shall be taken directly to Circuit Court.

Chapter 6.05 Permit Required

6.05

Permit Required. It shall be unlawful to commence the excavation for or begin the construction or installation of drainage works until a permit has been issued by the Spink County Drainage Board or the Drainage Administrator. The following work shall require a permit:

1. A permit is required before any individual or landowner may construct any type of drain for the purpose of draining water from a natural wetland or any artificially impounded water, or any series or combination thereof, having any possible or potentially substantial effect on the property of adjacent landowners, the environment, or the public as a whole.
2. A permit is required before any individual or landowner may drain by pumping any natural wetland or artificially impounded water, or any series or combination thereof having any possible or potentially substantial effect on the property of adjacent landowners, the environment, or the public as a whole.
3. A permit is required for a drainage project constructed pursuant to South Dakota Drainage Law Chapter 46A-10A and 46A-11.
4. A permit is required before any individual or landowner may modify or obstruct the drainage of any legal or natural drain (see definitions). Modification includes, but is not limited to, deepening, widening, obstruction, rerouting, or the extension of a drain. Obstruction includes, but is not limited to, man-made crossings.
5. A permit is required before any individual or landowner may fill any natural wetland, having any possible or potentially substantial effect on the property of adjacent landowners, the environment, or the public as a whole, for the purpose of causing the drainage of wetland by elimination of the existing storage.
6. Any vested drainage right not recorded under the provisions of SDCL 46A-10A-31 shall require a permit.
7. A permit is required for the process of pumping, the construction, modification, repair, or improvement of any drainage work, or ditch, that results in water flowing into or across any public highway right-of-way.
8. Construction of any drain (tiling, ditching, or waterway) requires a permit.
9. Expiration of Drainage Permit. If the work described in any drainage permit has not commenced within two (2) years from the date of issuance thereof, said permit shall expire. Applicant may request in writing an extension from the Drainage Administrator. The administrator may grant a one-time two (2) year extension for a drainage permit. If the work has not commenced after the extension a new application will be required.

Chapter 6.06 Exception to Permits Required

6.06

Exception to Permits Required. The provisions of 6.05 shall not apply to any drain constructed or to be constructed under the direct and comprehensive supervision of the Army Corps of Engineers or the Bureau of Reclamation. Individuals shall notify the Drainage Commission or the Drainage Administrator of any exempt project being undertaken.

Chapter 6.07 Filing Application

6.07

Filing Application. Any individual or landowner desiring a drainage permit shall complete and file an application with the Drainage Administrator or the Drainage Board on a form approved by the Drainage Board. If the application is incomplete, or if the information contained therein is insufficient to enable the Drainage Board or the Drainage Administrator to make an informed decision on the application, the application will be returned to the applicant for completion. A non-refundable fee of $25 shall be charged for the filing of drainage applications when the applicant has obtained the written approval of all the landowners within 1 ½ miles downstream from the drain outlet with a 1/8 mile buffer from the center to each side when draining into a natural waterway; private drainage onto a depression or low area with no natural outlet requires signatures from land owners within a 1/2 mile buffer area from center of the area receiving the water. If the applicant does not obtain the required signatures of the landowners the non-refundable application fee shall be $100. The application fee shall be interpreted to apply to each individual landowner where more than one landowner signs a single drainage application.

A hearing will be required unless all required signatures from landowners listed in 6.10 #1-3 are included with the application.

The permit for a drainage project constructed pursuant to SDCL Chapters 46A-10A and 46A-11 may encompass the entire assessed or benefited area. In order for a permit to encompass the entire assessed or benefited area, the project must be designed to accommodate the drainage of the entire assessed area and must be so stated in the application.

Chapter 6.08 Hearing Required

6.08

Hearing Required. A hearing is required for applications involving a Drainage Project outlined in 6.05, # 3 of this Ordinance and all applications of statewide or intercounty significance.

A hearing is also required to decide on drainage complaints and disputes between landowners. A hearing and Spink County Drainage Board approval is necessary for permit applications that cannot be approved by the Drainage Administrator because the applicant has failed to obtain the consensus of all affected persons or entities.

Any decision made by the Spink County Drainage Board in order to settle a drainage dispute between landowners may be appealed to the Circuit Court within thirty (30) days of the notice.

The Spink County Drainage Board may hold hearings on other such applications at its discretion. The purpose of a hearing is to establish a record on which to make a decision as to whether the application to drain shall be granted, and if so, under what conditions, if any.

The Spink County Drainage Board shall hold a meeting upon the request of the Drainage Administrator. Such meetings shall take place whenever it is necessary to carry out the purposes of this chapter.

Drainage permit applications may be approved by the Drainage Administrator for the construction of private drains (see definitions) or any other drainage works with no hearing required, subject to the provisions of 6.08 of the Ordinance and subject to the written approval of all individuals involved 6.10, #1-3. Any drainage permit approved or disapproved by the Drainage Administrator may be appealed to the Spink County Drainage Board.

The applicant, if requested, shall provide an engineering analysis showing the downstream impacts of the proposed drainage. The analysis may include, but not be limited to, a determination of the capacity of the drain and the receiving watercourse and a comparison of volume and timing of pre-drainage and post-drainage flows.

Chapter 6.09 Emergency Drainage

6.09

Emergency Drainage. The requirement for a permit, hearing and notice thereon may be waived by a unanimous vote of the quorum of the Spink County Drainage Board in order to facilitate emergency drainage. However, a permit shall be obtained and all hearings shall be conducted at the earliest opportunity if the drainage so created is to be permanent.

Chapter 6.10 Notice of Hearing Content

6.10

Notice of Hearing Content. For all drainage permit hearings required pursuant to this Ordinance, the Spink County Drainage Board shall at the applicant's expense, publish notice in the newspaper in general circulation in the area of the proposed drainage, once a week for two (2) consecutive weeks. The final notice shall be published not more than thirty (30) days, nor less than one (1) day before the date set for the hearing. The Spink County Drainage Board shall also give, at the applicant's expense, notice by certified mail not more than thirty (30) days, nor less than ten (10) days from the date set for the hearing to:

1. All landowners within 1 ½ miles downstream from the drain outlet with a 1/8 mile buffer from the center to each side when draining into a natural waterway; private drainage into a depression or low area with no natural outlet requires signatures from land owners within a ½ mile buffer area from center of the area receiving the water.
2. Any county which would be affected by the water to be drained.
3. The state highway department, county highway department, municipal government, water district, and township board of supervisors for any proposed drainage which will affect the right-of-way of any highway or roadway.
4. Any person who has notified the Spink County Drainage Board in writing of the person's objection to the drainage project, and who has requested in writing notification of such hearing on the drainage project proposed.

The notice shall give the name and address of the applicant, the legal description of the land to be drained, the date, the time, and the location where the hearing will take place. Evidence that notice has been completed by the filing of a certificate setting forth the names and addresses of those receiving notice by mail shall be kept.

Chapter 6.11 Time for Determination

6.11

Time for Determination. Within thirty (30) days after a hearing required pursuant to this Ordinance, or at the earliest opportunity, the Spink County Drainage Board shall make a determination on the application. For complex or unique applications, this time limit may be extended by the Spink County Drainage Board. Following the determination, the Spink County Drainage Board shall notify by mail the applicant and all individuals or landowners making appearances with respect to the application, of the determination. This notice must be accompanied by the basis on which the determination was made.

Chapter 6.12 Applications of Statewide or Intercounty Significance

6.12

Applications of Statewide or Intercounty Significance. In determining whether the proposed drainage is of statewide or intercounty significance, the Spink County Drainage Board or the Drainage Administrator shall be guided by the following criteria:

1. Drainage which affects property owned by the United States, the State of South Dakota, or any of their political subdivisions.
2. Drainage of natural wetlands having recognized fish and wildlife values.
3. Drainage which would have a substantial effect on another county.

For good cause, the Spink County Drainage Board or its designated official may classify any proposed drainage as having statewide or intercounty significance. Upon receipt of an application of statewide or intercounty significance, the Spink County Drainage Board shall set the date, time, and place for a public hearing on the application. Notice shall be given pursuant to 6.10 of this Ordinance and, additionally, the South Dakota Department of Water and Natural Resources shall be notified.

Chapter 6.13 Referral of Applications

6.13

Referral of Applications. Upon receipt of an application of statewide or intercounty significance, the Spink County Drainage Board shall attach to the application any comments, recommendations, and engineering data which may assist the appropriate county or counties. If the appropriate county or counties do not have a permit system, the Spink County Drainage Board will consult with such county or counties and reach a joint agreement under SDCL 46A-10A-9 to 46A-10A-10, if appropriate. The Spink County Drainage Board or Drainage Commission of each county affected by a proposed drainage of intercounty significance shall make a determination whether the permit should be granted. Approval by all counties involved is required for permit approval. If no agreement is reached between counties, the Spink County Drainage Board may petition to have the State Water Management Board resolve the dispute pursuant to SDCL 46A-10A-9.1

Chapter 6.14 Considerations

6.14

Considerations. In evaluating a drainage permit application, the Spink County Drainage Board and the Drainage Administrator shall consider the project's impact on the following:

1. Flood hazards, floodplain concerns,
2. Erosion potential,
3. Water supply quality and quantity,
4. Agricultural concerns,
5. Conservation concerns,
6. General environmental concerns,
7. Aesthetics,
8. Fish and wildlife concerns,
9. Potential adverse effects on adjacent landowners,
10. Any other factors deemed important.

