

Storm Water Management Program

City of Helena, MT

Small Municipal Separate Storm
Sewer System (MS4)

Permit Authorization Number MTR040000

Permit Term 2017-2021



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1.0 Introduction

The City of Helena (City) is regulated by the Montana Department of Environmental Quality (DEQ) as delegated by the United States Environmental Protection Agency (EPA) under the National Pollution Discharge Elimination System (NPDES) as the owner and operator of a Phase II, Small Municipal Separate Storm Sewer System (MS4). EPA regulations require that small MS4s prepare a Storm Water Management Program (SWMP) which includes management practices, control techniques, systems, designs, good standard engineering practices, and such other provisions necessary to reduce the discharge of pollutants from the permitted Small MS4 to the Maximum Extent Practicable (MEP). DEQ has primacy in Montana; therefore, federal NPDES regulations are incorporated by DEQ into Montana's General Permit for Storm Water Discharges Associated with Small MS4s (General Permit).

The City's MS4 has been covered by the Montana DEQ General Permit Number MTR040000, Authorization to Discharge under the Montana Pollutant Discharge Elimination System (MPDES) for three permit cycles: 2005 to 2009, 2010 to 2014 and the reissued 2010 permit for 2015 to 2016. This SWMP builds upon the SWMP which was developed during prior permit cycles (SWMP 2010) by incorporating all of the components and activities of the 2010 SWMP while addressing new program requirements. The layout of this SWMP parallels the layout of the General Permit (Appendix B) which is effective from January 1, 2017 to December 31, 2021.

1.1 Background of Regulatory Requirements and Permit Coverage

Permit Reference: Part I.

The Clean Water Act was enacted in 1972 and established the basic structure for regulating the discharge of pollutants to waters of the United States in order to maintain Water Quality Standards for surface waters. Under the 1987 amendments to the Clean Water Act, industrial storm water systems and MS4s were required to obtain NPDES permits. In 1990, EPA promulgated rules establishing Phase I of the NPDES storm water program. The Phase I program for MS4s requires owners or operators of "medium" and "large" MS4s, as defined by those that typically serve populations of 100,000 people or more, to implement a storm water management program as a means to control polluted discharges from these areas.

The Storm Water Phase II Rule took effect in 1999 and extended coverage of the NPDES storm water program to certain "small" MS4s. The Phase II Rule takes a slightly different approach to how the storm water management program would be developed and implemented. Rather than individual permits, which were required for the Phase I MS4s, the proposed Phase II program is designed to accommodate a general permit approach using a Notice of Intent (NOI) as the permit application. Under the Phase II Rule, small MS4s are automatically designated on a nationwide basis if the municipality is located in "urbanized areas" (UAs) as defined by the United States Census Bureau, or if they are located outside a UA they are designated on a case-by-case basis by the NPDES permitting authority. Montana DEQ is the permitting authority for Montana and designated the City as a Small MS4 under Administrative Rule of Montana (ARM) 17.30.1107.

1.2 MS4 Stakeholder Cooperative Process

To support the General Permit reissuance process, Montana DEQ and the permitted MS4 cities (Billings, Missoula, Great Falls, Bozeman, Helena, Butte, and Kalispell) entered into a memorandum of understanding (MOU) on October 24, 2014, to cooperatively discuss and document common Montana-specific issues with implementation of the MS4 program. As part of the process, the Cooperative Group developed Standard Forms, Checklists and Protocols to be used for compliance with the General Permit. These Standard Forms, Checklists and Protocols have been adopted, where appropriate, by the City under each of the Minimum Control Measures (MCMs) listed in the General Permit. Additionally, as part of the MS4 Stakeholder Cooperative Process, the group agreed to work collectively on a Post-Construction Best Management Practices (BMP) Manual which will contain a suite of DEQ endorsed Post-Construction BMPs. DEQ has participated in development and funding of the Manual; therefore, using these BMPs will provide the regulatory predictability that both the MS4s and development community needs. When implemented appropriately the BMPs in the Manual are intended to comply with the General Permit requirements.

2.0 Storm Water Management Program

Permit Reference: Part II.A.

This SWMP describes how compliance is achieved through effective management of a storm water program inclusive of the General Permit's six MCMs:

1. Public Education and Outreach;
2. Public Involvement and Participation;
3. Illicit Discharge Detection and Elimination (IDDE);
4. Construction Site Storm Water Management;
5. Post-Construction Storm Water Management in New and Redevelopment; and
6. Pollution Prevention/Good Housekeeping for Permittee Operations.

Additional provisions in the General Permit beyond the six MCMs which are part of this SWMP include:

- Training
- TMDL Related Monitoring
- Recording and
- Reporting

Compliance with the six MCMs and the additional provisions relies on activities of various departments throughout the City, and in conjunction with the Lewis and Clark County Water Quality Protection District (WQPD).

The rationale for implementation of Post-Construction Storm Water Management Controls and TMDL Related Monitoring can be found in the following documents:

- The City of Helena Storm Water Master Plan (January 2003);

- The Updated City of Helena Storm Water Master Plan (due for completion in December 2017); and
- The Lake Helena Watershed Restoration Plan 2016-2023 (December 2015).

The City will complete an annual report form for each calendar year within the General Permit term. If the City makes updates, changes, or improvements to the SWMP during the prior calendar year, an attachment to the annual report will be included to identify them. The General Permit and most recent annual report are available on the City's website.

SWMP Development Schedule

The General Permit requires implementation of a number of different BMPs and program components over the five year permit term. As such, there are several components of this SWMP which refer to permit requirements that will be addressed in future years (in accordance with schedule provided within the General Permit). This SWMP will be updated throughout the permit term as necessary. The schedule in the permit is summarized in Table A.1: City of Helena MS4 General Permit Implementation Schedule (see Appendix A).

Storm Water Management Team

The City's storm water management team is comprised of City personnel in the Public Works Department who are responsible for the development and oversight of the SWMP. The team has both direct and indirect responsibilities associated with implementation of the SWMP. Where other departments have direct responsibilities for implementation of the SWMP, the team will provide coordination, communication, assistance, and dissemination of information to assist other departments with SWMP compliance. Formal communication methods consist of office meetings with other departments, phone conversations, on-site meetings at City facilities, emails and the City website.

The storm water team and the individuals/positions responsible for the development and oversight of the SWMP are identified as follows:

Randal Camp – Public Works Director
Ryan Leland – City Engineer
Matt Culpo – Storm Water Engineer (Primary SWMP Coordinator)

Kevin Harrington – Engineering Technician
Kevin Hart – Utilities Superintendent
Bill Horner – Sewer Maintenance Supervisor

Contact information for City personnel can also be found on the City's website.

2.1 MCM 1: Public Education and Outreach

Permit Reference: Part II.A.1.

The City has created and implemented Public Education and Outreach Program (PEOP) which distributes and evaluates educational materials and outreach activities to key target audiences

in the MS4 to raise awareness about the impacts of storm water discharges on water bodies. The intent of this program is to educate the audiences about the behaviors and activities that have the potential to pollute storm water discharges while motivating the community to change behaviors in order to reduce pollutants in storm water runoff. The City's PEOP partners with the Lewis and Clark County WQPD to accomplish a significant portion of its activities through funding and coordinated activities. Additional information regarding the PEOP can be found in the Lake Helena Watershed Restoration Plan 2016-2023 (WQPD 2015). These activities are intended to reach the general public as a whole, as well as target audiences. Some of these activities include:

- Lake Helena Watershed Festival
- Water Watchers Youth Education Program
- Mailers for construction storm water management, good housekeeping, and the storm water cycle
- Social media
- Newsletters distributions
- Watershed tours
- Watershed group meetings
- Public displays in the City and County Building providing water quality information
- City of Helena and WQPD website information

The following sections describe the ongoing and planned future activities which the City will implement into its PEOP in accordance with the General Permit's requirements.

Permit Reference: Part II.A.1.a.i.

Table 1 provides a list of business types and residential behaviors that have the potential to pollute downstream waterways along with BMP(s) specific to each target audience.

Table 1: Public Outreach and Education Key Target Audiences

	Business Type or Residential Behavior with Potential for Illicit Discharge	Description and Rationale of Potential Illicit Discharge	Primary Potential Pollutants	BMP for Pollutant Disposal, Treatment or Behavioral Change to Reduce or Eliminate Potential Illicit Discharge
Business Types	Auto Service/Gas Stations	Use of automotive fluids. Potential for spilling and need for proper disposal.	Petroleum Products	Require Oil/Water separators for new facilities. City/County Disposal and Recycling available.
	Restaurants	Use of cooking materials such as oils, fats and grease. Potential for spilling and need for proper disposal.	Oils, fats and grease.	Industrial pretreatment program. Fats, oils and grease brochure. Required to use and operate a grease trap. Fats, oil, grease disposal and recycling. Inspections and record keeping.
	Commercial Car Washes	Use of soaps and water to wash off Oil/Sand from vehicles.	Oil, sand, phosphorous.	Oil/Sand separators. Discharge to sanitary sewer.

	Business Type or Residential Behavior with Potential for Illicit Discharge	Description and Rationale of Potential Illicit Discharge	Primary Potential Pollutants	BMP for Pollutant Disposal, Treatment or Behavioral Change to Reduce or Eliminate Potential Illicit Discharge
	Industrial Facilities	Use of chemicals and heavy metals. Potential for spilling and need for disposal.	Various Heavy Metals and Chemicals	Industrial pretreatment program. Industrial User Permit Required. Inspections and record keeping.
	Construction Activities	Use of construction materials such as wastewater form concrete washouts, which have the potential to pollute downstream waterways if not properly contained.	Sediment, wastewater from concrete washouts, fuels, paints and fertilizers.	Require that regulated construction activities obtain coverage under the Construction General Permit. SWPPP review. Site inspections.
	Parking Lots and Vehicle Storage Facilities	Potential for spilling and leaking automotive fluids.	Petroleum Products	Oil/Sand separators.
Residential Behaviors	Vehicle Maintenance	Potential for spilling and leaking automotive fluids.	Petroleum Products	Landfill disposal and recycling. Informational brochure distribution. City website information.
	Lawn Care	Use of fertilizers, pesticides and weed control products.	Fertilizers, pesticides, and weed control products.	Landfill accepts yard debris. Informational brochure distribution. City website information.
	Home Maintenance	Use of paints and household chemicals.	Petroleum products, paint, cleaning products.	Normal household waste disposal to sanitary sewer. Landfill disposal and recycling. Informational brochure distribution. City website information.

Permit Reference: Part II.A.1.a.ii.

The City actively operates a public website with various information relating to storm water, waste disposal, pollution prevention, and industrial permitting and restaurant operation information. The website can be found at <http://www.helenamt.gov>. More specifically, the City has a public storm water web page located at <http://www.helenamt.gov/pw/utility-maintenance/stormwater.html> and contains the following information:

- General information regarding the storm water program;
- A copy of the General Permit for Storm Water Discharge;
- Storm Water Management Program documentation;
- Helena’s Storm Basin Map;
- Annual reports, review comments and responses;
- Outreach materials;
- Construction Storm water requirements;
- EPA Storm Water Fact Sheets;
- Web link to Lewis and Clark County’s WQPD storm water page; and

- Contact information for reporting illicit discharges and storm water issues.

The Lewis and Clark County WQPD web page also has relevant information related to storm water protection and is a valuable resource for the City's PEOP. The web page is located at <http://www.lccountymt.gov/health/water/about-the-district.html> and contains information related to:

- WQPD mapping, strategic planning and annual reporting;
- Lake Helena Watershed Group mission, goals and activities;
- Lake Helena Watershed Restoration Plan 2016-2023; and
- Storm water information, outreach materials and a link to the City of Helena's Storm Water web page.

The website will be updated as needed to keep information and documentation correct. Additional required content such as information on how to identify sources of illicit discharges and a mechanism for providing public input on the SWMP will be added to the website in 2017.

Permit Reference: Part II.A.1.b.i. and Part II.A.1.c.i.

The City utilizes various forms of outreach materials which promote the benefits of non-polluting behaviors and their benefits to storm water. Such forms of outreach materials include fliers, brochures, posters and displays. The City distributes brochures and outreach materials as mailers in the water and sewer utility bills. The outreach materials are distributed annually on a rotating schedule. Electronic copies of the outreach materials are also available for viewing and downloading on the City's website. Examples of these outreach materials are provided in Appendix C of this SWMP.

The Lewis and Clark County WQPD sets up displays in locations which will reach a large group of key target audiences. Locations include areas of high visibility on the main floor of the City and County Building near the reception desk, voting area, tax department, water and sewer payment desk and motor vehicles. Figure 1 shows an example of a Lewis and Clark County WQPD display.



Figure 1: Public Outreach and Education Display by WQPD

2.2 MCM 2: Public Involvement and Participation

Permit Reference: Part II.A.2.a.i. and ii.

The City in cooperation with the Lewis and Clark County WQPD conducts public involvement and participation activities related to water quality and storm water improvement. These activities are intended to reach the general public as a whole in a manner that provides information to each of the key target audiences. Some of these activities include:

- Storm drain stenciling
- Lake Helena Watershed Group activities including the Lake Helena Watershed Festival, litter pickup, riparian planting day and volunteer monitoring
- Water Watchers education program
- Availability and advertisement of hazardous waste collection
- A Storm Water Control Ordinance (Ordinance) prohibiting illicit discharges
- An Ordinance requiring storm water treatment of the first 0.5 inches of runoff from each rainfall event for new development
- Engineering standards requiring oil/sand/water separators at certain businesses

Table 2 demonstrates how each of these activities is related to each of the key target audiences and the purpose or anticipated outcome of the activity as it relates to development and implementation of the SWMP and improving storm water quality.

Table 2: Public Involvement and Participation for Key Target Audiences

	Key Target Audiences	Approach	Target Date	Purpose of the Involvement
	All	Post SWMP, and MS4 Permit information on the City's website. Develop informational mailers regarding SWMP and MS4 permit status, involvement and contacts.	Active	To provide mechanisms for the public to be involved in the development of the SWMP.
Business Types	Consulting Engineers	Review and Implement Storm Water Engineering and Design Standards and provide DEQ and locally sponsored trainings.	Active	Increase awareness and implementation of permit requirements and storm water management controls for construction and post-construction BMPs.
	Contractors	Conduct site Inspections and provide DEQ and locally sponsored training.	Active	Increase awareness and implementation of permit requirements and storm water management controls for construction and post-construction BMPs.
	Auto Service/Gas Stations	Require retention, infiltration or reuse of runoff from the first 0.5-inches of rainfall. Require oil/water separators. Utility bill storm water information mailers.	Active	Reduce runoff and associated pollutants from auto service/gas stations. Increase awareness of water quality considerations among the target audience. Increase awareness of general storm water quality considerations.

	Key Target Audiences	Approach	Target Date	Purpose of the Involvement
	Restaurants	Require fats, oil and grease traps. Require fats, oil and grease disposal. Utility bill storm water information mailers.	Active	Reduce disposal of fats, oils and grease to the storm sewer system. Increase awareness of water quality considerations among the target audience. Increase awareness of general storm water quality considerations.
	Commercial Car Washes	Require oil/sand/water separators. Require connection to sanitary sewer. Utility bill storm water information mailers.	Active	Reduce discharge of car wash pollutants to the storm sewer system. Increase awareness of water quality considerations among the target audience. Increase awareness of general storm water quality considerations.
	Industrial Facilities	Require Industrial Pre-Treatment. Utility bill storm water information mailers.	Active	Reduce discharge of industrial heavy metals and other pollutants to the storm sewer system and waste water treatment plant. Increase awareness of water quality considerations among the target audience. Increase awareness of general storm water quality considerations.
	Parking Lots and Vehicle Storage Facilities	Require oil/sand/water separators. Utility bill storm water information mailers.	Active	Reduce petroleum and sediment pollutant discharges to the storm sewer system from parking lots. Increase awareness of water quality considerations among the target audience. Increase awareness of general storm water quality considerations.
Residential Behavior	Vehicle maintenance	Utility bill storm water information mailers. Advertise and provide hazardous waste disposal and recycling. Provide applicable information at the Lake Helena Watershed Festival.	Active	Reduce pollutants from vehicle maintenance entering the storm sewer system. Increase proper disposal of automotive products. Increase awareness of water quality considerations among the target audience.
	Lawn Care	Utility bill storm water information mailers. Provide for disposal of yard waste. Provide applicable information at the Lake Helena Watershed Festival.	Active	Reduce pollutants from lawn care entering the storm sewer system. Increase proper disposal of yard waste. Increase awareness of water quality considerations among the target audience.
	Home Maintenance	Utility bill storm water information mailers. Advertise and provide hazardous waste disposal and recycling. Provide applicable information at the Lake Helena Watershed Festival.	Active	Reduce pollutants from household chemical use entering the storm sewer system. Increase proper disposal of household chemicals. Increase awareness of water quality considerations among the target audience.

Permit Reference: Part II.A.2.b.i.

The City actively operates a public website for access by the public and for soliciting input from key target audiences, stakeholder and the public. The website is located at <http://www.helenamt.gov/pw/utility-maintenance/stormwater.html> and contains the following information relevant to MCM 2:

- General information regarding the storm water program;
- General Permit for Storm Water Discharge;
- Storm Water Management Program documentation;
- Helena's Storm Basin Map;
- Annual reports, review comments and responses;
- Outreach materials;
- Construction Storm water requirements;
- EPA Storm Water Fact Sheets;
- Lewis and Clark County's WQPD storm water page; and
- Contact information for submitting SWMP input and for reporting illicit discharges and storm water issues.

Additionally, the City partners with the Lewis and Clark WQPD regarding Public Involvement and Participation through an actively managed web page. The web page is located at <http://www.lccountymt.gov/health/water/about-the-district.html> and contains the following information relevant to MCM 2:

- WQPD mapping, strategic plan, and annual report;
- Lake Helena Watershed Group mission, goals and activities;
- Lake Helena Watershed Restoration Plan 2016-2023;
- Lake Helena Watershed Group public outreach and involvement activities (e.g., Lake Helena Watershed Festival, litter pickup, riparian planting day, volunteer monitoring, and Water Watcher's Education); and
- Storm water information, outreach materials and a link to the City of Helena's Storm Water web page.

The website will be updated as needed to keep information and documentation correct. Additional required content such as information on how to identify sources of illicit discharges and a mechanism for providing public input on the SWMP will be added to the website in 2017.

2.3 MCM 3: Illicit Discharge Detection and Elimination

The City's SWMP includes an array of BMPs with a common goal to identify, prevent, and eliminate the effects of illicit discharges on storm water quality. Illicit discharge BMPs specific to this MCM are discussed herein; however, this SWMP focuses on illicit discharges as a priority by providing BMPs within the other MCMs that also address illicit discharges.

Permit Reference: Part II.A.3.a.i.

The City conducts video surveys of its storm water system on a regular basis and has not seen any evidence of significant non-storm water discharges to its system. As such, the City is not currently aware of any non-storm water discharges that contribute a significant amount of pollutants to the storm water system. An Ordinance is in affect which prohibits illegal

discharges which contain pollutants that cause or contribute to a violation of applicable water quality standards or that could cause the City to be in violation of the General Permit. The specific section of the Ordinance that addresses illegal discharges can be found in Title 6, Chapter 6-10 of the City Code and a copy of the Ordinance is provided in Appendix I. Potential for non-storm water discharges which are significant contributors of pollutants will be reviewed annually and addressed in each years' annual report.

The following non-storm water discharges are exempt from the Ordinance and are not considered an illegal discharge: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising groundwater, groundwater infiltration to storm drains, uncontaminated and pumped groundwater, foundation or footing drains (not including active groundwater dewatering systems), springs, noncommercial washing of vehicles, natural riparian habitat or wetland flows, firefighting activities, routine street and utility maintenance, including chip sealing and spreading of gravel and other materials necessary to provide safe streets, and any other water source not containing pollutants.

Permit Reference: Part II.A.3.b.i.

Table 3 provides a list of occasional incidental non-storm water discharges that will not be addressed as illicit discharges. These will not be addressed as illicit discharges because the information available to the City indicates that these non-storm water discharges are not reasonably expected to be significant contributors of pollutants to the MS4. This list will be reviewed annually and any revisions will be included in each years' annual report.

Table 3: Occasional Incidental Non-Storm Water Discharges not to be addressed as Illicit Discharges

Occasional Incidental non-storm water discharge	Potential Pollutants	Local Controls or Conditions	Reason for non-significance
Charity Car Washes	Sediment and Phosphorous	None	Infrequent occurrence
Sprinkler System Overspray and breaks	Chlorine	None	Overspray and breaks are usually repaired by the owner or reported by residences or City personnel.
Residential Car Washes	Sediment and Phosphorous	None	Infrequent and small scale
Waterline flushing	Chlorine	Use of de-chlorination equipment	Use of water main flushing rules and de-chlorination equipment (Appendix D)
Main Breaks	Chlorine	Isolation/Termination	Rare and unpredictable
Fire Fighting	Chlorine and Fire Suppression Chemicals	Standard Operating Procedures	Emergency Response

Permit Reference: Part II.A.3.b.ii.

The City is not aware of any occasional incidental non-storm water discharges that contribute a significant amount of pollutants to the storm water system. An Ordinance is in affect which prohibits illegal discharges which contain pollutants that cause or contribute to a violation of applicable water quality standards or that could cause the City to be in violation of the General Permit. A copy of the Ordinance is provided in Appendix I.

Permit Reference: Part II.A.3.c.i.

The City has created a comprehensive Geographic Information System (GIS) database of the storm sewer system within the municipal boundary. The storm sewer system GIS database includes outfalls, piping, inlets, manholes, conveyance channels, streams and ponds. Pipe sizes range from approximately 12 inches to 84 inches in diameter. Ponds range from regional flood control and water quality ponds to private and public water quality, detention and infiltration ponds. The information available within the GIS database is too extensive to be accurately and completely shown on a hard copy map. However, Figure A.1 – Overall Storm System and Basin Map (see Appendix A) provides a graphical representation of the overall storm system by showing primary basins, existing outfalls, storm water ponds, and storm drains. The Overall Storm System and Basin Map is updated regularly throughout the year as developments occur, capital improvement projects are completed, and as needed to improve accuracy.

As part of the mapping and IDDE program, the City annually conducts video surveys on a portion of the storm sewer system. The annual videos are used to access the condition of the pipe, identify areas requiring future maintenance and replacement, and to detect illicit connections. Illicit discharge connections that are discovered during the video inspection are given a high priority for investigation and corrected based on the results of the investigation.

Permit Reference: Part II.A.3.d.i.

An Ordinance is in affect which prohibits illegal discharges which contain pollutants that cause or contribute to a violation of applicable water quality standards or that could cause the City to be in violation of the General Permit. A copy of the Ordinance is provided in Appendix I.

Permit Reference: Part II.A.3.d.ii.

Not applicable

Permit Reference: Part II.A.3.d.iii.

Not applicable (the City does not have neighboring MS4s as the County area is not currently designated as a Small MS4).

Permit Reference: Part II.A.3.d.iv and v.

A Enforcement Response Plan (ERP) for illicit discharges will be developed during the 2nd permit year and submitted with the 2nd year annual report. The ERP will be based on the Montana MS4 Template ERP which is included in Appendix H.

Permit Reference: Part II.A.3.e.i.

Outfall inspections are completed using the Montana MS4 Outfall Inspection Form included in Appendix D. This inspection form is based upon the field screening protocol developed by the Center for Watershed Protection. The City intends to inspect and screen all of its outfalls during dry weather by the end of this five year permit cycle. Progress will be documented in each year's annual report. A list of the outfalls from Helena's MS4 municipal boundary is provided in Table 4 and the location of each outfall is shown on Figure A.1 (see Appendix A).

Table 4: Outfalls for the City of Helena

Outfall No.	Drainage Basin	Outfall BMP	Outfall Conveyance	Street Location
1	Westside	East Simmons Detention Pond	30 inch	Broadwater Ave and spring meadow
2		West Simmons Detention Pond	12 inch	Broadwater and Motor Ave
3		Henderson Retention Pond Complex	24 inch	Silsbee Ave and Mitchell near Fairgrounds
			24 inch	
4		Fairgrounds Detention Pond	16 inch	Fairgrounds east of Arena
5		North Stone Meadows Detention Pond	8 inch	Andesite Ave and crystal springs creek
6		Central Stone Meadows Detention Pond	10 inch	Benton Ave and Flagstone Ave
7		South Stone Meadows Detention Pond	8 Inch	Benton Ave south of Obsidian Ave
8		Crystal Springs Detention Pond	Open Channel	Benton and Willowbrook
9	County Shop Detention Basin	Open Channel	E of N Benton and Willowbrook Drive	
10	Last Chance	Nature Park Retention Pond, and on-site detention/ret ponds	24 inch	McHugh Lane north of Golden Estates subdivision
11		Golden Estates Detention Pond	18 inch	Jade Street and Amethyst Ave (golden estates)
12		Skelton Detention 1, 2, 3, and 4	24 inch	North of Ptarmigan and Montana Ave
13		Anderson BP Detention and open	Open	S of Road Runner and Sand Piper

Outfall No.	Drainage Basin	Outfall BMP	Outfall Conveyance	Street Location
		channel	Channel	
14	Davis	Target Retention Pond	36 inch	Jordan Drive behind Macy's
15		Davis Region Pond and Kmart Pond	48 inch	I-15 Regional Ponds
16	Bull Run West	Burnham Ranch Retention Pond		
17		Helena Regional Detention and York and Custer Detention	55 inch	York Road north of Custer
18	Airport	Airport Detention 4, 5.1, and 5.2 and 1400ft of open channel	21 inch	Canyon Ferry Road east of Y-county
19		Airport Retention R-13 and National Guard, Helena Aviation, Fire and D10 Detention	48 x 60 inch	Helena Valley Canal Crossing east of National Guard
20		Airport Retention R-910 and Detention Pond 2	54 inch	Helena Valley Canal Crossing east end Airport
21	Bull Run Upstream of Airport	Walmart Detention 1 and 2	36 in	NW of Miller and Carter
22		Staples Detention	18 in	NW of Miller and Carter
23		Future Nichole St Pond	36 in	N of Nichole St and RR Tracks
24		Open Channel	Open Channel	N of Dick Anderson Construction
25		Hunters Point and Mountain West Bank Detention	Open Channel	N of I15, upstream of Synness Auto Salvage
26		Nob Hill Retention 1 and 2, and Nob Hill Detention 1, Grass swale along I15	24 in	NW of I15 and Mendocino Drive
27	Far East	Nob Hill Detention 4	Open Channel	Colonial drive south of Nob Hill Lift station
28		Aspen Meadows Detention	84 inch	Alice street East of Crossroads Pkwy
29		Grass channel, small basin at culvert inlet	2-24 inch	Crossroads Pkwy and Prospect Ave (highway 12)
30		West Aspen Meadows Retention	24 inch	Alice street East of Cascade Ave
31		East Aspen Meadows Retention	42 inch	Twilight and Stillwater streets
32		East Aspen Meadows Retention	12 inch	Runkle Pkwy between Still water and Alpine View
33		Open Channel for 700ft	12 inch	Runkle Pkwy and Highway 282

Outfall No.	Drainage Basin	Outfall BMP	Outfall Conveyance	Street Location
34		Aspen Meadows Detention North and South	36 inch	Highway 282 south of Runkle Parkway

Permit Reference: Part II.A.3.e.ii.

Evaluation of outfalls for determining which are high priorities is planned to occur during the implementation schedule for Permit Year 2 and reevaluated during Permit Years 3 – 5 as identified in the General Permit. Based upon the evaluations, a list of high priority outfalls will be submitted with each 2nd – 5th year annual reports per the General Permit.

Permit Reference: Part II.A.3.e.iii.

Inspection and screening of all high priority outfalls is planned to occur during the implementation schedule for Permit Years 3 – 5 as identified in the General Permit. The high priority outfalls will be inspected and screened during dry weather at least once per year and a summary of the screening results will be submitted with each 3rd – 5th annual report.

Permit Reference: Part II.A.3.f.i.

There are three main types of illicit discharges in the City: sanitary to storm sewer connections, and accidental spills and illegal disposals. Sanitary to storm sewer illicit discharges are consistently and effectively investigated, cleaned up or corrected. Due to previous City activities including infrastructure replacement, illicit discharge corrections, outfall screening, and storm and sanitary video investigations, no known illicit discharge connections remain in the City; however, it is assumed that a few may still exist. Illicit discharge connections are initially terminated and subsequently removed depending on the type. Illicit discharge connections which pose a human health risk are immediately terminated and disconnected.

Accidental spills and illegal disposals are discovered several ways including residential reports, City operations and maintenance activities. In some instances it is not possible to track down the responsible party for accidental spills and illegal disposal, leaving the City with clean up responsibility and costs. Most instances are resolved by informal methods described in the ERP; however, the City does not hesitate to send a Notice of Violation to the property owner or discharger (if it is known), or clean up the spill with City equipment and bill the discharger. As appropriate, spills are documented and outfall priorities are modified based upon inspections and screenings.

The City's Engineering and Utility Divisions have been and continue to investigate and record all suspected illicit discharges through normal operational procedures. Where the presence of an illicit discharge is confirmed, the source is terminated in a timely manner, taking into consideration both human and environmental health. A significant part of the illicit discharge investigation and correction process includes evaluation and maintenance inspection activities by the Utilities Division which is recorded in City Works. These activities may include:

- Maintenance work orders
- Cleaning storm sewers
- Drainage repairs
- Removal of sediment
- Responses to complaints
- Street sweeping activity

- Catch basin cleaning
- Video inspection of the MS4.

Although the City is currently implementing a program which conducts investigations and corrective actions, a formal Illicit Discharge Investigation and Corrective Action Plan (IDICAP) will be developed during Permit Year 1, in accordance with the General Permit requirements. The IDICAP will be based on the Montana MS4 Template which is included in Appendix D.

Permit Reference: Part II.A.3.f.ii.

Although the City actively investigates and takes corrective action when needed to locate and terminate illicit discharge connections, the final IDICAP referenced above will be implemented once completed.

Permit Reference: Part II.A.3.f.iii.

The City maintains documentation related to illicit discharge investigations and corrective actions. A summary of activities related to illicit discharge investigations and corrective actions is submitted with each year's annual report.

2.4 MCM 4: Construction Site Storm Water Management

The City requires by Storm Water Ordinance and in the Engineering and Design Standards that an owner or operator obtain coverage from DEQ under the General Permit for Storm Water Discharges Associated with Construction Activity (Construction General Permit) when applicable. The Construction General Permit is obtained by application through DEQ's Water Protection Bureau. This Construction General Permit regulates sites that disturb one acre or more, including projects disturbing less than one acre that are part of a larger common plan of development, redevelopment, or sale. DEQ's Water Protection Bureau also has inspection and enforcement authority for projects permitted by DEQ under the Construction General Permit.

The program for this MCM includes a review and approval process for all private projects; internal quality control and quality assurance for capital improvement projects; and inspection of active construction projects in high-priority areas. Records related to these projects and inspections are maintained in the City's electronic files.

Permit Reference: Part II.A.4.a.i

An Ordinance is in affect which requires a coverage under the Construction General Permit for all construction activities which disturb one acre or more, including projects disturbing less than one acre that are part of a larger common plan of development, redevelopment, or sale. The specific section of the Ordinance that addresses construction stormwater activity can be found in Title 6, Chapter 6-15 of the City Code and a copy of the Ordinance is contained in Appendix I. The Ordinance includes provisions requiring submission of an executed copy of the DEQ Notice of Intent and a Storm Water Pollution Prevention Plan (SWPPP) to the City. The Ordinance also includes a provision requiring compliance with all provisions of the MPDES Construction General Permit. Since coverage under DEQ's Construction General Permit is required by City

Ordinance, the minimum standards described as non-numeric technology-based effluent limits in the Construction General Permit are thereby required.

Permit Reference: Part II.A.4.a.ii.

Not applicable.

Permit Reference: Part II.A.4.a.iii.

A formal ERP will be developed during the 3rd Permit Year and submitted with the 3rd year annual report to ensure compliance with the construction storm water management regulatory mechanisms. The ERP will be based on the Montana MS4 Template ERP which is included in Appendix H.

Permit Reference: Part II.A.4.a.vi.

Implementation of the ERP described above will occur during the 4th Permit Year.

Permit Reference: Part II.A.4.b.i.

Per the Ordinance, SWPPPs are submitted to DEQ for review and approval. The City has a Construction Storm Water Management Plan Review Checklist which is consistent with the minimum required Non-Numeric Technology-Based Effluent Limits as required by the 2013 Construction General Permit. A copy of this plan review checklist is provided in Appendix E.

Permit Reference: Part II.A.4.b.ii.

The City will implement the Construction Storm Water Management Plan Review Checklist for all sites which require a Construction General Permit. Per the City's Ordinance, each of these sites must also develop and submit an NOI and SWPPP to DEQ in order to be granted coverage under the Construction General Permit. The City will not issue building or construction permits and approvals until the SWPPP meets the Construction General Permit requirements. The City process for infrastructure acceptance is outlined in the City Engineering and Design Standards. A copy of the checklist is provided in Appendix E.

Permit Reference: Part II.A.4.b.iii.

Not applicable.

Permit Reference: Part II.A.4.c.i.

The City maintains a Construction Storm Water Inspection Form developed by the Cooperative Group for the minimum required Non-Numeric Technology Based Effluent Limits as required by the Construction General Permit. A copy of the Construction Storm Water Inspection Form is provided in Appendix E. Permittees operating under the Construction General Permit are also subject to Compliance Evaluation Inspections (CEIs) by DEQ.

Permit Reference: Part II.A.4.c.ii.

Not applicable.

Permit Reference: Part II.A.4.c.iii.

The City will implement the Construction Storm Water Inspection Form for active projects which have been granted coverage by DEQ under the Construction General Permit and have been approved for construction by the City.

Permit Reference: Part II.A.4.c.iv.

The City maintains a list of projects which disturb one acre or more, including projects disturbing less than one acre that are part of a larger common plan of development, redevelopment, or sale. This list is reflective of the list that DEQ maintains for all projects permitted by DEQ under the Construction General Permit. The SWPPP that is submitted for coverage under the Construction General Permit contains information about the construction project regarding the size, topography and proximity to water bodies.

Permit Reference: Part II.A.4.c.v.

The City maintains construction storm water inspection frequency determination protocol form developed by the Cooperative Group. The protocol evaluates sites based on priority and determines an inspection frequency based on priority. High priority sites will be noted on the list that is maintained under Part II.4.c.iii., and the minimum inspection frequency for high priority sites are as follows:

- Once at commencement of construction after BMPs have been implemented;
- Once within 48 hours after each rain event of 0.25-inches or greater; and
- Once at the conclusion of the project.

A copy of the construction storm water inspection frequency determination protocol form is provided in Appendix E.

2.5 MCM 5: Post-Construction Site Storm Water Management in New and Redevelopment

Permit Reference: Part II.A.5.

The City has developed, implemented and enforces a program which address storm water runoff to prevent or minimize water quality impacts from development and redevelopment project which disturbs one acre or more, including projects disturbing less than one acre that are part of a larger common plan of development, redevelopment, or sale. The City also requires new development which creates 5,000 square feet (ft²) or more of impervious area to address storm water runoff to prevent or minimize water quality and quantity impacts. All projects meeting or exceeding these limits are required to design, implement and maintain post-construction storm water management controls that meet the performance standard described in Part II.A.5.b.iii of the General Permit.

The program for this MCM includes a review and approval process for private projects; quality control and quality assurance process for capital improvement projects; and regularly scheduled maintenance and inspection of all parts of the MS4. Records related to these projects, maintenance activities and inspections are maintained in the City's electronic files.

Permit Reference: Part II.A.5.a.i.

An Ordinance is in affect which requires post-construction storm water management controls for development and redevelopment project which disturbs one acre or more, including projects disturbing less than one acre that are part of a larger common plan of development, redevelopment, or sale and new development which creates 5,000 ft² or more of impervious area. The specific section of the Ordinance that addresses post-construction storm water management controls can be found in Title 6, Chapter 6-15 of the City Code and a copy of the Ordinance is provided in Appendix I. All post-construction storm water management controls must meet the performance standard described in Part II.A.5.b.iii of the General Permit.

Permit Reference: Part II.A.5.a.ii.

Not applicable.

Permit Reference: Part II.A.5.a.iii.

A formal ERP will be developed during the 4th Permit Year and submitted with the 4th year annual report. The ERP will be based on the Montana MS4 Template ERP which is included in Appendix H.

Permit Reference: Part II.A.5.a.iv.

Implementation of the ERP described above will occur during the 5th Permit Year.

Permit Reference: Part II.A.5.b.i.

The City uses the Post-Construction Storm Water Management Plan Review checklist developed by the Cooperative Group to ensure consistent review of submitted plans and to determine and document compliance with state and local post-construction requirements. The City process for infrastructure acceptance is outlined in the City Engineering and Design Standards which includes Post-Construction BMPs. A copy of the Post-Construction Storm Water Management Plan Review checklist is provided in Appendix F.

Permit Reference: Part II.A.5.b.ii.

Not applicable.

Permit Reference: Part II.A.5.b.iii.

The City has adopted an ordinance requiring a Storm Water Drainage Plan for new and redevelopment when 5,000 square feet or more of impervious area are created. The specific section of the ordinance that addresses the Storm Water Drainage plan can be found in Title 6, Chapter 6-15 of the City Code and copy of the ordinance is provided in Appendix I. The City of

Helena Engineering and Design Standards also require any new or redevelopment project to prepare a Storm Water Drainage Plan that must infiltrate, evapotranspire, or capture for reuse the runoff from the entire water quality storm event. The water quality storm event is defined as 0.5-inch of precipitation from a 24-hour storm event.

Post-Construction Offsite Storm Water Management

The City owns and operates regional storm water quality, detention and retention ponds throughout the MS4 area. These regional storm water ponds have and will continue to provide water quality and flood control protection for existing development, in addition to providing post-construction offsite storm water management for new and redevelopment when allowed by the City. A list of the regional storm water ponds is provided in Table 5 and Figure A.2 – Regional Storm Water Ponds and Treatment Basins Map (see Appendix A) shows the location of the primary ponds.

