

Emmons County Emergency Management

Flood Annex

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Table of Contents

	<u> Page</u>
I. Situation	1
A. General	1
B. Scope	
C. Legal Basis	
D. Planning Assumptions	
II. Mission	3
III. Execution	3
A. General	
B. Concept of Operations	
Phase 2 Page 2 P	
Phase 2—Response	
Phase 3—Recovery	1/
IV. Command and Control	21
V. Communications	23
VI. Resources	25
Appendix 1: Flood Category Definitions	27
Appendix 2: Beaver Creek	
Beaver Creek Stages and Response	
Appendix 3: Forms – Volunteer Waiver Form	
Appendix 4: Forms – Volunteer Registration Form	

Flood Annex

Lead Agencies: Emmons County Road Department

Emmons County Sheriff's Department

Emmons County Emergency Management/Emergency Operations Center

Support Agencies: Ambulances

Emmons County Extension Service Emmons County Public Health Emmons County Social Services Emmons County State's Attorney

Emmons County Water Resource District

Fire Departments

Private/Nonprofit: Ministerial/Chaplaincy

West Dakota American Red Cross

Salvation Army

I. Situation

A. General

This Flood Annex has been prepared to address future flood events in Emmons County, North Dakota. The Flood Annex attempts to provide information and guidance, not only to minimize the hardships experienced as a result of severe flooding, but also to identify proactive remediation measures, coordinate departments and resources, and public education.

Historically, extreme flooding occurs during the spring when any or all of the following events take place concurrently:

- A sudden increase of temperatures that melts existing snow cover and a high intensity rainfall event increasing the amount of water flowing into the River and Creeks.
- Ground temperatures that are below freezing, inhibiting any infiltration of rain/snow, and causing all water to quickly flow into the Missouri River, Beaver Creek, or result in overland flooding.
- A restriction of flow in the River or Creeks such as debris accumulation or ice jams that would cause increased water elevations upstream of the restriction.

This plan acknowledges that flood damage may not be entirely eliminated and attempts to mitigate the effects as much as possible.

B. Scope

This plan provides direction to local government and private/nonprofit agencies within Emmons County that are involved in preparing for and responding to a flood event. Each agency is responsible for planning how they will fulfill their task/responsibility:

- To provide for the timely and orderly response in Emmons County when it is determined that such action is the most effective means available for protecting the population, and
- To assign responsibilities to specific agencies; and
- To ensure a coordinated effort using the Incident Command System (ICS) by local, state, and federal government, as well as private response forces, to save lives and to protect property and the environment in a flood event.

C. Legal Basis

Legal authorities outlined in the Emmons County Emergency Operations Plan apply to this annex.

D. Planning Assumptions

The following assumptions provide the foundation for this annex:

- On an annual basis, the County may experience some level of flooding due to riverine or flash flooding.
- Floods take many forms and vary significantly in size, strength, intensity, duration and impact and may occur on several separate river/creek systems at the same time.
- Floods may escalate to a catastrophic event paralyzing municipalities and rural areas for several days by shutting down transportation routes, an inability of local emergency services to respond to calls for assistance, and extended periods of inaccessibility to basic needs.
- Floods may impact animal safety resulting in catastrophic losses for producers.
- Most floods occur gradually with advance warning, enabling first responders to preplan and pre-position resources.
- Floodwaters may isolate farmsteads and communities for many days as floodwaters slowly recede.
- The formation of ice jams may occur and create highly localized flooding with rapidly rising water levels on riverine systems.

II. Mission

The primary mission of local government and private/nonprofit agencies assigned responsibility in the Flood Annex is to coordinate and make available resources in support of local governments to minimize the impact of a flood on people, property, and the environment.

III. Execution

This annex is in effect when Emmons County Emergency Management, in collaboration with other County Departments and the National Weather Service, determines an imminent threat of flooding poses a risk to the health and safety of the community, property, and livestock, or actual flooding is occurring.

- The Emmons County Emergency Manager will then notify the Emmons County Commission and activate the Emergency Operations Center.
- The Emmons County Emergency Manager or designee will notify the State Emergency Operations Center.

