

DEPARTMENT OF ENVIRONMENTAL QUALITY

Environmental Assessment

Water Quality Division
Water Protection Bureau

Name of Project: General Permit for Storm Water Discharges Associated with Small Municipal Separate Storm Sewer Systems (MPDES General Permit MTR040000)

Type of Project: This is a fifth generation Comprehensive General Permit for storm water discharges associated with Municipal Separate Storm Sewer Systems (MS4s). A municipal separate storm sewer means a conveyance, or system of conveyances, designed for collecting and conveying storm water. Storm water includes storm water runoff, snow melt, surface runoff, and/or drainage that transports pollutants and discharges them to waterways via storm sewer systems.

Location of Project: This permit covers areas that are served by, or contribute to, municipal separate storm sewers that discharge to state waters as follows:

- **Traditional MS4s:** Geographic areas of permit coverage for cities and counties listed in ARM 17.30.1102(23)(a) include the U.S. Census designated urbanized areas in accordance with the most recent census. For cities listed in ARM 17.30.1102(23)(b) the area of coverage includes the entirety of the municipal incorporated boundary.
- **Non-Traditional MS4s:** For all other permitted MS4s as identified in accordance with ARM 17.30.1102(23)(d), the geographic areas of permit coverage are the portion of the permittee's jurisdiction that is within the permitted Traditional MS4.

Description of Project: Reissuance of the statewide General Permit for another five-year permit term to continue to regulate storm water discharges from designated small MS4s. Each MS4 must apply for authorization and receive written approval from the Department to be covered under the General Permit. The Permit requires small MS4s to maintain, update, and enforce a Storm Water Management Program (SWMP) that includes management practices, control techniques, system designs, good standard engineering practices, and such other provisions necessary to reduce the discharge of pollutants from the small MS4 to the maximum extent practicable. Small MS4s must effectively manage their SWMP to include the following six minimum control measures: Public Education and Outreach, Public Involvement and Participation, Illicit Discharge Detection & Elimination, Construction Site Storm Water Runoff Control, Post-Construction Site Storm Water Management in New and Redevelopment, and Pollution Prevent/Good Housekeeping for Permittee Operations. Implementation of best management practices (BMPs) consistent with the six minimum control measures, and all other provisions of the permit (including monitoring, reporting, and special conditions), will eliminate or minimize the migration of pollutants to surface waters to the maximum extent practicable.

Agency Action and Applicable Regulations: The proposed action is to reissue the General Permit. This action falls under:

- Montana Water Quality Act 75-5-101, *et seq.*
- Administrative Rules of Montana (ARM) Title 17 Chapter 30:
 - Subchapter 2 – Fees
 - Subchapter 5 - Mixing Zones in Surface and Ground Water

- Subchapter 6 - Montana Surface Water Quality Standards and Procedures
- Subchapter 7 - Nondegradation of Water Quality
- Subchapter 11 - Storm Water Discharges
- Subchapter 12 and 13 - Montana Pollutant Discharge Elimination System

Summary of Issues: Urbanization increases the number of impervious surfaces such as city streets, driveways, parking lots, and sidewalks, creating concern for potentially harmful storm water discharges to state waters. The pollutants of concern are diversified due to multiple land-use categories. Other concerns include illegal dumping, unpermitted discharges, and the possibility of illicit connections. When left uncontrolled, discharges from storm water can result in fish kills, destruction of spawning and wildlife habitat, a loss in aesthetic value, and contamination of recreational waterways that can threaten public health.

Benefits and Purpose of Action: The renewal contains clear, specific, measurable, and enforceable requirements to control discharge of pollutants associated with storm water to the maximum extent practicable to protect water quality and satisfy the appropriate water quality requirements of the Clean Water Act.

Affected Environment & Impacts of the Proposed Project:

Impacts on the Physical Environment	
Resource	Potential Impacts and Mitigation Measures
<p>1. Geology and Soil Quality, Stability and Moisture: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?</p>	<p>Storm water runoff is generated when precipitation and snowmelt flow over land or impervious surfaces, such as those found in urbanized areas, and does not percolate into the ground. Storm water runoff from construction sites within urbanized areas may carry sediment, increasing erosion, from disturbed project sites. The proposed action promotes the stability and retention of native soils through construction and post-construction runoff control requirements and required BMPs as part of the small MS4’s SWMP. Issuance of MTR04000 would mitigate potential erosion or sediment migration and support beneficial effects for regulated urbanized areas throughout Montana.</p>
<p>2. Water Quality, Quantity and Distribution: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>The proposed action will continue the beneficial effects of regulated small MS4s maintaining and updating a SWMP designed to reduce discharge of pollutants to the maximum extent practicable, protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act. A SWMP is comprised of six elements that, when implemented in concert, are expected to result in substantial reductions of pollutants discharged into receiving waterbodies.</p> <p>Post-construction runoff requirements include infiltration, evapotranspiration, and/or the capture for reuse of runoff generated from the first 0.5 inches of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation. Therefore, water can be infiltrated back into the aquifer, evapotranspired back into the water cycle, or reused. These requirements mediate the known increase in the quantity of water delivered to a receiving waterbody during storm events from urbanized areas.</p>
<p>3. Air Quality: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones?</p>	<p>Issuance of MTR04000 should have no direct effect on air quality. The proposed action focuses on the water quality of storm water discharged from urbanized areas to receiving waterbodies. Disturbed areas within construction sites have the potential for dust based on increased, temporary exposed soils, but these sites are required to implement and maintain BMPs to manage sediment on site.</p>