In accordance with SDCL 46A-10A-20, any rural land that drains onto other rural land has a right to continue that drainage if:

1. The land receiving the drainage remains rural in character,
2. The land being drained is used in a reasonable manner,
3. The drainage creates no unreasonable hardship or injury to the owner of the land receiving the drainage,
4. The drainage is natural and occurs by means of a natural watercourse or established watercourse,
5. The owner of the land being drained does not substantially alter on a permanent basis the course of flow, the amount of flow, or the time of flow from that which would occur, and,
6. No other feasible alternative drainage system is available that will produce less harm without substantially greater cost to the owner of the land being drained.

Chapter 6.15 Board Action

6.15

Board Action. All permits issued by Drainage Administrator or approved by the Spink County Drainage Board, unless appealed, shall be recorded within two (2) weeks of the action with the County Register of Deeds at the applicant's expense. The Spink County Drainage Board or its designated official shall have the following options available with respect to the disposition of the permit application:

1. Approve the application,
2. Conditionally approve the application,
3. Deny the application,
4. Defer the application.

The Spink County Drainage Board requires as a condition to the approval of any drainage permit application a post-construction survey or an as-built map of the permitted drain. Any permit to which the Spink County Drainage Board has attached such a condition will be perfected upon receipt and favorable review of the survey. The Spink County Drainage Board may attach conditions to an approved permit application deemed necessary by the Spink County Drainage Board according to the circumstances of each application.

Violation of the conditions of a permit is a Class II Misdemeanor.

The Spink County Drainage Board is the Spink County Commissioners therefore all appeals shall be filed within 30 days of notice to Circuit Court.

Chapter 6.16 Penalty for Failure to Secure Permit for Drainage Work

6.16

Penalty for Failure to Secure Permit for Drainage Work. Any individual or landowner or their contractor draining water without a permit or a recorded vested right as required under the provisions of this Ordinance and SDCL46A-10A may be subject to a Class I Misdemeanor. Further, the court may assess a civil penalty of one thousand dollars ($1,000) per day for each day of violation.

Chapter 6.17 Drainage Complaints and Disputes

6.17

Drainage Complaints and Disputes. Any party wishing to raise a question of a violation of this Drainage Ordinance shall file a written and signed complaint, as well as a dispute form with the Drainage Administrator in accordance with 6.18. The Drainage Administrator shall promptly investigate the complaint and if it is substantiated, notice shall be issued to the party in violation of this Ordinance advising them of the violation. The notice shall advise the party in violation of the corrective action necessary and of the party's right to have a hearing before the Spink County Drainage Board to contest the notice of violation. If a hearing is needed, notice shall be given in accordance with 6.10, and shall be conducted pursuant to 6.18 through 6.22, both inclusive.

Chapter 6.18 Contents of Notice in Contested Cases

6.18

Contents of Notice in Contested Cases. The notice shall include:

1. A statement of the time, place, and nature of the hearing;
2. A statement of the legal authority and jurisdiction under which the hearing is to be held;
3. A reference to the particular sections of the statutes and rules involved;
4. A short and plain statement of the matters asserted. If the agency or other party is unable to state the matters in details at the time the notice is served, the initial notice may be limited to a statement of the issues involved. Thereafter upon application a more definite and detailed statement shall be furnished;
5. A statement of any action authorized by law, which may affect the parties, as a result of any decision made at the hearing, whether it be the revocation of a license, the assessment of a fine or other effect;
6. A statement that the hearing is an adversary proceeding and that a party has the right at the hearing to be present, to be represented by a lawyer, and that these and other due process rights will be forfeited, if they are not exercised at the hearing;
7. A statement that the decision based on the hearing may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Chapter 6.19 Rights of Parties at Hearings on Contested Cases

6.19

Rights of Parties at Hearings on Contested Cases. Opportunity shall be afforded all parties to respond and present evidence on issues of fact and argument on issues of law or policy. A party to a contested case proceeding may appear in person or by counsel, or both, may be present during the giving of all evidence, may have reasonable opportunity to inspect all documentary evidence, may

examine and cross-examine witnesses, may present evidence in support of his interest, and may have subpoenas issued to compel attendance of witnesses and production of evidence in his behalf.

Chapter 6.20 Rules of Evidence in Contested Cases

6.20

Rules of Evidence in Contested Cases. In contested cases:

1. Irrelevant, incompetent, immaterial, or unduly repetitious evidence shall be excluded. The rules of evidence as applied under statutory provisions and in the trial of civil cases in the circuit courts of this state, or as may be provided in statutes relating to the specific agency shall be followed. When necessary to ascertain facts not reasonably susceptible of proof under those rules, evidence not otherwise admissible thereunder may be admitted except where precluded by statute if it is a type of commonly relied upon by reasonable prudent persons in the conduct of their affairs. Agencies shall give effect to the rules of privilege recognized by law. Objections to evidence may be made and shall be noted in the record. Subject to these requirements, when a hearing will be expedited and the interest of the parties will not be prejudiced substantially, any part of the evidence may be received in written form.
2. A party may conduct cross-examinations required for a full and true disclosure of facts;
3. Notice may be taken of judicially cognizant facts. In addition, notice may be taken of generally recognized technical or scientific facts within the agency's specialized knowledge. Parties present at the hearing shall be informed of the matters to be noticed, and those matters shall be noted in the record, referred to therein, or appended thereto. Any such party shall be given a reasonable opportunity on request to refute the officially noticed matters by evidence or by written or oral presentation of authority, the manner of such refutation to be determined by the agency.

Chapter 6.21 Transcript in Contested Cases – Minutes in Lieu of Transcript

6.21

Transcript in Contested Cases – Minutes in Lieu of Transcript. Whenever a party requests in writing that oral proceedings be transcribed, a verbatim record of all proceedings and testimony shall be kept by the agency, at the requesting party's expense. Unless otherwise provided by law the agency shall not be required to transcribe the record unless the requesting party tenders and pays the reasonable cost thereof. If transcribed, a copy of the record shall be furnished to any other party to the hearing at the request and expense of such other party. If no verbatim record is transcribed, the agency shall prepare minutes of the hearing. The minutes shall consist of a written summary of the evidence and proceedings.

Chapter 6.22 Experts

6.22

Experts. In contested cases, it shall be the responsibility of the litigants to supply expert opinion when necessary to record their respective burden of proof. The Spink County Drainage Board may also appoint a special master, whose findings and recommendations may or may not be adopted by the Board; and may also appoint an attorney to act as a hearing officer to preside over the hearing; and may assess the costs of both against litigants.

Chapter 6.23 Disclaimer of Liability

6.23

The degree of public and environmental protection offered by this ordinance is considered reasonable for regulatory purposes and is based on the best available scientific and engineering considerations. The application of this ordinance shall not create liability on the part of Spink County, or any officer or employee thereof.

A Drainage Permit issued by Spink County is not a 404 permit from United States Army Corp of Engineers (COE), or NRCS Wetland determination which may also be required. Applicant and/or landowner is responsible for complying with all federal, state, and local regulations. A drainage permit does not absolve applicant of liability from other agencies or adjacent landowners.

Spink County Drainage Permit

Date _____

Applicant Name _____

Legal(s) of Project and Brief Description of project_____

_____

_____

_____

_____

_____

Issued by _____

Spink County Drainage Administrator

210 East Seventh Avenue

Redfield, SD 57469

605-472-4585

****KEEP FOR YOUR RECORDS**

****THIS PERMIT CONVEYS NO RIGHT TO OCCUPY ANY STREET, ALLEY, OR SIDEWALK, OR ANY PART THEREOF EITHER TEMPORARILY OR PERMANENTLY.**

****THIS PERMIT EXPIRES ON** _____

A Drainage Permit issued by Spink County is not a 404 permit from United States Army Corp of Engineers (COE), or NRCS Wetland determination which may also be required. Applicant and/or landowner is responsible for complying with all federal, state, and local regulations. A drainage permit does not absolve applicant of liability from other agencies or adjacent landowners.

SPINK COUNTY DRAINAGE BOARD

Application for Drainage Project

Please fill out completely

1. Names, Addresses and telephone numbers of applicant(s): _____

_____

_____

2. Describe the nature of the desired project, including specific measures and physical improvements. Describe the proposed project route and general course. Describe all the land involved or that will be affected using legal descriptions. Attach separate sheet of paper if necessary.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

3. List all other affected land owners (failure to list all affected land owners may result in delay of hearing):_____
_____
_____
_____

4. If there is any public property or property right within the project area or area that will be affected, give an assessment of the impact, environmental of otherwise, on the public property of property right:_____

_____
_____
_____
_____

A Drainage Permit issued by Spink County is not a 404 permit from United States Army Corp of Engineers (COE), or NRCS Wetland determination which may also be required. Applicant and/or landowner is responsible for complying with other federal, state, and local regulations. A drainage permit does not absolve applicant of liability from other agencies or adjacent landowners.