A. General

The ND Department of Emergency Services categorizes emergency management activities into three operational phases, which often occur concurrently: Phase 1—Prevention, Mitigation and Preparedness; Phase 2—Response; and Phase 3—Recovery. Local responses to a flood event may encompass all three phases.

B. Concept of Operations

The Emmons County Emergency Operations Plan, of which this annex is a part, will guide local government emergency/disaster operations in relation to a flood event with support from private/nonprofit agencies.

The National Weather Service flood outlooks, watches and warnings provide advance knowledge thereby affording local responders the ability to pre-position resources (i.e. sandbags, distribution points, generators and pumps) and evaluate potential shortages. The Emergency Manager or designee will coordinate assistance requests beyond local mutual aid with the ND Department of Emergency Services. Flash flooding often comes without advanced warning and does not allow for pre-positioning of resources; however, assistance will be coordinated the same as flood events preceded by advance warning.

In addition to responsibilities outlined in the Emmons County Emergency Operations Plan, specific agency tasks during a flooding event are based on operational phases as follows:

Phase 1—Prevention, Mitigation, Prep	aredness
Task/Responsibility	Agency
Monitor developing or current flood forecast, weather conditions and report preparedness and pre-positioning activities to Emmons County Emergency Management.	
Review agency responsibilities, flood preparedness plans and resources; and evaluate capabilities to support flooding operations and provide updates to the Emmons County Emergency Management.	
Coordinate news releases in collaboration with lead and support agencies through the Public Information Officer (PIO) or Joint Information Center (JIC) to ensure a one message, many voices concept.	All Entities
Alert staff and appropriate stakeholders of impending flood and weather conditions and preparedness activities.	
Prepare to support extended work day requirements.	
Test and maintain communications capabilities.	
Monitor river stage, stream flow conditions and weather forecasts and coordinate with the Emergency Operations Center regarding imminent water retention structure failure.	
Prepare to provide technical support to local officials in support of preparations for flood fighting and recovery efforts.	Emmons County Water Resource District
Provide joint coordination of the Municipal, Rural, and Industrial Water Supply Program.	

Phase 1—Prevention, Mitigation, Preparedness (cont.)	
Task/Responsibility	Agency
Assist Public Information Officer in maintenance of media contact information.	
Maintain aviation resource contacts for aerial reconnaissance and damage assessment needs.	
Maintain a listing of pet and livestock shelters in coordination with the Extension Service and Emergency Management.	
Monitor weather outlooks, watches and warnings that may impact flood incidents and disseminate information to stakeholders.	
Prepare to activate the Emergency Operations Center as necessary.	Emergency Manager/Emergency
Identify local resources to assist with preparedness, response and recovery efforts.	Operations Center
Prepare to assess incident impacts, coordinate resource needs, and coordinate response and recovery efforts with EOC personnel.	
Prepare to provide liaison with state, federal, local, private and volunteer organizations.	
Prepare to collect, evaluate, document and disseminate information necessary to support incident response.	
Prepare to provide guidance in regard to animal welfare issues (i.e. feeding, disposal, medical care, etc.) in coordination with local veterinarians and the ND Board of Animal Health.	
Maintain a listing of pet and livestock shelters in coordination with Red Cross and Emergency Management.	Extension Service
Maintain awareness of the emergency snow routes which may be utilized for evacuation routes.	
Maintain awareness of road closures/openings and/or establishment of alternate routes.	Fire Departments
Prepare to assist with evacuations and search and rescue operations.	

Task/Responsibility	Agency
Prepare to develop maps of:	
 Inundated areas 	Gaaganhia Information
 Road closures 	Geographic Information
Alternate routes	System
Maintain current listing and map of emergency snow routes which may be utilized for evacuation routes.	
Monitor creek levels.	
Prepare to pre-position equipment and provide increased support to areas of potential impact or relocate resources to impacted areas.	
Prepare to support flood preparation, response, and recovery operations, as necessary (i.e. material hauling, dike maintenance, pumps, generators, barricades, etc.)	Road Department/Public Works
Prepare to coordinate with the Emmons County Sheriff's Department to determine the need for road closures/openings and relay information to the Emergency Operations Center. Coordinate listing of road closures/openings with the Public Information Officer.	
Prepare to provide emergency signs, regulatory devices and barricades, as well as identify alternate traffic routes.	
Prepare to provide assistance with debris removal and road repairs as needed.	
Review plans and forms for inspections of affected areas.	
Prepare to provide technical assistance regarding power restoration and status reports.	Inspections
Prepare to coordinate with homeowners, electrical companies, electrical engineers, and power supply companies regarding outages.	
Prepare to provide assistance to restore the potable water supply and waste water disposal systems.	
Prepare to provide technical assistance to licensed plumbing contractors and home owners regarding procedures for prevention of waste water backup and water service shut-off to prevent cross connection.	