Table 5: Regional Storm Water Ponds

Regional Watershed	MS4 Drainage Basin	Regional Storm Water Pond	MS4 Outfall Basin
Prickly Pear Creek	Bull Run and Airport	Airport Retention R-910	Outfall to Bull Run
	Bull Run Area	Crossroads Detention	R910
		Aspen Meadows Detention	R910
		Jeanette Rankin Detention	R910
		Aspen Meadows Retention	R910
		Airport Detention Pond 2	R910
		Hunter's Point Detention	R910
		Mountain West Bank Detention	R910
		Nob Hill Retention Pond 1	R910
		Nob Hill Retention Pond 2	R910
		Nob Hill Detention Pond 1	R910
		Nichole Street Detention	R910
		Nob Hill Detention 4	R910
	Helena Regional Detention	Outfall to Bull Run	
	Far East Area	Aspen Meadows Retention Pond 3	Outfall to Far East
		Aspen Meadows Detention Pond 4	Outfall to Far East
		Aspen Meadows Detention Pond 5	Aspen Meadows Detention Pond 4
	Davis Gulch	Davis Gulch Pond	Outfall to Davis Gulch
Kmart Pond		Davis Gulch Pond	
DNRC Pond		Davis Gulch Pond	
Helena High Pond		Davis Gulch Pond	
Tenmile Creek	Last Chance Gulch	Nature Park Pond	Outfall to Last Chance Gulch
	Westside Area	Overlook Pond	Outfall to Spring Meadows Ponds
		Simmons Pond	Outfall to Spring Meadows Ponds
		Henderson Pond	Outfall to Spring Creek
		Allison Street Pond	Henderson Pond

Other sub-regional storm water ponds exist downstream of the primary ponds listed in Table 5. These sub-regional ponds treat more than one lot and were installed as part of a subdivision. Some of these ponds include: Stone Meadows Ponds and Green Meadows Ponds, and Skelton Ponds, among others not listed here.

The City is preparing an update to its Storm Water Master Plan (January 2003) which will demonstrate and provide the basis for water quality and flood control protection of these facilities including their use as post-construction offsite storm water management of new and redevelopment when required by Part II.A.5.b.iii. An Offsite Treatment Evaluation Form with the various criteria for consideration when determining whether or not offsite treatment may be allowed is provided in Appendix F.

Permit Reference: Part II.A.5.c.i.

The City uses the Post-Construction Storm Water Management Inspection Form developed by the Cooperative Group to ensure consistent and thorough inspections of post-construction storm water management controls. The Post-Construction Storm Water Management Inspection Form is provided in Appendix F.

Permit Reference: Part II.A.5.c.ii.

Not applicable.

Permit Reference: Part II.A.5.c.iii. and iv.

The City maintains a GIS database of all its storm water facilities including all new and existing public and private post-construction storm water management controls. A table printout of the information contained in the GIS database for post-construction storm water management retention, detention and infiltration BMPs is included in Appendix F. This database will continue to be updated as post-construction storm water management controls are installed within the MS4 boundary. Priority evaluation will occur in the 3rd Permit Year.

Permit Reference: Part II.A.5.c.v.

Not applicable.

Permit Reference: Part II.A.5.c.vi.

The City has adopted the template developed by the Cooperative Group for post-construction inspection frequency protocol evaluations. The template will be revised in the 2nd Permit Year. A copy of the template is provided in Appendix F.

Permit Reference: Part II.A.5.c.vii.

A program for inspecting high-priority post-construction storm water management controls is due in the 2nd Permit Year. The City currently inspects high-priority post-construction storm water management controls and expects to continue to perform inspections as part of the program.

Permit Reference: Part II.A.5.c.viii.

The City currently inspects all permittee-owned high-priority post-construction storm water management controls and will revise the inspection process in the 3rd permit year based on the program developed in Part II.A.5.c.vii.of the General Permit. Most maintenance issues and requests are processed through the Utility Maintenance Division and completed by division staff. Larger infrastructure improvement and maintenance projects are included on the capital improvement program (CIP) and processed by the Engineering Division and completed by mix of division staff and consultants, then bid to contractors for construction. CIP projects are completed depending on availability of funds.

Permit Reference: Part II.A.5.c.ix.

The City will inspect any privately-owned high-priority post-construction storm water management controls based on the program developed in Part II.A.5.c.vii.of the General Permit. Inspections of all privately-owned high-priority post-construction storm water management controls will be implemented in the 3rd Permit Year.

Permit Reference: Part II.A.5.c.d.

A meeting to discuss and evaluate existing barriers to implementing low impact development (LID) infrastructure in the City's codes, ordinances and policies is planned to occur during the 4th Permit Year as identified in the General Permit. Discussion outcomes will be discussed within the 4th year Annual Report.

2.6 MCM 6: Pollution Prevention/Good Housekeeping for Permittee Operations

Permit Reference: Part II.A.6.

The City operates and maintains permittee owned facilities and conducts activities including training with the intent of reducing pollutant runoff from permittee operations, and ultimately from its MS4 outfalls. As part of the standard operating procedures (SOP) for the various facilities and activities, the City uses on-site and off-site structural storm water pollution controls. Portions of the MS4 are utilized to convey runoff to the off-site structural storm water pollution controls where off-site controls are part of the SOP.

Permit Reference: Part II.A.6.a.i.

The City has developed a draft inventory of permittee owned facilities and activities, including potential contaminants for each facility and activity. The draft inventory will be finalized, and the department and position responsible for pollution prevention at each facility and for each activity will be included in the inventory with the 1st year's annual report. The draft inventory is included in Appendix G.

Permit Reference: Part II.A.6.a.ii.

The City has developed and maintains a GIS database which includes the location of City owned facilities. Activities occur on City owned property depending on the use of the property. The GIS database is regularly updated throughout the year as property is acquired or sold. The GIS database will be used to create a map showing the location of facilities in accordance with the implementation schedule.

Permit Reference: Part II.A.6.a.iii, iv and v

Development of SOPs and training for City facilities and activities is planned based on the implementation schedule provided in the General Permit. This work will begin in the 2nd Permit Year.

3.0 Training

Permit Reference: Part II.B.

The storm water management team outlined in Section 2.0 has been actively engaged in SWMP implementation responsibilities under prior permit terms and during the development of the reissued 2017 General Permit. During the 2017 General Permit development process the storm water management team has been comprehensively trained and educated about the new permit, the necessary updates to the SWMP and implementation responsibilities. Various members of the storm water management team have attended the Cooperative Group meetings, held internal meetings, and attended meetings with other MS4 representatives. Each of these meetings involved discussions, coordination and training between the individuals regarding the current and new permit and SWMP.

The City typically employs personnel with prior experience related to their job duties or provides training for entry level positions. During employment, employees are trained internally or trained at outside venues on various topics related to their current and future job duties and responsibilities. As such, employees with duties and responsibilities related to storm water pollution prevention have been trained and receive on-going training in methods and standards of practice which are intended to minimize the potential for release of pollutants into storm water. Training is tailored to the duties and responsibilities of the position. Typical training topics by department and position are shown Table 6.

Table 6: SWMP Training

Department/Division	Position	Potential Pollutants	SWMP Training
Public Works	Director	As related to program management	MS4 Permit, permit changes, and associated SWMP elements
Engineering Division	City Engineer	As related to program management	MS4 Permit, permit changes, and associated SWMP elements
	Storm Water Engineer	Sediment, construction materials and wastes, illicit discharges	MS4 Permit, permit changes, SWMP, MCMs 1 through 6, Monitoring
	Engineering Staff	Sediment, construction materials and wastes	MCM 4: Construction Site Storm Water Management, MCM 5: Post-Construction Storm Water

Department/Division	Position	Potential Pollutants	SWMP Training
			Management, and illicit discharge reporting
Utility Maintenance Division	Utility Maintenance Superintendent	As related to program management	MS4 Permit, permit changes, and associated SWMP elements
	Sewer and Water Maintenance Supervisor	Illicit discharges, sediment, petroleum products, treated water, waste water	Sediment and Erosion Control; Monitoring; Illicit discharge detection, tracking and cleanup; chemical use, storage and disposal
	Sewer and Water Staff	Illicit discharges, sediment, petroleum products, treated water, waste water	Waste disposal, spill cleanup, operation and maintenance of mechanized equipment
Streets Division	Streets Superintendent	As related to street maintenance and operations	Associated elements of the MS4 Permit and SWMP
	Streets Supervisor	Sediment and petroleum products	Sediment and Erosion Control, waste disposal, spill cleanup
	Streets Staff	Sediment and petroleum products	Waste disposal, spill cleanup. operation and maintenance of mechanized equipment
Solid Waste Division	Solid Waste Superintendent	As related to facility operation and solid waste collection	Associated elements of the MS4 Permit and SWMP
	Solid Waste Supervisor	Waste disposal products	Waste disposal, spill cleanup
	Solid Waste Staff	Waste disposal products	Waste disposal, spill cleanup. operation and maintenance of mechanized equipment
Parks and Recreation	Director	As related to department operations	Associated elements of the MS4 Permit and SWMP
	Open Land Manager	Sediment and herbicides	Sediment and Erosion Control, Forestry, Weed Management
	Parks Superintendent	Pesticides, herbicides, Fertilizers, sediment, petroleum products	Sediment and Erosion Control, Lawn Care and Maintenance
	Parks and Recreation Staff	Pesticides, herbicides, Fertilizers, sediment, petroleum products	Waste disposal, spill cleanup. operation and maintenance of mechanized equipment

SOP training for City facilities and activities is planned for development based on the implementation schedule provided in the General Permit.

4.0 Sharing Responsibility

Permit Reference: Part II.C.

The City utilizes DEQ's Construction Storm Water Permit documents, process and responsibilities to implement MCM 4. DEQ's Water Protection Bureau issues the Construction General Permit and has inspection and enforcement authority for permitted projects. This General Permit is issued by the DEQ under the authority of 75-5-402, Montana Code Annotated (MCA) and Sections 402 and 303 of the Federal Clean Water Act. ARM 17.30.1105 requires any person who discharges or proposes to discharge "storm water discharge associated with construction activity", as defined in ARM 17.30.1102(28), to get MPDES permit coverage. The City requires qualifying projects to obtain coverage under the Construction General Permit.

5.0 Qualifying Local Program

Permit Reference: Part II.D.

Not applicable.

6.0 Transfer of Ownership, Operational Authority, or Responsibility for SWMP Implementation

Permit Reference: Part II.E.

The City implements the SWMP on all new areas added to their small MS4.

7.0 Storm Water Management Program Updates Required by the Department

Permit Reference: Part II.F.

To date, DEQ has not requested any storm water management program updates beyond those requirements in the General Permit. Any future DEQ requests will be identified in the Annual Reports and any appended to the SWMP.

8.0 Special Conditions (TMDL Monitoring)

Permit Reference: Part III.A.

Not applicable.

Permit Reference: Part III.B.

The City is within the drainage basin of two perennial streams that are impaired waterbodies listed on the Montana 303(d) list: Tenmile Creek and Prickly Pear Creek (see Figure A.3 – Excerpt Drainage Map from Lake Helena TMDL, Appendix A). A Total Maximum Daily Load (TMDL) was developed for these waterbodies as part of the Framework Water Quality Restoration Plan and TMDL for the Lake Helena Watershed, August 31, 2006 by the Environmental Protection Agency (Lake Helena TMDL). *The Lake Helena TMDL identifies that storm water pollutant loading from regulated storm water discharges contributes less than 0.5% of the total load for nitrogen, phosphorous, and sediment to either Tenmile Creek or Prickly Pear Creek drainage basins. Although the Lake Helena TMDL does not propose any new requirements for regulated storm water, it does recommend monitoring and/or model based evaluations to estimate pollutant removal efficiencies of structural and non-structural BMPs (Lake Helena TMDL, Appendix J).*

The City is part of the Lake Helena Watershed Restoration Plan 2016-2023, prepared by Lewis and Clark County Water Quality Protection District. This report discusses the Characterization of the Watershed; Pollutants, Sources, Existing Pollutant Loads and Allocations; Lake Helena

Watershed Restoration Priorities; Expected Load Reductions; Best Management Practices; and Community Engagement Education and Outreach Strategies.

The City permitted MS4 area is bound by the City limits. The City limits in 2016 encompassed approximately 16.5 square miles. The permitted area includes six primary drainage areas which include the Westside Area, Last Chance Gulch, Davis Gulch, Bull Run, Airport and Far East (see Figure A.1, Appendix A). Additionally, the Montana Department of Transportation (MDT) operates a regulated MS4 within the City.

USGS Mapping shows no surface connection of drainage ways to Prickly Pear or Tenmile Creek except at Crystal Springs Creek (see Figure A.4 – USGS Map of Helena Area, Appendix A). The majority of the City does not discharge directly into either creek because the City boundary ends prior to the creeks where storm water runoff infiltrates into alluvial fans, and is retained and infiltrated in Regional Storm Water Ponds (See Table 5) prior to the municipal boundary.

Approximately 12.5 square miles of the City of Helena are treated by Regional Storm Water Ponds as shown on Figure A.2 (see Appendix A). Only portions of the Westside basin area below the regional ponds is expected to have a potential to discharge storm water runoff during minor events into tributaries of Ten Mile Creek. These portions of the Westside basin area are tributary to Spring Meadow Lake and Crystal Springs Creek. The area below the regional ponds in the Westside basin is shown on Figure A.5 – Priority Drainage Basins Map (see Appendix A).

This TMDL section will be further developed in the coming years, in accordance with the Implementation Schedule.

TMDL Monitoring Option 2

The City is planning to implement TMDL Monitoring Option 2. The anticipated monitoring locations are to be at the inlet and outlet into Henderson Regional Ponds and Nature Park Pond (see Table 7 and Figure A.6 – Existing Self-Monitoring and Conceptual TMDL Option 2 Monitoring Locations, Appendix A). These four locations are representative of the Westside Basin and Last Chance Gulch which encompass large portions of urban areas within the City. The inlet and outlet are planned for monitoring to verify discharge amounts and BMP effectiveness. In accordance with the General Permit requirements, the City will develop a sampling plan during 2017. The sampling plan will be submitted to DEQ for approval with the first year’s annual report.

Table 7: TMDL Monitoring Option 2 Sites Locations

Monitoring Site ID	Representative Area	Monitoring Location Description	Approximate Latitude/Longitude
005A	Residential	Inlet to Henderson Ponds	46.6127°N, 112.0533°W
005B	Residential	Outlet from Henderson Ponds	46.6162°N, 112.0533°W
004A	Residential/Commercial/Industrial	Inlet to Nature Park Pond	46.6038°N, 112.0316°W
004B	Residential/Commercial/Industrial	Outlet from Nature Park Pond	46.6090°N, 112.0311°W

9.0 Self-Monitoring

Permit Reference: Part IV.A.

Self-Monitoring Requirements

The City has been monitoring at two locations since 2007 with the data reported in each year's annual report. Helena will continue monitoring the current locations with the addition of two new sites as planned under Self-Monitoring Option 2 discussed below.

Specific Monitoring Parameters

Reference: Part IV.A.2

The City monitors for the parameters in the following table excerpted from the General Permit.

Table 8: Small MS4 Monitoring Requirement

Parameter ^{(1) (2)}	Frequency	Type ⁽³⁾
Total Suspended Solids (TSS), mg/L	Semi-annual	Grab or Composite
Chemical Oxygen Demand (COD), mg/L	Semi-annual	Grab or Composite
Total Phosphorus, mg/L	Semi-annual	Grab or Composite
Total Nitrogen, mg/L	Semi-annual	Grab or Composite
pH, standard units	Semi-annual	Instantaneous
Copper, mg/L	Semi-annual	Grab or Composite
Lead, mg/L	Semi-annual	Grab or Composite
Zinc, mg/L	Semi-annual	Grab or Composite
Estimated Flow, gpm	Semi-annual	Instantaneous ⁽⁴⁾
Oil and Grease ⁽⁵⁾ , mg/L	Semi-annual	Grab
(1) Detection limits are pursuant to levels defined in Circular DEQ-7. (2) Total recoverable methods to be used on all metals. (3) See Definitions in Part VI. of this General Permit. (4) Estimated flow rates are appropriate in cases where measurement gauges are not installed. (5) Hexanes extraction (EPA Method 1664A).		

Self-Monitoring Option 2

Permit Reference: Part IV.A.3.b

The City is conducting Self-Monitoring Option 2. The four monitoring locations consist of the two locations that have been monitored since 2007, an upstream site, and a site at the regional ponds under the TMDL Monitoring Option 2 discussed above (see Table 9 and Figure A.6,

Appendix A). The two sites that have been monitored since 2007 and will continue to be monitored are: 001A for the Industrial/Commercial Area and 002A for the Residential Area. Site 001A is at 18th Street near Walmart and 002A is at the intersection of Broadway and Sanders. These two locations are being evaluated for replacement with other locations proposed under TMDL Monitoring Option 2. The upstream site is 003A at the beginning of Last Chance Gulch just below the confluence of Grizzly Gulch and Orofino Gulch. The fourth monitoring location is 004A at the inlet to Nature Park Pond. This location was selected since it is also on Last Chance Gulch but below a significant portion of the urban area.

Table 9: Self-Monitoring Option 2 Sites Locations

Monitoring Site ID	Representative Area	Monitoring Location Description
001A	Commercial/Industrial	18 th Street near Walmart
002A	Residential	Intersection of Broadway and Sanders
003A	Upstream of the MS4	Beginning of Last Chance Gulch
004A	Residential/Commercial/Industrial	Inlet to Nature Park Pond

9.1 Monitoring Schedule

Permit Reference: Part IV.A.4

Monitoring will be conducted in accordance with the Implementation Schedule.

10.0 Annual Report

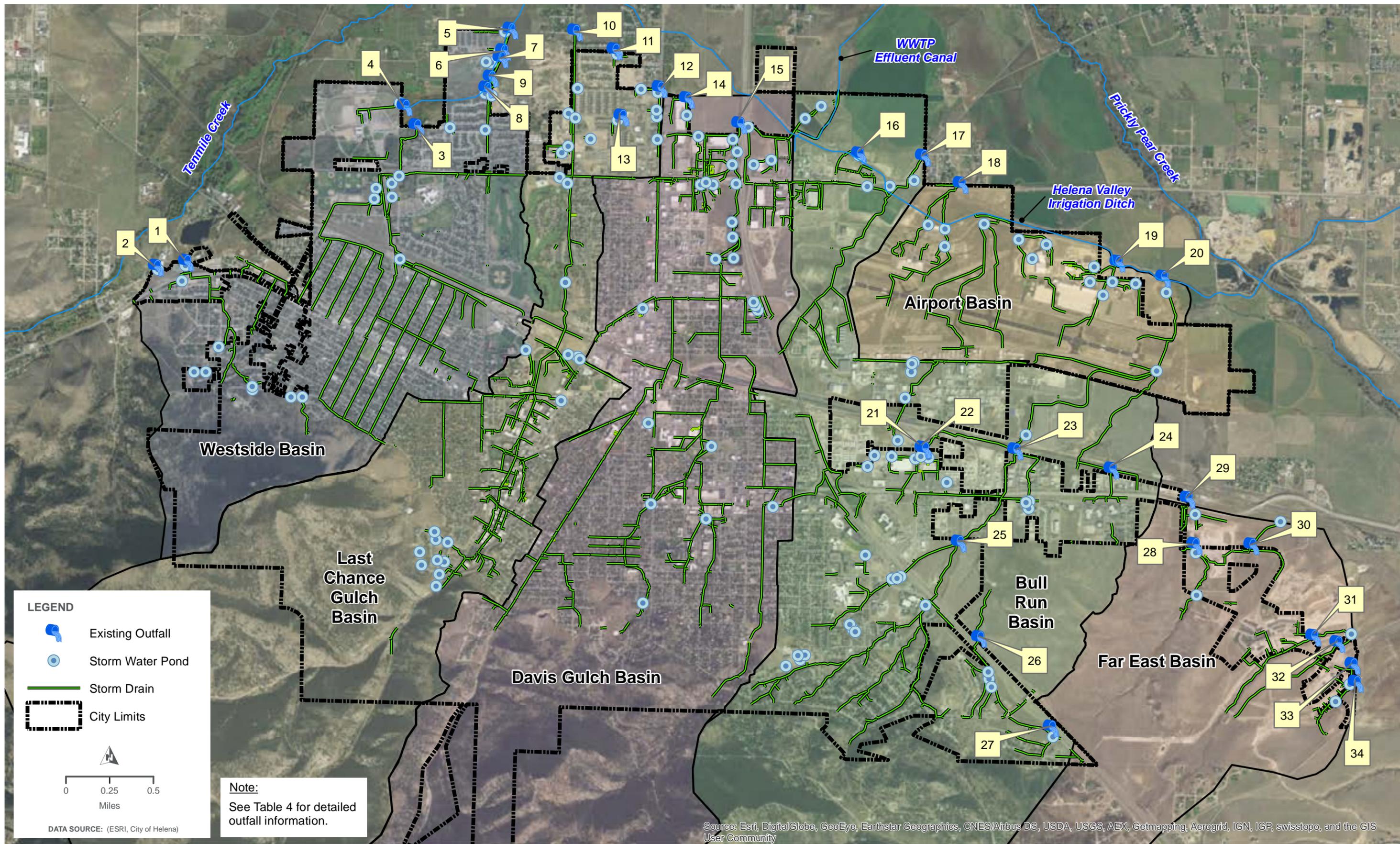
Permit Reference: Part IV.F

The City will submit a completed Annual Report Form, updated version of this SWMP (if applicable), and relevant documents to DEQ by March 1st of each year of this MS4 General Permit term.

References

- City of Helena. (June 10, 2013). *Engineering and Design Standards*.
- Environmental Protection Agency. (August 31, 2006). *Framework Water Quality Restoration Plan and TMDL for the Lake Helena Watershed*.
- HDR, Inc. (February 19, 2010). *City of Helena Storm Water Management Program Documentation 2010-2014*.
- HDR, Inc. (January 2003). *Storm Water Master Plan*.
- Lewis and Clark County Water Quality Protection District. (December 2015). *Lake Helena Watershed Restoration Plan 2016-2023*.
- WGM Group, Inc. (n.d.). *Storm Water Master Plan Update, Pending*.

Appendix A. Supplemental Tables and Figures



LEGEND

- Existing Outfall
- Storm Water Pond
- Storm Drain
- City Limits

0 0.25 0.5
Miles

DATA SOURCE: (ESRI, City of Helena)

Note:
See Table 4 for detailed outfall information.

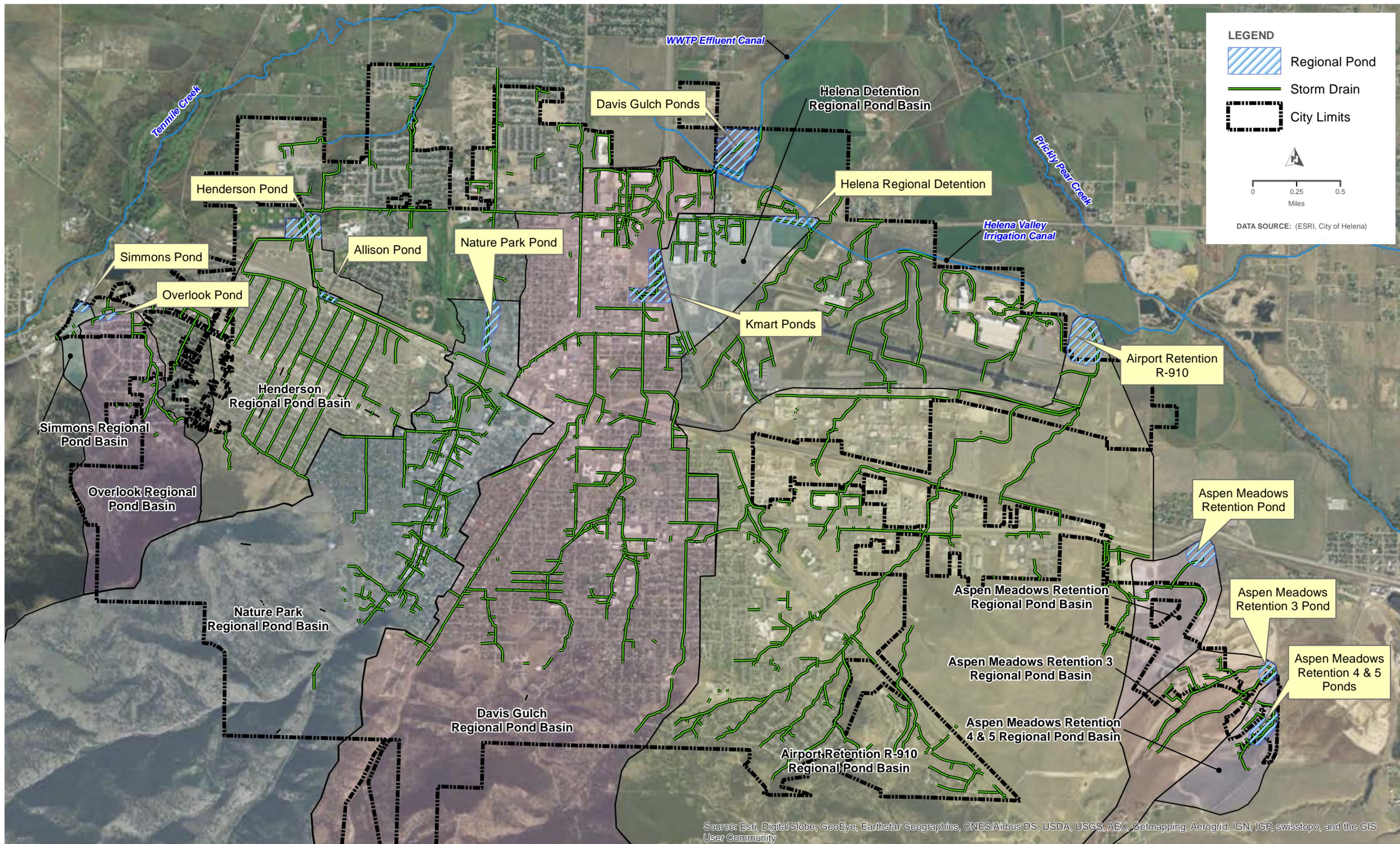
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

OVERALL STORM SYSTEM AND BASIN MAP

CITY OF HELENA, MT

FIGURE A.1





REGIONAL STORM WATER PONDS & TREATMENT BASINS MAP

CITY OF HELENA, MT

FIGURE A.2



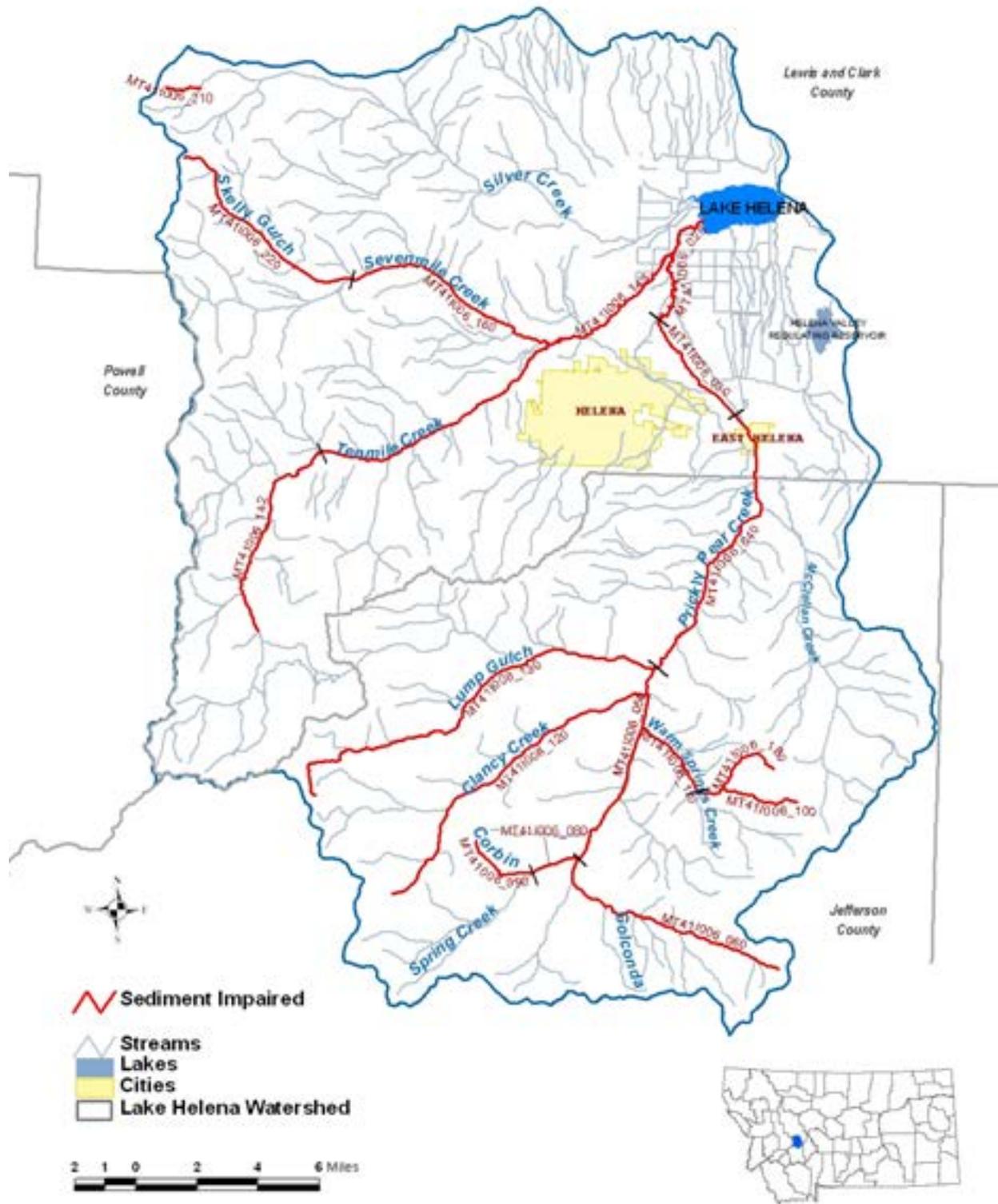
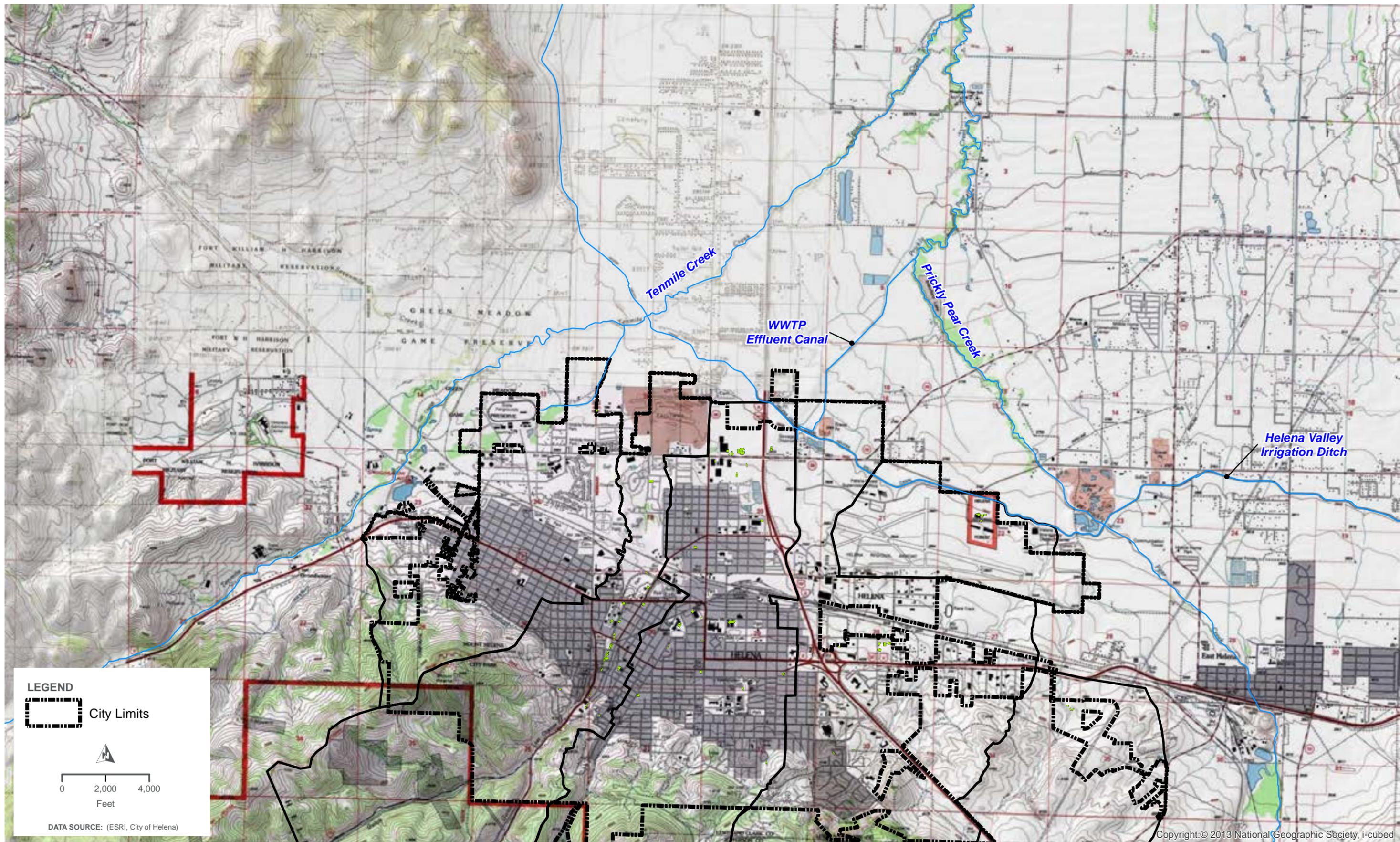


Figure A.3 - Excerpt Drainage Map from Lake Helena TMDL

Taken from *Framework Water Quality Restoration Plan and TMDL for the Lake Helena Watershed* [EPA, 2006]