Date: _____ Signature of Applicant(s) _____

_____

Signature of landowner if applicant is not landowner:_____

Name, Address and telephone number of applicant(s): _____

_____

_____

Land Owner Approval

Description of Project:

_____
_____
_____
_____
_____
_____
_____

I have no opposition to the proposal presented to the Spink County Drainage/Administrator in regard to the drainage land within the designated area.

Landowner_____ Date_____

Landowner_____ Date_____

Landowner_____ Date_____

Landowner_____ Date_____

List land that is involved:

SPINK COUNTY DRAINAGE BOARD

Petition for Dispute Resolution

Please fill out completely.

1. Name of Applicant_____
2. Address of Applicant_____
3. Phone Number_____
4. Describe the nature of the dispute, including descriptions of land involved. Use the legal descriptions. Attach separate sheet of paper if necessary._____

5. List all other affected landowners (failure to list all affected landowners may result in delay of hearing):

6. Describe your request of the Spink County Drainage Board:_____

You will be notified of the date and time of the hearing on your petition. All other affected landowners will be given notice by the Spink County Drainage Board.

Date: _____ Signature of Applicant: _____

APPENDIX D: CHANGES TO SPINK CO. ORDINANCES IN THE PAST 5 YEARS

Appendix A
Mobile Home Standards

The following standards for mobile home tiedowns have taken into account possibilities and practicalities of providing protection from high winds for mobile homes. The standards may be used in conjunction with the ideas and concepts presented in TR-75, Protecting Mobile Homes from High Winds, prepared by the Defense Civil Preparedness Agency, Washington, D.C.

Mobile homes require two types of anchorage: (1) over-the-top tiedowns to restrict overturning and (2) frame ties to prevent the mobile home from being pushed from its piers. The standards apply to single mobile homes up to 14 feet in width. "Double wides" do not require over-the-top ties, but they require the same number of frame ties.

Mobile Home Piers and Footings. All mobile homes shall meet the following minimum requirements for mobile home piers and footings:

1. The ground on which the mobile home is placed will support a minimum of 2,500 pounds per square foot.
2. All piers shall be placed on footings of solid concrete with minimum dimensions of 16" x 16" x 4".
3. Piers shall be constructed of standard 8" x 8" x 16" hollow concrete blocks.
4. Piers shall be topped with solid concrete caps 8" x 16".
5. Treated or cedar wood shims shall be driven tight between the cap and the main frame to provide uniform bearing.
6. Other types of piers and foundations of equivalent permanence and weight bearing ability may be approved. Jacks or heavy metal adjustable columns, anchored to both frame and foundation, may be used.
7. Piers shall be centered under each main frame (or chassis) member, with a maximum spacing of 10 feet on centers. The end piers shall be no farther than five (5) feet in from the ends of the mobile homes.

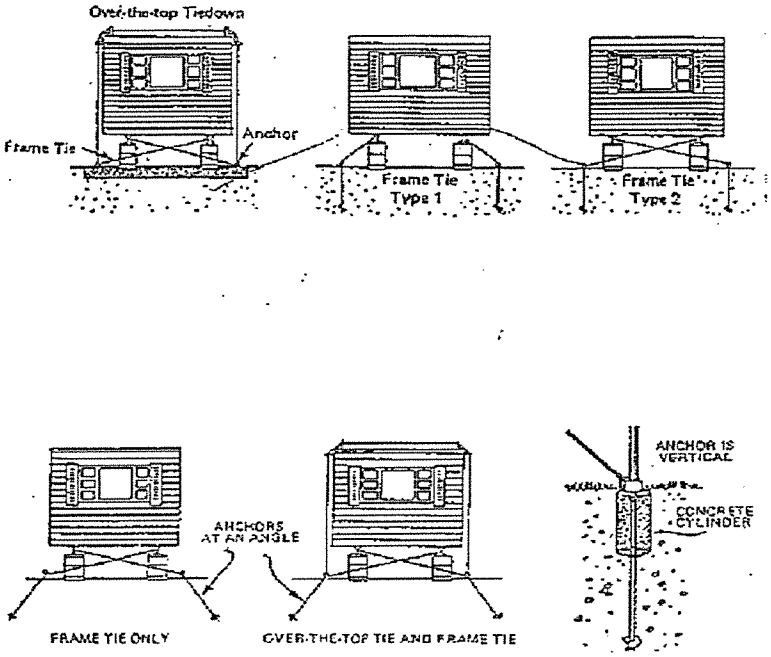
The mobile home tie-downs will also have to meet the following criteria:

1. Over-the-top tiedowns shall be positioned at stud and rafter locations near each end of the mobile home. Others, if needed, may be positioned between them
2. Either steel cable or steel strapping can be used for ties. All ties shall be fastened to ground anchors, as described in Section 3 below, and drawn tight with galvanized turnbuckles or yoke-type fasteners and tensioning devices. Turnbuckles shall be forged, or ended with jaws. Turnbuckles with hook ends will not be permitted.
3. All cable ends shall be secured with at least two U-bolt-type cable clamps or other fastening devices as approved by the enforcing officials.
4. Cables used for tiedowns shall be either galvanized steel or stainless steel having a breaking strength greater than 4,800 pounds. Cable shall be either 7/32" diameter or greater (7x19) aircraft cable.
5. When flat steel straps are used for tiedowns, they must be in accordance with Federal Specification QQ-S-781. That is 1 ¼" x .035", type 1, Class B, Grade 1, with a breaking strength of at least 4, 750 pounds.
6. Steel straps used for ties must terminate with D-rings, bolts, or other fastening devices which will not cause distortion of the band or reduce its breaking strength.
7. Sharp edges of the mobile home that would tend to cut the cable or strap must be protected by a suitable device to prevent cutting when the mobile home is buffeted by the wind. Likewise, special adapters must be installed to prevent the cable or strap from knifing through the mobile home.

8. Connection of the cable frame tie to the I-beam (or other shape) main structural-frame member should be by a 5/8" drop-forged closed eye bolted through a hole drilled in the center of the I-beam web. A washer, or equivalent, should be used so that the beam is sufficiently reinforced around the hole. If steel-strap ties are used, care should be exercised to ensure that minimum bending radius is adhered to so that the breaking strength of the strap is not reduced.
9. Frame ties should connect the anchor and the steel I-beam (or other shape) main structural frame member which runs lengthwise under the mobile home. Frame ties CANNOT BE CONNECTED to any of the steel outrigger beams which fasten to and intersect the main I-beams at right angles. The outriggers do not have adequate strength to resist the frame tie loadings during high winds.

   Mobile home ground anchors shall meet the following requirements:

   1. Ground anchors should be aligned with centers of piers. Also, they should be situated immediately below the outer wall to accommodate over-the-top as well as frame ties.
   2. Auger-type anchors shall have a minimum diameter of 6 inches (arrowheads 81') and be sunk to their full depth (at least four inches). Steel rods shall be at least 5/8" in diameter, have a forged or welded eye at top, or have a yoke-type fastening and tensioning device or a threaded connector and tensioning device.
   3. Anchors shall be capable of withstanding 5,700 pounds of pull (in a vertical or diagonal direction) without failure. This loading can be achieved by many anchors in most kinds of soils.
   4. Deadman anchors shall be sunk to a depth of five feet, have a minimum length of two feet, and have a diameter of at least six inches. Hollow concrete blocks are not approved. Steel rods shall be at least 5/8" in diameter, with a bottom hooked into the concrete deadman.
   5. Anchors to reinforced concrete slabs must be of strength comparable to that presented above.



Age requirements: Any mobile home brought into the county or relocated within the county requires a building permit. For a building permit to be issued the owner must provide the title for the mobile home. Any mobile home that is older than 15 years from the manufacture date will need to apply for a variance. Pictures of the mobile home inside and out will be required in the variance process. Once a building permit has been issued for moving in a mobile home the building permit will expire within 6 months of the issued date and can only be renewed one time after expiration of building permit.

Appendix B
Industrial Performance Standards

1. Physical Appearance. All operations shall be carried on within an enclosed building except that new materials or equipment in operable condition may be stored in the open. Normal daily wastes of an inorganic nature may be stored in containers not in a building when such containers are not readily visible from the street
2. Fire Hazard. No operation shall involve the use of highly flammable gases, acid, liquids, grinding processes or other inherent fire hazards. This provision shall not be construed to prohibit the use of normal heating fuels, motor fuels, and welding gases when handled in accordance with other county ordinances.
3. Noise. No operation shall be carried on which involves noise in excess of the normal traffic noise of the adjacent street at the time of the daily peak hour of traffic volume. Noise shall be measured at the property line and when the level of such noise cannot be determined by observation with the natural senses, a suitable instrument may be used and measurement may include breakdowns into a reasonable number of frequency ranges. All noises shall be muffled so as not to be objectionable due to intermittence, beat frequency, or shrillness.
4. Sewage and Liquid Wastes. No operation shall be carried on which involves the discharge into a sewer, water course, or the ground, of liquid wastes of any radioactive nature, or liquid wastes of a chemical nature which are detrimental to normal sewage plant operation or corrosive and damaging to sewer pipes and installations.
5. Air Contaminants. Air contaminants and smoke shall be less dark than designated Number One on the Ringleman Chart as published by the United States Bureau of Mines, except that smoke of a density designated as Number One shall be permitted for one (1) four (4) minute period each one-half (1/2) hour. Light-colored contaminants of such opacity as to obscure an observer's view to a degree equal to or greater than the aforesaid shall not be permitted.