Phase 1—Prevention, Mitigation, Preparedness (cont.)

Task/Responsibility	Agency
Prepare to provide technical assistance to ensure safe drinking water in the event of an emergency or disaster which may have resulted in bacteriological or chemical contamination.	
Prepare to provide coordination for the delivery of safe (potable) alternate water supplies and temporary water systems.	
Prepare to provide information on carbon monoxide poisoning, food safety, immunizations, and any other health risk associated with floods.	
Prepare to provide technical assistance to assure safe and sanitary disposal of household refuse and wastewater in the event of a flood, procedures for utility shut-offs, and prevention of wastewater backup.	
Prepare to serve as a liaison with health care providers and provide technical assistance to local first responders.	Public Health/Environmental
Review and update plans for coordination of response to: • Mass fatalities and mortuary services; • Environmental remediation; and • Follow-up care to individuals impacted by the incident.	Health
Prepare to assist healthcare facilities with such needs as backup power, relocation of patients and medical supply needs.	
Prepare to request and coordinate supplemental medical personnel through the ND Medical Reserve Corps/Public Health Emergency Volunteer Reserve (PHEVR).	
Prepare to coordinate the evacuation and sheltering of patients with medical needs.	
Assist Emergency Manager in maintenance of media contact information.	
Review/develop canned messages.	
Review press release template.	Public Information Officer
Prepare to develop and maintain talking points.	
Prepare for press briefing/conferences.	

Phase 1—Prevention, Mitigation, Preparedness (cont.)	
Task/Responsibility	Agency
Prepare to coordinate with voluntary agencies to provide shelters and provisions for evacuated people.	
Prepare to deliver essential items (ex. food, water, medicine) to isolated and/or special needs populations in coordination with Salvation Army.	
Prepare to coordinate delivery of mental health services and other assistance programs.	Red Cross Salvation Army
Maintain a listing of pet and livestock shelters in coordination with the Extension Service and Emergency Management.	
Work with Extension office in maintaining relationship/listing of animal care facilities, veterinarians, and shelters for animals (pets and farming).	
Prepare to deliver essential items (ex. food, water, medicine) to isolated and/or special needs populations in coordination with Public Health and Social Services.	Red Cross Salvation Army
Maintain awareness of the emergency snow routes which may be utilized for evacuation routes.	
Prepare to execute road closures/openings and/or establishment of alternate routes based on analysis from the Emmons County Highway Department.	Sheriff's Department/Law
Prepare to establish traffic control on main roadways.	Enforcement
Prepare to assist with evacuations and search and rescue operations.	
Preserve law and order.	

Phase 2—Response	
Task/Responsibility	Agency
Assist in warning the public.	
Collect, evaluate, document and disseminate documents necessary to support incident response.	All Entities
Coordinate medical triage at incident scene.	
Coordinate incident scene decontamination procedures with fire department as necessary.	Ambulances
Communicate and coordinate with local hospitals for treatment.	
Analyze river stage, stream flow conditions and weather forecasts and coordinate with the Emergency Operations Center regarding imminent water retention structure failure. Provide technical support to local officials in support of flood fighting and recovery efforts.	Emmons County Water Resource District
Assist Public Health, Red Cross, Salvation Army, and Social Services to provide disaster mental health counseling and critical incident stress debriefings as needed.	Ministerial/Chaplaincy