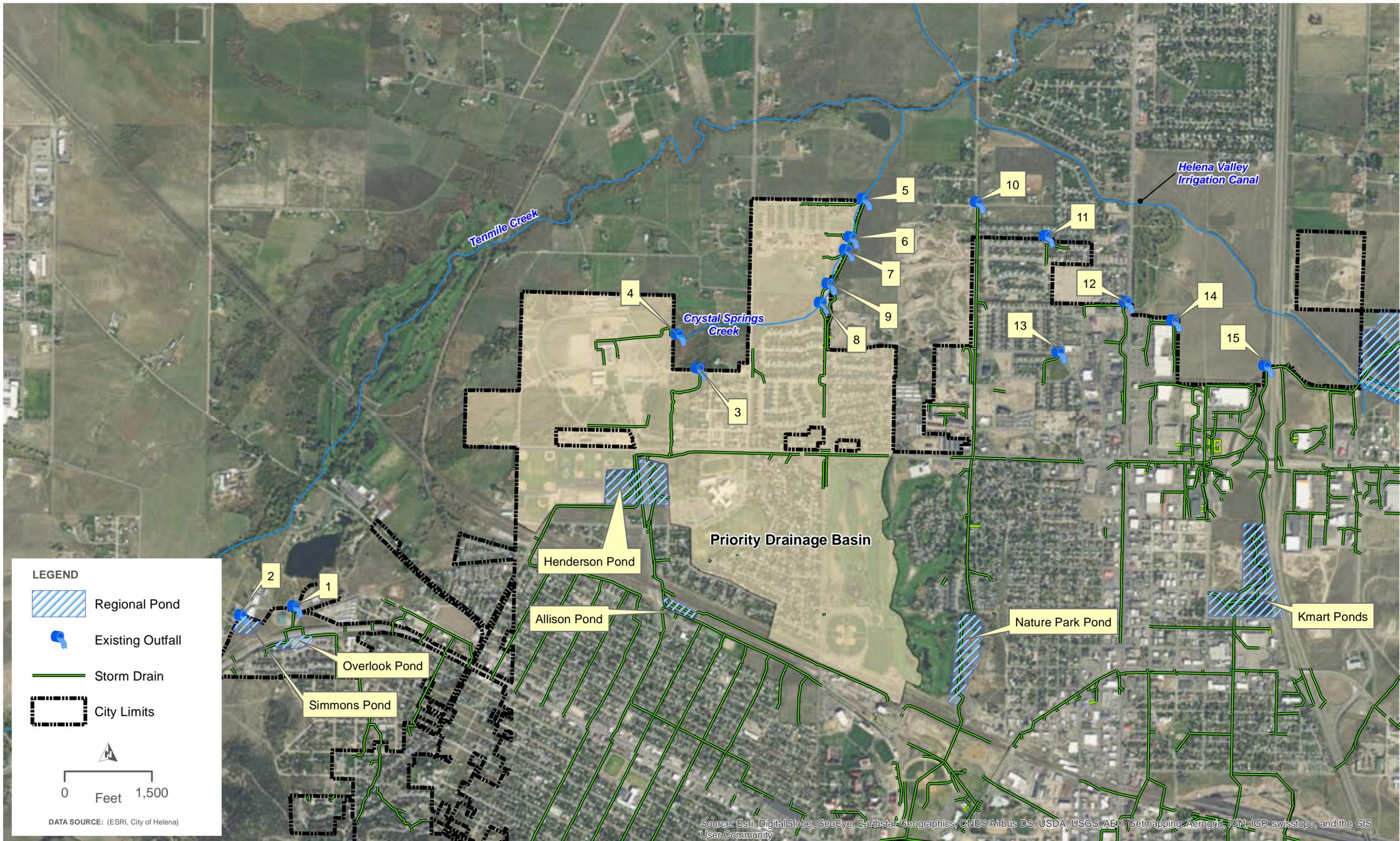


Copyright: © 2013 National Geographic Society, i-cubed

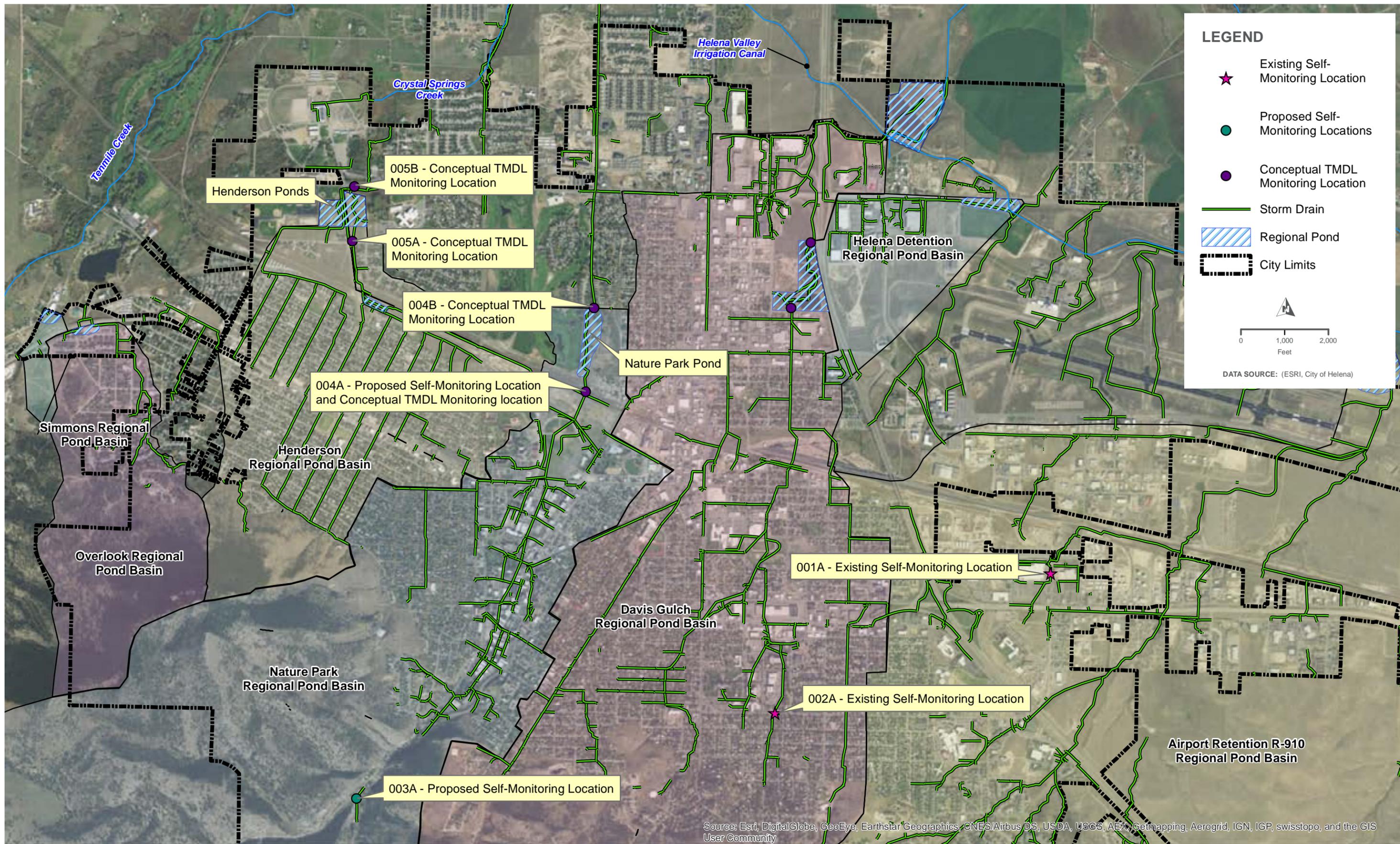


USGS MAP OF HELENA AREA
CITY OF HELENA, MT

FIGURE A.4



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

EXISTING SELF-MONITORING & CONCEPTUAL TMDL OPTION 2 MONITORING LOCATIONS

CITY OF HELENA, MT

FIGURE A.6

Table A.1: City of Helena MS4 General Permit Implementation Schedule

	Permit Reference	Summary of Required BMP	Deadline/ Implementation Schedule	Status (As of December 2016)	Comments/Discussion	Anticipated 2017 Tasks	Anticipated 2018 Tasks	Anticipated 2019 Tasks	Anticipated 2020 Tasks	Anticipated 2021 Tasks
Storm Water Management Program (SWMP)	Part II.A	Develop, document, and maintain a SWMP	Submit SWMP with Reapplication	In progress	<ul style="list-style-type: none"> The SWMP will be updated throughout the permit term as necessary (in accordance with the General Permit schedule and as described below). 	<ul style="list-style-type: none"> Update SWMP as necessary. Post SWMP updates to storm water website 	<ul style="list-style-type: none"> Update SWMP as necessary. Post SWMP updates to storm water website 	<ul style="list-style-type: none"> Update SWMP as necessary. Post SWMP updates to storm water website 	<ul style="list-style-type: none"> Update SWMP as necessary. Post SWMP updates to storm water website 	<ul style="list-style-type: none"> Update SWMP as necessary. Post SWMP updates to storm water website
	Part II.A	Develop a storm water management team	March 1 st , 2017	Complete	<ul style="list-style-type: none"> See Section 2.0 of Helena's SWMP document. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
MCM-1: Public Education and Outreach	Part II.A.1.a.i	Analyze which business types and/or residential behaviors are common sources of illicit discharges, spills, and dumping.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> See Table 1: Public Outreach and Education Key Target Audiences. This table will be revisited during 2017 if necessary. 	<ul style="list-style-type: none"> Update Table 1, if necessary. Submit with Annual Report. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.1.a.ii	Develop and advertise a storm water website for access by key target audiences and other interested stakeholders.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> The City maintains a storm water website which includes most of the required information. Applicable updates will be made during each permit year (posting of annual reports, revised outreach materials, etc...). 	<ul style="list-style-type: none"> Post copy of the new General Permit Add outreach event information Add new SWMP Add 2016 Annual Report Provide mechanism for public input on the SWMP Add info on how to identify sources of illicit discharges 	<ul style="list-style-type: none"> Maintain website with current information and documentation Add 2017 Annual Report 	<ul style="list-style-type: none"> Maintain website with current information and documentation Add 2018 Annual Report 	<ul style="list-style-type: none"> Maintain website with current information and documentation Add 2019 Annual Report 	<ul style="list-style-type: none"> Maintain website with current information and documentation Add 2020 Annual Report
	Part II.A.1.b.i	Use storm water website to develop outreach messages to the key target audiences.	End of 2 nd Permit Year	In Progress	<ul style="list-style-type: none"> See Table 1: Public Outreach and Education Key Target Audiences. This is mostly complete. Table 1 will be updated in 2017 and 2018 if necessary. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Revise/update outreach messages in order to promote benefits of non-polluting behaviors. Submit with Annual Report. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.1.c.i	Identify and develop outreach formats and distribution channels for messages developed for each key target audience.	End of 2 nd Permit Year	In Progress	<ul style="list-style-type: none"> See Table 1: Public Outreach and Education Key Target Audiences. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Update Table 1 to provide a direct link between key target audiences and distribution messages. Develop a schedule for distribution (e.g. number of brochures to be distributed to each target audience). Submit with Annual Report. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.1.c.ii	Distribute outreach materials to key target audiences.	During the 3 rd , 4 th , and 5 th Permit Years	Will begin in 2019		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Distribute outreach messages. Describe distribution in Annual Report. 	<ul style="list-style-type: none"> Distribute outreach messages. Describe distribution in Annual Report. 	<ul style="list-style-type: none"> Distribute outreach messages. Describe distribution in Annual Report.

Table A.1: City of Helena MS4 General Permit Implementation Schedule

	Permit Reference	Summary of Required BMP	Deadline/ Implementation Schedule	Status (As of December 2016)	Comments/Discussion	Anticipated 2017 Tasks	Anticipated 2018 Tasks	Anticipated 2019 Tasks	Anticipated 2020 Tasks	Anticipated 2021 Tasks
MCM-2: Public Involvement and Participation	Part II.A.2.a.i.	Identify approaches for involving key target audiences in development and implementation of the SWMP.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> The City will consider creating a new table or expanding the existing table with a more detailed implementation schedule. 	<ul style="list-style-type: none"> Update Table 2 to include a schedule of activities and target dates for implementation. Submit approach and schedule in Annual Report. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.2.a.ii.	Implement involvement approaches for each key target audience.	During 2 nd , 3 rd , 4 th , & 5 th Permit Years	Will begin in 2018		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Implement public involvement schedule. Document participation in Annual Report. 	<ul style="list-style-type: none"> Implement public involvement schedule. Document participation in Annual Report. 	<ul style="list-style-type: none"> Implement public involvement schedule. Document participation in Annual Report. 	<ul style="list-style-type: none"> Implement public involvement schedule. Document participation in Annual Report.
	Part II.A.2.b.i	Develop and advertise the storm water website for soliciting input.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> See Part II.A.1.a.ii 	<ul style="list-style-type: none"> See Part II.A.1.a.ii 	<ul style="list-style-type: none"> Maintain website with current information and documentation. 	<ul style="list-style-type: none"> Maintain website with current information and documentation. 	<ul style="list-style-type: none"> Maintain website with current information and documentation. 	<ul style="list-style-type: none"> Maintain website with current information and documentation.
MCM-3: Illicit Discharge Detection & Elimination	Part II.A.3.a.i.	Address the frequent categories of non-storm water discharges or flow identified as significant contributors of pollutants to the City's MS4.	Annually	In Progress		<ul style="list-style-type: none"> Document all non-stormwater discharges identified as significant contributors of pollutants (for the given permit year). Include the associated pollutants and any BMPs used to control the discharges. Include in Annual Report. 	<ul style="list-style-type: none"> Document all non-stormwater discharges identified as significant contributors of pollutants (for the given permit year). Include the associated pollutants and any BMPs used to control the discharges. Include in Annual Report. 	<ul style="list-style-type: none"> Document all non-stormwater discharges identified as significant contributors of pollutants (for the given permit year). Include the associated pollutants and any BMPs used to control the discharges. Include in Annual Report. 	<ul style="list-style-type: none"> Document all non-stormwater discharges identified as significant contributors of pollutants (for the given permit year). Include the associated pollutants and any BMPs used to control the discharges. Include in Annual Report. 	<ul style="list-style-type: none"> Document all non-stormwater discharges identified as significant contributors of pollutants (for the given permit year). Include the associated pollutants and any BMPs used to control the discharges. Include in Annual Report.
	Part II.A.3.b.i.	Identify and address incidental non-stormwater discharges which will not be addressed as illicit discharges.	Annually	In Progress	<ul style="list-style-type: none"> See Table 3: Occasional Incidental Non-Storm Water Discharges not to be Addressed as Illicit Discharges. 	<ul style="list-style-type: none"> Update Table 3 to list occasional incidental non-storm water discharges which will not be addressed as illicit discharges (for the given permit year). Include the associated pollutants and any BMPs used to control the discharges. Include in Annual Report. 	<ul style="list-style-type: none"> Update Table 3 to list occasional incidental non-storm water discharges which will not be addressed as illicit discharges (for the given permit year). Include the associated pollutants and any BMPs used to control the discharges. Include in Annual Report. 	<ul style="list-style-type: none"> Update Table 3 to list occasional incidental non-storm water discharges which will not be addressed as illicit discharges (for the given permit year). Include the associated pollutants and any BMPs used to control the discharges. Include in Annual Report. 	<ul style="list-style-type: none"> Update Table 3 to list occasional incidental non-storm water discharges which will not be addressed as illicit discharges (for the given permit year). Include the associated pollutants and any BMPs used to control the discharges. Include in Annual Report. 	<ul style="list-style-type: none"> Update Table 3 to list occasional incidental non-storm water discharges which will not be addressed as illicit discharges (for the given permit year). Include the associated pollutants and any BMPs used to control the discharges. Include in Annual Report.
	Part II.A.3.b.ii.	Prohibit any occasional incidental non-storm water discharge that is determined to be contributing significant amounts of pollutants to the Small MS4.	End of 2 nd Permit Year	Complete	<ul style="list-style-type: none"> See Ordinance in Appendix I 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.3.c.i.	Inventory the City's storm water infrastructure to track illicit discharges, contain spills, and determine high priority areas.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> The City maintains the storm water infrastructure inventory in its GIS database (which is continually updated). Map is provided in Figure A.1 (Appendix A). 	<ul style="list-style-type: none"> List, label, or highlight high priority areas. Maintain and update GIS database as necessary. Include updated map in Annual Report. 	<ul style="list-style-type: none"> Maintain and update GIS database as necessary. 	<ul style="list-style-type: none"> Maintain and update GIS database as necessary. 	<ul style="list-style-type: none"> Maintain and update GIS database as necessary. 	<ul style="list-style-type: none"> Maintain and update GIS database as necessary.

Table A.1: City of Helena MS4 General Permit Implementation Schedule

Permit Reference	Summary of Required BMP	Deadline/ Implementation Schedule	Status (As of December 2016)	Comments/Discussion	Anticipated 2017 Tasks	Anticipated 2018 Tasks	Anticipated 2019 Tasks	Anticipated 2020 Tasks	Anticipated 2021 Tasks
Part II.A.3.d.i.	Prohibit illicit discharges into the regulated storm sewer system.	End of 2 nd Permit Year	Complete	<ul style="list-style-type: none"> See Ordinance in Appendix I 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Part II.A.3.d.ii.	N/A	N/A	N/A	<ul style="list-style-type: none"> Non-traditional requirement. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Part II.A.3.d.iii.	Solicit assistance from neighboring MS4s to detect and eliminate illicit discharges that may originate within the neighboring MS4.	N/A	N/A	<ul style="list-style-type: none"> The City does not have neighboring MS4s. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Part II.A.3.d.iv.	Develop a formal ERP for illicit discharges.	End of 2 nd Permit Year	In Progress	<ul style="list-style-type: none"> See ERP Template in Appendix H 	<ul style="list-style-type: none"> Continue development of ERP. 	<ul style="list-style-type: none"> Adopt ERP. Submit with Annual Report. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Part II.A.3.d.v.	Implement ERP for illicit discharges.	End of 2 nd Permit Year	Will begin in 2018.		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Implement ERP. 	<ul style="list-style-type: none"> Continue to implement ERP 	<ul style="list-style-type: none"> Continue to implement ERP 	<ul style="list-style-type: none"> Continue to implement ERP
Part II.A.3.e.i.	Inspect and screen all of the City's outfalls during dry weather.	Complete by end of 5 th Permit Year	In Progress	<ul style="list-style-type: none"> See Outfall Inspection Form in Appendix D. 	<ul style="list-style-type: none"> Screen a percentage of the City's outfalls during dry weather. Document results and progress in Annual Report. 	<ul style="list-style-type: none"> Screen a percentage of the City's outfalls during dry weather. Document results and progress in Annual Report. 	<ul style="list-style-type: none"> Screen a percentage of the City's outfalls during dry weather. Document results and progress in Annual Report. 	<ul style="list-style-type: none"> Screen a percentage of the City's outfalls during dry weather. Document results and progress in Annual Report. 	<ul style="list-style-type: none"> Screen a percentage of the City's outfalls during dry weather. Document results and progress in Annual Report.
Part II.A.3.e.ii.	Determine high priority outfalls.	2 nd – 5 th Permit Years	Will begin in 2018		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Determine high priority outfalls. Submit list of high priority outfalls in Annual Report. 	<ul style="list-style-type: none"> Reevaluate high priority outfalls. Submit list of high priority outfalls in Annual Report. 	<ul style="list-style-type: none"> Reevaluate high priority outfalls. Submit list of high priority outfalls in Annual Report. 	<ul style="list-style-type: none"> Reevaluate high priority outfalls. Submit list of high priority outfalls in Annual Report.
Part II.A.3.e.iii.	Inspect and screen high priority outfalls during dry weather a minimum of once per year.	3 rd – 5 th Permit Years	Will begin in 2019		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Inspect and screen high priority outfalls. Submit summary of results in Annual Report. 	<ul style="list-style-type: none"> Inspect and screen high priority outfalls. Submit summary of results in Annual Report. 	<ul style="list-style-type: none"> Inspect and screen high priority outfalls. Submit summary of results in Annual Report.
Part II.A.3.f.i.	Develop an Illicit Discharge Investigation and Corrective Action Plan (IDICAP).	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> Although the City is currently implementing a program which conducts investigations and corrective actions, an IDICAP will be developed during Permit Year 1. See IDICAP template in Appendix D 	<ul style="list-style-type: none"> Develop and adopt IDICAP. Submit adopted IDICAP in Annual Report. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Part II.A.3.f.ii.	Implement IDICAP.	End of 2 nd Permit Year	Will begin in 2018	<ul style="list-style-type: none"> The City's Engineering and Utility Divisions have been and continue to investigate and record all suspected illicit discharges through normal operational procedures. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Implement IDICAP 	<ul style="list-style-type: none"> Continued implementation of IDICAP 	<ul style="list-style-type: none"> Continued implementation of IDICAP 	<ul style="list-style-type: none"> Continued implementation of IDICAP
Part II.A.3.f.iii.	Maintain documentation which describes the investigations conducted and corrective actions taken per the IDICAP.	2 nd – 5 th Permit Years	Will begin in 2018		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Maintain documentation of investigations conducted and corrective actions taken. Submit summary in Annual Report. 	<ul style="list-style-type: none"> Maintain documentation of investigations conducted and corrective actions taken. Submit summary in Annual Report. 	<ul style="list-style-type: none"> Maintain documentation of investigations conducted and corrective actions taken. Submit summary in Annual Report. 	<ul style="list-style-type: none"> Maintain documentation of investigations conducted and corrective actions taken. Submit summary in Annual Report.
Part II.A.3.f.iv.	N/A	N/A	N/A	<ul style="list-style-type: none"> Non-traditional requirement. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

Table A.1: City of Helena MS4 General Permit Implementation Schedule

	Permit Reference	Summary of Required BMP	Deadline/ Implementation Schedule	Status (As of December 2016)	Comments/Discussion	Anticipated 2017 Tasks	Anticipated 2018 Tasks	Anticipated 2019 Tasks	Anticipated 2020 Tasks	Anticipated 2021 Tasks
MCM-4: Construction Site Stormwater Management	Part II.A.4.a.i	Adopt an ordinance or other mechanism to require construction storm water controls on all regulated projects in accordance with the construction storm water management minimum standards described as Non-Numeric Technology-Based Effluent Limits in the most current Montana Construction General Permit (CGP).	End of 3 rd Permit Year	Completed (pending 2017 CGP revisions)	<ul style="list-style-type: none"> The CGP will be revised in 2017. Since coverage under DEQ's CGP is required by City Ordinance, the minimum standards described as non-numeric technology-based effluent limits in the CGP are thereby required and an Ordinance revision is not necessary. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Submit ordinance with Annual Report. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.4.a.ii	N/A	N/A	N/A	<ul style="list-style-type: none"> Non-traditional requirement. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.4.a.iii	Develop a formal ERP to ensure compliance with the construction storm water management regulatory mechanisms on private property.	End of 3 rd Permit Year	In Progress	<ul style="list-style-type: none"> See ERP Template in Appendix H 	<ul style="list-style-type: none"> Continue development of ERP 	<ul style="list-style-type: none"> Continue development of ERP 	<ul style="list-style-type: none"> Adopt ERP Submit Adopted ERP with Annual Report 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.4.a.iv	Implement the ERP.	End of 4 th Permit Year	Will Implement in 2020		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Implement ERP 	<ul style="list-style-type: none"> Continue to implement ERP
	Part II.A.4.b.i	Develop a construction storm water management plan review checklist which documents that the requirements described in the Non-Numeric Technology-Based Effluent Limits of the most current Montana CGP have been included on all regulated projects.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> See Construction Stormwater Management Plan Review Checklist in Appendix E. The draft/template checklist may need revisions if there are updates to the Non-Numeric Technology-Based Effluent Limits for the 2017 CGP. 	<ul style="list-style-type: none"> Finalize the Construction Stormwater Management Plan Review Checklist. Submit Construction Stormwater Management Plan Review Checklist with Annual Report. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.4.b.ii	Implement Construction Storm Water Management Plan Review Checklist.	End of 1 st Permit Year	In Progress		<ul style="list-style-type: none"> Implement Construction Stormwater Management Plan Review Checklist 	<ul style="list-style-type: none"> Continued implementation. 	<ul style="list-style-type: none"> Continued implementation. 	<ul style="list-style-type: none"> Continued implementation. 	<ul style="list-style-type: none"> Continued implementation.
	Part II.A.4.b.iii	N/A	N/A	N/A	<ul style="list-style-type: none"> Non-traditional requirement. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.4.c.i	Develop an inspection form or checklist to ensure consistent and thorough regulated project inspections.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> See Construction Storm Water Inspection Form in Appendix E The draft/template form may need revisions if there are updates to the Non-Numeric Technology-Based Effluent Limits for the 2017 CGP. 	<ul style="list-style-type: none"> Finalize Construction Storm Water Inspection Form Submit Construction Storm Water Inspection Form with Annual Report 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.4.c.ii	N/A	N/A	N/A	<ul style="list-style-type: none"> Non-traditional requirement. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

Table A.1: City of Helena MS4 General Permit Implementation Schedule

	Permit Reference	Summary of Required BMP	Deadline/ Implementation Schedule	Status (As of December 2016)	Comments/Discussion	Anticipated 2017 Tasks	Anticipated 2018 Tasks	Anticipated 2019 Tasks	Anticipated 2020 Tasks	Anticipated 2021 Tasks
	Part II.A.4.c.iii	Conduct inspections using the inspection form.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> See Construction Storm Water Inspection Form in Appendix E 	<ul style="list-style-type: none"> Conduct inspections using the Construction Storm Water Inspection Form 	<ul style="list-style-type: none"> Conduct inspections using the Construction Storm Water Inspection Form 	<ul style="list-style-type: none"> Conduct inspections using the Construction Storm Water Inspection Form 	<ul style="list-style-type: none"> Conduct inspections using the Construction Storm Water Inspection Form 	<ul style="list-style-type: none"> Conduct inspections using the Construction Storm Water Inspection Form
	Part II.A.4.c.iv	Develop and maintain/update a regulated project inventory.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> Project inventory must include: if the project is covered under the CGP and associated authorization number, location, size, topography, and proximity to waterbodies for each project. 	<ul style="list-style-type: none"> Update and continue to maintain regulated project inventory. 	<ul style="list-style-type: none"> Update and continue to maintain regulated project inventory. 	<ul style="list-style-type: none"> Update and continue to maintain regulated project inventory. 	<ul style="list-style-type: none"> Update and continue to maintain regulated project inventory. 	<ul style="list-style-type: none"> Update and continue to maintain regulated project inventory.
	Part II.A.4.c.v	Develop an inspection frequency determination protocol based upon the priority of the project.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> See Construction Site Stormwater Inspection Frequency Determination Protocol template in Appendix E 	<ul style="list-style-type: none"> Finalize the Construction Site Stormwater Inspection Frequency Determination Protocol. Submit with Annual Report. 	<ul style="list-style-type: none"> Continued implementation of inspection frequency form. 	<ul style="list-style-type: none"> Continued implementation of inspection frequency form. 	<ul style="list-style-type: none"> Continued implementation of inspection frequency form. 	<ul style="list-style-type: none"> Continued implementation of inspection frequency form.
MCM-5: Post-Construction Site Storm Water Management in New and Redevelopment	Part II.A.5.a.i	Adopt an ordinance or other mechanism to require post-construction storm water management controls (PCSMCs) on regulated projects which - at a minimum- includes the performance standard described in Part III.B.6.b.iii.	End of 4 th Permit Year	Complete	<ul style="list-style-type: none"> An ordinance is in effect which requires post-construction stormwater management controls for development and redevelopment projects which disturb one acre or more, including projects disturbing less than one acre that are part of a larger common plan of development, redevelopment, or sale and new development which creates 5,000 ft² or more of impervious area. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.5.a.ii	N/A	N/A	N/A	<ul style="list-style-type: none"> Non-traditional requirement. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.5.a.iii	Develop a formal ERP to ensure compliance with installation, operation and maintenance requirements for PCSMCs.	End of 4 th Permit Year	ERP will be developed in 2020	<ul style="list-style-type: none"> See ERP template in Appendix H. 	<ul style="list-style-type: none"> Continued development of ERP. 	<ul style="list-style-type: none"> Continued development of ERP. 	<ul style="list-style-type: none"> Continued development of ERP. 	<ul style="list-style-type: none"> Adopt ERP Submit Adopted ERP with Annual Report 	<ul style="list-style-type: none"> N/A
	Part II.A.5.a.iv	Implement ERP.	End of 5 th Permit Year	Will Implement in 2021		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Implement the ERP.
	Part II.A.5.b.i	Develop and implement a plan review checklist to ensure consistent review and determine and document compliance with state and local post-construction requirements.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> See Post-Construction Storm Water Management Plan Review checklist in Appendix F. 	<ul style="list-style-type: none"> Finalize Post-Construction Storm Water Management Plan Review checklist Implement checklist Submit with Annual Report. 	<ul style="list-style-type: none"> Continued implementation. 	<ul style="list-style-type: none"> Continued implementation. 	<ul style="list-style-type: none"> Continued implementation. 	<ul style="list-style-type: none"> Continued implementation.
	Part II.A.5.b.ii	N/A	N/A	N/A	<ul style="list-style-type: none"> Non-traditional requirement. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

Table A.1: City of Helena MS4 General Permit Implementation Schedule

Permit Reference	Summary of Required BMP	Deadline/ Implementation Schedule	Status (As of December 2016)	Comments/Discussion	Anticipated 2017 Tasks	Anticipated 2018 Tasks	Anticipated 2019 Tasks	Anticipated 2020 Tasks	Anticipated 2021 Tasks
Part II.A.5.b.iii	Require that all regulated projects implement PCSMCs that are designed to meet the performance standard for runoff generated from the first 0.5 inches of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation. Develop and apply criteria for determining the circumstances under which offsite treatment may be allowed. Develop a formal review and approval process for determining projects eligible for offsite treatment. Create and maintain an inventory of regulated projects which utilize offsite treatment.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> The City has adopted an ordinance requiring a Storm Water Drainage Plan for new and redevelopment when 5,000 ft² or more of impervious area are created. The City is preparing an update to its Storm Water Master Plan which will demonstrate and provide the basis for water quality and flood control protection of these facilities including their use as post-construction offsite storm water management of new and redevelopment when required by Part II.A.5.b.iii. See the Offsite Treatment Evaluation Form in Appendix F. 	<ul style="list-style-type: none"> Finalize Offsite Treatment Evaluation Form. Develop and document the formal review and approval process for determining project eligible for offsite treatment. Create an inventory of regulated projects which utilize offsite treatment of post-construction storm water runoff. Update Engineering and Design Standards, if necessary. Submit adopted performance standards with Annual Report, if applicable. 	<ul style="list-style-type: none"> Maintain inventory of regulated projects which utilize offsite treatment of post-construction stormwater runoff. 	<ul style="list-style-type: none"> Maintain inventory of regulated projects which utilize offsite treatment of post-construction stormwater runoff. 	<ul style="list-style-type: none"> Maintain inventory of regulated projects which utilize offsite treatment of post-construction stormwater runoff. 	<ul style="list-style-type: none"> Maintain inventory of regulated projects which utilize offsite treatment of post-construction stormwater runoff.
Part II.A.5.c.i	Develop and implement an inspection form or checklist to ensure consistent and thorough inspections of PCSMCs.	End of 2 nd Permit Year	In Progress	<ul style="list-style-type: none"> See Post-Construction Storm Water Management Inspection Form in Appendix F 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Finalize Post-Construction Storm Water Management Inspection Form. Implement inspection form. Submit with Annual Report. 	<ul style="list-style-type: none"> Continued implementation. 	<ul style="list-style-type: none"> Continued implementation. 	<ul style="list-style-type: none"> Continued implementation.
Part II.A.5.c.ii	N/A	N/A	N/A	<ul style="list-style-type: none"> Non-traditional requirement. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Part II.A.5.c.iii	Develop and maintain/update an inventory of all new permittee-owned and private PCSMCs.	End of 2 nd Permit Year	In Progress	<ul style="list-style-type: none"> The City maintains a GIS database of all its storm water facilities including all new and existing public and private PCSMCs. 	<ul style="list-style-type: none"> Continue to maintain and update database. 	<ul style="list-style-type: none"> Continue to maintain and update database. 	<ul style="list-style-type: none"> Continue to maintain and update database. 	<ul style="list-style-type: none"> Continue to maintain and update database. 	<ul style="list-style-type: none"> Continue to maintain and update database.
Part II.A.5.c.iv	Develop and maintain/update an inventory of all existing permittee-owned and private high priority PCSMCs.	End of 3 rd Permit Year	In Progress	<ul style="list-style-type: none"> The City maintains a GIS database of all its storm water facilities including all new and existing public and private PCSMCs. 	<ul style="list-style-type: none"> Continue to maintain and update database. 	<ul style="list-style-type: none"> Continue to maintain and update database. 	<ul style="list-style-type: none"> Conduct evaluation to determine high priority PCSMCs. 	<ul style="list-style-type: none"> Continue to maintain and update database. 	<ul style="list-style-type: none"> Continue to maintain and update database.
Part II.A.5.c.v	N/A	N/A	N/A	<ul style="list-style-type: none"> Non-traditional requirement. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Part II.A.5.c.vi	Develop an inspection frequency determination protocol based upon the priority of the post-construction storm water management control.	End of 2 nd Permit Year	In Progress	<ul style="list-style-type: none"> See Post-Construction Stormwater Management Control Inspection Frequency Determination Protocol template in Appendix F. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Finalize inspection frequency determination protocol. Submit with Annual Report. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

Table A.1: City of Helena MS4 General Permit Implementation Schedule

	Permit Reference	Summary of Required BMP	Deadline/ Implementation Schedule	Status (As of December 2016)	Comments/Discussion	Anticipated 2017 Tasks	Anticipated 2018 Tasks	Anticipated 2019 Tasks	Anticipated 2020 Tasks	Anticipated 2021 Tasks
	Part II.A.5.c.vii	Develop a program to either conduct inspections of high-priority PCSMCs at least annually or require self-inspection and reporting by owners at least annually.	End of 2 nd Permit Year	In Progress	<ul style="list-style-type: none"> The City currently inspects high-priority PCSMCs and expects to continue inspections. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Develop a program to inspect high priority PCSMCs. Submit program description with Annual Report. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Part II.A.5.c.viii	Inspect permittee-owned high priority post-construction storm water management controls annually.	During the 3 rd , 4 th , and 5 th Permit Years	Will begin in 2019	<ul style="list-style-type: none"> The City currently inspects high-priority PCSMCs and expects to continue inspections. 	<ul style="list-style-type: none"> Continued inspections. 	<ul style="list-style-type: none"> Continued inspections. 	<ul style="list-style-type: none"> Implement revised inspection process per Part II.A.5.c.vii. Inspect permittee-owned high priority PCSMCs. Document findings and resulting compliance actions. 	<ul style="list-style-type: none"> Inspect permittee-owned high priority PCSMCs. Document findings and resulting compliance actions. 	<ul style="list-style-type: none"> Inspect permittee-owned high priority PCSMCs. Document findings and resulting compliance actions.
	Part II.A.5.c.ix	Inspect or have inspected all high priority privately-owned PCSMCs annually.	During the 3 rd , 4 th , and 5 th Permit Year	Will begin in 2019	<ul style="list-style-type: none"> The City currently inspects high-priority PCSMCs and expects to continue inspections. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Implement revised inspection process per Part II.A.5.c.vii, if applicable. Inspect privately-owned high priority controls. Document findings and resulting compliance actions. 	<ul style="list-style-type: none"> Inspect privately-owned high priority controls. Document findings and resulting compliance actions. 	<ul style="list-style-type: none"> Inspect privately-owned high priority controls. Document findings and resulting compliance actions.
	Part II.A.5.d.i	Conduct a discussion to evaluate existing barriers to implementing LID infrastructure in the codes, ordinances and policies; identify opportunities for change; and address the potential inconsistencies between policies.	End of 4 th Permit Year	Will conduct in 2020		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Meet with appropriate staff to discuss existing barriers to LID. Submit summary of discussion outcome with Annual Report. 	<ul style="list-style-type: none"> N/A
MCM-6: Pollution Prevention/Good Housekeeping for Permittee Operations	Part II.A.6.a.i	Create an inventory of permittee-owned/operated facilities and activities that have the potential to release contaminants to the MS4. List possible contaminates and local departments(s) and positions(s) responsible for pollution prevention at each facility/activity.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> The City has developed a draft inventory of permittee owned facilities and activities, including potential contaminants for each facility and activity. 	<ul style="list-style-type: none"> Finalize the draft inventory of facilities and activities. Submit inventory with Annual Report. 	<ul style="list-style-type: none"> Update inventory. 	<ul style="list-style-type: none"> Update inventory. 	<ul style="list-style-type: none"> Update inventory. 	<ul style="list-style-type: none"> Update inventory.
	Part II.A.6.a.ii	Develop a map that identifies the locations of facilities and known locations of activities identified in Part II.A.6.a.i.	During the 2 nd , 3 rd , 4 th , and 5 th Permit Years	Will begin in 2018	<ul style="list-style-type: none"> The City developed and maintains a GIS database which includes the locations of City owned facilities. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Develop map showing the location of facilities and activities identified in Part II.A.6.a.i. 	<ul style="list-style-type: none"> Update map as necessary. 	<ul style="list-style-type: none"> Update map as necessary. 	<ul style="list-style-type: none"> Update map as necessary.

Table A.1: City of Helena MS4 General Permit Implementation Schedule

	Permit Reference	Summary of Required BMP	Deadline/ Implementation Schedule	Status (As of December 2016)	Comments/Discussion	Anticipated 2017 Tasks	Anticipated 2018 Tasks	Anticipated 2019 Tasks	Anticipated 2020 Tasks	Anticipated 2021 Tasks
	Part II.A.6.a.iii	Organize similar facilities and activities identified in Part II.A.6.a.i. into categories, label the categories, and develop standard operating procedures (SOPs) for all categories.	During the 2 nd , 3 rd , 4 th , and 5 th Permit Years	Will begin in 2018		<ul style="list-style-type: none"> Begin to organize facilities and activities into categories. 	<ul style="list-style-type: none"> Develop one-fourth of SOPs. Submit completed SOPs with Annual Report. 	<ul style="list-style-type: none"> Develop one-fourth of SOPs (one-half of SOPs will be complete). Submit completed SOPs with Annual Report. 	<ul style="list-style-type: none"> Develop one-fourth of SOPs (three-fourths of SOPs will be complete). Submit completed SOPs with Annual Report. 	<ul style="list-style-type: none"> Develop one-fourth of SOPs (all SOPs will be complete). Submit completed SOPs with Annual Report.
	Part II.A.6.a.iv	Develop and document storm water pollution prevention training in conjunction with the development of the SOPs for each category.	During the 2 nd , 3 rd , 4 th , and 5 th Permit Years	Will begin in 2018		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Develop training session for the SOPs developed during 2018. 	<ul style="list-style-type: none"> Develop training session for the SOPs developed during 2019. 	<ul style="list-style-type: none"> Develop training session for the SOPs developed during 2020. 	<ul style="list-style-type: none"> Develop training session for the SOPs developed during 2021.
	Part II.A.6.a.v	Conduct storm water pollution prevention training for all staff directly involved with implementing SOPs.	During the 3 rd , 4 th , and 5 th Permit Years	Will begin in 2019		<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Conduct training for SOPs developed during 2018. Retain training and attendance records. 	<ul style="list-style-type: none"> Conduct training for SOPs developed during 2019. Retain training and attendance records. 	<ul style="list-style-type: none"> Conduct training for SOPs developed during 2020. Retain training and attendance records.
Part II.B: Training	Part II.B.1	Conduct training to educate the storm water management team about the new permit, updated SWMP and implementation responsibilities.	End of 1 st Permit Year	In Progress	<ul style="list-style-type: none"> During the 2017 General Permit development process the storm water management team has been comprehensively trained and educated about the new permit, the necessary updates to the SWMP and implementation responsibilities. 	<ul style="list-style-type: none"> Conduct training. Document participation in training. 	<ul style="list-style-type: none"> Train new team members within 90 days of hire date. Document participation in training. 	<ul style="list-style-type: none"> Train new team members within 90 days of hire date. Document participation in training. 	<ul style="list-style-type: none"> Train new team members within 90 days of hire date. Document participation in training. 	<ul style="list-style-type: none"> Train new team members within 90 days of hire date. Document participation in training.
	Part II.B.2	Conduct illicit discharge related training for appropriate field staff and staff who work at permittee facilities.	Ongoing	In Progress	<ul style="list-style-type: none"> See Table 6: SWMP Training. 	<ul style="list-style-type: none"> Train all appropriate staff. Document participation in training. 	<ul style="list-style-type: none"> Train appropriate new staff within 90 days of hire date. Document participation in training. 	<ul style="list-style-type: none"> Train appropriate new staff within 90 days of hire date. Document participation in training. 	<ul style="list-style-type: none"> Train all appropriate staff. Document participation in training. 	<ul style="list-style-type: none"> Train appropriate new staff within 90 days of hire date. Document participation in training.
	Part II.B.3	Conduct training for all inspectors and plan reviewers responsible for implementation MCM 4.	Ongoing	In Progress	<ul style="list-style-type: none"> See Table 6: SWMP Training. 	<ul style="list-style-type: none"> Train all appropriate staff. Document participation in training. 	<ul style="list-style-type: none"> Train new inspectors and plan reviewers within 90 days of hire date. Document participation in training. 	<ul style="list-style-type: none"> Train new inspectors and plan reviewers within 90 days of hire date. Document participation in training. 	<ul style="list-style-type: none"> Train all appropriate staff. Document participation in training. 	<ul style="list-style-type: none"> Train new inspectors and plan reviewers within 90 days of hire date. Document participation in training.
	Part II.B.4	Train all inspectors and plan reviewers responsible for implementation MCM 5.	Ongoing	In Progress	<ul style="list-style-type: none"> See Table 6: SWMP Training. 	<ul style="list-style-type: none"> Train all appropriate staff. Document participation in training. 	<ul style="list-style-type: none"> Train new inspectors and plan reviewers within 90 days of hire date. Document participation in training. 	<ul style="list-style-type: none"> Train new inspectors and plan reviewers within 90 days of hire date. Document participation in training. 	<ul style="list-style-type: none"> Train all appropriate staff. Document participation in training. 	<ul style="list-style-type: none"> Train new inspectors and plan reviewers within 90 days of hire date. Document participation in training.
	Part II.B.5	Conduct training for all inspectors and plan reviewers responsible for implementation MCM 6.	Ongoing	Will begin in 2019	<ul style="list-style-type: none"> See Part II.6.a.v 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Conduct training for SOPs developed during 2018. Retain training and attendance records. 	<ul style="list-style-type: none"> Conduct training for SOPs developed during 2019. Retain training and attendance records. 	<ul style="list-style-type: none"> Conduct training for SOPs developed during 2020. Retain training and attendance records.
	Part II.C	MS4 may share responsibility to implement MCMs.	Ongoing	In Progress		<ul style="list-style-type: none"> Coordinate reviews, inspections, and compliance actions with DEQ as appropriate. 	<ul style="list-style-type: none"> Coordinate reviews, inspections, and compliance actions with DEQ as appropriate. 	<ul style="list-style-type: none"> Coordinate reviews, inspections, and compliance actions with DEQ as appropriate. 	<ul style="list-style-type: none"> Coordinate reviews, inspections, and compliance actions with DEQ as appropriate. 	<ul style="list-style-type: none"> Coordinate reviews, inspections, and compliance actions with DEQ as appropriate.