Particular matter of dust as measured at the point of emission by any generally accepted method shall not be emitted in excess of two-tenths (.2) grains per cubic foot as corrected to a temperature of five hundred (500) degrees Fahrenheit, except for a period of four (4) minutes in any one-half (1/2) hour at which time it may equal but not exceed six-tenths (.6) grains per cubic foot as corrected to a temperature of five hundred (500) degrees Fahrenheit.

Due to the fact that the possibilities of air contamination cannot reasonably be comprehensively covered in this section, there shall be applied the general rule that there shall not be discharged from any sources whatsoever such quantities of air contaminants or other material in such quantity as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public in general or to endanger the comfort, repose, health or safety of any such considerable number of persons or to the public in

general or to cause or have a natural tendency to cause injury or damage to business, vegetation, or property.

6. Odor. The emissions of odors that are generally agreed to be obnoxious to any considerable number of persons shall be prohibited. Observations of odor shall be made at the property line of the establishment causing the odor. As a guide to classification of odor, it shall be deemed that strong odors of putrefaction and fermentation tend to be obnoxious, and that such odors as associated with baking or the roasting of nuts and coffee shall not normally be considered obnoxious within the meaning of this Ordinance.
7. Gases. The gases sulphur dioxide and hydrogen sulphide shall not exceed five (5) parts per million. All nitrous fumes shall not exceed one (1) part per million. Measurements shall be taken at the property line of the particular establishment involved.
8. Vibration. All machines, including punch presses and stamping machines, shall be so mounted as to minimize vibration and in no case shall such vibration exceed a displacement of three thousandths (3/1,000) of an inch measured at the property line. The use of steam or broad hammers shall not be permitted in this district.
9. Glare and Heat. All glares, such as welding arcs and open furnaces, shall be shielded so that they shall not be visible from the property lines. No heat from furnaces or processing equipment shall be sensed at the property line to the extent of raising the temperature of air or materials more than five (5) degrees Fahrenheit.

APPENDIX D

CONCENTRATED ANIMAL FEEDING OPERATION (CAFO) REGULATIONS

Definitions

Animal Manure: Poultry, livestock, or other animal excreta or mixture of excreta with feed, bedding, or other materials.
Applicant: An individual, a corporation, a group of individuals, partnership, joint venture, owners, or any other business entity having charge or control of one or more concentrated animal feeding operations.
Concentrated Animal Feeding Operation (CAFO): A lot or facility that stables or confines and feeds or maintains animals for a total of 45 days or more in any 12-month period and where crops, vegetation, forage growth, or post harvest residues are not sustained over any portion of the lot or facility, and meets the criteria for class sizes as found in Table 1.1.1.
Letter of Assurances. A list of conditions signed by the applicant for a permit acknowledging agreement to follow the conditions of the permit
Permit: A permit required by these regulations unless stated otherwise.
Residence: A home must be occupied six (6) months out of the year and have utility hook ups.
Setback: The distance required for an operation to be measured from a particular entity. Setbacks are measured from the outermost point of the feedlot and the lagoon to the structure/use as identified on Table 1.1.3.
Shall: *Shall* means that the condition is an enforceable requirement of this permit.

Should: *Should* means that the condition is a recommendation. If violations of the permit occur, the County will evaluate whether the producer implemented the recommendations contained in this permit that may have helped the producer to avoid the violation.

General Requirements.

An adequate supply of healthy livestock, poultry and other animals is essential to the well-being of county citizens and the State of South Dakota. This section applies to any concentrated animal feeding operation (CAFO) constructed or used after the effective date of October 31st 2017. Any facility shall be sufficiently separated from other land uses so as not to unreasonably interfere with or burden the enjoyment of other neighboring lands, consistent with the policy established under this Ordinance. All concentrated animal feeding operations shall comply with the regulations as outlined herein.

If a Class A or B concentrated animal feeding operation, which has a previously issued county permit, changes ownership; the state will transfer the permit. The county will update the permit after the applicant provides proof of state approval. If a Class C concentrated animal feeding operation, which was a previously issued county permit, changes ownership; the new owner will notify the county so that the permit may be updated. The new owner will be required to abide by the permit requirements and letter of assurances that were issued under the permit application. If the county is not notified of the transfer within sixty (60) days, there will be a $200 penalty fee.

Classes of Concentrated Animal Feeding Operations:

Concentrated animal feeding operations are hereby classified as Class A, B, C or D concentrated animal feeding operations and are defined by the number of animal as listed in Table 1.1.1.

Number of Animals to Define Classes of Concentrated Animal Feeding Operations
Table 1.1.1

TYPE OF ANIMAL FEEDING OPERATION	Class A: ANIMAL NUMBERS EQUAL TO	Class B: ANIMAL NUMBERS EQUAL TO	Class C: ANIMAL NUMBERS EQUAL TO	Class D: ANIMAL NUMBERS EQUAL TO
Dairy Cows (mature-milked or dry) & Buffalo	3,501 to 7,000	701 to 3,500	200 to 700	199 or less
Cattle other than mature dairy cows or veal calves*	5,001 to 10,000	1,001 to 5,000	300 to 1,000	299 or less
Swine (weighing more than 55 pounds)	12,501 to 25,000	2,501 to 12,500	750 to 2,500	749 or less
Swine (weighing less than 55 pounds)	50,001 to 100,000	10,001 to 50,000	3,000 to 10,000	2,999 or less

Sheep, Lambs, or Goats	**50,001 to 100,000**	**10,001 to 50,000**	**3,000 to 10,000**	**2,999 or less**
Turkeys	**280,001 to 550,000**	**55,001 to 280,000**	**17,000 to 55,000**	**16,999 or less**
Laying hens or broilers, and Pheasants**	**150,001 to 300,000**	**30,001 to 150,000**	**9,000 to 30,000**	**8,999 or less**
Chickens, other than laying hens***	**625,001 to 1,250,000**	**125,001 to 625,000**	**38,000 to 125,000**	**37,999 or less**
Laying hens ***	**410,001 to 820,000**	**80,001 to 410,000**	**25,000 to 80,000**	**24,999 or less**
Ducks **	**25,001 to 50,000**	**5,001 to 25,000**	**1,500 to 5,000**	**1,499 or less**
Ducks ***	**150,001 to 300,000**	**30,001 to 150,000**	**9,000 to 30,000**	**8,999 or less**
Geese	**150,001 to 300,000**	**30,001 to 150,000**	**9,000 to 30,000**	**8,999 or less**
Horses	**2,501 to 5,000**	**501 to 2,500**	**150 to 500**	**149 or less**

If applying for a larger number of head than Class A allows, the applicant must first obtain a Variance from the Board of Adjustments. Subject to approval of the variance, for every 1 Animal Unit (AU) over Class A, 1ft will be added to the setback distance.

Table 1.1.2 Animal Ratios to Calculate Class for Multiple Species Under Common Ownership

Cattle other than mature dairy cows or veal calves*	1
Dairy cows (mature – milked or dry & buffalo)	1.4
Swine (weighting more than 55 pounds)	0.4
Swine (weighting less than 55 pounds)	0.1
Sheep, Lambs, or Goats	0.1
Turkeys	0.018
Laying hens or broilers, and Pheasants**	0.033
Chickens, other than laying hens***	0.008
Laying hens***	0.0122
Ducks**	0.2
Ducks***	0.033
Geese	0.033
Horses	2

NOTES:

*** *Cattle* includes, but is not limited to, heifers, steers, bulls, and cow/calf pairs.**
**** Animal feeding operation uses a liquid manure handling system.**
***** Animal feeding operation uses other than a liquid manure handling system.**

Concentrated Animal Feeding Operation Permit Requirements

Two (2) or more concentrated animal feeding operations under common ownership are a single concentrated animal feeding operation if they adjoin each other (within one mile) or if they use a common area or system for disposal of manure. Required setbacks for the two (2) or more concentrated animal feeding operations treated as a single operation shall not be less than the minimum setback required for each operation if said operations were treated as individual operations. (See Table 1.1.2)

Any person who owns, operates, or proposes to own or operate a Class A, B, or C concentrated animal feeding operation as defined in these regulations, shall be required to apply for a conditional use permit pursuant to these regulations whenever any of the following occurs:

1. A new concentrated animal feeding operation is proposed where one does not exist.

2. An expansion of a concentrated animal feeding operation is proposed that exceeds the number of animal units allowed by an existing county-issued permit.

3. An expansion in the number of animal units of a concentrated animal feeding operation, without a county-issued permit, that existed prior to October 31st 2017 which would result in the creation of either a Class A, B or C concentrated animal feeding operation

4. A change in ownership of a Class C concentrated animal feeding operation which does not have a previously issued county-permit.

5. An existing concentrated animal feeding operation is to be restocked after being idle for five (5) or more years.

6. A signed complaint has been received and/or documented by the County Zoning Administrator or South Dakota Department of Environment and Natural Resources and after inspection reveals that the concentrated animal feeding operation is in violation of County or State regulations.