Phase 2—Response	
Task/Responsibility	Agency
Analyze weather outlooks, watches and warnings that may impact flood response and disseminate information to stakeholders. Activate the Emergency Operations Center as necessary.	
Coordinate local resources assigned to assist with response and recovery efforts. Assess incident impacts, coordinate resource needs and response and	
recovery efforts with EOC personnel. Provide liaison with state, federal, local, private and volunteer	
organizations.	Emergency Manager/
Collect, evaluate, document and disseminate information necessary to support incident response.	Emergency Operations Center
Coordinate with Public Information Officer to establish a Joint Information Center as necessary.	
 Assist Public Information Officer with the following: Disseminate emergency information to the public (safety precautions, road closures, evacuation routes, and any additional actions). Provide updates as appropriate. Schedule media conferences as necessary. 	
Request aviation support for aerial reconnaissance and damage assessment needs as necessary.	
Provide guidance in regard to animal welfare issues (ex. feeding, disposal, medical care, etc.) in coordination with local veterinarians and emergency management.	
Coordinate shelters or re-location areas for livestock and pets. Coordinate emergency feed distribution for livestock with the ND	Extension Service
Department of Agriculture. Provide guidance to producers.	

Phase 2—Response (cont.)	
Task/Responsibility	Agency
Maintain awareness of road closures/openings and/or establishment of	
alternate routes.	
Maintain on-scene control and perimeter.	
Coordinate incident scene decontamination procedures with the	
ambulances as necessary.	Fire Departments
Assist Sheriff's Department in designation of evacuation routes.	
Ensure fire security in evacuated areas.	
Perform search, rescue and evacuation in the immediate vicinity of the incident.	
Develop maps of:	
Inundated areas	
Road closures	Geographic Information
Alternate routes	System
• Evacuated areas	
 Maps to be utilized for press briefings/conferences and to be posted on the website. 	
Monitor creek levels.	
Pre-position equipment and provide increased support to areas of potential impact or relocate resources to impacted areas.	
potential impact of refocate resources to impacted areas.	
Support flood preparation, response, and recovery operations, as necessary (i.e. material hauling, dike maintenance, pumps, generators, barricades, etc.).	
Coordinate with the Emmons County Sheriff's Department to determine the need for road closures/openings and relay information to	Road Department/Public Works
the Emergency Operations Center.	
Provide emergency signs, regulatory devices and barricades, as well as identify alternate traffic routes.	
Provide assistance with debris removal and road repairs, as needed.	

Phase 2—Response (cont.)	
Task/Responsibility	Agency
Provide power outage and repair status reports to the Emergency Operations Center.	
Be prepared to coordinate with homeowners, electrical companies, electrical engineers, and power supply companies regarding outages.	
Provide assistance to restore the potable water supply and waste water disposal systems.	Inspections
Provide technical assistance to licensed plumbing contractors and home owners regarding procedures for prevention of waste water backup and water service shut-off to prevent cross connection.	

Phase 2—Response (cont.)	
Task/Responsibility	Agency
Provide information on carbon monoxide poisoning, food safety, immunizations, and any other health risk associated with floods.	
Provide coordination for the delivery of safe (potable) alternate water supplies and temporary water systems.	
Provide technical assistance to ensure safe public and private drinking water supplies and waste disposal.	
Provide technical assistance to assure safe and sanitary disposal of household refuse and wastewater in the event of a flood, and procedures for utility shut-offs and prevention of wastewater backup.	
Serve as a liaison with health care providers and provide technical assistance to local first responders.	
Coordinate response to: • Mass fatalities and mortuary services; • Environmental remediation; and • Follow-up care to individuals impacted by the incident.	
Assist healthcare facilities with such needs as backup power, relocation of patients, and medical supply needs.	Public Health/Environmental Health
Coordinate the request for supplemental medical personal through the ND Medical Reserve Corps/Public Health Emergency Volunteer Reserve (PHEVR).	
Coordinate the evacuation and sheltering of patients with medical needs.	
Assist Ministerial/Chaplaincy, Red Cross, Salvation Army, and Social Services to provide disaster mental health counseling and critical incident stress debriefings as needed.	
Assist with Red Cross, Salvation Army, voluntary agencies, and Social Services to provide shelters and provisions for evacuated people.	
Assist with delivery of essential items (ex. food, water, medicine) to isolated and/or special needs populations in coordination with Red Cross, Salvation Army, and Social Services.	