Table A.1: City of Helena MS4 General Permit Implementation Schedule

	Permit Reference	Summary of Required BMP	Deadline/Implementation Schedule	Status (As of December 2016)	Comments/Discussion	Anticipated 2017 Tasks	Anticipated 2018 Tasks	Anticipated 2019 Tasks	Anticipated 2020 Tasks	Anticipated 2021 Tasks
	Part II.D	N/A	N/A	N/A	• N/A	• N/A	• N/A	• N/A	• N/A	• N/A
	Part II.E	Implement the SWMP on all new areas added to the MS4.	Ongoing	In Progress		<ul style="list-style-type: none"> Implement SWMP on newly added areas. Discuss in Annual Report. 	<ul style="list-style-type: none"> Implement SWMP on newly added areas. Discuss in Annual Report. 	<ul style="list-style-type: none"> Implement SWMP on newly added areas. Discuss in Annual Report. 	<ul style="list-style-type: none"> Implement SWMP on newly added areas. Discuss in Annual Report. 	<ul style="list-style-type: none"> Implement SWMP on newly added areas. Discuss in Annual Report.
	Part II.F	DEQ may require changes to the SWMP as needed.	As needed.	N/A	<ul style="list-style-type: none"> Any future DEQ requests to modify the SWMP will be identified in the Annual Reports and appended to the SWMP. 	• N/A				
Part III. Special Conditions	Part III.A	N/A	N/A	N/A	• N/A	• N/A	• N/A	• N/A	• N/A	• N/A
	Part III.B	Identify outfalls which discharge to impaired waterbodies and associated pollutants of impairment. Include a section in the SWMP which aims to make progress towards meeting the TMDL.	End of 4 th Permit Year	Will develop over the coming permit years		• N/A	<ul style="list-style-type: none"> Begin development of TMDL section of the SWMP. 	<ul style="list-style-type: none"> Continued development of TMDL section of the SWMP. 	<ul style="list-style-type: none"> Finalize TMDL section of the SWMP. Submit TMDL section with Annual Report. 	<ul style="list-style-type: none"> Implement TMDL section of the SWMP. Evaluate TMDL approach based on monitoring results, revise as needed, and resubmit with Annual Report.
	Part III.B: TMDL Related Monitoring	Conduct monitoring to track and evaluate the effectiveness of BMPs.	Implement in 2 nd Permit Year	Will begin in sampling in 2018	<ul style="list-style-type: none"> The City has selected Monitoring Option 2. Anticipated monitoring locations are provided in Table 7: TMDL Monitoring Option 2 Locations 	<ul style="list-style-type: none"> Develop Sampling Plan. Submit Sampling Plan with Annual Report. 	<ul style="list-style-type: none"> Provide mechanism for public review of the Sampling Plan. Begin sampling. 	<ul style="list-style-type: none"> Continued sampling. Document sampling results. 	<ul style="list-style-type: none"> Continued sampling. Document sampling results. 	<ul style="list-style-type: none"> Continued sampling. Document sampling results.
Part IV. Monitoring, Recording and Reporting Requirements	Part IV.A,B, C, & D.	Perform sampling, testing, and reporting of storm water discharges.	Implement in 1 st Permit Year	In Progress	<ul style="list-style-type: none"> The City has selected Monitoring Option 2. Anticipated monitoring locations are provided in Table 9: Self-Monitoring Option 2 Locations 	<ul style="list-style-type: none"> Conduct semi-annual motoring at each site. Conduct evaluation of results. Submit results with Annual Report. 	<ul style="list-style-type: none"> Conduct semi-annual motoring at each site. Conduct evaluation of results. Submit results with Annual Report. 	<ul style="list-style-type: none"> Conduct semi-annual motoring at each site. Conduct evaluation of results. Submit results with Annual Report. 	<ul style="list-style-type: none"> Conduct semi-annual motoring at each site. Conduct evaluation of results. Submit results with Annual Report. 	<ul style="list-style-type: none"> Conduct semi-annual motoring at each site. Conduct evaluation of results. Submit results with Annual Report.
	Part IV.E	N/A	N/A	N/A	• N/A	• N/A	• N/A	• N/A	• N/A	• N/A
	Part IV.F	Prepare and submit an annual report for each calendar year within the General Permit term.	March 1 st of each year	N/A		<ul style="list-style-type: none"> Submit Annual Report by March 1st. 	<ul style="list-style-type: none"> Submit Annual Report by March 1st. 	<ul style="list-style-type: none"> Submit Annual Report by March 1st. 	<ul style="list-style-type: none"> Submit Annual Report by March 1st. 	<ul style="list-style-type: none"> Submit Annual Report by March 1st.

Appendix B. General Permit

**GENERAL PERMIT
FOR
STORM WATER DISCHARGES ASSOCIATED WITH SMALL
MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

PERMIT NUMBER MTR040000

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

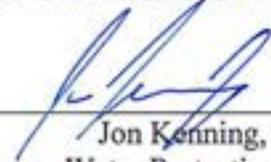
**AUTHORIZATION TO DISCHARGE UNDER
THE MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES)**

In compliance with Section 75-5-101 *et seq.*, Montana Code Annotated (MCA); Administrative Rules of Montana (ARM) 17.30.1101; 17.30.1301 *et seq.*; and ARM 17.30.601 *et seq.*, applicants with an authorization letter issued under this *General Permit for Storm Water Discharges Associated with Small Municipal Separate Storm Sewer Systems (Small MS4s)* are permitted to discharge storm water resulting only from Small MS4s in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

This Permit shall become effective January 1, 2017.

This Permit and the authorization to discharge shall expire at midnight, December 31, 2021.

FOR THE MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY



Jon Kenning, Chief
Water Protection Bureau

Issuance Date: November 30, 2016

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Part I. Permit Coverage

Discharges Authorized

Montana Pollutant Discharge Elimination System (MPDES) General Permit MTR040000 is a fourth-generation General Permit for storm water discharges associated with Small Municipal Separate Storm Sewer Systems (MS4s). Pursuant to 75-5-402, MCA and requirements found in ARM, Title 17, Chapter 30, Subchapters 11, 12, and 13, the Department of Environmental Quality (the Department or DEQ) regulates storm water discharges from Small MS4s. To elaborate, ARM 17.30.1105(1)(d) requires MPDES permit coverage for Small MS4s that are identified in ARM 17.30.1102(23) or designated pursuant to ARM 17.30.1107. Regulated Small MS4s are required to apply for, and obtain, authorization for the discharge of storm water into state waters per requirements of this General Permit.

Ineligibility for Coverage

This 2017 General Permit does not authorize, or supersede permitting requirements for "storm water discharge associated with industrial activity" as defined in ARM 17.30.1102(29), "storm water discharge associated with construction activity" as defined in ARM 17.30.1102(28), or storm water discharges required or covered under another MPDES permit. The 2017 General Permit does not relieve the permittee from any other statute, regulation, permits, or other regulatory requirements for activities occurring within their area and not associated with permitted storm water discharges with Small Municipal Separate Storm Sewer Systems.

Applicants

The Department may determine that a small MS4 applying for coverage does not qualify for authorization under the renewed 2017 General Permit for Storm Water Discharges associated with Small MS4s, citing that the specific source applying for authorization appears unable to comply with the one or more of the following requirements:

- effluent standards, effluent limitations, standards of performance for new sources of pollutants, toxic effluent standards and prohibitions, and pretreatment standards;
- water quality standards established pursuant to 75-5-301, MCA;
- prohibition of discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste;
- prohibition of any discharges to which the regional administrator has objected in writing;
- prohibition of any discharge which is in conflict with a plan or amendment thereto approved pursuant to section 208(b) of the Act;
- any additional requirements that the Department determines are necessary to carry out the provisions of 75-5-101, et seq., MCA.
- The storm water discharge is different in degree or nature from discharges reasonably expected from sources or activities within the category described in this MPDES General Permit (including pollutants from process wastewater streams).
- The MPDES permit authorization for the same operation has previously been denied or revoked.
- The discharge sought to be authorized under the 2017 General Permit is also included within an application or is subject to review under the Major Facility Siting Act, 75-20-101, et seq., MCA.

- The point source is, or will be, located in an area of unique ecological or recreational significance. Such determination must be based upon considerations of Montana stream classifications adopted under 75-5-301, MCA, impacts on fishery resources, local conditions at proposed discharge sites, and designations of wilderness areas under 16 USC 1132 or of wild and scenic rivers under 16 USC 1274.

If the Department determines ineligibility for a Small MS4, the Department shall proceed, unless the application withdrawn, to process the application through the Individual MPDES Permit requirements. The Department will contact the applicant regarding ineligibility and request more information and fees, as needed, for Individual MPDES Permit requirements.

Permittees

Per ARM 17.30.1341(9), the Department may require any Small MS4 authorized by the 2017 General Permit to obtain an Individual Permit instead. The Department may require a Small MS4 to get an Individual Permit citing one or more of the following reasons:

- a water quality management plan has been approved that contains requirements applicable to categories or subcategories of discharges or facilities covered in a general permit;
- the Department has determined that the Small MS4 is a significant contributor to pollution;
- a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the Small MS4;
- the discharger is not in compliance with the conditions of the 2017 General Permit;
- circumstances have changed since the time of the request to be covered by the 2015 General Permit so that the Small MS4 is no longer appropriately controlled under the 2017 General Permit;
- effluent limitations guidelines have been promulgated for facilities covered under the 2017 General Permit; or
- a change in any condition that requires either a temporary or permanent reduction or elimination of the discharge authorized under the 2017 General Permit has occurred.

Public Notice

Prior to issuing a General Permit, the Department shall provide a public notice in accordance with the requirements of ARM 17.30.1372 and shall adhere to the requirements of ARM 17.30.1373 through 17.30.1377 regarding public comments and public hearings.

Application for Coverage

Per ARM 17.30.1111, owners or operators of Small MS4s must obtain coverage under a MPDES General Permit by completing a General Permit application or a MPDES Individual Permit by submitting an application for an Individual Permit, and complying with the application requirements set forth in ARM 17.30.1111(2).

In accordance with ARM 17.30.1341(4), a discharger who fails to submit a written application in accordance with the terms of this General Permit shall not be authorized to discharge under the permit. A complete and timely application to be covered in accordance with this General Permit's requirements fulfills the requirements for permit application for purposes of ARM

17.30.1105, 17.30.1111, 17.30.1313, 17.30.1322, and 17.30.1341. The application form, as provided by the Department, shall be completed and submitted to:

Montana Department of Environmental Quality
Water Protection Bureau
P.O. Box 200901
Helena, Montana 59620-0901

Authorization options for coverage under the 2017 General Permit are provided below.

New Authorizations (Not currently authorized under the 2015 General Permit)

Applicants seeking authorization under the 2017 General Permit shall submit a complete application package at least 30 days before the anticipated date of required permit coverage. If an applicant owns and operates Small MS4 areas throughout the state, the applicant can submit:

- application packages for each Small MS4 area separately,
- application packages for each Small MS4 area separately as a co-permittee with the interconnected Small MS4,
- application packages for each Small MS4 area to reflect both permittee and co-permittee statuses, as requested, or
- a single comprehensive application package to cover all Small MS4 areas in the state.

An application package includes:

- an application form, as provided by the Department,
- a storm water management program, and
- fees (renewal permit fees) as required under ARM 17.30.201.

If there are deficiencies with the application package, the Department may deny authorization under the permit or contact the MS4 for additional information necessary to ensure the application package meets requirements. If the request is denied, the Department may process the request as an Individual Permit (with additional fees); the applicant may withdraw the request; or the applicant may modify the MS4's operations to meet the conditions of the 2017 General Permit and re-apply for coverage under the 2017 General Permit.

Once determined adequate, the Department will issue an authorization letter to these MS4s confirming coverage under the 2017 General Permit beginning January 1, 2017 [ARM 17.30.1341(4)].

Continuing Authorizations issued under the 2015 General Permit

Permitted MS4s renewing authorizations under the 2017 General Permit shall submit a complete renewal application package at least 30 days in advance of the existing 2015 General Permit expiration.

A renewal application package includes:

- a renewal application form, as provided by the Department,
- a storm water management program, and
- fees (renewal permit fees) as required under ARM 17.30.201.

If there are deficiencies with the renewal application package, the Department may deny authorization under the permit or contact the MS4 for additional information necessary to ensure the application package meets requirements. If the request is denied, the Department may process the request as an Individual Permit (with additional fees); the applicant may withdraw the request; or the applicant may modify the MS4's operations to meet the conditions of the 2017 General Permit and re-apply for coverage under the 2017 General Permit.

Once determined adequate, the Department will issue an authorization letter to these MS4s confirming coverage under the 2017 General Permit beginning January 1, 2017 [ARM 17.30.1341(4)].

Co-permittees Authorizations (New or Continuing Authorizations)

When multiple Small MS4s apply for coverage under a single permit authorization number, they shall be considered co-permittees and shall be jointly responsible for compliance under the 2017 General Permit as set forth at ARM 17.30.1111(3) and (7). Each co-permittee must submit a separate application package to obtain authorization. Co-permittee authorizations may occur under the 2017 General Permit as a renewal authorization with continuing coverage status from the 2015 General Permit or a new authorization. Co-permittees will be subject to the requirements above based on their status: new or continuing.

Other Permitting Requirements

Submittal of the application package and receipt of an authorization letter from the Department does not eliminate a permittee's obligation to obtain other necessary permits to include MS4-related activities that utilize the storm sewer systems as a conveyance for non-storm water discharges to a receiving waterbody.

Permit Area of Permitted MS4s Under the 2015-Issued General Permit

This permit covers areas pursuant to ARM 17.30.1102(23) that are served by, or contribute to, municipal separate storm sewers owned or operated by the permittee that discharges to State waters as follows:

- **Cities:** Billings, Bozeman, Butte, Great Falls, Helena, Kalispell, and Missoula.

For cities required to maintain coverage under this renewed permit, the geographic area of permit coverage will include the U.S. Census designated urbanized areas in accordance with the 2010 census for cities listed in ARM 17.30.1102(23)(a) and the entirety of the municipal incorporated boundary for cities listed in ARM 17.30.1102(23)(b). For the purposes of the 2017 General Permit, these permittees are referred to as Traditional MS4s.

- **Counties:** Cascade, Missoula, and Yellowstone.

For counties required to maintain coverage under this renewed permit, the geographic area of permit coverage will include the U.S. Census designated urbanized areas in accordance with the 2010 census for counties listed in ARM 17.30.1102(23)(a). For the purposes of the 2017 General Permit, these permittees are referred to as Traditional MS4s.

- **Other:** Malmstrom Air Force Base, Montana State University, and University of Montana (Missoula).

For all other permitted MS4s as identified in accordance with ARM 17.30.1102(23)(d) and required to maintain coverage under this renewed permit, the geographic area of permit coverage is the portion of the permittee's jurisdiction that is within permitted Traditional MS4s. For the purposes of the 2017 General Permit, these permittees are referred to as Non-Traditional MS4s.

Effluent Limitations

Effective immediately upon issuance of an authorization under the 2017 General Permit and lasting through the expiration date, the following conditions apply to all Small MS4s covered under this General Permit. There must be no discharge of pollutants via storm water runoff to State Waters except as provided for below.

- A. Implementation of Best Management Practices (BMPs) consistent with the provisions of the Storm Water Management Program (SWMP) and the requirements in this General Permit shall constitute compliance with the requirement of reducing pollutants to the maximum extent practicable (MEP). Discharges of storm water containing pollutants associated with Small MS4s covered under this General Permit will be controlled through the development, implementation, and enforcement of a SWMP designed to reduce the discharge of pollutants from the permitted Small MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Montana Water Quality Act (MWQA).
- B. For regulated Small MS4s which have been designated through ARM 17.30.1102(23) and had initial authorization under the preceding January 1, 2005 to December 31, 2009 General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer System, the permittee was required to develop, implement, and enforce a SWMP, as stated in Part II of the 2005 General Permit, no later than the December 31, 2009 expiration date. This requirement is still valid and binding under this reissued January 1, 2017 to December 31, 2021 General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer System (MS4), although for the new inclusions or revisions to the SWMP as stated in the reissued 2017 General Permit, the permittee must develop, implement, and enforce those additional or revised components as per the implementation timeframe specified.
- C. For any regulated Small MS4s which have been designated through ARM 17.30.1102(23) or 17.30.1107 or an unregulated MS4 seeking coverage that has not been previously authorized, the permittee must develop, implement, and enforce a SWMP in accordance with the 2017 General Permit, no later than five years from the initial date of permit authorization.
- D. If an individual MPDES permit is issued to any regulated Small MS4, coverage under the 2017 General Permit is terminated on the effective date of the final individual MPDES permit.

No discharge of storm water containing pollutants from process wastewater streams may occur under this General Permit.

No discharge of storm water containing pollutants from Small MS4s covered under this General Permit may cause or contribute to a violation of water quality standards.

Part II. Storm Water Management Program

A. Requirements

The permittee must develop, document, and maintain a SWMP which includes management practices, control techniques, systems, designs, good standard engineering practices, and such other provisions necessary to reduce the discharge of pollutants from the permitted Small MS4 to the MEP. This section describes required BMP's and implementation schedules or deadlines for each BMP. DEQ requires BMPs that are *selected, designed, installed, implemented, inspected, and maintained* (or replaced based on inspections) in accordance with good engineering, hydrologic, and pollution control practices. DEQ provides the flexibility for permittees to choose appropriate BMP's based on their location-specific discretion to self-determine appropriate BMP's to control pollutant sources. If applicable, retain documentation, specifications, and/or standard operating procedures used for BMP selection.

Pursuant to ARM 17.30.1111(6), the permittee shall effectively manage a storm water program inclusive of the six minimum control measures: Public Education and Outreach; Public Involvement and Participation; Illicit Discharge Detection & Elimination; Construction Site Storm Water Management; Post-Construction Site Storm Water Management in New and Redevelopment; and Pollution Prevention/Good Housekeeping for Permittee Operations.

The permittee shall effectively implement a coordinated storm water program inclusive of the development of a storm water management team comprised of persons responsible for implementation of the SWMP and the establishment of formal mechanisms for communication and coordination between team members (e.g. meetings, email updates, etc.) to ensure cooperation necessary to facilitate permit compliance and timely reporting.

Within 60 Days of the permit effective date and then reviewed annually, all permittees must develop a storm water management team, including a primary SWMP coordinator, and organizational chart which identifies the position responsible for implementing each minimum measure. Any updates to this information shall be submitted with Annual Reports.

During the entire permit term, all permittees must establish, document, and execute formalized mechanisms for regular communication between storm water management team members to allow for exchange of information and submittal of information necessary for permit compliance tracking and reporting.

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
<p>L. PUBLIC EDUCATION AND OUTREACH</p> <p>The permittee shall implement a storm water public education program to develop or adapt, distribute, and evaluate educational materials and outreach activities to key target audiences in the MS4 that raise awareness about the impacts of storm water discharges on waterbodies, educate audiences about the behaviors and activities that have the potential to pollute storm water discharges, and motivate action to change behaviors to reduce pollutants in storm water runoff.</p>			
<p>a. Determine key target audiences most appropriate for storm water outreach.</p>	All	<p>i.</p> <ul style="list-style-type: none"> • Analyze which business types and/or residential behaviors are common sources of illicit discharges, spills, and dumping. • Develop a list, description, and rationale for selecting these key target audiences based on business and residential groups associated with illegal discharges and improper disposal of waste to the MS4. • List the pollutants associated with each key target audience. • Submit with 1st Annual Report. 	End of 1 st Permit Year
	All	<p>ii.</p> <ul style="list-style-type: none"> • Develop and advertise a storm water website for access by key target audiences, other interested stakeholders, and the general public. • At a minimum, the storm water website must include: <ul style="list-style-type: none"> ○ a copy of this General Permit; or ○ a link to the permittee's webpage containing <ul style="list-style-type: none"> ▪ the permit, ▪ access to outreach materials, ▪ outreach event information (most recent and current), ▪ storm water management program documents and updates, ▪ annual reports (or an equivalent summary or document providing an annual overview, and the availability 	End of 1 st Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
		<p>for the general public to request the annual report), and</p> <ul style="list-style-type: none"> ▪ an effective mechanism for providing continued public input for the SWMP. <ul style="list-style-type: none"> • The website must also include: <ul style="list-style-type: none"> ○ information regarding how to identify sources of illicit discharges; ○ procedures on how to report an illicit discharge; ○ a summary of the permittee's requirements for covered construction activities; and ○ how to submit construction project complaints. • The website shall be available to the public on the internet. 	
b. Develop and utilize the permittee's website for public outreach and involvement.	All	i.	End of 2 nd Permit Year
c. Develop a tailored outreach strategy for each key target audience and specific storm water polluting behavior.	All	i.	End of 2 nd Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
	All	ii. <ul style="list-style-type: none"> • Distribute outreach materials to target audiences • Describe distribution in Annual Reports. 	During the 3 rd , 4 th , and 5 th Permit Years

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
2. PUBLIC INVOLVEMENT AND PARTICIPATION The permittee shall develop a strategy to involve key target audiences in the development and implementation of the SWMP that complies with state and local public notice requirements.			
a	All	i. <ul style="list-style-type: none"> • Identify approaches for involving the key target audiences (identified under Part II.A.1.a.i.) in the development and implementation of the SWMP over the five year permit term. • For each key audience, describe: <ul style="list-style-type: none"> o the approach; o the target date(s) for implementation; and o purpose of the involvement approach (e.g. raise awareness, change behavior, and improve the SWMP). • Wherever possible, identify existing organizations with membership that represent some or all of the key target audiences and describe opportunities for partnering to involve membership in SWMP development and implementation. • Document collaboration with existing organizations if this is an approach for involving key target audiences. • Submit a description of public involvement approach, and schedule for each key audience in 1st Annual Report. 	End of 1 st Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
	All	ii. <ul style="list-style-type: none"> • Implement identified involvement approaches for each key target audience. • Document participation and key target audience feedback on the approach in the SWMP and in each Annual Report. 	During the 2 nd , 3 rd , 4 th , and 5 th Permit Years
b. Develop and utilize the permittee's website for public involvement.	All	i. <ul style="list-style-type: none"> • Develop and advertise a storm water website for soliciting input from key target audiences, other interested stakeholders, and the general public. At a minimum, the storm water website must include: <ul style="list-style-type: none"> ○ access to outreach materials; ○ most recent or current outreach event information; ○ SWMP planning documents; ○ annual reports (or an equivalent summary or document providing an annual overview, and the availability for the public to request the annual report); ○ a mechanism for collecting public input for the SWMP; and ○ illicit discharge and construction project complaints. • Website shall be available to the public on the internet. 	End of 1 st Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
3. ILLICIT DISCHARGE DETECTION & ELIMINATION The permittee shall develop, implement and enforce a program to detect and eliminate illicit discharges (as defined in ARM 17.30.1102(7)) into the permitted Small MS4.			
a. Address the following more frequent categories of non-storm water discharges or flows (i.e., illicit discharges) if identified as significant contributors of pollutants to the Small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined in ARM 17.30.1102(8)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from firefighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to state waters). These more frequent non-storm water discharges must be reasonably expected (based on information available to the permittee) to not be significant sources of	All	i. <ul style="list-style-type: none"> • Evaluate and include, in each Annual Report: <ul style="list-style-type: none"> ○ a list of non-storm water discharges that the permittee has identified as significant contributors of pollutants; ○ the pollutants associated with each non-storm water significant contributor; and ○ document any local controls or conditions placed on these discharges. 	Annually

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
<p>pollutants to the Small MS4, because of either the nature of the discharges or conditions the permittee established for not allowing these discharges to the Small MS4.</p>			
<p>b. Develop a list of other similar occasional incidental non-storm water discharges (e.g. non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges. These non-storm water discharges must not be reasonably expected (based on information available to the permittee) to be significant sources of pollutants to the Small MS4, because of either the nature of the discharges or conditions the permittee established for allowing these discharges to the Small MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive waterbodies, BMPs for the wash water, etc.).</p>	All	<p>i.</p> <ul style="list-style-type: none"> • Evaluate and include, in each Annual Report: <ul style="list-style-type: none"> ○ a list of occasional incidental non-storm water discharges that the permittee has determined will not be addressed as illicit discharges; ○ the pollutants associated with each non-storm water occasional incidental; and ○ document any local controls or conditions placed on these discharges. 	Annually
	All	<p>ii.</p> <ul style="list-style-type: none"> • Include a provision prohibiting any occasional incidental non-storm water discharge that is determined to be contributing significant amounts of pollutants to the Small MS4 in appropriate ordinances, regulatory mechanism or memoranda of agreements. 	End of 2 nd Permit Year
<p>c. Inventory storm water sewer infrastructure to thoroughly track illicit discharges, contain spills, and determine high priority areas. When determining high priority areas, permittees must document and consider, at a minimum, the following: industrial areas, previous areas with illicit discharges, known illegal dumping areas, the oldest portions of</p>	All	<p>i.</p> <ul style="list-style-type: none"> • Update existing map showing: <ul style="list-style-type: none"> ○ the location and number of all outfalls (as defined in ARM 17.30.1102(14) and Part VIII of this General Permit); and ○ the names and location of all surface waters that receive discharges from those outfalls. • Development of this map to accommodate the provisions of a comprehensive illicit discharge detection and elimination (IDDE) program and 	End of 1 st Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
MS4 storm sewer infrastructure, any areas with onsite sewage disposal systems, and areas that discharge to an impaired waterbody.		<p>the SWMP would typically include mapping storm sewer system components including:</p> <ul style="list-style-type: none"> ○ inlets; ○ open channels; ○ subsurface conduits/pipes; ○ dry wells (discharges to ground water directly); and ○ other similar discrete conveyances. <ul style="list-style-type: none"> • List, label, or highlight determined high priority areas. • Update the storm sewer map regularly and make available for review by the Department upon request. 	
d. To the extent allowable under State, or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges (except those listed under Part II.A.3.a.) into the regulated storm sewer system and implement appropriate enforcement procedures and actions.	Traditional MS4s	<p>i.</p> <ul style="list-style-type: none"> • If not done previously, adopt an ordinance or other regulatory mechanism to prohibit illicit discharges • Submit with 2nd Annual Report. 	End of 2 nd Permit Year
	Non-Traditional MS4s	<p>ii.</p> <ul style="list-style-type: none"> • If not done previously, adopt an ordinance or other regulatory mechanisms to prohibit illicit discharges. • Permittees without legal authority to enact an ordinance or other regulatory mechanism shall ensure that written policies and procedures are in place to exert authority (to the extent allowable) over MS4 users such as: <ul style="list-style-type: none"> ○ employees, ○ the traveling public, ○ contractors, etc. • Submit a summary of legal authority, written policy, and written procedures with the 2nd Annual Report. 	End of 2 nd Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
	All	iii. <ul style="list-style-type: none"> • Solicit assistance from neighboring MS4s as necessary to detect and eliminate illicit discharges that may originate within the neighboring MS4 and formalize in cooperative agreements, i.e. memoranda of understanding. • Agreements should specify investigation and enforcement responsibilities and these agreements should be described in each permittee's Enforcement Response Plan (ERP) (Part II.A.3.d.iv.) and Illicit Discharge Investigation and Corrective Action Plan (Part II.A.3.f). • Formalize cooperative agreements, i.e. memoranda of understanding, with all neighboring MS4s as necessary to implement the IDDE program described in Part II.A.3. • Submit a summary of the cooperative agreements with the 2nd Annual Report. 	End of 2 nd Permit Year
	All	iv. <ul style="list-style-type: none"> ▪ Develop a formal ERP for illicit discharges. The ERP must describe: <ul style="list-style-type: none"> ○ legal authority - through ordinance, formal policies or memoranda of understanding to eliminate and abate illicit discharges; ○ identify staff with enforcement authority; ○ enforcement actions available; ○ enforcement escalation process; and ○ schedule to be utilized to quickly and consistently eliminate the source of the discharge, abate any damages and prevent recurrence. ▪ The ERP must include informal, formal, and judicial responses. <ul style="list-style-type: none"> ○ Informal responses may include: 	End of 2 nd Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
	All v.	<ul style="list-style-type: none"> • telephone notification; • verbal notice; • notice of violation; and • meetings. ○ Formal responses may include: <ul style="list-style-type: none"> ▪ administrative order; ▪ compliance schedule; ▪ order to show cause; ▪ monetary penalty (administrative); and ▪ suspended service. ○ Judicial responses may include: <ul style="list-style-type: none"> ▪ injunctive relief; ▪ consent decree; ▪ civil penalties; and ▪ criminal penalties. • Submit the ERP with the 2nd Annual Report. • Implement ERP. 	End of 2 nd Permit Year
e Proactively inspect, during dry weather, all outfalls to detect illicit discharges and connections into the MS4 and identify high priority outfalls.	All All	<p>i.</p> <ul style="list-style-type: none"> • Inspect and screen all of the permittee's outfalls during dry weather using the outfall field screening protocol developed by the <i>Center for Watershed Protection</i> or equivalent process. • This process shall be completed by the end of the permit cycle. <p>ii.</p> <ul style="list-style-type: none"> • Using inspection and screening results, storm sewer maps, and other appropriate data, determine high priority outfalls. • Priority is to be determined by the permittee and shall be based on potential water quality impact. When determining high priority outfalls, permittees must consider, at a minimum, outfalls: 	<p>Completed by the end of the 5th year. Progress documented in the Annual Reports.</p> <p>End of 2nd Permit Year</p> <p>Reevaluate during 3rd, 4th, and 5th Permit Years</p>

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
	All	<ul style="list-style-type: none"> ○ which drain industrial areas (as identified by the Small MS4s zoning regulations or growth policy); ○ where illicit discharges have been detected during past permit terms; ○ which drain areas prone to incidents of illegal dumping; ○ which drain the oldest portions of the Small MS4s storm sewer infrastructure; ○ which serve areas primarily served by onsite sewage disposal systems; and/or ○ which discharge into an impaired water body. <ul style="list-style-type: none"> • Submit the list of high-priority outfalls with each 2nd - 5th Annual Reports. The 3rd-5th Year lists may reflect updated priority outfalls based on screening results. • Inspect and screen high priority outfalls during dry weather a minimum of once per year. • Submit a summary of screening results with each 3rd - 5th Annual Report. 	During 3 rd , 4 th , and 5 th Permit Years
f. Consistently and effectively investigate suspected illicit discharges and connections and track subsequent compliance actions.	All	<ul style="list-style-type: none"> • Develop an Illicit Discharge Investigation and Corrective Action Plan. This plan will describe the process that will be used to: <ul style="list-style-type: none"> ○ locate the source of an illicit discharge and ○ select the appropriate corrective action, i.e. enforcement action, abatement, etc. ○ At a minimum, this plan shall include processes to: <ul style="list-style-type: none"> ▪ investigate all illicit discharges within 7 calendar days. Document circumstances that prevented this timeframe; 	End of 1 st Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
		<ul style="list-style-type: none"> ▪ prioritize non-storm water discharges suspected of being sanitary sewage and/or significantly contaminated for investigation first; ▪ confirmed illicit connections must be eliminated within a goal timeframe of 6 months. Document circumstances that prevented this timeframe; ▪ notify Montana DEQ and appropriate agencies of dry weather flows believed to be an immediate threat to human health or the environment; ▪ document that a good faith effort was made to find the source of the dry weather discharge and document each phase of the investigation in a case file; and, ▪ resolve and document the conclusion of all investigations. <ul style="list-style-type: none"> ▪ The outfall where any illicit discharge is detected shall continue to be considered high priority and should be investigated as required in the permit. ▪ The plan should refer to the permittee's ERP for execution of appropriate enforcement actions. ▪ Submit the plan with the 1st Annual Report 	
All	ii.	<ul style="list-style-type: none"> • Implement an Illicit Discharge Investigation and Corrective Action Plan. 	End of 2 nd Permit Year
Traditional MS4s	iii.	<ul style="list-style-type: none"> ▪ Maintain documentation which describes the investigations conducted and corrective actions taken per the Illicit Discharge Investigation 	During 2 nd , 3 rd , 4 th , and 5 th Permit Years

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
		<p>and Corrective Action Plan during dry weather screening or through other detection methods, e.g. public complaints.</p> <ul style="list-style-type: none"> ▪ Submit summary with each Annual Report. ▪ Maintain documentation which describes the investigations conducted and corrective actions taken per the Illicit Discharge Investigation and Corrective Action Plan by the permittee or a neighboring MS4 for all illicit discharges – detected on the permittee’s property that originates outside of the permittee’s property – during dry weather screening or through other detection methods, e.g. public complaints. ▪ Submit summary with each Annual Report. 	<p>During 2nd, 3rd, 4th, and 5th Permit Years</p>

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
<p>4. CONSTRUCTION SITE STORM WATER MANAGEMENT The permittee shall develop, implement, and enforce a program to reduce pollutants in storm water runoff to the permitted Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the Department waives its permitting requirements for storm water discharges associated with construction activity that disturbs less than five acres of total land area in accordance with ARM 17.30.1105(5), the Small MS4 permittee is not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.</p>			
<p>a. To the extent allowable under State, or local law, effectively require, through ordinance, or other regulatory mechanism, erosion and sediment controls and controls of other construction-related pollutant sources</p>	<p>Traditional MS4s</p>	<p>i.</p> <ul style="list-style-type: none"> ▪ If not completed previously, adopt an ordinance or other mechanism to require construction storm water controls on private and permittee-owned regulated projects. ▪ At a minimum the ordinance or other regulatory mechanism must: 	<p>End of 3rd Permit Year</p>

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
<p>on regulated construction projects (construction storm water controls) and implement appropriate enforcement procedures and actions.</p>		<ul style="list-style-type: none"> ○ require the construction storm water management minimum standards described as Non-Numeric Technology-Based Effluent Limits in the most current Montana DEQ General Permit for Storm Water Discharges Associated with Construction Activity to be implemented on all regulated construction projects, and ○ provide the permittee the authority to inspect privately-owned construction storm water management controls. <ul style="list-style-type: none"> ▪ Submit with 3rd Annual Report. 	
	<p>Non-Traditional MS4s</p>	<p>ii.</p> <ul style="list-style-type: none"> • If not completed previously, at a regulatory minimum, adopt formal policies or other mechanisms to the extent allowable, such as contractual requirements applicable to contractors performing construction work requiring construction storm water controls on permittee-owned/operated projects. The permittee must consider and document private development projects regardless of legal authority. • Submit authority summary, written policy, and written procedures with the 3rd Annual Report. 	<p>End of 3rd Permit Year</p>
	<p>All</p>	<p>iii.</p> <ul style="list-style-type: none"> • Develop a formal ERP to ensure compliance with the construction storm water management regulatory mechanisms on regulated projects including private property. The sanctions and enforcement mechanisms to be used to ensure compliance will be included. 	<p>End of 3rd Permit Year</p>

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
		<ul style="list-style-type: none"> • The ERP must describe how the permittee will: <ul style="list-style-type: none"> ○ eliminate and abate illegal construction discharges; ○ identify staff with enforcement authority; ○ enforcement actions available and enforcement escalation process and include a schedule to be utilized to quickly, and consistently eliminate the source of the discharge; and ○ abate any damages and prevent recurrence. • The ERP must include informal, formal, and judicial responses. <ul style="list-style-type: none"> ○ Informal responses may include telephone notification, verbal notice, notice of violation, and meetings. ○ Formal responses may include administrative order, compliance schedule, order to show cause, monetary penalty (administrative), and suspended service. ○ Judicial response may include injunctive relief, consent decree, civil penalties, and criminal penalties. • In addition, the ERP must also include non-monetary construction project-specific penalties such as stop work orders, bonding requirements, and/or permit denials for non-compliance. • Submit documentation of progress towards creation of ERP with the 1st Annual Report. • Submit adopted ERP with the 3rd Annual Report. 	

