Montana Department of Environmental Quality

WATER PROTECTION BUREAU

Agency Use
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FORM **MS4-AR**

MPDES Storm Water Small MS4 Annual Report Form

Reporting period is for the calendar year, January 1st through December 31st. Check one. Annual Report is due by March 1st of the following year.

◉ 2017	○ 2018	○ 2019	○ 2020	○ 2021

Instructions: This Annual Report Form is to be completed by each permittee and co-permittee authorized to discharge storm water under the General Permit for Storm Water Discharges Associated with Small Municipal Separate Storm Water Sewer Systems (MS4s). All authorized permittees and co-permittees are required to complete this Annual Report Form for each calendar year reporting period. For co-permittees authorized under one permit authorization or for co-permittees with multiple authorizations, you are required to complete this form and submit separate required documents/information exclusively for your respective regulated Small MS4 area(s). This completed Annual Report Form must be electronically submitted to the Montana Department of Environmental Quality, Water Protection Bureau. 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 0007

Small MS4 Classification	◉ **Traditional**	○ **Non-Traditional**

Small MS4 Name: City of Missoula

Small MS4 Mailing Address: 435 Ryman Street

City, State, and Zip Code: Missoula, MT 59802

Small MS4 Contact Person (and Title): Bob Hayes, Storm Water Superintendent

Mailing Address: 435 Ryman Street

City, State, and Zip Code: Missoula, MT 59802

Phone Number: (406) 552-6357 **E-mail address:** bhayes@ci.missoula.mt.us

Storm Water Management Team: Attach an organizational chart identifying a primary SWMP coordinator and the positions responsible for implementing each minimum measure.		
Requested above chart:	◉ Attached See Page 13 of report	○ Not Attached
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? 3.81 If needed, provide an explanation.

See Page 14 of report.

If more space is needed, submit on an additional page with corresponding reference or on a data storage device.

Answer the following five (5) questions on an additional page with corresponding reference or on a data storage device. See Pages 14, 15 and 16 of this report.

(1) What are the source(s) of funding for implementation of the MS4 permit and the estimated percentage of the total budget allocated from each source listed?

(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.

Illicit Discharge Detection & Elimination: Per the IDDE MCM requirement (Part II (3)(c.i)), has the permittee reviewed, and updated if needed, the storm sewer map during the calendar year? See Page 17 of report.	◉ Yes	○ No
Per the IDDE MCM requirement (Part II (3)(e.i)), has the permittee dry weather inspected and screened outfalls during the calendar year?	○ Yes	◉ No

Fill in the blanks with numbers. The permittee has inspected 4 outfalls during this calendar year. Since authorization under the 2017 General Permit, the permittee has inspected 4 total outfalls out of the 36 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. See Page 47 of report.	◉ Yes	○ No
Construction Site Storm Water Management: During the calendar year, how many construction storm water management plan reviews were completed (Part II (4)(b))? 24		
During the calendar year, how many construction projects were inspected for their storm water management controls (Part II (4)(c))? 58		
Pollution Prevention/Good Housekeeping for Permittee Operations: Has the permittee reviewed, and updated if needed, the inventory of permittee-owned/operated facilities and activities (Part II (6)(a.i))?	◉ Yes	○ No
Has the permittee reviewed, and updated if needed, the map that identifies the locations of facilities and known locations of activities (Part II (6)(a.ii))?	◉ 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))? ***Not applicable during calendar year 2017, 2018, and 2019. Check "No" during these years.***	○ Yes	◉ No
Training: According to Part II (B) Training requirements, has the permittee conducted applicable training during the 1st and 4th calendar years? ***Not required during calendar year 2018, 2019, and 2021. Check "No" during these 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
Special Conditions: Per **Pre-TMDL Approval (Part III.A) requirements**, 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 List on Pages 21 & 22, BMPs Pages 27+	○ Not Attached	○ Not Applicable
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 See Page 23 of report.	○ Not Attached	○ Not Applicable

Calendar Year 2017: The permittee has attached all outfalls that discharge to impaired waterbodies and the associated pollutants of impairment.		
◉ Attached See Pages 21 and 22	○ 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
Calendar Year 2019: The permittee has attached all outfalls that discharge to impaired waterbodies and the associated pollutants of impairment.		
○ Attached	○ Not Attached	○ Not Applicable
Calendar Year 2020: The permittee has attached all outfalls that discharge to impaired waterbodies and the associated pollutants of impairment.		
○ Attached	○ Not Attached	○ Not Applicable
Calendar Year 2020: 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
Calendar Year 2021: 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
Monitoring: Per requirements in Part IV (B), has the permittee attached monitoring results, calculations, and evaluations?		
◉ Attached See Pages 24, 25 and 26 of report	○ 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 Report Attachments (1st Calendar Year)		
Public Education and Outreach:		
Per requirements a.i in the referenced MCM, attach the required information regarding key target audiences and associated pollutants.		
◉ Attached See Pages 27 through 43 of report	○ Not Attached	
Public Involvement and Participation:		
Per requirements a.i in the referenced MCM, attach the required information regarding the public involvement approach and schedule of each key audience.		
◉ Attached See Pages 44 and 45 of report	○ Not Attached	
Illicit Discharge Detection & Elimination:		
Per requirements a.i in the referenced MCM, attach the required information regarding categories of non-storm water discharges or flows, associated pollutants, and local controls or conditions.		
○ Attached	◉ Not Attached	
Per requirements b.i in the referenced MCM, attach the required information regarding occasional non-storm water discharges or flows, associated pollutants, and local controls or conditions.		
○ Attached	◉ Not Attached	
Per requirements f.i in the referenced MCM, attach the required Illicit Discharge Investigation and Corrective Action Plan and any associated documents.		
◉ Attached See Pages 46 through 50 of report	○ Not Attached	
Construction Site Storm Water Management:		
Per requirements a.iii in the referenced MCM, attach progress towards an Enforcement Response Plan and associated documents.		
○ Attached	◉ Not Attached	
Specific to Traditional MS4s and per requirements b.i in the referenced MCM, attach the construction storm water management plan review checklist.		
◉ Attached See Pages 52 through 56 of report	○ Not Attached	○ Not applicable
Specific to Non-Traditional MS4s and per requirements b.iii in the referenced MCM, attach the construction storm water management plan review checklist.		
○ Attached	○ Not Attached	◉ Not applicable
Specific to Traditional MS4s and per requirements c.i in the referenced MCM, attach the construction storm water management inspection form or checklist.		
◉ Attached See Pages 57 through 63 of report	○ Not Attached	○ Not applicable
Specific to Non-Traditional MS4s and per requirements c.ii in the referenced MCM, attach the construction storm water management inspection form or checklist.		
○ Attached	○ Not Attached	◉ Not applicable

Post-Construction Site Storm Water Management in New and Redevelopment		
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 Attachments (2nd Calendar Year)		
Public Education and Outreach:		
Per requirements b.i in the referenced MCM, attach the required information regarding outreach messages.		
○ 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, 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, attach the required information regarding categories of non-storm water discharges or flows, associated pollutants, and local controls or conditions.		
○ Attached	○ Not Attached	
Per requirements b.i in the referenced MCM, attach the required information regarding occasional non-storm water discharges or flows, associated pollutants, and local controls or conditions.		
○ Attached	○ Not Attached	
Specific to Traditional MS4s and per requirements d.i in the referenced MCM, attach the adopted ordinance or other regulatory mechanism to prohibit illicit discharges.		
○ Attached	○ Not Attached	○ Not applicable
Specific to Non-Traditional MS4s and per requirements d.ii in the referenced MCM, attach the summary of legal authority to prohibit illicit discharges.		
○ Attached	○ Not Attached	○ Not applicable
Per requirements d.iii in the referenced MCM, attach the required summary of the cooperative agreements.		

◯ 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, attach the list of high priority outfalls.		
◯ 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
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 inspection 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	◯ 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 Attachments (3rd 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, attach the required information regarding categories of non-storm water discharges or flows, associated pollutants, and local controls or conditions.		
◯ Attached	◯ Not Attached	
Per requirements b.i in the referenced MCM, attach the required information regarding occasional non-storm water discharges or flows, associated 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	
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 Management:		
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 Management in New and Redevelopment		

Per requirements in c.viii in the referenced MCM, attach findings and compliance actions regarding 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 the completed Standard Operating Procedures.		
◯ Attached	◯ Not Attached	

2020 Annual Report Attachments (4th 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, attach the required information regarding categories of non-storm water discharges or flows, associated pollutants, and local controls or conditions.		
◯ Attached	◯ Not Attached	
Per requirements b.i in the referenced MCM, attach the required information regarding occasional non-storm water discharges or flows, associated 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	
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		

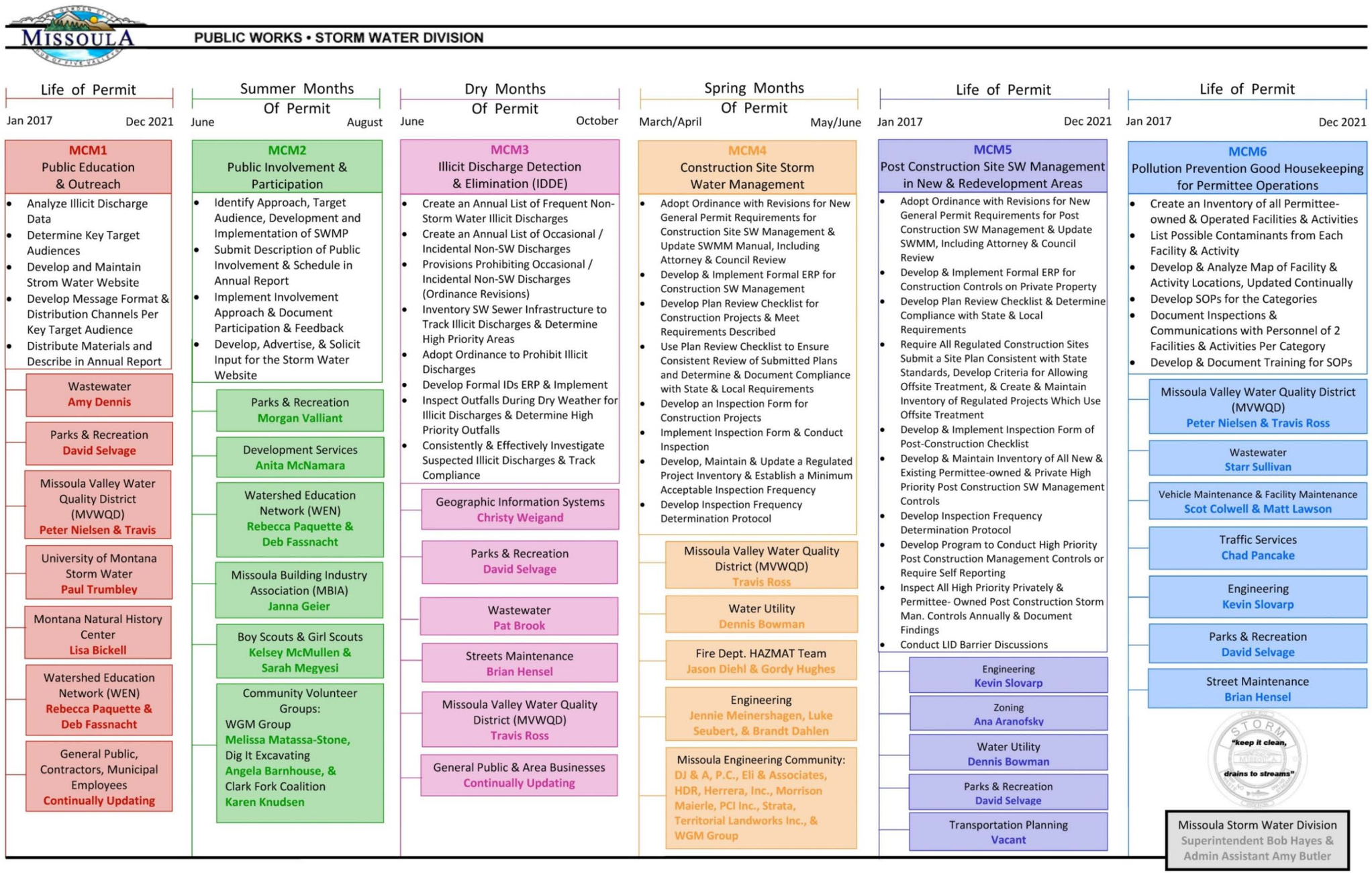
Investigation and Corrective Action Plan and any associated documents.		
☐ Attached	☐ Not Attached	☐ Not applicable
Post-Construction Site Storm Water Management in New and Redevelopment		
Specific to Traditional MS4s and per requirements a.i in the referenced MCM, attach the adopted ordinance or other regulatory mechanism to require post-construction storm water controls.		
☐ Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and per requirements a.ii in the referenced MCM, attach the legal authority summary.		
☐ Attached	☐ Not Attached	☐ Not applicable
Per requirements in a.iii in the referenced MCM, attach the Enforcement Response Plan and associated documents.		
☐ Attached	☐ Not Attached	
Per requirements in c.viii in the referenced MCM, attach findings and compliance actions regarding 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
Per requirements in d.i in the referenced MCM, attach a summary of the discussion outcomes.		
☐ Attached	☐ Not Attached	
Pollution Prevention/Good Housekeeping for Permittee Operations		
Per requirements in a.iii in the referenced MCM, attach the completed Standard Operating Procedures.		
☐ Attached	☐ Not Attached	

2021 Annual Report Attachments (5th 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, attach the required information regarding categories of non-storm water discharges or flows, associated pollutants, and local controls or conditions.

◯ Attached	◯ Not Attached	
Per requirements b.i in the referenced MCM, attach the required information regarding occasional non-storm water discharges or flows, associated 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	
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
Post-Construction Site Storm Water Management in New and Redevelopment		
Per requirements in c.viii in the referenced MCM, attach findings and compliance actions regarding 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 rankir 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) Bob Hayes	
Title (Type or Print) Storm Water Utility Superintendent	**Phone Number** (406) 552-6357
Signature Bob Hayes Digitally signed by Bob Hayes Date: 2018.02.23 11:31:46 -07'00'	**Date Signed** 23-Feb-2018

Storm Water Management Team
A. From Page 2, 2017 MS4-AR Form. "Storm Water Management Team: Attach an organizational chart identifying a primary SWMP coordinator and the positions responsible for implementing each minimum measure."
B. In accordance with Page 9, Part II. A. of General Permit 2017 - 2021.
Missoula's Storm Water Management Team meets quarterly and coordinates as needed in the interim via e-mail, phone and person-to-person contact. The organization of the Team is outlined in the chart below.



SWMP Resources

A. From Page 2, 2017 MS4-AR Form. "Permittee's SWMP Resources: How many FTEs does the permittee designate to the MS4 permit? If needed, provide an explanation."

B. In accordance with Page 9, Part II. A. of General Permit 2017 - 2021. Storm Water Management Team.

Missoula's Storm Water Management Team budget is supported by both City and City-County organizations. The following list provides the organization, FTEs directly responsible for storm water pollution prevention activities, and the activity related to each organization.

DESIGNATED FTEs

Organization	*FTE*	*Activity*
City Storm Water Utility	2.00	All MS4 Permit and utility activities
City Public Works Department	0.25	MS4 Permit annual report and other services as needed
City GIS Division	0.02	Facility mapping and asset database services
City Street Maintenance Division	0.50	Storm drain cleaning and maintenance
City Sewer Utility	0.08	Wet weather sampling, lab work, cleaning and emergency repairs/standing water removal
City Finance Division	0.50	Database of storm water utility customers and billing
City Conservation and Lands Management Division	0.30	Riparian area cleanup and replanting native species along with related public education
City Engineering Division	0.08	Storm water plan review and inspection for developer construction projects and city construction projects
Missoula Valley Water Quality District	0.08	IDDE, household hazardous waste collection and disposal, and related public education
Total FTEs:	3.81	

Five Questions, Question 1

A. From Page 2, 2017 MS4-AR Form. "What are the source(s) of funding for implementation of the MS4 permit and the estimated percentage of the total budget allocated from each source listed?"

B. In accordance with Page 9, Part II. A. of General Permit 2017 - 2021. Storm Water Management Team.

Missoula's Storm Water Management Team budget is supported by both City and City-County organizations. Table one provides the budget sources for work directly related to storm water management. Table two provides Missoula's current capital improvement program budget by priority, amount, and proposed funding years, dependent upon funding availability.