Phase 2—Response (cont.)	
Task/Responsibility	Agency
Disseminate emergency information advising the public of safety precautions, possibility of evacuation, appropriate routes, and any additional actions.	Public Information Officer
Provide updates as appropriate.	
Schedule media conferences as necessary.	
Coordinate with voluntary agencies, Public Health, and Social Services to provide shelters and provisions for evacuated people.	
Coordinate delivery of essential items (ex. food, water, medicine) to isolated and/or special needs populations in coordination with Salvation Army, Public Health, and Social Services.	Red Cross
Assist Ministerial/Chaplaincy, Public Health and Social Services to provide disaster mental health counseling and critical incident stress debriefings as needed.	Salvation Army
Establish pet and livestock shelters in coordination with the Extension Service and Emergency Management.	
Determine the need for road closures/openings and/or establishment of alternate routes based on analysis from the Emmons County Road Department.	
Conduct traffic control on main roadways as necessary.	Sheriff's Department/Law Enforcement
Assist with evacuations, search and rescue operations, and or extraction of stranded people.	
Preserve law and order.	

Phase 2—Response (cont.)				
Task/Responsibility	Agency			
Assist Ministerial/Chaplaincy, Public Health, Red Cross, and Salvation Army to provide disaster mental health counseling and critical incident stress debriefings as needed. Assist with Red Cross, Salvation Army, voluntary agencies, and Public Health to provide shelters and provisions for evacuated people. Assist with delivery of essential items (ex. food, water, medicine) to isolated and/or special needs populations in coordination with Red Cross, Salvation Army, and Public Health.	Social Services			
Provide technical assistance to the Emergency Operations Staff with interpretations of related legal issues.	States Attorney			
Provide support within the scope of agency services including, but not limited to, the following: • Informational support to the Joint Information Center (JIC). • Continuity of operations and continuation of essential services.	Other Agencies			

Phase 3—Recovery				
Task/Responsibility	Agency			
Assist community in developing floodplain management capabilities pursuant to the National Flood Insurance Program.				
Provide joint coordination of the Municipal, Rural, and Industrial Water Supply Program.	Emmons County Water Resource District			
Provide technical and/or cost-share assistance with recovery of water control projects, such as rebuilding dikes, irrigation projects, bank stabilization, dikes and dams, etc				
Assist Red Cross, Salvation Army, Public Health, and Social Services to provide disaster mental health services and monitoring as necessary.	Ministerial/Chaplaincy			
Assist Public Information Officer in the dissemination of information regarding re-entry process.				
Coordinate disaster recovery programs with the ND Department of Emergency Services.	Emergency Manager/			
Coordinate resources assisting with recovery efforts.	Emergency Operations Center			
Assist with coordination of tasks required to provide unmet needs response to impacted urban and rural residents not meeting standard disaster relief/recovery criteria.				
Determine eligibility for federal agricultural relief programs and coordinate as necessary with ND Department of Agriculture.	Extension Service			
Assist Sheriff's Department to ensure evacuated areas are safe for reentry.				
Assist Road Department with debris removal.	Fire Departments			
Develop maps of: • Damage assessment project sites	Geographic Information Systems			
Assist with damage assessment.				
Repair damaged infrastructure.	Road Department/Public Works			
Support local cleanup, and recover emergency signs, regulatory devices and barricades.	WOIKS			

Phase 3—Recovery (cont.)				
Task/Responsibility	Agency			
Provide support as needed with environmental remediation to include assessment of impacts to: • Municipal drinking water and waste water facilities; • Waste management operations; • Water quality – surface and ground water contaminants; and • Hazardous materials storage sites and controls.				
Support efforts to provide follow-up health care to individuals impacted by the incident.	Public Health/Environmental			
Provide enhanced surveillance measures.	Health			
Coordinate the repatriation of patients and residents with medical needs to their normal health and medical care systems.				
Assist Red Cross, Salvation Army, Ministerial/Chaplaincy, and Social Services to provide disaster mental health services and monitoring as necessary.				
Disseminate information regarding re-entry process.	Public Information Officer			
Assist in the transportation needs of shelter evacuees returning to their homes.				
If homes have been damaged, determine the long-term housing requirements.	Dad Cuasa			
Provide clean-up kits and volunteer assistance.	Red Cross Salvation Army			
Assist Ministerial/Chaplaincy, Public Health, and Social Services to provide disaster mental health services and monitoring as necessary.				
Ensure evacuated areas are safe for re-entry.				
Establish traffic control for return of evacuees.	Showiff's Donortment			
Assist Road Department/Public Works in recovering barricades and any other barriers utilized.	Sheriff's Department			