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
b. Require that all regulated construction projects submit a construction storm water management plan prior to construction which is consistent with state and local requirements and which incorporates consideration of potential water quality impacts including storm water pollution prevention through appropriate erosion, sediment, and waste control BMPs. The storm water pollution prevention plan (SWPPP) developed pursuant to the MPDES General Permit for Storm Water Discharges Associated With Construction Activity (Permit Number MTR100000) may substitute for this site plan for projects where a SWPPP is developed.	All	iv. • Implement ERP.	End of 4 th Permit Year
	Traditional MS4s	i. • Develop a construction storm water management plan review checklist that documents, at a minimum, that the requirements described in the Non-Numeric Technology-Based Effluent Limits of the most current Montana DEQ General Permit for Storm Water Discharges Associated with Construction Activity have been included on all regulated project construction storm water management plans. • The construction storm water management plan review checklist shall be used to ensure consistent review of submitted plans and to determine and document compliance with state and local requirements. • Submit with the 1 st Annual Report.	End of 1 st Permit Year
	Traditional MS4s	ii. • Implement construction storm water management plan review checklist.	End of 1 st Permit Year
	Non-Traditional MS4s	iii. • Develop and implement a plan review checklist which documents, at a minimum, that the requirements described in the Non-Numeric Technology-Based Effluent Limits of the most current Montana DEQ General Permit for Storm Water Discharges Associated with Construction Activity have been included on all permittee-owned/operated project site plans. The permittee may modify the plan review checklist based on the maximum extent of contractual agreements with documentation. • The plan review checklist shall be used to ensure consistent review of submitted plans for permittee-owned/operated projects and	End of 1 st Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
c. Ensure that all construction storm water management controls are installed, operated and maintained in order to function as designed.	Traditional MS4s	to determine and document compliance with state and local requirements. • Submit with the 1 st Annual Report. • Develop an inspection form or checklist to ensure consistent and thorough regulated project inspections. • The checklist shall include, at a minimum, the requirements described in the Non-Numeric Technology-Based Effluent Limits of the most current Montana DEQ General Permit for Storm Water Discharges Associated with Construction Activity. • Submit with the 1 st Annual Report.	End of 1 st Permit Year
	Non-Traditional MS4s	ii. • Develop an inspection form or checklist to ensure consistent and thorough regulated project inspections. • The checklist shall include, at a minimum, the requirements described in the Non-Numeric Technology-Based Effluent Limits of the most current Montana DEQ General Permit for Storm Water Discharges Associated with Construction Activity. The permittee may modify the plan review checklist based on the maximum extent of contractual agreements with documentation. • Submit with the 1 st Annual Report.	End of 1 st Permit Year
	All	iii. • Conduct inspections using inspection form.	End of 1 st Permit Year
	All	iv. • Develop and maintain/update a regulated project inventory to include, at a minimum, if the project is covered under the Montana DEQ General Permit for Storm Water Discharges Associated with Construction Activity and associated authorization number, the location, size, topography of site and proximity to	End of 1 st Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
	All	<p>waterbodies for each project.</p> <ul style="list-style-type: none"> • Develop an inspection frequency determination protocol based upon the priority of the project. • Priority is to be determined using specific criteria to include – at a minimum: <ul style="list-style-type: none"> ○ project size; ○ proximity to a water body; ○ steepness of project site slope; ○ discharge to waterbodies impaired for pollutants expected from active construction projects; and ○ past record of non-compliance by the operator of the construction site. • The protocol shall establish the following minimum inspection frequency for all high priority projects: <ul style="list-style-type: none"> ○ once at commencement of construction after BMPs have been implemented; ○ once within 48-hours after each rain event of 0.25 inches or greater; ○ once within 48-hours after each occurrence of runoff from snowmelt due to thawing conditions that causes visible surface erosion at the site; and ○ once at the conclusion of the project prior to finalization (i.e. release of bond, issuance of certificate of occupancy, etc.) • In addition, the inspection frequency shall include: <ul style="list-style-type: none"> ○ recidivism reduction measures such as incentives; ○ disincentives; or 	End of 1 st Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
		<ul style="list-style-type: none"> ○ increased inspection frequency at non-compliant operator's sites. 	

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
<p>5. POST-CONSTRUCTION SITE STORM WATER MANAGEMENT IN NEW AND REDEVELOPMENT The permittee shall develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the permitted Small MS4. This program must ensure that controls are in place that would prevent or minimize water quality impacts.</p>			
<p>ii. To the extent allowable under State, or local law, effectively require, through ordinance, or other regulatory mechanism, post-construction storm water management controls and on regulated projects and implement appropriate enforcement procedures and actions.</p>	Traditional MS4s	<p>i.</p> <ul style="list-style-type: none"> • If not completed previously, adopt an ordinance or other mechanism to require post-construction storm water management controls on regulated projects that, at a minimum, include the performance standard described in Part II.A 5.b.iii. • Submit with 4th Annual Report 	End of 4 th Permit Year
	Non-Traditional MS4s	<p>ii.</p> <ul style="list-style-type: none"> • If not completed previously, at a regulatory minimum, adopt formal policies or other mechanisms to the extent allowable, such as contractual requirements applicable to contractors performing construction work requiring post-construction storm water controls on permittee-owned/operated projects. The permittee must consider and document private development projects regardless of legal authority. • Submit authority summary, written policy, and written procedures with the 4th Annual Report 	End of 4 th Permit Year
	All	<p>iii.</p> <ul style="list-style-type: none"> • Develop a formal ERP to ensure compliance with installation, operation and maintenance 	End of 4 th Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
	All	<p>requirements for post-construction storm water management controls on regulated projects including private property.</p> <ul style="list-style-type: none"> • The ERP must include informal, formal, and judicial responses. <ul style="list-style-type: none"> ○ Informal responses may include: <ul style="list-style-type: none"> ▪ telephone notification; ▪ verbal notice; ▪ notice of violation; and ▪ meetings. ○ Formal responses may include: <ul style="list-style-type: none"> ▪ administrative order; ▪ compliance schedule; ▪ order to show cause; ▪ monetary penalty (administrative); and ▪ suspend service. ○ Judicial responses may include: <ul style="list-style-type: none"> ▪ injunctive relief; ▪ consent decree; ▪ civil penalties; and ▪ criminal penalties. • The ERP must describe: <ul style="list-style-type: none"> ○ legal authority to require inspection and maintenance of controls; ○ identify staff with enforcement authority; ○ the enforcements actions available; ○ enforcement escalation process; and ○ schedule to be utilized to quickly and consistently ensure compliance with post-construction requirements. • Submit the ERP with the 4th Annual Report. • Implement ERP. 	End of 5 th Permit Year

	Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
b.	Require that all regulated development projects submit a site plan which is consistent with state and local post-construction requirements which incorporates consideration of potential water quality impacts including appropriate post-construction storm water management controls.	Traditional MS4s	i. <ul style="list-style-type: none"> • Develop and implement a plan review checklist to ensure consistent review of submitted plans and to determine and document compliance with state and local post-construction requirements • Submit with the 1st Annual Report. 	End of 1 st Permit Year
Non-Traditional MS4s		ii. <ul style="list-style-type: none"> • Develop and implement a plan review checklist to ensure consistent review of plans for permittee-owned/operated projects and to determine and document compliance with state and local post-construction requirements. The permittee may modify the plan review checklist based on the maximum extent of contractual agreements with documentation. • Submit the checklist with the 1st Annual Report 	End of 1 st Permit Year	
All		iii. <ul style="list-style-type: none"> • Require that all regulated projects implement post-construction storm water management controls that are designed to infiltrate, evapotranspire, and/or capture for reuse the post-construction runoff generated from the first 0.5 inches of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation. For projects that cannot meet 100% of the runoff reduction requirement, the remainder of the runoff from the first 0.5 inches of rainfall must be either: <ol style="list-style-type: none"> a. Treated onsite using post-construction storm water management control(s) expected to remove 80 percent total suspended solids (TSS); b. Managed offsite within the same sub-watershed using post-construction storm 	End of 1 st Permit Year	

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
		<p>water management control(s) that are designed to infiltrate, evapotranspire, and/or capture for reuse; or</p> <p>c. Treated offsite within the same sub-watershed using post-construction storm water management control(s) expected to remove 80 percent TSS.</p> <ul style="list-style-type: none"> • Permittees allowing offsite treatment shall do the following: <ul style="list-style-type: none"> a. Develop and apply criteria for determining the circumstances under which offsite treatment may be allowed. <ul style="list-style-type: none"> • The criteria must be based on multiple factors, including but not limited to: <ol style="list-style-type: none"> i. technical or logistic infeasibility (e.g. lack of available space; ii. high groundwater; iii. groundwater contamination; iv. poorly infiltrating soils; v. shallow bedrock; vi. prohibitive costs; and vii. a land use that is inconsistent with capture and reuse or infiltration of storm water). • Determinations may not be based solely on the difficulty and/or cost of implementation • The permittee must develop a formal review and approval process for determining projects eligible for offsite treatment. • The offsite treatment option is to be used only after all onsite options have 	

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
		<p>been evaluated and documented through the permittee's developed formal review and approval process.</p> <p>b. Create and maintain an inventory of regulated projects which utilize offsite treatment of post-construction storm water runoff. The inventory must include the following information pertaining to each approved project:</p> <ul style="list-style-type: none"> • Geographic location of the project; • Location of the offsite treatment facility which the project drains to; and • Documentation of the rationale for approval of offsite treatment. <p>• Submit adopted performance standards with the 1st Annual Report.</p>	
c. Ensure that all post-construction storm water management controls are installed, operated and maintained in order to function as designed.	Traditional MS4s	<p>i.</p> <ul style="list-style-type: none"> • Develop and implement an inspection form or checklist to ensure consistent and thorough inspections of post-construction storm water management controls. • Submit with 2nd Annual Report. 	End of 2 nd Permit Year
	Non-Traditional MS4s	<p>ii.</p> <ul style="list-style-type: none"> • Develop and implement an inspection form or checklist to ensure consistent and thorough inspections of post-construction storm water management controls. • The permittee may modify the inspection form or checklist based on the maximum extent of contractual agreements with documentation. • Submit with 2nd Annual Report. 	2 nd Permit Year
	All	<p>iii.</p> <ul style="list-style-type: none"> • Develop and maintain/update an inventory (including at a minimum, a description and location) of all new permittee-owned and 	End of 2 nd Permit Year

	Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
		Traditional MS4s	<p>private post-construction storm water management controls installed since the effective date of the permit.</p> <p>iv.</p> <ul style="list-style-type: none"> • Develop and maintain/update an inventory (including at a minimum, a description and location) of all existing permittee-owned and private high priority post-construction storm water management controls installed prior to the effective date of the permit. • Priority is to be determined by the permittee and should be based on potential water quality impact using specific criteria which may include <ul style="list-style-type: none"> ○ operation and maintenance needs of the practices; ○ proximity to water body; ○ drainage area treated; ○ land use type; and ○ location within an impaired waterbody watershed. 	End of 3 rd Permit Year
		Non-Traditional MS4s	<p>v.</p> <ul style="list-style-type: none"> • Develop and maintain/update an inventory (including a description and location) of all existing permittee-owned post-construction BMPs. 	End of 3 rd Permit Year
		All	<p>vi.</p> <ul style="list-style-type: none"> • Develop an inspection frequency determination protocol based upon the priority of the post- construction storm water management control • Priority is to be determined by the permittee and should be based on potential water quality impact using specific criteria which may include: <ul style="list-style-type: none"> ○ operation and maintenance needs 	End of 2 nd Permit Year

	Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
			<ul style="list-style-type: none"> of the practices; o proximity to water body; o drainage area treated; o land use type; and o location within an impaired waterbody watershed. <ul style="list-style-type: none"> • Submit protocol with 2nd Annual Report. 	
		Traditional MS4s	vii. <ul style="list-style-type: none"> • Develop a program to either: <ul style="list-style-type: none"> o conduct inspections of high-priority post-construction storm water management controls at least annually, OR o to require self-inspection and reporting by owners at least annually. o Submit program description with 2nd Annual Report. 	End of 2 nd Permit Year
		All	viii. <ul style="list-style-type: none"> • Inspect permittee-owned high priority post-construction storm water management controls annually and document findings and resulting compliance actions. 	During the 3 rd , 4 th , and 5 th Permit Years
		Traditional MS4s	ix. <ul style="list-style-type: none"> • Inspect or have inspected all high priority privately-owned post-construction storm water management controls annually • Document findings and resulting compliance actions. 	During the 3 rd , 4 th , and 5 th Permit Years
d.	Incorporate recommendations and requirements into plans, policies and ordinances which allow and support the utilization of LID concepts on public and private property.	All	i. <ul style="list-style-type: none"> • Convene appropriate staff and conduct a discussion to evaluate existing barriers to implementing LID infrastructure in the permittee's codes, ordinances and policies. • The outcome of this discussion must identify opportunities for change and address the potential inconsistencies between policies. • Appropriate staff must include member(s) of various departments, some of which may 	End of 4 th Permit Year

	Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
			include: <ul style="list-style-type: none"> ○ Parks and Recreation; ○ Public Works; ○ Planning; ○ Environmental Protection; ○ Utilities; and ○ Transportation. <ul style="list-style-type: none"> ▪ Submit a summary of the discussion outcomes with the 4th Annual Report. 	

	Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
6.	POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR PERMITTEE OPERATIONS The permittee shall develop and implement an operation and maintenance program which includes a training component, and has the ultimate goal of preventing or reducing pollutant runoff from permittee operations.			
a.	Identify the operation and maintenance program to prevent or reduce pollutant runoff from permittee-owned/operated facilities and field activities.	All	<ul style="list-style-type: none"> • Create an inventory of permittee-owned/operated facilities and activities that have the potential to release contaminants to the MS4. The inventory should include, at a minimum, the following: <ol style="list-style-type: none"> 1. Facilities: <ul style="list-style-type: none"> • maintenance and storage yards; • waste handling and disposal areas; • vehicle fleet or maintenance shops with outdoor storage areas; • salt/sand storage locations; and • snow or dredge material disposal areas operated by the permittee. 2. Activities: <ul style="list-style-type: none"> • park and open space maintenance; 	End of 1 st Permit Year

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
		<ul style="list-style-type: none"> • parking lot maintenance; • building maintenance; • road maintenance/deicing; and • storm water system maintenance including catch basin cleaning. • List the possible contaminant(s) from each facility/activity and list the local department(s) and position(s) responsible for pollution prevention with each facility/activity. • Update the inventory annually. 	
All	ii.	<ul style="list-style-type: none"> • Develop a map that identifies the locations of facilities and known locations of activities identified in 6.a.i. • Update the map annually. 	During the 2 nd , 3 rd , 4 th , and 5 th Permit Years
All	iii.	<ul style="list-style-type: none"> • Organize similar facilities and activities identified in 6.a.i. into categories, label the categories, and develop standard operating procedures (SOPs) for all categories. • Development of the SOPs must include documented inspections and communication with relevant department personnel of 2 facilities/activities per category prior to SOP category completion. • The SOPs must identify storm water pollution controls (structural and non-structural controls, and operation improvements) to be installed, implemented, and/or maintained to minimize the discharge of contaminants. • The permittee must complete, at a minimum, the 	During the 2 nd , 3 rd , 4 th , and 5 th Permit Years

Minimum Measure	Permittee	Required BMP	Deadline/ Implementation Schedule
	All	<p>required SOPs according to the following schedule:</p> <ul style="list-style-type: none"> ○ one-fourth by the end of the 2nd permit year; ○ one-half by the end of the 3rd permit year; ○ three-fourths by the end of the 4th permit year; and ○ all by the end of the 5th permit year. <ul style="list-style-type: none"> • Submit the completed SOPs annually starting with the 2nd Annual Report. 	
	All	<p>iv.</p> <ul style="list-style-type: none"> • Develop and internally document storm water pollution prevention training in conjunction with the development of the SOPs for each category. 	<p>During the 2nd, 3rd, 4th, and 5th Permit Years</p>
	All	<p>v.</p> <ul style="list-style-type: none"> • Conduct annual storm water pollution prevention training for all permittee staff directly involved with implementing SOPs. • Trainings will be conducted during the next permit year after development of each SOP. <i>Example: SOP and training developed in 2nd Permit Year. Training conducted in 3rd Permit Year.</i> • Retain records of completed trainings and attendance. 	<p>During the 3rd, 4th, and 5th Permit Years</p>

B. Training

The permittee is required to conduct and/or coordinate the following training and track/document of all municipal staff participation in each:

1. Conduct comprehensive training during the 1st year of the permit term for all members of the storm water management team to educate them about the new permit, the updated SWMP and implementation responsibilities for the upcoming permit term. New members of the storm water management team must receive the equivalent amount of training within 90 days of the hire date.
2. Conduct storm water awareness training, at a minimum, during 1st and 4th years of the permit term for all appropriate permittee field staff (and pretreatment inspection staff) and staff who work at permittee facilities. The training must provide education regarding storm water impacts, the MS4 permit, the detection and elimination of illicit discharges and the implementation of the ERP, and specifically address BMPs necessary to minimize discharges of pollutants during permittee activities or the operation of permittee facilities. Appropriate new field staff and staff who work at permittee facilities must receive the equivalent amount of training within 90 days of the hire date.
3. Conduct training, at a minimum, during the 1st and 4th years of the permit term for all inspectors and plan reviewers responsible for implementation of the Construction Site Storm Water Management Control Minimum Measure. Inspector training shall include inspection protocol and the implementation of the ERP upon development. New inspectors and plan reviewers must receive the equivalent amount of training within 90 days of the hire date.
4. Conduct training, at a minimum, during the 1st and 4th years of the permit term for all inspectors and plan reviewers responsible for implementation of the Post-Construction Storm Water Management in New Development and Redevelopment Minimum Measure. Inspector training shall include inspection protocol and the implementation of the ERP. New inspectors and plan reviewers must receive the equivalent amount of training within 90 days of the hire date.
5. Conduct training, at the schedule outlined within Part II.6.a.v, for storm water staff responsible for implementing Standard Operating Procedures (SOPs) developed as a requirement of the Pollution Prevention/Good Housekeeping Minimum Measure. Training must be oriented to staff involved with the SOP-specific duties. New storm water staff responsible for implementing SOPs must receive the equivalent amount of training within 90 days of the hire date.

C. Sharing Responsibility

In accordance with 17.30.111(7), a small MS4 may share responsibility to implement the minimum control measures with another entity in order to satisfy their MPDES permit obligations to implement a minimum control measure. Shared responsibility is allowed only if the other entity implements the control measure, and the particular control measure, or component thereof, to a degree at least as stringent as the corresponding MPDES permit requirement. The other entity must agree to implement the control

measure on behalf of the owners and operators of the regulated small MS4. Written acceptance of this obligation is required. This obligation must be maintained as part of the description of the permittee's SWMP. In annual reports, the owners and operators must specify that they are relying on another entity to satisfy some of their permit obligations, unless the other entity is responsible to file the reports. The MS4 remains responsible for compliance with its permit obligations if the other entity fails to implement the control measure (or component thereof).

The MS4 should enter into a legally binding agreement with the other entity in order to minimize uncertainty about compliance with the MPDES permit.

D. Qualifying Local Program

If the application indicates a Qualifying Local Program requires a Small MS4 to implement one or more of the six minimum control measures as stated in ARM 17.30.1113 (9), and the permittee elects to do this in the application, then the permittee is directed to follow that qualifying program's requirements rather than the applicable storm water management program requirements stated in Part II.A.

E. Transfer of Ownership, Operational Authority, or Responsibility for SWMP Implementation

The permittee must implement the SWMP on all new areas added to the permittee's portion of the Small MS4 (or for which the permittee becomes responsible for implementation of storm water quality controls) as expeditiously as possible. Implementation may be accomplished as part of a phased plan to allow additional time for controls that cannot be implemented immediately.

Within 90 days of a transfer of ownership, operational authority, or responsibility for SWMP implementation, the permittee must have a plan for implementing the SWMP on all newly added areas. The plan may include schedules for implementation. Information on all new annexed areas and any resulting updates required to the SWMP must be included in the Annual Report.

F. Storm Water Management Program Updates Required by the Department

The Department may require changes to the SWMP as needed to:

1. Address impacts on receiving water quality caused, or contributed to, by discharges from the Small MS4;
2. Include more stringent requirements necessary to comply with new federal statutory or regulatory requirements; or
3. Include such other conditions deemed necessary by the Department to comply with the goals and requirements of the Montana Water Quality Act.

4. Update BMPs as necessary to improve program effectiveness per information and data submitted in permittees' Annual Reports.
5. Changes requested by the Department must be made in writing, set forth the time schedule for the permittee to develop the changes and update their program, and offer the permittee the opportunity propose alternatives to their program to meet the objective of the requested changes.

Part III. Special Conditions

A. Water Quality Controls for Storm Discharges to Impaired Waterbodies Pre-Total Maximum Daily Load (TMDL) Approval

The permittee's Storm Water Management Program (SWMP) must identify all outfalls that discharge to impaired waterbodies, the impaired waterbodies, and the associated pollutant(s) of impairment. Information on impaired waterbodies may be obtained from the Department or from the Montana DEQ Clean Water Act Information Center website: <http://cwaic.mt.gov/>. This information will be submitted with each Annual Report.

The permittee's SWMP must include a section that describes BMPs that target and reduce discharges of the identified pollutant(s) of impairment to impaired waterbodies without an approved TMDL. *The permittee should only identify pollutants of impairment from Table 1 in Part IV.* The permittee's Annual Report must contain a summary of BMPs implemented over the reporting period and a schedule of BMPs planned for the following year.

B. Water Quality Controls for Storm Discharges to Impaired Waterbodies with Approved TMDL Wasteload Allocations (WLAs)

Addressing TMDLs in the SWMP

Appendix A of the permit contains a list of TMDLs with WLAs assigned to MS4s approved by the Department and EPA as of the effective date of this permit. The permittee's SWMP must identify all outfalls that discharge to impaired waterbodies with an approved MS4 WLA, the impaired waterbodies, and the associated pollutant(s) of impairment. This information will be submitted with each Annual Report.

The permittee must include in its SWMP a section identifying the measures and BMPs it plans to implement, describing the MS4's impairment priorities and long term strategy, and outlining interim milestones (i.e., a completion schedule for action items) for controlling the discharge of the pollutants of concern and making progress towards meeting the TMDL. **TMDL-Related Monitoring**, below, will be incorporated into this section.

The TMDL section of the SWMP must be submitted with the 4th year Annual Report for approval. The permittee will begin to implement the approved section no later than the start of the 5th permit year. The section must be annually evaluated based on monitoring results, revised as needed, and resubmitted with Annual Reports beginning with the 5th year Annual Report. Rationale must be provided for any revisions to this section. Revisions must be approved by the Department.

TMDL-Related Monitoring

The permittee must supplement the Self-Monitoring Requirements in Part IV with additional monitoring targeted at further evaluating MS4 loading to impaired waterbodies (Option 1) or at evaluating the effectiveness of BMPs selected for reducing MS4 loading to impaired waterbodies (Option 2). The same sample sites may be used for Self-Monitoring and TMDL Monitoring. Each permittee must inform the Department of its preferred Monitoring Option (1 or 2) with application for coverage under this renewed General Permit. Monitoring will begin no later than March 1 of the 2nd permit year.

Monitoring Option 1

1. At a minimum, the MS4 will select four sampling locations that discharge to impaired waterbodies. The location of these outfalls should consider the largest drainage areas, the surrounding land uses which could contribute to impairments, and high priority areas as identified by the TIDE minimum control measure. The permittee must submit a Sampling Plan to the Department for approval with the first Annual Report. The Sampling Plan should include strategy rationale, monitoring frequency, monitoring parameters, and monitoring locations. After the Sampling Plan is approved by the Department, the Permittee must provide a mechanism for public review of the plan.
2. Monitoring will be conducted semi-annually. Specific monitoring parameters will include pollutant(s) listed as a source of impairment specific to the receiving waterbody from the MS4. Monitoring data must be collected following procedures in 40 CFR Part 136, unless other test procedures have been specified in this General Permit.

Monitoring Option 2

1. As determined by the permittee and approved by the Department, Monitoring Option 2 provides the flexibility for a MS4-specific monitoring strategy that will provide the data required to track and evaluate effectiveness of BMPs. The permittee must submit a Sampling Plan to the Department for approval with the first Annual Report. The Sampling Plan should include strategy rationale, monitoring frequency, monitoring parameters, and monitoring locations. After the Sampling Plan is approved by the Department, the Permittee must provide a mechanism for public review.

Part IV. Monitoring, Recording and Reporting Requirements

A. Self-Monitoring Requirements

Storm water monitoring requirements must initiate: (1) on the effective date of authorization issued under this General Permit, (2) as outlined by Part IV.A.4., or (3) as otherwise directed by the Department. The Department reserves the right to require additional storm water sampling, testing, and reporting on a case-by-case basis.

1. Storm Water Discharge Monitoring

All permittees are required to perform sampling, testing, and reporting of storm water discharges for their Small MS4s under this General Permit, or as otherwise required by the Department.

2. Specific Monitoring Parameters

The required monitoring parameters are listed in Table 1.

Table 1. Small MS4 Monitoring Requirements

Parameter ⁽¹⁾⁽²⁾	Frequency	Type ⁽³⁾
Total Suspended Solids (TSS), mg/L	Semi-annual	Grab or Composite
Chemical Oxygen Demand (COD), mg/L	Semi-annual	Grab or Composite
Total Phosphorus, mg/l.	Semi-annual	Grab or Composite
Total Nitrogen, mg/l.	Semi-annual	Grab or Composite
pH, standard units	Semi-annual	Instantaneous
Copper, mg/L	Semi-annual	Grab or Composite
Lead, mg/l.	Semi-annual	Grab or Composite
Zinc, mg/L	Semi-annual	Grab or Composite
Estimated Flow, gpm	Semi-annual	Instantaneous ⁽⁴⁾
Oil and Grease ⁽⁵⁾ , mg/L	Semi-annual	Grab

(1) Detection limits are pursuant to levels defined in Circular DEP-Q-7
(2) Total recoverable methods to be used on all metals
(3) See Definitions in Part VI. of this General Permit
(4) Estimated flow rates are appropriate in cases where measurement gauges are not installed
(5) Hexanes extraction (EPA Method 1664A)

3. Monitoring Locations

Permittees will choose from the two monitoring location options below and submit their selected option to the Department with their application for General Permit coverage:

a. Monitoring Option 1

For each semi-annual monitoring period, MS4 permittees must sample at the following locations within the permitted geographic area during a storm event with a measurable amount of discharge:

- 2 discharge points which represent storm water runoff drainage areas from a relatively commercial and/or industrial area; and,
- 2 discharge points which represent storm water runoff drainage areas from a relatively residential area.

Monitoring locations must be consistently identified as "001A" and "001B" for the industrial/commercial locations, and "002A" and "002B" for the residential locations. If a new monitoring location is added or used to replace an existing monitoring location, the new location will be identified according to the numeric alphabet scheme above.

b. Monitoring Option 2

For each semi-annual monitoring period, MS4 permittees must establish a network of at least four (4) monitoring locations and sample during a storm event with a measurable amount of discharge. At least one (1) monitoring location shall contain storm water runoff from a predominantly commercial and/or residential area and one (1) monitoring location shall contain storm water runoff from a predominantly residential area. At least one (1) monitoring location may be upstream, outside the MS4 boundary to evaluate water quality entering the MS4.

Monitoring locations must be consistently identified using a naming scheme of the permittee's choice, but the permittee can only use a chosen name once. If a new monitoring location is added or used to replace an existing monitoring location, a new name must be selected for the new location.

4. Storm Water Discharge Monitoring Schedule

Permittees authorized under the 2015 General Permit that were not required to monitor and obtain coverage under the 2017 General Permit are required to self-monitor starting January 1, 2018.

New authorizations under the 2017 General Permit (not authorized under the 2015 General Permit) are required to self-monitor starting three years from the date of authorization. These prescribed monitoring schedules provide flexibility for the permittee to establish a self-monitoring program.

5. Impaired Waterbodies Monitoring

Permittees with a storm water discharge to an impaired waterbody must conduct storm water discharge monitoring according to Part III, Special Conditions. Permittees must comply with all requirements associated with the TMDLs.

New authorizations under the 2017 General Permit (not authorized under the 2015 General Permit) will apply Part III.A requirements to both storm water discharges to impaired waterbodies with pre-total maximum daily load (TMDL) approval and approved TMDL wasteload allocations. Part III. B is not applicable during this permit cycle.

6. Monitoring Frequency

- a. Sampling, testing, and reporting must be conducted at least semi-annually (two times per year) for each of the parameters listed in Table 1 above during a storm event with a measurable amount of discharge. One sample at each monitoring location must be taken between January 1st and June 30th of each permitted calendar year and the other sample between July 1st and December 31st.
- b. If a permittee is not able to dependably obtain a sample at the identified required sampling outfall during a six-month monitoring period, rationale must be recorded in the corresponding annual report on why the collection of a sample was impracticable and the permittee must collect a substitute sample during the subsequent six-month monitoring period in addition to the required sample for that six-month monitoring period. The substitute sample and required six-month sample may be collected from back to back storm events with at least 48 hours of no measurable precipitation.
- c. If a permittee fails to obtain the required sample for a six-month monitoring period, the permittee may request to replace the monitoring location outfall with appropriate rationale prior to the next calendar year. The Department must approve such requests prior to replacing a monitoring location. The new, approved outfall monitoring location will be identified with an unused outfall name/number. The permittee may not request to replace approved replacement monitoring locations again during the same permit cycle.

7. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under Part 136, Title 40 of the Code of Federal Regulations, unless other test procedures have been specified in this General Permit.

8. Penalties for Tampering

The Montana Water Quality Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$25,000, or by imprisonment for not more than six months, or both.

B. Reporting and Evaluation of Monitoring Results

1. Monitoring results shall be submitted to the Department with each annual report.
2. Each annual report shall include a calculation of the long-term median concentration of each parameter in Table 1 of Part IV.A. The long-term median shall be calculated from all known monitoring results for each parameter at a monitoring location.
3. Monitoring results shall be used by permittees to self-evaluate measures taken to improve the quality of storm water discharges. Each annual report shall include an evaluation of the monitoring results relative to the long-term median. The evaluation must include (1) comparisons between monitoring locations, (2) discuss determinations for trends and outliers in monitoring results compared to the calculated long-term median, and results outside a pH range of 6.0 to 9.0 standard units, and (3) a schedule and rationale for BMPs planned to improve water quality of storm water discharges based on monitoring results.

C. Monitoring Records

The following information must be recorded and maintained at the office of the contact person/position for all storm water discharges which are sampled:

1. Date, exact place, and time of sampling;
2. Estimated duration (in hours) of the storm event(s) sampled;
3. Total rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff;
4. Name(s) of the individuals which performed the sampling or measurements; and
5. Analytical laboratory test result data and reports for storm water samples, and/or records, which minimally indicate:
 - a. The date(s) analyses were performed;
 - b. The time analyses were initiated;
 - c. The initials or name(s) of individual(s) who performed the analyses;

- d. References and written procedures, when available, for the analytical techniques or methods used; and
- e. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc. used to determine these results.

D. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this General Permit, and records of all data used to complete the application for this General Permit, for a period of at least three years from the date of sample, measurement, report, or application.

E. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit must be submitted to DEQ in either electronic or paper format and be postmarked no later than 14 days following each schedule date unless otherwise specified in the permit.

F. Annual Report

1. The permittee (or co-permittee if co-permitted under one permit authorization number) shall prepare and submit an annual report to the Department for each calendar year within the General Permit term.
2. The permittee shall electronically submit the signed copy of the annual report form and required attachments to the Department by March 1st of each year for the preceding calendar year. Electronic submission is through NetDMR.
3. Each co-permittee shall submit an annual report form pertaining to their respective permitted Small MS4(s) unless formal written shared responsibilities allow another entity to complete the annual report form obligations.
4. The Department has provided an annual report form for use by all permittees or co-permittees.
5. If additional information is requested with the annual report form, then the permittee must submit this additional information at the same time as the form.
6. Monitoring results and evaluations, as required in Part IV.B of the General Permit, must be attached to the annual report form.
7. If the permittee or co-permittee has made any updates, changes, or improvements to their Storm Water Management Program during the prior calendar year, then an attachment to the annual report must provide a date and description of these updates, changes, or improvements.
8. Full-size, hard-copies of storm sewer system maps, including updates, must be submitted directly to the Department by March 1st of each year if the map(s) was developed or modified during the calendar year for which the annual report pertains.
9. The completion of this annual report must initiate for the calendar year in which authorization under the General Permit was issued.

10. The annual report must comply with the signatory and certification requirements as stated in Part VI.
11. Updates or revisions to submitted documents after the initial required submittal per development of the SWMP as outlined in Part II shall be retained onsite with the last revision date, and documents must be available upon request.

G. Changes in Storm Water Coordinator

The application identifies a formal Storm Water Coordinator for each permittee or co-permittee. Should the Storm Water Coordinator person/position, mailing address, email address, or telephone number identified on the Application Form change, the permittee or co-permittee must notify the Department in writing of this change within 15 calendar days of the change. This written notification must specifically reference that there is a "change of the Storm Water Coordinator", specifically identify the permit authorization number, and specifically identify the formal "Small MS4 Name" as identified on the application. The written notification letter for a change in the Storm Water Coordinator must be signed by a person meeting the signatory requirements of Part VI.

H. Records For Inspection

A copy of the General Permit, permit authorization letter, required SWMP documents, Annual Reports, Discharge Monitoring Reports (if required), and other pertinent records required by the General Permit shall be maintained by the Storm Water Coordinator for their respective Small MS4, and shall be made available to Department inspectors upon request for all permittees and co-permittees.

I. Inspection and Entry

The permittee shall allow the head of DEQ or the Regional Administrator, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment) practices, operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance, any substance or parameters at any location.

J. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee shall report any serious incident of noncompliance affecting the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Protection Bureau at (406) 444-3080 or the Office of Disaster and

Emergency Services at (406) 324-4777. The following examples are considered serious incidents:

- a. Any noncompliance which may seriously endanger health or the environment;
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit; or
 - c. Any upset which exceeds any effluent limitation in the permit.
2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
- a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected already; and
 - d. DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-3080.
 - e. Reports shall be submitted to the following address:
DEQ Water Protection Bureau, PO Box 200901, Helena, MT 59620.

K. Other Required Reporting

1. The permittee shall report any serious incident of illicit discharge within permitted MS4 boundaries that affects the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Protection Bureau at (406) 444-3080.
2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
 - a. A description of the illicit discharge and its cause/origin;
 - b. The period of illicit discharging, including exact dates and times;
 - c. The estimated time for correction of the illicit discharge if it has not been corrected already; and
 - d. DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-3080.
 - e. Reports shall be submitted to the following address:
DEQ Water Protection Bureau, PO Box 200901, Helena, MT 59620.

Part V. Compliance Responsibilities

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Montana Water Quality Act and is grounds for enforcement action; for termination under the General Permit; or for denial of coverage under this General Permit renewal. The permittee shall give the Department advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed \$25,000 per day or one year in prison, or both, for the first conviction, and \$50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. MCA 75-5-611(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations. Except as provided in permit conditions "Bypass of Treatment Facilities" and "Upset Conditions", nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard.

Part VI. General Requirements

A. Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

1. The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit.

B. Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

C. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The reapplication must be submitted at least 90 days before the expiration date of this permit.

E. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

F. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or any report to the Department, it shall promptly submit such facts or information with a narrative explanation of the circumstances of the omission or incorrect submittal and why they weren't supplied earlier.

G. Signatory Requirements

All applications, reports or information submitted to the Department or the EPA shall be signed and certified.

1. All permit notices of intent shall be signed by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Department; and
 - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or an individual occupying a named position.
3. Changes to authorization. If an authorization described above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the above requirements must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

II. Penalties for Falsification of Reports

The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by the Clean Water Act, applications, permits and effluent data shall not be considered confidential.

J. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

K. Property Rights

The issuance of this permit does not convey any property or water rights of any sort, or any exclusive privileges.

L. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

M. Transfers

This permit is not transferable to a new permittee. A new owner or operator of a facility must apply according to the standard application procedures 30 days prior to taking responsibility for the facility.

N. Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:

1. Impose an additional assessment computed at the rate established under ARM 17.30.201; and,
2. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this sub-section. Suspensions are limited to one year, after which the permit will be terminated.

O. Reopener Provisions

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. **Water Quality Standards:** The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different permit conditions than contained in this permit.
 2. **Water Quality Standards are Exceeded:** If it is found that water quality standards or trigger values in the receiving stream are exceeded either for parameters included in the permit or others, the Department may modify the permit conditions or water management plan.
 3. **TMDL or Wasteload Allocation:** TMDL requirements or a wasteload allocation is developed and approved by the Department and/or EPA for incorporation in this permit.
 4. **Water Quality Management Plan:** A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.
- P. **Toxic Pollutants:** A toxic standard or prohibition is established under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.

Part VII. Definitions

1. The "Act" means the Federal Clean Water Act.
2. "Best Management Practices" ("BMPs") means schedule of activities, prohibition of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of state waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
3. "Control measure" as used in this General Permit, means any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to state waters.
4. The "Department" means the Montana Department of Environmental Quality.
5. "Flow-weighted composite sample" means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.
6. "Grab Sample" for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
7. "Green Infrastructure" means vegetation, soils, and natural processes used to manage water and create healthier urban environments. At the scale of a city or county, green infrastructure refers to the patchwork of natural areas that provides habitat, flood protection, cleaner air, and cleaner water. At the scale of a neighborhood or site, green infrastructure refers to storm water management systems that mimic nature by soaking up and storing water.
8. "Hazardous substance" means any substance designated under 40 CFR Part 116 pursuant to section 311 of the federal Clean Water Act.
9. "Illicit Connection" means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.
10. "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to an MPDES permit (other than the MPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from firefighting activities.
11. "MEP" is an acronym for "Maximum Extent Practicable", the technology-based discharge standard for Municipal Separate Storm Sewer Systems to reduce pollutants in storm water discharges that was established by the Clean Water Act, Section 402(p). A discussion of MEP as it applies to Small MS4s is found in ARM 17.30.1114(5). The MEP standard requires the development, implementation, and enforcement of measures including BMPs, control techniques, system design, engineering methods, and other

provisions that the Department determines to be appropriate for the control of such pollutants. MEP is an iterative, dynamic, flexible standard that the permittee shall evaluate and update continuously, as necessary, to better tailor or expand the program based on its effectiveness in reducing pollutant discharge load.