Table 1: Operating Budget Funds	*Amount*	*Percent*
City Storm Water Utility fund	$485,950	62%
City Public Works Operating Budget	18,834	2%
City GIS Section Operating Budget	1,600	0%
City Street Maintenance Operating Budget	126,200	16%
City Sewer Utility Fund	16,044	2%
City Finance Division	28,400	4%
City Conservation and Lands Management Operating Budget	62,000	8%
City Engineering Division Operating Budget	10,208	1%
MVWQD Program Budget	40,305	5%

Table 1: Operating Budget Funds	*Amount*	*Percent*
Totals:	$789,541.00	100%

Table 2: Capital Improvement Program Funds	*Cost*	*Year*
1. Caras Park Outfall Retrofit	173,300	FY18
2. Upper Gharrett Drainage Improvement	275,000	FY19
3. Grant Creek Drainage Improvements	450,000	FY18-19
4. Levee Geotech Inspection and Certification	150,000	FY18-19
5. Facility Plan	100,000	FY18
6. Household Hazardous Waste Collection Facility (Multi-agency project)	70,000	FY18
7. Facility Rate Study	172,705	FY18
Total:	1,391,005	

Five Questions, Question 2

A. *From Page 2, 2017 MS4-AR Form. "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."*

B. *In accordance with Page 9, Part II A of General Permit 2017 - 2021.*

Creation of Missoula's storm water utility in late 2016 gave an opportunity to educate both the public and city council members of the history leading to Montana's efforts toward surface water pollution prevention. Re-use of the educational materials carried over into 2017 and 2018 for budget planning and approval procedures. The materials that assisted staff with presentations included:

1. PowerPoint slideshow prepared and presented by the DEQ to the city council prior to creation of the storm water utility in 2016.
2. PowerPoint slideshow prepared by city staff and presented to the city council and general public. This slideshow listed the accomplishments staff had made toward storm water management with its existing funding. Also outlined were the priority requirements that would be implemented with the new permit and estimated costs of those priorities. The slideshow was made available at Council Committee meetings, public hearings and on a temporary website dedicated to the creation of the utility and both the operating and capital improvement budgets.
3. Public Works Director and Chief Administrative Officer attended meetings with target business representatives and neighborhood councils to share the above materials in 2016 and 2017.

The budget proposed by the Storm Water Utility was adopted by Council as proposed at the same time as the majority of the city budget was adopted in mid-2017 for fiscal year 2018.

Five Questions, Question 3

A. *From Page 2, 2017 MS4-AR Form. "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?"*

B. *In accordance with Page 9, Part II. A. of General Permit 2017 - 2021.*

Having a Storm Water Utility Fund provides the Council with specific budgetary targets that are related to storm water issues exclusively. Rather than mixed with, and possibly obscured by other budgetary needs, storm water concerns stand-alone during budget review. Background provided at utility creation and first budget adoption gave a clear overview of needs.

Five Questions, Question 4

A. *From Page 2, 2017 MS4-AR Form. "How was this annual reporting calendar year's approach to allocate resources different than the previous year's approach?"*

B. *In accordance with Page 9, Part II A of General Permit 2017 - 2021.*

Implementation of a Storm Water Utility Fund allowed the city to apply for grants and interest only loans that were unavailable or impractical in the past. Missoula's Storm Water Utility budget included the use of interest only loans to fund equipment and other start-up costs.

Five Questions, Question 5

A. *From Page 2, 2017 MS4-AR Form. "Was the permittee successful in their request for budget allocations? Describe the outcome and factors that affected or resulted in that outcome."*

B. *In accordance with Page 9, Part II. A. of General Permit 2017 - 2021.*

Missoula's 2017 budget successes included:

1. Continuation of existing budgets in other City and City-County agencies for another year of providing education, IDDE services, sampling, lab-work, minor infrastructure construction, repair and maintenance, SWPPP plan review and inspection, etc.

2. Additional funds to hire two full-time FTEs dedicated to Missoula's storm water management activities and potential funding for additional hires in 2018.

3. Funds to purchase equipment needed to support staff and the storm water program.

4. Funds to construct a hydraulic hydrodynamic separator project in Caras Park.

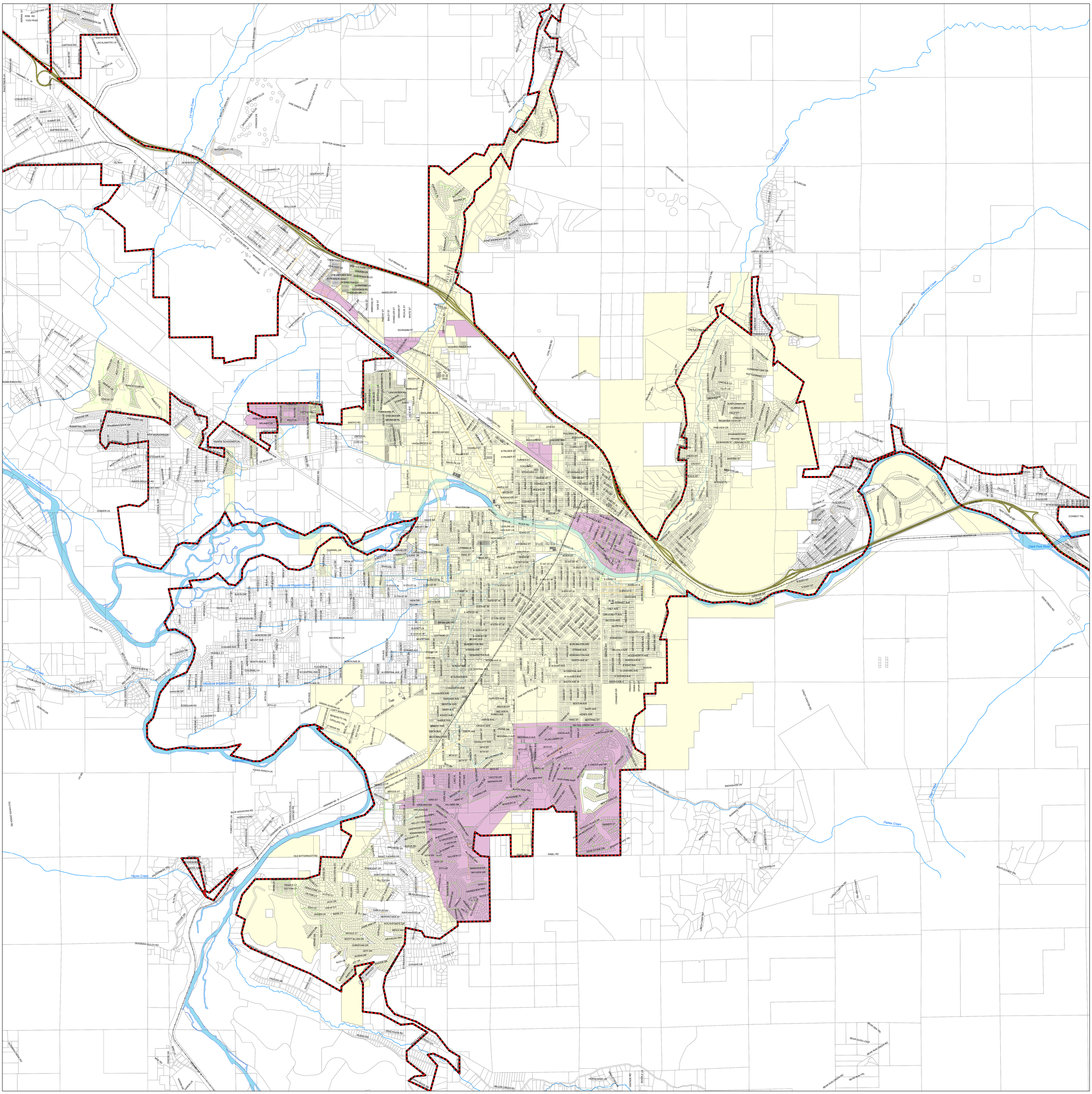
5. Hiring of two consultants. The first consultant is preparing a storm water utility study and the second is preparing a utility rate study. These are expected to be completed and presented to Council in early 2018.

6. Development of a capital improvement budget for prioritizing and funding new and retrofitted infrastructure.

Illicit Discharge Detection and Elimination

A. *From Page 2, 2017 MS4-AR Form, "Per the IDDE MCM requirement (Part II (3)(c.i)), has the permittee reviewed, and updated if needed, the storm sewer map during the calendar year?"*

Missoula annually updates its storm system facility map to include newly constructed storm drain infrastructure, add previously unknown infrastructure and remove abandoned infrastructure. See the updated map below.



Legend

Inlet
- City MS4 Responsibility
- Other or Unknown MS4 Responsibility

Outfall
- City MS4 Responsibility
- Other or Unknown MS4 Responsibility

Detention/Retention Basin
- City MS4 Responsibility
- Other or Unknown MS4 Responsibility

Gravity Main
- City MS4 Responsibility
- Other or Unknown MS4 Responsibility

- 2010 Urban Area
- High Priority Area

Manhole
- City MS4 Responsibility
- Other or Unknown MS4 Responsibility

Separator
- City MS4 Responsibility

Drywell
- City MS4 Responsibility
- Other or Unknown MS4 Responsibility

Open Channel
- City MS4 Responsibility
- Other or Unknown MS4 Responsibility

0 3 6 12 18 24 Miles

City of Missoula
Storm Water Infrastructure Map

Created by City of Missoula GIS Services Division
Printing Date: February 21, 2018

Pollution Prevention/Good Housekeeping for Permittee Operations
A. From Page 3, 2017 MS4-AR Form. ""Has the permittee reviewed and updated if needed, the inventory of permittee-owned/operated facilities and activities (Part II (6)(a.i))?"
B. In accordance with Page 34, Part II A (6) (a.i) of General Permit 2017 - 2021.
Missoula has drafted a list and maps of city facilities and activities. (See Lists 1 and 2 and the map below.)

LIST 1 – CITY FACILITY INVENTORY

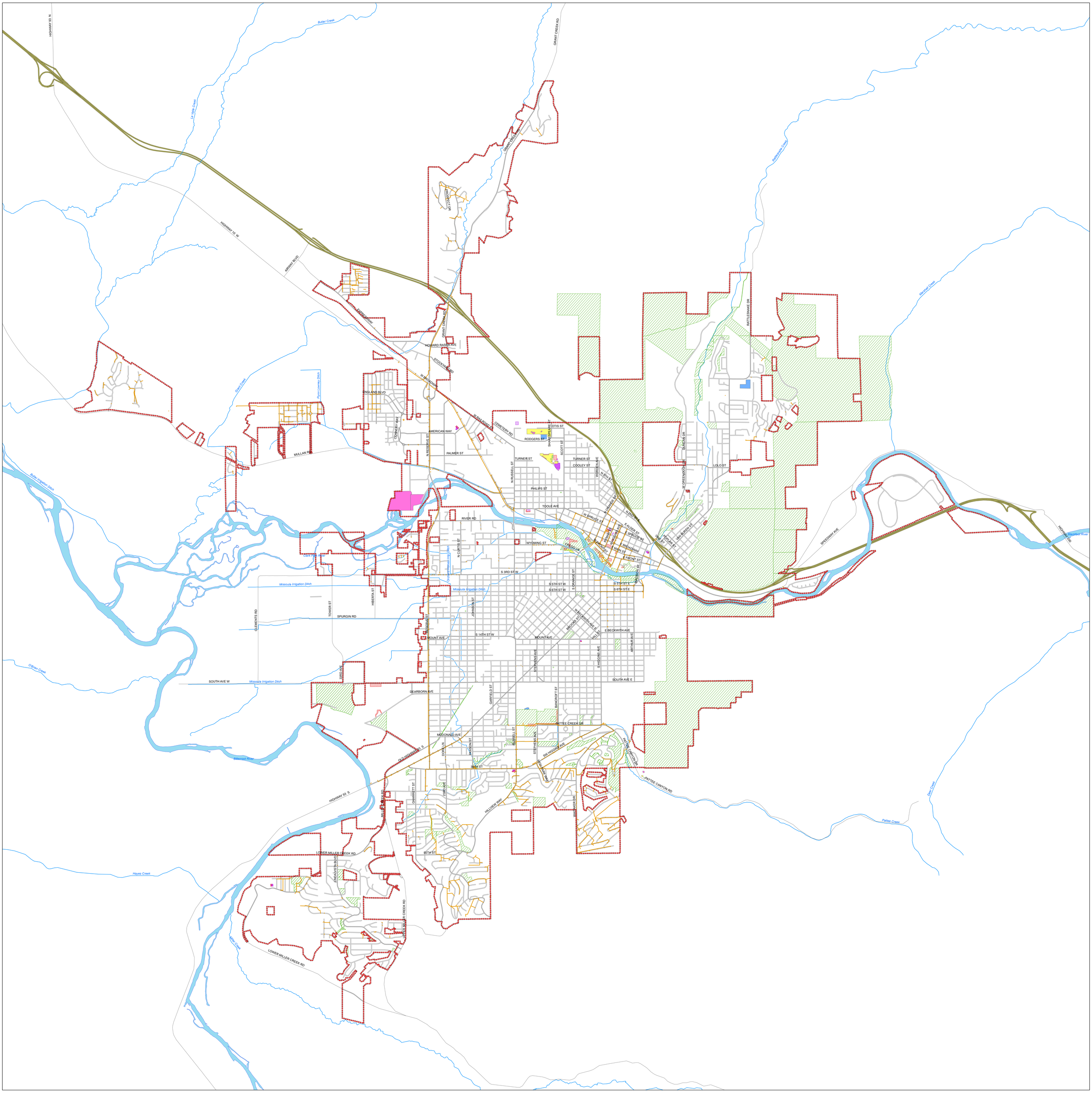
FACILITY NAME	*FACILITY ADDRESS*	*FACILITY TYPE*	*RESPONSIBLE DEPARTMENT*	*RESPONSIBLE POSITION*	*DESCRIPTION*	*POSSIBLE POLLUTANTS*
Traffic Shop and Vehicle Maintenance Building	1305 SCOTT ST	Vehicle fleet or maintenance shops	Central Services	Fleet Manager		Petroleum products, vehicle fluids
Wastewater Treatment Facility	1100 CLARK FORK DR	Waste Handling and Disposal Areas	Public Works	Wastewater Division Superintendent		Petroleum products, vehicle fluids, floatables
Scott Street Yard	1305 SCOTT ST	Salt/Sand/Deicer Storage Location	Public Works	Street Division Superintendent	Deicer storage tanks	Magnesium Chloride
Scott Street Yard	1305 SCOTT ST	Maintenance and Storage Yards	Public Works	Street Division Superintendent	Open vehicle and materials storage	Petroleum products, vehicle fluids
Scott Street Yard	1305 SCOTT ST	Salt/Sand/Deicer Storage Location	Public Works	Street Division Superintendent	Covered sand and salt storage	Sediment
Shakespeare Property	none	Snow Disposal Area	Public Works	Street Division Superintendent	Open snow disposal area	Petroleum products, vehicle fluids, floatables, sediment
Shakespeare Property	none	Waste Handling and Disposal Areas	Public Works	Street Division Superintendent	Petroleum products containment area?	
Shakespeare Property	none	Waste Handling and Disposal Areas	Public Works	Street Division Superintendent	Sweeping water sediment pond	Petroleum products, vehicle fluids, floatables, sediment
Shakespeare Property	none	Waste Handling and Disposal Areas	Public Works	Street Division Superintendent	Sweeping drying bed	Petroleum products, vehicle fluids, floatables, sediment
Scott Street Yard	1305 SCOTT ST	Salt/Sand/Deicer Storage Location	Public Works	Street Division Superintendent	Covered sand and salt storage	Sediment
Scott Street Yard	1305 SCOTT ST	Salt/Sand/Deicer Storage Location	Public Works	Street Division Superintendent	Open sand storage	Sediment
Missoula County Public Schools property	1500 LOWER LINCOLN HILLS DR	Snow Disposal Area	Missoula County Public Schools		Open snow disposal area	Petroleum products, vehicle fluids, floatables, sediment
Missoula County Fairgrounds	1101 SOUTH AVE W	Snow Disposal Area	Missoula County Fairgrounds	Fairgrounds Director	Open snow disposal area	Petroleum products, vehicle fluids, floatables, sediment
JTL Pit	750 PATTEE CANYON RD	Waste Handling and Disposal Areas	Public Works	Street Division Superintendent	Sweeping water sediment pond	Petroleum products, vehicle fluids, floatables, sediment
JTL Pit	750 PATTEE CANYON RD	Salt/Sand/Deicer Storage Location	Public Works	Street Division Superintendent	Open salt and sand storage	Sediment
JTL Pit	750 PATTEE CANYON RD	Maintenance and Storage Yards	Public Works	Street Division Superintendent	Material storage	
Scott Street Yard	1305 SCOTT ST	Maintenance and Storage Yards	Public Works	Street Division Superintendent	Covered vehicle storage	Petroleum products, vehicle fluids
Scott Street Yard	1305 SCOTT ST	Equipment Storage Building	Public Works	Street Division Superintendent	Covered vehicle storage	Petroleum products, vehicle fluids
Shakespeare Property	none	Maintenance and Storage Yards	Public Works	Street Division Superintendent	Materials storage for various departments	
Scott Street Yard	1305 SCOTT ST	Equipment Storage Building	Public Works	Street Division Superintendent	Covered vehicle storage	Petroleum products, vehicle fluids
Scott Street Yard	1305 SCOTT ST	Equipment Storage Building	Public Works	Street Division Superintendent	Covered vehicle storage	Petroleum products, vehicle fluids
Compost Facility	1125 CLARK FORK LN	Waste Handling and Disposal Areas	Public Works	Wastewater Division Superintendent		Petroleum products, vehicle fluids, sediment

