			1	
		Agency Use		
		MTR04		
			Date Rec'd:	
			Amount Rec'd	l:
Montana Department			Check No.:	
of Environmental Qua			Rec'd By:	
WATER PROTECTION B			·	
EODM	torm Water Sn			
Reporting	period is for the ca	•	•	
<b>1V154-AK</b> Check □2017	one. Annual Repo	$\Box 2019$	$\square$ 2020	owing year. □2021
Instructions: This Annual Rep				_
authorized to discharge storm				
<b>Associated with Small Munici</b>	•		•	*
authorized permittees and co-	•	-	•	•
for each calendar year reporti authorization or for co-permit	O .	-		-
this form and submit separate	-		-	-
regulated Small MS4 area(s).				
submitted to the Montana Dep		_	• /	
Electronic submission is required through the web-based tool: NetDMR. Additional information is located on DEQ's website: http://deq.mt.gov/Water/WQINFO/ctss/netdmr.				
Small MS4 Authorization Number: MTR04				
Small MS4 Classification	□Traditional		□Non-Tradition	nal
Small MS4 Name:				
C. HARCANG II. A LL				
Small MS4 Mailing Address:				
City, State, and Zip Code:				
Small MS4 Contact Person (and Title):				
Mailing Address:				
City, State, and Zip Code:				
Phone Number: ( ) E-mail address:				

<b>Storm Water Management Team:</b> Attach an organizational chart identifying a primary SWMP coordinator and the positions responsible for implementing each minimum measure.				
Requested above chart:				
Has the permittee established and executed a formalized mechanism for regular communication between storm water management team members? ☐ Yes ☐ No				
Permittee's SWMP Resources:  How many FTEs does the permittee designate to the MS4 permit? If needed, provide an explanation.				
	dditional page with corresponding refere			
Answer the following five (5) q on a data storage device.	uestions on an additional page w	vith corres	ponding re	ference or
(1) What are the source(s) of fun percentage of the total budget all	ding for implementation of the MS ocated from each source listed?	S4 permit a	nd the estin	nated
(2) Specific to the annual reporting calendar year, how did the permittee justify commitment of resources or budget allocations to the implementation of the MS4 permit to decision-makers and the public? Provide a summary of meetings and outcomes held with decision-makers and the public.				
(3) Has the permittee demonstrated program effectiveness to obtain budget allocations for this annual reporting calendar year or previous years? Why or why not? If so, what program effectiveness metrics were presented?				
(4) How was this annual reporting calendar year's approach to allocate resources different than the previous year's approach?				
(5) Was the permittee successful in their request for budget allocations? Describe the outcome and factors that affected or resulted in that outcome.				
*	limination: t (Part II (3)(c.i)), has the permittee, the storm sewer map during the c		□ Yes	□ No
*	t (Part II (3)(e.i)), has the permitted outfalls during the calendar year?	e dry	□ Yes	□ No
<b>Fill in the blanks with numbers.</b> The permittee has inspected outfalls during this calendar year. Since authorization under the 2017 General Permit, the permittee has inspected total outfalls out of the total MS4 outfalls.				

Per the Illicit Discharge Detection & Elimination MCM (Part II (3)(e.i)), the permittee will complete the requirement to inspect and screen all outfalls during dry weather by the end of the permit cycle.		□ Yes	□ No
Construction Site Storm Water Management storm water management plan reviews were con		-	
During the calendar year, how many construction management controls (Part II (4)(c))?	2 0	their storm	water
Pollution Prevention/Good Housekeeping for Has the permittee reviewed, and updated if need permittee-owned/operated facilities and activities	ded, the inventory of	□ Yes	□ No
Has the permittee reviewed, and updated if need the locations of facilities and known locations of	•	□ Yes	□ No
Has the permittee conducted annual storm water pollution prevention training for permittee staff during the next permit year after development of each standard operating procedure (Part II (6)(a.v))?		□ Yes	□ No
*Not applicable during calendar year 2017, 2018, and 2019. Check "No" during these years.*			
<b>Training:</b> According to Part II (B) Training requonducted applicable training during the 1 <sup>st</sup> and *Not required during calendar year 2018, 2019, and 2021. Check "	4 <sup>th</sup> calendar years?	□ Yes	□ No
According to Part II (B) Training requirements, has the permittee conducted applicable new employee training within 90 days of the hire date?		□ Yes	□ No
		_	_
<b>Special Conditions:</b> Per <b>Pre-TMDL Approval (Part III.A) requirements</b> , attach the required information regarding identification of all outfalls that discharge to impaired waterbodies, the impaired waterbodies, and the associated pollutants of impairments. Summarize the BMPs implemented over the reporting period and a schedule of BMPs planned for the following year.			
□Attached	☐ Not Attached	□ Not Ap	oplicable
Special Conditions: Approved TMDLs (Part III.B) requirements per calendar year below.			
Calendar Year 2017: The permittee has attached a Sampling Plan that includes strategy rationale, monitoring frequency, monitoring parameters, and monitoring locations.			
□Attached	☐ Not Attached	□ Not Ap	oplicable

Calendar Year 2017: The permittee has attached all outfalls that discharge to impaired waterbodies and the associated pollutants of impairment.			
□Attached	☐ Not Attached	☐ Not Applicable	
Calendar Year 2018: The permittee has attached all outfalls that discharge to impaired waterbodies and the associated pollutants of impairment.			
□Attached	☐ Not Attached	☐ Not Applicable	
<b>Calendar Year 2019:</b> The permittee has attache and the associated pollutants of impairment.	ed all outfalls that discharge to	impaired waterbodies	
□Attached	☐ Not Attached	☐ Not Applicable	
<b>Calendar Year 2020:</b> The permittee has attache and the associated pollutants of impairment.	ed all outfalls that discharge to	impaired waterbodies	
□Attached	☐ Not Attached	☐ Not Applicable	
<b>Calendar Year 2020:</b> The permittee has attached the TMDL section of the SWMP that identifies the measures and BMPs it plans to implement, describes the MS4's impairment priorities and long term strategy, and outlines interim milestones for controlling the discharge of the pollutants of concern and making progress towards meeting the TMDL.			
□Attached	☐ Not Attached	☐ Not Applicable	
Calendar Year 2021: The permittee has attached all outfalls that discharge to impaired waterbodies and the associated pollutants of impairment.			
□Attached	☐ Not Attached	☐ Not Applicable	
<b>Calendar Year 2021:</b> The permittee has evaluated the TMDL section of the SWMP based on monitoring results. The section has been revised, if needed, and is attached.			
□Attached	☐ Not Attached	☐ Not Applicable	
<b>Monitoring:</b> Per requirements in Part IV (B), has the permittee attached monitoring results, calculations, and evaluations?			
□Attached	☐ Not Attached	☐ Not Applicable	

### INSTRUCTIONS: The permittee will only fill out the Annual Report Attachments section below that corresponds to the calendar in which an Annual Report is being submitted for. Attach the requested documents/information.

2017 Annual Repor	rt Attachments (1 <sup>st</sup> Cal	endar Year)
Public Education and Outreach:	`	,
Per requirements a.i in the referenced Mo audiences and associated pollutants.	CM, attach the required infor	mation regarding key target
□Attached	☐ Not Attached	
Public Involvement and Participation:		
Per requirements a.i in the referenced Mo involvement approach and schedule of ea		mation regarding the public
□Attached	☐ Not Attached	
Illicit Discharge Detection & Eliminati	on:	
Per requirements a.i in the referenced Monon-storm water discharges or flows, ass		
□Attached	☐ Not Attached	
Per requirements b.i in the referenced Monon-storm water discharges or flows, ass		
☐ Attached ☐ Not Attached		
Per requirements f.i in the referenced MC Corrective Action Plan and any associate		t Discharge Investigation and
□Attached	☐ Not Attached	
Construction Site Storm Water Manag	gement:	
Per requirements a.iii in the referenced M Plan and associated documents.	ICM, attach progress toward	s an Enforcement Response
□Attached	☐ Not Attached	
Specific to Traditional MS4s and per req construction storm water management pl		ed MCM, attach the
□Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and peconstruction storm water management pl		ferenced MCM, attach the
□Attached	☐ Not Attached	☐ Not applicable
Specific to Traditional MS4s and per req construction storm water management in		ed MCM, attach the
□Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and perconstruction storm water management in		erenced MCM, attach the
□Attached	☐ Not Attached	☐ Not applicable

Post-Construction Site Storm Water Mana	gement in New and Redev	elopment	
Specific to Traditional MS4s and per requirements b.i in the referenced MCM, attach the post-construction storm water management plan review checklist.			
□Attached	☐ Not Attached	☐ Not applicable	
Specific to Non-Traditional MS4s and per requirements b.ii in the referenced MCM, attach the post-construction storm water management plan review checklist.			
□Attached	☐ Not Attached	☐ Not applicable	
Per requirements in b.iii in the referenced MCM, attach the performance standards and associated documents.			
□Attached	☐ Not Attached		
2018 Annual Report A	ttachments (2 <sup>nd</sup> Calend	ar Year)	
Public Education and Outreach:			
Per requirements b.i in the referenced MCM, messages.	attach the required informat	ion regarding outreach	
□Attached	☐ Not Attached		
Per requirements c.i in the referenced MCM, attach the required information regarding a description of formats, distribution channels and schedule for key target audiences.			
□Attached	☐ Not Attached		
Public Involvement and Participation:			
Per requirements a.ii in the referenced MCM, and key target audience feedback on approach	•	tion regarding participation	
□Attached	☐ Not Attached		
Illicit Discharge Detection & Elimination:			
Per requirements a.i in the referenced MCM, non-storm water discharges or flows, association			
□Attached	☐ Not Attached		
Per requirements b.i in the referenced MCM, non-storm water discharges or flows, associated	•		
□Attached	☐ Not Attached		
Specific to Traditional MS4s and per requires	ments d.i in the referenced M	ICM, attach the adopted	
ordinance or other regulatory mechanism to prohibit illicit discharges.			
□Attached	☐ Not Attached	☐ Not applicable	
Specific to Non-Traditional MS4s and per recommand summary of legal authority to prohibit illicit of	•	ced MCM, attach the	
□Attached	☐ Not Attached	☐ Not applicable	
Per requirements d.iii in the referenced MCM agreements.	I, attach the required summa		

□Attached	☐ Not Attached		
Per requirements d.iv in referenced MCM, attach the Enforcement Response Plan and associated			
documents.			
□Attached	☐ Not Attached		
Per requirements e.ii in referenced MCM, attac	ch the list of high priority ou	ıtfalls.	
□Attached	☐ Not Attached		
Specific to Traditional MS4s and per requirem			
of investigations conducted and corrective acti	<u> </u>	licit Discharge	
Investigation and Corrective Action Plan and a	any associated documents.		
□Attached	☐ Not Attached	☐ Not applicable	
Specific to Non-Traditional MS4s and per requ	irements f.iv in the reference	ced MCM, attach the	
summary of investigations conducted and corre		required Illicit Discharge	
Investigation and Corrective Action Plan and a	any associated documents.		
□Attached	☐ Not Attached	☐ Not applicable	
Post-Construction Site Storm Water Management in New and Redevelopment			
Specific to Traditional MS4s and per requirements c.i in the referenced MCM, attach the post-			
construction storm water management inspection form or checklist.			
□Attached	☐ Not Attached	☐ Not applicable	
Specific to Non-Traditional MS4s and per requirements c.ii in the referenced MCM, attach the post-			
construction storm water management inspecti	on form or checklist.		
□Attached	☐ Not Attached	☐ Not applicable	
Per requirements in c.iii in the referenced MCM, attach the inventory of all new permittee-owned			
and private post-construction storm water management controls.			
□ Attached □ Not Attached			
Per requirements in c.vi in the referenced MCM, attach an inspection frequency protocol.			
□Attached	□Attached □ Not Attached		
Specific to Traditional MS4s and per requirements c.vii, attach the developed inspection program.			
□Attached	☐ Not Attached	☐ Not applicable	
Pollution Prevention/Good Housekeeping for Permittee Operations			
Per requirements in a.iii in the referenced MCM, attach completed Standard Operating Procedures.			
□Attached	☐ Not Attached		

