

STORM WATER MANAGEMENT PLAN FOR MEADE COUNTY, SOUTH DAKOTA

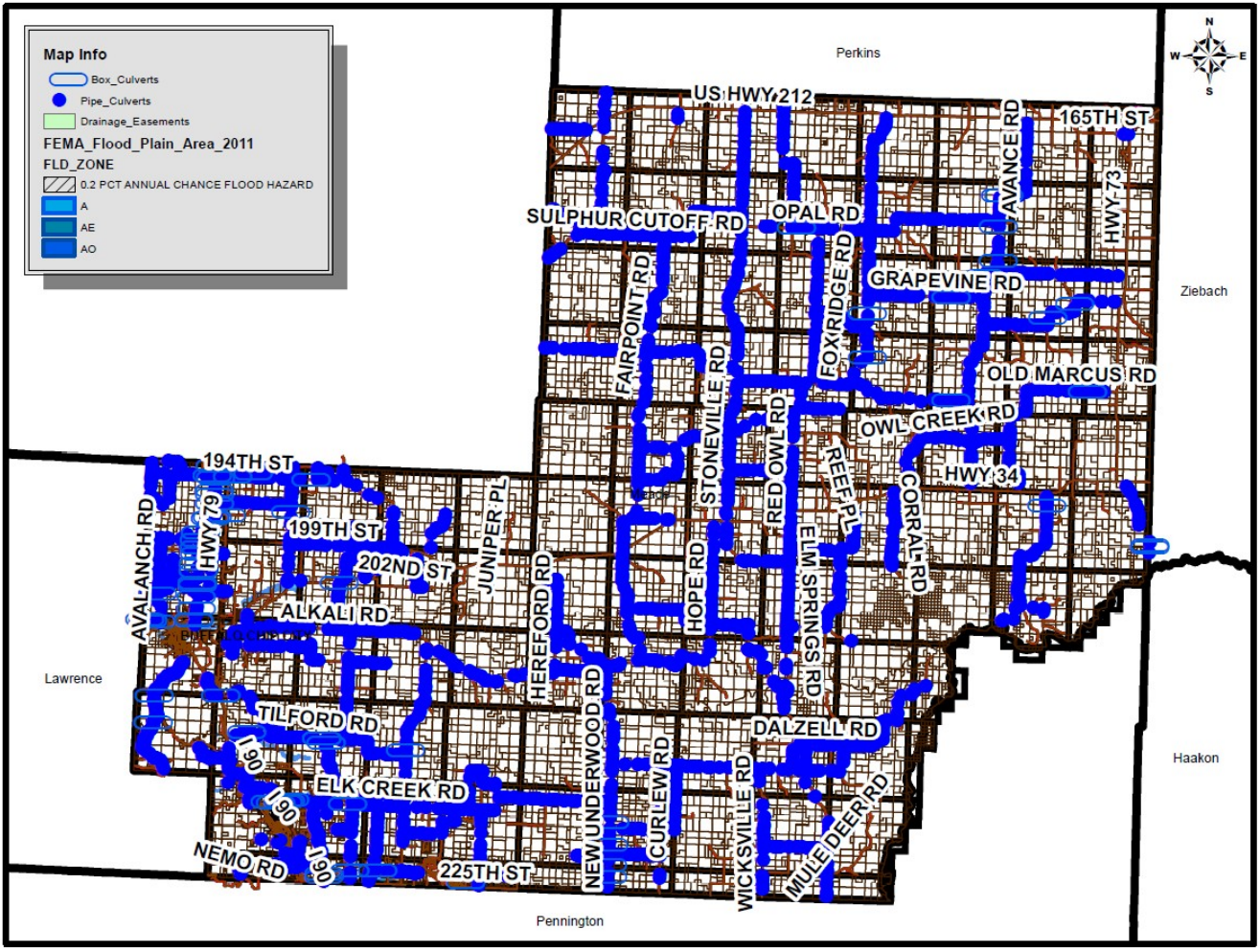


Summary

Meade County was required to submit a Storm Water Management Plan (SWMP) in accordance with the Environmental Protection Agency's Phase II Storm Water Regulations. The SWMP provides the framework for Meade County to develop, implement, and enforce a Storm Water Management Program designed to reduce impacts from pollutants to the "maximum extent possible". The SWMP addresses the six minimum control measures as required by the Phase II Storm Water Regulations.