LIST 1 – CITY FACILITY INVENTORY

FACILITY NAME	*FACILITY ADDRESS*	*FACILITY TYPE*	*RESPONSIBLE DEPARTMENT*	*RESPONSIBLE POSITION*	*DESCRIPTION*	*POSSIBLE POLLUTANTS*
Parks and Recreation Operations	100 HICKORY ST	Maintenance and Storage Yards	Parks and Recreation	Systems and Services Manager		Petroleum products, vehicle fluids, sediment
Fire Station #1	625 E PINE ST	Vehicle fleet or maintenance shops	Fire Department		Vehicle maintenance at fire station	Petroleum products, vehicle fluids, floatables, sediment
Fire Station #2	247 MOUNT AVE	Vehicle fleet or maintenance shops	Fire Department		Vehicle maintenance at fire station	Petroleum products, vehicle fluids, floatables, sediment
Fire Station #3	1501 39TH ST	Vehicle fleet or maintenance shops	Fire Department		Vehicle maintenance at fire station	Petroleum products, vehicle fluids, floatables, sediment
Fire Station #4	3011 LATIMOR ST	Vehicle fleet or maintenance shops	Fire Department		Vehicle maintenance at fire station	Petroleum products, vehicle fluids, floatables, sediment
Fire Station #5	6501 LOWER MILLER CREEK RD	Vehicle fleet or maintenance shops	Fire Department		Vehicle maintenance at fire station	Petroleum products, vehicle fluids, floatables, sediment

LIST 2 –CITY ACTIVITIES INVENTORY

FACILITY TYPE	RESPONSIBLE DEPARTMENT	RESPONSIBLE POSITION	POSSIBLE POLLUTANTS
Park and Open Space Maintenance	Parks and Recreation	Systems and Services Manager	Herbicides, pesticides, fertilizers, dog waste
Parking Lot Maintenance	Parking Commission		Petroleum products, vehicle fluids, floatables, sediment
Building Maintenance	Central Services?	Maintenance Supervisor	Floatables
Road Maintenance / Deicing	Public Works	Street Division Superintendent	Petroleum products, sediment, magnesium chloride
Storm Water System Maintenance	Public Works	Storm Water Division Superintendent	Petroleum products, vehicle fluids, floatables, sediment



Legend

- City Limits
- Road Maintenance / Deicing
- Storm Water System Maintenance
- Building Maintenance
- Parking Lot Maintenance
- Park and Open Space Maintenance
- Equipment Storage Building
- Maintenance and Storage Yards
- Salt/Sand/Deicer Storage Location
- Snow Disposal Area
- Vehicle fleet or maintenance shops
- Waste Handling and Disposal Areas

0 0.325 0.65 1.3 1.95 2.6 Miles

City of Missoula
Facilities and Activities Map

Created by City of Missoula GIS Services Division
Printing Date: February 21, 2018

Special Conditions
A. From Page 3, 2017 MS4-AR Form. "Per Pre-TMDL Approval (Part III.A) requirements, 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."
B. In accordance with Page 40, Part III A of General Permit 2017 - 2021.
Missoula's list of impaired waterbodies and pollutants are shown below in List 1 – Impaired Waterbodies and Pollutants. Missoula's General Permit pollutants of concern are: (1) total nitrogen, (2) sediment, and (3) metals including arsenic, cadmium, copper, lead, iron and zinc. A summation of 2017 BMP activities as well as plans for 2018 is incorporated with Pages 27 through 65 of this report.

LIST 1 – IMPAIRED WATERBODIES and POLLUTANTS

AUID	*Water Body*	*Pollutant*	*Probable Source(s)*	*Associated Uses*	*TMDL*	*MCM – BMP(s)*
MT76H001_030	Bitterroot River, Eightmile to the mouth	Alteration in stream-side or littoral vegetative covers	Rangeland Grazing Weather Discharges	Aquatic Life Cold Water Fishery	No	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 4a(i), 4a(iii), 4a(iv), 4b(i), 4b(ii), 4c(i), 4c(iii), 4c(iv), 4c(v), 5a(i), 5a(iii), 5a(iv), 5b(i), 5b(iii), 5c(i), 5c(iii), 5c(iv), 5c(vi), 5c(vii), 5c(viii), 5c(ix), 5d(i), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)
		Copper	Sediment Resuspension (Contaminated Sediment)	Aquatic Life Cold Water Fishery	No	N/A
		Lead	Sediment Resuspension (Contaminated Sediment)	Aquatic Life Cold Water Fishery	No	N/A
		Nitrogen, Nitrate	On-Site Treatment Systems Grazing Wet Weather Discharges	Aquatic Life Cold Water Fishery	No	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 3a(i), 3b(i), 3b(ii), 3c(i), 3d(i), 3d(iii), 3d(iv), 3d(v), 5a(i), 5a(iii), 5a(iv), 5b(i), 5b(iii), 5c(i), 5c(iii), 5c(iv), 5c(vi), 5c(vii), 5c(viii), 5c(ix), 5d(i), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)
		Sedimentation / Siltation	Sediment Resuspension Streambank Modifications Wet Weather Discharges	Aquatic Life Cold Water Fishery	No	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 3a(i), 3b(i), 3b(ii), 3c(i), 3d(i), 3d(iii), 3d(iv), 3d(v), 4a(i), 4a(iii), 4a(iv), 4b(i), 4b(ii), 4c(i), 4c(iii), 4c(iv), 4c(v), 5a(i), 5a(iii), 5a(iv), 5b(i), 5b(iii), 5c(i), 5c(iii), 5c(iv), 5c(vi), 5c(vii), 5c(viii), 5c(ix), 5d(i), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)
MT76M001_020	Clark Fork River, Fish Creek to Rattlesnake Creek	Arsenic	Mill Tailings	Aquatic Life Cold Water Fishery Drinking Water	No	N/A
		Cadmium	Mill Tailings	Aquatic Life Cold Water Fishery Drinking Water	No	N/A
		Chlorophyll-a	Industrial Point Source Discharge Municipal Point Source Discharges On-Site Treatment Systems	Aquatic Life Cold Water Fishery Primary Contact Recreation	Yes	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 3a(i), 3b(i), 3b(ii), 3c(i), 3d(i), 3d(iii), 3d(iv), 3d(v), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)
		Copper	Mill Tailings	Aquatic Life Cold Water Fishery	No	N/A
		Nitrogen (Total)	Industrial Point Source Discharge Municipal Point Source Discharges On-Site Treatment Systems	Aquatic Life Cold Water Fishery	Yes	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 3a(i), 3b(i), 3b(ii), 3c(i), 3d(i), 3d(iii), 3d(iv), 3d(v), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)
		Organic Enrichment (Sewage) Biological Indicators	Industrial Point Source Discharge Municipal Point Source Discharges On-Site Treatment Systems	Aquatic Life Cold Water Fishery	Yes	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 3a(i), 3b(i), 3b(ii), 3c(i), 3d(i), 3d(iii), 3d(iv), 3d(v), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)
		Phosphorus (Total)	Industrial Point Source Discharge Municipal Point Source Discharges On-Site Treatment Systems	Aquatic Life Cold Water Fishery	Yes	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 3a(i), 3b(i), 3b(ii), 3c(i), 3d(i), 3d(iii), 3d(iv), 3d(v), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)
MT76M001_030	Clark Fork River, Blackfoot River to Rattlesnake Creek	Arsenic	Mill tailings	Drinking water	No	N/A

LIST 1 – IMPAIRED WATERBODIES and POLLUTANTS

AUID	*Water Body*	*Pollutant*	*Probable Source(s)*	*Associated Uses*	*TMDL*	*MCM – BMP(s)*
		Cadmium	Mill tailings	Aquatic Life	No	N/A
		Copper	Mill tailings	Aquatic Life	No	N/A
		Iron	Mill tailings	Aquatic Life	No	N/A
		Lead	Mill tailings	Aquatic Life, Drinking Water	No	N/A
		Nutrient-eutrophication biological indicators	Industrial point source discharge, Upstream impoundments (e.g., Pl-566 NRCS structures)	Aquatic Life	No	N/A
		Zinc	Mill tailings	Aquatic Life	No	N/A
MT76M002_120	Rattlesnake Creek	Other flow regime alterations	Dam Construction Water Diversions	Cold Water Fishery	No	5a(i), 5a(iii), 5a(iv), 5b(i), 5b(iii), 5c(i), 5c(iii), 5c(iv), 5c(vi), 5c(vii), 5c(viii), 5c(ix), 5d(i)
MT76M002_130	Grant Creek, headwaters to the mouth	Alteration in stream-side or littoral vegetative covers	Irrigated Crop Production Site Clearance	Aquatic Life Cold Water Fishery	No	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 4a(i), 4a(iii), 4a(iv), 4b(i), 4b(ii), 4c(i), 4c(iii), 4c(iv), 4c(v), 5a(i), 5a(iii), 5a(iv), 5b(i), 5b(iii), 5c(i), 5c(iii), 5c(iv), 5c(vi), 5c(vii), 5c(viii), 5c(ix), 5d(i), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)
		Excess Algal Growth	Irrigated Crop Production Site Clearance	Aquatic Life Cold Water Fishery Primary Contact Recreation	No	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 6a(ii), 6a(iii), 6a(iv), 6a(v)
		Low flow alterations	Flow Alterations Irrigated Crop Production Site Clearance	Aquatic Life Cold Water Fishery Industrial Primary Contact Recreation	No	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 4a(i), 4a(iii), 4a(iv), 4b(i), 4b(ii), 4c(i), 4c(iii), 4c(iv), 4c(v), 5a(i), 5a(iii), 5a(iv), 5b(i), 5b(iii), 5c(i), 5c(iii), 5c(iv), 5c(vi), 5c(vii), 5c(viii), 5c(ix), 5d(i), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)
		Nitrate/Nitrite (Nitrite + Nitrate as N)	Irrigated Crop Production Site Clearance	Aquatic Life Cold Water Fishery	No	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 6a(ii), 6a(iii), 6a(iv), 6a(v)
		Sedimentation / Siltation	Site Clearance Streambank Modifications	Aquatic Life Cold Water Fishery	No	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 4a(i), 4a(iii), 4a(iv), 4b(i), 4b(ii), 4c(i), 4c(iii), 4c(iv), 4c(v), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)
		Temperature, water	Flow Alterations Loss of Riparian Habitat	Aquatic Life Cold Water Fishery	No	MCM 1a(i), 1a(ii), 1b(i), 1c(i), 1c(ii), 4a(i), 4a(iii), 4a(iv), 4b(i), 4b(ii), 4c(i), 4c(iii), 4c(iv), 4c(v), 5a(i), 5a(iii), 5a(iv), 5b(i), 5b(iii), 5c(i), 5c(iii), 5c(iv), 5c(vi), 5c(vii), 5c(viii), 5c(ix), 5d(i), 6a(i), 6a(ii), 6a(iii), 6a(iv), 6a(v)

Based upon Montana Final 2016 Integrated Report – Final 2016 Pure 303(d) List.

Special Conditions
*A. From Page 3, 2017 MS4-AR Form. **"**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."*
B. In accordance with Page 40 Part III B of General Permit 2017 - 2021.
Missoula selected 4 new outfalls for monitoring during the 5-year term of General Permit 2017 - 2021. See the locations list below. TMDL related monitoring can begin as annual sampling results are collected and compared. Missoula intends to meet the permit requirement for implementing the TMDL related monitoring with the 4th year of reporting or at the latest, the start of the 5th year of the permit.

SELECTED MONITORING LOCATIONS

Location ID	Location Name	Asset ID	Latitude / Longitude
001A	Pattee Creek	SNA-1563	North 46° 50' 29.8014", West 113° 59' 47.278"
002A	Scott Street	SNA-1524	North 46° 52' 30.7894", West 114° 0' 17.5301"
001B	Silver Park	S09-50-OF	North 46° 52' 28.7299", West 114° 0' 31.5891"
002B	Clark Fork Manor	SNA-1567	North 46° 52' 17.7459", West 114° 0' 0.0721"

These outfalls are sampled twice yearly during spring and fall storm events. 2017 sampling results are shown below.

Monitoring

A. *From Page 3, 2017 MS4-AR Form. "Per requirements in Part IV (B), has the permittee attached monitoring results, calculations, and evaluations?"*

B. *In accordance with Page 40 Part III B of General Permit 2017 - 2021.*

Missoula is compiling records of annual sample from 4 newly selected outfalls for each pollutant type to make future comparison and develop a more comprehensive plan for addressing these issues. 2017 monitoring results are below.

MONITORING RESULTS

Outfall 001A (Pattee Creek) Receiving Water: Bitterroot River	*Method*	*09/15/2017*	*2018*	*2019*	*2020*	*2021*	*Average Median Calculations*
Flow Time (a.m. or p.m.)		11:47 a.m.					
Flow Rate (gpm)		9.89					
Chemical Oxygen Demand (COD)	SM 5220 D	32.64					
Dissolved Oxygen (mg/L)	SM 4500-O G	7.14					
Non-Filterable Residue (TSS)	SM 2540D	5.60					
Oil and Grease (HEM)	EPA 1664B	1.20					
pH (Note: pH in s.u. units)	SM 4500-H+ B	7.87					
Phosphorus: Total	EPA 365.1	0.15					
Specific Conductivity	SM 2510B	356.90					
Temperature (Note: in degrees C)		12.80					
Total Dissolved Solids	SM 2540C	232.00					
Total Persulfate Nitrogen	SM 4500-N C	2.43					
Copper (mg/L)	E200.8	0.003					
Iron (mg/L)	E200.7	0.13					
Lead (mg/L)	E200.8	0.0004					
Zinc (mg/L)	E200.7	0.018					

Outfall 002A (Scott Street) Receiving Water: Clark Fork River	*Method*	*2017❶*	*2018*	*2019*	*2020*	*2021*	*Average Median Calculations*
Flow Time (a.m. or p.m.)							
Flow Rate (gpm)							
Chemical Oxygen Demand (COD)	SM 5220 D						
Dissolved Oxygen (mg/L)	SM 4500-O G						

Outfall 002A (Scott Street) Receiving Water: Clark Fork River	*Method*	*2017❶*	*2018*	*2019*	*2020*	*2021*	*Average Median Calculations*
Non-Filterable Residue (TSS)	SM 2540D						
Oil and Grease (HEM)	EPA 1664B						
pH (Note: pH in s.u. units)	SM 4500-H+ B						
Phosphorus: Total	EPA 365.1						
Specific Conductivity	SM 2510B						
Temperature (Note: in degrees C)							
Total Dissolved Solids	SM 2540C						
Total Persulfate Nitrogen	SM 4500-N C						
Copper (mg/L)	E200.8						
Iron (mg/L)	E200.7						
Lead (mg/L)	E200.8						
Zinc (mg/L)	E200.7						

❶ *This outfall has been cut and abandoned. A new outfall will be selected to replace it.*

Outfall 001B (Silver Park) Receiving Water: Clark Fork River	*Method*	*9/15/2017*	*2018*	*2019*	*2020*	*2021*	*Average Median Calculations*
Flow Time (a.m. or p.m.)		11:25 a.m.					
Flow Rate (gpm)		2.45					
Chemical Oxygen Demand (COD)	SM 5220 D	86.63					
Dissolved Oxygen (mg/L)	SM 4500-O G	5.58					
Non-Filterable Residue (TSS)	SM 2540D	15.10					
Oil and Grease (HEM)	EPA 1664B	1.13					
pH (Note: pH in s.u. units)	SM 4500-H+ B	7.4					
Phosphorus: Total	EPA 365.1	0.56					
Specific Conductivity	SM 2510B	129.70					
Temperature (Note: in degrees C)		14.70					
Total Dissolved Solids	SM 2540C	84.50					
Total Persulfate Nitrogen	SM 4500-N C	3.86					
Copper (mg/L)	E200.8	0.01					
Iron (mg/L)	E200.7	0.98					
Lead (mg/L)	E200.8	0.0015					
Zinc (mg/L)	E200.7	0.044					

Outfall 002B (Clark Fork Manor) Receiving Water: Clark Fork River	*Method*	*9/15/2017*	*2018*	*2019*	*2020*	*2021*	*Average Median Calculations*
Flow Time (a.m. or p.m.)		12:12 p.m.					
Flow Rate (gpm)		2.36					
Chemical Oxygen Demand (COD)	SM 5220 D	121.2					
Dissolved Oxygen (mg/L)	SM 4500-O G	5.91					
Non-Filterable Residue (TSS)	SM 2540D	14.60					
Oil and Grease (HEM)	EPA 1664B	3.70					
pH (Note: pH in s.u. units)	SM 4500-H+ B	7.17					
Phosphorus: Total	EPA 365.1	0.39					
Specific Conductivity	SM 2510B	78.20					
Temperature (Note: in degrees C)		13.70					
Total Dissolved Solids	SM 2540C	50.70					
Total Persulfate Nitrogen	SM 4500-N C	2.78					
Copper (mg/L)	E200.8	0.02					
Iron (mg/L)	E200.7	0.48					
Lead (mg/L)	E200.8	0.002					
Zinc (mg/L)	E200.7	0.167					

2017 Year 1 Activities – MCM 1. Public Education and Outreach

A. *From Page 5, 2017 MS4-AR Form.*

B. *In accordance with MCM – BMP 1-a(i), BMP 1-a(ii), BMP 1-b(i), BMP 1-c(i), and BMP 1-c(ii)*

WATER QUALITY DISTRICT PUBLIC EDUCATION AND OUTREACH ACTIVITIES – Continued existing education and outreach programs – Missoula continued to partner with the Missoula Valley Water Quality District to provide educational materials to the public.