Concentrated Animal Feeding Operation Control Requirements:

1. Required Minimum Setbacks and Separation Distance for New Classes A, B, and C Concentrated Animal Feeding Operations and those Existing Concentrated Animal Feeding Operations without a County issued permit expanding into a Class A, B, and C Concentrated Animal Feeding Operations after (October 31, 2017). See Table 1.1.3.

Minimum Setbacks 1.1.3

	CLASS A	CLASS B	CLASS C	CLASS D
1. Established Residences not including owners/ operators	**2 miles**	**3,960 feet**	**2,640 feet**	
2. Churches, Businesses, & Commercially-zoned Areas	**2 miles**	**5,280 feet**	**5,280 feet**	
3. Incorporated Municipality	**3 miles**	**2.5 miles**	**2 miles**	
4. Federal, State, & County road ROW ~~housed~~	**300 feet**	**300 feet**	**300 feet**	
5. Township road ROW	**150 feet**	**150 feet**	**150 feet**	

1. **Additional Setback and Separation Distance Requirements for Classes A, B and C Concentrated Animal Feeding Operations.**

   a. **Considerations to Increase Setbacks and/or Separation Distances**

   The facility shall be sited not closer than those distances indicated in Table 1.1.3. These setbacks are minimum standards that may be increased by the Board of Adjustment during the conditional use permit issuance process due to concerns of the size of the operation or circumstances unique to a specific concentrated animal feeding operation permit application. Setbacks shall be measured from the outermost point of the feedlot and the lagoon to the structure/use as identified on Table 1.1.3.

   b. **Considerations to Decrease Setbacks and/or Separation Distances**

   If an applicant wishes to place a concentrated animal feeding operation closer than the separation distances set forth in these regulations, the applicant shall obtain Waivers of Distance from all residential property owners within the separation distance. If the applicant obtains waivers from all residential owners of property within the separation distance, the Zoning Administrator will file the waivers with the Register of Deeds. If the applicant cannot obtain waivers from all residential owners of property within the separation distance, they may request a hearing from the Board of Adjustment. Some considerations for allowing decreased setbacks and/or separation distances includes, but is not limited to, the use of a vegetative buffer, deep pit manure management, or any additional recommendations for odor control from the county. Any authorized person, business, or governmental entity that is within the separation distance may waive the separation distance through a written instrument to be filed with the County Register of Deeds. This waiver will accompany the sale and/or transfer of the land.

3. **Exemptions** to Setback and/or Separation Distance Requirements

a. All Concentrated Animal Feeding Operations (CAFO) in operation prior to October 31 2017, which do not comply with the minimum setback requirements, but continue to operate, and are not expanded in a manner which will result in one of the following examples are exempt from setback/separation distance requirements:

Example 1: Class D CAFO expands to a Class A, B, or C CAFO.
Example 2: Class C CAFO expands to a Class A or B CAFO.
Example 3: Class B CAFO expands to a Class A CAFO.
Example 4: Class A CAFO expands by 15% of the number of animal units

b. A concentrated animal feeding operation which is expanded or constructed, if the title holder of the land benefiting from the distance separation requirement executes a written waiver with the title holder of the land where the CAFO is located, under such terms and conditions which the parties may negotiate. The written waiver becomes effective only upon the recording of the waiver in the office of the Register of Deeds in the county. The title holder of the land benefiting from the distance separation requirement land is the individual or individuals, business entity, governmental entity, bona-fide religious institution, or educational institution from which separation is required. The waiver shall be binding upon the heirs, successors, and assigns of the title holder and shall pass with the land.

c. A concentrated animal feeding operation which is constructed or expanded closer than the required setback/separation distance from the corporate limits of a city, if the incorporated community approves a written waiver. The written waiver becomes effective only after it's recorded with the Register of Deeds.

d. A concentrated animal feeding operation which existed prior to the creation of a residence, educational institution, commercial enterprise, bona-fide religious institution, incorporated community, if the residence, educational institution, commercial enterprise or bona-fide institution was constructed or expanded or the boundaries of the incorporated community were expanded, after the date that the animal feeding operation was established. The date that the concentrated animal feeding operation was established is the date on which concentrated animal feeding operation commenced operating. A change in ownership or expansion shall not change the date of operation.

e. It is the intention of the Board of Adjustment in the enforcement of this ordinance that when an operator of an existing Concentrated Animal Feeding Operation applies for a permit to expand to another class level, the standards that apply to the expansion will not be applied to existing structures that were built in compliance with accepted industry standards in existence at the time of the construction of such facilities.

4. Standards for Conditional Use Permits

a. The Board of Adjustment or the County Zoning Administrator may request information relating to concentrated animal feeding operations not contained in these regulations.

b. The Board of Adjustment may impose, in addition to the standards and requirements set forth in these regulations, additional conditions which the Board of Adjustment considers necessary to protect the public health, safety and welfare.

c. Conditional Use permits for concentrated Animal Feeding Operations shall be in effect only as long as other provisions of the permit are being adhered to.

d. When considering an application, the Board of Adjustment will take into consideration current and past violations relating to concentrated animal feeding operations that the applicant has or had an interest in.

e. A CAFO that adjoins between two counties will follow the regulations of the county that is most restrictive.

f. Permit applicants will be required to file a letter of assurances as required by the Board of Adjustment. The letter of assurances will be prepared by the county and-signed by both the applicant and the Chair of the Board of Adjustment. The permit for the concentrated animal feeding operation is based upon compliance with the regulations herein, and letter of assurances. Any violation of these regulations or non-compliance with the letter of assurances shall be cause for revoking a permit. If a violation of these regulations or non-compliance with the letter of assurance occurs, permit holders will be notified by registered mail and a hearing before the Board of Adjustment will be held concerning status of the permit. The Board of Adjustment shall either revoke the permit or set a time line for compliance. If compliance is not met, the permit shall be revoked and the permit holder ordered to cease operations.

g. It is declared unlawful for any person, firm, or corporation to violate any of the terms or provisions of the concentrated animal feeding operation ordinances. Violation of this ordinance shall be a misdemeanor and may be punishable by a fine of up to two hundred ($200) dollars for each and every day that any violator fails to comply with the provisions of this ordinance.

h. The county will follow State regulations for time allowed to complete construction of a new CAFO.

5. **Information Required for Class A, B, C and D Concentrated Animal Feeding Operation**

a. Owner's, manager's, management company's or similar entities name, address and telephone number.

b. Legal descriptions of site.

c. The number and type of animals to be housed by the proposed concentrated animal feeding operation.

d. Concentrated Animal Feeding Operations shall obtain a State General Permit pertaining to the animal species of the Concentrated Animal Feeding Operation, if required by the State of South Dakota. A County conditional use permit may be approved conditioned upon receiving a State General Permit.

e. Information on ability to meet designated setback requirements, including maps showing measured distances and site plan.

f. Notification / Road Agreement of whomever maintains the access road (township and county).

TITLE 17.19 COUNTY PLANNING AND ZONING BOARD

Chapter 17.19 Planning and Zoning Board/Zoning Board of Adjustment

17.1901 Proceedings of the Planning and Zoning Board. The County Planning and Zoning Board shall serve as a Board of Adjustment . The County Planning and Zoning Board shall adopt rules necessary for the conduct of its affairs and keeping with the provisions of this Ordinance. The County Planning and Zoning Board shall keep a record of all proceedings. Meetings shall be held at the call of the Zoning Administrator and at such other times as the Planning and Zoning Board may determine. The Zoning Administrator, or in his/her absence the Director of Equalization, may administer oaths and compel the attendance of witnesses. All meetings shall be open to public. The Planning and Zoning Board shall keep minutes of its proceedings, showing the vote of each member upon each question, or if absent or failure to vote indicating such fact, and shall keep records of its examinations and other official actions, all of which shall be a public record and be immediately filed with the Secretary of the Planning Board. The Planning and Zoning Board shall adopt sub-regulations as it deems necessary to carry appropriate provisions of this Ordinance into effect.

17.1902 Powers and Duties of the Board.

1. The Planning and Zoning Board may initiate proposed amendments to this Ordinance.
2. The Planning and Zoning Board shall review all proposed amendments to this Ordinance and make recommendations to the Board of County Commissioners.
3. The Planning and Zoning Board shall have all other responsibilities designated to it by this Ordinance and South Dakota Law.

17.1903 Rezoning, Conditions Governing Applications, and Procedures. The Planning and Zoning Board shall have power to hear and decide, in accordance with the provisions of this Ordinance, requests for rezoning or for decisions upon other special questions upon which the Planning and Zoning Board is authorized by this Ordinance to pass; to decide such questions as are involved in determining whether rezoning should be granted; and to grant rezoning with such conditions and safeguards as are appropriate under this Ordinance, or to deny rezoning when not in harmony with the purpose and intent of this Ordinance. A rezoning request shall not be granted by the Planning and Zoning Board unless and until:

1. A Petition for Rezoning is submitted to the Zoning Administrator, indicating the chapter of this Ordinance under which the rezoning is sought and stating the grounds on which it is requested. An individual landowner may petition the board to change the zoning of all or any part of the landowner's property. Notice shall be given in the legal newspaper ten days prior to the public hearing by the Planning and Zoning Board.