2019 Annual Report Att	achments (3 <sup>rd</sup> Calenda	ır Year)	
Public Education and Outreach:			
Per requirements c.ii in the referenced MCM, a materials distributions.	attach the required informati	on regarding outreach	
□Attached	☐ Not Attached		
Public Involvement and Participation:			
Per requirements a.ii in the referenced MCM, a and key target audience feedback on approache		on regarding participation	
Attached	□ Not Attached		
Illicit Discharge Detection & Elimination:	□ Not Attached		
Per requirements a.i in the referenced MCM, a	ttach the required information	on regarding categories of	
non-storm water discharges or flows, associate	*	0 0	
□Attached	☐ Not Attached		
Per requirements b.i in the referenced MCM, a non-storm water discharges or flows, associate	-	-	
□Attached			
Per requirements e.ii in referenced MCM, attach the list of high priority outfalls.			
□Attached □ Not Attached			
Per requirements e.iii in referenced MCM, attach the required summary of screening results.			
□Attached □ Not Attached			
Specific to Traditional MS4s and per requirements f.iii in the referenced MCM, attach the summary of investigations conducted and corrective actions taken per the required Illicit Discharge Investigation and Corrective Action Plan and any associated documents.			
□Attached	☐ Not Attached	☐ Not applicable	
Specific to Non-Traditional MS4s and per requirements f.iv in the referenced MCM, attach the summary of investigations conducted and corrective actions taken per the required Illicit Discharge Investigation and Corrective Action Plan and any associated documents.			
□Attached	☐ Not Attached	☐ Not applicable	
Construction Site Storm Water Managemen			
Specific to Traditional MS4s and per requirements a.i in the referenced MCM, attach the adopted ordinance or other regulatory mechanism to require construction storm water controls.			
□Attached	☐ Not Attached	☐ Not applicable	
Specific to Non-Traditional MS4s and per requirements a.ii in the referenced MCM, attach the legal authority summary.			
□Attached	☐ Not Attached	☐ Not applicable	
Per requirements a.iii in the referenced MCM, attach the adopted Enforcement Response Plan and associated documents.			
□Attached	☐ Not Attached		
Post-Construction Site Storm Water Manag	ement in New and Redeve	lonment	

Per requirements in c.viii in the reference inspections of high priority post-constructions.	ed MCM, attach findings and compliance actions regarding	
Attached	□ Not Attached	
	uirements c.ix, attach the findings and resulting actions	
	vately-owned post-construction storm water management	
□Attached	☐ Not Attached ☐ Not applicable	
Pollution Prevention/Good Housekeep	ing for Permittee Operations	
Per requirements in a.iii in the referenced Procedures.	d MCM, attach the completed Standard Operating	
□Attached	□ Not Attached	
***		
2020 Annual Repor	rt Attachments (4 <sup>th</sup> Calendar Year)	
Public Education and Outreach:		
Per requirements c.ii in the referenced M	ICM, attach the required information regarding outreach	
materials distributions.		
□Attached	☐ Not Attached	
<b>Public Involvement and Participation:</b>	•	
	ICM, attach the required information regarding participation	
and key target audience feedback on app		
□Attached	☐ Not Attached	
Illicit Discharge Detection & Eliminati	ion:	
	CM, attach the required information regarding categories of	
_	ociated pollutants, and local controls or conditions.	
□Attached	☐ Not Attached	
Per requirements b.i in the referenced M	CM, attach the required information regarding occasional	
non-storm water discharges or flows, ass	ociated pollutants, and local controls or conditions.	
□Attached	☐ Not Attached	
Per requirements e.ii in referenced MCM, attach the list of high priority outfalls.		
□Attached □ Not Attached		
Per requirements e.iii in referenced MCM, attach the required summary of screening results.		
□Attached	□ Not Attached	
	uirements f.iii in the referenced MCM, attach the summary	
	ve actions taken per the required Illicit Discharge	
Investigation and Corrective Action Plan	1 1	
□Attached	☐ Not Attached ☐ Not applicable	
Specific to Non-Traditional MS4s and pe	er requirements f.iv in the referenced MCM, attach the	
-	d corrective actions taken per the required Illicit Discharge	

Investigation and Corrective Action Plan and a	any associated documents.			
□Attached	☐ Not Attached	☐ Not applicable		
Post-Construction Site Storm Water Manag	gement in New and Redeve	· · · · · ·		
Specific to Traditional MS4s and per requirements a.i in the referenced MCM, attach the adopted ordinance or other regulatory mechanism to require post-construction storm water controls.				
□Attached	☐ Not Attached	☐ Not applicable		
Specific to Non-Traditional MS4s and per requauthority summary.	airements a.ii in the reference	ced MCM, attach the legal		
□Attached	☐ Not Attached	☐ Not applicable		
Per requirements in a.iii in the referenced MCl associated documents.	M, attach the Enforcement F	Response Plan and		
□Attached	☐ Not Attached			
Per requirements in c.viii in the referenced MO inspections of high priority post-construction s				
□Attached	☐ Not Attached			
Specific to Traditional MS4s and per requirements c.ix, attach the findings and resulting actions regarding inspections of high priority privately-owned post-construction storm water management controls.				
□Attached	☐ Not Attached	☐ Not applicable		
Per requirements in d.i in the referenced MCM	I, attach a summary of the d	iscussion outcomes.		
□Attached	☐ Not Attached			
Pollution Prevention/Good Housekeeping for Permittee Operations				
Per requirements in a.iii in the referenced MC Procedures.	M, attach the completed Sta	ndard Operating		
□Attached	☐ Not Attached			
	4			
	2021 Annual Report Attachments (5 <sup>th</sup> Calendar Year)			
Public Education and Outreach:				
Per requirements c.ii in the referenced MCM, attach the required information regarding outreach materials distributions.				
□Attached	☐ Not Attached			
Public Involvement and Participation:				
Per requirements a.ii in the referenced MCM, attach the required information regarding participation and key target audience feedback on approaches.				
□Attached	☐ Not Attached			
Illicit Discharge Detection & Elimination:				
Per requirements a.i in the referenced MCM, a non-storm water discharges or flows, associated				

□Attached	☐ Not Attached		
Per requirements b.i in the referenced MCM, attach the required information regarding occasional			
non-storm water discharges or flows, associate	-	ols or conditions.	
□Attached	☐ Not Attached		
Per requirements e.ii in referenced MCM, attac	ch the list of high priority ou	tfalls.	
□Attached	☐ Not Attached		
Per requirements e.iii in referenced MCM, atta	ch the required summary of	screening results.	
□Attached	☐ Not Attached		
Specific to Traditional MS4s and per requirem			
of investigations conducted and corrective acti		licit Discharge	
Investigation and Corrective Action Plan and a			
□Attached	☐ Not Attached	☐ Not applicable	
Specific to Non-Traditional MS4s and per requ			
summary of investigations conducted and corrective actions taken per the required Illicit Discharge			
Investigation and Corrective Action Plan and a	ny associated documents.		
□Attached	☐ Not Attached	☐ Not applicable	
Post-Construction Site Storm Water Management in New and Redevelopment			
Per requirements in c.viii in the referenced MC			
inspections of high priority post-construction storm water management controls.			
□Attached	☐ Not Attached		
Specific to Traditional MS4s and per requirements c.ix, attach the findings and resulting actions			
regarding inspections of high priority privately-owned post-construction storm water management			
controls.			
□Attached	☐ Not Attached	☐ Not applicable	
Pollution Prevention/Good Housekeeping for Permittee Operations			
Per requirements in a.iii in the referenced MCM, attach completed Standard Operating Procedures.			
□Attached □ Not Attached			
Attach any updates, changes, or improvements to the Small MS4 Storm Water Management Program per requirements in Part IV (E).			
□Attached	☐ Not Attached	☐ Not applicable	

#### **Annual Report Form Signature**

This Annual Report Form must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

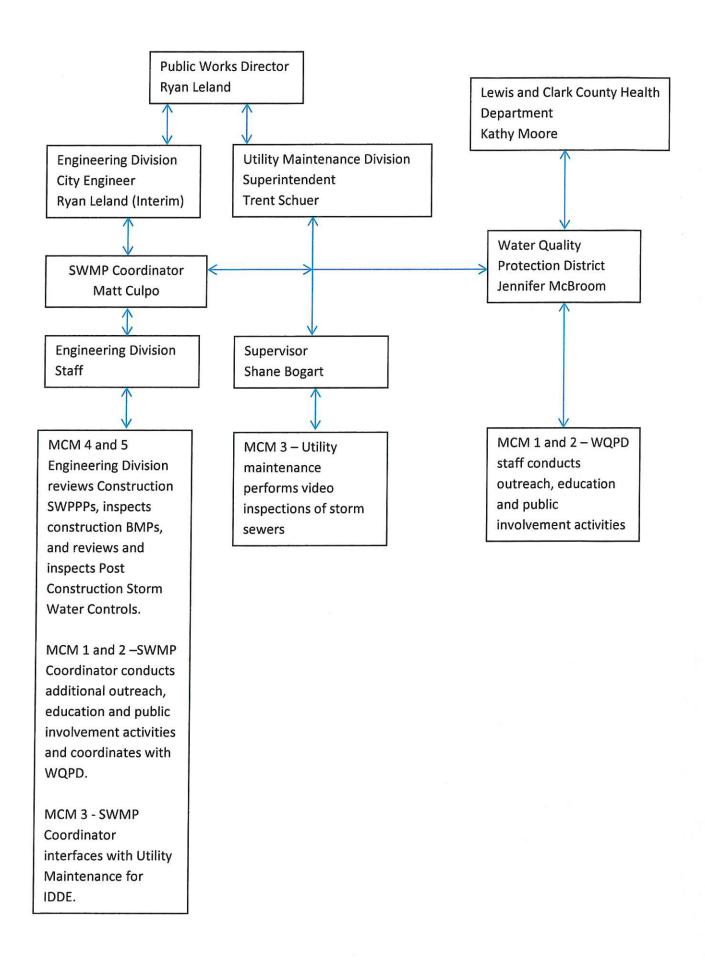
#### All Permittees Must Complete the Following Certification:

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 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. [75-5-633, MCA].

Certification of this form indicates conformance with the 2017 General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer Systems and the required Annual Reporting upon receipt of permit coverage.

Name (Type or Print)  ACHEC MARION -	Colpany
Title (Type or Print) City Manager	Phone Number 406-447-8000
Signature	Date Signed /- //:202/