<p>4. Vegetation Cover, Quantity and Quality: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?</p>	<p>MTR04000 focuses on storm water from urban areas with development and concentrated areas of human populations. Much of the original vegetation has already been altered through urbanization, but the proposed action includes options for regulated small MS4s to increase, restore, and maintain vegetative BMPs within their urbanized boundaries. These vegetative BMPs are landscaping features that, with optimal design and good soil conditions, remove pollutants and facilitate percolation of runoff, thereby promoting healthier habitats and increasing aesthetic appeal. Vegetative BMPs may include grassy swales, filter strips, artificial wetlands, and rain gardens. These increased and maintained landscaping features may improve and enhance vegetation quantity and quality in the urbanized area.</p>
<p>5. Terrestrial, Avian and Aquatic Life and Habitats: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>The proposed action is protective of receiving waterbodies from pollutants transported by storm water via storm sewer systems. Therefore, aquatic life and habitat should have a positive correlation with the reissuance of this General Permit. Terrestrial, avian life, and corresponding habitat may be positively affected because post-construction runoff requirements emphasize both storm water retention/detention and vegetative BMPs. Retention or detention BMPs control storm water by gathering runoff into sediment basins such as wet ponds, dry basins, or multi-chamber catch basins. These sediment basins function as storm water impoundments and sediment accumulation reservoirs that may become new or increased habitat within an urbanized area. Vegetative BMPs are landscaping features that, with optimal design and good soil conditions, remove pollutants and facilitate percolation of runoff, thereby promoting healthier habitats and increasing aesthetic appeal. Examples include grassy swales, filter strips, artificial wetlands, and rain gardens. Vegetative BMPs may increase and enhance terrestrial and avian life and corresponding habitats in an urbanized area.</p>
<p>6. Unique, Endangered, Fragile or Limited Environmental Resources: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>The proposed action is protective of receiving waterbodies from pollutants transported by storm water via storm sewer systems. Therefore, aquatic life and habitat should have a positive correlation with reissuance of MTR040000. The permit focuses on storm water from urban areas with development and concentrated areas of human populations. The proposed action includes options for regulated small MS4s to increase, restore, and maintain vegetative BMPs that may benefit terrestrial and avian life and corresponding habitat. Overall, the proposed action may have a beneficial effect on unique, endangered, fragile, or limited environmental resources because MTR04000 focuses on improving water quality and encourages increased vegetation in urbanized areas.</p>
<p>7. Sage Grouse Executive Order No. 12-2015</p>	<p>Applying the Executive Order within city limits would not reduce the overall threat to sage grouse, nor will habitats be enhanced through mitigation or restoration efforts as cities and towns do not provide sage grouse habitat. The land has already been converted to human-related land uses. The Montana Sage Grouse Oversight Team granted a geographically-limited exception to the consultation requirements and stipulations for any activity that would wholly occur within the boundaries of incorporated cities and towns as of March 28, 2016. The geographic area of permit coverage for cities includes the entirety of the municipal incorporated boundaries, and for counties within the designated urbanized area in accordance with the 2010 U.S. Census. DEQ concludes that the boundaries of the urbanized areas of the counties follow the same rationale of incorporated cities. Small MS4 counties will not exacerbate threats to sage grouse habitat.</p>
<p>8. Historical and Archaeological Sites: Are any historical, archaeological or paleontological resources present?</p>	<p>The proposed action includes development and implementation of (1) a construction project plan review process focused on sediment and erosion controls, (2) a construction inspection process for implemented sediment and erosion controls, and (3) a construction site inventory. Identification of historical and archaeological sites located within planned urbanized area development or redevelopment may occur based on federal, state, or local laws, ordinances, or other requirements outside of the focus of the proposed action. Issuance of MTR04000 should have no direct effect on identified historical and archaeological sites. The proposed action may have a secondary beneficial effect of reduced or controlled erosion near or within a historical or archaeological site (if development or redevelopment is approved) because</p>