Phase 3—Recovery (cont.)				
Task/Responsibility	Agency			
Assist Ministerial/Chaplaincy, Public Health, Red Cross, and Salvation Army to provide disaster mental health services and monitoring as necessary.	Social Services			
Provide support within the scope of agency services including, but not limited to: Damage assessment Cleanup efforts Disaster relief programs	Other Agencies			

IV. Command and Control

Initial command and control will be local with on-scene incident command. Further guidance will be provided upon dispatch order. The Emergency Operations Center, as configured in the organizational chart below, will coordinate local requests for assistance with the appropriate agencies.

Unified Command System Chart Command Highway Dept Sheriff's Dept Safety Officer Rural Fire Dept Liaison Officer Emergency Manager **Public Information** Officer Commissioner, Auditor, or Designee **Planning** Logistics Finance/Admin **Operations** Highway Dept Sheriff Dept Sheriff Dept Auditor/Commission Sheriff's Dept Rural Fire Dept Rural Fire Dept States Attorney **Evacuation** Sheriff's Dept Highway Dept Rural Fire Dept Shelter/ Mass Care Red Cross Public Health Social Services

NOTE: Agencies within the incident command structure may vary based on the scenario.

V. Communications

Communications outlined in the Emmons County Emergency Operations Plan apply to this annex.

VI. Resources

The Incident Commander will evaluate local assets and determine additional resource requirements in coordination with the Emergency Operations Center. The Emmons County Emergency Operations Plan contains a Resource Section for equipment and services which will assist in providing resources in the most expedient means possible.

The Incident Commander will coordinate needs with the Emergency Operations Center. After local resources and mutual aid have been exhausted, resources will be requested from the State.

Local agencies should support both internal and external resource needs during an emergency. The following is a summary of logistical support based on the Emergency Support Functions (ESFs):

- <u>ESF 1 Transportation</u>: Each agency will support the transportation needs of its employees through agency vehicle resources.
- <u>ESF-2 Communications</u>: Each agency will support the communications needs of its agency through radio, cellular, landlines, WebEOC, internet and other means of communications. Agencies with internal communications will support their own requirements.
- <u>ESF 3 Public Works and Engineering:</u> Public works and engineering agencies will provide support for signage and road blocks. Other areas of support include debris removal and maintenance of ingress and egress for first responders.
- <u>ESF 4 Firefighting</u>: Initial firefighting operations remain the responsibility of local responders and will follow normal local protocol.
- <u>ESF 5 Emergency Management</u>: Each agency assigned responsibility in the Emergency Operations Plan should provide periodic updates to the Emergency Operations Plan to ensure timely, accurate information is processed immediately.
- <u>ESF 6 Mass Care, Housing and Human Services</u>: When required, local shelters in accordance with local plans will be used as the first level of response. Local and voluntary organization resources will be used based upon availability.
- <u>ESF 7 Resource Support</u>: Agencies requiring resources not readily available through the local incident command system, should contact the Emergency Operations Center.
- <u>ESF 8 Public Health and Medical Services</u>: Local assets will be used based on availability and will follow local protocols.
- <u>ESF 9 Urban Search and Rescue</u>: Initial search and rescue operations will be the responsibility of local responders and follow local protocols.

- <u>ESF 10 Oil and Hazardous Materials Response</u>: Any agency representative encountering a hazardous material must report the situation to 911.
- <u>ESF 11 Agriculture and Natural Resources</u>: Agencies will be required to subsist on the local economy until such time central feeding locations are secured by the Incident Commander.
- ESF 12 Energy: Agencies are responsible for securing their own fuel supplies.
- <u>ESF 13 Public Safety and Security</u>: Local public safety and security resources may be required to support traffic control, security, law enforcement liaison and criminal investigation efforts, as well as assist with evacuation, at the request of the local Incident Commander.
 - **Safety is paramount.** Each agency is encouraged to secure a Safety Officer for the conduct of operations.
- <u>ESF 14 Long-Term Community Recovery and Mitigation</u>: Local support will be coordinated through the ND Department of Emergency Services' Recovery Section.
- <u>ESF 15 External Affairs</u>: Agencies responding to the incident are required to coordinate media inquiries with the Public Information Officer. Follow your agency PIO protocols for inquiries specific to your agency.