Missoula's education and outreach programs consist of:

- Distributing approximately 500 brochures annually
- Placing about 160 television and 225 radio ads annually
- Conduct pollution prevention talks and activities with approximately 600 sixth graders annually
- Providing funding to send city field- staff and inspectors to DEQ BMP courses as needed for certification
- Providing funding to send city storm water program staff to a variety of water quality webinars, lectures and storm water conferences annually
- Placing seasonal storm water news in the Public Works Department newsletter (new in 2017)
- Maintaining active websites for both the Water Quality District and city Storm Water Division annually
- Adopt and post policies related to pollution prevention, such as the example vehicle washing policy on Page 30 of this report

2018 MVWQD TARGET – Based on its annual IDDE findings, the MVWQD will be specifically targeting education toward pet owners regarding pet waste contamination and prevention techniques.

WATER QUALITY DISTRICT WEBSITE – In 2017, the MVWQD's main webpage monitored 945 hits, the haz-waste days webpage received 5,679 hits, the hazardous waste webpage was visited 1,203 times and the storm water page monitored 343 hits.

MVWQD HAZARDOUS WASTE FACILITY WEBSITE – The household hazardous waste collection facility website monitored 2,200 hits in 2017. This site is dedicated to hazardous waste disposal activities, resources, and status of the new hazardous waste collection facility. The site can be visited at http://www.hazwastemissoula.com.

CITY STORM WATER WEBSITE – Missoula's website is updated quarterly with seasonal storm water related information. In 2017, it was updated to: (1) be more informative; (2) provide opportunities for scheduling educational trips to storm water facility sites; (3) list ideas for voluntary pollution control on private property; (4) provide reporting capability for illicit discharges and storm water overflows; (5) describe storm water infrastructure construction projects and what they will accomplish; (6) assist with a variety of links to other websites such as the DEQ construction storm water permit webpages, city SWPPP webpages, and Missoula Valley Water Quality website.

Missoula has a survey form nearly ready for posting to the website for public input related to storm water pollution prevention activities.

KEY TARGET AUDIENCES – Missoula continues to partner with the Water Quality District to review key target audiences and develop strategies for targeting specific storm water polluting behaviors. Missoula's key target audiences include the general public, contractors, and municipal employees.

2017 Year 1 Activities – MCM 1. Public Education and Outreach

Contractor messages target good construction site management techniques, such as sediment and erosion controls, contained wash areas, covered storage for chemicals and other potential contaminants, and storm drain protection techniques.

A few of the messages for municipal employees relate to a variety of activities such as covered storage for potential pollutants, auto maintenance practices, fertilizers and pesticides, storm drain protection techniques during street maintenance activities, sediment and erosion controls, spill prevention and proper spill clean-up methods, etc. In addition to these messages, Missoula's field inspectors and storm water utility staff receive training via DEQ BMP 101 through 201(R) courses, webinars and conferences.

Messages directed toward the public include pollution prevention related to yard wastes and chemicals, pet wastes, and safe hazardous waste disposal methods.

NON-POLLUTING BEHAVIOR MESSAGES - Missoula has begun posting non-polluting behavior messages on its updated website. Examples include subjects like voluntary collection of pet wastes, trash pickup and car washing.

Volunteer

Know a trail or park with an unpleasant amount of dog waste? It's not just your shoes you have to worry about. A day's waste from one large dog can contain 7.8 billion fecal coliform bacteria and can cause human diseases like Giardia and Salmonella. If left on the ground these bacteria flow with runoff and enter our rivers and streams. Too much dog waste can lead to algae blooms and contaminated waterways. Help keep Missoula's rivers and streams clean by scheduling a Dog Waste Pick-up day at your favorite public place.

Out for walk and see some trash? By carrying a trash bag in your backpack you can combat one of the world's largest problems. That tiny piece of plastic you pick up in the park has a far reaching effect. Picking up trash here in Missoula helps other communities and international efforts, reducing the amount they have to clean-up and improving their ability to restore aquatic ecosystems. Join our positive and active Parks and Recreation Community, working to clean up Missoula public places.

Schedule a Field Trip to a Storm Water Facility

Learn about Missoula's largest Hydrodynamic Separator (HDS). Under the pavers in Caras Park this HDS sits 22ft deep, spinning downtown Missoula's runoff into a vortex. Learn how seasonal weather increases the HDS' speed with the volume of water, pulling oil, sediment, and trash to the deeper part of the chamber, allowing clean water to rise up and flow to the outlet next to Brennan's Wave.

Want to see density and particulate floatables in action? Walk next to Pattee Creek Desiltation Facility and learn how it detains floodwater and clears Pattee Creek from sediments harmful to Missoula's aquatic habitats.

Plant a Vegetation Buffer Around Your Property

Private properties are a main source of the nutrient and sediment pollution entering Missoula's storm inlets, streams, and rivers. By planting trees, shrubs, and other nutrient-loving plants along your property you create a natural buffer that will soak up extra chemicals like nitrogen and phosphorus left over from your home and lawn. Learn more about the problem and responsible lawn and garden care. This nutrient-rich material remains useful. Come Autumn, dead leaves from your property's plants are often more nutrient-rich than manure, making them great to use in personal compost bins or to drop off at Garden City Compost.

Wash Your Car

Washing your car frees it of pollutants like oil, fine particles, and sediment. If you can, use a commercial car wash, which often reuse wash water before sending it to a treatment plant. If washing a car at home only use as much water and biodegradable soap as you need. Try washing where the water will drain into gravel or grass, which can help filter the wash water before it gets into the aquifer, storm inlets, rivers, or streams. Learn more from the EPA.

Year 2 (2018) Activity Planning – MCM 1. Public Education and Outreach
A. From Page 5, 2017 MS4-AR Form.
B. In accordance with MCM – BMP 1-a(i), BMP 1-a(ii), BMP 1-b(i), BMP 1-c(i), and BMP 1-c(ii).
Continue with educational pamphlets, utility bill stuffers, media advertising, community watershed education, contractor education program, and municipal employee training and education programs. Continue to consider developing a collection of video clips demonstrating storm water pollution prevention activities and types of pollutants being mitigated. Post on Storm Water Utility website, share with local television stations for use as PSAs, and post on the City's main page under news. Continue to consider use of door hangers for very specific non-polluting behavioral messages as well as any other ideas for educational tools that may develop.

Missoula Public Health
City-County Health Department

Missoula City-County Health Department
WATER QUALITY DISTRICT
301 West Alder Street | Missoula MT 59802-4123
www.co.missoula.mt.us/wq
Phone | 406.258.4890
Fax | 406.258.4781

Policy Statement: Discharge of Vehicle Wash Water
12/2015

I. Under **no** circumstance will untreated vehicle wash water which results from the degreasing or cleaning of mechanical parts, including engine, drive train, or hydraulic components, be allowed to discharge to the ground surface, surface water, storm drain, injection well or septic system.

II. Commercial establishments which routinely wash vehicles at a fixed location (e.g. car washes and facilities with wash bays) must meet **one** of the following requirements:

A. Connect to public sewer and use an appropriate pretreatment system (e.g. an oil & sand interceptor) as required by the Missoula Wastewater Treatment Plant.

B. If public sewer is not available, collect and dispose of the wastewater in a lined lagoon. The lagoon must be fenced to prevent access by the public and animals. The system must be designed by a licensed Civil Engineer, and the design must be approved by the Department prior to use. The wastewater must be pre-treated through an oil/water separator prior to discharge to the lagoon. The lagoon must be lined with an impermeable liner, and must be capable of containing and treating the entire volume of wastewater produced at the facility. The design life of the system must be specified by the Engineer. The system will not be allowed to operate beyond the design life specified by the Engineer, unless and until its performance is evaluated by a Civil Engineer and certified by the Engineer as meeting the original performance criteria. The lagoon and oil/water separator must be regularly maintained, which includes removal and proper disposal of all sediments, oils, and/ or sludge which accumulates in the system. Records of any maintenance performed, as well as waste disposal manifests must be kept and be accessible to regulatory officials.

C. Use a wash water recycling system approved by the District.

III. The exterior of commercial fleet vehicles may be washed on property owned or controlled by the fleet operator, provided that biodegradable soap/detergent and water are used, the wash water is **not** allowed to enter a surface water body or storm drain which discharges to a surface water body, and the wash water is contained on property owned or controlled by the fleet operator. Degreasing or cleaning of mechanical parts is not permitted, unless the conditions outlined in Section **II** are met.

IV. The exterior of new and used vehicles on display at vehicle dealerships may be rinsed with biodegradable soap/detergents and water only. Use of detergents is permitted only where wash water will not enter a storm drain which discharges to a surface water body. Degreasing or cleaning of mechanical parts is not permitted unless the conditions outlined in Section **II** are met. Wash water is allowed to enter storm water injection wells located on contiguous property owned or controlled by the dealership.

V. The exterior of non-commercial vehicles may be washed at temporary locations by non-commercial entities (e.g. fund-raising groups operating in a parking lot) using only soap and water. Degreasing or cleaning of mechanical parts is not permitted unless the conditions outlined in Section **II** are met. Wash water is allowed to enter storm water injection wells which do not discharge to a surface water body.

2017-2022 MS4 Permit: Contractors as a Key Target Audience

Due to contributions to non-point source (NPS) pollution the City of Missoula Storm Water Division has defined "Contractors" as a key target audience appropriate for storm water outreach and involvement. This document states requirements for this key target audience, as defined by the Montana DEQ Small MS4 Permit valid for years 2017-2022, and the City of Missoula's progress towards meeting them.

(Year 1) MCM 1 a i	
Determine key target audiences most appropriate for storm water outreach.	Missoula Storm Water key target audiences are the Public, Contractors, and Municipal Employees.
Analyze which business types and/or residential behaviors are common sources of illicit discharges, spills, and dumping.	Within the Missoula area, sediment is a primary NPS pollutant. Sediment floatables are largely attributed to construction, landscaping, and any other slope-disturbance that causes erosion.
Develop a list, description, and rationale for selecting these key target audiences based on business and residential groups associated with illegal discharges and improper disposal of waste to the MS4.	Members of the slope-disturbance community include contractors for building, construction, grading, and landscaping.
List the pollutants associated with each key target audience.	Contractor activity is associated with sediment floatables, a primary NPS pollutant.
Submit with 1st Annual Report.	Submitted in the 2017 Annual Report.

(Year 1) MCM 1 a ii	
Develop and advertise a storm water website for access by key target audiences, other interested stakeholders, and the general public.	The City of Missoula advertises the Storm Water website via word of mouth and search engine relevance, such as when someone Googles "Missoula Storm Water". It maintains a high rank in search engines with the freshness of its content, the number of times a given search term appears, and by maintaining a quality user experience.
The storm water website must include access to outreach materials and outreach event information (most recent and current).	The Storm Water website provides Contractors with outreach material, information on the construction permits they may need, and step-by-step instructions for their state and local permit submittals. It also provides event and seasonal information in the monthly online public works newsletter.

(All Years) MCM 1 b i	
Develop outreach messages which promote benefits of non-polluting behaviors to the key target audience as well as benefits to storm water discharges.	Missoula's Storm Water Division is currently developing outreach messages for Contractors. Preliminary messages include: 1) Many Missoulians believe water entering our storm drains is treated at the wastewater plant when in reality this water flows to the aquifer, streams, or river. Example educational poster slogan, "Drains to streams, keep it clean." This is already on the Storm Water website. 2) As discovered in construction site inspections, some contractors are better than others about maintaining slope stability and minimizing erosion. By encouraging every contractor to "Leave No Trace", via standard technical drawings and trainings on BMPs, the City of Missoula is working towards clean storm drains and waterways. 3) Any construction activities on slopes over 5% grade are required to fill out a Grading, Drainage, and Erosion Permit. In this process contractors are made aware of the grading, drainage, and hillside standards for slopes greater than 5% as listed in the Residential Site

(All Years) MCM 1 b i	
	Plan and Commercial Site Plan checklists. They are also made aware that their construction site will be inspected according to the BMPs listed on the SWPPP Inspection Report. Repeat offenders of construction site SWPPP deficiencies receive a notice of violation, a stop work notice, and access to the site other than SWPPP mitigation work shall be prohibited.
Submit with 2nd Annual Report.	Submitted in the 2017 Annual Report.

(Year 2) MCM 1 c i	
Identify and, as needed, develop outreach formats and distribution channels for messages developed for each key target audience and associated storm water polluting behavior.	Not Required until Year 2.
Formats and distribution channels should be tailored to key target audiences and can utilize other existing formats and distribution channels, such as existing community newsletters.	Not Required until Year 2.
Submit a description of formats, distribution channels and schedule for each key target audience in 2nd Annual Report.	Not Required until Year 2.

(Year 2-5) MCM 1 c ii	
Distribute outreach materials to target Audiences.	Not Required until Year 2.
Describe distribution in Annual Reports.	Not Required until Year 2.

(Year 1) MCM 2 a i	
Identify approaches for involving the key target audiences (identified under Part 11.A. I .a.i.) in the development and implementation of the SWMP over the five year permit term. For each key audience, describe:	
the approach;	To involve Contractors, Missoula Storm Water Division is working with Missoula Development Services Engineering and Inspections, both of whom have longstanding connections to local design and construction groups. Events and opportunities are broadcasted on the Storm Water website. Further, we're working towards a marketing campaign which may include signs to be placed in relevant areas and included with BMP training material.
the target date(s) for implementation; and	For the duration of 2017, educational material was available via standard technical drawings, permit requirements, and help designing what BMPs would benefit the contractor's construction activity. Future marketing campaigns are pending on funding to be approved by Missoula City Council.
Purpose of the involvement approach (e.g. raise awareness, change behavior, and improve the SWMP).	These approaches aim to raise awareness and change behavior which results in water NPS pollution or illicit discharge.
Wherever possible, identify existing organizations with membership that represent some or all of the key target audiences and describe opportunities for partnering to involve membership in SWMP development and implementation.	As appropriate we coordinate with other agencies, partnerships, and citizens to: • construct, upgrade, and maintain storm water facilities; • educate contractors on storm water pollution prevention; • provide contractor training, permits, and inspections for construction sites which may increase erosion, reduce slope stability, or displace sediment; • screen, sample, and test storm water for illicit discharges and

(Year 1) MCM 2 a i	
	pollution levels; • report test results and other required activities to the Montana Department of Environmental Quality; • and coordinate response to storm water flooding situations. Organizations include Missoula County, Missoula Water Quality District, Montana Natural History Museum, Watershed Education Network, University of Montana, Missoula Building Industry Association, Boy Scouts and Girl Scouts. Likewise, community volunteers have come from WGM Group, Dig It Excavating, and the Clark Fork Coalition. Cooperating City of Missoula departments include Parks and Recreation, Geographic Information Systems, Wastewater, Streets Maintenance, Water Utility, Fire Dept., Zoning, Transportation Planning, Traffic Services, Vehicle Maintenance and Facility Maintenance, and Engineering. For specific individuals involved see the "MCM org responsibilities_v10.2.pdf" available from the City of Missoula Storm Water Division.
Document collaboration with existing organizations if this is an approach for involving key target audiences.	Emails and substantive documentation are available upon request.
Submit a description of public involvement approach, and schedule for each key audience in 1st Annual Report.	Approach includes outreach through the Storm Water website, permitting and plan review process, providing standard technical drawings, and help designing what BMPs would benefit the contractor's construction activity. In 2017, the website was updated on February 8th, March 3rd, and March 7th. Public meetings to reduce pollutants took place on March 28th and July 18th.

(Years 2-5) MCM 2 a ii	
Implement identified involvement approaches for each key target audience.	Not Required until Year 2.