## **Organization Chart**



## **RESPONSES TO QUESTIONS 1-5**

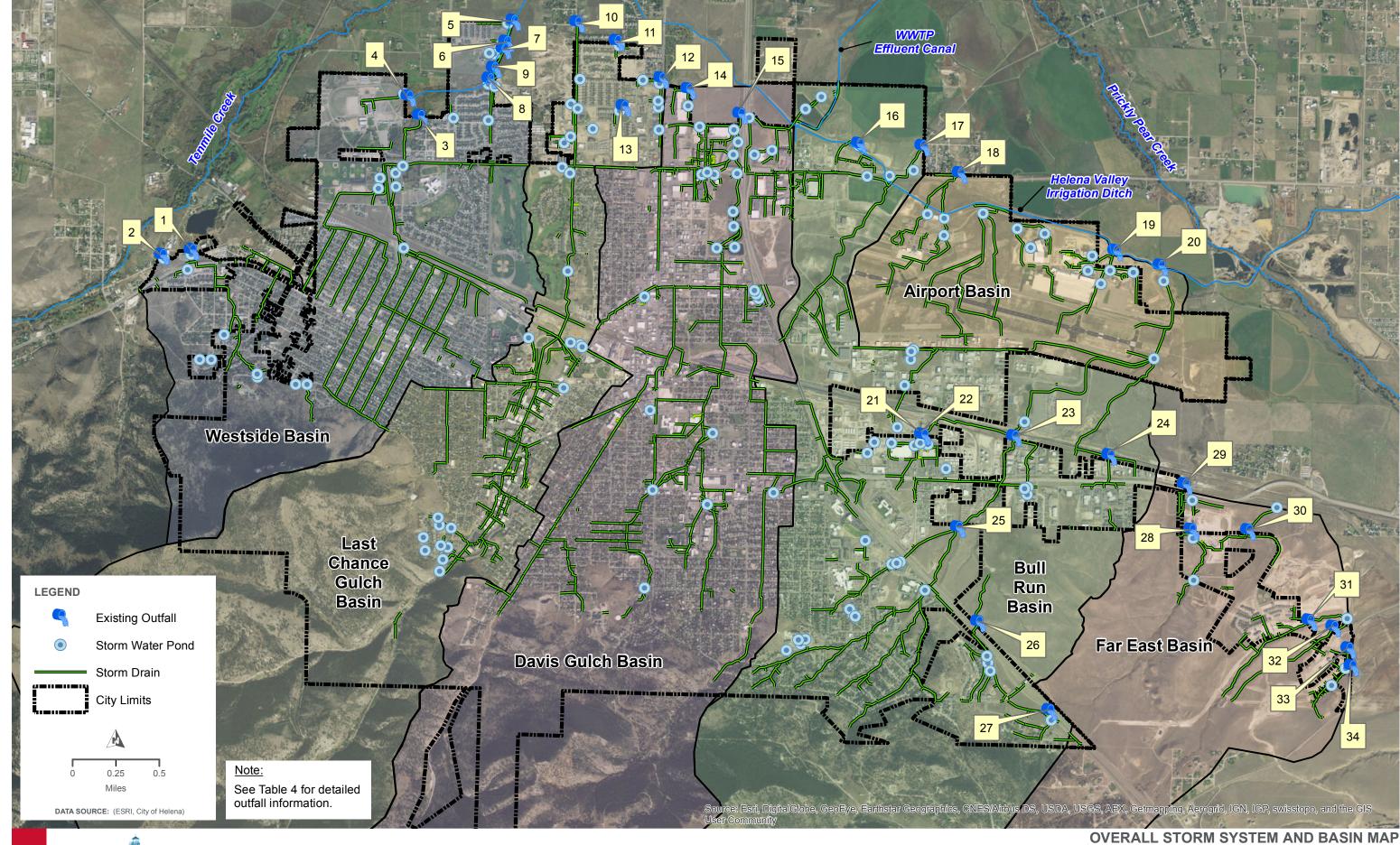
#### Page 2: Questions 1-5

- The City of Helena has a storm water utility which charges property owners based on the amount of impervious land they own. The storm water utility collects approximately 1 million dollars annually. 100% of the funds from the storm water utility are used to operate, maintain and manage the City's MS4.
  - The City of Helena also teams up with Lewis and Clark County to assess property owners between \$8 and \$10 per year which amounts to approximately \$350,000 to fund the Water Quality Protection District (WQPD). These funds are used to preserve, protect and improve water quality with the WQPD, of which, the City of Helena is part of. The WQPD encompasses Prickly Pear Creek and Ten Mile Creek watersheds which the City of Helena is tributary to. The WQPD conducts restoration planning, monitoring, outreach and education activities.
- 2) The City prepares annual budgets for projects and expenditures based on priority. The City prepared a Storm Water Master Plan (Master Plan) in 2003. The 2003 Master Plan was updated in 2018. The Master Plan analyzes the storm water system for capacity, treatment and condition and establishes an overall Capital Improvement Plan and identifies priority projects. Priority projects include life/safety concerns, flooding, failing infrastructure, water quality and maintenance improvements. City management and staff meet on a regular basis throughout the year to discuss projects and assign priorities. City management and staff also meet bimonthly in administration meeting with City Commission and at City Commission meetings which are open to the public to discuss projects and priorities of City staff.
- 3) The City has demonstrated program effectiveness to obtain budget allocations by utilizing the Storm Water Master Plan and actively pursuing and updating the Storm Water Master Plan; by responding to MS4 requirement s and needs through the development of a Storm Water Management Plan and Engineering Design Standards; by continuing ongoing storm water quality programs, operation, inspection and maintenance of the storm water system; and by development of additional activities and reporting as needed or as required by the MS4 program. The program effectiveness metrics presented include: storm water monitoring results, capital expenditures on storm water projects, quantity of storm water treated, quantity of storm water system inspected, completion of maintenance projects, quantity of material removed from streets and the storm water system, ability to clean up illicit discharges, coordination/review/implementation of storm water treatment facilities for developments, and inspections of construction project and storm water system components.
- 4) This year's approach to allocated resources built upon the program developed in prior years. Effective programs were continued, existing programs were updated and new programs where added as needed. Some examples of resource allocations include: continuation of the storm

sewer inspection and street sweeping programs, preparing updates to the Storm Water Master Plan and the Storm Water Management Plan, updates to the City website, and focused staff reviews of development projects to incorporate effective low impact development and water quality treatment.

5) The permittee was successful in their requests for budget allocations. The outcome of the budget allocation requests include continuation of storm water programs described above in question 4. The outcome of some of the budget allocation requests include completion of the Henderson Street Drainage and Erosion Control Improvement Project, a \$300,000 capital improvement project; which included planting of 56 trees. A storm sewer emergency repair project was also conducted in 2018. The emergency repair from installed 48 inch diameter storm pipe along two city blocks along 11th Avenue and Dakota Street from Montana Ave to 9th Ave and abandoned a collapsed 36 inch corrugated metal pipe. This project cost approximately \$500,000 and utilized city staff for design, construction oversight and construction administration. Design and construction of storm sewer improvements from the DNRC Regional Strom Water Pond to 11th Avenue to increase stormwater capacity and repair damaged pipe in 2020. Funding for an outreach and education flyer and information page on the use of raingardens were mailed out to all utility costumers and posted on the City's website at a cost of \$6,000. Front Street and Neill Street Improvements were made in 2019 at a cost 5 million dollars, approximately half was for storm water improvements. The project also included streetscape with increased landscaped areas and numerous trees. Design and construction of storm sewer improvements in 2020 from the DNRC Regional Strom Water Pond to 11th Avenue to increase stormwater capacity and repair damaged pipe at a cost of over \$600,000.

## **Outfall Map and Inspection Summary**



VERALL STORM SYSTEM AND BASIN MAP CITY OF HELENA, MT

FIGURE A.

MONTANA

QUEEN CITY OF THE ROCKIES

HELENA

### **Outfalls for the City of Helena**

	Outfall No.	Drainage Basin	Outfall BMP	Outfall Conveyance	Street Location	Date Inspected
	1		East Simmons Detention Pond	30 inch	Broadwater Ave and spring meadow	7/2017 10/2019
2			West Simmons Detention Pond	12 inch	Broadwater and Motor Ave	7/2017 10/2019
High Priority			Henderson Retention Pond Complex	24 inch	Silsbee Ave and Mitchell near	7/2017
Outfalls				24 inch	- Fairgrounds	7/2017
	4		Fairgrounds Detention Pond	16 inch	Fairgrounds east of Arena	7/2017
	5		North Stone Meadows Detention Pond	8 inch	Andesite Ave and crystal springs creek	7/2017 6/2020
	6	Westside	Central Stone Meadows Detention Pond	10 inch	Benton Ave and Flagstone Ave	7/2017 6/2020
	7	v	South Stone Meadows Detention Pond	8 Inch	Benton Ave south of Obsidian Ave	7/2017 6/2020
	8		Crystal Springs Detention Pond	Open Channel	Benton and Willowbrook	7/2017 6/2020
	9		County Shop Detention Basin	Open Channel	E of N Benton and Willowbrook Drive	7/2017 9/2018 6/2020
	10		Nature Park Retention Pond, and on-site detention/ret ponds	24 inch	McHugh Lane north of Golden Estates subdivision	9/2018
	11	Last	Golden Estates Detention Pond	18 inch	Jade Street and Amethyst Ave (golden estates)	9/2018
	12	Chance	Skelton Detention 1, 2, 3, and 4	24 inch	North of Ptarmigan and Montana Ave	9/2018 6/2020
	13		Anderson BP Detention and open channel	Open Channel	S of Road Runner and Sand Piper	9/2018
	14	Davis	Target Retention Pond	36 inch	Jordan Drive behind Macy's	9/2018
	15	Davis	Davis Region Pond and Kmart Pond	nd and Kmart Pond 48 inch		9/2018
	16	Bull Run	Burnham Ranch Retention Pond			
	17	West	Helena Regional Detention and York and Custer Detention	55 inch	York Road north of Custer	9/2018

Outfall No.	Drainage Basin	Outfall BMP	Outfall Conveyance	Street Location	Date Inspected
18		Airport Detention 4, 5.1, and 5.2 and 1400ft of open channel	21 inch	Canyon Ferry Road east of Y- county	9/2018
19	Airport	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	9/2018
20		Airport Retention R-910 and Detention Pond 2	54 inch	Helena Valley Canal Crossing east end Airport	9/2018
21		Walmart Detention 1 and 2	36 in	NW of Miller and Carter	9/2019
22		Staples Retention	18 in	NW of Miller and Carter	9/2019
23		Future Nichole St Pond	36 in	N of Nichole St and RR Tracks	9/2019
24	Bull Run Upstream of Airport	Open Channel	Open Channel	N of Dick Anderson Construction	9/2019
25		Hunters Point and Mountain West Bank Detention	Open Channel	N of I15, upstream of Synness Auto Salvage	9/2019 4/2020
26		Nob Hill Retention 1 and 2, and Nob Hill Detention 1, Grass swale along I15	24 in	NW of I15 and Mendocino Drive	4/2020
27		Nob Hill Detention 4	Open Channel	Colonial drive south of Nob Hill Lift station	4/2020
28		Aspen Meadows Detention	84 inch	Alice street East of Crossroads Pkwy	11/2019
29		Grass channel, small basin at culvert inlet	2-24 inch	Crossroads Pkwy and Prospect Ave (highway 12)	11/2019
30	Far East	West Aspen Meadows Retention	24 inch	Alice street East of Cascade Ave	11/2019
31		East Aspen Meadows Retention	42 inch	Twilight and Stillwater streets	11/2019
32		East Aspen Meadows Retention	12 inch	Runkle Pkwy between Still water and Alpine View	11/2019
33		Open Channel for 700ft	12 inch	Runkle Pkwy and Highway 282	11/2019
34		Aspen Meadows Detention North and South	36 inch	Highway 282 south of Runkle Parkway	11/2019

Note: All screening results have resulted in zero suspected illicit discharges.

#### **TMDL Section of SWMP**

#### 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

December 2016

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.