Appendix 1: Flood Category Definitions

Action Stage: The stage which, when reached by a rising stream, represents the level where the National Weather Service or a partner/user needs to take some type of mitigation action in preparation for possible significant hydrologic activity.

Flood Categories: Terms defined for each forecast point which describe or categorize the severity of flood impacts in the corresponding river/stream reach. Each flood category is bounded by an upper and lower stage. The severity of flooding at a given stage is not necessarily the same at all locations along a river reach due to varying channel/bank characteristics or presence of levees on portions of the reach. Therefore, the upper and lower stages for a given flood category are usually associated with water levels corresponding to the most significant flood impacts somewhere in the reach.

Minor Flooding: Minimal or no property damage, but possibly some public threat.

Moderate Flooding: Some inundation of structures and roads near stream. Some evacuations of people and/or transfer of property to higher elevations.

Major Flooding: Extensive inundation of structures and roads. Significant evacuations of people and/or transfer of property to higher elevations.

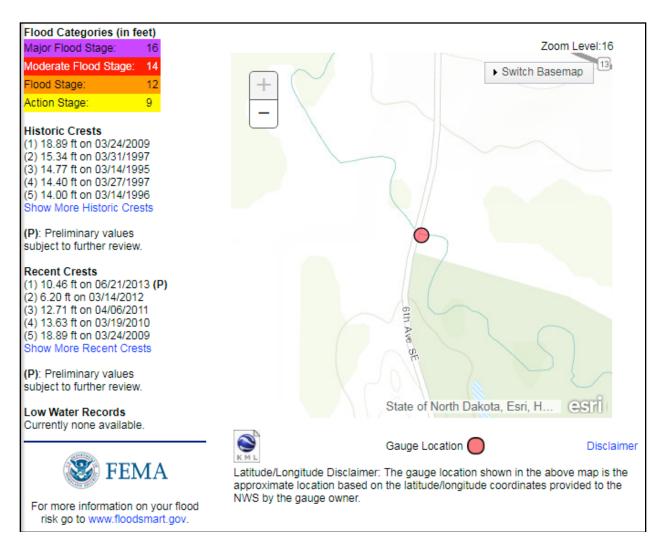
Record Flooding: Flooding which equals or exceeds the highest stage or discharge at a given site during the period of record keeping.

<u>Note</u>: All three of the lower flood categories (minor, moderate, major) do not necessarily exist for a given forecast point. For example, at the level where a river reaches flood stage, it may be considered moderate flooding. However, at least one of these three flood categories must start at flood stage.

Source: National Weather Service website

Appendix 2: Beaver Creek

Beaver Creek near Linton



Source: National Weather Service website

Beaver Creek Stages and Response

13, 11, 9, 7 Old stages 16, 14, 12, 9 New Stages

Stage	Response Action	Potential Impacts
15'+	Beyond local capability	
Spring Flood Outlook	Dependent upon outlook:	
	Pre-fill and stage sandbags Indeed and the control of the	
	 Indoor sandbag operation Outdoor sandbag operation	
	 Consider Corps of Engineers 	
	request for technical assistance	
9' – Action Stage	Periodic visual patrols and gage monitoring.	Below bank full conditions
	Consider aerial reconnaissance.	
	Key personnel alerted and information disseminated.	
	Sheriff's Department enacts flood	
	alert message to residents in low-lying	
	areas along the Creek (approximately 12 residences).	
10'	,	Near the top of the bank at 19th
		Avenue SE bridge (12 miles east of Linton). Water leaves the bank on
		north side and encroaches nearby
		property at 6th Avenue SE gage
		site.
10'	Possible pre-staging of sandbags.	The creek is rising to its natural banks, but has not spilled over into
	Prepare evacuation notices.	the floodplain. There may be some
		limited flooding in unprotected
101 77 10		areas.
12' – Flood Stage, Minor Flooding		The Creek has risen beyond its banks. Some low-lying farmland
Willor Plooding		and roads.
12'		Water leaves north bank
		encroaching front yard of nearby property at 6th Avenue SE gage
		site. North bank overtops on west
		side of bridge at Seaman Park
		resulting in overland flooding.