(Year 1) MCM 2 b i	
Develop and advertise a storm water website for soliciting input from key target audiences, other interested stakeholders, and the general public. At a minimum, the storm water website must include:	
access to outreach materials;	The Storm Water website provides Outreach Materials for Contractors (under the tabs named Purpose, Opportunities, and Rates), Municipal Employees (under the Projects tab), as well as Contractors and Engineers (under the Construction Permits tab). Additionally, Municipal Employees will soon have access to educational storm water videos.
most recent or current outreach event information;	The website includes this.
SWMP planning documents;	The City of Missoula's most current SWMP is on the website, to be updated annually.
annual reports (or an equivalent summary or document providing an annual overview, and the availability for the public to request the annual report);	The City of Missoula's most current annual report is on the website, to be updated annually.
a mechanism for collecting public input for the SWMP; and	The Missoula Storm Water website has a comment form for the City's most current SWMP, accessible to all key target audiences.
Illicit discharge and construction project complaints.	At the bottom of the Storm Water website there are instructions, "If you have construction project complaints or suspect illicit discharge, report

(Year 1) MCM 2 b i	
	online anonymously. To reach the general spill hotline during business hours call 406-258-4890, or, for after-hours dispatch call 911."
Website shall be available to the public on the internet.	The Storm Water website is available through all common internet browsers.

Example of Material available for Contractors on the Missoula Storm Water Website

Construction Permit Activities

Any construction work where the grade of the lot or parcel is altered more than three feet requires a Grading, Drainage and Erosion Permit, as governed by Missoula Municipal Code 15.65, to be submitted to City of Missoula Development Services for review. Exclusions may apply where the site's original slope is less than 5%. Grading, drainage, and hillside standards for slopes greater than 5% are listed in the Residential Site Plan and Commercial Site Plan checklists. If you require assistance contact Development Services at 406-552-6635.

Any construction activity that results in disturbance of one acre or greater total land area requires additional permit coverage. This total disturbance may include any clearing, excavating, grading, stockpiling earth materials, placement or removal of earth material performed during the construction project. If so, the construction activity's owner or operator is required to follow the below steps:

1. Obtain and submit to Montana DEQ the Storm Water Construction General Permit Application Package. For this, the owner or operator is fully responsible. This 2018 Montana DEQ application package may include the items listed below:
   - Notice of Intent (NOI) with instructions;
   - Storm Water Pollution Prevention Plan (SWPPP);
   - SWPPP Attachment A and Attachment B; and
   - Storm Water Rainfall Erosivity Waiver with instructions.
2. Montana DEQ will review and will provide an approval letter.
3. Once the Storm Water Construction General Permit Application Package has been approved by Montana DEQ, then the following should be submitted to City of Missoula's Development Services:
   - A copy of the Notice of Intent (NOI) provided to Montana DEQ;
   - A copy of the Storm Water Pollution Prevention Plan (SWPPP) provided to Montana DEQ; and
   - A copy of Montana DEQ's approval letter.
4. City of Missoula's Development Services' engineering staff will review. And when approved, the City will then issue a permit for your construction activity.
5. If the construction activity requires a permit transfer, both Montana DEQ and the City of Missoula Development Services require the owner or operator to submit a Permit Transfer Notification (PTN).
6. When your construction activity is completed to the specific item instructions, submit a Notice of Termination (NOT). This is to be submitted to both Montana DEQ and the City of Missoula Development Services engineering staff.

2017-2022 MS4 Permit: Municipal Employees as a Key Target Audience

Due to contributions to non-point source (NPS) pollution the City of Missoula Storm Water Division has defined "Municipal Employees" as a key target audience appropriate for storm water outreach and involvement. This document states requirements for this key target audience, as defined by the Montana DEQ Small MS4 Permit valid for years 2017-2022, and the City of Missoula's progress towards meeting them. In 2017, 68 City of Missoula employees completed training, this training included Storm Water Videos "IDDE - A Grate Concern" and "Rain Check - MS4s".

(Year 1) MCM 1 a i	
Determine key target audiences most appropriate for storm water outreach.	Missoula Storm Water key target audiences are the Public, Contractors, and Municipal Employees.
Analyze which business types and/or residential behaviors are common sources of illicit discharges, spills, and dumping.	Within the Missoula area, primary NPS pollutants like salt, sand, trash, soap, oil, nitrogen, phosphorus, and organic enrichment may be attributed to improving safety of winter roads and sidewalks, littering, septic system leaks, lawn care, animal waste, vehicle oil leaks and tire residue, as well as the improper disposal of wash water and other household chemicals.
Develop a list, description, and rationale for selecting these key target audiences based on business and residential groups associated with illegal discharges and improper disposal of waste to the MS4.	Municipal Employees who may be associated with these NPS polluting behaviors, or in a position to change the public's behaviors, include the following City of Missoula Departments: 1) Cemetery; 2) Parks and Recreation; 3) Storm Water; 4) Traffic Services; 5) Wastewater; 6) Water.
List the pollutants associated with each key target audience.	Primary NPS pollutants include, but are not limited to salt, sand, trash, soap, oil, nitrogen, phosphorus, and organic enrichment.
Submit with 1st Annual Report.	Submitted in the 2017 Annual Report.

(Year 1) MCM 1 a ii	
Develop and advertise a storm water website for access by key target audiences, other interested stakeholders, and the general public.	The City of Missoula advertises the Storm Water website via word of mouth and search engine relevance, such as when someone Googles "Missoula Storm Water". It maintains a high rank in search engines with the freshness of its content, the number of times a given search term appears, and by maintaining a quality user experience.
The storm water website must include access to outreach materials and outreach event information (most recent and current).	The Storm Water website provides Municipal Employees outreach material. It also provides event and seasonal information in the monthly online public works newsletter.

(All Years) MCM 1 b i	
Develop outreach messages which promote benefits of non-polluting behaviors to the key target audience as well as benefits to storm water discharges.	Missoula's Storm Water Division has provided outreach material for Municipal Employees. Preliminary messages include: 1) Many Missoulians believe water which enters our storm drains are treated at the wastewater plant when in reality this water flows to the aquifer, streams, or river. Example educational poster slogan, "Drains to streams, keep it clean." This is already on the Storm Water website.

(All Years) MCM 1 b i	
	2) How to identify, collect, and report illicit discharge. Identification includes visible water quality characteristics, timeframe to be suspicious of an outfall post-storm, etc. 3) Best Measure Practices (BMPs) for construction sites, storage and secondary containment facilities, pouring and transferring liquids, non-hazardous spill cleanup, fueling a vehicle, maintaining equipment, proper disposal of street sweeping debris, etc. 4) For those who wonder if they should report spilled oil, chemicals, or other illicit discharge, the simple reminder, "Only rain down the storm drain."
Submit with 2nd Annual Report.	Submitted in the 2017 Annual Report.

(Year 2) MCM 1 c i	
Identify and, as needed, develop outreach formats and distribution channels for messages developed for each key target audience and associated storm water polluting behavior.	Not Required until Year 2.
Formats and distribution channels should be tailored to key target audiences and can utilize other existing formats and distribution channels, such as existing community newsletters.	Not Required until Year 2.
Submit a description of formats, distribution channels and schedule for each key target audience in 2nd Annual Report.	Not Required until Year 2.

(Year 2-5) MCM 1 c ii	
Distribute outreach materials to target Audiences.	Not Required until Year 2.
Describe distribution in Annual Reports.	Not Required until Year 2.

(Year 1) MCM 2 a i	
Identify approaches for involving the key target audiences (identified under Part 11.A. I .a.i.) in the development and implementation of the SWMP over the five year permit term. For each key audience, describe:	
the approach;	To involve Municipal Employees Missoula has a Storm Water Management Team and the Storm Water Division collaborates with the below departments: 1) Cemetery; 2) Parks and Recreation; 3) Storm Water; 4) Traffic Services; 5) Wastewater; 6) Water. Events and opportunities are broadcasted on the Storm Water website. Further, we're working towards a marketing campaign which may include signs to be placed in relevant areas.
the target date(s) for implementation; and	Educational programs have been implemented. In 2017, 68 City of Missoula employees completed training, this training included Storm Water Videos "IDDE A Grate Concern" and "Rain Check - MS4s". Future marketing campaigns are pending on funding to be approved by Missoula City Council.
Purpose of the involvement approach (e.g. raise awareness, change behavior, and improve the SWMP).	These approaches aim to raise awareness and change behaviors which otherwise may have resulted in water NPS pollution or illicit discharge.
Wherever possible, identify existing organizations with membership that	As appropriate we coordinate with other agencies, partnerships, and citizens to:

(Year 1) MCM 2 a i	
represent some or all of the key target audiences and describe opportunities for partnering to involve membership in SWMP development and implementation.	• Improve the practices of Municipal Employees and projects they oversee; • Increase the protection of storm water and water quality by improving municipal plan reviews and construction site inspections; • Improve the reporting of illicit discharges and work with the public to prevent these situations; • construct, upgrade, and maintain storm water facilities; • educate the public on storm water pollution prevention; • screen, sample, and test storm water for illicit discharges and pollution levels; • report test results and other required activities to the Montana Department of Environmental Quality; • and coordinate response to storm water flooding situations. Organizations include Missoula County, Missoula Water Quality District, Montana Natural History Museum, Watershed Education Network, University of Montana, Missoula Building Industry Association, Boy Scouts and Girl Scouts. Likewise, community volunteers have come from WGM Group, Dig It Excavating, and the Clark Fork Coalition. Cooperating City of Missoula departments include Parks and Recreation, Geographic Information Systems, Wastewater, Streets Maintenance, Water Utility, Fire Dept., Zoning, Transportation Planning, Traffic Services, Vehicle Maintenance and Facility Maintenance, and Engineering. For specific individuals involved see the "MCM org responsibilities_v10.2.pdf" available from the City of Missoula Storm Water Division.
Document collaboration with existing organizations if this is an approach for involving key target audiences.	Emails and substantive documentation are available upon request.
Submit a description of public involvement approach, and schedule for each key audience in 1st Annual Report.	Approach includes outreach through the Storm Water website, Missoula Storm Water Management Team, Municipal Employee training, and meetings to discuss Storm Water MCMs. In 2017, the website was updated on February 8th, March 3rd, and March 7th. Municipal Employee meetings to reduce pollutants took place on March 27th, March 28th, March 30th, June 19th, June 22nd, and July 18th.

(Years 2-5) MCM 2 a ii	
Implement identified involvement approaches for each key target audience.	Not Required until Year 2.
Document participation and key target audience feedback on the approach in the SWMP and in each Annual Report.	Not Required until Year 2.

(Year 1) MCM 2 b i	
Develop and advertise a storm water website for soliciting input from key target audiences, other interested stakeholders, and the general public. At a minimum, the storm water website must include:	
access to outreach materials;	The Storm Water website provides Outreach Materials for the General Public (under the tabs named Purpose, Opportunities, and Rates), Municipal Employees (under the Projects tab), as well as Contractors and Engineers (under the Construction Permits tab). Additionally, Municipal Employees will soon have access to educational storm water videos.

(Year 1) MCM 2 b i	
most recent or current outreach event information;	The website includes this.
SWMP planning documents;	The City of Missoula's most current SWMP is on the website, to be updated annually.
annual reports (or an equivalent summary or document providing an annual overview, and the availability for the public to request the annual report);	The City of Missoula's most current annual report is on the website, to be updated annually.
a mechanism for collecting public input for the SWMP; and	The Missoula Storm Water website has a comment form for the City's most current SWMP, accessible to all key target audiences.
Illicit discharge and construction project complaints.	At the bottom of the Storm Water website there are instructions, "If you have construction project complaints or suspect illicit discharge, report online anonymously. To reach the general spill hotline during business hours call 406-258-4890, or, for after-hours dispatch call 911."
Website shall be available to the public on the internet.	The Storm Water website is available through all common internet browsers.

2017-2022 MS4 Permit: the Public as a Key Target Audience

Due to contributions to non-point source (NPS) pollution the City of Missoula Storm Water Division has defined "the Public" as a key target audience appropriate for storm water outreach and involvement. This document states requirements for this key target audience, as defined by the Montana DEQ Small MS4 Permit valid for years 2017-2022, and the City of Missoula's progress towards meeting them.

(Year 1) MCM 1 a i	
Determine key target audiences most appropriate for storm water outreach.	Missoula Storm Water key target audiences are the Public, Contractors, and Municipal Employees.
Analyze which business types and/or residential behaviors are common sources of illicit discharges, spills, and dumping.	Within the Missoula area, primary NPS pollutants like trash, soap, oil, nitrogen, phosphorus, and organic enrichment are largely attributed to littering, septic system leaks, lawn care, animal waste, vehicle oil leaks and tire residue, as well as the improper disposal of wash water and other household chemicals.
Develop a list, description, and rationale for selecting these key target audiences based on business and residential groups associated with illegal discharges and improper disposal of waste to the MS4.	Members of the Public associated with these behaviors could include animal owners, home owners, car owners, landscapers, lawn care and garden maintenance workers, litterers, youth aged 13-25, and the local transient population.
List the pollutants associated with each key target audience.	Primary NPS pollutants include, but are not limited to trash, soap, oil, nitrogen, phosphorus, and organic enrichment.
Submit with 1st Annual Report.	Submitted in the 2017 Annual Report.

(Year 1) MCM 1 a ii	
Develop and advertise a storm water website for access by key target audiences, other interested stakeholders, and the general public.	The City of Missoula advertises the Storm Water website via word of mouth and search engine relevance, such as when someone Googles "Missoula Storm Water". It maintains a high rank in search engines with the freshness of its content, the number of times a given search term appears, and by maintaining a quality user experience.
The storm water website must include access to outreach materials and outreach event information (most recent and current).	The Storm Water website provides the Public outreach material. It also provides event and seasonal information in the monthly online public works newsletter.

(All Years) MCM 1 b i	
Develop outreach messages which promote benefits of non-polluting behaviors to the key target audience as well as benefits to storm water discharges.	Missoula's Storm Water Division is currently developing outreach messages for the Public. Preliminary messages include: 1) Many Missoulians believe water which enters our storm drains are treated at the wastewater plant when in reality this water flows to the aquifer, streams, or river. Example educational poster slogan, "Drains to streams, keep it clean." This is already on the Storm Water website. 2) Missoula Parks and Recreation reports much of the trash they pick-up comes from youth and the transient populations. If not disposed of properly, this trash can flow across the land, ending up on stream beds and in waterways. Example Sign on a park trash can, "More Trash in the Can, Less in Our Storm Water." 3) On public walkways and trails pet waste has become a problem. Missoula Parks and Recreation already offers free Mutt Mitt Poo bag dispensers, but they're not always used, or if used not always disposed of in a trash can. An example sign on these bag dispensers might read, "No one wants poo on their shoe, they definitely don't want it flowing into their aquifer or streams. Make sure to throw it away." 4) For those who wonder if they should report spilled oil, chemicals, or other illicit discharge, the simple reminder, "Only rain down the storm drain." 5) Or for the everyday trash thrown on the trails, "Out for walk and see some trash? By carrying a trash bag in your backpack you can combat one of the world's largest problems. That tiny piece of plastic you pick up in the park has a far reaching effect".
Submit with 2nd Annual Report.	Submitted in the 2017 Annual Report.

(Year 2) MCM 1 c i	
Identify and, as needed, develop outreach formats and distribution channels for messages developed for each key target audience and associated storm water polluting behavior.	Not Required until Year 2.
Formats and distribution channels should be tailored to key target audiences and can utilize other existing formats and distribution channels, such as existing community newsletters.	Not Required until Year 2.
Submit a description of formats, distribution channels and schedule for each key target audience in 2nd Annual Report.	Not Required until Year 2.

(Year 2-5) MCM 1 c ii	
Distribute outreach materials to target Audiences.	Not Required until Year 2.
Describe distribution in Annual Reports.	Not Required until Year 2.

(Year 1) MCM 2 a i	
Identify approaches for involving the key target audiences (identified under Part 11.A. I .a.i.) in the development and implementation of the SWMP over the five year permit term. For each key audience, describe:	
the approach;	To involve the Public Missoula Storm Water is working with WEN and the Natural History Museum, both of whom have longstanding connections to local educational and volunteer groups. Events and opportunities are broadcasted on the Storm Water website. Further, we're working towards a marketing campaign which may include signs to be placed in relevant areas.
the target date(s) for implementation; and	Educational programs have been implemented. Future marketing campaigns are pending on funding to be approved by Missoula City Council.

(Year 1) MCM 2 a i	
Purpose of the involvement approach (e.g. raise awareness, change behavior, and improve the SWMP).	These approaches aim to raise awareness and change behavior which results in water NPS pollution or illicit discharge.
Wherever possible, identify existing organizations with membership that represent some or all of the key target audiences and describe opportunities for partnering to involve membership in SWMP development and implementation.	As appropriate we coordinate with other agencies, partnerships, and citizens to: • construct, upgrade, and maintain storm water facilities; • educate the public on storm water pollution prevention; • screen, sample, and test storm water for illicit discharges and pollution levels; • report test results and other required activities to the Montana Department of Environmental Quality; • and coordinate response to storm water flooding situations. Organizations include Missoula County, Missoula Water Quality District, Montana Natural History Museum, Watershed Education Network, University of Montana, Missoula Building Industry Association, Boy Scouts and Girl Scouts. Likewise, community volunteers have come from WGM Group, Dig It Excavating, and the Clark Fork Coalition. Cooperating City of Missoula departments include Parks and Recreation, Geographic Information Systems, Wastewater, Streets Maintenance, Water Utility, Fire Dept., Zoning, Transportation Planning, Traffic Services, Vehicle Maintenance and Facility Maintenance, and Engineering. For specific individuals involved see the "MCM org responsibilities_v10.2.pdf" available from the City of Missoula Storm Water Division.
Document collaboration with existing organizations if this is an approach for involving key target audiences.	Emails and substantive documentation are available upon request.
Submit a description of public involvement approach, and schedule for each key audience in 1st Annual Report.	Approach includes outreach through the Storm Water website, Field Trip and Volunteer Opportunities, and Public Meetings. In 2017, the website was updated on February 8th, March 3rd, and March 7th. Public meetings to reduce pollutants took place on March 28th and July 18th.