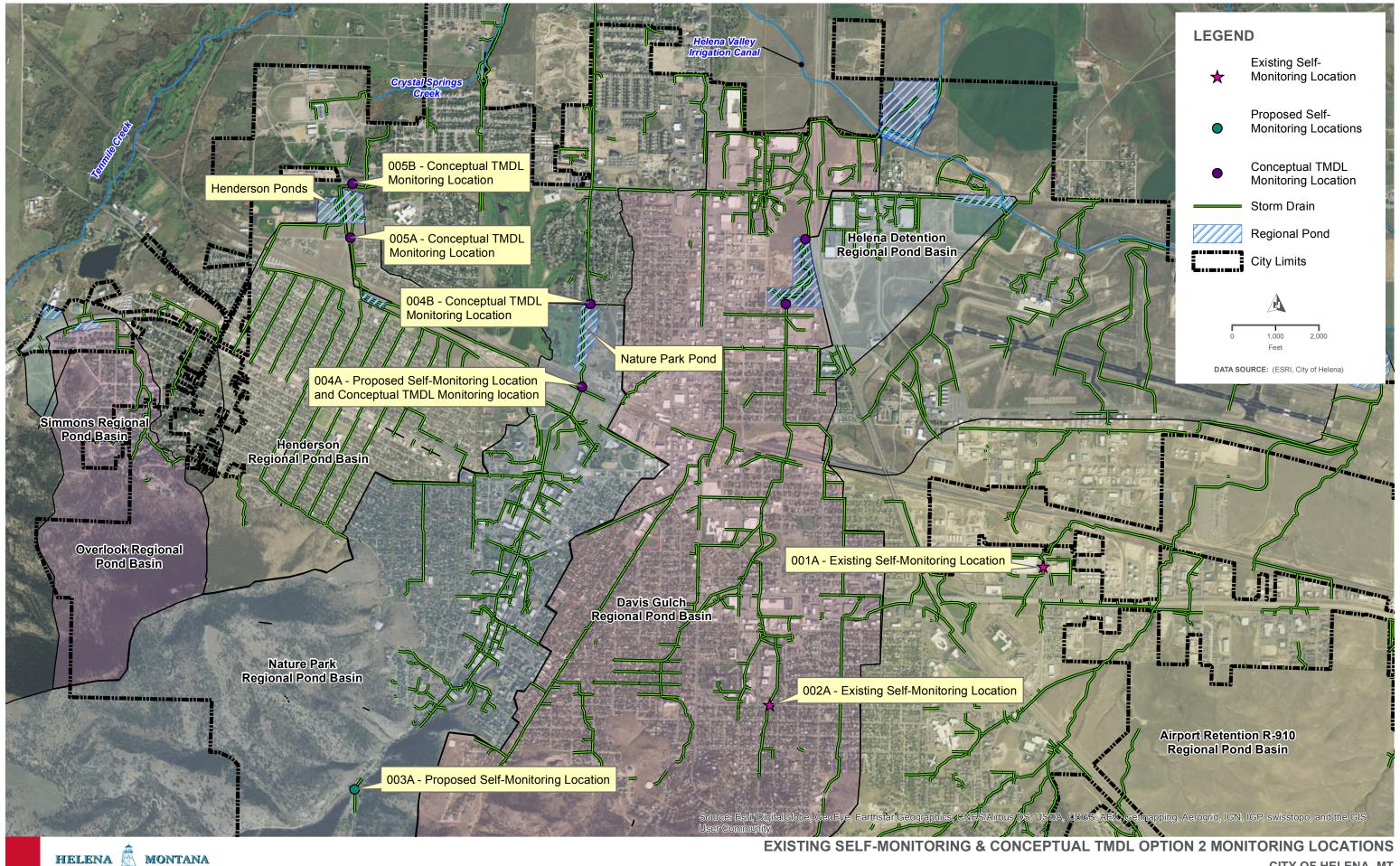
#### **TMDL Monitoring Option 2**

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

December 2016



**CITY OF HELENA, MT** 

MONTANA

QUEEN CITY OF THE ROCKIES

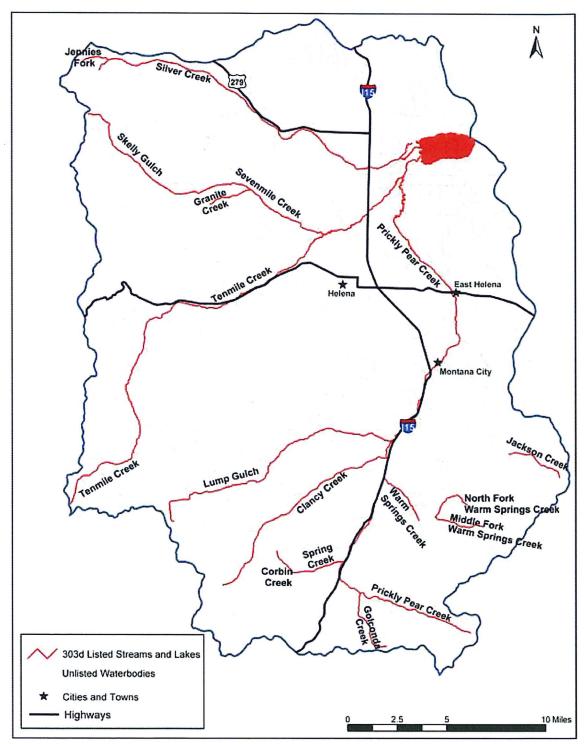


Figure 3-1. Locations of 1996–2004 303(d)-listed stream segments in the Lake Helena watershed.

Table 3-2. Probable causes of water quality impairment in the Lake Helena watershed identified in 1996–2004 Montana 303(d) lists.

Water body	1996 Causes	-2004 Montana 303( 2000 Causes	2002 Causes	2004 Causes
Clancy Creek	Metals Nutrients Habitat alterations Siltation Suspended solids	Metals (Did not meet SCD for Primary Contact Recreation)	Arsenic Channel incisement Lead Mercury Metals Other habitat alterations Siltation	Arsenic Channel incisement Lead Mercury Metals Other habitat alterations Siltation
Corbin Creek	Metals Other inorganics Salinity/TDS/ chlorides Suspended solids pH	Metals Suspended solids pH Thermal modifications Habitat alterations	Metals Other habitat alterations pH Suspended solids Thermal modifications	Metals Other habitat alterations pH Suspended solids Thermal modifications
Golconda Creek	Metals Suspended solids Turbidity Unknown toxicity	Metals	Metals	Metals
Granite Creek	Habitat alterations	Arsenic Cadmium	Arsenic Cadmium Metals	Arsenic Cadmium Metals
Jackson Creek	1998 Listing: Siltation	(Did not meet SCD)	(Did not meet SCD for Aquatic Life, Cold-water Fishery)	(Did not meet SCD for Aquatic Life, Cold-water Fishery)
Jennie's Fork	Metals Siltation	(Did not meet SCD)	(Did not meet SCD for Aquatic Life, Cold-water Fishery)	(Did not meet SCD for Aquatic Life, Cold-water Fishery)
Lake Helena	Metals Nutrients Suspended solids Thermal modifications	Lead Arsenic	Arsenic Lead Metals	Arsenic Lead Metals
Lump Gulch	Metals Suspended solids	Cadmium Mercury Copper Lead Zinc	Cadmium Copper Lead Mercury Metals Zinc	Cadmium Copper Lead Mercury Metals Zinc
Middle Fork Warm Springs Creek	Metals Habitat alterations Siltation	Arsenic Mercury Copper Zinc	Arsenic Copper Mercury Metals Other habitat	Arsenic Copper Mercury Metals Other habitat

Water body	1996 Causes	2000 Causes	2002 Causes	2004 Causes
			alterations Siltation Zinc	alterations Siltation Zinc
North Fork Warm Springs Creek	1998 Listing: Siltation	(Did not meet SCD)	Arsenic Bank erosion Fish habitat degradation Metals Organic enrichment/Low dissolved oxygen Other habitat alterations Siltation	Arsenic Bank erosion Fish habitat degradation Metals Organic enrichment/Low dissolved oxygen Other habitat alterations Siltation
Prickly Pear Creek MT41I006_060	Metals Suspended solids	Metals Fish habitat degradation Habitat alterations	Fish habitat degradation Metals Other habitat alterations	Fish habitat degradation Metals Other habitat alterations
Prickly Pear Creek MT41I006_050	Siltation Suspended solids	Metals Fish habitat degradation Bank erosion Habitat alterations Siltation	Bank erosion Fish habitat degradation Metals Other habitat alterations Siltation	Bank erosion Fish habitat degradation Metals Other habitat alterations Siltation
Prickly Pear Creek MT41I006_040	Flow alteration Metals Habitat alterations	Metals Siltation Fish habitat degradation Habitat alterations	Fish habitat degradation Metals Other habitat alterations Siltation	Fish habitat degradation Metals Other habitat alterations Siltation
Prickly Pear Creek MT41I006_030	Flow alteration Metals Habitat alterations Siltation Suspended solids	Metals Dewatering Siltation Fish habitat degradation Riparian degradation Nutrients Thermal modifications	Dewatering Fish habitat degradation Flow alteration Metals Nutrients Other habitat alterations Riparian degradation Siltation Thermal modifications	Dewatering Fish habitat degradation Flow alteration Metals Nutrients Other habitat alterations Riparian degradation Siltation Thermal modifications

Water body	1996 Causes	2000 Causes	2002 Causes	2004 Causes
Prickly Pear Creek MT41I006_020	Flow alteration Metals Nutrients Habitat alterations Siltation Suspended solids Un-ionized ammonia	Metals Un-ionized ammonia Nutrients Thermal modifications Siltation Dewatering Fish habitat degradation Bank erosion	Bank erosion Dewatering Fish habitat degradation Flow alteration Metals Nutrients Other habitat alterations Siltation Thermal modifications Un-ionized ammonia	Bank erosion Dewatering Fish habitat degradation Flow alteration Metals Nutrients Other habitat alterations Siltation Thermal modifications Un-ionized ammonia
Prickly Pear Creek MT41I006_010	Nutrients Suspended solids Thermal modifications	Arsenic	Arsenic Metals	Arsenic Metals
Sevenmile Creek	Habitat alterations Siltation	(Did not meet SCD)	Flow alteration Metals Nutrients Other habitat alterations Riparian degradation Siltation	Flow alteration Metals Nutrients Other habitat alterations Riparian degradation Siltation
Silver Creek	Flow alteration Metals Habitat alterations Priority organics	Metals Habitat alterations Flow alteration Priority organics	Flow alteration Metals Other habitat alterations Priority organics	Flow alteration Metals Other habitat alterations Priority organics
Skelly Gulch	Siltation	(Did not meet SCD)	Metals Siltation	Metals Siltation
Spring Creek	Metals Nutrients Habitat alterations Suspended solids pH	Metals Dewatering Fish habitat degradation Habitat alterations Riparian Degradation	Dewatering Fish habitat degradation Flow alteration Metals Other habitat alterations Riparian degradation	Dewatering Fish habitat degradation Flow alteration Metals Other habitat alterations Riparian degradation

Water body	1996 Causes	2000 Causes	2002 Causes	2004 Causes
Tenmile Creek MT41I006_141	Flow alteration Metals Habitat alterations Siltation pH	Mercury Lead Arsenic Copper Cadmium Zinc Metals Turbidity Habitat alterations	Arsenic Cadmium Copper Lead Mercury Metals Other habitat alterations Siltation Zinc	Arsenic Cadmium Copper Lead Mercury Metals Other habitat alterations Siltation Zinc
Tenmile Creek MT41I006_142	Flow alteration Metals Habitat alterations Siltation pH	Arsenic Cadmium Lead Zinc Copper Flow alteration Metals	Arsenic Cadmium Copper Flow alteration Lead Metals Siltation Zinc	Arsenic Cadmium Copper Flow alteration Lead Metals Siltation Zinc
Tenmile Creek MT41I006_143	Flow alteration Metals Habitat alterations Siltation pH	Arsenic Lead Cadmium Copper Mercury Zinc Flow alteration Siltation Habitat alterations	Arsenic Cadmium Copper Flow alteration Lead Mercury Metals Nutrients Other habitat alterations Siltation Zinc	Arsenic Cadmium Copper Flow alteration Lead Mercury Metals Nutrients Other habitat alterations Siltation Zinc
Warm Springs Creek	Metals Suspended Solids	Arsenic Lead	Arsenic Cadmium Lead Metals Siltation	Arsenic Cadmium Lead Metals Siltation