	regulated small MS4s will require erosion and sediment controls on all regulated construction projects within their boundaries and ensure that these controls are included in site plans as well.
9. Aesthetics: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	As discussed in 4 and 5 above, the proposed action may increase the visual aesthetic appeal of regulated small MS4s and urbanized areas within their boundaries. The proposed action to continue to regulate storm water within the permitted MS4 boundaries should not affect noise within an urbanized area. The proposed action may have a beneficial effect on odors if these odors originate from contaminants conveyed through storm water in state surface waters or from illicit discharges.
10. Demands on Environmental Resources of Land, Water, Air or Energy: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded powerline or other energy source be needed)	The proposed action will continue the beneficial effects of regulated small MS4s maintaining and updating a SWMP designed to reduce the discharge of pollutants to the maximum extent practicable, protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act. Therefore, the proposed action is intended to prevent and mitigate the potential negative effects of pollutants carried by storm water within urbanized areas and reduce the demand on resources that would result from uncontrolled storm water discharges (like contamination of local waterbodies, fish kills, and the destruction of spawning and wildlife habitats) and any consequential remediation efforts.
11. Impacts on Other Environmental Resources: Are there other activities nearby that will affect the project?	No other significant impacts on other environmental resources have been identified.

Impacts on the Human Environment	
Resource	Potential Impacts and Mitigation Measures
12. Human Health and Safety: Will this project add to health and safety risks in the area?	Urban storm water runoff may affect human health from disease-causing bacteria carried in storm water and conveyed to receiving waterbodies used for water supplies, fishing, and recreation. Issuance of the General Permit, subsequent maintenance, and further development and implementation of storm water management programs may potentially neutralize the effects of uncontrolled urban storm water. The proposed action includes requirements for public education and outreach that raise awareness to audiences about the behaviors and activities that have the potential to pollute storm water discharges and motivate action to change behaviors and reduce pollutants in storm water runoff. The proposed action also includes requirements for an illicit discharge detection and elimination (IDDE) program to detect and eliminate illicit discharges into storm sewer systems that will reach receiving waterbodies. The IDDE program is designed to track, investigate, eliminate, and abate any illicit discharges reported or discovered, including discharges that may be negatively affecting human health. Analysis of the proposed action concludes that continued storm water regulations may have a beneficial effect on human health.
13. Industrial, Commercial and Agricultural Activities and Production: Will the project add to or alter these activities?	The proposed action is in relation to urbanized areas, so no impacts to agricultural activity within permitted boundaries have been determined. The proposed action may have an effect on industrial and commercial activity within the boundaries of regulated small MS4s. As part of the IDDE program, permittees must prioritize industrial drainage areas for dry weather screening to detect illicit discharges. Small MS4s must continue water quality monitoring from a location representative of commercial/industrial sector within their boundaries to assess the effectiveness of their Storm Water Management Program. The effect of the proposed action is increased awareness of industrial and commercial activities within small MS4s, and the abatement of pollutants if such activities are illicitly discharging from their facilities and areas of operation. Analysis of the proposed action concludes that regulated storm water may have a beneficial effect on the local water quality from an IDDE program that addresses industrial and commercial activities.