(Years 2-5) MCM 2 a ii	
Implement identified involvement approaches for each key target audience.	Not Required until Year 2.
Document participation and key target audience feedback on the approach in the SWMP and in each Annual Report.	Not Required until Year 2.

(Year 1) MCM 2 b i	
Develop and advertise a storm water website for soliciting input from key target audiences, other interested stakeholders, and the general public. At a minimum, the storm water website must include:	
access to outreach materials;	The Storm Water website provides Outreach Materials for the General Public (under the tabs named Purpose, Opportunities, and Rates), Municipal Employees (under the Projects tab), as well as Contractors and Engineers (under the Construction Permits tab). Additionally, Municipal Employees will soon have access to educational storm water videos.
most recent or current outreach event information;	The website includes this.

(Year 1) MCM 2 b i	
SWMP planning documents;	The City of Missoula's most current SWMP is on the website, to be updated annually.
annual reports (or an equivalent summary or document providing an annual overview, and the availability for the public to request the annual report);	The City of Missoula's most current annual report is on the website, to be updated annually.
a mechanism for collecting public input for the SWMP; and	The Missoula Storm Water website has a comment form for the City's most current SWMP, accessible to all key target audiences.
Illicit discharge and construction project complaints.	At the bottom of the Storm Water website there are instructions, "If you have construction project complaints or suspect illicit discharge, report online anonymously. To reach the general spill hotline during business hours call 406-258-4890, or, for after-hours dispatch call 911."
Website shall be available to the public on the internet.	The Storm Water website is available through all common internet browsers.

Example of a message which may be posted on Parks and Recreation trash cans.

Example of the message posted on the City of Missoula Storm Water Division website.

Example of Illicit Discharge once tested by The Missoula County IDDE program.

Excerpt of Training Materials given to Municipal Employees specializing in Municipal Facility Maintenance, Parking Lots, and Streets.

SPECIALTY BMPs

Municipal Facility Maintenance

27. When painting outdoors, which of the following steps should be taken?
    a. Spread a drop cloth or tarp under the work.
    b. Mix and thin paints on a paved surface like a parking lot.
    c. Clean tools and equipment over a grassy area.
    d. Dispose of scraps and empty containers down the nearest storm drain.

28. What should be done with a drop cloth or tarp after the work is finished?
    a. Nothing
    b. Shake it off over a grassy area.
    c. Shake it off over a storm drain.
    d. Shake it off inside of a waste receptacle.

Parking Lots & Streets

29. Where is the proper place to dispose of street sweeping debris?
    a. in a secure landfill or disposal site
    b. in a drainage ditch
    c. near a stream or river
    d. in a lake or other surface water body

30. When performing wet concrete sawing, which of the following measures are useful in protecting stormwater?
    a. Add disinfectant to the saw cooling water.
    b. Use a wet vac to collect the excess cooling water.
    c. Hose down the area when work is completed.
    d. All of the above.

Example of the message posted on the City of Missoula Storm Water Division website.

Example of Illicit Discharge once tested By the Missoula County IDDE program.

2017 Year 1 Activities – MCM 2. Public Involvement and Participation

A. From Page 5, 2017 MS4-AR Form.

B. In accordance with MCM - BMP 2-a(i), BMP 2-a(ii), and BMP 2-b(i).

WATER QUALITY DISTRICT EDUCATION AND INVOLVEMENT ACTIVITIES – Missoula continues to partner with the Water Quality District for public involvement and participation activities. These activities are provided for our audiences as identified in Missoula's SWMP. These audiences include the general public, contractors and municipal employees.

Opportunities for public involvement and/or participation have typically included:

- Household Hazardous Waste Collection Days – once annually
- Tours of storm water facilities – spring and fall as requested
- Replanting riparian areas – once annually
- Riverside clean up drives – once annually
- Programs hosted by the Watershed Education Network – when available
- Storm drain stenciling project – every third year
- Call site for anonymously reporting illegal dumping – year round

In 2017, the Water Quality District was unable to host its annual household hazardous waste disposal days. All efforts, both staff time and financially were directed toward work to complete a year-round Household Hazardous Waste Collection Facility. Currently, architectural and engineering designs are substantially complete for the project.

CITIZEN INVOLVEMENT IN STORM WATER DEVELOPMENT - Soon the Storm Water website will include a comment form allowing public comments on Missoula's storm water management plans. Citizen feedback will help Missoula define the approach it will take for public involvement, the preparation and materials necessary, best methods of advertising to solicit participation, and a schedule of events.

CITY INVOLVEMENT and PARTICIPATION ACTIVITIES – Missoula teamed up with the Watershed Education Network (WEN) to facilitate two field trips with Sentinel High School Students to the Pattee Creek Desiltation Facility. In 2016, the first group of students built Floating Islands which help use up nutrients left in the water (stemming from runoff of properties and lawns uphill).

In December 2017, the second group of students visited the desiltation facility to learn about storm water management. They discussed what kinds of non-point source (NPS) pollutants like salt, sediment, oil, nitrogen, and phosphorous may runoff roads and properties into Pattee Creek. They then learned how the Pattee Creek Desiltation Facility cleans the creek, where NPS pollutants and particulate floatables sink down with gravity and allow clean water to continue on into the Missoula residential neighborhoods before it feeds into the Bitterroot River. This process helps clean Pattee Creek of NPS pollutants which are harmful to Missoula's aquatic habitats. The 2017 participants consisted of 24 students and 3 adults.

2017 Year 1 Activities – MCM 2. Public Involvement and Participation

CITY CONSERVATION LANDS MANAGEMENT (CCLM) INVOLVEMENT and PARTICIPATION ACTIVITIES – In 2017, volunteers donated 62 hours of labor, along with CCLM staff time to clean-up a large transient campsite adjacent to and impacting the Clark Fork River. The CCLM also planted 3,000 native plants in riparian areas in 2017 to maintain, stabilize and improve streamside drainages and banks.

Year 2 (2018) Activity Planning – MCM 2. Public Involvement and Participation

A. *From Page 5, 2017 MS4-AR Form.*

B. *In accordance with MCM - BMP 2-a(i), BMP 2-a(ii), and BMP 2-b(i).*

Based on past successes, Missoula will continue to partner with WEN for educational field trips as well as develop city learning materials for both the Desiltation Facility and Hydrodynamic Separator. We are also creating and updating educational material for our 3 key audiences: (1) construction contractors; (2) municipal employees; and (3) general public, with their associated NPS polluting behaviors.

In addition to offering field trips, Missoula will continue to seek other opportunities and programs with which to partner to educate citizens of all ages and backgrounds about pollution types and non-polluting behavior.

Move forward with the next steps in construction of the Household Hazardous Waste Collection Facility for Missoula area residents. The Facility will allow residents to conveniently dispose of household hazardous wastes properly and safely on a year-round basis. The Facility could potentially decrease the number of illegal dumping events for an improvement in Missoula's IDDE program.

2017 Year 1 Activities – MCM 3. Illicit Discharge Detection and Elimination

A. *From Page 3 and Page 5, 2017 MS4-AR Form.*

B. *In accordance with MCM - BMP 3-a(i), BMP 3-b(i), BMP 3-b(ii), BMP 3-c(i), BMP 3-d(i), BMP 3-d(iii), BMP 3-d(iv), BMP 3-d(v), BMP 3-e(i), BMP 3-e(ii), BMP 3-e(iii), BMP 3-f(i), BMP 3-f(ii), BMP 3-f(iii)"*

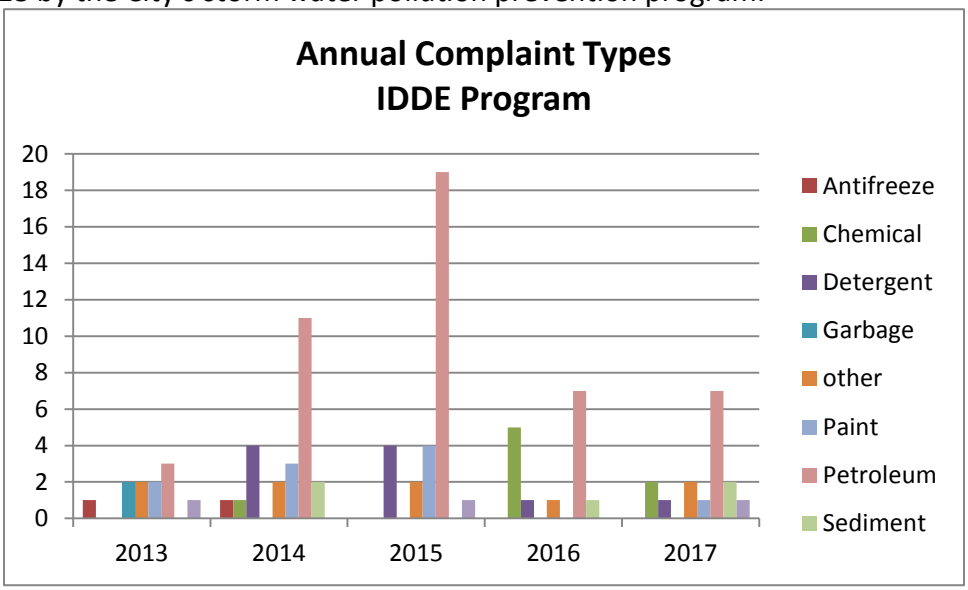
EXISTING IDDE PROGRAM – Missoula continues to partner with the Missoula Valley Water Quality District for enforcement of its IDDE program. Education and outreach is an ongoing component of the program, including behavior modification messages. An updated contractual agreement is currently under review in preparation for adoption.

2017 Year 1 Activities – MCM 3. Illicit Discharge Detection and Elimination

2017 MVWQD IDDE PROGRAM RESULTS – Two MVWQD inspectors made 13 facility inspections in 2017 as well as fielding 667 calls regarding possible spills or illegal dumping. 4 outfalls were inspected.

PET WASTE BECOMING PROBLEMATIC - MVWQD plans to target pet owners with educational materials related to pet waste and pollution prevention techniques in 2018. Many Missoula trails are pet friendly and owners often take them on walks. Most of Missoula's trails drain to a watershed and uncollected pet waste contributes to surface water pollution.

CITY REVIEW OF PAST MVWQD IDDE COMPLAINTS – A review of the type and number of complaints received over the past few years related to illegal dumping shows that petroleum products are most commonly dumped illegally by the general public. The general public and petroleum pollutants will be targeted in 2018 by the City's storm water pollution prevention program.



ILLICIT DISCHARGE INVESTIGATION AND CORRECTIVE ACTION PLAN – Also known as an Enforcement Response Plan (ERP). See the Missoula Valley Water Quality District's ERP for IDDE activities on Pages 49, 50 and 51 below. This Enforcement Response Plan is continually being improved to meet current water quality impairments and local improvement priorities.

MAP and STORM WATER ASSETS – Missoula annually updates its maps and database of storm water assets with new construction, modifications/replacements and abandoned components. The asset management database is also used to schedule and track regular repair/maintenance activities of the storm water drainage system performed by city staff.

DRY WEATHER INSPECTIONS – MVWQD performed 4 outfall inspections in 2017. Due to time limitations and changes in staffing at the city, the remaining outfalls scheduled for inspection in 2017 have been delayed to the remaining years of this permit cycle. Inspections scheduled for 2017 will be divided and added to the outfall inspections scheduled for 2018 - 2021.

Year 2 (2018) Activity Planning - MCM 3. Illicit Discharge Detection and Elimination
A. From Page 3 and Page 5, 2017 MS4-AR Form.
B. In accordance with MCM - BMP 3-a(i), BMP 3-b(i), BMP 3-b(ii), BMP 3-c(i), BMP 3-d(i), BMP 3-d(iii), BMP 3-d(iv), BMP 3-d(v), BMP 3-e(i), BMP 3-e(ii), BMP 3-e(iii), BMP 3-f(i), BMP 3-f(ii), and BMP 3-f(iii).
PUBLIC REPORTING - The majority of Missoula's IDDE monitoring is through public reporting of illicit discharge incidents and through the Illicit Discharge Detection and Elimination program coordinated by Missoula County. These continue to be reviewed and public messages updated accordingly. DRY WEATHER INSPECTIONS - In 2018, Missoula will begin catching up annual dry weather outfall inspections by splitting and adding the first year list of outfalls to the 2018 and succeeding years' inspections list so that all outfall inspections will be completed by the end of this current permit cycle. TARGET AUDIENCES – In 2018, the MVWQD plans to target specific education regarding pet waste pollution to pet owners. The City plans to target the general public with specific education regarding petroleum product pollution.

Missoula Public Health
City-County Health Department

Missoula City-County Health Department
WATER QUALITY DISTRICT
301 West Alder Street | Missoula MT 59802-4123
www.co.missoula.mt.us/wq
Phone | 406.258.4890
Fax | 406.258.4781

Missoula Valley Water Quality District – Enforcement Response Plan

Purpose: The Missoula Valley Water Quality District (District) is charged with protection of surface water and groundwater resources within the Missoula Valley. One method of accomplishing this is through Municipal Codes, County Ordinances and State Law.

Application: The District commits to investigating all illicit discharge complaints within 3 business days of receiving them. If possible, the investigation will take place within 24 hours of receipt. Complaints may be filed by calling the District at 258-4890, on the website for the City-County Health Department or by calling 911. 24-7 response of Health Department staff is available if necessary.

Applicable Regulations:

This section of Municipal Code (Water Quality Ordinance) is a Health Ordinance pursuant to §7-4-4306 MCA, and the extraterritorial application of the ordinance has been agreed to in a Resolution of Concurrence by the Missoula Board of County Commissioners. This covers the majority of the MS4 including unincorporated areas.

> *Missoula Municipal Code*
> *Section 13.26.080 PROHIBITED ACTIVITY*
>
> *It is unlawful for any person to:*
> *(a) cause contamination or to place, cause to be placed, or allow to remain in place any substance in a location where it is likely to cause contamination;*
> *(b) violate any provision set forth in a permit for the facility issued pursuant to this Ordinance;*
> *(c) violate any order issued pursuant to this Ordinance; or*
> *(d) violate any provision of this Ordinance.*

Contamination is defined as:

> *Contamination - The presence of any substance (chemical, radiological, or biological) or any condition (temperature, pH, taste, color, odor, turbidity) in soil or water which may create or threaten to create a hazard to human health or the environment, or impair the usefulness of the soil or water.*

The Water Quality Ordinance contains enforcement procedures in Section 13.26.120, and provisions for criminal penalties in Section 13.26.130. The Enforcement section includes provisions for Notice of violation, Administrative Review, Board Hearings, and Judicial Review.

The Missoula City-County Health Code, Regulation 1 regulates discharge of wastewater and is applicable throughout the entire county including the city of Missoula. It states:

> *Regulation 1 (A)(3) A person may not discharge wastewater onto the surface of the ground except for a permitted system designed for surface application and licensed septic tank pumpers discharging septic wastes onto disposal sites approved by the Department*

And:

> *Regulation 1 (A)(4) Unless an Underground Injection Control (UIC) permit is obtained from the U.S. Environmental Protection Agency pursuant to 40 CFR 144, a person may not install or use any sump, dry well, or septic system from disposal of waste fluids from the washing, servicing, maintenance or storage of any vehicle, equipment or components that are associated with an internal combustion engine.*

Wastewater is defined in the Health Code, Regulation 1 as:

> *liquid waste which may include chemicals, household, commercial or industrial wastes, human excreta, animal and vegetable matter in suspension or solution, discharged from a dwelling, building, establishment, vehicle or container.*

The Missoula City/County Health Code also includes detailed enforcement provisions, including administrative and judicial review and civil penalties.

The following chart references the regulations that would be applied to various sources of illicit discharges:

Source of Illicit Discharge	Applicable Regulation
Sanitary Wastewater	Missoula City County Health Code, Regulation 1, Missoula Municipal Code 13.04.080
Effluent from Septic Tanks	Missoula City County Health Code, Regulation 1, Missoula Municipal Code 13.04.080
Car Wash Wastewaters	Missoula City County Health Code, Regulation 1, Missoula Municipal Code 13.04.080
Improper Oil Disposal	Missoula Municipal Code 13.04.080
Radiator flushing disposal	Missoula Municipal Code 13.04.080
Laundry wastewaters	Missoula City County Health Code, Regulation 1, Missoula Municipal Code 13.04.080MMC 13.04.080
Spills from Roadway accidents	Missoula Municipal Code 13.04.080
Improper disposal of auto and household toxics	Missoula City County Health Code, Regulation 1, Missoula Municipal Code 13.04.080

Investigation: Once complaints are received, they are logged into the Complaint Management Software, *Paragon*. It is assigned to a staff member of the district who receives and immediate notification via email of the complaint. Staff then investigates the complaint, typically by an in-person field inspection. If the complaint is of an immediate nature and takes place after hours, staff are notified via pager and

cell phone. Information obtained during a field visit may include; witness information, photos, property owner interview, soil and/or water samples. If the property owner is not cooperative and the need to inspect is justifiable, District staff may pursue an administrative warrant to investigate the property.