Source: MDEQ, 2003, 2004. SCD = Sufficient Credible Data

# **Monitoring Data**

Sample Location	Discharge Number	Date	Flow Rate	pH		Oil &	, ,	unless show	•			
EPA NURP Median Concentration	Number		(gal/min)	(s.u.) 6 to 9	<b>TSS</b> 125	Grease 10	Nitrogen 2.00	Phosphorus 0.41	<b>Zinc</b> 0.210	<b>Lead</b> 0.165	<b>Copper</b> 0.040	80
Industrial/ Commercial Area	001A	5/3/2007 10/3/2007	14 98	7.4 7.4	88 68	<b>19</b> 4.9	0.15 1.02	0.25 <b>0.71</b>	0.090 0.140	0.020 0.010	0.020	29 <b>33</b>
18th Street near Walmart GIS id: BR-1-92-7-3		5/6/2008 11/13/2008	87 39	<b>5.7</b> 6.6	384 140	9	<b>2.69</b> 0.86	2.40 0.48	2.150 0.300	<b>0.440</b> 0.050	0.330 0.070	90 41
010 Id. Bit 1 02 7 0		6/14/2009 7/28/2009	50 1400	7.6 6.9	112	9.3 4.1	1.31 0.46	<b>0.46</b> 0.08	<b>0.380</b> 0.070	0.030 ND	<b>0.060</b> 0.030	39
		5/3/2010	350	6.9	390	7.3	0.92	0.70	0.520	0.060	0.100	49
		8/29/2010 11/16/2010	225 91	6.3 7.8	368 244	9	0.05 0.64	0.37 <b>0.47</b>	0.830 0.260	0.080	<b>0.110</b> 0.040	6
		5/22/2011 8/2/2011	350	7.6 7.3	38 <b>349</b>	6.5 8.4	0.43 0.49	0.07 <b>0.42</b>	0.110 <b>0.280</b>	0.010	0.030 <b>0.050</b>	7
		3/28/2012 7/17/2012	550	6.9 7.6	1260 442	5 5	0.39 1.46	0.66 0.82	0.740 0.790	<b>0.174</b> 0.066	0.137 0.129	13
		10/3/2012 5/23/2013	180 269	6.6 8.0	50 60	5 <1	<b>2.52</b> 0.15	<b>1.71</b> 0.29	<b>0.920</b> 0.150	0.034	<b>0.122</b> 0.030	<b>13</b>
		9/17/2013 6/25/2014	314 283	<b>5.1</b> 7.0	196 604	4 2	0.04 0.19	0.45 1.73	0.070 <b>0.308</b>	0.004 0.126	0.012 <b>0.073</b>	4
		8/25/2014	426 247	6.8	188	<1 1	<0.01	0.32 0.27	0.162	0.017	0.006	14
		9/29/2014 5/16/2015	202	7.4	1500	5	1.01	0.20	0.117 <b>0.711</b>	0.021	0.013 <b>0.135</b>	18
		7/10/2015 10/1/2015	404 539	6.2 7.3	<b>380</b> 53	<1 1	0.21 0.17	<b>1.01</b> 0.19	<b>0.348</b> 0.061	0.043	<b>0.089</b> 0.023	<b>3</b> :
		4/14/2016 5/20/2016	134 718	8.0 7.1	264 408	<1 <1	0.50 <.01	0.74 0.71	0.330 0.280	0.090	0.060 0.050	2
		8/9/2016 9/20/2016	582 157	7.6 6.4	964 224	3 <1	<.01 0.37	1.05 0.48	<b>0.530</b> 0.020	0.070	0.080	3°
		6/13/2017 9/15/2017	20 1	7.3 7.3	33 84	<1 <1	0.04 0.12	0.14 0.18	0.039	0.004 0.012	0.001 0.012	31 <b>4</b>
		4/27/2018 5/24/2019	1	7.7 8.4	484 434	<1 <1	0.35 0.16	0.91 0.62	<b>0.303</b> 0.151	0.049	0.099 0.040	1:
Residential Area	002A	5/3/2007	6.46	6.9	160	12	2.23	3.88	0.100	0.020	0.040	3
	JUZA	9/24/2007	85	6.8	76	13	0.76	0.53	0.150	ND	0.030	34
Broadway and Sanders GIS Id: DG-3-9		5/6/2008 11/13/2008	215 51.34	7.6 7.0	<b>2970</b> 124	<b>25</b> 6.1	1.17 0.35	0.79 0.36	0.590	0.120 0.020	<b>0.130</b> 0.040	19
		6/15/2009 7/7/2009	5400 400	7.6	56 <b>610</b>	3.4 5.3	0.88	0.40 0.23	0.120	ND 0.020	0.040 <b>0.050</b>	3
		7/28/2009 4/13/2010	3000 30	7.2 7.3	ND 520	4.1 5.1	0.50 1.58	0.11 <b>0.70</b>	0.050 <b>0.310</b>	ND 0.050	0.010 <b>0.090</b>	2 2
		5/3/2010 8/28/2010	1250 115	7.5 6.8	485 134	7.2 7.8	0.41 0.89	<b>0.64</b> 0.24	<b>0.340</b> 0.160	0.050	<b>0.090</b> 0.040	14
		10/24/2010 5/24/2011	19 1000	7.2 8.2	56 <b>386</b>	4.8 5.1	0.52 0.31	<b>12.20</b> 0.28	0.170 <b>0.220</b>	ND 0.040	0.050 0.050	3
		7/31/2011 4/6/2012	3500 100	6.9	50 <b>908</b>	7.1	0.61 1.14	0.28 <b>0.82</b>	1.100 0.300	0.150	0.190 0.063	2
		8/28/2012	21	7.8	201	4	0.33	0.21	0.330	0.035	0.056	2
		4/8/2013 8/29/2013	1122 358	6.9	1670 484	6	<b>2.20</b> 0.17	<b>1.41</b> 0.37	0.730 0.400	0.152	0.187	1
		6/17/2014 8/25/2014	359 673	7.6 7.1	70 <b>276</b>	<1 <1	0.08 0.58	0.23 <b>0.49</b>	0.041 0.084	<0.01 <b>0.018</b>	<b>0.083</b> < 0.01	3 8
		9/29/2014 5/16/2015	112 76	6.8 7.9	121 <b>956</b>	3	<0.01 1.42	0.50 1.52	0.087 <b>0.334</b>	0.008	0.039 <b>0.065</b>	2:
		7/10/2015 10/3/2015	22 49	7.2 7.2	<b>772</b> 85	3	0.41 0.01	1.16 0.46	<b>0.247</b> 0.073	0.034	<b>0.079</b> 0.018	1:
		4/14/2016 5/20/2016	112 157	7.5	540 500	1	0.60	0.84 0.81	0.220	0.030	0.040	2:
		8/9/2016 6/13/2017	1792	7.4 7.3	<b>1320</b>	4 <1	0.02	1.72 0.28	0.600	0.060 0.004	<b>0.070</b> 0.023	34 49
		9/15/2017	1	7.2	1792	<1	0.53	0.83	0.036	0.05	0.093	63
		4/27/2018 5/24/2019	1	8.0 7.5	<b>408</b> 59	2 <1	0.03 0.27	<b>2.24</b> 0.11	<b>0.22</b> 0.03	0.04	<b>0.067</b> 0.016	<b>1</b> 9
Last Chance Gulch at Confluence of	003A	5/18/2018	No Flow									
Oro Fino and Grizzly Gulches		8/27/2018 4/9/2019	No Flow No Flow									
Nature Park Inlet (north of RR)	004A	7/23/2019 1/14/2010	No Flow NA	7.7	432	13	1.35	0.45	0.330	0.060	0.070	8
rataro i ark mot (notar or rat)		2/22/2012 5/18/2018	NA NA	7.9	387 126	4	0.40	<b>0.70</b> 0.31	0.180 0.073	0.047	<b>0.045</b> 0.015	3
		8/27/2018	NA NA	7.9	67	1	0.78	0.24	0.080	0.009	0.015	5
		4/3/2019 7/23/2019		8.0 7.5	39 <b>434</b>	<1 <1	0.74 0.94	0.35 <b>0.53</b>	0.05	0.018	0.009	7
		5/8/2020 10/19/2020		7.7 8.1	<b>907</b> 85	1	0.55 1.02	<b>1.85</b> 0.19	<b>0.26</b> 0.070	0.074 0.009	<b>0.064</b> 0.012	5 3
Nature Park Outlet d.s. of Cole Avenue	004B	5/18/2018 8/27/2018	No Flow No Flow									F
		4/3/2019 7/23/2019	trickle No Flow	7.7	<1	<1	0.38	0.07	<1	<1	<1	<
		5/8/2020 10/19/2020	No Flow No Flow									F
Henderson Pond Complex Inlet d.s. of Allision St Pond	005A	5/18/2018 8/27/2018	No Flow	7.9	53	ND	0.43	0.17	0.040	0.007	0.009	3
AIIISIUII SI PUIIU		4/3/2019 7/23/2019	trickle	7.4	74	ND	0.64	0.23	0.060	0.006	0.019	6
		5/8/2020	No Flow	8.7	867	ND ND	0.64	1.18	0.060	0.006	0.019	10
Henderson Pond Complex Outlet into		10/19/2020	INO FIOW								<u> </u>	
Custer Wetlands	005B	5/18/2018	No Flow									L
ouster Wetlands		0/07/0040	No Flow									
Ouster Wetlands		8/27/2018 7/23/2019	No Flow									
Ouster Wetlands			No Flow No Flow No Flow									
Kmart Pond Inlet	NA	7/23/2019 5/8/2020 10/19/2020 1/14/2010	No Flow No Flow NA	7.5	944	20	2.72 0.86	0.65	0.52 ND	0.10 ND	0.09	_
	NA	7/23/2019 5/8/2020 10/19/2020 1/14/2010 5/24/2011 2/22/2012	No Flow No Flow NA NA NA	8.0 8.2	58 578	1.5 4	<b>0.86</b> 0.43	0.09 0.70	ND 0.31	ND 0.12	0.09 0.07	3
Kmart Pond Inlet	NA	7/23/2019 5/8/2020 10/19/2020 1/14/2010 5/24/2011 2/22/2012 7/16/2013 3/10/2014	No Flow No Flow NA NA NA NA	8.0 8.2 8.2 8.1	58 578 <10 250	1.5 4 <1 2	0.86 0.43 6.64 0.62	0.09 0.70 0.04 0.69	<b>ND 0.31</b> <0.01 0.07	ND 0.12 <0.001 0.03	0.09 0.07 <0.005 0.04	3 4 1 9
	NA NA	7/23/2019 5/8/2020 10/19/2020 1/14/2010 5/24/2011 2/22/2012 7/16/2013 3/10/2014 7/16/2013 5/24/2011	No Flow No Flow NA	8.0 8.2 8.2 8.1 8.3	58 578 <10 250 ND	1.5 4 <1 2 1 1.5	0.86 0.43 6.64 0.62 0.01	0.09 0.70 0.04 0.69 0.07	ND 0.31 <0.01 0.07 ND 0.04	ND 0.12 <0.001 0.03 ND ND	0.09 0.07 <0.005 0.04 ND	3 4 1 9 3
Kmart Pond Inlet Kmart Pond Outlet		7/23/2019 5/8/2020 10/19/2020 1/14/2010 5/24/2011 2/22/2012 7/16/2013 3/10/2014 7/16/2013	No Flow No Flow NA NA NA NA NA NA NA NA NA	8.0 8.2 8.2 8.1 8.3	58 578 <10 250 ND	1.5 4 <1 2	0.86 0.43 6.64 0.62 0.01	0.09 0.70 0.04 0.69 0.07	ND 0.31 <0.01 0.07 ND	ND 0.12 <0.001 0.03 ND	0.09 0.07 <0.005 0.04 ND	3 4 1 9 3 3 7
Kmart Pond Inlet  Kmart Pond Outlet  Hunters Pointe at Outlet Structure	NA	7/23/2019 5/8/2020 10/19/2020 1/14/2010 5/24/2011 2/22/2012 7/16/2013 3/10/2014 7/16/2013 5/24/2011 2/22/2012 7/16/2013 3/10/2014	No Flow No Flow NA	8.0 8.2 8.2 8.1 8.3 8.0 8.0 8.3 7.9	58 578 <10 250 ND 58 78 <10 72	1.5 4 <1 2 1 1.5 6 <1 <1	0.86 0.43 6.64 0.62 0.01 0.86 0.33 0.01 0.44	0.09 0.70 0.04 0.69 0.07 0.09 0.33 0.07 0.45	ND 0.31 <0.01 0.07 ND 0.04 0.04 <0.01 0.03	ND 0.12 <0.001 0.03 ND ND 0.01 <0.001	0.09 0.07 <0.005 0.04 ND ND 0.01 <0.005 0.027	3 4 1 9 9 3 7 7 3 3
Kmart Pond Inlet  Kmart Pond Outlet  Hunters Pointe at Outlet Structure  Henderson Pond Complex at Silsbee		7/23/2019 5/8/2020 10/19/2020 1/14/2010 5/24/2011 2/22/2012 7/16/2013 3/10/2014 7/16/2013 5/24/2011 2/22/2012 7/16/2013	No Flow No Flow NA	8.0 8.2 8.2 8.1 8.3 8.0 8.0 8.3	58 578 <10 250 ND 58 78 <10	1.5 4 <1 2 1 1.5 6 <1	0.86 0.43 6.64 0.62 0.01 0.86 0.33 0.01	0.09 0.70 0.04 0.69 0.07 0.09 0.33 0.07	ND 0.31 <0.01 0.07 ND 0.04 0.04 <0.01	ND 0.12 <0.001 0.03 ND ND 0.01 <0.001	0.09 0.07 <0.005 0.04 ND ND 0.01 <0.005	3 4 1 9 3 3 7 3 3 4
Kmart Pond Inlet  Kmart Pond Outlet  Hunters Pointe at Outlet Structure  Henderson Pond Complex at Silsbee  Custer Wetland at crossing near  Fairgrounds	NA NA NA	7/23/2019 5/8/2020 10/19/2020 1/14/2010 5/24/2011 2/22/2012 7/16/2013 3/10/2014 7/16/2013 5/24/2011 2/22/2012 7/16/2013 3/10/2014 2/22/2012 3/10/2014	No Flow No Flow NA	8.0 8.2 8.2 8.1 8.3 8.0 8.0 8.3 7.9 8.3 7.8	58 578 <10 250 ND 58 78 <10 72 490 6	1.5 4 <1 2 1 1.5 6 <1 <1 <1 <1	0.86 0.43 6.64 0.62 0.01 0.86 0.33 0.01 0.44 0.20 2.51	0.09 0.70 0.04 0.69 0.07 0.09 0.33 0.07 0.45 0.74 0.20	ND 0.31 <0.01 0.07 ND 0.04 0.04 <0.01 0.03 0.29 0.01	ND 0.12 <0.001 0.03 ND ND 0.01 <0.001 0.06 <0.01	0.09 0.07 <0.005 0.04 ND ND 0.01 <0.005 0.027 0.061 0.023	3 4 1 9 9 3 3 3 3 3 3 4 4 2 2
Kmart Pond Inlet  Kmart Pond Outlet  Hunters Pointe at Outlet Structure  Henderson Pond Complex at Silsbee  Custer Wetland at crossing near	NA NA	7/23/2019 5/8/2020 10/19/2020 1/14/2010 5/24/2011 2/22/2012 7/16/2013 3/10/2014 7/16/2013 5/24/2011 2/22/2012 7/16/2013 3/10/2014 2/22/2012 3/10/2014	No Flow No Flow NA	8.0 8.2 8.2 8.1 8.3 8.0 8.0 8.3 7.9 8.3 7.8	58 578 <10 250 ND 58 78 <10 72 490 6	1.5 4 <1 2 1 1.5 6 <1 <1 <1	0.86 0.43 6.64 0.62 0.01 0.86 0.33 0.01 0.44 0.20 2.51	0.09 0.70 0.04 0.69 0.07 0.09 0.33 0.07 0.45 0.74 0.20	ND 0.31 <0.01 0.07 ND 0.04 0.04 <0.01 0.03 0.29 0.01	ND 0.12 <0.001 0.03  ND 0.01 <0.001 <0.001 0.06 <0.01  0.009 0.014	0.09 0.07 <0.005 0.04 ND ND 0.01 <0.005 0.027 0.061 0.023	200 33 4 11 9 9 3 3 3 7 3 3 4 4 2 4 4
Kmart Pond Inlet  Kmart Pond Outlet  Hunters Pointe at Outlet Structure  Henderson Pond Complex at Silsbee  Custer Wetland at crossing near Fairgrounds  I-15 Crossing to Regional Pond	NA NA NA NA NA	7/23/2019 5/8/2020 10/19/2020 1/14/2010 5/24/2011 2/22/2012 7/16/2013 3/10/2014 7/16/2013 3/10/2014 2/22/2012 3/10/2014 3/10/2014 3/10/2014	No Flow No Flow NA	8.0 8.2 8.2 8.1 8.3 8.0 8.0 8.3 7.9 8.3 7.8	58 578 <10 250 ND 58 78 <10 72 490 6 34	1.5 4 <1 2 1 1.5 6 <1 <1 <1 <1 <1 <1	0.86 0.43 6.64 0.62 0.01 0.86 0.33 0.01 0.44 0.20 2.51 0.22	0.09 0.70 0.04 0.69 0.07 0.09 0.33 0.07 0.45 0.74 0.20 0.37	ND 0.31 <0.01 0.07 ND 0.04 0.04 <0.01 0.03 0.29 0.01 0.027 0.037	ND 0.12 <0.001 0.03  ND 0.01 <0.001 <0.001 0.06 <0.01  0.009 0.014	0.09 0.07 <0.005 0.04 ND 0.01 <0.005 0.027 0.061 0.023 0.029	3 4 1 9 3 3 3 7 3 3 4 2 2