2. Notice shall be sent to the adjacent/abutting landowners and the local government entity by certified letter at least seven (7) days prior to a hearing on the request and shall state the date, time, and place of the hearing. The notice will be sent by the requesting landowner, showing proof of notice to the Zoning Administrator. Property is considered abutting even though it may be separated from the property of the petitioner by a public road or highway.

3. The public hearing shall be held by the Planning and Zoning Board. Any party may appear in person or by agent or by attorney.

4. The Planning and Zoning Board shall make a finding of facts that it is empowered under the chapter of this Ordinance described in the application to grant the rezoning, and that the granting of the rezoning will not adversely affect the public interest.

5. Before any rezoning shall be issued, the Planning and Zoning Board shall make written findings certifying compliance with the specific rules governing individual rezoning requests and that satisfactory provisions and arrangements have been made concerning the following to the Spink County Commissioners, where applicable:

    a. Ingress and egress to property and proposed structures thereon with particular reference to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire or catastrophe;

    b. Off-street parking and loading areas where required, with particular attention to the items in "a" above and the economic, noise, glare or other effects of the general exception on adjoining properties and properties generally in the district;

    c. Refuse and service areas, with particular reference to the items in "a" and "b" above;

    d. Utilities, with reference to locations, availability, and compatibility;

    e. Screening and buffering with reference to type, dimensions, and character;

    f. Signs, if any, and proposed exterior lighting with reference to glare, traffic safety, economic effect and compatibility and harmony with properties in the district;

    g. Required yards and other open spaces; and

    h. General compatibility with adjacent properties and other property in the district.

6. Upon application, pursuant to the provisions of this Ordinance, conditions, and safeguards may be imposed as are appropriate. These conditions may specify time limits or address other matters pertinent to the issuance of a rezoning request. If conditions and safeguards established are not met, the rezoning request shall be declared unlawful and constitute a violation. Classified rezoning shall be authorized only if they meet the following criteria:

    a. Fire Hazard. The use shall not include any activity involving the use or storage of flammable or explosive material unless protected by adequate fire-fighting and fire-suppression equipment and by such safety devices as are normally used in the handling of any such material.

    b. Noise. The use shall not include noise which is objectionable due to volume, frequency, or beat unless muffled or otherwise controlled.

    c. Vibration. The use shall not include vibration which is discernible without instruments on any adjoining lot or property.

    d. Air Pollution. The use shall not involve any pollution of air by fly ash, dust, vapors, or other substances which are harmful to health, animals, vegetation, or other property or which can cause soiling, discomfort, or irritation.

    e. Odors. The use shall not involve any malodorous gas or matter which is discernible to any adjoining lot or property.

    f. Glare. The use shall not involve any direct or reflected glare that is visible from any adjoining property or from any public streets, road, or highway.

    g. Traffic Hazard. The use shall not involve any activity substantially increasing the movement of traffic on public streets unless procedures are instituted to limit traffic hazards and congestion. No single use or density of development should generate traffic volumes on any public street in excess of one hundred (100) vehicle trips per day per acre.

    h. Sewer and Water. The use shall not involve an activity which will substantially increase the burden on the water supply or cause sewage treatment problems unless provision is made for necessary adjustments.

    i. Character of Neighborhood. The use shall not involve any activity not in character with the majority of the uses in the neighborhood unless, by design, setback, nature of operation, and other devices, the character of the neighborhood will be maintained.

j. General Welfare of the Community. The use shall not involve any activity which adversely affects the general welfare to the community.

7. Notice is given by the County Auditor in the legal newspaper ten days prior to a hearing of the County Commission.

8. County Commissioners hold the rezoning hearing and take action based upon the finding of facts recommended by the Planning and Zoning Board. If approved by the County Commissioners, it becomes effective twenty (20) days after a summary of the action is published in the County's legal newspaper.

9. The Zoning Administrator files the approved meeting minutes with the Register of Deeds.

9. Any changes to zoning district boundaries must be made in accordance with 17.0402, Zoning Map Changes.

10. *It is advisable for the notice to list BOTH the Planning and Zoning Board meeting date and the required County Commission meeting dates. This way, if there is any opposition, it will surface at the Planning and Zoning Board level and may affect their recommendation to the full board of County Commissioners.

11. It is also to be noted that the party responsible for getting the plat prepared (whether by an engineer or other service), if needed, is responsible for turning the appropriate plat documents over to the County to be filed.

TITLE 17.18 ADMINISTRATIVE PROCEDURES AND ENFORCEMENT-BUILDING PERMITS AND APPROACH

Chapter 17.18 Administration and Enforcement

17.1801 Zoning Administrator.
The provisions of this Ordinance shall be administered and enforced by a County Zoning Administrator appointed by the Board of County Commissioners, who shall have the power to make inspection of buildings or premises necessary to carry out his duties in the enforcement of this Ordinance.

17.1802 Duties.
The powers and duties of the Zoning Administrator shall be as follows:

1. Issue all building/use permits and make and maintain records thereof.

2. Conduct inspections of buildings, structures, and the use of land to determine compliance with this Ordinance.

3. Notify in writing persons responsible for violations, indicating the nature of the violation and ordering action necessary to correct.

4. Order discontinuance of illegal use of land, buildings, or structures; removal of illegal buildings or structures or of illegal additions; alterations or structural changes; discontinuance of any illegal work being done; or shall take any other action authorized by this Ordinance to ensure compliance with or to prevent violation of its provisions.

5. Revoke any permit, which was unlawfully issued, or any permit wherein defective work has been performed, and when such work has not been corrected within ninety (90) days of notification.

6. Maintain permanent and current records of this regulation, including, but not limited to, all maps, amendments, variances, appeals, and applications.

7. Prepare documents, easements, letters of assurance, waivers, etc. as required by this Ordinance, or at the direction of the Spink County Board of Adjustment and/or Spink County Commissioners.

8. Provide public information relative to all matters arising out of this Ordinance.

9. Forward to the Board of Adjustment, applications for appeals, conditional uses, variances, or other matters on which the Board of Adjustment is required to pass under this ordinance.

10. Initiate, direct, and review, from time to time, a study of the provisions of this ordinance, and to make such reports available to the Planning and Zoning Board.

11. The Zoning Administrator shall receive applications required under this ordinance, specifically but not limited to Building Permits, Conditional Uses, Variances, and Rezonings.

    a. For building permits, the Zoning Administrator shall approve the application only in accordance with the provisions of the County's Zoning Ordinance.

    b. For Conditional Uses and Variances, the Zoning Administrator shall review the application, and shall make recommendations regarding said application to the Board of Adjustment.

c. For Rezonings, the Zoning Administrator shall review the application, and shall make recommendations regarding said application to the Planning and Zoning Board and Board of County Commissioners.

17.1803 Building Permits Required. Building permits are required in the following instances:

1. For any new structure, or improvements to existing structures, in which the market value of the improvement, including labor done by self or hired labor and materials exceeds twenty-five hundred ($2,500) dollars.

2. For structures that are being moved, regardless of the cost incurred in moving the structure. (Effective 3-07-06)

3. For any structure, regardless of cost, if additional land or area is required for it to be sited on. No structure, which meets any one of the above criteria, shall be erected, partially erected, moved, added to, or structurally altered without a permit issued by the Zoning Administrator.

4. No building permit shall be issued by the Zoning Administrator except in conformity with the provisions of this Ordinance, unless he/she received a verbal approval from the Board of Adjustment in the form of an administrative review, conditional use, or variance as provided by this Ordinance.

5. Any mobile home brought into the county requires a building permit. For a building permit to be issued the owner shall provide the title for the mobile home or a governmental document stating age and ownership. Any mobile home that is older than 15 years from the manufacture date will need to apply for a variance. Pictures of the mobile home inside and out will be required in the variance process.

17.1804 Application for Building Permit. All applications for building permits shall show the actual dimensions and shape of the lot to be built upon; the exact sizes and locations on the lot of buildings already existing, if any, and the location and dimensions of the proposed building or alteration. The application shall include such other information as lawfully may be required by the Zoning Administrator, including existing or proposed building or alteration; existing or proposed uses of the building and land; the number of families, housekeeping units, or rental units the building is designed to accommodate; conditions existing on the lot; and such other matters as may be necessary to determine conformance with, and provide for the enforcement of this Ordinance.

One cardboard copy of the building permit shall be given to the applicant by the Zoning Administrator after he/she has marked the application as approved and attested to same by his/her signature on such copy. If a building permit is refused, the Zoning Administrator shall state the reasons for such refusal in writing. The original and one copy of the application, similarly marked, shall be retained by the

Zoning Administrator. The issuance of a building permit shall, in no case, be construed as waiving any provisions of this Ordinance.

17.1805 Expiration of Building Permit. If the work described in any building permit has not begun within ninety (90) days from the date of issuance, or is not completed within two (2) years from the date of issuance thereof, said permit shall expire. It shall be cancelled by the Zoning Administrator, and written notice thereof shall be given to the persons affected, together with notice that further work as described in the cancelled permit shall not proceed unless and until a renewed building permit has been obtained at half the price of the original permit cost. A permit may be renewed two (2) times, after that a new permit shall be required. If substantial changes have been made to the original building permit, a new permit shall be required. Building permits issued to move in a mobile home shall expire within six months from the issue date and will only be renewed one time before it is expired.