If an illicit discharge is discovered, staff will attempt to receive immediate voluntary compliance through ceasing the activity and using control measures to minimize spread of contamination (ie oil sorbent materials). If necessary, the department may secure contractors necessary to reduce the spread of contamination (ie vactor truck or excavator).

Typical enforcement procedure is as follows

Complaint Receipt ⟶ Investigation ⟶ Notification to responsible party via Notice of Violation (NOV)
(1-3 days) (1-3 days)

This process can be faster if warranted. The timeline for compliance which is outlined in the NOV is based on the circumstances of the illicit discharges. The discharge may be ordered to cease immediately but an extended timeline for investigation and clean-up of investigation may be longer.

If compliance is not achieved through the above procedures, the department will pursue compliance through the enforcement procedures outlined in Municipal Code and City-County Health Code.

The Water Quality Ordinance contains enforcement procedures in Section 13.26.120, and provisions for criminal penalties in Section 13.26.130. The Enforcement section includes provisions for Notice of violation, Administrative Review, Board Hearings, and Judicial Review. The Missoula City/County Health Code also includes detailed enforcement provisions, including administrative and judicial review and civil penalties. The Missoula Municipal Code also contains detailed enforcement provisions.

2017 Year 1 Activities – MCM 4. Construction Site Storm Water Management

A. *From Page 5, 2017 MS4-AR Form.*

B. *In accordance with MCM - BMP 4-a(i), BMP 4-a(iii), BMP 4-a(iv), BMP 4-b(i), BMP 4-b(ii), BMP 4-c(i), BMP 4-c(iii), BMP 4-c(iv), and BMP 4-c(v).*

CONSTRUCTION SITE STORM WATER MANAGEMENT - Missoula has a Construction Site Storm Water Management Program. It consists of 5 parts: (1) construction Storm Water Pollution Prevention Plan (SWPPP) ordinance; (2) construction site standard drawings; (3) site plan review procedures; (4) dedicated water pollution complaint phone number; and (5) site inspection checklist. The checklist documents those Non-Numeric Technology-Based Effluent Limit requirements of the Permit. Further requirements are met by Missoula's local SWPPP permits.

In 2017, Missoula staff reviewed 24 storm water management plan sets and 58 construction projects were inspected. The following actions were necessary:

Action	*2014*	*2015*	*2016*	*2017*
Notice of violation	2	3	10	11
Administrative fines				1
Stop Work Orders			1	1
Civil penalties				
Criminal actions				

Ordinances were updated late 2016 and early 2017 to include fines, civil penalties and criminal actions.

2017 Year 1 Activities – MCM 4. Construction Site Storm Water Management

FREQUENCY DETERMINATION PROTOCOLS - Missoula is aware of requirements for an inspection frequency determination protocol and is working on it.

CONSTRUCTION SITE PLAN REVIEW CHECKLIST – Residential construction site plan review checklist attached (see Pages 52 and 53 below). Commercial construction site plan review checklist attached (see Pages 54, 55 and 56 below).

SWPPP INSPECTION CHECKLIST – Attached (see Pages 57 through 63 below).

Year 2 (2018) Activity Planning – MCM 4. Construction Site Storm Water Management

A. *From Page 5, 2017 MS4-AR Form.*

B. *In accordance with MCM - BMP 4-a(i), BMP 4-a(iii), BMP 4-a(iv), BMP 4-b(i), BMP 4-b(ii), BMP 4-c(i), BMP 4-c(iii), BMP 4-c(iv), and BMP 4-c(v).*

FREQUENCY DETERMINATION PROTOCOLS - In 2018 we will continue to develop an inspection frequency determination protocol. We are currently considering priority of the project based on project size, proximity to a water body, steepness of project site slopes, discharge to impaired waterbodies and past record of non-compliance of operators.

Missoula's current SWPPP inspection checklist does mandate that, "Continued SWPPP deficiencies will result in a notice of violation, a stop-work order, and access to the site, other than that limited to SWPPP mitigation will be prohibited."

RESIDENTIAL SITE PLAN CHECK LIST

2016

REQUIRED ON ALL BUILDING AND SITE PLANS FOR ONE AND TWO FAMILY DWELLINGS FOR NEW CONSTRUCTION, ADDITIONS OR REMODELS. THE FOLLOWING CHECK LIST MAY NOT BE ALL INCLUSIVE OF EVERYTHING NEEDED TO COMPLETE THE PLAN REVIEW PROCESS, BUT NONETHELESS IT MUST BE COMPLETED, SIGNED AND SUBMITTED BY THE PERMITTEE. INCOMPLETE SUBMITTALS WILL BE RETURNED UN-REVIEWED.

SITE ADDRESS: _____

LEGAL DESCRIPTION: _____

CONTACT PERSON & PHONE #: _____

N/A	YES	
	❒	**ONE (1) COPY OF BUILDING PLANS**
	❒	**ONE (1) COPY OF SIGNED AFFIRMATION OF KNOWLEDGE OF THE MISSOULA LIGHTING ORDINANCE**
	❒	**PLAN REVIEW FEE**
	❒	**ONE (1) COPY OF SITE PLAN**
❒	❒	**ONE (1) COPY OF SIGNED RES-CHECK** (www.energycodes.gov) (HEATED STRUCTURES ONLY)
❒	❒	**INTERNATIONAL ENERGY CONSERVATION CODE** (IECC) FORM (NEW CONSTRUCTION/ADDITIONS ONLY)
❒	❒	**FAIR HOUSING FORM SIGNED BY THE PROPERTY OWNER** (NEW CONSTRUCTION ONLY)
❒	❒	**WATER PIPING FIXTURE UNIT COUNT (**NEW CONSTRUCTION - 3+ BATHROOMS)
❒	❒	**ANY OTHER REQUIRED DOCUMENTS AS A CONDITION OF THE SUBDIVISION, SUCH AS SOILS LETTER, ELEVATION CERTIFICATIONS, ETC. IF THESE ITEMS ARE NOT INCLUDED IT MAY DELAY THE REVIEW AND APPROVAL OF PERMIT.**

NO	YES	
❒	❒	1. Grading and drainage: slope is equal to or greater than 5%? (If checked yes, please see appropriate section on second page.)
❒	❒	2. Hillside Standards: Is the area of development, (grading, driveways and structures) is equal to, or greater than 15%? (If checked yes, please see appropriate section on second page.)

N/A	YES	**Please show the following on the site plan.**
	❒	3. North Arrow
	❒	4. Clearly indicate scale use on Site Plan. (1" = 20' minimum unless pre-approved by Permit Staff)
	❒	5. Existing and proposed buildings with distance to property lines and uses of buildings.
	❒	6. Boundaries and dimensions of property and property corners identified on site.
❒	❒	7. Distance from property line to curb or edge of street. (No reversed plans accepted.)
❒	❒	8. Existing and proposed curbs, sidewalks, driveways, curb cuts and locations.
❒	❒	9. Existing and proposed landscaping.
❒	❒	10. Distance between all structures.
❒	❒	11. Existing and proposed easements - access, utility, etc. - include location and size. (Structures are not allowed in easements.)
	❒	12. Names of streets and cross streets - include alleyways and all rights-of-way
❒	❒	13. Show parking designation and number of spaces: _____. Maximum drive way grade = 8%
	❒	14. Location of water service.
	❒	15. Water meter size _____ inch. If on well, list water line size.
	❒	16. Drain field, step system, and/or sewer line location.
❒	❒	17. Storm water drainage pathways. Discharge shall not impact buildings on adjacent properties.
❒	❒	18. Heights and types of fences, existing and proposed. (New fences or modifications of an existing fence may require a separate permit.)
❒	❒	19. Construction Shoring - location and type.
❒	❒	20. Swimming Pools - require a separate permit. Show drain line, size, location and connection.
❒	❒	21. Adjacent parks, open space or public trails

N/A	YES	**Please show the following on the building plans:**
❒	❒	22. Garages and Carports ❒ Attached ❒ Detached # of buildings on site _____
❒	❒	23. Foundation
❒	❒	24. Floor framing
❒	❒	25. Wall framing
❒	❒	26. Conventional roof framing ❒ Truss engineering ❒ Engineering sheets not included
❒	❒	27. Room identification and intended use of each room.
❒	❒	28. Exterior building elevations of all structures. (Indicate scale used ie: 1/8" = 1')
❒	❒	29. Existing grade on elevation drawing.
❒	❒	30. Installing Radon Mitigation System.

NOTES:

Page 2

GRADING, DRAINAGE AND HILLSIDE STANDARDS

MUST BE COMPLETED WHEN BUILDING ON A SLOPE GREATER THAN 5%

NO	YES	
☐	☐	30. Is the slope equal to or greater than 5%? (5' elevation in 100 lineal feet)

If you checked **NO** then **STOP** here.
If you checked **YES** then the following must be completed.

N/A	YES	
☐	☐	31. Existing and finished ground elevations at all building corners.
☐	☐	32. Spot elevations for driveway at street, garage floor and sea level elevation for one building corner. Maximum driveway grade = 8%
☐	☐	33. Use shading or crosshatch to indicate location of cut and fill and proposed slopes in excess of 2:1.
☐	☐	34. Existing and proposed drainage structures and flow lines.
☐	☐	35. Retaining walls including height and location (maximum height of 6' above grade).
☐	☐	36. Existing and proposed contours of not more than two foot (2') intervals for the entire lot.

MUST BE COMPLETED WHEN A BUILDING ON A HILLSIDE LOT WITH A SLOPE GREATER THAN 15%

NO	YES	
☐	☐	37. Is part of the proposed structure located on a slope greater than 15%? (15' elevation in 100 lineal feet)

If you checked **NO** then **STOP** here.
If you checked **YES** then a topographic map must be prepared by a professional engineer, licensed land surveyor or licensed architect and continue with check list.

N/A	YES	
☐	☐	38. A slope analysis on a topographic map with contour intervals of 2 feet
☐	☐	39. Proposed finish contours (after all proposed grading)
☐	☐	40. Protected ridgelines, as shown on the City of Missoula Ridgeline Map
☐	☐	41. Proposed erosion control and slope stabilization techniques
☐	☐	42. Surface hydrological conditions including natural drainage courses, streams, floodplains, wetlands and ponding areas
☐	☐	43. Location and types of significant vegetation including known rare and endangered plant species and general plant communities
☐	☐	44. Habitat areas for rare or endangered animal species
☐	☐	45. Proposed building and disturbance area
☐	☐	46. Grading treatments - use shading or crosshatch to indicate location of cut and fill and proposed slopes in excess of 2:1.
☐	☐	47. Driveways and other vehicular and pedestrian circulation routes

ATTEST: I hereby attest that the information submitted on this document and site plan is true and accurate.

APPLICANT'S SIGNATURE: _____ DATE: _____

Failure to complete this form and to provide all the requested information will result in the permit application being returned to the permittee for corrections.

COMMERCIAL SITE PLAN CHECK LIST

2013

MULTI-FAMILY, COMMERCIAL, INDUSTRIAL SITE PLAN REQUIREMENTS

THE FOLLOWING CHECK LIST MAY NOT BE ALL INCLUSIVE OF EVERYTHING NEEDED TO COMPLETE THE PLAN REVIEW PROCESS, BUT NONETHELESS IT MUST BE COMPLETED, SIGNED AND SUBMITTED BY THE PERMITTEE. INCOMPLETE SUBMITTALS WILL BE RETURNED UN-REVIEWED.

SITE ADDRESS: _____

LEGAL DESCRIPTION: _____

CONTACT PERSON & PHONE #: _____

N/A	YES	
	❒	**TWO (2) COPIES OF BUILDING PLANS**
	❒	**TWO (2)-COPIES OF SIGNED COM-CHECK** (www.energycodes.gov) (heated structures only)
	❒	**PLAN REVIEW FEE**
	❒	**TWO (2) COPIES OF SITE PLAN**
	❒	**TWO SIGNED ASBESTOS LETTERS - 1 FROM OWNER AND 1 FROM CONTRACTOR** (May not be applicable to new construction)
❒	❒	**FAIR HOUSING FORM** (New construction/additions)
❒	❒	**IECC FORM** (Multi-family or group home only - new construction/additions)
❒	❒	**FOR SITE DISTURBANCE OF ONE (1) ACRE OR GREATER. SUBMIT MT DEQ NOTICE OF INTENT, SWPPP APPLICATION & APPROVAL LETTER.**
❒	❒	**SEWER UNIT FIXTURE COUNT BY LICENSED PLUMBER** (if existing/proposed sanitary sewer service will be less then 6" in diameter.)
❒	❒	**WASTEWATER CLASSIFICATION SURVEY**

N/A	YES		**Please show the following on the site plan:**
	❒	1.	North Arrow
	❒	2.	Clearly indicate scale use on Site Plan. (1" = 20' minimum unless pre-approved by Permit Staff)
	❒	3.	Names of streets and cross streets - All rights-of-way including alleys.
❒	❒	4.	Existing and proposed easements; access, utility, etc. - include location and size. Note: Structures are not allowed in easements.
❒	❒	5.	Boundaries and dimensions of property and property corners identified on site.
❒	❒	6.	Distance from property line to curb or edge of street.
❒	❒	7.	Locations of existing and proposed structures.
	❒	8.	Uses of all present and proposed structures.
❒	❒	9.	Distance from all structures to the property lines. (No reversed plans accepted.)
	❒	10.	Existing and proposed curbs, sidewalks, driveways, curb cuts and trails. Note dimensions/locations.
❒	❒	11.	Garages and Carports ❒ Attached ❒ Detached # of buildings on site _____
❒	❒	12.	Location, dimensions, and number of existing and proposed parking spaces including:
	❒		(a) Number of parking spaces and dimensions.
	❒		(b) Square footage of paved parking area.
	❒		(c) Show ADA accessible entrances, ramps, routes and signage.
	❒		(d) Number, type and location of ADA (Americans With Disabilities Act) accessible parking; including striping and ADA signage placement.
❒	❒	13.	Number, type and location of short and long term bicycle spaces.
❒	❒	14.	Location of loading areas, accesses and type of vehicles using the area (delivery trucks, etc.)
❒	❒	15.	Show all areas to be paved including alleys. Show typical pavement section. (thickness, base materials, etc.)
❒	❒	16.	Show fire access and fire hydrant size and location.
❒	❒	17.	Grading and drainage plan to include (may be on a separate sheet):
	❒		(a) Topographic map showing existing elevation of all relative features including but not limited to: curbs and sidewalks, edge of asphalt and drainage structures in existing street, property corners, spot elevation throughout lot, contours on a 1 foot maximum interval if cut or fill exceeds 3 feet. (Elevations must be in sea level designation if greater than 3,400 feet above sea level.)
	❒		(b)Proposed elevations for: critical locations in parking lots, curbing both on site and on right-of-way, sidewalks, existing and finished building floor elevations, landscaping, cut and fill slopes, retaining walls.
	❒		(c) Drainage plan including inlets or sumps with reference or copy of City Standards, roof drainage, storm drains, etc. All stormwater shall be retained on-site.
	❒		(d) Indicate plans for erosion control and drag-on mitigation during construction.

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❒	❒	18.	Exterior lighting to include (may be on a separate sheet): (a) Photometric drawing to include, lighting layout, foot candles at property lines and regular intervals and fixture mounting height. (Sample at www.ci.missoula.mt.us/building.) (b) Lighting fixture catalog sheets.
❒	❒	19.	Irrigation and drainage ditches.
❒	❒	20.	Existing and proposed landscaping for on-site and boulevard including (may be on a separate sheet): (a) Square footage existing, proposed and required. (b) Topography. (c) Types of plants, botanical and common name, ultimate size and size at planting. (d) Type of ground cover. (e) Irrigation. (f) Type of mulch and location. (g) Installation and maintenance plan. (h) Parks Department approval for activity areas for multi-family dwellings (10 or more units).
❒	❒	21.	Heights and types of fences, existing and proposed.
❒	❒	22.	Location and type of trash storage, including screening, ADA accessiblility. Gates cannot open into the public ROW.
❒	❒	23.	Location of external/internal grease interceptor. Provide sizing and type of interceptor. To determine applicability - www.ci.missoula.mt.us/Documents/Public%20Works/Admin Rusels/Requirements.
❒	❒	24.	Drain field, step system, and/or sewer line location and size.
❒	❒	25.	Location of water service and water meter.
❒	❒	26.	Water meter size: _____ inch If on well, list the water line size
❒	❒	27.	Signs require a separate permit. Contact Kledia Colenso, Plans Examiner @ 552-6622 or kcolenso@ci.missoula.mt.us
❒	❒	28.	Include construction quantities for the following: curb/gutter and sidewalk in public ROW; parking/paving - private and public ROW Curb/Gutter _____ L.F. Sidewalks: _____ S.F. Parking/Paving (Asphalt/Concrete): _____ S.F.
	❒	29.	Construction Shoring - show location and type.
❒	❒	30.	City Standard Drawings (STD-xxx) shall be referenced and attached when/where required/used.
❒	❒	31.	On-site snow storage area (typically a minimum of 20% of the square footage of hardscape (paved and sidewalk) surfaces)
❒	❒	32.	Swimming Pools - require a separate permit. Show drain line, size, location and connection. City ordinance requires 5' fence with self closing gate.
❒	❒	33	City Parks, public trails and open space lands.