#### Monitoring Data Evaluation

Monitoring data locations where changed in 2019 through a request to DEQ from in-line storm sewer locations to the inlet and outlet of two large regional ponds. The new monitoring locations were sampled in 2018, 2019 and in 2020. The locations are 004A and 004B, known as Nature Park Pond, and 005A and 005B, known as Henderson Ponds. The identifier "A" is the inlet to the ponds and "B" is the outlet of the ponds. The drainage area of Nature Park Pond includes nearly all of the commercial downtown area of Helena, while Henderson Pond's drainage area is primarily residential. The data is demonstrating that both ponds effectively treat and infiltrate all runoff throughout the year with no discharge from Henderson Ponds and only limited discharges from Nature Park Pond in the spring when there is increased baseflow from snowmelt and/or higher groundwater conditions. Additionally, Nature Park Pond has been observed to discharge during significant precipitation events as evident from minor erosion observed at the outlet. Some of the data suggests that the inlet water quality is worse during the spring or during rain events following prolonged dry periods; however, there is not enough data to make conclusions and on-going monitoring of these two ponds is recommended and planned for future years.

# MCM 1 AND 2

# **Public Education and Outreach**

Public Involvement and Participation

The City of Helena updated its web page in 2020 including an overhaul of the stormwater page. Following is the web page address to the storm water page and a summary of the updated information and documents:

https://www.helenamt.gov/government/departments/public-works/stormwater

### **Storm Water System**

Stormwater runoff is a major cause of water pollution in urban areas. When rain falls on our roofs, streets, and parking lots in cities and their suburbs, the water cannot soak into the ground as it should. Stormwater drains through gutters, storm sewers, and other engineered collection systems and is discharged into nearby water bodies. The stormwater runoff carries trash, bacteria, heavy metals, and other pollutants from the urban landscape into water bodies. Today cities and urban areas regulate storm water systems to help improve water quality by various methods remove pollutants from storm water before it enters our water bodies. These methods include Best Management Practices, Low Impact Development and Green Infrastructure.

Due to the size of the City of Helena, our storm water system is regulated under the Montana Pollution Discharge Elimination System General Permit for Storm Water Discharges Associated with Small Municipal Separate Storm Sewer Systems (General Permit) [Link document: Storm Water Discharge Permit 2017.pdf] issued by Montana Department of Environmental Quality. The City has developed a Storm Water Management Plan in accordance with the General Permit requirements which is available online at the following location: (Link Documents: H:\ENGINEERING\MS4\Helena\Storm Water Management Plan 2017\Final Helena SWMP). New additions of infrastructure to the system and new connections that will discharge to the storm sewer system must be developed to meet the requirements in the General Permit, the Storm Water Ordinance under City Code 6-6-1, the Engineering and Design Standards, and the system must is operated to apply Best Management Practices to protect storm water quality.

The Utility Maintenance Division maintains and operates the storm sewer system. The storm sewer system consists of approximately:

- 70 miles of storm pipe, which range from 8 inch to 90 inch pipes
- 30 miles of open storm drainage channels
- 700 manholes
- 1,800 storm inlets

If you see any maintenance needs, such as clogged inlets, eroding channels or poor drainage, please report them to: Utility Maintenance Division at 447-8567 or the Engineering Division at 447-8431.

#### **Storm Water Program**

Federal regulations require municipalities and other operators of storm water systems to obtain authorization to discharge storm water under the National Pollution Discharge Elimination System. Due to Helena's size, we are required to obtain authorization to discharge storm water as a Phase II community (See EPA Storm Water Phase II Final Rule, Fact Sheet 1.0. https://www.epa.gov/npdes/stormwater-phase-ii-final-rule-fact-sheet-series

The General Permit for Storm Water Discharges Associated with Small Municipal Separate Storm Sewer Systems requires permittees to develop, implement, and enforce a Stormwater Management Program (SWMP). The SWMP is designed to reduce the discharge of pollutants from the permitted Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP), to protect water quality, and satisfy the appropriate water quality requirements of the Montana Water Quality Act.

The Storm Water Management Program consists of Best Management Practices (BMPs) for each of the six Minimum Control Measures (MCMs) as identified in the Permit:

- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post Construction Storm Water Management for New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations

The Storm Water Management Program is available online at the following location insert link. The public is encouraged to review and comment on the SWMP at anytime. If you have any comments please contact:

Matt Culpo - Stormwater Engineer (406) 447-8073 mculpo(at)helenamt.gov

Each year, the City of Helena prepares a Storm Water Small MS4 Annual Report which is submitted to the Department of Environmental Quality. Last year's annual report can be access by the following link: Small MS4 Annual Report.

The City of Helena also partners with the Lewis and Clark County Water Protection District (District). The District was formed in 1992. Its mission is to preserve, protect and improve water quality within District boundaries which includes the City of Helena with the Lake Helena Watershed. The District also provides outreach and education opportunities to the

**public.** More information can be found at the Lewis and Clark County Water Quality Protection website: <a href="https://www.lccountymt.gov/health/water.html">https://www.lccountymt.gov/health/water.html</a>

For additional information related to storm water protection at home and to see how you can take part, please see our Storm Water Runoff Pollution and Clean Water Begins at Home Flyers.

#### **Illicit Discharges**

In general, only stormwater and water from the City water distribution system are allowed to be discharged into the storm drainage system. Illicit discharges are defined as a storm drain that has measurable flow during dry weather containing pollutants and/or pathogens and any discharge to the storm sewer system that is not composed entirely of storm water, with exceptions for discharges allowed under the General permit, for example: waters used for firefighting operations, hydrant flushing or car washing. A storm sewer with measurable flow but containing no pollutants is simply considered a normal storm water discharge and generally consists of storm water runoff or groundwater infiltration. The Environmental Protection Agency's, Storm Water Phase II Final Rule for Illicit Discharge Detection and Elimination Minimum Control Measure can be found here: Link to IDDE Rule.

To report any suspected discharges or dumping of pollutants into the stormwater system, referred to as illicit discharges, please immediately contact:

Matt Culpo - Stormwater Engineer (406) 447-8073 mculpo(at)helenamt.gov

#### **Low Impact Development and Green Infrastructure**

The term Low Impact Development (LID) refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat. Green infrastructure (GI) is the patchwork of natural areas that provide habitat, flood protection and cleaner water. At both the site and regional scale, LID/GI practices aim to preserve, restore and create green space using soils, vegetation, and rainwater harvest techniques. LID is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, bioswales and water quality ponds. By implementing LID principles and practices, water can be managed in a way that reduces the impact of development and promotes the natural movement of water within an ecosystem or watershed. Applied on a broad scale, LID can maintain or restore a watershed's hydrologic and ecological functions. (https://www.epa.gov/nps/urban-runoff-low-impact-development)

The City of Helena, as part of a MS4 working group and in cooperation with the Montana Department of Environmental Quality, has prepared the Montana Post-Construction Storm Water Best Management Practices Design Guidance Manual (BMP Manual). These best management practices identified in the BMP Manual represent green infrastructure that can be applied individually or in combination to a development or redevelopment to provide a LID system. The BMP Manual provides design guidance for achieving the storm water quality requirement in the Engineering and Design Standards for treatment of runoff from the 0.5 inch precipitation event. Click this link to access the BMP Manual.

#### **Rain Gardens**

As a property owner the City of Helena encourages the use of Rain Gardens wherever possible to improve water quality and your property. The City of Helena has prepared the following Rain Garden flyer related to design and construction of Rain Gardens in the Helena area.

#### **Construction Storm Water**

An owner or operator of a construction activity is required to obtain authorization under the General Permit for Stormwater Discharges Associated with Construction Activity for construction activities that include clearing, excavating, grading, grubbing, or placement/removal of earth material with a total area of one or more acres. An owner or operator is a person who owns, leases, operates, controls, or supervises the construction activity. To apply for an authorization under the General Permit within the City of Helena submit a complete Notice of Intent Application Package including Storm Water Pollution Prevention Plan forms to the Building Department with your building permit application and to DEQ. Go to the following link for information related to the General Permit requirements and to obtain the application package and forms: <a href="http://deq.mt.gov/water/stormwater/stormsystems">http://deq.mt.gov/water/stormwater/stormsystems</a>.

For additional information please see our Storm Water and Construction Flyer.

**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
	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.
ies	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 Types	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.
	Vehicle Maintenance	Potential for spilling and leaking automotive fluids.	Petroleum Products	Landfill disposal and recycling. Informational brochure distribution. City website information.
Residential Behaviors	Use of fertilizers, Lawn Care pesticides and weed control products.		Fertilizers, pesticides, and weed control products.	Landfill accepts yard debris. Informational brochure distribution. City website information.
Residen	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.

#### **Public Involvement and Participation**

As a result of advertising through utility bill mailer and updated contact information on the City website, the storm water engineer occasionally receives phone calls reporting spills and storm water concerns.

No specific feedback on the approaches has been received.

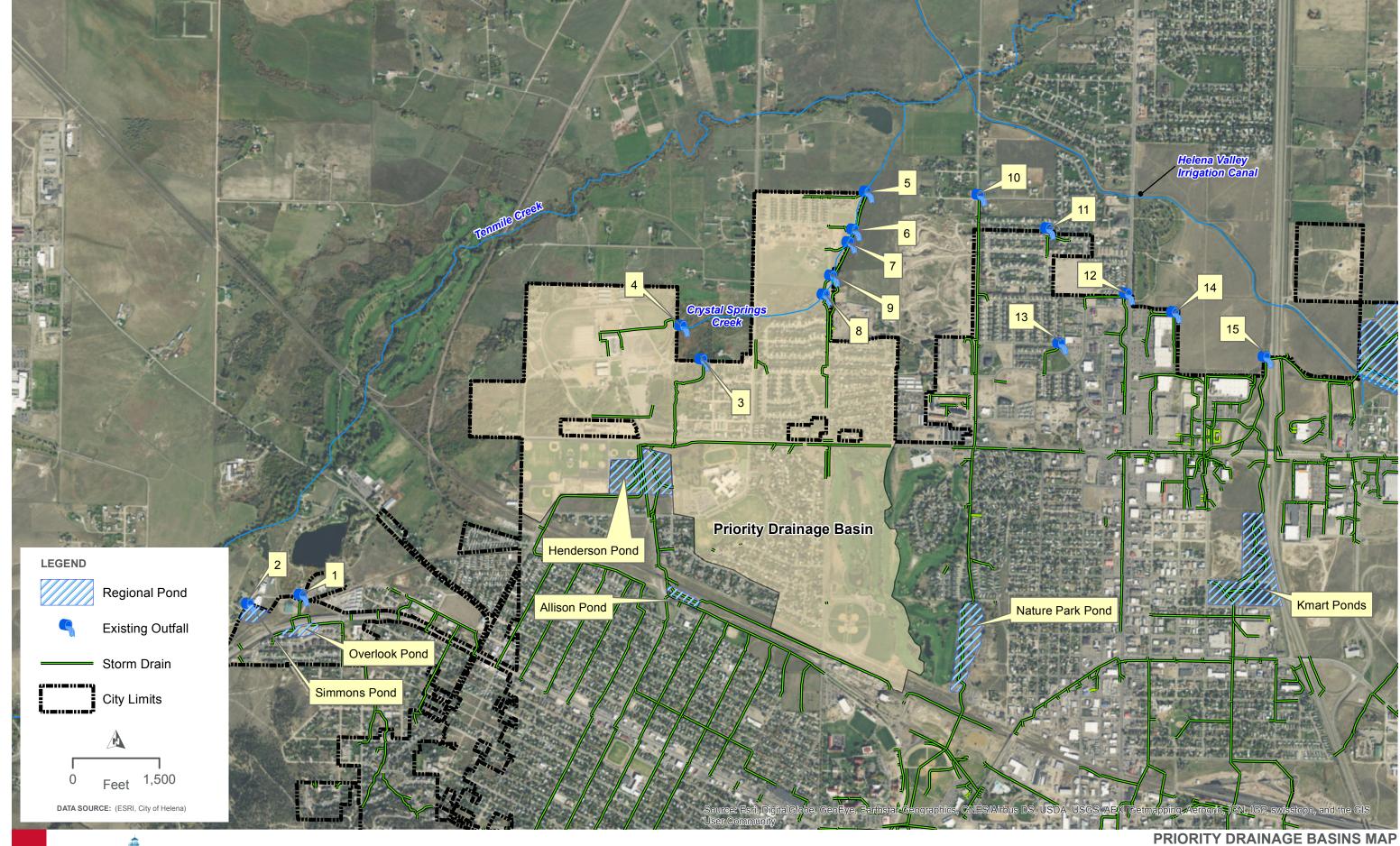
See also <u>City of Helena, Storm Water Management Program, Permit Term 2017-2021</u>, Section 2.2: Public Involvement and Participation for more detailed information.