12. "MS4" means a municipal separate storm sewer system.
13. "Municipal separate storm sewer" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that discharges to surface waters and is: (a) owned or operated by the state of Montana, a governmental subdivision of the state, a district, association, or other public body created by or pursuant to Montana law, including special districts such as sewer districts, flood control districts, drainage districts and similar entities, and designated and approved management agencies under section 308 of the federal Clean Water Act, which has jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, and is:
 - a. designed or used for collecting or conveying storm water;
 - b. not a combined sewer; and
 - c. not part of a publicly owned treatment works (POTW) as defined in ARM Title 17, chapter 30, subchapter 13.
14. "Non-Traditional MS4" means MS4s which are designated as Small MS4s but are not cities or counties, such as drainage districts, transportation agencies, municipal utility districts, military bases, prisons and universities.
15. "Outfall" means the physical location where these conveyance structures discharge pollutants or storm water into surface water or where they leave the boundary of the designated MS4. The term does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances that connect segments of the same stream or other surface waters and that are used to convey surface waters.
16. "Owner or operator" means a person who owns, leases, operates, controls, or supervises a point source. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.
17. "Process wastewater" means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

18. "Small municipal separate storm sewer system" means:
- a. small MS4s, and portions of them, that are located in the following urbanized areas in Montana as determined by the latest decennial census by the United States census bureau:
 - i. the city of Billings and Yellowstone County;
 - ii. the city of Missoula and Missoula County; and
 - iii. the city of Great Falls and Cascade County;
 - b. the following small MS4s serving a population of at least 10,000 as determined by the latest decennial census by the United States census bureau and that are located outside of an urbanized area:
 - i. MS4s located in the city of Bozeman;
 - ii. MS4s located in the city of Butte;
 - iii. MS4s located in the city of Helena; and
 - iv. MS4s located in the city of Kalispell;
 - c. MS4s designated by the department pursuant to 17.30.1107; and
 - d. systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large educational, hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.
19. "Small MS4" means a small municipal separate storm sewer system.
20. "State waters" is defined at 75-5-103, MCA.
21. "Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.
22. "Storm Water Management Program" or "SWMP" means a comprehensive program to manage the quality of storm water discharged from the Small municipal separate storm sewer system.
23. "Surface waters" means any waters on the earth's surface including, but not limited to, streams, lakes, ponds, and reservoirs, and irrigation and drainage systems discharging directly into a stream, lake, pond, reservoir, or other surface water. Water bodies used solely for treating, transporting, or impounding pollutants shall not be considered surface water.
24. "Time-weighted composite sample" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.
25. "Total Maximum Daily Load" or "TMDL" is defined at 75-5-103, MCA.
26. "Traditional MS4" means all cities and counties covered by this General Permit.
27. "Waste Load Allocation" or "WLA" means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources.

Appendix A: TMDLs with MS4 Approved WLAs

Basin: Upper Missouri

Affected MS4s: City of Helena

Pollutants of Concern: Total Phosphorus (TP), Total Nitrogen (TN), Total Suspended Solids (TSS)

MS4 WLA: None specified for Nutrients and Sediment in Prickly Pear Creek and Ten Mile Creek.

Assumptions and Actions Specified by the TMDL: The Department recognized that regulated storm water contributes only a small fraction of the total nutrient load and total sediment load. No additional requirements were imposed for permitted storm water facilities. However, to meet the intent of the TMDL, goals and future recommendations, Helena MS4 must follow their permit requirements, evaluate potential impacts to impaired receiving waters, and utilize monitoring to implement an adaptive management approach to minimize pollutant loads.

Name and Date of TMDL: Framework Water Quality Restoration Plan and Total Maximum Daily Loads (TMDLs) for the Lake Helena Watershed Planning Area: Volume II – Final Report (August 2006)

Status of the TMDL: Final

Link to Main TMDL Document:

<http://deq.mt.gov/Portals/112/Water/WQP/B/CWA/IC/TMDL/M09-TMDL-02a.pdf>

Affected MS4s: City of Great Falls

Pollutants of Concern: Total Phosphorus (TP), Total Nitrogen (TN), and Sediment

MS4 WLA: None specified in the Lower Sun River.

Assumptions and Actions Specified by the TMDL:

In 2004, the MS4 was not considered a significant point source and no MS4 WLAs were developed. However, the Department recognized that urban areas have the potential to impact nutrient and sediment loading and future analysis is needed. To meet the intent of the TMDL, goals and future recommendations, Great Falls MS4 must follow their permit requirements, evaluate potential impacts to impaired receiving waters, and utilize monitoring to implement an adaptive management approach to minimize pollutant loads.

Name and Date of TMDL: Water Quality Restoration Plan and Total Maximum Daily Loads for the Sun River Planning Area (December 2004)

Status of the TMDL: Final

Link to Main TMDL Document:

<http://deq.mt.gov/Portals/112/Water/WQP/B/CWA/IC/TMDL/M13-TMDL-01a.pdf>

Affected MS4s: City of Bozeman, Montana State University-Bozeman

Pollutants of Concern: Total Suspended Solids (TSS), Total Phosphorus (TP), Total Nitrogen (TN), E.coli

MS4 WLAs as follows: Note that WLAs apply to all MS4s that were co-permittees at the time of TMDL development; therefore, WLAs are aggregated and not individually assigned to each MS4.

TSS: The WLA is 137 tons of sediment per year for the Bozeman Creek watershed, which is a 37% reduction from the estimated existing load (218 tons/year). Because of the limited amount of data for Bear Creek, the Bear Creek WLA is also a 37% reduction (3.4 tons/year).

TSS Assumptions and Actions Specified by the TMDL: Percent reduction allocations were developed, but the WLAs are not intended to add load limits to the permit. WLAs are met by adhering to the permit requirements to minimize pollutant loads. As identified in the permit, monitoring data should continue to be evaluated to assess BMP performance and help determine whether and where additional BMP implementation may be necessary.

Nutrients: Since the storm water system should not be actively discharging during typical summer low flow conditions, both the existing load and WLA are defined as 0 (zero) for Bozeman Creek (Total Nitrogen), East Gallatin River (Total Nitrogen & Total Phosphorus); Bridger Creek (Nitrate), and Mandeville Creek (Total Nitrogen & Total Phosphorus).

Nutrient Assumptions and Actions Specified by the TMDL: When the storm water system is activated, the WLAs are met by adhering to the permit requirements and that monitoring can be used to implement an adaptive management approach to minimize pollutant loads. The MS4 is assigned a wasteload allocation of zero when the storm water system is not activated or functioning during storm events. As required by the permit, an illicit discharge detection and elimination program is necessary to achieve this WLA, which requires the permittees to regularly update the storm sewer system map, showing the location and number of outfalls.

Escherichia coli (E. coli): The MS4 will be assigned a wasteload allocation of 0 (zero) in Bozeman Creek when the storm water system is not activated.

E. coli Assumptions and Actions Specified by the TMDL: When the storm water system is activated, the WLAs are met by adhering to the permit requirements and that monitoring can be used to implement an adaptive management approach to minimize pollutant loads. The MS4 is assigned a wasteload allocation of zero when the storm water system is not activated or functioning during storm events. As required by the permit, an illicit discharge detection and elimination program is necessary to achieve this WLA, which requires the permittees to regularly update the storm sewer system map, showing the location and number of outfalls.

Name and Date of TMDL: Lower Gallatin Planning Area TMDLs & Framework Water Quality Improvement Plan (March 2013)

Status of the TMDL: Final

Link to Main TMDL Document:

http://deq.mt.gov/Portals/112/Water/WQPB/CWAIC/TMDL/M05-TMDL_02a.pdf

Basin: Columbia Basin

Affected MS4s: Butte-Silver Bow (BS13)

Pollutants of Concern: Total Phosphorus (TP), Total Nitrogen (TN), Total Suspended Solids (TSS), Metals (Arsenic, Cadmium, Copper, Lead, Mercury, and Zinc)

MS4 WLAs as follows:

TSS: The WLA is 179 tons of sediment per year from the BS13 MS4 to Silver Bow Creek. (A 76% reduction from the current estimated load of 746 tons/yr.) The WLA comprises 8.5% of the Silver Bow Creek sediment TMDL.

TSS Assumptions and Actions Specified by the TMDL: Percent reduction allocations were developed, but the WLAs are not intended to add load limits to the permit. The WLAs are met by adhering to the permit requirements. As identified in the permit, monitoring data should continue to be evaluated to assess BMP performance and help determine whether and where additional BMP implementation may be necessary.

Nutrients: The MS4 will be assigned a WLA of zero (0) lbs/day TN and TP in Silver Bow Creek when the storm water system is not activated.

Nutrient Assumptions and Actions Specified by the TMDL: When the storm water system is activated, the WLAs are met by adhering to the permit requirements and that monitoring can be used to implement an adaptive management approach to minimize pollutant loads. The MS4 is assigned a wasteload allocation of zero when the storm water system is not activated or functioning during storm events. As required by the permit, an illicit discharge detection and elimination program is necessary to achieve this WLA, which requires the permittees to regularly update the storm sewer system map, showing the location and number of outfalls.

Metals: The Butte-Silver Bow MS4 and the Butte Area Superfund Site are presently addressed in Silver Bow Creek via a composite wasteload allocation (WLA_{total}) because the sections of these areas overlap.

WLA_{Butte}

Arsenic: 2.38 lbs/day

Cadmium: 0.07 lbs/day

Copper: 2.85 lbs/day

Lead: 1.09 lbs/day

Mercury: 0.01 lbs/day

Zinc: 36.6 lbs/day

Metals Assumptions and Actions Specified by the TMDL: The WLAs are met by adhering to the permit requirements because the Superfund site has the goal of meeting water quality targets in Silver Bow Creek with direction from the CERCLA program.

Name and Date of TMDL: Upper Clark Fork Phase 2 Sediment and Nutrients TMDLs and Framework Water Quality Improvement Plan (April 2014)

Status of the TMDL: Final

Link to Main TMDL Document:

<http://deq.mt.gov/Portals/112/Water/WQP/B/CWA/IC/TMDL/C01-TMDL-04a.pdf>

Affected MS4s: City of Kalispell**Pollutants of Concern:** Total Phosphorus (TP), Total Nitrogen (TN), Nitrate + Nitrite, Dissolved Oxygen (DO), Sediment, Temperature**MS4 WLAs as follows:****Nutrients:** The TP WLAs are Middle Ashley Creek 15 lbs/growing season (44% reduction), Spring Creek 13 lbs/growing season (44% reduction), and Lower Ashley Creek 54 lbs/growing season (44% reduction). The TN WLAs are Middle Ashley Creek 292 lbs/growing season (30% reduction), Spring Creek 269 lbs/growing season (30% reduction), and Lower Ashley Creek 1030 lbs/growing season (30% reduction). The TN TMDL for Lower Ashley Creek provides a surrogate TMDL and allocations to address the Nitrate + Nitrite impairment. Water quality improvements that address excess TN loading will inherently result in decreased Nitrate + Nitrite loading and concentrations.**Nutrient Assumptions and Actions Specified by the TMDL:** The Kalispell MS4 does not continuously discharge, and it only sporadically discharges during the dry summer growing season. Percent reduction allocations were developed, but the WLAs are not intended to add load limits to the permit. The WLAs are met by adhering to the permit requirements. As identified in the permit, monitoring data should continue to be evaluated to assess BMP performance and help determine whether and where additional BMP implementation may be necessary.**Dissolved Oxygen:** None specified for Ashley Creek and Spring Creek.**Dissolved Oxygen Assumptions and Actions Specified by the TMDL:** Water quality improvements addressed in Nutrient TMDLs will result in improved DO concentrations. Therefore, the DO concentrations will increase by adhering to the permit requirements and discharge volumes. As identified in the permit, monitoring data should continue to be evaluated to assess BMP performance and help determine whether and where additional BMP implementation may be necessary.**Sediment:** The Sediment WLAs are Middle Ashley Creek 15.4 tons/year (62% reduction), Lower Ashley Creek 46.5 tons/year (62% reduction), and Stillwater River 16.5 tons/year (62% reduction).**Sediment Assumptions and Actions Specified by the TMDL:** Percent reduction allocations were developed, but the WLAs are not intended to add load limits to the permit. The WLAs are met by adhering to the permit requirements. As identified in the permit, monitoring data should continue to be evaluated to assess BMP performance and help determine whether and where additional BMP implementation may be necessary.**Temperature:** None specified for Ashley Creek and Whitefish River.**Temperature Assumptions and Actions Specified by the TMDL:** The discharge temperatures will be consistent with naturally occurring conditions by the City of Kalispell MS4 adhering to the permit requirements. As identified in the permit, monitoring data should continue to be evaluated to assess BMP performance and help determine whether and where additional BMP implementation may be necessary.**Name and Date of TMDL:** Flathead-Stillwater Planning Area Nutrient, Sediment, and Temperature TMDLs and Water Quality Improvement Plan (December 2014) which references Flathead Lake Nutrient TMDL Document (Phase 1, 2002)**Status of the TMDL:** Final

Link to Main TMDL Document:

http://deq.mt.gov/Portals/112/Water/WQPB/TMDL/PDF/FlatheadStillwater/CEI-TMDL_02a.pdf

Affected MS4s: City of Missoula

Pollutants of Concern: Total Nitrogen (TN), Sediment, Metals (Arsenic, Cadmium, Copper, Lead, Iron, and Zinc)

MS4 WLAs as follows:

Nutrients: The TN WLA for Grant Creek is 0.0 lbs/day.

Nutrient Assumptions and Actions Specified by the TMDL: Percent reduction allocations were developed, but the WLAs are not intended to add load limits to the permit. The WLAs are met by adhering to the permit requirements. The MS4 is assigned a wasteload allocation of zero when the storm water system is not activated or functioning during storm events. As required by the permit, an illicit discharge detection and elimination program is necessary to achieve this WLA, which requires the permittees to regularly update the storm sewer system map, showing the location and number of outfalls. When the storm water system is activated, the WLAs are met by adhering to the permit requirements and that monitoring can be used to implement an adaptive management approach to minimize pollutant loads.

Sediment: The Sediment WLA for Grant Creek 7.8 tons/year (53% reduction).

Sediment Assumptions and Actions Specified by the TMDL: Percent reduction allocations were developed, but the WLAs are not intended to add load limits to the permit. The WLAs are met by adhering to the permit requirements. As identified in the permit, monitoring data should continue to be evaluated to assess BMP performance and help determine whether and where additional BMP implementation may be necessary.

Temperature: None specified for Grant Creek and Bitterroot River.

Temperature Assumptions and Actions Specified by the TMDL: No MS4 WLAs (except during periods of non-storm water runoff) were developed for Grant Creek or the Bitterroot River. To meet the intent of the TMDL goals and future recommendations, the MS4 must follow their permit requirements, evaluate potential impacts to impaired receiving waters, and implement Low Impact Development practices. The MS4 is assigned a wasteload allocation of zero when the storm water system is not activated or functioning during storm events. As required by the permit, an illicit discharge detection and elimination program is necessary to achieve this WLA. When the storm water system is activated, the WLAs are met by adhering to the permit requirements and that monitoring can be used to implement an adaptive management approach to minimize pollutant loads.

Metals: The Clark Fork River (MT76M001_030, Blackfoot River to Rattlesnake Creek) WLAs include a 55% reduction to metal loads, applicable to arsenic, cadmium, copper, iron, lead, and zinc. This reduction equates to 0.009 lbs/day of copper, 0.0045 lbs/day of lead, and 0.00004 lbs/day of zinc. No loads for arsenic, cadmium, or iron were calculated for this stream segment. The Clark Fork River (MT76M001_020, Rattlesnake Creek to Fish Creek) WLAs include a 40% reduction to metal loads, applicable to copper, iron, and lead. This reduction equates to 1.1 lbs/day of copper and 0.51 lbs/day of lead. No load for iron was calculated for this stream segment. The lead WLA for the Bitterroot River is 0.08 lbs/day (54% reduction).

Metals Assumptions and Actions Specified by the TMDL: Percent reductions and wasteload allocations were developed for the metals identified above in the Bitterroot River and Clark Fork River, but the WLAs are not intended to add load limits to the permit. The WLAs are met by adhering to the permit requirements. As identified in the permit, monitoring data should continue to be evaluated to assess BMP performance and help determine whether and where additional BMP implementation may be necessary.

Name and Date of TMDL: Silver Bow Creek and Clark Fork River Metals TMDLs (May 2014); Bitterroot Watershed Total Maximum Daily Loads and Water Quality Improvement Plan (December 2014); Bitterroot Temperature and Tributary Sediment Total Maximum Daily Loads and Framework Water Quality Improvement Plan (August 2011); and Central Clark Fork Basin Tributaries TMDLs and Water Quality Improvement Plan (September 2014).

Status of the TMDL: All final.

Links to Main TMDL Document:

<http://deq.mt.gov/Portals/112/Water/WQPB/CWAIC/TMDL/C01-TMDL-05a.pdf>

<http://deq.mt.gov/Portals/112/Water/WQPB/TMDL/PDF/Bitterroot/C05-TMDL-04a.pdf>

<http://deq.mt.gov/Portals/112/Water/WQPB/CWAIC/TMDL/C05-TMDL-03a.pdf>

<http://deq.mt.gov/Portals/112/Water/WQPB/CWAIC/TMDL/C01-TMDL-01a.pdf>

Appendix C. MCM 1 and 2

Contacts and Further Resources

City of Helena

Utility Maintenance Division: (406) 457-8567

Engineering Division: (406) 447-8430

Web Site: www.helenamt.gov/public-works/utility-maintenance/stormwater

- Reviews storm water plans and measures for construction projects.
- Information on storm water management best practices.

City Planning Division: (406) 447-8490

Web Site: www.helenamt.gov/departments/community-development/planning

- Helena construction permits.

Lewis & Clark County

Water Quality Protection District:

(406) 457-8584

water@lccounty.mt.gov

Web Site: www.lccountymt.gov/health/water

- Information on storm water and BMPs.
- Help identify appropriate permits.

Community Development and Planning:

(406) 447-8374

Web Site: www.lccountymt.gov/cdp

- Lewis & Clark County permits.

MT Department of Environmental Quality (DEQ)

Storm Water Construction: (406) 444-5349

Web Site: www.deq.mt.gov/wqinfo/MPDES/StormwaterConstruction.mcp

- Issues the State storm water "General Permit."
- Extensive online information and forms.

Environmental Protection Agency (EPA)

Storm Water Construction Web Site:

cfpub.epa.gov/npdes/stormwater/const.cfm

- Information on the SWPPP, General Permit, and storm water BMPs.

Storm Water

Storm water is naturally occurring runoff. If it runs off into the storm drain system or across the land, it will eventually enter Tenmile Creek or Prickly Pear Creek without further treatment.

If that water picks up contaminants such as excess sediment, chemicals or other waste, it can affect fish and water quality.

Management

Storm water control and management is part of every construction project. A successful project will:

- Keep storm water on-site.
- Ensure that storm water runoff stays clean.

The City of Helena and the State of Montana have specific guidance, requirements, and permits for construction projects. This guide will give you the information you need to ensure your building project addresses storm water control.

Storm Water BMPs



Poor Silt Fence BMP

Good Silt Fence BMP



Infiltration Pond

Grassy Retention Swale

Storm Water & Construction



Your Guide to Storm Water Control Permits & Requirements

Helena and Lewis & Clark County

Lewis & Clark County
Water Quality Protection District

City of Helena Public Works



Best Management Practices

Storm water that runs off the land or through the storm drain system is not treated and will eventually end up in local streams and lakes. Erosion, excess sediment, and increased storm water runoff may occur, due to construction, if not carefully managed.

Allowing storm water to seep into the ground and keeping that water clean will help preserve drinking water, fisheries, and healthy streams. The City of Helena has an obligation to ensure that only storm water enters its system. Anything else is illicit discharge.

Best Management Practices (BMPs) are designed to ensure that storm water is kept controlled on-site and clean. Appropriate BMPs can apply to construction and built sites. BMP types for storm water control are:

Temporary BMPs are temporary measures put in place during the construction phase of a project. Sediment and erosion are primary concerns, addressed by measures such as silt fences. Concrete wash stations to keep concrete from contaminating and plugging storm drains.

Permanent BMPs are elements designed to retain storm water and allow it to infiltrate into the ground such as retention ponds, swales or pervious pavement.

Post-construction Operation and Maintenance BMPs Chemical spills, debris, and excess fertilizer are long-term management considerations. Spill prevention and regular maintenance of impervious surfaces and permanent storm water retention structures continues for the life of a built project.

Storm Water Permits and Requirements

Applicable permits, reviews, and obligations vary depending on the type of construction project and location of the project. One or more of the following cases will apply to your project.

Construction Size and Type	Location and Permits or Obligations	Requirements
<p>Project will disturb a total of 1 or more acres of land during construction</p> <p>Any activity that may result in soil erosion is a disturbance. Activities include clearing, grading, excavation, and filling.</p> <p>BMPs: Temporary BMPs and operation and maintenance planning to prevent erosion and increases in storm water runoff.</p>	<p>Location: Anywhere in Montana.</p> <p>Permit: General Storm Water Discharge Permit, known as the General Permit, must be issued before construction begins. The Montana Department of Environmental Quality (DEQ) issues the permit. An owner or operator must obtain the permit.</p> <p>Subdivision permits may have additional drainage and grading requirements.</p>	<ul style="list-style-type: none"> • A Notice of Intent (NOI) to discharge storm water associated with construction. • A Storm Water Pollution Prevention Plan (SWPPP) must be completed and approved. • Fees paid to the DEQ. • In Helena or on land that is being annexed, the SWPPP must be submitted with Helena building permits in cases where the General Permit is needed.
<p>Project will result in 5,000 or more square feet of impervious surface or is critical to storm water system function</p> <p>BMPs: Permanent BMPs that will prevent storm water runoff increases.</p>	<p>Location: City of Helena or land that will be annexed.</p> <p>Permit: The applicable planning or building permit will be submitted to the Planning Department. The Engineering Department reviews storm water considerations for compliance with the city ordinance.</p>	<ul style="list-style-type: none"> • An engineered Drainage and Grading Plan must be submitted with the appropriate City of Helena building permit. The City of Helena Engineering Division must sign off on the plan as part of the permit application.
<p>All other construction projects</p> <p>BMPs: Good construction, good site management, and good housekeeping practices are applied on as-needed temporary or long-term basis.</p>	<p>Location: City of Helena or land that will be annexed.</p> <p>Permit: Applicable building permits. The City of Helena Storm Water Ordinance prohibits storm water contamination from entering into its storm water system.</p>	<ul style="list-style-type: none"> • All property owners in Helena are required to prevent contaminants from entering storm water system. There is no formal review of the practices, but landowners can be liable for clean-up costs if contamination occurs.

Commercial Storm Water Management

Know where your property storm water is collected, where it goes, and what can be done to protect runoff quality. This will protect water quality in streams and lakes.

Outdoor Areas and Parking Lots Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local streams and lakes.

- Sweep up litter and debris from sidewalks, driveways, and parking lots, especially around storm drains.
- Regularly clear sediment and debris from storm inlets, drains, and storm water ponds.
- Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Keep property free of trash and windblown items.

Automotive Facilities Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by storm water.

- Clean up spills immediately and properly dispose of cleanup materials.
- Cover fueling stations and design or retrofit spill containment measures.
- Properly maintain vehicles to prevent oil, gas, and other discharges from being washed into local streams and lakes.

Further Information

Water Quality Protection District

(406) 457-8927

water@lccounty.mt.gov

www.lccounty.mt.gov/health/water

City of Helena Public Works

(406) 457-8567

www.helenamt.gov/public-works/utility-maintenance

Lake Helena Watershed Group

(406) 457-8584

jmcbroom@lccounty.mt.gov

EPA Storm Water Information

www.epa.gov/npdes/stormwater



Runoff that enters a storm drain is not treated and eventually flows into streams, lakes, or groundwater.

What is storm water runoff?

Storm water runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surface like driveways, sidewalks, streets, and roofs prevent storm water from naturally soaking into the ground.

Why is storm water runoff a problem?

Storm water can pick up debris, chemicals, dirt, and other pollutants. Contaminants in storm water runoff negatively impact our ability to use streams and lakes for drinking water, swimming, and fishing because storm water is typically untreated. Locally, storm water eventually flows into Tenmile or Prickly Pear Creek, Lake Helena, or the Helena valley aquifer.

How can runoff be improved?

Simple practices around your house, yard or business can reduce pollution in storm water runoff.

Storm Water
Keep it Clean
Save Your Stream

2014



Storm Water Runoff Pollution

How You Can Protect Streams & Lakes



Lewis & Clark County
Water Quality Protection District



City of Helena Public Works

Storm Water Pollution

Polluted storm water runoff can have many adverse effects on plants, fish, animals, and people.

Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow.

Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.

Bacteria and other pathogens can wash into swimming areas and create health hazards.

Common household chemicals like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick from eating diseased fish and shellfish or ingesting polluted water.

Polluted storm water often affects drinking water sources like the Helena Valley groundwater aquifer. This, in turn, can affect human health and increase drinking water treatment costs.

Together, we can prevent storm water pollution.



Residential Storm Water Management

Household Chemicals Household products that contain chemicals like insecticides, pesticides, paint, solvents, and used motor oil and other auto fluids contaminate storm water if they enter runoff.



- Don't pour chemicals onto the ground or into storm drains.
- Recycle or properly dispose of household products that contain chemicals.

Auto Care Washing your car and dumping automotive fluids into storm drains is just like dumping them directly into a stream or lake.

- Use a commercial car wash that treats or recycles its wastewater, or wash your car on your lawn so the water filters into the ground.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations. You can drop off used motor oil and antifreeze at the City of Helena Transfer Station. It is free with a residential permit.

Pet Waste Pet waste on the ground can be picked up by storm water runoff, washed into storm drains, and into rivers, and streams. There, it can contribute to elevated pathogen and nutrient levels.

- Regularly clean up pet waste from your yard.
- Bring a bag and pick up any waste when out with your pet.
- Dispose of pet waste by burying it or putting it in the garbage.

Debris Trash and other debris washed into streams and lakes can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.

- Ensure that plastic bags, six-pack rings, bottles, and cigarette butts are put in the garbage to keep out of waterways.



Residential Lawn and Landscaping Management

Lawn Care Excess fertilizers and pesticides applied to lawn and gardens wash off and pollute streams. Yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams.

- Don't overwater your lawn. Consider using a soaker hose instead of a sprinkler.
- Use pesticides and fertilizers sparingly and at the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- Compost mulch, or recycle grass trimmings, leaves, and branches. Keep yard waste away from streets, storm drains, and drainage infrastructure.

Landscaping Landscape design and plantings can reduce storm water runoff and allow water to seep into the ground.

- Permeable pavement systems allow rain and snowmelt to soak through into the ground. This decreases storm water runoff, unlike conventional, impervious concrete or asphalt.
- Consider routing roof runoff to lawns, other vegetation, or rain barrels. Rain gardens and grassy swales are specially designed areas planted with native plants that can provide natural places for rainwater to collect and soak into the ground. Rain from rooftop areas or paved areas can be diverted into these areas rather than into storm drains.
- Vegetated filter strips are native plants along roads, sidewalks, or streams that trap pollutants from storm water.



Storm Water Runoff Pollution Prevention Information

What is Storm Water Runoff?

- When it rains, storm water runs over yards, streets, highways, parking lots, parks, and playgrounds where it eventually enters into the ground or storm drains.
- Everything in its way, debris, chemical spills, dirt, and other pollutants will be carried away and end up in your lakes and streams.
- This water eventually becomes what we drink and recreate in.



Keep it Clean Save Your Stream

Why Is Storm Water Runoff Bad?

- Contaminates drinking water, lakes, streams, creeks, and recreational water areas.
- Harmful to people, plants, fish, and animals.



How Can You Prevent Storm Water Runoff?

- Properly dispose of hazardous waste.
- Pick up pet waste.
- Don't over water your lawns
- Reroute Roof water to lawns
- For more solutions find the Water Quality Protection District online, or stop by City Hall.



Keep It Clear, Clean, & Safe!



WATER WATCHERS I - 4th Graders Classroom & Field Trip to Prickly Pear Creek



Any Questions ?

Web of Life



- Program piloted 1994
- Every spring
- 12 schools
- 700-800 students
- Classroom visit & field trip



Riparian Area

Water Quality Testing



Kick Nets



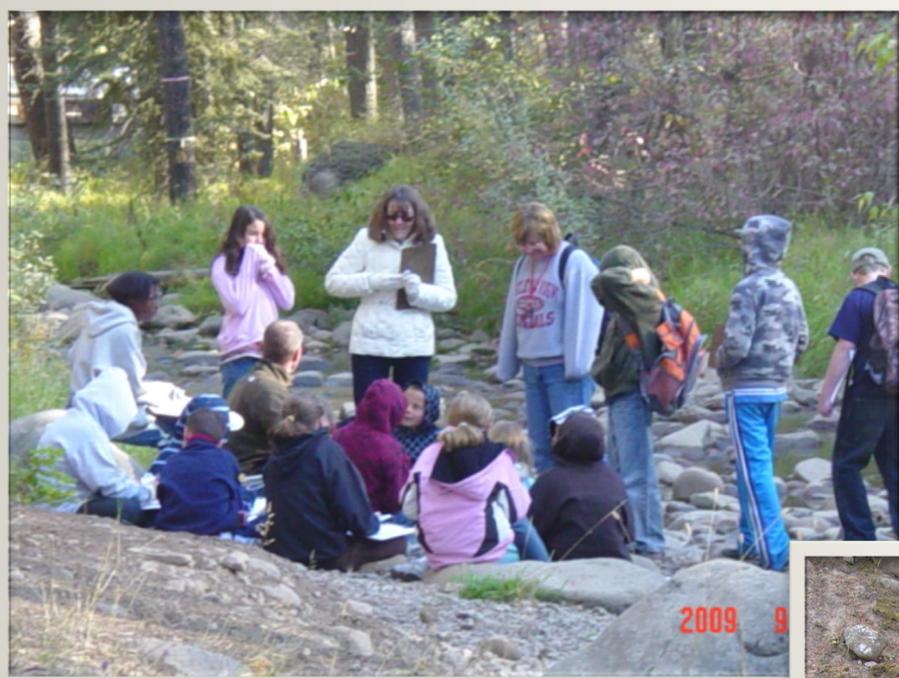
Bugs!



WATER WATCHERS II - 5th Graders Classroom & Field Trip to Tenmile Creek



Stream Investigations



Hike



Stream Velocity

Journal Activity



Wastewater Tour

Riparian Area

- Program piloted 1995
- Every fall
- 12 schools
- 700-800 students
- Classroom visit & field trip
- Wastewater or Drinking water plant tour



Riparian Scavenger Hunt



Appendix D. MCM 3

Instructions for use: The following template provides a suggested framework for an Illicit Discharge Investigation and Corrective Action Plan. Italics red colored text is provided as instructions and is intended to be deleted when the document is complete.

ILLICIT DISCHARGE INVESTIGATION AND CORRECTIVE ACTION PLAN WITHIN THE CITY OF **[NAME HERE], MONTANA**

[INSERT DATE HERE]

Introduction

In accordance with the General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer System (MS4), issued by the Montana Department of Environmental Quality (DEQ), the City of *[Insert name here]* is required to develop and implement an illicit discharge investigation and corrective action plan. Illicit discharge as defined in the Administrative Rules of Montana (ARM) 17.30.1102(7) "means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to an MPDES permit (other than the MPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities." This plan provides guidelines for tracking potential illicit discharges and criteria by which City personnel can determine the most appropriate corrective action to eliminate an illicit discharge. [*Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*](#), developed by the Center for Watershed Protection (CWP), was utilized to guide the development of this plan. The complete document is available at *[insert location here (e.g. on City's server, internet link, hardcopy storage location, etc.)]* for reference.

This plan has been developed with the following objectives in mind:

- Identify the source of an illicit discharge
- Determine appropriate corrective actions
- Abate damages following detection of illicit discharge
- Prevent recurrence of illicit discharge violations

1. Source Detection and Investigation Procedures

Potential illicit discharges can be revealed through various sources such as outfall inspections, reports from staff, or public complaints. If the source of a potential illicit discharge is not immediately clear the City will begin an official illicit discharge investigation to trace the source of the illicit discharge following the procedures outlined in this section.

In cases where the source of an illicit discharge is immediately known (e.g. when an illegal dumping or illicit discharge problem is directly observed by a member of the City staff) it is generally not necessary to follow investigation procedures. In such cases the *[insert appropriate City personnel here]* will complete the steps outlined in Sections 1.1 - 1.4 and will then refer to the corrective action procedures provided in Section 2.

1.1 Documentation

When a potential illicit discharge is identified the *[insert appropriate City personnel here]* will start an investigation file. An Illicit Discharge Investigation and Corrective Action Form which includes a creation date, case description, and any information related to the observed or suspected problem will be filled out. The *[insert appropriate City personnel here]* will keep an accurate log of labor, materials and costs associated with the investigation for invoicing the responsible party, if necessary. The form will be started prior to completing any additional field work unless the nature of the discharge necessitates an immediate response. As the investigation proceeds, any field investigations, photographs, corrective actions, or other activities associated with the suspected problem area will be documented and saved on file as this becomes the City's official record of the illicit discharge detection and elimination (IDDE) investigation. Additional documentation may include the following:

List the forms and information specific to your City's process below

- Copy of Outfall Inspection Report
- Photographs

- Additional field notes
- Lab testing results
- Compliance letters sent and responses received
- Correspondence (mail, email, telephone logs)
- Proof of corrected problems (contract and invoice or clean field investigation report)

1.2 Site Visit

In cases where the City's *[Stormwater Division]* did not discover the potential illicit discharge (e.g. the City was made aware via a public complaint), the *[insert appropriate City personnel here]* will conduct a site visit to confirm the nature of the problem and determine the prioritization of the investigation.

1.3 Prioritization

Each suspected illicit discharge has the potential to cause damage to the MS4 and receiving waters; however, certain situations may warrant more immediate attention than others and each investigation must be prioritized in order to protect public health and avoid serious threats to the environment or damage to property. The following items will be considered when determining the immediacy of the investigation: *Edit the following list per your city's pollutants of concern, priority levels, and response times.*

- Discharges posing an immediate threat to human health
- Discharges within **XX** feet of a surface or drinking water source
- Discharges containing substances with significant potential to cause immediate damage to the environment
- Large volume (**XX** gallons) or continuous flow (**XX** gallons per minute)
- Potential threat of contaminating groundwater

1.4 Notification of Appropriate Agencies

Threat to Human Health:

Discharges and/or activities which are believed to be an immediate threat to human health or the environment will be reported to Montana DEQ and *[insert other agencies, if necessary]*. DEQ's Enforcement Division may assist in the investigation and corrective action process if necessary. The phone number and website to access a Complaint/Spill Form are as follows:

Phone: (406) 444-0379

Website: <http://deq.mt.gov/enf/spill.mcp>

The local health department protects people from health threats such as food-borne illnesses, natural and man-made disasters, toxic exposures, and preventable illness and injury. This includes hazardous spills near drinking water sources, parks with dogs and children, and potential to contaminant soils and groundwater. The health department phone number is:

Phone: (406) **XXX-XXXX**

Hazardous Materials:

The *[City Fire Department]* will be contacted for situations requiring hazardous materials response. When hazardous materials are suspected the *[insert appropriate person/position here]* will be contacted to determine if hazardous materials response is necessary:

Phone: (406) **XXX-XXXX**

[Other]:

Add any other local agencies that need to be contacted for specific responses.

1.5 Select Appropriate Investigation Method

The four investigation methods which may be used to trace and identify the source of a suspected illicit discharge are as follows:

- Storm Drain Network Investigations
- Drainage Area Investigations
- On-Site Investigations
- Septic System Investigations

The *[insert appropriate City personnel or department here]* will review available information (e.g. initial documentation, previous investigations conducted in the vicinity, etc.) and select the appropriate method. Each method, as described by the CWP, is briefly discussed below. Once the appropriate method is selected Chapter 13 of the CWP's [*Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*](#) will be consulted, which contains detailed guidance on how to efficiently conduct each investigation.

After the appropriate investigation method has been selected, the *[insert appropriate City personnel or department here]* will coordinate the appropriate resources to begin the investigation to trace and identify the source of the illicit discharge.

The four investigation methods are briefly introduced below, additional information and instructions for each method may be found in Chapter 13 of the CWP's IDDE Guidance Manual referenced above. The City may choose to either use this manual to further develop this section of the document or refer the reader to Chapter 13 of the IDDE Guidance Manual.

i.) Storm Drain Network Investigations

City personnel inspect manholes within the area of the suspected illicit discharge and examine the manhole contents for chemical or physical indicators of contaminants in an effort to narrow the illicit discharge location to an isolated pipe segment between two manholes. Indicators may include odor, color, staining, unusual films, floatables, or samples which may be taken for chemical testing in a laboratory. The City's storm drainage system map will be helpful in determining which manholes to visit and inspect. After the pipe segment has been isolated, on-site investigations may be used to locate the exact location of the illicit discharge.

ii.) Drainage Area Investigations

When there is strong evidence that suggests a specific and known contaminant or if the known contaminant points towards a short list of potential discharge sources, it is often most effective to survey the drainage area and focus on sites which are known to produce and/or contain the contaminant which has been identified within the storm drain network. The primary methods for conducting drainage area investigations include windshield surveys and mapping analyses. While conducting the investigation it is recommended to consult the mapped pipe network and compare this to maps of high priority businesses, land use types and zoning, and on-going construction projects.

iii.) On-Site Investigations

The on-site investigation diagnoses the exact location and source of an illicit discharge and should be performed after the illicit discharge has been isolated to a specific section of the storm drain network. Techniques such as dye testing the plumbing systems of households and buildings, video testing, and smoke testing may be necessary for this type of investigation. It is important to understand when a technique would work best for the application and to understand limitations that may deem the technique unusable.

iv.) Septic System Investigations

Some residential watersheds do not have sanitary sewer systems or stormwater conveyance piping, but rather have septic systems and alternative practices for dealing with stormwater volumes. Stormwater conveyance systems consisting of swales, ditches, and ponds are common in these watersheds and the illicit discharges often come from failing septic systems and illegal dumping. Two separate types of analyses are typically employed in these areas:

on-site septic investigations and detailed system inspections. On-site septic investigations typically include homeowner system audits or surface condition analyses. Detailed system inspections are more thorough, typically involve the use of infrared imagery, and are usually appropriate if the on-site investigations are not successful in locating the source of an illicit discharge.

1.6 Document Investigation Findings

Once the source of an illicit discharge has been identified, the *[insert appropriate staff personnel here]* will document the findings and progress towards the corrective action process. Documentation may include but are not limited to:

- Investigation method(s)
- Photographs
- Additional field notes
- Lab testing results

2. Corrective Action Process and Procedures

After the source of an illicit discharge has been identified, the *[insert appropriate City personnel or department here]* will begin the corrective action process to eliminate the discharge. Where applicable, corrective actions will focus first on education to promote voluntary compliance and escalate to increasingly severe enforcement actions as needed.