Coverage Area

The SWMP includes the "Urbanized Areas" (UA) and the entire county as shown on the map on the following page.



This plan outlines six minimum control measures as required by the Phase II Regulations. The plan includes best management practices and is intended to reduce pollutant levels to the “maximum extent possible” to protect water quality and comply with the Clean Water Act. Each control measure has measurable goals that are expected to result in reductions in pollutants discharged within the Urbanized Areas of Meade County.

1. Stakeholders

- a. The Equalization and Planning Department for management and enforcement of stormwater issues.
- b. The Highway Department who is responsible to clean out and mow stormwater ditches along with cleaning and replacing culverts and bridges.

Minimum Control Measures

1. Public Education and Outreach

Meade County will implement a public program to distribute materials to the public, or conduct equivalent outreach programs and activities about the impact of storm water discharges on local waterways. The plan addresses steps the public can take to help reduce storm water pollution.

- a. Develop and distribute materials about the harmful effects of storm water pollution.
- b. Develop and distribute materials about the improper use, storage and disposal of common household chemicals such as herbicides, pesticides, and fertilizers. The materials will also make the public aware of how the improper use of these chemicals can impact storm water quality.
- c. Develop, update and maintain a section about storm water on Meade County’s website.
- d. Implement a storm drain labeling program which includes purchasing and coordinating installation of labels until all storm drains within Meade County’s Urbanized Areas are marked on County Roads. The program may utilize the Adopt-a-Highway groups and other citizen groups.

2. Public Participation / Involvement

Meade County must comply with State, County, and Federal public notice requirements during implementation of the public participation and involvement control measure and its associated best management practices and goals. Notice of all public hearings will be published in at least two publications, of general circulation, to provide opportunities for public involvement.

- a. To comply with State, County, and Federal public notice requirements, Meade County will hold public hearings until this updated SWMP is implemented and when a new ordinance is adopted or revised.
- b. To comply with State, County, and Federal public notice requirements, Meade County will hold public hearings for any new ordinances, or ordinance changes developed for the purpose of this plan.
- c. Encourage the use of the compliance complaint mechanism (such as phone, email or on-line complaint), for reporting violations of ordinances relating to storm water pollution. Publicize reporting methods on Meade County’s website and on all educational materials.
- d. Sponsor or create an Annual Clean-up Day and encourage the public to participate.
- e. Identify and notify affected stakeholder groups such as commercial and industrial businesses, sanitary districts, road districts and homeowners associations about the SWMP.

3. Illicit Discharge and Elimination

An illicit discharge is defined as any discharge to a Municipal Separate Storm Sewer

System (MS4) that is not composed entirely of storm water, and has not been authorized under a discharge permit issued by the State of South Dakota. Illicit discharges enter the system either through direct (wastewater piping connected to storm drains) or indirect (spills or dumping directly in or near a storm drain) connections. Illicit discharges can result in untreated discharges that contribute high levels of pollutants to receiving water bodies. Pollutant levels from these illicit discharges have been shown by the Environmental Protection Agency studies to be high enough to significantly degrade receiving water quality and threaten aquatic life, wildlife, and human health.

- a. Continue developing and maintaining a storm sewer map showing the location of all storm sewer outfalls within the Urbanized Areas and the names and locations of all the waters of the state that receive discharges from those outfalls. Meade County will review and update the storm sewer map at least annually.
- b. Effectively prohibit, through an ordinance or ordinance changes, non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions.
- c. Develop and enact a plan for the detection of illicit discharges, including illegal dumping.
- d. Educate the public, businesses, and employees to the hazards associated with illegal discharges and improper waste disposal.
- e. Collaborate with other municipalities in a household hazardous waste disposal/recycling program.
- f. Promote the use of the complaint mechanisms approved by the County for reporting of illicit discharges.
- g. The condition of the storm water inlets will be inspected and documented every three years.