17.1806 Construction and Use to be as provided in Applications and Permits. Building permits issued on the basis of applications approved by the Zoning Administrator authorized only the use, arrangement, and construction set forth in such approved application and no other use, arrangement, or construction. Use, arrangement, or construction at variance which is unauthorized shall be deemed a violation of this Ordinance, and punishable as provided by Title 17.23.

17.1807 Building Permit Fees. All building permits shall be obtained by application of the owner or builder. It is the owner's and builder's responsibility to obtain a permit prior to construction on property owned or leased. The fee for a building permit will be as follows in Fee Schedule which shall be adopted every January and is available for viewing in the Equalization office, refundable only if the request for a building permit is denied.

17.1808 Municipalities May Issue Building Permit. Only the Finance Officer of the City of Doland may issue building permits to residents of such respective community, unless any such Finance Officer prefers the County to issue the permit. All building permits will be forwarded to the Zoning Administrator, along with any money received from the applicant. If an applicant is denied a building permit from the municipality, the applicant may appeal to the Planning and Zoning Board/Zoning Administrator. No other municipality shall be allowed to issue building permits unless authorized by the Zoning Administrator.

17.1809 Building Permit in Conspicuous Places. All building permits issued by the Zoning Administrator must be placed in a conspicuous location on the building site for the duration of the construction or work described.

17.1810 Matters Coming Before Board of Zoning Adjustment, Fees. Fees for matters coming before the Board of Zoning Adjustment shall be as follows in Fee Schedule.

17.1811 Selling Landowner Must Plat Land. Any landowner(s) selling part of his/her property, building a subdivision, or dividing his/her property into smaller pieces is responsible for getting the plat prepared (whether by an engineer or other service), paying for the plat information, and turning the appropriate plat documents over to the County to be filed. Platting of land is required, regardless of whether the land in question is to be rezoned.

The process and regulations that are required for this are listed below as such:

1. Minimum Lot Requirements
   A plat is required whenever twenty (20) acres or less are split out of a larger parcel, as required in Chapter 17.07. (Effective 3-7-06)

2. Application Fee
   The landowner and the Equalization Office must fill out the Checklist for Filing a Plat. The landowner shall then pay to the Equalization Office all application fees as stated on the checklist.

3. Plat Application
   All plat submittals shall be in conformance with the design standards set forth in Appendix E (Spink County Subdivision and Minor Plat and Replat Regulations)

TITLE 17.13 WIND ENERGY CONVERSION SYSTEMS (WECS)

17.1301 Definitions

Construction — Any clearing of land, excavation, or other action that would adversely affect the natural environment of the site or route but does not include changes needed for temporary use of sites or routes for non-utility purposes, or uses in securing survey or geological data, including necessary borings to ascertain foundation conditions.

High Voltage Transmission Line — A conductor of electric energy and associated facilities.

Large Wind Energy Conversion System or LWECS — All WECS facilities excluding Small Wind Energy Conversion Systems.

Person — An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, consumers power district, or any other entity, public or private, however organized.

Route — The location of a High Voltage Transmission Line between two endpoints. The route may have a variable width of up to 1.25 miles.

Private Wind Energy Conversion System or PWECS — A WECS facility with a single Tower Height of less than seventy-five (75) feet used primarily for on-site consumption of power.

Tower Height — The height above grade of the fixed portion of the tower, excluding the wind turbine itself

System Height — The height above grade of the tallest point of the WECS, including the rotor radius.

Turbine — The parts of the WECS including the blades, generator and tail.

Utility — Any person engaged in the generation, transmission or distribution of electric energy in this state including, but not limited to, a private investor owned utility, a cooperatively owned utility, a consumer's power district and a public or municipal utility.

Wind Energy Conversion System or WECS — A commonly owned and/or managed integrated system that converts wind movement into electricity. All of the following are encompassed in this definition of system:

a) Tower or multiple towers, including foundations;

b) Generator(s);

c) Blades;

d) Power collection systems, including padmount transformers;

e) Access roads, meteorological towers, on-site electric substation, control building, and other ancillary equipment and facilities; and

f) Electric interconnection systems or portion thereof dedicated to the WECS.

17.1302 Private Wind Energy Conversion Systems (PWECS). The regulations regarding Private Wind Energy Conversion Systems (hereafter referred to as PWECS) shall be as follows:

1. Limited Use. No PWECS installed in accordance with the requirements of these regulations shall generate power as a commercial enterprise as defined by the Public Utility Commission.

2. Setback Requirements. The minimum distance between the property line, overhead utility lines or another wind turbine, and any turbine support base of a PWECS shall be equal to the proposed turbine hub height (plus the radius of the rotor for the horizontal access machines).

3. Contiguous property owners and planned developments may construct a PWECS for their use in common. If property held by more than one (1) single owner is used to meet the setback requirements, a site plan establishing easements or reserved areas must be submitted to the Board of Adjustment for their approval.

4. Turbine Access. Climbing access to the PWECS turbine shall be limited either by means of a fence six (6) feet high around the turbine base with a locking portal, or by limiting turbine climbing apparatus so there is access to it no lower than twelve (12) feet from the ground.

5. Electromagnetic Interference. If a PWECS is installed in any location along or within the major access of an existing microwave communications link, the person desiring to install the PWECS shall be required to provide a letter from the business whose link they are within or adjacent to stating that the business whose link is affected would have no objection to the installation of the PWECS.

6. Air Space. A PWECS shall be located or installed in compliance with the guidelines of the Federal Aviation Administration Regulations with regard to Airport Approach Zones and clearance around VOR stations.

7. Interconnect. The PWECS, if interconnected to an electric utility distribution system, shall meet the interconnect requirements of the electric utility company.

17.1303 Permit Requirements

1. Building Permit. A building permit shall be required for the installation of a PWECS.

2. The building permit shall be accompanied by a plot plan which shall include at a minimum the following:

    a) Property lines and physical dimensions of the property;

    b) Location, dimensions, and types of existing major structures on the property;

    c) Location of the proposed PWECS;

    d) The right-of-way of any public road that is contiguous with the property;

    e) Any overhead utility lines;

    f) Wind system specifications, including manufacturer and model, rotor

g) diameter, tower height, and tower type (monopole, lattice, guyed);

h) Tower foundation blueprints or drawings;

i) Tower blueprint or drawing;

j) Proof of notification to the utility in the service territory in which the PWECS is to be erected;

k) The status of all necessary interconnection agreements or studies.

l) Easement agreements and separate landowner agreements;

1) The Board may also request additional information and documents should they deem it necessary in order to properly review the application.

3. Conditional Use Hearing. A Conditional Use hearing shall be required for the installation of a PWECS.

4. Expiration. A permit issued pursuant to this ordinance shall expire if

a) The PWECS is not installed and functioning within two (2) years from the date the permit is issued; or

b) The PWECS is out of service or otherwise unused for a continuous one (1) year period.

17.1304 Wind Energy Conversion System (WECS) Requirements

The requirements of these regulations shall apply to all WECS facilities except private facilities with a single turbine height of less than seventy-five (75) feet and used primarily for on-site consumption of power.

17.1305 Federal and State Requirements

All WECSs shall meet or exceed standards and regulations of the Federal Aviation and South Dakota State Statutes and any other agency of federal or state government with the authority to regulate WECSs.

17.1306 General Provisions

1. Mitigation Measures

a. Site Clearance. The permittees shall disturb or clear the site only to the extent necessary to assure suitable access for construction, safe operation and maintenance of the WECS.

b. Topsoil Protection. The permittees shall implement measures to protect and segregate topsoil from subsoil in cultivated lands unless otherwise negotiated with the affected landowner.

c. Compaction. The permittees shall implement measures to minimize compaction of all lands during all phases of the project's life and shall confine compaction to as small an area as practicable.

d. Livestock Protection. The permittees shall take precautions to protect livestock during all phases of the project's life.

e. Fences. The permittees shall promptly replace or repair all fences and gates removed or damaged during all phases of the project's life unless otherwise negotiated with the affected landowner.

f. Roads

i. Public Roads. Prior to commencement of construction, the permittees shall identify all state, county or township "haul roads" that will be used during the construction of the WECS project and shall notify the state, county or township governing body having jurisdiction over the roads to determine if the haul roads identified are acceptable. The governmental body shall be given adequate time to inspect the haul roads prior to use of these haul roads. Where practical, existing roadways shall be used for all activities associated with the WECS. Where practical, all-weather roads shall be used to deliver cement, turbines, meteorological towers, assembled nacelles and all other heavy components to and from the site.

ii. The permittees shall, prior to the use of approved haul roads, make satisfactory arrangements with the appropriate state, county or township governmental body having jurisdiction over approved haul roads for construction of the WECS for the maintenance and repair of the haul roads that will be subject to extra wear and tear due to transportation of equipment and WECS components. The permittees shall notify the County of such arrangements upon request of the County.

iii. Turbine Access Roads. Construction of turbine access roads shall be minimized. Access roads shall be low profile roads so that farming equipment can cross them and shall be covered with Class 5 gravel or similar material. When access roads are constructed across streams and drainage ways, the access roads shall be designed in a manner so runoff from the upper portions of the watershed can readily flow to the lower portion of the watershed.

iv. Private Roads. The permittees shall promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the site, unless otherwise negotiated with the affected landowner.

v. Control of Dust. The permittees shall utilize reasonable measures and practices of construction to control dust.

vi. Soil Erosion and Sediment Control Plan. The permittees shall develop a Soil Erosion and Sediment Control Plan prior to construction and submit the plan to the County. The Soil Erosion and Sediment Control Plan shall address the erosion control measures for each project phase, and shall at a minimum identify plans for grading, construction and drainage of roads and turbine pads; necessary soil information; detailed design features to maintain downstream water quality; a comprehensive revegetation plan to maintain and ensure adequate erosion control and slope stability and to restore the site after temporary project activities; and measures to minimize the area of surface disturbance. Other practices shall include containing excavated material, protecting exposed soil, stabilizing restored material and removal of silt fences or barriers when the area is stabilized. The plan shall identify methods for disposal or storage of excavated material.