Stage	Response Action	Potential Impacts
13'		Water overtops north side bank at 3rd Avenue SE/80th Street. Golf Course Hole #9 retains overflow. North bank on north side of golf course overtops and provides overland flooding.
14' – Moderate Flood	Emergency Operations Center	The Creek has generally widened
Stage	activated.	into the floodplain.
	Monitor bank erosion and areas of seepage/boils monitored and repaired as necessary. Consider turning off gas and electricity.	
	Describbe conservation and increase	
16' Major Flood Stage	Possible evacuation notices.	Sampson Ave (water encroaching)
16' – Major Flood Stage	Barricades/road closure signs placed.	Sampson Ave (water encroaching)
	Publicize road closures.	Crest on Highway 83
	Turn off gas and electricity	
	Possible evacuation notices.	
13+'	Consider evacuating Hickory Ave W	
14'	Evacuate Sampson Ave	Water crossing Hwy 83
15'	Evacuate Hickory Ave W	
15'-16'	Final evacuation notices.	
16-17'		Linton Lift Station threatened. Milo Kramer residence threatened Hickory Ave W inundated
18.89' Record Flood		Creek is at the level of the flood of record in 2009.

Appendix 3: Forms – Volunteer Waiver Form

Informed Consent, Waiver and Release of Liability Agreement Emmons County Sandbagging Operations

The undersigned, being at least 18 (eighteen) years of age, does hereby agree to this consent, waiver, and release of liability.

Acknowledgement and Assumption of Risk

I recognize that the sandbagging operations will involve physical labor and may carry a risk of personal injury. I hereby agree to assume all risks which may be associated with or may result from my participation in this effort.

I also recognize that the physical activity and may cause physical and emotional discomfort. I state that I am free from any known heart or other health problems that could prevent me from participating. I further state that I am sufficiently physically fit to participate in the activities.

Waiver and Release of Liability

I agree to release Emmons County, their agencies, departments, officers, employees, agents, and all sponsors and/or officials and staff of any said entity or person, their representatives, agents, affiliates, directors, servants, volunteers, and employees from the cost of any medical care that I receive while participating in this activity or as a result of it.

I further agree to waive, release, and discharge Emmons County from any and all liability, claims, demands, actions, and causes of actions whatsoever, except to the extent prohibited by N.D.C.C. § 9-08-02, for any loss, claim, damage, injury, illness, attorney's fees or harm of any kind or nature to me arising out of any and all activities associated with participating in this activity or as a result of it.

Consent

In the event of injury while participating in any and all activities associated with the Program, I consent to receive any emergency medical aid, anesthesia, and/or medical treatment or operation if, in the opinion of the attending physician, such treatment is necessary.

I, the undersigned participant, affirm that I am at least 18 years of age and am freely signing this agreement. I have read this form and fully understand that by signing this form I am giving up legal rights and/or remedies which may otherwise be available to me regarding any losses I may sustain as a result of my participation. I agree that if any portion is held invalid, the remainder will continue in full legal force and effect.

READ BEFORE SIGNING

NAME:	
SIGNATURE: _	DATE:
WITNESS:	DATE:

Return completed form to Emmons County Emergency Management.

Authorization for Participants Under 18 Years of Age

NAME OF MINOR
NAME OF MINOR
I have read the "Informed Consent, Waiver and Release of Liability Agreement" and do hereby authorize and give permission for the above-names minor(s) to participate in Emmons County Sandbagging Operations.
PARENT/GUARDIAN NAME
PARENT/GUARDIAN SIGNATURE DATE
WITNESS:DATE:
Return completed form to Emmons County Emergency Management.

Appendix 4: Forms – Volunteer Registration Form



Volunteer Registration Form

Date	Name	Phone #	Location	Activity	Time In	Time Out	Total Hours

Return completed form to Emmons County Emergency Management.