Procedures to Trace Illicit Discharges

- All priority areas will be located in Meade County's Urbanized Area. Priority areas will be direct discharges into county ditches and creeks. Pipes or culverts that discharge into ditches from stormwater collection systems or stormwater pipes or culverts that discharges into creeks.
- Reported or discovered illicit discharges will be visually traced upstream and every attempt shall be made to determine the source.
- Once the source of the illicit discharge has been located, the responsible party must immediately remove the source. Inspectors may write the responsible party a violation ticket or follow enforcement procedures listed in Ordinance No. 52.
- After the source is removed, the responsible party must present a written plan on how all illicit discharges will be eliminated in the future. Damage to ditches and creeks must be remedied by the responsible party. If there is damage from illicit discharges, the SDDENR and if applicable the Corp of Engineers will be briefed by county inspectors.

4. Construction Site Runoff Control

Polluted storm water runoff from construction sites often flow to Municipal Separate Storm Sewer Systems (MS4s). Sediment is the main pollutant of concern. During a short period of time, construction sites can contribute more sediment to waters than can be deposited naturally over time. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to waters. Other pollutants of concern in Meade County include oil, grease, trash, surfactants, and other chemicals. Best Management Practices (BMPs) are methods used to prevent or control storm water runoff and discharge of pollutants (sediment, chemicals, bacteria, etc.) into local waterbodies. BMPs may include silt fences, site stabilization and inlet protection, on or near construction sites.

- a. Meade County will develop, implement and enforce a program to reduce

pollutants in storm water runoff to the MS4 and or receiving bodies of water or streams from construction activities that result in or create a land disturbance of greater than or equal to 1 acre.

- b. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs.
- c. Requirement for construction site operators to control waste such as building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may affect water quality.
- d. Site plan review to consider potential water quality impacts from construction procedures.
- e. Site inspection and enforcement measures.
- f. Ordinance No. 52, addresses construction site runoff control.

5. Post-Construction Runoff Control

Meade County will develop, implement and enforce a program to address storm water runoff from development projects that disturb greater than or equal to one acre to the maximum extent possible, under South Dakota State Law. Post-Construction Runoff Controls will be put into place to prevent and/or minimize water quality impacts.

- a. Implementing BMPs (Best Management Practices) appropriate for the type of community or area.
- b. Adoption of an ordinance or a change to an existing ordinance to address post- construction runoff from development projects.
- c. Provide inspection of BMPs on a regular basis.
- d. Verify maintenance of BMPs is being performed.

6. Pollution Prevention / Good Housekeeping

Meade County will develop and implement an operation and maintenance program to reduce and prevent runoff from County operations into the storm sewer system or streams, which will include employee training on incorporation of pollution prevention and good housekeeping practices into County operations.

- a. Encourage municipalities within the county and road districts have a regular street sweeping program for hard surface streets or roads.
- b. Encourage municipalities within the county and road districts to have a regular storm sewer maintenance program.
- c. Continue inspections of on-site wastewater systems to correct any failing systems.
- d. Consider a storm water utility fee for maintenance of the storm sewer system including road ditches, capital projects involving storm sewers, housekeeping, and clean- up programs.
- e. Review the Storm Water Management Plan at least annually.