<p>14. Quantity and Distribution of Employment: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>The MTR040000 requirements may consequently cause a small MS4 to assess budgets, allocation of resources, and/or propose a new or increased source of funding. This assessment may include the need for additional internal or external services resulting in a potential minor increase in local employment and economy. The reissuance of the permit continues to protect receiving waterbodies, which inadvertently protects a sector of Montana employment including tourism and recreational fishing through guide services, gear distribution, and retailers. Analysis of the proposed action concludes continued regulation may have a beneficial effect on this category.</p>
<p>15. Local and State Tax Base and Tax Revenues: Will the project create or eliminate tax revenue?</p>	<p>The requirements within MTR04000 are carried out by municipalities which are funded through taxes. To meet the requirements, a small MS4 may assess budgets, allocation of resources, and/or propose a new or increased source of funding. In return and if applicable, these potential effects will result in a supported Storm Water Management Program. If MTR04000 is not reissued, municipalities may have to allocate resources to mitigate any negative impacts of uncontrolled urban storm water runoff into receiving waterbodies. The analysis of this category concludes the proposed action may have a beneficial effect.</p>
<p>16. Demand for Government Services: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?</p>	<p>Demand on the Department exists for continuing to implement discharge permitting under this General Permit, but storm water permitting is a fee-funded program. By minimizing potential impacts to state surface waters through storm water discharge permitting, there may be a potential beneficial effect on other government services through the avoidance of respective water pollution and related issues. The proposed action is the fifth iteration of the General Permit and small MS4s have developed programs (using allocated budgets and resources) based on previous permitting requirements. The continued regulation of storm water is beneficial to the physical environment and human health within the boundaries of small MS4s and alleviates the allocation of budget and resources to other local governmental agencies/departments that would potentially mitigate the negative effects of unregulated storm water.</p>
<p>17. Locally Adopted Environmental Plans and Goals: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>Previous iterations of MTR040000 included requirements for small MS4s to enact an ordinance or other regulatory mechanism to prohibit illicit discharges. Additionally, the construction and post-construction requirements require small MS4s to adopt an ordinance or other regulatory mechanism to effectively require erosion and sediment controls on construction projects within their boundaries and implement appropriate enforcement procedures and actions. Through the iterative process of the reissuance of MTR040000 and the adaptive management approach of storm water permitting, DEQ influences the environmental plans and goals of small MS4s that will in return improve storm water quality. Analysis of the proposed action concludes there may be a beneficial effect on local environmental plans and goals (and in return local water quality) because of locally adopted regulatory mechanisms and DEQ’s environmental foresight with administering the fifth iteration of MTR040000.</p>
<p>18. Access to and quality of Recreational and Wilderness Activities: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>The proposed action will have no impacts on access to recreational and wilderness activities. As discussed above, the proposed action may enhance the quality of recreational and wilderness activities of regulated small MS4s and urbanized areas within their boundaries.</p>
<p>19. Density and Distribution of Population and Housing: Will the project add to the population and require additional housing?</p>	<p>The proposed action will have no impacts on this category.</p>
<p>20. Social Structures and Mores: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>The proposed action will have no impacts on this category.</p>
<p>21. Cultural Uniqueness and Diversity: Will the action cause a shift in some unique quality of the area?</p>	<p>The proposed action will have no impacts on this category.</p>
<p>22. Other Appropriate Social and Economic Circumstances:</p>	<p>No further human population categories require analysis for the proposed action.</p>

<p>23(a). Private Property Impacts: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.</p>	<p>N/A</p>
<p>23(b). Private Property Impacts: Is the agency proposing to deny the application or condition the approval in a way that restricts the use of the regulated person's private property? If not, no further analysis is required.</p>	<p>N/A</p>
<p>23(c). Private Property Impacts: If the answer to 21(b) is affirmative, does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives. The agency must disclose the potential costs of identified restrictions.</p>	<p>N/A</p>

Description and Impacts of other Alternatives Considered: The reasonable alternative to reissuance is to not reissue the General Permit. Without reissuance of MTR04000, the fourth iteration and active General Permit would expire effective midnight, December 31, 2021. All permitted small MS4s would be required to obtain individual permit coverage. The individual permit application process would be (1) more expensive for the small MS4s with the same baseline six minimum control measures and (2) delay updated MS4 program requirements from being implemented, as the proposed action requirements are already outlined for the upcoming five years. The federal storm water Phase II Rules were designed to accommodate general permit issuance and the small MS4 General Permit is the typical approach being used by EPA and other states. The General Permit enables DEQ the ability to provide an enforceable statewide regulatory mechanism for storm water discharges from small MS4s where application and permit coverage can be effectively managed and expedited.

Summary of Magnitude and Significance of Potential Impacts: Reissuance of this comprehensive General Permit contains the full set of clear, specific, and measurable requirements necessary to meet the statutory standard of reducing pollutants to the maximum extent practicable, to protect aquatic life and human health, and to satisfy the appropriate water quality requirements of the Clean Water Act.

Cumulative Effects: Unregulated and uncontrolled urban storm water often has interrelated and cumulative effects, such as degraded water quality to negatively impact human health, aquatic life, and environmental resources. Secondary effects of polluted waterbodies from unregulated and uncontrolled storm water may include a negative impact on tourism, recreation, and the employment associated with those industries. However, the proposed action to reissue the General Permit is protective of receiving waterbodies within MS4 boundaries and will have a net beneficial cumulative effect on storm water quality discharged to state waters. The General Permit requires permittees to

maintain and further develop their current Storm Water Management Programs, and thus continues to mitigate and reduce the cumulative effects of unregulated urban storm water into receiving waterbodies.

Preferred Action Alternative and Rationale: Consistent with EPA’s Phase II Final Rule, DEQ has determined the achievement of reducing pollutants to the maximum extent practicable is an iterative and evaluative process. To facilitate this, the preferred action is the reissuance of the fifth iteration of MTR040000 for another five-year cycle to continue to provide an effective regulatory mechanism for storm water discharges from small MS4s.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

Rationale for Recommendation: The proposed action continues to mitigate and reduce effects of unregulated urban storm water into receiving waterbodies and does not consequently result in potential significant impacts on the physical environment and the human population.

Public Involvement: A public comment period and public hearing will be held for the proposed General Permit, including this EA.

Persons and agencies consulted in the preparation of this analysis: None

EA Prepared by: Haley Sir, October 2021

Approved by:

Jon Kenning, Chief

Date