2.1 Determine Type of Illicit Discharge

The type of an illicit discharge can be generalized as either behavioral or structural, each of which is discussed below.

i.) Behavioral

The nature of the illicit discharge is an action, operation, or conduct and the illicit discharge will be eliminated when this behavior is modified.

ii.) Structural

The illicit discharge is caused by a physical configuration or connection which requires modification of the system in order to eliminate the discharge.

2.2 Assign Responsibility

The party responsible to fix the illicit discharge will be identified based on the nature and location of the illicit discharge.

i.) Private Property Owner

Discuss criteria for which a private property owner will be responsible to fix the illicit discharge and discuss how/if the City will work with the property owner to fix the problem.

ii.) Municipality

Discuss criteria for which the City will be responsible to fix the illicit discharge.

iii.) Other Public Entity

Discuss criteria for which a separate public entity will be responsible to fix the illicit discharge (e.g. MDT, a public university, etc...).

2.3 Select Appropriate Corrective Action

If deemed to be safe and within the *[insert appropriate staff personnel here]* authority and capabilities the illicit discharge may be eliminated immediately using appropriate and available methods. For situations requiring proper authorization and/or expertise, a work order will be generated and sent to *[insert appropriate staff personnel here]* for approval.

For cases where a private property owner is responsible the *[insert appropriate staff personnel here]* will coordinate with the Responsible Party to determine an appropriate method to eliminate the illicit discharge. If necessary, enforcement actions such as a compliance schedule will be created to ensure that the illicit discharge is eliminated in a timely manner (refer to the Enforcement Response Plan (ERP) to determine appropriate enforcement actions).

Chapters 8 and 14 of the CWP's [Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments](#) provides a list of methods to remove and eliminate illicit discharges and will be used, if necessary, to determine the appropriate corrective action.

Complete this section using the workflow deemed appropriate for your MS4, if necessary.

2.4 Confirm and Document Elimination of Contamination Source

Modify this section to address which confirmation methods are appropriate for your MS4.

A site visit may be necessary to confirm the source has been eliminated, the corrected operations are sufficient, and/or the structural problem has been fixed according to the approved corrective action. In other cases it may be sufficient to allow a verbal confirmation from the property owner, a photograph of the modification, as-built drawings, or simply verify that all signs of the illicit discharge are gone. Once confirmed, the *[insert appropriate staff personnel here]* will close the investigation and correction file by noting the elimination of the discharge within the Illicit Discharge Investigation and Corrective Action Form.

2.5 Enforcement Actions

In circumstances where the responsible party does not volunteer compliance, refuses compliance, or disputes responsibility, the City will take enforcement actions consistent with the Enforcement Response Plan in order to ensure that the discharge is eliminated. Note that voluntary compliance in eliminating an illicit discharge may not preclude the responsible party from enforcement actions.

Modify and/or further develop this form, which is referenced in the Illicit Discharge Investigation and Corrective Action Plan

ATTACHMENT A ILLICIT DISCHARGE INVESTIGATION & CORRECTIVE ACTION FORM

City Personnel Involved Date

Type of Initial Notification (e.g. Phone call from public, result of City inspection, Dry weather screening, etc.)

Location of Illicit Discharge (Address)

() -
Responsible Party Name/Company Telephone Repeat Offender High Priority Site

Street City Zip

Description of Investigations Conducted and Investigation Findings:

Description of Corrective Action:

Enforcement Action (if applicable):

Level of Response Selected Remedy Date for Follow-Up

Additional Notes:

Confirmation of Resolution:

City Personnel Date

CITY OF [NAME]

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.):	Last 24 hours:	Last 48 hours:
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential (High Density) <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Golf Course <input type="checkbox"/> Institutional Other: _____ Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____ In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Conductivity		EC	Probe	
Ammonia		mg/L	Test strip	

CITY OF [NAME]
OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? Yes No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint	<input type="checkbox"/> 2 – Easily detected	<input type="checkbox"/> 3 – Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint colors in sample bottle	<input type="checkbox"/> 2 – Clearly visible in sample bottle	<input type="checkbox"/> 3 – Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 – Cloudy	<input type="checkbox"/> 3 – Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Few/slight; origin not obvious	<input type="checkbox"/> 2 – Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? Yes No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

Unlikely Potential (presence of two or more indicators) Suspect (one or more indicators with a severity of 3) Obvious

Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam		

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Adapted from the Illicit Discharge Detection and Tracking Guide: Outfall Reconnaissance Inventory Form, by the Center for Watershed Protection

Standard Operation Procedure	
IC-2 IDDE: Outfall Screening	
Purpose of the SOP:	This SOP provides a basic checklist for managers and field crews conducting illicit discharge inspections of storm drainage system outfalls

Reference: Brown et al., *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*, Center for Watershed Protection, Ellicott City, 2004.

Planning Considerations:

- ❑ Employees should have reviewed and understand the information presented in Chapter 11 of the reference manual
- ❑ Inspections are to occur during dry weather (no runoff producing precipitation in last 48 hours)
- ❑ Conduct inspections with at least two staff per crew
- ❑ Conduct inspections during low groundwater and leaf off conditions if possible
- ❑ Complete Site Info section on Outfall Reconnaissance Inventory Form before leaving the office

Field Methods:

- ❑ Ensure outfall is accessible – contact M&O if overgrown
- ❑ Inspect outfall only if safe to do so
- ❑ Characterize the outfall by recording information on the Outfall Reconnaissance Inventory Form
- ❑ Photograph the outfall with a digital camera (use dry erase board to identify outfall)
- ❑ If dry weather flow is present and does not appear to be an illicit discharge, attempt to identify the source of the flow (document flow for future comparison)
- ❑ Document dry outfalls for future comparison
- ❑ Follow procedure below if an illicit discharge is suspected
- ❑ Do not enter private property without permission

Equipment List:

1. System map
2. Outfall Reconnaissance Inventory Forms
3. City identification
4. Digital camera (spare batteries)
5. Cell phone
6. Clip board and pencils
7. Dry erase board and pens
8. Flashlight (spare batteries)
9. Disposable gloves
10. Folding wood ruler
11. Temperature probe
12. pH probe
13. Ammonia test strips
14. Five 1-liter (polyethylene) sample bottles
15. Watch with second hand
16. Calculator
17. Hand sanitizer
18. Safety vests
19. First aid kit
20. Machete
21. Cooler
22. Permanent marker

Procedures to Follow if Illicit Discharge is Suspected:

- ❑ Use Outfall Reconnaissance Inventory Form to document observations
- ❑ Visually inspect general area for possible sources
- ❑ Take photos
- ❑ Estimate flow
- ❑ Collect samples if they would help with source identification
- ❑ Refer to Investigating Illicit Discharges SOP for further directions on source identification

MAIN FLUSHING RULES

1. FLUSH FROM LARGER TO SMALLER MAINS.
2. ISOLATE MAINS TO BE FLUSHED USING GATE VALVES SO WATER FLOWS FROM ONE KNOWN DIRECTION.
3. ACHIEVE FLUSHING FLOW SO VELOCITY IS AROUND 5 FT. PER SECOND FOR SIZE OF PIPE. (SEE CHART)
4. LENGTH OF TIME TO FLOW SHOULD BE 3 TO 5 PIPE VOLUME TURNOVER OR UNTIL WATER FLOWS CLEAR FOR 5 MINS. FLOW TIME IS USUALLY ABOUT 30 MINUTES.
5. USE DECHLOR AND HOSE MONSTER DECHLORINATING SYSTEM TO DECHLORINATE THE DISCHARGE WATER. GENERALLY 24 TABLETS NEEDED TO FLOW 100 GAL/MIN FOR 15-20 MINUTES.
6. SAMPLE DISCHARGE WATER FOR CHLORINE RESIDUAL AT START OF FLUSHING AND EVERY 10 – 15 MINUTES DURING FLUSHING. FILL OUT FLUSHING FIELD LOG SHEET FOR EACH FLUSH. READING SHOULD BE 0.01 OR LESS.
7. FOLLOW DISCHARGE WATER AND SAMPLE FOR CHLORINE AT NEAREST STORM INLET. MAKE SURE DISCHARGE WATER IS NOT CAUSING FLOODING PROBLEMS.
8. TURN IN FLUSHING LOGS AND FILL OUT DAILY MAIN FLUSHING TOTALS.

FLUSHING FLOWS

TARGET RATE OF FLUSHING IN GALLONS

PIPE SIZE	3 CU. FT/SEC	5 CU. FT/SEC	7 CU. FT/SEC
4"	117	195	274
6"	264	439	614
8"	470	783	1,096
10"	736	1,223	1,712
12"	1,032	1,750	2,463
14"	1,436	2,396	3,352
16"	1,885	3,142	4,398

FORMULA FOR VOLUME OF FLUSH

GALLONS PER FOOT BY SIZE X LENGTH OF PIPE = VOLUME OF PIPE

VOLUME OF PIPE X NUMBER OF TURNOVERS = AMOUNT OF WATER TO FLOW

AMOUNT OF WATER TO FLOW DIVIDED BY RATE OF FLOW @ PITOT = APPROXIMATE TIME NEEDED TO FLUSH

GALLONS PER FOOT OF PIPE

SIZE	GALLONS/FT
4"	0.65
6"	1.47
8"	2.61
10"	4.08
12"	5.88
14"	8.00
16"	10.45
18"	13.22
20"	16.33
24"	23.57
30"	36.73
36"	52.9



Appendix E. MCM 4

**CITY OF [NAME]
 [NAME OF DEPARTMENT, IF APPLICABLE]
 CONSTRUCTION SITE STORMWATER INSPECTION FREQUENCY
 DETERMINATION PROTOCOL**

NAME OF PROJECT	PROJECT FILE NO.	ADDRESS
TOTAL PROJECT ACRES		TOTAL DISTURBED ACRES
OWNER	ADDRESS	PHONE NUMBER

Template Instructions: The following template contains example criteria which may be used to prioritize construction sites in order to determine inspection frequency. In accordance with the MS4 General Permit, high-priority sites are to be inspected a minimum of three times within the duration of a construction project. This template assumes that all other sites will be inspected at least once during a construction project's lifespan. Some of the criteria provided within the table below were taken directly from the General Permit (Part III.B.5.c.iv). Criteria not required within the permit can be removed and/or additional criteria can be added, if desired. Rating values have not been provided because it is expected that each MS4 will utilize different rating values; therefore, rating values should be selected to meet the needs of your MS4 system.

[CITY/DEPARTMENT NAME]

Instructions:

To determine the suggested inspection frequency of a given construction site, begin by filling out the Construction Site Rating Table below and add up all of the applied ratings. Then utilize the Inspection Frequency Determination Table to determine the priority and minimum inspection frequency for the site.

Construction Site Rating Table

Criteria	Rating System	Rating Value	Applied Rating for Each Criteria
Pre-determined priority of the control (if applicable)	Non High-Priority	0	
	High-Priority	X	
Project size	Less than 1 acre	X	
	1 to 5 acres	X	
	5+ acres	X	
Proximity to a surface water	1,000+ feet from site's outfall	X	
	200 to 1,000 feet from site's outfall	X	
	Direct discharge to surface water	X	
Steepness of project site slopes	Mostly Flat Ground	X	
	Slopes of 3:1	X	
	Slopes of 2:1 or steeper	X	
Discharge to a waterbody impaired for pollutants expected from active construction projects	No	X	
	Yes	X	
History of operator compliance	No history of non-compliant	X	
	Once non-compliant	X	
	2+ non-compliant	X	
Risk of Hazardous Material Spills/ Leaks	Low Risk: No hazardous materials stored on site	X	
	Medium Risk: Non-liquid hazardous materials stored on site	X	
	High Risk: Liquid hazardous materials stored on site	X	

Total = _____

The total of all the ratings will indicate the priority of the inspection for this construction site. The following is a suggested template which could be used to define inspection frequency based on site priority:

Inspection Frequency Determination Table

Total Rating Value	Priority	Inspection Frequency
0 to X	Low	1.
X to Y	Medium	1.
Y to Z	High	1. Once at commencement of construction after BMPs have been implemented
		2. Once within 48-hours after one rain event of 0.25 inches or greater
		3. Once at the conclusion of the project prior to finalization

Inspection Frequency for Construction Site

Site Priority: _____

Inspection Frequency:

CONSTRUCTION SITE VISIT INSPECTION FORM

General Information	
Project Name:	
Location:	
Date of Inspection:	Start/End Time:
Inspector's Name(s):	
Inspector's Title(s):	
Inspector's Contact Information (phone):	
Describe Present Phase of Construction:	
Type of Inspection:	
<input type="checkbox"/> Beginning of Construction <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During rain event	
<input type="checkbox"/> Post-rain event <input type="checkbox"/> Conclusion of Project <input type="checkbox"/> Response to violation or complaint	
Weather Information	
Has it rained since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, provide:	
Storm Start Date & Time:	Storm Duration (hrs): Approximate Rainfall (in):
Weather at time of this inspection:	
<input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Raining <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds	
<input type="checkbox"/> Other:	Temperature:
Do you suspect that discharges may have occurred since the last inspection?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are there any stormwater discharges at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, provide location(s) and a description of stormwater discharged from the site (presence of suspended sediment, turbid water, discoloration, and/or oil sheen):	
Prohibited Discharges	
Are there any prohibited discharges at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, provide location(s) and a description:	

	BMP/Activity	Implemented?	Maintained?	Corrective Action Needed & Notes
Erosion and Sediment Controls				
1	Are stormwater volume and velocity controls being used to minimize soil erosion within the site? (e.g. check dams, fiber rolls, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
2	Are stormwater volume and velocity controls being used to minimize soil erosion at discharge locations? (e.g. stilling basins, fiber rolls, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
3	Are efforts being made to minimize the amount of soil exposed throughout the site?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
4	Are efforts being made to minimize the disturbance of steep slopes?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
5	Are perimeter controls and sediment barriers (e.g. silt fence) adequately installed (keyed into substrate) and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
6	Are storm drain inlets properly protected?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
7	Are discharge points and receiving waters free of sediment deposits? If no, provide locations.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
8	Is there evidence of sediment being tracked into the street?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
9	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected by natural buffers, barriers, or similar BMPs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
10	Are efforts being made to minimize soil compaction and preserve topsoil?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

	BMP/Activity	Implemented?	Maintained?	Corrective Action Needed & Notes
Soil Stabilization				
11	Are all slopes and disturbed areas not actively being worked properly stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Dewatering				
12	Are discharges from dewatering activities being managed by appropriate controls?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pollution Prevention Measures				
13	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
14	Are materials that are potential stormwater contaminants stored inside or under cover?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
15	Is trash/litter from work areas collected and placed in covered dumpsters?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
16	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
17	Are vehicle and equipment fueling, cleaning, material storage, and maintenance areas free of spills, leaks, or other harmful materials?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Surface Outlets and Miscellaneous				
18	When discharging from basins and impoundments, are outlet structures that withdraw water from the surface being used?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
19	Are there locations where additional BMPs appear to be necessary?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Describe any incidents of non-compliance not described above:				

Inspector's Signature _____

Date _____

DATE RECEIVED _____

CITY OF [NAME]
[NAME OF DEPARTMENT, IF APPLICABLE]
CONSTRUCTION STORMWATER MANAGEMENT PLAN REVIEW CHECKLIST

NAME OF PROJECT PROJECT FILE NO. ADDRESS

TOTAL PROJECT ACRES TOTAL DISTURBED ACRES

Latitude: Longitude:
GPS LOCATION OF CONSTRUCTION SITE

APPLICANT ADDRESS PHONE NUMBER

OWNER (If different from Applicant) ADDRESS PHONE NUMBER

Review History

First Review

Plan Received on: _____ Approved/Denied: _____
Review Completed on: _____ Comments: _____
Reviewed by: _____

Second Review

Plan Received on: _____ Approved/Denied: _____
Review Completed on: _____ Comments: _____
Reviewed by: _____

Third Review

Plan Received on: _____ Approved/Denied: _____
Review Completed on: _____ Comments: _____
Reviewed by: _____

REPORT OF TECHNICAL REVIEW

_____ The Construction Stormwater Management Plan for the above named project or activity **includes** the necessary components identified within the attached checklist.

_____ The Construction Stormwater Management Plan for the above named project or activity **does not include** the necessary components identified within the attached checklist through failure to include the following:

Review by: _____

Signature: _____

Date: _____

Project Name: _____

Applicant: _____

	Complete	Incomplete	N/A
General Information			
1. Describe the project location (address, parcel number, etc...)			
a. Description of project activity			
2. Areas (ac)			
a. Total disturbed area			
b. Existing impervious area			
3. Construction schedule/sequence			
4. Identify site features			
a. Limits of improvements relative to neighbors or a Vicinity Map			
b. Limits of clearing and grading			
c. Existing vegetation delineated			
d. Existing and proposed site topography			
e. Existing and proposed runoff direction			
f. Surface waters and storm conveyance systems within 200' of project			
g. Description of outfall and receiving surface waters			
h. Protection of waterways, receiving surface waters and natural resources			
i. Construction Stormwater Management Plan is phased with construction			
j. Stockpile locations, staging areas and access points defined			
k. Show all areas of construction, including but not limited to: structures, retaining walls, roads, drives, utilities, trenches, scaffolds, catch basins, etc.			
l. Description of site soil			
m. Description of watershed tributary to site			
5. Maintenance Plan for Control Facilities			
6. Copies of Design Waivers or Variances			
7. Copy of NOI and SWPPP as submitted to DEQ, if applicable			
Erosion and Sediment Controls			
1. Design considerations and erosion control BMPs are specified to:			
a. Control stormwater volume and velocity within the site to minimize soil erosion through use of controls such as check dams, fiber rolls, etc.			
b. Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion through use of controls such as stilling basins, fiber rolls, etc.			
c. Minimize the amount of soil exposed during construction activity			
d. Minimize the disturbance of steep slopes			

Project Name: _____

Applicant: _____

	Complete	Incomplete	N/A
Erosion and Sediment Controls (cont.)			
e. Minimize sediment discharges from the site through use of perimeter controls such as silt fence, fiber rolls, diversion berms, etc.			
f. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible			
g. Minimize soil compaction and, unless infeasible, preserve topsoil			
Soil Stabilization			
1. The following soil stabilization requirements are clearly communicated:			
a. Stabilization of disturbed areas must be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days			
b. If initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be specified			
Dewatering			
1. If applicable, discharges from dewatering activities are managed by appropriate controls such as sedimentation basins, sediment traps, etc. <i>Note: This does not preclude the contractor from the requirement to obtain a dewatering permit from MT DEQ.</i>			
Pollution Prevention Measures			
1. Pollution prevention measures are specified to:			
a. Specify treatment of wash waters in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge			
b. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to storm water			
c. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures			
Prohibited Discharges			
1. Wastewater from washout of concrete is prohibited or managed by appropriate controls			
2. A statement (or statements) which prohibit discharges of the following:			
a. Wastewater from washout and cleanout of stucco, paint, from release oils, curing compounds and other construction materials			
b. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance			
c. Soaps or solvents used in vehicle and equipment washing			
Surface Outlets			
1. When discharging from basins and impoundments, outlet structures that withdraw water from the surface are used (unless infeasible)			

Appendix F. MCM 5

DATE RECEIVED _____

CITY OF [NAME]
[NAME OF DEPARTMENT, IF APPLICABLE]
POST-CONSTRUCTION STORMWATER MANAGEMENT
PLAN REVIEW CHECKLIST

NAME OF PROJECT PROJECT FILE NO. ADDRESS

TOTAL PROJECT ACRES TOTAL DISTURBED ACRES

Latitude: Longitude:
GPS LOCATION OF CONSTRUCTION SITE

APPLICANT ADDRESS PHONE NUMBER

OWNER (If different from Applicant) ADDRESS PHONE NUMBER

Review History

First Review

Plan Received on: _____ Approved/Denied: _____
Review Completed on: _____ Comments: _____
Reviewed by: _____

Second Review

Plan Received on: _____ Approved/Denied: _____
Review Completed on: _____ Comments: _____
Reviewed by: _____

Third Review

Plan Received on: _____ Approved/Denied: _____
Review Completed on: _____ Comments: _____
Reviewed by: _____

REPORT OF TECHNICAL REVIEW

_____ The Stormwater Management Plan for the above named project or activity **includes** the necessary post-construction controls in order to comply with the State and local post-construction stormwater requirements (as identified within the attached checklist).

_____ The Stormwater Management Plan for the above named project or activity **does not include** the necessary post-construction controls in order to comply with the State and local post-construction stormwater requirements (as identified within the attached checklist) through failure to include the following:

Review by: _____

Signature: _____

Date: _____

Project Name: _____

Applicant: _____

	Complete	Incomplete	N/A
General Information			
1. Location			
a. Address, subdivision name, legal description, etc...			
2. Type of development (residential, commercial, etc...)			
3. Areas (ac)			
a. Total disturbed area			
b. Existing impervious area			
c. Post-development impervious area			
4. Drainage basin maps are provided which clearly label the following:			
a. Existing basin boundaries			
b. Existing time of concentration flowpaths for each basin			
c. Post-development basin boundaries			
d. Post-development time of concentration flowpaths for each basin			
e. Discharge location(s)			
f. Receiving waters within 200 feet of project are identified			
5. Montana Licensed Engineer Stamp			
Drainage Plan Content			
1. Topographic map of existing and finished grade contours at 2-foot max intervals			
2. Location of each permanent stormwater control			
3. Plan and profile of each permanent stormwater control			
4. Invert elevations, slopes, and lengths of storm drain facilities			
5. Size, types, invert elevations and lengths of all culverts and pipe systems			
6. Discharge points clearly labeled			
7. Receiving surface waters identified			
8. Existing on-site natural resources identified and protected			
9. FEMA floodplains identified			
Calculations and Design Documentation			
1. Hydrology calculations			
a. State runoff method used (rational, SCS, etc...)			
b. State modeling constants and assumptions			
c. Description of design storms (frequency, depth, duration)			
d. Existing and post-development land uses			

Project Name: _____

Applicant: _____

	Complete	Incomplete	N/A
Calculations and Design Documentation (Continued)			
e. Existing and post-development peak runoff rate for each design storm			
f. Existing and post-development runoff volume for each design storm			
2. Post-construction BMP sizing calculations			
a. State design requirements (0.5-inch requirement, TSS removal, or other)			
b. Required permanent controls capacities, flow rates, and operating levels			
c. Sizing calculations with results			
d. A statement documenting compliance with design requirements			
e. If 0.5-inch or TSS removal requirements are not met, provide documentation showing the impracticability of infiltration, evapotranspiration, capture for reuse, and treatment.			
3. Culvert and pipe system capacities and outlet velocities			
4. Ditch capacities and velocities			
Additional Information			
1. Permits, easements, setbacks, and discharge agreements			
2. Floodplain maps			
3. Operations and Maintenance Manual for each permanent stormwater control			
a. Identify the owner			
b. Identify the party responsible for long-term O&M			
c. A schedule of inspection and maintenance for routine and non-routine maintenance tasks to be conducted			
d. System failure and replacement criteria to define the structure's performance requirements			
4. Geotechnical Report			

CITY OF [NAME]
[NAME OF DEPARTMENT, IF APPLICABLE]
POST-CONSTRUCTION STORMWATER MANAGEMENT CONTROL
INSPECTION FREQUENCY DETERMINATION PROTOCOL

NAME OF STORMWATER CONTROL	PROJECT FILE NO.	ADDRESS
Latitude:	Longitude:	
GPS LOCATION		

RESPONSIBLE PARTY	PHONE NUMBER
--------------------------	---------------------

Template Instructions: The following template contains example criteria which may be used to prioritize post-construction stormwater management controls in order to determine inspection frequency. In accordance with the MS4 General Permit, high-priority sites are to be inspected annually, at a minimum. This template assumes that all other sites will be inspected at least once during the five year permit cycle. The criteria provided within the table below were taken directly from the General Permit (Part III.B.6.c.iii) and additional criteria can be added, if desired. Rating values have not been provided because it is expected that each MS4 will utilize different rating values; therefore, rating values should be selected to meet the needs of your MS4 system.

Instructions:

To determine the suggested inspection frequency of a given stormwater management control, begin by filling out the Post-Construction Stormwater Management Control Rating Table below and add up all of the applied ratings. Then utilize the Inspection Frequency Determination Table to determine the priority and minimum inspection frequency for the site.

Post-Construction Stormwater Management Control Rating Table

Criteria	Rating System	Rating Value	Applied Rating for Each Criteria
Pre-determined priority of the control (if applicable)	Non High-Priority	0	
	High-Priority	X	
Proximity to a surface water	1,000+ feet from site's outfall	X	
	200 to 1,000 feet from site's outfall	X	
	Direct discharge to surface water	X	
Drainage Area Treated	Less than X acre(s)	X	
	X to Y acres	X	
	Y+ acres	X	
Land Use Type	Residential	X	
	Commercial	X	
	Industrial	X	
	[other]	X	
Discharge to a waterbody impaired for pollutants expected from stormwater runoff	No	X	
	Yes	X	
[other]		X	
		X	
		X	

Total = _____

The total of all the ratings will indicate the priority of the inspection for this construction site. The following is a suggested template which could be used to define inspection frequency based on site priority:

Inspection Frequency Determination Table

Total Rating Value	Priority	Inspection Frequency ⁽¹⁾
0 to X	Low	1. Once every X year(s)
		2. [additional criteria if desired, e.g. after snowmelt, rain event, etc...]
		3.
X to Y	Medium	1. Once every X year(s)
		2. [additional criteria if desired, e.g. after snowmelt, rain event, etc...]
		3.
Y to Z	High	1. Once each year
		2. [additional criteria if desired, e.g. after snowmelt, rain event, etc...]
		3.

⁽¹⁾Note: Consult the Operation and Maintenance (O&M) Plan/Manual for the given stormwater management control for additional inspection frequency requirements or recommendations. Compare O&M Manual/Plan to the results of the above table and select the inspection frequency which is more frequent for the given control.

Inspection Frequency for Post-Construction Stormwater Management Control

Site Priority: _____

Inspection Frequency:

POST-CONSTRUCTION STORMWATER MANAGEMENT CONTROL INSPECTION FORM

General Information	
Site Name (if Applicable):	Type of Control:
Location:	
Site Owner:	Phone Number:
Responsible Party:	Phone Number:
Date of Inspection:	Start/End Time:
Inspector's Name:	Inspector's Title:
Inspector's Contact Information (phone):	
Type of Inspection: <input type="checkbox"/> Routine, Dry Weather <input type="checkbox"/> Routine, Wet Weather <input type="checkbox"/> Complaint Response <input type="checkbox"/> Other _____	
Weather Information	
Weather at time of this inspection: <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Raining <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds <input type="checkbox"/> Other: _____ Temperature: _____	
Do you suspect that any physical changes or damages to the stormwater management control may have occurred since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Are there any stormwater discharges at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide location(s) and a description of stormwater discharged from the site (presence of suspended sediment, turbid water, discoloration and/or oil sheen, odor, etc...)	
Prohibited Discharges	
Are there any prohibited discharges at the time of inspection and/or any signs of prohibited discharges since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide location(s) and a description:	

	Desired Conditions	Findings	Corrective Action Needed & Notes
1	There is no excessive sediment deposition.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
2	Slopes are well stabilized and are not contributing sediment to the stormwater management control.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
3	There is no scour in swales or other vegetated areas.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
4	Trash racks, inlets, outlets, and low flow orifices are clear of trash, debris, and sediment.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
5	There is no woody vegetation impeding the performance of any structural component of the stormwater management control.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
6	Outfall structures do not show signs of settling, cracking, bulging, misalignment or other structural deterioration.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
7	Embankments, emergency spillways, side slopes or inlet/outlet structures show no signs of erosion.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
8	Pipes going into and/or out of any stormwater management control are unclogged and unobstructed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
9	There is no evidence of animal burrows.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
10	There is no trash or debris in the stormwater management control.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
11	There are no encroachments on the stormwater management control.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

	Desired Conditions	Findings	Corrective Action Needed & Notes
12	All necessary repairs to safety devices such as fences, gates, covers or locks are complete.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
13	There is not excessive algae or vegetation in the pond/ditch.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
14	The ground surface stabilization is retaining any highly erosive or unstable soils, seed germination is being properly facilitated, and any netting or blankets are properly fastened to obtain full contact with the ground.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
15	Stormwater control appears to be functioning properly.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
16	Are there locations where additional stormwater management controls appear to be necessary?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
17	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Describe any incidents of non-compliance or need for maintenance not described above:			
Follow-up inspection required? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Inspector's Signature

Date

**CITY OF [NAME]
 [NAME OF DEPARTMENT, IF APPLICABLE]
 OFFSITE TREATMENT EVALUATION FORM**

Template Instructions: In accordance with the MS4 General Permit, each MS4 must develop criteria to be considered before allowing offsite stormwater treatment for new and redevelopment projects which are subject to Part III.B.6.b.iv of the Permit. The following template contains example criteria which may be used to evaluate projects for eligibility to utilize offsite treatment. The process, criteria, and other considerations provided within the template are provided as examples and should be modified and/or expanded upon to meet the MS4's specific needs and goals.

Project Information	
Project name:	
Description of work:	
Subdivision name (if applicable):	
Site area (acres):	Impervious surface created or altered (acres):
Runoff reduction volume (acre feet):	Runoff reduction flow (cfs):
Project classification (check all that apply):	
<input type="checkbox"/> New Development	<input type="checkbox"/> Redevelopment
<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial
Regional Facility Considerations	
Basin name:	
Regional treatment facility to be utilized:	
Design capacity of regional treatment facility:	
Does the regional treatment facility have adequate capacity? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Technical Considerations	
Topography (Steep Slopes) <input type="checkbox"/> Yes <input type="checkbox"/> No	Space available <input type="checkbox"/> Yes <input type="checkbox"/> No
Soil infiltration rate <input type="checkbox"/> Yes <input type="checkbox"/> No	Shallow bedrock <input type="checkbox"/> Yes <input type="checkbox"/> No
Contaminated soils <input type="checkbox"/> Yes <input type="checkbox"/> No	Prohibitive costs <input type="checkbox"/> Yes <input type="checkbox"/> No
High groundwater <input type="checkbox"/> Yes <input type="checkbox"/> No	Down-gradient structures <input type="checkbox"/> Yes <input type="checkbox"/> No
City code/ordinance <input type="checkbox"/> Yes <input type="checkbox"/> No	Community development rules <input type="checkbox"/> Yes <input type="checkbox"/> No
Water quality benefits <input type="checkbox"/> Yes <input type="checkbox"/> No	[Insert Other] <input type="checkbox"/> Yes <input type="checkbox"/> No
Additional Information	

Appendix G. MCM 6

Draft Inventory of City Facilities

Facility	Department	Position	Potential to Release contaminants	Contaminants	Water Quality Pond
Waste Water Treatment Plant	Public Works	Mark Fitzwater			
Missouri River Water Treatment Plant	Public Works	Jason Fladland			
Ten Mile Water Treatment Plant	Public Works	Jason Fladland			
Fleet Maintenance Facility	Public Works	Ben Sautter			
Parks and Open Space Facility	Parks and Recreation	Craig Marr			
Solid Waste Transfer Station	Public Works	Pete Anderson			
Utility Maintenance Facility	Public Works	Kevin Hart			
City Owned Buildings - Various	Community Facilities	Gery Carpenter			
Activity					
Parks Operation and Maintenance	Parks and Recreation	Craig Marr			
Building Operation and Maintenance	Community Facilities	Gery Carpenter			
Open Space Operation and Maintenance	Parks and Recreation	Brad Langsather			
Right-of-Way Operation and Maintenance	Public Works	Ben Sautter			

Appendix H. ERP

Instructions for use: The following template provides a suggested framework for a municipal stormwater program Enforcement Response Plan. Italics red colored text is provided as suggested instructions and is intended to be deleted when the ERP is complete. Blue colored text is provided as example text and should be modified to meet each MS4s needs.

ENFORCEMENT RESPONSE PLAN FOR STORMWATER MANAGEMENT WITHIN THE CITY OF HELENA, MONTANA

December 2016

Introduction

In accordance with the General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer System (MS4), issued by the Montana Department of Environmental Quality (DEQ), the City of Helena is required to develop and implement an Enforcement Response Plan (ERP) to ensure compliance with stormwater regulations. The purpose of this ERP is to specify criteria by which City personnel can determine the enforcement action most appropriate to instances of non-compliance and communicate how the enforcement tools available to City personnel will be used to achieve compliance following violations of the City's stormwater regulations. This document addresses the Montana DEQ MS4 General Permit's ERP requirements for the following Minimum Control Measures (MCM's):

- MCM 4: Illicit Discharge Detection and Elimination
- MCM 5: Construction Site Storm Water Management
- MCM 6: Post-Construction Site Storm Water Management in New and Redevelopment

The enforcement actions and procedures within this plan are generally applicable to each of the three MCMs listed above; however, enforcement actions and procedures which are specific to an individual MCM are addressed within the attachments, listed as follows:

- Attachment A: Illicit Discharge Detection and Elimination
- Attachment B: Construction Site Storm Water Management
- Attachment C: Post-Construction Site Storm Water Management in New and Redevelopment

The procedures within this ERP have been developed with the following objectives in mind:

- Prevent pollutants from entering the MS4 and causing environmental harm.
- Communicate definitions for non-compliance.
- Establish appropriate enforcement action based on the nature and severity of the violation.
- Promote consistent and timely use of enforcement tools.
- Ensure that violators return to compliance in a timely manner.
- Recover costs incurred by the City due to operator non-compliance.
- Promote compliance through education and compliance assistance first and, if necessary, penalties second.

The City of Helena has the authority to enforce stormwater regulations under Title 6: Public Utilities, Chapter 6: Stormwater Control of its municipal code which covers:

- Illicit Discharge Detection and Elimination under 6-6-10
- Construction Site Storm Water management under 6-6-15
- Post-Construction Site Storm Water Management under 6-6-15
- *Enforcement under 6-6-24*

A complete copy of the City Code regulating stormwater is included in Appendix C of the Storm Water Management Plan.

Acronyms

The following acronyms shall have the following meaning:

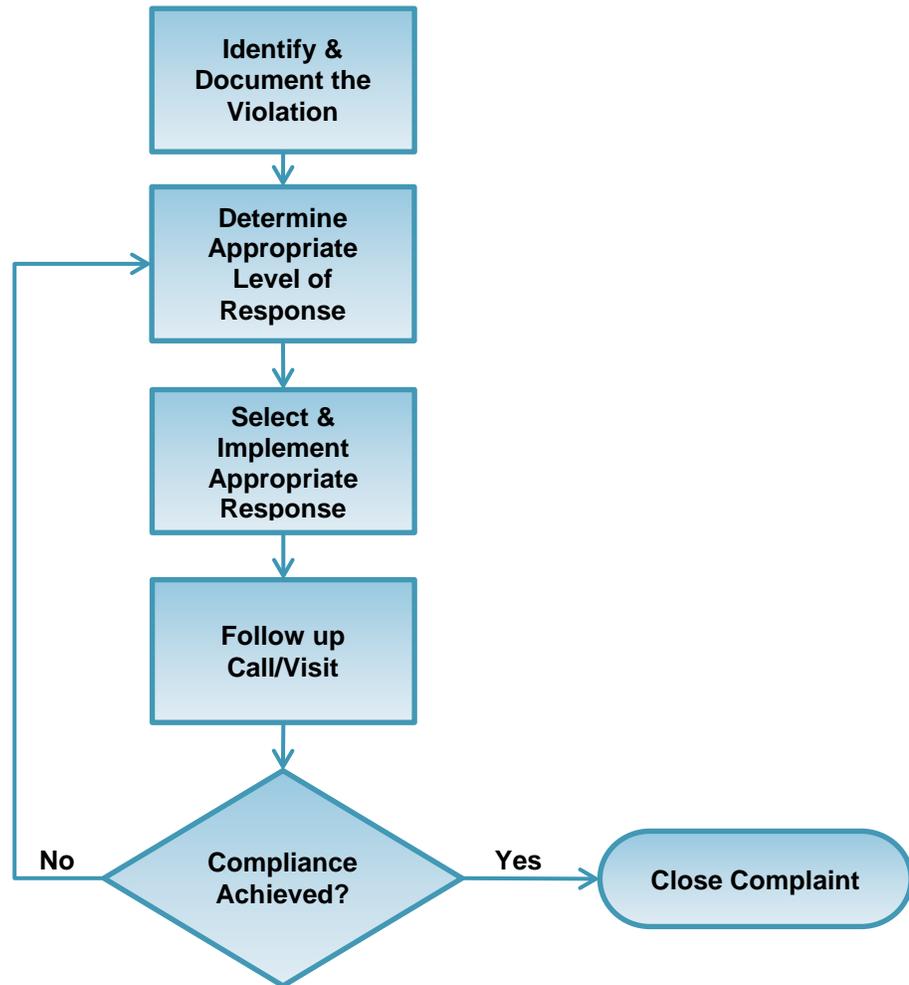
DEQ	Department of Environmental Quality
ERP	Enforcement Response Plan
MCM	Minimum Control Measure
MS4	Municipal Separate Storm Sewer System
NOV	Notice of Violation

SWO Stop Work Order

1. Enforcement Response Plan Overview

The enforcement process consists of six basic steps beginning with identification of a violation and concluding with closing the complaint. The overall process is shown within the flowchart below and is further explained within the following sections.

Enforcement Response Flowchart for the City of Helena Stormwater Management Program



2. Determining the Appropriate Level of Response

Once a potential violation is identified, the appropriate level of response should be determined and an appropriate response remedy should then be selected. The City has five levels of responses, each of which is briefly described below.

2.1 Level 1: No Enforcement Action

There may be situations where city personnel are made aware of a potential violation; however, sufficient evidence does not exist to prove a violation is taking place. An example of such situation may be if a complaint is received stating that a private stormwater control has not been properly maintained; however, after a brief site inspection and/or verbal discussion, the City staff determines the stormwater control is within compliance and no enforcement action is required. In such situations

the potential violation and response should be documented using the [Enforcement Response Documentation Form \(Attachment D\)](#) so that it can be referenced in the future, if necessary.