Responsible Staff Members Duties (Shared)

Bill Rich, Marlo Kapsa, Max Rooke & Chad
Skinner

Action Items – Measurable Goals

MCM No.	Minimum Control Measure (MCM)	BMP	Measurable Goals	Year 1 2020	Year 2 2021	Year 3 2022	Year 4 2023	Notes
1	Public Education and Outreach	A	Develop and distribute materials about the harmful effects of stormwater pollution		X			Available on website and at front counter
		B	Develop and distribute materials about the improper use, storage and disposal of common household chemicals such as herbicides, pesticides, and		X			Will be made available on website and at front counter
		C	Develop, update and maintain a section about storm water on Meade County's website.	X				Available on Meade County Website
		D	Implement a storm drain labeling program which includes purchasing and coordinating installation of labels until all storm drains within Meade County's Urbanized Areas are marked on	X				DOT has drop inlets numbered
2	Public Participation/ Involvement	A	Hold public hearings until this updated SWMP is implemented and when a new ordinance is adopted or revised	X	X	X	X	Standard practice
		B	Hold public hearings for any new ordinances, or ordinance changes developed for the purpose of this plan.	X	X	X	X	Standard practice
		C	Encourage the use of the compliance complaint mechanism (such as phone, email or on-line complaint), for reporting violations of ordinances relating to storm water pollution.	X				
		D	Sponsor or create an Annual Clean-up Day and encourage the public to participate.	X	X	X	X	Done twice a year in urban areas

		E	Identify and notify affected stakeholder groups such as commercial and industrial businesses, sanitary districts, road districts and homeowners	X	X	X	X	Handled through permitting process
3	Illicit Discharge and Elimination	A	Continue developing and maintaining a storm sewer map showing the location of all storm sewer outfalls within the Urbanized Areas and the names and locations of all the waters of the state that receive discharges from those outfalls. Meade County will review and update the storm sewer map at	X	X	X	X	Done annually
		B	Effectively prohibit, through an ordinance or ordinance changes, non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures	X	X	X	X	Ordinance 52
		C	Develop and enact a plan for the detection of illicit discharges, including illegal dumping	X	X	X	X	Ordinance 52
		D	Educate the public, businesses, and employees to the hazards associated with illegal discharges and improper waste disposal	X	X	X	X	
		E	Collaborate with other municipalities in a household hazardous waste disposal/recycling program.	X	X	X	X	Follow SD DENR practices
		F	Promote the use of the complaint mechanisms approved by the County for reporting of illicit discharges.	X	X	X	X	Meade County website
		G	The condition of the storm water inlets will be inspected and documented every three years.	X	X	X	X	Yearly

4	Construction Site Runoff Control	A	Meade County will develop, implement and enforce a program to reduce pollutants in storm water runoff to the MS4 and or receiving bodies of water or streams from construction activities that result in or create a land disturbance of	X	X	X	X	Ordinance 52
		B	Requirements for construction site operators to implement appropriate erosion and sediment control BMPs	X	X	X	X	Ordinance 52
		C	Requirement for construction site operators to control waste such as building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may affect water	X	X	X	X	Ordinances 20, 52 & 34
		D	Site plan review to consider potential water quality impacts from construction procedures	X	X	X	X	Requirement of all permit application review
		E	Site inspection and enforcement measures.	X	X	X	X	Standard practice of all subdivision inspections
5	Post-Construction Runoff Control	A	Implementing BMPs (Best Management Practices) appropriate for the type of	X	X	X	X	Dependent upon development density type
		B	Adoption of an ordinance or a change to an existing ordinance to address post-construction runoff from development projects.	X				Post-development conditions must match pre-development
		C	Provide inspection of BMPs on a regular basis.	X	X	X	X	Inspected according to stormwater management sit plan for each BMP
		D	Verify maintenance of BMPs is being performed.	X	X			Highway department inspections

6	Pollution Prevention/ Good Housekeeping	A	Encourage municipalities within the county and road districts have a regular street sweeping program for hard surface streets or roads.	X	X	X	X	
		B	Encourage municipalities within the county and road districts to have a regular storm sewer maintenance program.	X	X	X	X	
		C	Continue inspections of on-site wastewater systems to correct any failing systems.	X	X	X	X	Ordinance 33
		D	Consider a storm water utility fee for maintenance of the storm sewer system including road ditches, capital projects involving storm sewers, housekeeping, and	X	X	X	X	Standard building permit requirement
		E	Review the Storm Water Management Plan at least annually.	X	X			

