

STORM WATER MANAGEMENT PLAN FOR MEADE COUNTY, SOUTH DAKOTA

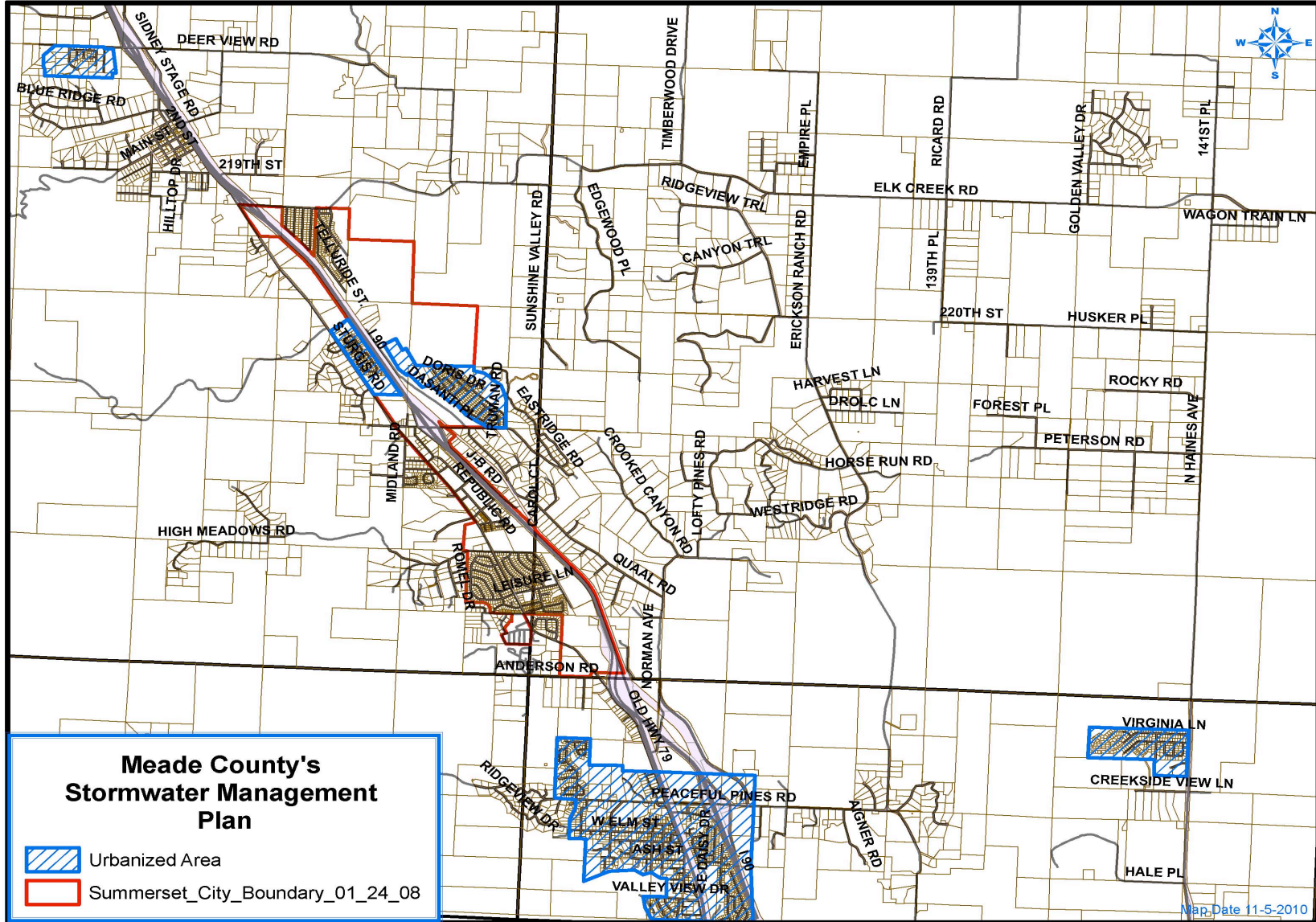


Summary

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) as determined by the 2000 Census and/or population density. The UA included for the purposes of this plan are indicated in blue:



Storm Water Management

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.

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. The program may utilize the Adopt-a-Highway groups and other citizen groups.
- E. Enter into a partnership with the City of Sturgis, City of Summerset, City of Box Elder, City of Piedmont and the City of Rapid City to address storm water pollution. Cooperate with the various municipalities Storm Water Management Plans within their three-mile platting jurisdictions.

2. Public Participation / Involvement

Meade County must comply with State, County, City, 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, City, and Federal public notice requirements, Meade County will hold public hearings until this updated SWMP is implemented, and at least once per year thereafter.
- B. To comply with State, County, City, 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. Implement an Adopt-a-Highway program through the Meade County Highway Department. Educate the responsible groups about storm water quality and how the Adopt-a-Highway program can integrate into protecting storm water quality.
- D. 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.
- E. Sponsor or create an Annual Clean-up Day and encourage the public to participate.
- F. Identify and notify affected stakeholder groups such as commercial and industrial businesses, sanitary districts, road districts and homeowners associations about the SWMP.