2.2 Level 2: Informal Response

The City will pursue compliance to stormwater violations through informal methods whenever reasonable. Informal responses include [telephone notification](#), [verbal notice or meeting](#). These methods are appropriate for [situations where education is needed, violations do not pose a significant threat to human health or the environment, or the City believes that compliance can be achieved without the use of formal measures](#). In addition, implementation of informal measures often establishes the documentation necessary to implement formal enforcement actions if informal measures do not result in compliance.

i.) Telephone Notification/Verbal Notice

A telephone notification or verbal notice will be used to [obtain additional information pertaining to a potential violation or to resolve an infrequent violation](#). The initial contact will take place within [\[insert time in days or hours\]](#) of determining a potential violation. At a minimum, the conversation shall be documented with the following information: [date/time call placed, the City staff member who initiated contact, the person contacted \(responsible party\), and the content of the conversation](#).

ii.) Meetings

A meeting will be requested with the responsible party when [\[insert situations which warrant a meeting\]](#). The meeting will serve to [educate the responsible party regarding the violation and to discuss measures which shall be taken to correct the violation](#). The meeting will be conducted by [\[insert staff position/personnel\]](#). At a minimum, the meeting shall be documented with the following information: [meeting location, date/time of meeting, meeting attendees, content of the conversation, and agreements made at the meeting](#).

2.3 Level 3: Civil Enforcement

Whenever the City of Helena finds that a person has violated a prohibition or failed to meet a requirement of the Helena Stormwater Control Chapter, the City of Helena may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

1. The performance of monitoring, analyses, and reporting;
2. The elimination of illegal connections or discharges;
3. That violating discharges, practices, or operations shall cease and desist;
4. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
5. Payment of restitution for remediation costs;
6. The implementation of source control or treatment BMPs; and
7. The cessation of any construction or postconstruction work not permitted according to this chapter.

B. If abatement of a violation or restoration of affected property is required, the notice will set forth a deadline within which such remediation or restoration must be completed. Said notice will further advise that, should the violator fail to remediate or restore within the established deadline, the work may be done by the city and the expense thereof may be levied against the real property of the violator.

C. If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, then the department may enter upon the subject private property and is authorized to take any and all measures necessary to abate the violation or restore the property. The total cost thereof may be assessed against the real property of the violator in the same manner as a property tax. It is unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the department or designated contractor to enter upon the premises for the purposes set forth above. (Ord. 3120, 12-21-2009)

i.) Administrative Order

An administrative order is a formal enforcement document which requires the responsible party to either cease the specified activity or implement specified corrective measures. An administrative order **will be issued when informal remedies have been pursued and have not resulted in compliance.**

ii.) Notice of Violation

A NOV is an official communication from the City to the responsible party which informs the party that a violation has occurred. It will be issued for **relatively minor or infrequent violations of the City's stormwater ordinances and requirements.** It is a prompt response to violations and documents the initial attempts of the City to resolve the violation.

The NOV will include the following information: **the specific violation, photos (if possible), timeframe and actions required to return to compliance, and a warning that further enforcement action may be taken for failure to comply.**

NOV's shall be sent via certified mail/return receipt or hand delivered and signed by the responsible party within **[# of days]** working days after discovery of the violation.

iii.) Permit Denials

Permits denials will be implemented for situations involving construction site stormwater violations. Permits will be denied for situations where **[insert situations which warrant permit denials]**. The following is a list of permits which may be denied as a result of violation of the City's stormwater management requirements: **[insert applicable permits here]**.

iv.) Stop Work Order

A SWO is applicable to construction site stormwater management violations. It is a notice which informs the construction site operator that a stormwater management violation is ongoing and work is not allowed to continue until the matter is resolved. **The SWO will be issued for failure to comply with a NOV or for significant violations of the City's construction site stormwater requirements that require immediate action.** The SWO will include the following information: **the specific violation, contact information for the City personnel who must be contacted to discuss required remediation procedures, the timeframe for which the City must be contacted to discuss the situation, and a warning which notifies the site operator that failure to comply will result in formal enforcement actions.**

v.) Compliance Schedule

A compliance schedule directs the responsible party to address the violation and restore compliance by a specified date. A compliance schedule will be issued when **[insert situations which warrant issuance of a compliance schedule]**. The order will include the following: **the specific violation, noncompliance (document the City's previous attempts to achieve compliance), state required actions to be completed by the responsible party, and the dates by which the actions must be completed to return to compliance.**

Note that issuance of a compliance schedule does not necessarily relieve the responsible party of having to meet any existing stormwater control commitments, nor protect the responsible party from having additional fines levied for other violations during the compliance schedule period.

vi.) Order to Show Cause

An OSC directs the responsible party to appear before the **[insert appropriate authority here]** to explain its noncompliance and show cause why more severe enforcement actions should

not be pursued. An OSC will be issued when *[insert situations which warrant issuance of an OSC]*.

vii.) Monetary Penalty

An administrative fine is a monetary penalty assessed by the City to the responsible party for a violation of the City's stormwater management requirements.

Additional suggested text is as follows:

The fine is considered punitive in nature and is not related to any specific cost borne by the City. The amount of the fine will be proportional to the harm caused by the violation. The City will also recover damages to its MS4 or for the cost of fixing/maintaining stormwater infrastructure as stated in Section X.X of the Municipal Code.

Or, it may be more appropriate to provide a list or table of violations with the corresponding monetary value of the fine to be issued.

viii.) Suspend Service

The City has the authority to *[insert service(s) which could be suspended as a result of violations. Note that this penalty may not be applicable to all stormwater related violations]*. These actions will be used against a responsibly party which fails to comply with previous remedies, or to prevent or stop discharges that are considered to pose an immediate or serious hazard or significant environmental damage.

2.4 Level 4: Criminal Enforcement

Violations of this chapter may also subject the violator to a fine in any sum not to exceed five hundred dollars (\$500.00), or imprisonment in the county jail for a period not to exceed thirty (30) days, or both such fine and imprisonment. The department may recover all attorney fees, court costs, and other expenses associated with enforcement of this chapter, including sampling and monitoring expenses. (Ord. 3120, 12-21-2009)

i.) Civil Penalties

If necessary, a civil suit *will be used to recover costs borne by the City in responding to the responsible party's noncompliance.*

ii.) Criminal Penalties

Criminal prosecution is a formal process of charging the responsible party with violations of ordinance provisions that are punishable, upon conviction, by fines and/or imprisonment. Criminal prosecution will be pursued when when *[discuss appropriate situations]*.

2.5 Level 5: Referral to Other Agencies

Describe when referral to other agencies (i.e. Montana DEQ) would be appropriate based on the local enforcement procedures and levels of authority.

2.6 Additional Considerations

The following criteria will be considered to aid in determining the correct level of response:

i.) Magnitude

A minor isolated instance of non-compliance will typically be considered non-significant and addressed with informal responses; however, isolated incidents which may cause damage to the MS4 or pose a threat to human health and/or the environment will be considered significant and necessitate a formal enforcement action.

ii.) Duration

Regardless of magnitude, violations which continue over prolonged periods of time will result in escalated enforcement actions.

iii.) Compliance History

The responsible party's compliance history will be an important factor in determining the appropriate remedy to apply. The City has the authority to issue informal notices for the less severe violation if the responsible party has a good compliance history; however, recurring violations may lead the City to escalate the level of response in a shorter time-frame than usual.

iv.) Good Faith of the Operator

Good Faith is a characteristic of actions which show that the responsible party is intending to achieve compliance in a timely manner. If the responsible party is attempting in good faith to correct the violation the City's enforcement responses may be less severe; however, potential threats to human health and the environment will always take precedence when considering whether or not to base the City's level of response on the good faith of the responsible party.

In addition, while the responsible party's good faith in correcting its noncompliance may be a factor in determining which enforcement response is suitable, good faith does not preclude the responsible party from enforcement action.

3. Enforcement Roles and Responsibilities

Define staff responsibilities and identify staff positions with enforcement authority (i.e. identify the following: who initiates the first step in the enforcement/response process, who is responsible for informal actions, formal actions, and judicial actions, etc...). Example text is as follows; however, it may also be appropriate to create a table or list which identifies each position/staff member and the role that he/she is responsible for within the enforcement response process.

All significant violations and the responses shall be reported to the Storm Water Program Manager and/or the Public Works Director. The Public Works Director and City Attorney will be copied on all formal Enforcement Responses. The Public Works Director will consult with the City Attorney and City Administrator in Judicial Actions.

4. Escalation Process and Schedule for Construction Site Violations

The common violations and enforcement response schedules differ for each MCM; therefore, refer to the following attachments for this information:

- Attachment A: Illicit Discharge Detection and Elimination
- Attachment B: Construction Site Storm Water Management
- Attachment C: Post-Construction Site Storm Water Management in New and Redevelopment

Glossary of Terms

Modify the following glossary of terms and definition as necessary.

Administrative Fine - A monetary penalty assessed by the City to the responsible party for a violation of the City's stormwater management requirements.

Administrative Order - A formal enforcement document which requires the responsible party to either cease the specified activity or implement specified corrective measures.

Compliance Schedule - A schedule of required activities necessary for a responsible party to achieve compliance with specified stormwater program requirements.

Consent Decree - An agreement between the City and the responsible party reached after a lawsuit has been filed.

Criminal Prosecution - A formal process of charging the responsible party with violations of ordinance provisions that are punishable, upon conviction, by fines and/or imprisonment.

Good Faith Effort - A characteristic of actions which show that the responsible party is intending to achieve compliance in a timely manner.

Injunctive Relief - A court order which directs the responsible party to cease a specified action or behavior.

Judicial Action - An enforcement action that involves a court. (The action may either be civil or criminal in nature).

Notice of Violation - An official communication from the City to the responsible party which informs the party that a violation has occurred.

Responsible Party – The person or organization responsible for a violation.

Order to Show Cause - An administrative order directing the responsible party to appear before the *[insert appropriate authority here]* to explain its noncompliance and show cause why more severe enforcement actions should not be pursued.

ATTACHMENT A

ESCALATION PROCESS AND SCHEDULE FOR ILLICIT DISCHARGE VIOLATIONS

Table's A-1 and A-2 below provide typical responses to common illicit discharge violations and a typical schedule for escalation of enforcement actions. The City understands that each violation has unique circumstances and concerns; therefore, the tables below will serve as guidance only. Violations which a pose a significant threat to human health and/or the environment will utilize more severe enforcement actions on a compressed timeframe in order to quickly eliminate the violation, abate any damages, and prevent recurrence.

Modify and complete Table's A-1 and A-2 below to communicate the enforcement escalation process and schedule to be utilized to quickly and consistently eliminate illicit discharge violations within your MS4.

Table A-1: Common Illicit Discharge Violation Responses

Violation	Circumstances of Violation	Initial Level of Response	Initial Response Remedy
<i>List common illicit discharge violations. Example below.</i>	<i>Multiple circumstances may exist for certain violations.</i>	<i>List the appropriate level of response for the violation: No action, informal, formal, judicial, or referral to other agencies</i>	<i>Identify the appropriate remedy for the violation.</i>
Dumping household toxins in a storm drain	Isolated incident	Informal	Telephone notification
	Repeat violation	Formal	Monetary penalty

Table A-2: Escalation Process, Response Schedule, and Responsibilities for Illicit Discharge Violations

Response	Time Frame	Responsibility
<i>List formal, informal, and judicial remedies to be used by the City. An example schedule is provided below.</i>	<i>e.g. within 24 hours of violation, within 3-days of inspection, etc...</i>	<i>List staff responsible for selected response</i>
Telephone Notification	Within [#] hours of determining a potential violation	[Staff member/position(s)]
Notice of Violation	Within [#] days of violation	[Staff member/position(s)]
Compliance Schedule	Within [#] days of violation	[Staff member/position(s)]
Monetary Penalty	Within [#] days of violation	[Staff member/position(s)]
Judicial Actions	As deemed appropriate by [Staff member/position(s)]	[Staff member/position(s)]
Referral to other agencies	As deemed appropriate by [Staff member/position(s)]	[Staff member/position(s)]

ATTACHMENT B

ESCALATION PROCESS AND SCHEDULE FOR CONSTRUCTION VIOLATIONS

Table's B-1 and B-2 below provide typical responses to common construction site violations and a typical schedule for escalation of enforcement actions. The City understands that each violation has unique circumstances and concerns; therefore, the tables below will serve as guidance only. Violations which pose a significant threat to human health and/or the environment will utilize more severe enforcement actions on a compressed timeframe in order to quickly eliminate the violation, abate any damages, and prevent recurrence.

Modify and complete Table's B-1 and B-2 below to communicate the enforcement escalation process and schedule to be utilized to quickly and consistently eliminate construction site violations within your MS4.

Table B-1: Common Construction Site Stormwater Violation Responses

Violation	Circumstances of Violation	Initial Level of Response	Initial Response Remedy
<i>List common construction site stormwater violations. Example below.</i>	<i>Multiple circumstances may exist for each violation.</i>	<i>List the appropriate level of response for the violation: No action, informal, formal, judicial, or referral to other agencies</i>	<i>Identify the appropriate remedy for the violation.</i>
Conducting earth disturbing activities without construction stormwater management permit	Operator is unaware of requirements	Informal	Telephone notification
	operator is aware but has chosen not to obtain appropriate permit	Formal	Stop work order

Table B-2: Escalation Process, Response Schedule, and Responsibilities for Construction Site Stormwater Violations

Response	Time Frame	Responsibility
<i>List formal, informal, and judicial remedies to be used by the City. An example schedule is provided below.</i>	<i>e.g. within 24 hours of violation, within 3-days of inspection, etc...</i>	<i>List staff responsible for selected response</i>
Telephone Notification	Within [#] hours of determining a potential violation	[Staff member/position(s)]
Notice of Violation	Within [#] days of violation	[Staff member/position(s)]
Stop Work Order	Within [#] days after NOV	[Staff member/position(s)]
Compliance Schedule	Within [#] days of violation	[Staff member/position(s)]
Monetary Penalty	Within [#] days of violation	[Staff member/position(s)]
Judicial Actions	As deemed appropriate by [Staff member/position(s)]	[Staff member/position(s)]
Referral to other agencies	As deemed appropriate by [Staff member/position(s)]	[Staff member/position(s)]

ATTACHMENT C

ESCALATION PROCESS AND SCHEDULE FOR POST-CONSTRUCTION STORMWATER MANAGEMENT VIOLATIONS

Table's C-1 and C-2 below provide typical responses to common post-construction stormwater management violations and a typical schedule for escalation of enforcement actions. The City understands that each violation has unique circumstances and concerns; therefore, the tables below will serve as guidance only. Violations which pose a significant threat to human health and/or the environment will utilize more severe enforcement actions on a compressed timeframe in order to quickly eliminate the violation, abate any damages, and prevent recurrence.

Modify and complete Table's C-1 and C-2 below to communicate the enforcement escalation process and schedule to be utilized to quickly and consistently eliminate post-construction stormwater management violations within your MS4.

Table C-1: Common Post-Construction Stormwater Management Violation Responses

Violation	Circumstances of Violation	Initial Level of Response	Initial Response Remedy
<i>List common post-construction stormwater violations. Example below.</i>	<i>Multiple circumstances may exist for certain violations.</i>	<i>List the appropriate level of response for the violation: No action, informal, formal, judicial, or referral to other agencies</i>	<i>Identify the appropriate remedy for the violation.</i>
Failure to maintain a post-construction stormwater control	Isolated incident	Informal	Telephone notification
	Repeat violation	Formal	Monetary penalty

Table C-2: Escalation Process, Response Schedule, and Responsibilities for Post-Construction Stormwater Management Violations

Response	Time Frame	Responsibility
<i>List formal, informal, and judicial remedies to be used by the City. An example schedule is provided below.</i>	<i>e.g. within 24 hours of violation, within 3-days of inspection, etc...</i>	<i>List staff responsible for selected response</i>
Telephone Notification	Within [#] hours of determining a potential violation	[Staff member/position(s)]
Notice of Violation	Within [#] days of violation	[Staff member/position(s)]
Compliance Schedule	Within [#] days of violation	[Staff member/position(s)]
Monetary Penalty	Within [#] days of violation	[Staff member/position(s)]
Judicial Actions	As deemed appropriate by [Staff member/position(s)]	[Staff member/position(s)]
Referral to other agencies	As deemed appropriate by [Staff member/position(s)]	[Staff member/position(s)]

**ATTACHMENT D
ENFORCEMENT RESPONSE DOCUMENTATION FORM**

City Personnel Involved _____ Date _____

Description of Violation _____

Location of Violation (address) _____

() -

Responsible Party _____ Telephone _____

Street _____ City _____ Zip _____

Description of Violation:

Level of Response _____ Selected Remedy _____ Date for Follow-Up _____

Additional Notes:

Appendix I. City Storm Water Ordinance

Chapter 6 STORMWATER CONTROL

6-6-1: TITLE:

This chapter may be cited as the *HELENA STORMWATER CONTROL CHAPTER*. (Ord. 3120, 12-21-2009)

6-6-2: PURPOSE:

The purpose of this chapter is to provide for the health, safety, and general welfare of the citizens of the city of Helena by protecting water quality through the regulation of nonstormwater discharges to the stormwater drainage system to the maximum extent practicable as required by federal and state law. This chapter establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the Montana pollutant discharge elimination system (MPDES) permit process. The objectives of this chapter are:

- A. To regulate the contribution of pollutants to the municipal separate storm sewer system from stormwater discharges by any user.
- B. To prohibit illegal connections to and discharges into the municipal separate storm sewer system.
- C. To establish legal authority to carry out all inspection, surveillance, and monitoring procedures necessary to ensure compliance with this chapter.
- D. To establish legal authority to develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects. (Ord. 3120, 12-21-2009)

6-6-3: DEFINITIONS:

For purposes of this chapter, the following definitions apply:

BEST MANAGEMENT PRACTICES (BMPs): Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

CONSTRUCTION ACTIVITY: Development and redevelopment projects resulting in any land disturbance including, but not limited to, clearing and grubbing, grading, excavating, and demolition.

DEPARTMENT: City of Helena public works department.

DETENTION/RETENTION BASINS: A normally dry area designed to capture and hold stormwater. The stormwater may be captured and released at a uniform rate after the storm peak flow has passed (detention) or the stormwater may be held for evaporation or infiltration into the ground and not released at all (retention).

DISCHARGE: Any direct or indirect nonstormwater discharge to the storm drain system.

HAZARDOUS MATERIALS: Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. This includes materials defined as hazardous by the United States environmental protection agency and the Montana department of environmental quality.

ILLEGAL CONNECTIONS: Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including, but not limited to, any conveyances that allow any nonstormwater discharge, including sewage, processed wastewater, and wash water to enter the storm drain system, and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drains or connections had been previously allowed, permitted, or approved by the department, or any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records, and approved by the department.

INDUSTRIAL ACTIVITY: Activities subject to MPDES industrial permits as defined in 40 CFR, section 122.26(b)(14).

MS4: The municipal separate storm sewer system including stormwater drainage facilities and system.

MANMADE DRAINAGEWAY: An open channel designed to carry stormwater.

MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES) STORMWATER DISCHARGE PERMIT: A permit issued by the Montana department of environmental quality that authorizes the discharge of pollutants to surface waters of the United States, whether the permit is applicable on an individual, group, or general areawide basis. Also includes permits issued by the United States environmental protection agency.

NATURAL DRAINAGEWAY: A recognizable drainage which has historically carried storm or runoff water. The drainageway may still be in its native state or may be partially or totally encroached upon. The limits of the drainageway are considered to be the outermost area of flow for the design storm or the prescribed easement for

the drainageway.

NONSTORMWATER DISCHARGE: Any discharge to the storm drain system that is not composed entirely of stormwater.

PERSON: Any individual, association, organization, partnership, firm, corporation or other entity recognized by law.

POLLUTANT: Anything which causes or contributes to pollution. Pollutants may include, but are not limited to, paints, varnishes, and solvents; oil and other automotive fluids; nonhazardous liquid and solid wastes; and refuse, rubbish, garbage, litter, or other discarded or abandoned objects and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous materials and wastes; sewage, fecal coliform, and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

PREMISES: Any building, lot, parcel of land, or portion of land, whether improved or unimproved, including adjacent sidewalks and parking strips.

STORM DRAINAGE SYSTEM OR FACILITIES: City owned or controlled facilities that are part of the MS4 by which stormwater is collected or conveyed, including, but not limited to, any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and humanmade or altered drainage channels, reservoirs, and other drainage structures.

STORMWATER: Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

STORMWATER POLLUTION PREVENTION PLAN: A written document which describes the best management practices and activities to be implemented by a person to identify sources of pollution or contamination at a site, and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, or receiving waters to the maximum extent practicable.

STORMWATER UTILITY: A funding mechanism for maintenance and operation of, as well as capital improvements to, the stormwater drainage system. The utility is a user fee charged equitably to all property within the service area which benefits from the utility.

WASTEWATER: Any water or other liquid, other than uncontaminated stormwater, discharged from a facility. (Ord. 3120, 12-21-2009)

6-6-4: APPLICABILITY:

This chapter applies to all water entering the city's separate stormwater system that is generated on any developed and undeveloped land. (Ord. 3120, 12-21-2009)

6-6-5: STORMWATER UTILITY SERVICE AREA:

The stormwater utility service area is inclusive of all premises annexed to the city and bounded by the incorporated city limits as the same may be adjusted by the city commission.

The city reserves the right to plan for drainage improvements outside the service area. The city may also construct storm drainage improvements out of the service area when needed as an integral part of the storm drain facilities located within the service area. (Ord. 3120, 12-21-2009)

6-6-6: RESPONSIBILITY FOR ADMINISTRATION:

The department shall administer, implement, and enforce the provisions of this chapter. Any powers granted or duties imposed upon the department may be delegated by the department to persons or entities acting in the beneficial interest of or in the employ of the city. (Ord. 3120, 12-21-2009)

6-6-7: COOPERATION WITH THE COUNTY:

The city shall, in all ways and within the limits of its powers, solicit the county to cooperate in providing drainage facilities in stormwater basins, or parts thereof, extending outside the city and, in general, to carry out the drainage plan developed therein. (Ord. 3120, 12-21-2009)

6-6-8: STORM DRAINAGE MASTER PLAN:

The storm drainage master plan prepared by Stahley and Wright-McLaughlin Engineers and dated April 9, 1980, as well as the application updates of the Davis Gulch Basin dated May 1985, prepared by Robert Peccia and Associates, and the updates of the Last Chance Gulch Basin, Bull Run Basin and West Area Basin prepared by Stahley Engineering and Associates, dated May 1989, are hereby adopted by reference and declared to be part of this chapter. The plans are on file in the office of the city engineer. The city may adopt additional master drainage plan updates by reference and declare them to be a part of this chapter, and copies of such master drainage plan updates shall be on file in the office of the city engineer. Modifications of the plans may be initiated by the department and submitted to the city commission for approval. Approved modifications are to be filed in the office of the city engineer. (Ord. 3120, 12-21-2009)

6-6-9: ULTIMATE RESPONSIBILITY:

The standards set forth herein and promulgated pursuant to this chapter are minimum standards; therefore, this chapter does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, or unauthorized discharge of pollutants. (Ord. 3120, 12-21-2009)

6-6-10: PROHIBITION OF ILLEGAL DISCHARGES:

- A. A person may not discharge or cause to be discharged into the MS4 any materials, including, but not limited to, pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards or that could cause the city to be in violation of its MPDES phase II permit, other than stormwater. Any such prohibited discharge is an illegal discharge.
- B. The commencement, conduct, or continuance of any illegal discharge to the MS4 is prohibited except as follows:
1. Water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising groundwater, groundwater infiltration to storm drains, uncontaminated and pumped groundwater, foundation or footing drains (not including active groundwater dewatering systems), springs, noncommercial washing of vehicles, natural riparian habitat or wetland flows, firefighting activities, routine street and utility maintenance, including chip sealing and spreading of gravel and other materials necessary to provide safe streets, and any other water source not containing pollutants;
 2. Discharges specified in writing by the department as being necessary to protect public health and safety;
 3. Any nonstormwater discharge permitted under an MPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the federal environmental protection agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system; and
 4. Other nonstormwater discharges which are not a source of pollutants to the city's MS4 or waters of the United States and are exempted in writing by the department.
- C. It is unlawful to introduce hazardous materials into any drainage system. The originator of any hazardous material spill or introduction is responsible for the material, and shall pay all applicable investigation and cleanup costs, including the cost of equipment, materials, staff time with fringes, and consultant charges.
- D. The city may use available and reasonable testing to identify the source of an illegal discharge including, but not limited to, visual inspections, sample collection and testing, dye testing, and smoke testing. (Ord. 3120, 12-21-2009)

6-6-11: DRAINAGEWAY PROTECTION:

- A. It is unlawful to encroach upon natural or manmade drainageways with:
1. Temporary or permanent structures not approved by the city manager; or
 2. Fill material or other material obstructing or restricting natural stormwater flow.
- B. Natural or manmade drainageways may be altered under the supervision of, and upon application to, the department under the following circumstances:
1. A roadway crossing, provided drainage is considered in the design and culverts are designed to handle proper flow as specified in the master plan and updates, or bridges are designed such that the opening is adequate;
 2. Improvements such as detention basins; and
 3. Slope improvements.
- All improvements or changes to drainageways must be designed by a registered professional engineer and submitted for approval to the department. Approval must be obtained before any on site work commences. (Ord. 3120, 12-21-2009)

6-6-12: PROHIBITION OF ILLEGAL CONNECTIONS:

- A. The construction, use, maintenance or continued existence of illegal connections to the storm drain system is prohibited.
- B. This prohibition expressly includes, without limitation, illegal connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- C. A person who wishes to connect to the MS4 shall obtain permission from the department to install the connection in accordance with city engineering standards. (Ord. 3120, 12-21-2009)

6-6-13: SUSPENSION OF MS4 ACCESS:

- A. The department may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the department may take such steps as deemed necessary to prevent or minimize damage to the MS4 or waters of the United States, or to minimize danger to persons.
- B. A person discharging to the MS4 in violation of this chapter may have their MS4 access terminated if such termination would abate or reduce an illegal discharge. The department will notify a violator of the proposed termination of its MS4 access. The violator may petition the department for a reconsideration and hearing.
- C. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this section, without the prior approval of the department. (Ord. 3120, 12-21-2009)

6-6-14: MONITORING OF DISCHARGES:

- A. This section applies to all facilities that have stormwater discharges including construction activity.
- B. The department is permitted to enter and inspect MS4 facilities subject to regulation under this chapter as often as may be necessary to determine compliance with this chapter. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the department.
- C. Facility operators shall allow the department ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an MPDES permit to discharge stormwater, and the performance of any additional duties as defined by state and federal law.
- D. The department has the right to set up on any permitted facility such devices as are necessary in the opinion of the department to conduct monitoring or sampling of the facility's stormwater discharge.
- E. The department has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment must be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality must be calibrated to ensure their accuracy.
- F. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected or sampled must be promptly removed by the operator at the written or oral request of the department and may not be replaced. The cost of clearing such access is borne by the operator.
- G. Unreasonable delay in allowing the department access to a permitted facility is a violation of a stormwater discharge permit and of this chapter. A person who is the operator of a facility with an MPDES permit to discharge stormwater associated with industrial activity commits an offense if the person denies the department reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this chapter.
- H. If the department has been refused access to any part of the premises from which stormwater is discharged, and it is able to demonstrate probable cause to believe that there may be a violation of this chapter, or that there is a need to inspect or sample as part of a routine inspection and sampling program designed to verify compliance with this chapter or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the city may seek issuance of a court order from any court of competent jurisdiction. (Ord. 3120, 12-21-2009)

6-6-15: DEVELOPMENT AND REDEVELOPMENT ACTIVITY AND POSTCONSTRUCTION STORMWATER CONTROL:

- A. A construction activity stormwater permit is required for construction activity that disturbs one acre or more, including projects disturbing less than one acre that are part of a larger common plan of development, redevelopment, or sale. A permit may only be issued subsequent to a properly submitted and reviewed permit application, pursuant to this section.
- B. An owner or developer of land required to obtain a construction activity stormwater permit must submit an executed copy of the state standard notice of intent ("NOI") and a stormwater pollution prevention plan prepared and stamped by a licensed professional engineer prior to performing any construction activity.
- C. A construction activity stormwater permit will require erosion and sediment controls through the design, installation, and construction of stormwater management and control practices on the permitted construction site including structural BMPs and elements of site design for construction stormwater management other than structural BMPs.

- D. The permittee is required to perform regularly scheduled construction activity site inspections at least every fourteen (14) calendar days and within twenty four (24) hours of a precipitation event to ensure that all BMPs have been constructed and are functioning properly. The permittee must document all inspections in writing and make inspection records available to the department for review.
- E. Commencement of construction work on development or redevelopment projects that disturbs one acre or more, including projects disturbing less than one acre that are part of a larger common plan of development, may not begin until such time as a permit is issued and final approval of the drainage plan if required below is obtained in accordance with this chapter.
- F. Any person subject to a construction activity MPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the department prior to the allowing of discharges to the MS4.
- G. In order to address postconstruction stormwater runoff, all owners or developers of property that are required to submit a drainage plan shall provide the stormwater facilities necessary for the drainage and control of flood and surface waters within stormwater basins and shall provide the facilities required to convey such waters from the stormwater basin to major drainageways. The cost of installing stormwater facilities in the service area is charged in whole or in part against the property in the service area.
- H. All owners or developers applying for any of the following permits or approvals shall submit a drainage plan for approval, prepared and stamped by a professional engineer, with the application or request:
1. Major subdivision plat approval;
 2. Minor subdivision plat approval;
 3. Building permits where the impervious development coverage within the property is five thousand (5,000) or more square feet, or where development is in an area critical to the functioning of the MS4 as determined by the department; and
 4. Planned unit development (PUD).
- I. The same plan submitted during one permit or approval process may be subsequently submitted with other required applications. The plan must be supplemented with such additional information as may be requested by the department.
- J. The drainage plan requirement established in this section applies except when the owner or developer demonstrates to the satisfaction of the department that the proposed use of the property:
1. Will neither seriously nor adversely impact the water quality conditions of any affected receiving bodies of water;
 2. Will not alter the surface discharge location, alter the drainage pattern on adjoining properties, alter drainage patterns, increase the discharge, or cause any other adverse effects in the drainage area; and
 3. Will not alter the subsurface drainage patterns, flow rates and discharge points, or result in any significant adverse effects to property or residents.
- K. Drainage plans shall be prepared by a certified engineer in accordance with current hydraulic hydrology practices and hydrology design standards and shall be consistent with the storm drain master plan. Drainage plans shall consist of drainage calculations and mitigation of stormwater drainage and include contour lines as necessary and explicitly describe the stormwater drainage system, including any required detention areas.
- L. All required storm drainage plans must be submitted for review by and approval of the department. At the time of approval of the drainage plan for the subject property, a schedule for inspection of required construction and facilities will be established by the department. (Ord. 3120, 12-21-2009)

6-6-16: CREDIT FOR CONSTRUCTION OF STORM DRAINAGE FACILITIES:

If the department requires an owner or developer to construct stormwater facilities that serve more than that development and are identified in the storm drain master plan, a portion of the actual costs incurred may be eligible for credit from the city's stormwater drainage assessment. To be eligible for credit, prior to final approval of the development agreement, the owner or developer must submit a report to the stormwater utility detailing the proposed improvements and obtain the city's approval of the report. The report must identify all elements of the project eligible for credit and include a detailed project description, a project bid form with estimated quantities, unit prices, engineering design and construction management costs. The report also must provide an accurate quantity and cost delineation between the proposed stormwater improvements necessary to meet the standard requirements of the development. The books and records of the owner or developer relating to the stormwater facilities for which the utility is providing reimbursement must be open to the city at all reasonable times for the purpose of auditing or verifying costs. The department will recommend inclusion of the cost of improvements eligible for credit in the next available budget submitted to the city commission. Upon approval and appropriation by the city commission, such costs will be credited from the storm drainage fund. (Ord. 3120, 12-21-2009)

6-6-17: RESPONSIBILITY FOR ACCEPTED STORMWATER FACILITIES:

All stormwater facilities constructed, installed, or provided hereunder, upon acceptance by the city, are the property of the city and thereafter the city is responsible for the operation and maintenance of the facilities. The city shall maintain all accepted public stormwater facilities located within city owned land, city rights of way and city

easements. (Ord. 3120, 12-21-2009)

6-6-18: RESPONSIBILITY FOR PRIVATE STORM DRAINAGE FACILITIES:

Property owners who install private storm drainage facilities that are not connected to the MS4 and not accepted by the city are required to perform maintenance of all private storm drainage facilities to ensure that those facilities function as designed. (Ord. 3120, 12-21-2009)

6-6-19: APPLICABILITY TO GOVERNMENTAL ENTITIES:

All governmental entities are required to submit a drainage plan and comply with the terms of this chapter when developing or improving land including, but not limited to, road construction and reconstruction and other improvements that can affect stormwater runoff within the city. (Ord. 3120, 12-21-2009)

6-6-20: REQUIREMENT TO USE BEST MANAGEMENT PRACTICES:

The department will adopt requirements identifying BMPs for any activity, operation, or facility which may cause or contribute to pollution or contamination of stormwater, the storm drain system, or waters of the U.S. The owner or operator of a commercial or industrial establishment shall provide, at the owner's own expense, reasonable protection from the accidental discharge of prohibited materials or other wastes into the MS4 or watercourses through the use of these structural and nonstructural BMPs. Further, any person responsible for a property or premises that is or may be the source of an illegal discharge, may be required to implement, at said person's expense, additional structural and nonstructural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid MPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, is deemed compliance with the provisions of this section. Adopted BMPs shall be part of a stormwater pollution prevention plan (SWPPP) as necessary for compliance with requirements of the MPDES permit. (Ord. 3120, 12-21-2009)

6-6-21: NOTIFICATION OF SPILLS:

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, the storm drain system, or waters of the U.S. that person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials that person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, said person shall notify the department in person or by phone, electronic mail, or facsimile no later than the next business day. Notification in person or by phone must be confirmed by written notice addressed and mailed to the department within three (3) business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on site written record of the discharge and the actions taken to prevent its recurrence. Such records must be retained for at least three (3) years. (Ord. 3120, 12-21-2009)

6-6-22: MANAGEMENT OF MUNICIPAL SEPARATE STORMWATER SYSTEM:

- A. The purpose of the stormwater utility rates and charges established by the city commission is to generate sufficient revenue to pay all costs for the operation, maintenance, administration and routine functions of the existing MS4 and the operation, maintenance and administration of such future storm drainage facilities as may be established within or without the service area and to pay for the review of drainage plans, and the design, right of way acquisition and construction or reconstruction of stormwater facilities. All of the proceeds are deemed to be in payment for use of the city stormwater system.
- B. The department shall determine the total annual cost of operation and maintenance of the stormwater system. The total annual cost of operation and maintenance includes, but is not limited to, labor, repairs, equipment replacement, maintenance, necessary modifications, power, sampling, laboratory tests and a reasonable contingency fund. Capital improvement priorities are determined by the city commission, and utility rates shall be passed in the same manner as all other special assessments. All assessments are set by resolution after public hearing.
- C. The city may assess a user fee upon all assessable property within the service area. This charge must appear on yearly property tax statements distributed by the county or by individual billing where necessary. The property owner shall pay the fee directly to the county and the county shall then pay the city the fee in the same manner as all other special fees and assessments. The city reserves the right to pursue further legal action to remedy nonpayment. Nonpayment constitutes a lien on the property, as are other taxes and assessments, in accordance with state law.
- D. The rates, charges, and rentals are deemed prima facie fair, reasonable, and equitable. In any case where any contention is made that the rates are unfair, inequitable, or unreasonable, the party objecting thereto shall apply to the city, stating the facts and grounds of the complaint, and the city shall investigate and report with recommendations to the city commission. The city shall consider each and every such complaint and report, and communicate such findings in respect thereto to the city commission within one month after the filing of each such complaint. The city commission has the right to order public hearings as to any such matter and, if convinced that an adjustment of stormwater utility rates or charges for such lot or parcel of land is necessary to provide equality with those charged to others, it shall so provide. (Ord. 3120, 12-21-2009)

6-6-23: VIOLATIONS AND CIVIL ENFORCEMENT:

- A. Whenever the department finds that a person has violated a prohibition or failed to meet a requirement of this chapter, the department may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:
1. The performance of monitoring, analyses, and reporting;
 2. The elimination of illegal connections or discharges;
 3. That violating discharges, practices, or operations shall cease and desist;
 4. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
 5. Payment of restitution for remediation costs;
 6. The implementation of source control or treatment BMPs; and
 7. The cessation of any construction or postconstruction work not permitted according to this chapter.
- B. If abatement of a violation or restoration of affected property is required, the notice will set forth a deadline within which such remediation or restoration must be completed. Said notice will further advise that, should the violator fail to remediate or restore within the established deadline, the work may be done by the city and the expense thereof may be levied against the real property of the violator.
- C. If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, then the department may enter upon the subject private property and is authorized to take any and all measures necessary to abate the violation or restore the property. The total cost thereof may be assessed against the real property of the violator in the same manner as a property tax. It is unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the department or designated contractor to enter upon the premises for the purposes set forth above. (Ord. 3120, 12-21-2009)

6-6-24: VIOLATIONS AND CRIMINAL ENFORCEMENT:

Violations of this chapter may also subject the violator to a fine in any sum not to exceed five hundred dollars (\$500.00), or imprisonment in the county jail for a period not to exceed thirty (30) days, or both such fine and imprisonment. The department may recover all attorney fees, court costs, and other expenses associated with enforcement of this chapter, including sampling and monitoring expenses. (Ord. 3120, 12-21-2009)

6-6-25: INJUNCTIVE RELIEF:

It is unlawful for any person to violate any provision or fail to comply with any of the requirements of this chapter. If a person has violated or continues to violate the provisions of this chapter, the city may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation. (Ord. 3120, 12-21-2009)

6-6-26: REMEDIES NOT EXCLUSIVE:

The remedies listed in this chapter are not exclusive of any other remedies available under any applicable federal or state law, and it is within the discretion of the city to seek cumulative remedies. (Ord. 3120, 12-21-2009)