# MCM 3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

#### 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.



RIORITY DRAINAGE BASINS MAR

CITY OF HELENA, MT

HELENA MONTANA

QUEEN CITY OF THE ROCKIES

## High Priority Outfalls for the City of Helena

Outfall No.	Drainage Basin	Outfall BMP	Outfall Conveyance	Street Location
3		Henderson Retention Pond Complex	24 inch	Silsbee Ave and Mitchell near
		·	24 inch	Fairgrounds
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

Specific to Traditional MS4s and per requirements f.iii in the referenced MCM, attach the summary of investigations conducted and corrective actions taken per the required Illicit Discharge Investigation and Corrective Action Plan and any associated documents.

No illicit discharges were reported during 2019.

A sanitary sewer collapsed on 15<sup>th</sup> Street upstream of Front which was discovered about 9pm. Bypass pumping was set up the following day and the sanitary sewer repaired the following week.

## 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

# **Outfalls for the City of Helena**

	Outfall No.	Drainage Basin	Outfall BMP Outfall Conveyance		Street Location	Date Inspected	
	1		East Simmons Detention Pond	30 inch	Broadwater Ave and spring meadow	7/2017 10/2019	
	2		West Simmons Detention Pond	12 inch	Broadwater and Motor Ave	7/2017 10/2019	
High Priority Outfalls	3		Henderson Retention Pond Complex	24 inch	Silsbee Ave and Mitchell near	7/2017	
				24 inch	- Fairgrounds	7/2017	
	4		Fairgrounds Detention Pond	16 inch	Fairgrounds east of Arena	7/2017	
	5	Westside	North Stone Meadows Detention Pond	8 inch	Andesite Ave and crystal springs creek	7/2017 6/2020	
	6		Central Stone Meadows Detention Pond	10 inch	Benton Ave and Flagstone Ave	7/2017 6/2020	
	7		South Stone Meadows Detention Pond	8 Inch	Benton Ave south of Obsidian Ave	7/2017 6/2020	
	8		Crystal Springs Detention Pond	Open Channel	Benton and Willowbrook	7/2017 6/2020	
	9		County Shop Detention Basin	Open Channel	E of N Benton and Willowbrook Drive	7/2017 9/2018 6/2020	
	10	Last Chance	Nature Park Retention Pond, and on-site detention/ret ponds	24 inch	McHugh Lane north of Golden Estates subdivision	9/2018	
	11		Golden Estates Detention Pond	18 inch	Jade Street and Amethyst Ave (golden estates)	9/2018	
	12		Skelton Detention 1, 2, 3, and 4	24 inch	North of Ptarmigan and Montana Ave	9/2018 6/2020	
	13		Anderson BP Detention and open channel	Open Channel	S of Road Runner and Sand Piper	9/2018	
	14	Davis	Target Retention Pond	36 inch	Jordan Drive behind Macy's	9/2018	
f	15	Davis	Davis Region Pond and Kmart Pond	48 inch	I-15 Regional Ponds	9/2018	
	16	Bull Run	Burnham Ranch Retention Pond				
	17	West	Helena Regional Detention and York and Custer Detention	55 inch	York Road north of Custer	9/2018	

Outfall No.	Drainage Basin	Outfall BMP	Outfall Conveyance	Street Location	Date Inspected
18		Airport Detention 4, 5.1, and 5.2 and 1400ft of open channel	21 inch	Canyon Ferry Road east of Y- county	9/2018
19	Airport	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	9/2018
20		Airport Retention R-910 and Detention Pond 2	Heletia Valley Carial Crossing east		9/2018 11/2019
21		Walmart Detention 1 and 2	36 in	NW of Miller and Carter	9/2019
22		Staples Retention	18 in	NW of Miller and Carter	9/2019
23		Future Nichole St Pond	36 in	N of Nichole St and RR Tracks	9/2019
24	Bull Run Upstream of Airport	Open Channel	Open Channel	N of Dick Anderson Construction	9/2019
25		Hunters Point and Mountain West Bank Detention	Open Channel	N of I15, upstream of Synness Auto Salvage	9/2019 4/2020
26		Nob Hill Retention 1 and 2, and Nob Hill Detention 1, Grass swale along I15	24 in	NW of I15 and Mendocino Drive	4/2020
27		Nob Hill Detention 4	Open Channel	Colonial drive south of Nob Hill Lift station	4/2020
28		Aspen Meadows Detention	84 inch	Alice street East of Crossroads Pkwy	11/2019
29		Grass channel, small basin at culvert inlet	2-24 inch	Crossroads Pkwy and Prospect Ave (highway 12)	11/2019
30	Far East	West Aspen Meadows Retention	24 inch	Alice street East of Cascade Ave	11/2019
31		East Aspen Meadows Retention	42 inch	Twilight and Stillwater streets	11/2019
32		East Aspen Meadows Retention	12 inch	Runkle Pkwy between Still water and Alpine View	11/2019
33		Open Channel for 700ft	12 inch	Runkle Pkwy and Highway 282	11/2019
34		Aspen Meadows Detention North and South	36 inch	Highway 282 south of Runkle Parkway	11/2019

Note: All screening results have resulted in zero suspected illicit discharges.

# ILLICIT DISCHARGE INVESTIGATION AND CORRECTIVE ACTION PLAN WITHIN THE CITY OF HELENA, MONTANA

September 1, 2020

#### 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 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. <a href="Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments">Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments</a>, developed by the Center for Watershed Protection (CWP), was utilized to guide the development of this plan. The complete document is available at City of Helena, Engineering Division 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 Storm Water Coordinator or Utility Maintenance Supervisor 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 Storm Water Coordinator or Utility Maintenance Supervisor 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 Storm Water Coordinator or Utility Maintenance Supervisor 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:

- Outfall Inspection Report
- Photographs
- 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 did not discover the potential illicit discharge (e.g. the City was made aware via a public complaint), the Storm Water Coordinator or Utility Maintenance Supervisor 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:

- Discharges posing an immediate threat to human health or the environment
- · Discharges with a potential to contaminate drinking water
- · Discharges with the potential to contaminate groundwater
- Discharges into or with a potential to reach surface water
- · Any continuous flow or any volume large enough that it is not contained

#### 1.4 Notification of Appropriate Agencies

#### Threat to Human Heath:

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 Lewis and Clark County Health Department. 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.mcpx

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 Lewis and Clark County Health Department phone number is:

Phone: (406) 457-8900

#### Hazardous Materials:

Lewis and Clark County has a Hazardous Materials – Terrorism Incident Response Plan which covers appropriate responses and contact information in the event of a hazardous material spill. When hazardous materials are suspected the Montana Disaster and Emergency Services Duty Officer will be contacted to determine if hazardous materials response is necessary:

Phone: (406) 841-3911

Additionally, the National Response Center can be notified if the MT DES Duty Officer is not available at:

Phone: (800)-424-8802

#### 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 Storm Water Coordinator or Utility Maintenance Supervisor 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 <u>Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments</u> will be consulted, which contains detailed guidance on how to efficiently conduct each investigation.

After the appropriate investigation method has been selected, the Storm Water Coordinator or Utility Maintenance Supervisor 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, theStorm Water Coordinator or Utility Maintenance Supervisor 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 Storm Water Coordinator or Utility Maintenance Supervisor 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 a field investigation conducted by the City's Storm Water Coordinator or Utility Maintenance Supervisor. The City may take the lead on the clean up action or request additional assistance as appropriate if the illicit discharge is an immediate threat to public health and safety. The cost of clean up will be charged back to the responsible party.

#### 2.3 Select Appropriate Corrective Action

If deemed to be safe and within the Storm Water Coordinator or Utility Maintenance Supervisor authority and capabilities the illicit discharge may be eliminated immediately using appropriate and available methods.

For cases where a private property owner is responsible the Storm Water Coordinator or Utility Maintenance Supervisor 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 <u>Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments</u> provides a list of methods to remove and

eliminate illicit discharges and will be used, if necessary, to determine the appropriate corrective action.

#### 2.4 Confirm and Document Elimination of Contamination Source

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 Storm Water Coordinator or Utility Maintenance Supervisor 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.

# ATTACHMENT A ILLICIT DISCHARGE INVESTIGATION & CORRECTIVE ACTION FORM

City Personnel Involved		Da	
Type of Initial Notification (e.g. Phone call f	rom public, result of City i	nspection, Dry weather	screening, etc.)
Location of Illicit Discharge (Address)			
	( ) -		
Responsible Party Name/Company	Telephone	Repeat Offender	High Priority Site
	011		
Street	City		Zip
Description of Investigations Conducted an	d Investigation Findings:		
Description of Corrective Action:			
Description of Conserve Action.			
Enforcement Action (if applicable):			
Level of Response	Selected Remedy		Date for Follow-Up
Additional Notes:			
Confirmation of Resolution:			
City Personnel		Da	te

## MCM 5

# POST CONSTRUCTION SITE STORM WATER MANAGMENT

# 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

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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:
  - 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)

7 of 7

# ENFORCEMENT RESPONSE PLAN FOR STORMWATER MANAGEMENT WITHIN THE CITY OFHELENA, MONTANA

# December 2018

### 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 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 I 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

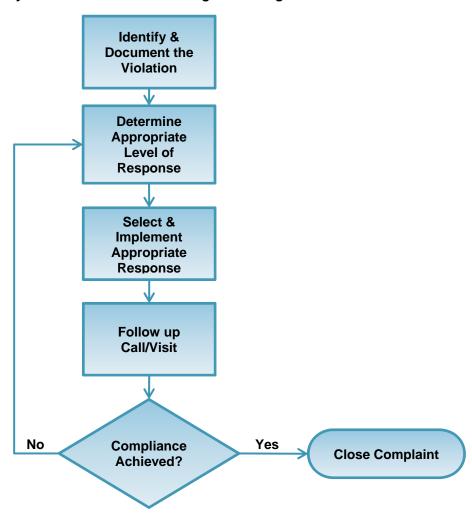
MS4 Municipal Separate Storm Sewer System

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 A) 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 24 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 necessary to implement clean up. 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 Storm Water Coordinator or Utility Maintenance Supervisor. 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

As allowed by City Ordinance: 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 10 working days after discovery of the violation.

# iii.) 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.

### iv.) 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 clean up does not occur within 10 business days of the date of the NOV. The schedule 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.

### v.) Monetary Penalty

As allowed by City Ordinace 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.

### 2.4 Level 4: Violations and Criminal Enforcement

As allowed by City Ordinance: 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.

### 2.5 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. 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)

# 4. Enforcement Roles and Responsibilities

All significant violations and the responses shall be reported to the Storm Water Coordinator or Utility Maintenance Supervisor and 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.