N/A	YES		**Please show the following on the building plans:**
❒	❒	34.	Occupancy type, type of construction and occupant load.
❒	❒	35.	Exterior building elevations of all structures. (Indicate scale used ie: 1/8" = 1')
❒	❒	36.	Room identification and intended use of each room.
❒	❒	37.	Structural plans.
	❒	38.	Engineering and/or architect stamps on appropriate sheets.
❒	❒	39.	Foundation.
❒	❒	40.	Floor framing.
❒	❒	41.	Wall framing.
❒	❒	42.	Conventional roof framing.
❒	❒	43.	Schematic Drawings: ❒ Electrical ❒ Mechanical ❒ Plumbing

GRADING, DRAINAGE AND HILLSIDE STANDARDS

MUST BE COMPLETED WHEN A BUILDING ON A HILLSIDE LOT WITH A SLOPE GREATER THAN 5%

NO	YES		
❒	❒	44.	Is any part of the proposed structure located on a slope greater than 5%? (5' elevation in 100 lineal feet) If you checked **NO** then **STOP** here. If you checked **YES** then the following must be completed.

N/A	YES		
❒	❒	45.	Existing and finished ground elevations at all building corners.
❒	❒	46.	Spot elevations for driveway at street, garage floor and sea level elevation for one building corner.
❒	❒	47.	Use shading or crosshatch to indicate location of cut and fill and proposed slopes in excess of 2:1.
❒	❒	48.	Existing and proposed drainage structures and flow lines.
❒	❒	49.	Retaining walls including height and location (maximum height of 6' above grade).
❒	❒	50.	Existing and proposed contours of not more than two foot (2') intervals for the entire lot.

MUST BE COMPLETED WHEN A BUILDING ON A HILLSIDE LOT WITH A SLOPE GREATER THAN 15%

NO	YES		
❒	❒	51.	Is part of the proposed structure located on a slope greater than 15%? (15' elevation in 100 lineal feet) If you checked **NO** then **STOP** here. If you checked **YES** then a topographic map must be prepared by a professional engineer, licensed land surveyor or licensed architect and continue with check list.

N/A	YES		
❒	❒	51.	A slope analysis on a topographic map with contour intervals of 2 feet
❒	❒	52.	Proposed finish contours (after all proposed grading)
❒	❒	53.	Protected ridgelines, as shown on the City of Missoula Ridgeline Map
❒	❒	54.	Proposed erosion control and slope stabilization techniques
❒	❒	55.	Surface hydrological conditions including natural drainage courses, streams, floodplains, wetlands and
❒	❒	56.	Location and types of significant vegetation including known rare and endangered plant species and general
❒	❒	57.	Habitat areas for rare or endangered animal species
❒	❒	58.	Proposed building and disturbance area
❒	❒	59.	Grading treatments
❒	❒	60.	Driveways and other vehicular and pedestrian circulation routes

ATTEST: I hereby attest that the information submitted on this document and site plan is true and accurate.

APPLICANT'S SIGNATURE: _____ DATE: _____

Failure to complete this form and to provide all the requested information will result in the permit application being returned to the permittee for corrections.

SWPPP Inspection Report

INSPECTION DATE: _____

INSPECTOR(S) PRESENT: _____

_____

_____

The City of Missoula Storm Water Pollution Prevention Program (SWPPP) is administered in accordance with and under the following authorities:

U.S. Environmental Protection Agency (EPA)	33 USC 26 §§ 1251 – 1387
U.S. Environmental Protection Agency (EPA)	40 CFR 122
Montana Department of Environmental Quality (DEQ)	ARM 17.30.11 and 13
City of Missoula – Missoula Municipal Code	MMC 15.65

Compliance with SWPPP requirements is mandatory as per federal, state and local law.

SECTION A – Permit Information

PERMIT TYPE	PERMIT NUMBER	DATE ISSUED	PERMIT STATUS
MT DEQ NOI #			
MT DEQ SWPPP #			
MT DEQ PTN #			
MT DEQ NOT #			
CITY SWPPP #			

SECTION B – Site / Facility / Location Information

LOCATION	DESCRIPTION		
SITE NAME			
SITE LOCATION / SITE ADDRESS			
CITY / STATE / ZIP	Missoula	MT	598_____
LAT / LONG	_____ D _____ ' _____ "	_____ D _____ ' _____ "	
TAX ID / GEOCODE			

SECTION C – Permittee (Owner / Operator) Information			
CONTACT	**INFORMATION**		
PERMITTEE / OWNER / OPERATOR			
MAILING ADDRESS			
CITY / STATE / ZIP			
TELEPHONE LANDLINE / MOBILE	(_____) _____ - _____ x- _____	(_____) _____ - _____ x- _____	
IS ABOVE PERMITTEE CONSTRUCTION PROJECT OWNER ?		☐ YES	☐ NO
PERMITTEE STATUS	☐ PRIVATE	☐ PUBLIC – ☐ FEDERAL ☐ STATE ☐ COUNTY ☐ LOCAL	

SECTION D – Weather, Climatology and General Information				
CURRENT WEATHER				
SKY	☐ CLEAR	☐ PART CLOUD	☐ MOST CLOUD	☐ OVERCAST
TEMPERATURE	_____ °F LOW	_____ °F HIGH	_____ °F AVERAGE	
MOISTURE	☐ FOG	☐ RAIN	☐ SLEET / HAIL	☐ SNOW
WIND	_____ RANGE (MPH)		_____ GUSTS (MPH)	
CLIMATOLOGY (LAST STORM EVENT)				
DATE / # DAYS / TIME:	____ / ____ / _____	_____ DAYS PRIOR	____ : ____ AM / PM	
PERIODIC / DURATION	☐ SINGLE	☐ MULTIPLE	____ : ____ HOURS : MINUTES	
AMOUNT / TYPE OF PRECIPITATION	_____ INCHES	☐ RAIN	☐ SLEET / HAIL	☐ SNOW
GENERAL INFORMATION				
INSPECTION TYPE	☐ REGULAR	☐ PRE-STORM	☐ DURING STORM	☐ POST-STORM
DISCHARGE SINCE LAST INSPECTION	☐ YES – COMMENTS ON PAGE 6		☐ NO	
DISCHARGE AT THIS INSPECTION	☐ YES – COMMENTS ON PAGE 6		☐ NO	

SECTION E – On-Site Inspection Data and SWPPP Information		
DATA	**STATUS**	
SWPPP MAP(S)	AVAILABLE ON-SITE: YES / NO	CURRENT: YES / NO
SWPPP LOG(S)	AVAILABLE ON-SITE: YES / NO	CURRENT: YES / NO
CONSTRUCTION PLANS	AVAILABLE ON-SITE: YES / NO	CURRENT: YES / NO

SECTION F – Work Progression		
STOP WORK NOTICE REQUIRED ?	YES NO	IF YES, SEE COMPLIANCE REQUIREMENTS PAGE 4
RE-INSPECTION REQUIRED ?	YES NO	IF YES, ON WHAT DATE ? _____ / _____ / _____

SECTION G – Work / Activity Information	
WORK TYPE	**ACTIVITY DESCRIPTION**
CLEARING / GRUBBING / STRIPPING TOPSOIL	
SITE GRADING - CUT / FILL	
UTILITY INFRASTRUCTURE	
SURFACE INFRASTRUCTURE	
STRUCTURE CONSTRUCTION	
SITE GRADING – FINISH / FINAL	
SITE REVEGETATION	

SECTION H – City SWPPP Standards Compliance							
BMP	STANDARD DRAWING REFERENCE	BMP IN DESIGN (CIRCLE ONE)	BMP IN USE (CIRCLE ONE)	BMP STATUS (CHECK ALL THAT APPLY)			
				FUNCTIONING	MAINTENANCE REQUIRED	REPLACE	REMOVE
SILT FENCE	STD-604	YES NO	YES NO	☐	☐	☐	☐
POST PAVE INLET PROTECTION	STD-605	YES NO	YES NO	☐	☐	☐	☐
PRE PAVE INLET PROTECTION	STD-606	YES NO	YES NO	☐	☐	☐	☐
TEMP. CONST. ENTRANCE	STD-408 STD-607	YES NO	YES NO	☐	☐	☐	☐
STRAW BALE CHECK DAM	STD-608	YES NO	YES NO	☐	☐	☐	☐
STRAW BALE SEDIMENT CONTROL	STD-609	YES NO	YES NO	☐	☐	☐	☐
OTHER 1							
OTHER 2							
OTHER 3							
OTHER 4							

SECTION I – EPA / DEQ Best Management Practice (BMP) Matrix							
BMP	USE REQUIRED (CIRCLE ONE)		IN USE (CIRCLE ONE)		MAINT RQD (CIRCLE ONE)		ACTION REQUIRED / NOTES
DISTURBED AREAS AND SLOPES NOT ACTIVELY BEING WORKED PROPERLY STABILIZED	YES	NO	YES	NO	YES	NO	
NATURAL RESOURCE AREAS PROTECTED WITH BARRIERS OR SIMILAR BMP	YES	NO	YES	NO	YES	NO	
PERIMETER CONTROLS AND SEDIMENT BARRIERS ADEQUATELY INSTALLED AND MAINTAINED	YES	NO	YES	NO	YES	NO	
DISCHARGE POINTS AND RECEIVING WATERS FREE OF SEDIMENT DEPOSITS	YES	NO	YES	NO	YES	NO	
STORM DRAIN INLETS PROPERLY PROTECTED	YES	NO	YES	NO	YES	NO	
CONSTRUCTION EXIT PREVENTING SEDIMENT FROM BEING TRACKED / DRAGGED OFF-SITE	YES	NO	YES	NO	YES	NO	
TRASH / LITTER COLLECTED AND PLACED IN COVERED DUMPSTERS	YES	NO	YES	NO	YES	NO	
WASHOUT FACILITES (PAINT, CONCRETE) AVAILABLE AND CLEARLY MARKED AND MAINTAINED	YES	NO	YES	NO	YES	NO	
FUELING, CLEANING AND MAINTENANCE AREAS FREE OF SPILLS, LEAKS, ETC	YES	NO	YES	NO	YES	NO	
POTENTIAL CONTAMINANTS STORED INSIDE OR UNDER COVER	YES	NO	YES	NO	YES	NO	
NON-STORMWATER DISCHARGES PROPERLY CONTROLLED	YES	NO	YES	NO	YES	NO	

INSPECTION COMMENTS: _____

DISCHARGE COMMENTS: _____

COMPLIANCE REQUIREMENTS: _____

GENERAL SITE OBSERVATIONS / HOUSEKEEPING: _____

OTHER COMMENTS / NOTES: _____

SECTION I – City SWPPP Inspection Notification		
INSPECTION AND NOTIFICATION	**PERMITTEE (OWNER / OPERATOR)**	**CONTRACTOR**
PRESENT DURING INSPECTION (CIRCLE ONE)	YES NO	YES NO
NOTIFIED OF DEFICIENCIES (CIRCLE ONE)	YES NO	YES NO
DIRECTED TO TAKE CORRECTIVE ACTION (CIRCLE ONE)	YES NO	YES NO
NOTIFICATION METHOD: ☐ LETTER ☐ EMAIL ☐ TELEPHONE ☐ VERBAL / IN-PERSON ☐ OTHER: _____		

☐ Re-inspection is required (review checklist and comments); all indicated and / or noted corrective action shall be completed on or by:

_____, _____ / _____ / _____ at ____ : ____ AM / PM
(DAY) (DATE) (TIME)

Continued SWPPP deficiencies shall result in a NOTICE OF VIOLATION, a STOP WORK notice and access to the site, other than SWPPP mitigation work, shall be prohibited.

SWPPP INSPECTORS

INSPECTOR

INSPECTOR

INSPECTOR

INSPECTOR

REV. 02/2011 SWPPP Inspection Report 7 / 7

2017 Year 1 Activities – MCM 5. Post Construction Site Storm Water Management in New and Redevelopment
A. From Page 6, 2017 MS4-AR Form.
B. In accordance with MCM – BMP 5-a(i), BMP 5-a(iii), BMP 5-a(iv), BMP 5-b(i), BMP 5-b(iii), BMP 5-c(i), BMP 5-c(iii), BMP 5-c(iv), BMP 5-c(vi), BMP 5-c(vii), BMP 5-c(viii), BMP 5-c(vix), and BMP 5-d(i).
LOCAL CODES - Missoula has begun developing language for amending our ordinance and administrative rules to include post-construction storm water management controls on regulated projects. However, drafts of the amendments are not yet written. PLAN REVIEW – Missoula has not yet developed a post-construction plan review checklist or a set of adopted performance standards for dealing with on- and off site storm water management and treatment.

Year 2 (2018) Activity Planning – MCM 5. Post Construction Site Storm Water Management in New and Redevelopment
A. From Page 5, 2017 MS4-AR Form.
B. In accordance with MCM – BMP 5-a(i), BMP 5-a(iii), BMP 5-a(iv), BMP 5-b(i), BMP 5-b(iii), BMP 5-c(i), BMP 5-c(iii), BMP 5-c(iv), BMP 5-c(vi), BMP 5-c(vii), BMP 5-c(viii), BMP 5-c(vix), and BMP 5-d(i).
LOCAL CODES – Proceed with adoption of code amendments as planned. ENFORCEMENT RESPONSE PLAN – Proceed to develop a formal ERP. CHECKLISTS – Proceed to prepare plan review and inspection checklists due with end of second year annual report. DATABASE – Incorporate data collection into existing permit tracking datasets. LID – Begin reviewing existing barriers to implementation of LID infrastructure and look for opportunities to change.

2017 Year 1 Activities – MCM 6. Pollution Prevention Good / Housekeeping for Permittee Operations
A. In accordance with MCM – BMP 6-a(i), BMP 6-a(ii), BMP 6-a(iii), BMP 6-a(iv) and BMP 6-a(v).
CITY FACILITIES LIST and ACTIVITIES – Missoula is working toward completion of first and second year requirements. See Pages 17, 18 and 19 of this report for details. FACILITY EMPLOYEE TRAINING – DEQ training videos were sent to all city facility sites in 2017. These videos were viewed by staff at each of these facilities. In addition, in 2017, two FTEs attended the annual Montana Storm Water Conference. In early 2018 two FTEs attended "Urban Forest Connections webinar hosted by www.treesandstormwater.org, with lectures by Karen Cappiella from the Center for Water Protection and Justin Hynicka from American Forests.

Year 2 (2018) Activity Plans – MCM 6. Pollution Prevention Good / Housekeeping for Permittee Operations

A. From Page 5, 2017 MS4-AR Form.

B. In accordance with MCM - BMP 6-a(i), BMP 6-a(ii), BMP 6-a(iii), BMP 6-a(iv) and BMP 6-a(v).

CITY FACILITIES - 2018, continue to update and refine city facilities list, activities and potential pollutants along with facility maps for annual reporting.

Proceed with categorization of similar city facilities and activities for developing SOPs for activity types including storm water pollution controls in accordance with the Permit timeline.

Prepare pollution prevention training materials to assist with conducting training for facility staff directly involved with implementing SOPs in preparation for beginning next year's training sessions.

Develop a method for documenting these training activities for annual reporting purposes.

SOPs –Missoula has SOPs for each of its city facilities. However, Storm Water Program staff desire to standardize portions of these existing SOPs as well as update individual procedures related to each facility's activity types.

TRAINING – Continue employee training at each facility as new employees are hired. Vehicle Maintenance Division and Parks and Recreation Department provide annual training to existing and all new employees regarding pollution prevention and hazardous spill clean-up in accordance with its SOPs.

2018 training plans include an FTE attending:

- WASHI's 2018 Winter cyber-seminar series on Urban Storm Water Hydroinformatics with lectures by Randel Dymond, Maras Aguilar and Clayton Hodges, all of Virginia Tech.
- Lectures by Branko Kerkez of the University of Michigan
- Lectures by Ben Hodges, University of Texas
- Lectures by Aditi Bhaskar of Colorado State University

These webinars will inform us about possibilities for developing SOPs for the categories of: (1) Parks and open space maintenance; and (2) Storm Water System Maintenance. Further, they are informing us about hydrinformatic systems to help monitor and report on possible contaminants which may be coming from different facilities and activities.