2. Setbacks

Wind turbines shall meet the following minimum spacing requirements.

a. Distance from existing off-site residences, business and churches shall be at least one thousand (1,000) feet. Distance from other existing buildings or structures shall be at least five hundred (500) feet. Distance from on-site or lessor's residence shall be at least five hundred (500) feet. Distance to be measured from the wall line of the neighboring principal building to the base of the WECS turbine.

b. Distance from the edge of a public right of way shall be five hundred (500) feet. The vertical height of the wind turbine is measured from the ground surface to the tip of the blade when in a fully vertical position. The horizontal setback shall be measured from the base of the turbine to the centerline of the public road.

c. Distance from any property line shall be five hundred (500) feet of the height of the wind turbine. The vertical height of the wind turbine is measured from the ground surface to the tip of the blade when in a fully vertical position. The horizontal setback shall be measured from the base of the turbine to the adjoining property line unless wind easement has been obtained from adjoining property owner.

   1) Exception: The Board of Adjustment may allow setback/separation distances to be less than the established distances identified above, if the applicant obtains waivers from all dwellings and owners of property within the separation distance. If approved, such agreement is to be recorded and filed with the Spink County Register of Deeds. Said agreement shall be binding upon the heirs, successors, and assigns of the title holder and shall pass with the land.

3. Electromagnetic Interference. The permittees shall not operate the WECS so as to cause microwave, television, radio, or navigation interference contrary to Federal Communications Commission (FCC) regulations or other law. In the event such interference is caused by the WECS or its operation, the permittees shall take the measures necessary to correct the problem.

4. Lighting. Turbines shall be marked as required by the Federal Aviation Administration (FAA). With the exception of lighting to illuminate doorway to turbine hub, there shall be no lights on the turbines other than what is required by the FAA. This restriction shall not apply to infrared heating devices used to protect the monitoring equipment. Upon commencement of construction of a turbine, in cases where there are residential uses located within a distance which is three hundred (300) percent of the height of the turbine from the turbine and when required by federal law, dual mode lighting shall be requested from the FAA. Beacon lighting, unless required by FAA, shall not be utilized.

5. Turbine Spacing. The turbines shall be spaced no closer than three (3) rotor diameters (RD) (measurement of blades tip to tip) within a straight line. If required during final micro siting of the turbines to account for topographic conditions, up to 10 percent of the turbines may be sited closer than the above spacing but the permittees shall minimize the need to site the turbines closer.

6. Footprint Minimization. The permittees shall design and construct the WECS so as to minimize the amount of land that is impacted by the WECS. Associated facilities in the vicinity of turbines such as electrical/electronic boxes, transformers and monitoring systems shall to the greatest extent feasible be mounted on the foundations used for turbine towers or inside the turbine hubs unless otherwise negotiated with the affected landowner.

7. Collector Lines. Collector lines are the conductors of electric energy from the WECS to the feeder lines. When located on private property, the permittees

shall place electrical lines, known as collectors, and communication cables underground between the WECS and the feeder lines. The exception to this requirement is when the total distance of collectors from the substation requires an overhead installation due to line loss of current from an underground installation. Collectors and cables shall also be placed within or immediately adjacent to the land necessary for turbine access roads unless otherwise negotiated with the affected landowner. This paragraph does not apply to feeder lines.

8. Feeder Lines. Feeder lines are the conductors of electric energy from the collector lines to the main electric terminal. The permittees shall place overhead electric lines, known as feeders, on public rights-of-way or private property. Changes in routes may be made as long as feeders remain on public rights-of-way and approval has been obtained from the governmental unit responsible for the affected right-of-way. When placing feeders on private property, the permittees shall place the feeder in accordance with the easement negotiated with the affected landowner. The permittees shall submit the site plan and engineering drawings for the feeder lines before commencing construction. Feeder line support structures (power poles) shall be placed on private property where concrete or other similar materials are used as an exposed or above-ground permanent foundation.

9. Meteorological Towers. Permanent meteorological towers associated with a WECS facility shall be permitted as part of the facility. A temporary meteorological tower shall require a separate conditional use permit, and shall be constructed in accordance with all applicable federal, state, and local requirements.

10. Decommissioning/Restoration/Abandonment.

    a. Decommissioning Plan. Within 120 days of completion of construction, the permittees shall submit to the County a decommissioning plan describing the manner in which the permittees anticipate decommissioning the project in accordance with the requirements of paragraph (b) below. The plan shall include a description of the manner in which the permittees will ensure that it has the financial capability to carry out these restoration requirements when they go into effect. The permittees shall ensure that it carries out its obligation to provide for the resources necessary to fulfill these requirements. The County may at any time request the permittees to file a report with the County describing how the permittees are fulfilling this obligation.

    b. Site Restoration. The decommissioning of the WECS shall begin within eight (8) months of the expiration of this permit, or earlier termination of operation of the WECS and be completed within eighteen (18) months of the expiration of this permit or earlier termination of operation of the

WECS. The permittees shall have the obligation to dismantle and remove from the site all turbines, turbine generators, transformers, overhead and underground cables, foundations, buildings, and ancillary equipment to a depth of four (4) feet. To the extent possible the permittees shall restore and reclaim the site to its pre-project topography and topsoil quality. All access roads shall be removed unless written approval is given by the affected landowner requesting that one or more roads, or portions thereof, be retained. Any agreement for removal to a lesser depth or for no removal shall be recorded with the County and shall show the locations of all such foundations. All such agreements between the permittees and the affected landowner shall be submitted to the County prior to completion of restoration activities. The site shall be restored in accordance with the requirements of this condition within eighteen months after expiration.

c. Cost Responsibility. The owner or operator of a WECS is responsible for decommissioning that facility and for all costs associated with decommissioning that facility and associated facilities.

d. Financial Assurance. After the tenth (10^{th}) year of operation of a WECS facility, the Board may require a performance bond, surety bond, letter of credit, corporate guarantee or other form of financial assurance that is acceptable to the Board to cover the anticipated costs of decommissioning the WECS facility.

e. Failure to Decommission. If the WECS facility owner or operator does not complete decommissioning, the Board may take such action as may be necessary to complete decommissioning, including requiring forfeiture of the bond. The entry into a participating landowner agreement shall constitute agreement and consent of the parties to the agreement, their respective heirs, successors, and assigns, that the Board may take such action as may be necessary to decommission a WECS facility.

11. Abandoned Turbines. The permittees shall advise the County of any turbines that are abandoned prior to termination of operation of the WECS. The County may require the permittees to decommission any abandoned turbine.

12. Height from Ground Surface. The minimum height of blade tips, measured from ground surface when a blade is in fully vertical position, shall be twenty-five (25) feet.

13. Turbine Hubs.

    a. Color and Finish. The finish of the exterior surface shall be non-reflective and non-glass.

    b. All turbine hubs shall be singular tubular design.

14. Noise. Noise level shall not exceed 50 dBA, average A-weighted Sound pressure including constructive interference effects at the perimeter of the principal and accessory structures of existing off-site residences, businesses, and buildings.

15. Permit Requirements. Any person who owns, operates, or proposes to own or operate a WECS as defined in these regulations, shall be required to apply for a Conditional Use permit pursuant to these regulations whenever any of the following occurs:

    a. A new WECS is proposed where one does not exist

    b. A proposed expansion of the existing WECS

16. Permit Expiration. The permit shall become void if no substantial construction has been completed within two (2) years of issuance.

17.1307 Required Information for Permit.

1. Boundaries of the site proposed for WECS and associated facilities on United States Geological Survey Map or other map as appropriate.

2. Map of easements for WECS.

3. Affidavit attesting that necessary easement agreements with landowners have been obtained.

4. Map of occupied residential structures, businesses and buildings.

5. Preliminary map of sites for WECS, access roads and collector and feeder lines. Final map of sites for WECS, access roads and utility lines to be submitted sixty (60) days prior to construction.

6. Proof of right-of-way easement for access to transmission lines and/or utility interconnection.

7. Location of other WECS in the general area.

8. Project schedule.

9. Mitigation measures.

10. Project-specific environmental concerns (e.g. native habitat, rare species, and migratory routes). This information shall be obtained by consulting with state and federal wildlife agencies. Evidence of such consultation shall be included in the application.

11. Final haul road agreements to be submitted sixty (60) days prior to construction