# **Glossary of Terms**

**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.

# ATTACHMENT A ENFORCEMENT RESPONSE DOCUMENTATION FORM

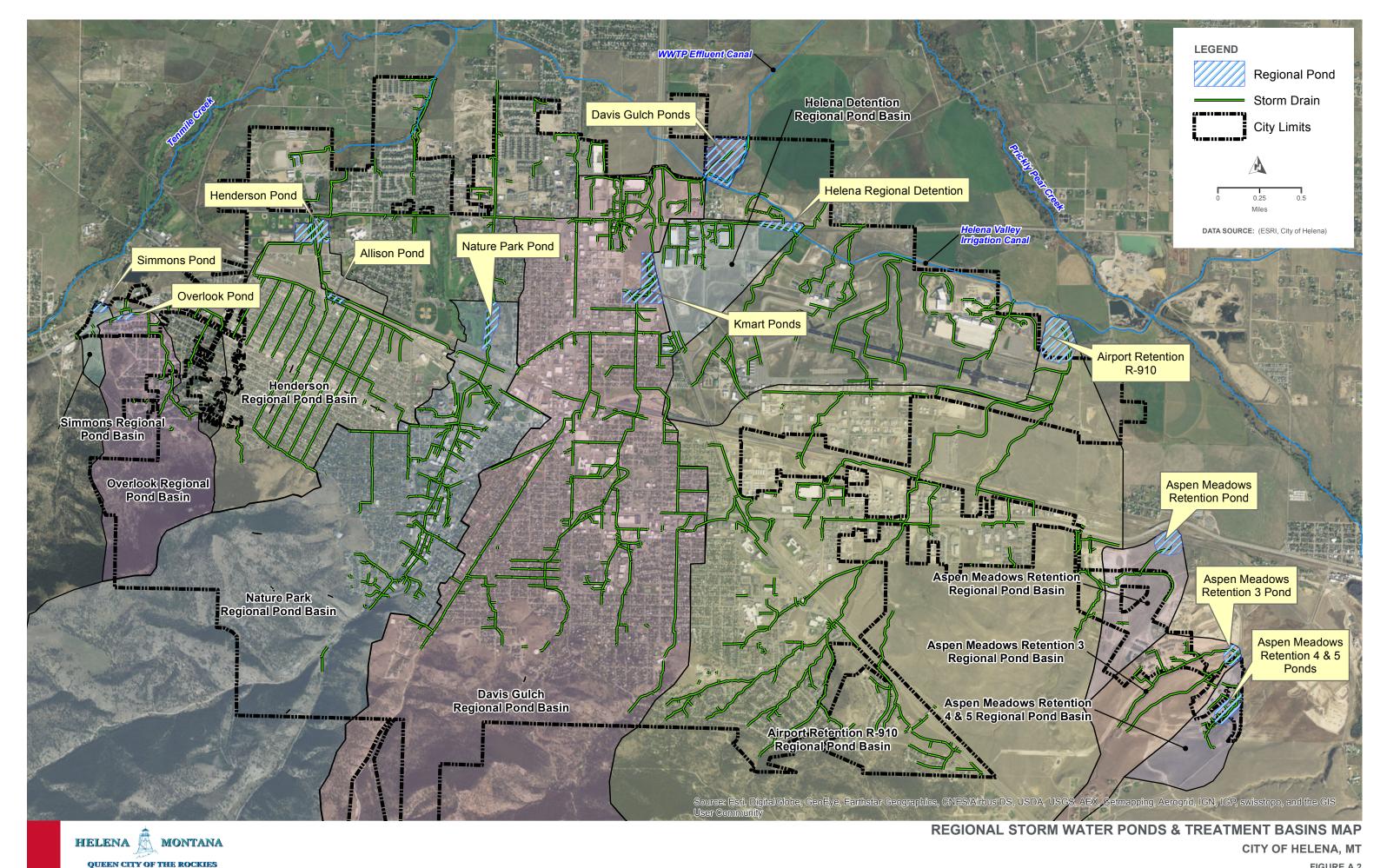
City Personnel Involved		Date
Description of Violation		
Location of Violation (address)		
	( )	
	( ) -	
Responsible Party	Telephone	
Street	City	Zip
	•	•
Description of Violation:		
· · · · · · · · · · · · · · · · · · ·		
Level of Response	Selected Remedy	Date for Follow-Up
Level of Response	Gelected Remedy	Date for Follow-Op
A LPC LAL		
Additional Notes:		

# Outfalls for the City of Helena

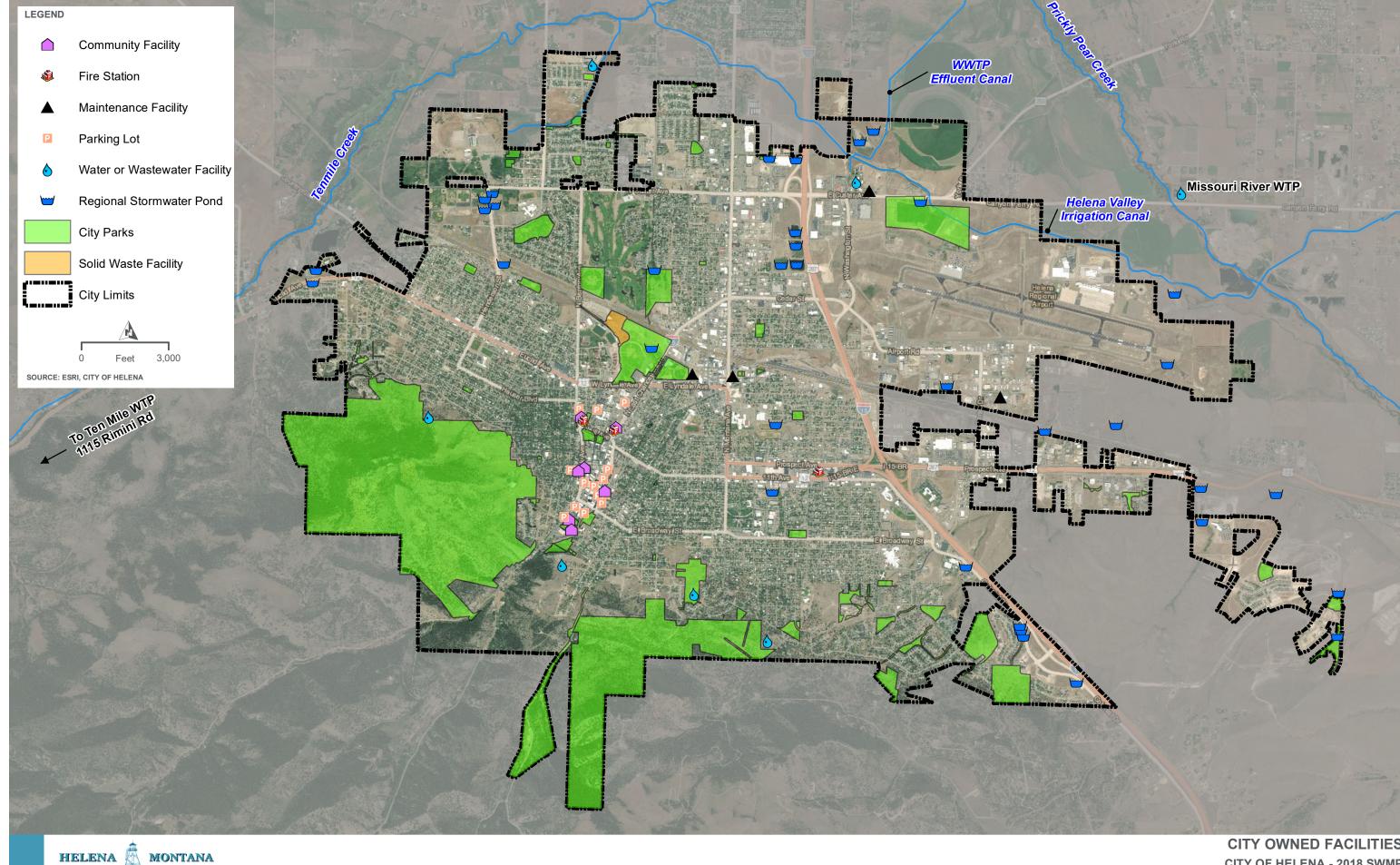
	Outfall Drainage		Outfall BMP		Street Location	Date
	No.	Basin		Conveyance		Inspected
	1		East Simmons Detention Pond	30 inch	Broadwater Ave and spring meadow	7/2017 10/2019
	2		West Simmons Detention Pond	12 inch	Broadwater and Motor Ave	7/2017 10/2019
High Priority	3	•	Henderson Retention Pond Complex	24 inch	Silsbee Ave and Mitchell near	7/2017
Outfalls				24 inch	Fairgrounds	7/2017
	4		Fairgrounds Detention Pond	16 inch	Fairgrounds east of Arena	7/2017
					Andocite Ave and existel springs	7/2017
	5		North Stone Meadows Detention Pond	8 inch	Andesite Ave and crystal springs creek	6/2020
		Westside				7/2017
	6		Central Stone Meadows Detention Pond	10 inch	Benton Ave and Flagstone Ave	6/2020
						7/2017
	7		South Stone Meadows Detention Pond	8 Inch	Benton Ave south of Obsidian Ave	6/2020
						7/2017
	8		Crystal Springs Detention Pond	Open Channel	Benton and Willowbrook	6/2020
			County Shop Detention Basin			7/2017
						9/2018
				Open	E of N Benton and Willowbrook	3,2010
	9			Channel	Drive	6/2020
			Nature Park Retention Pond, and on-site		McHugh Lane north of Golden	9/2018
	10		detention/ret ponds	24 inch	Estates subdivision	
	11	Last	Golden Estates Detention Pond	18 inch	Jade Street and Amethyst Ave (golden estates)	9/2018
		Chance				9/2018
	12		Skelton Detention 1, 2, 3, and 4	24 inch	North of Ptarmigan and Montana Ave	6/2020
	13		Anderson BP Detention and open channel	Open Channel	S of Road Runner and Sand Piper	9/2018
	14	Davis	Target Retention Pond	36 inch	Jordan Drive behind Macy's	9/2018
	15	2013	Davis Region Pond and Kmart Pond	48 inch	I-15 Regional Ponds	9/2018
	16		Burnham Ranch Retention Pond			
		Bull Run	Helena Regional Detention and York and			9/2018
	17	West	Custer Detention	55 inch	York Road north of Custer	9/2010

Outfall No.	Drainage Basin	Outfall BMP	Outfall Conveyance	Street Location	Date Inspected
18		Airport Detention 4, 5.1, and 5.2 and 1400ft of open channel	21 inch	Canyon Ferry Road east of Y- county	9/2018
19	Airport	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	9/2018
20		Airport Retention R-910 and Detention Pond 2	54 inch	Helena Valley Canal Crossing east end Airport	9/2018 11/2019
21		Walmart Detention 1 and 2	36 in	NW of Miller and Carter	9/2019
22		Staples Retention	18 in	NW of Miller and Carter	9/2019
23		Future Nichole St Pond	36 in	N of Nichole St and RR Tracks	9/2019
24	Bull Run Upstream of Airport	Open Channel	Open Channel	N of Dick Anderson Construction	9/2019
25		Hunters Point and Mountain West Bank Detention	Open Channel	N of I15, upstream of Synness Auto Salvage	9/2019 4/2020
26		Nob Hill Retention 1 and 2, and Nob Hill Detention 1, Grass swale along I15	24 in	NW of I15 and Mendocino Drive	4/2020
27		Nob Hill Detention 4	Open Channel	Colonial drive south of Nob Hill Lift station	4/2020
28		Aspen Meadows Detention	84 inch	Alice street East of Crossroads Pkwy	11/2019
29		Grass channel, small basin at culvert inlet	2-24 inch	Crossroads Pkwy and Prospect Ave (highway 12)	11/2019
30	Far East	West Aspen Meadows Retention	24 inch	Alice street East of Cascade Ave	11/2019
31		East Aspen Meadows Retention	42 inch	Twilight and Stillwater streets	11/2019
32		East Aspen Meadows Retention	12 inch	Runkle Pkwy between Still water and Alpine View	11/2019
33		Open Channel for 700ft	12 inch	Runkle Pkwy and Highway 282	11/2019
34		Aspen Meadows Detention North and South	36 inch	Highway 282 south of Runkle Parkway	11/2019

Note: All screening results have resulted in zero suspected illicit discharges.



# MCM 6 POLLUTION PREVENTION AND GOOD HOUSEKEEPING



**CITY OWNED FACILITIES CITY OF HELENA - 2018 SWMP** 

MONTANA

The City of Helena's Standard Operating Procedures (SOPs) are multipage documents that are not included with this annual report but are available upon request. Following is a summary of the SOPs on file at the City.

# **City Facility Standard Operating Procedures**

Vehicle Maintenance Facility

**Wastewater Treatment Facility** 

**Utility Maintenance Facility** 

Solid Waste Transfer Station Facility

# **City Activity Standard Operating Procedures**

Landscaping

**Shop and Fleet Services** 

Solid Waste Management

**Utility Maintenance**