1. 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.

1. Construction Site Run-Off 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. 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. Adoption of an ordinance or changes to an existing ordinance, to address construction site runoff control.

1. 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.

1. 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.

Action Items – Measurable Goals

MCM No.	Minimum Control Measure (MCM)	BPM	BMP	Measurable Goals	Year 1 2011	Year 2 2012	Year 3 2013	Responsibility
1	Public Education and Outreach	A	Education Materials – Effects Storm Water Pollution	Prepare and distribute materials to citizens located within UA				
		B	Education Materials – Hazardous Chemicals	Prepare and distribute materials to citizens located within UA				
		C	Education on Illicit Discharges	Provide materials regarding Illicit Discharges through mailings and the website				
		D	Website	Add to our website about Storm Water – provide links to other information sites				
		E	Storm Drain Labeling	Label storm drains throughout UA				
		F	Partnership with Municipalities	Work with the municipalities to ensure Storm Water programs are consistent with one another				
2	Public Participation and Involvement	A	Public Hearings - SWMP	Notify public of Storm Water Management Plan– take public comment regarding Storm Water issues				
		B	Public Hearings – Ordinances	Notify public of Ordinances associated with Storm Water Management Plan– take public comment regarding Storm Water issues				
		C	Complaint Line	Provide complaint mechanisms that citizens can report illicit discharges through the Highway Dept or Compliance Office				
		D	Sponsor Clean-up Day	Notify citizens about when Clean-up days are being held. Allow citizens to volunteer for the programs				
		E	Adopt a Highway	Educate the groups responsible about storm water quality and how the Adopt-a-Highway program can integrate into protecting storm water quality				
3	Illicit Discharge and Elimination	A	Storm Sewer Mapping	Update Storm Sewer Map every year				

Action Items – Measurable Goals (Continued)

MCM No.	Minimum Control Measure (MCM)	BPM	BMP	Measurable Goals	Year 1 2011	Year 2 2012	Year 3 2013	Responsibility
		B	Household Waste Recycling/Disposal	Develop a program that allows citizens in the UA to dispose of household hazardous wastes.				
		C	Illicit Discharge Detection Plan	Adopt an Ordinance or add to an existing ordinance to provide regulation of non-storm water discharges to the municipal separate storm sewer system (MS4), waterbodies or streams.				
		D	Confidential Reporting of Illicit Discharges	Provide a phone number or e-mail on mailings and website that citizens can report illicit discharge				
		E	Inspection of Storm Water Inlets	Develop a program to inspect all storm water inlets every three years.				
4	Construction Site Run-Off Control	A	Program to Reduce Pollutants from Construction	Any land disturbance \geq one acre will require pollution reduction BMPs.				
		B	Requirements for Construction Operators	Construction operators will be required to submit plans for pollution control on their construction sites and implement the components of the plan.				
		C	Construction Operator Waste Control	Construction sites must have controls in place for litter, debris and truck washing and tracking.				
		D	Site Plan Review	All construction site plans will be reviewed through the Planning and Zoning Office's routing procedure.				
		E	Site Inspection and Enforcement	All construction site plans will be reviewed through the Planning and Zoning Office's routing procedure.				

Action Items – Measurable Goals
(Continued)

MCM No.	Minimum Control Measure (MCM)	BPM	BMP	Measurable Goals	Year 1 2011	Year 2 2012	Year 3 2013	Responsibility
5	Post-Construction Runoff Control	A	Adoption of Construction Site Runoff Control Ordinance	Prepare an Ordinance or add to an existing Ordinance to provide regulation of construction site BMPs				
		B	Implementation of BMPs	Implement BMPs following construction activities to prevent pollution				
		C	Regular BMP Inspection	Inspect post-construction BMPs during construction activities to ensure they are functioning properly.				
		D	Verification of BMP Maintenance	Inspect post-construction BMPs at least once within 1 year to ensure they are being maintained properly.				
6	Pollution Prevention and Good Housekeeping	A	Develop Staff Training Program	Measures put into place to educate employees within the Highway Department about pollution prevention and storm water pollution.				
		B	On-Site Wastewater Systems Ordinance	Update our Wastewater Ordinance to provide improved regulation of on-site wastewater systems. Require inspection of systems to fix failing systems.				
		C	Storm Water Utility Fee	Consider a storm water utility fee that will cover operation and maintenance of the Storm Water Management Plan and provide funds for capital improvement projects relating to MS4s.				
		D	Review Storm Water Management Plan	Review and update Storm Water Management Plan at least annually.				
		E	Adopt-a-Highway Program	Prepare and Implement an Adopt-a-Highway Program with the Highway Superintendent				