DEQ
Montana Department of Environmental Quality
WATER PROTECTION BUREAU

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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 0012

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

Small MS4 Name: University of Montana - Missoula

Small MS4 Mailing Address: 32 Campus Drive

City, State, and Zip Code: Missoula, MT 59812

Small MS4 Contact Person (and Title): Paul Trumbley, Assoc. Director for Engineering and Utilities

Mailing Address: 32 Campus Drive

City, State, and Zip Code: Missoula, MT 59812

Phone Number: (406) 243-2127	**E-mail address:** paul.trumbley@umontana.edu

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	( ) 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? 0.25 If needed, provide an explanation. Currently two staff put a fraction of their time on the permit. UM was audited in December. The audit indicated our program needs additional effort to get up to speed. UM is currently working to get a consultant on board for help and additional resources will be need to be identified.

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.

(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?	(•) 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 2 outfalls during this calendar year. Since authorization under the 2017 General Permit, the permittee has inspected 2 total outfalls out of the 2 total MS4 outfalls.

Per the Illicit Discharge Detection & Elimination MCM (Part II (3)(e.i)), the permittee will complete the requirement to inspect and screen all outfalls during dry weather by the end of the permit cycle.	(●) Yes	( ) No
Construction Site Storm Water Management: During the calendar year, how many construction storm water management plan reviews were completed (Part II (4)(b))? none - no construction in 2019		
During the calendar year, how many construction projects were inspected for their storm water management controls (Part II (4)(c))? none - no construction in 2019.		
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	( ) 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	( ) 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	○ 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	○ 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	◉ 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	◉ 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	◉ 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	◯ 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	◯ 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)

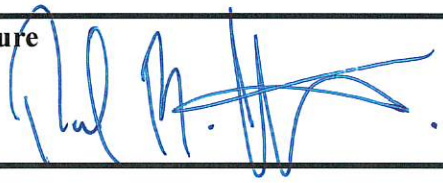
Public Education and Outreach:	
Per requirements c.ii in the referenced MCM, attach the required information regarding outreach materials distributions.	
( ) Attached	(●) Not Attached
Public Involvement and Participation:	
Per requirements a.ii in the referenced MCM, attach the required information regarding 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	

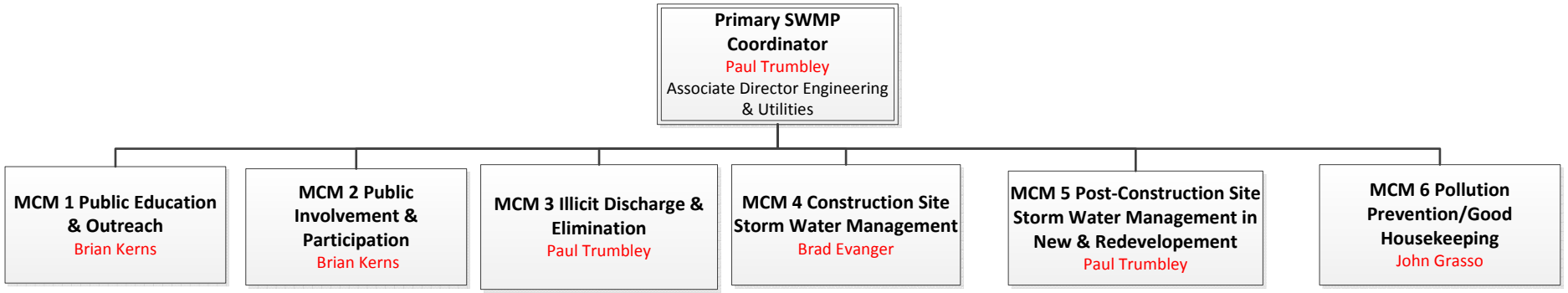
2021 Annual Report Attachments (5th Calendar Year)

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 ranki 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) Paul Lasiter	
Title (Type or Print) Vice President for Operations and Finance	**Phone Number** 406.243.4662
Signature 	**Date Signed** 2/28/2020

Small MS4 2019 Annual Report
Attachment 1
University of Montana – Missoula
MS4 Storm Water Management Team



Small MS4 2019 Annual Report

Attachment 2

Responses to 5 questions on page 2 of the annual form:

(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?

Funding for MS4 activities come 100% from the University's Facilities Services operating budget.

(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.

The University administration has been informed of the violations of the December, 2019 DEQ audit of UM's MS4. Management has been alerted that UM must step-up its commitment in order to become compliant. UM is looking to expand its storm water management team and is in the process of retaining a consultant with MS4 expertise.

(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?

The University has just completed its third year of sampling its outfalls and is beginning to establish a baseline from which program effectiveness can be assessed. High iron analyses has been manifested and the University is adjusting its MS4 program to determine the source of the iron (likely gravel/sand) and how to keep it out of the storm drain.

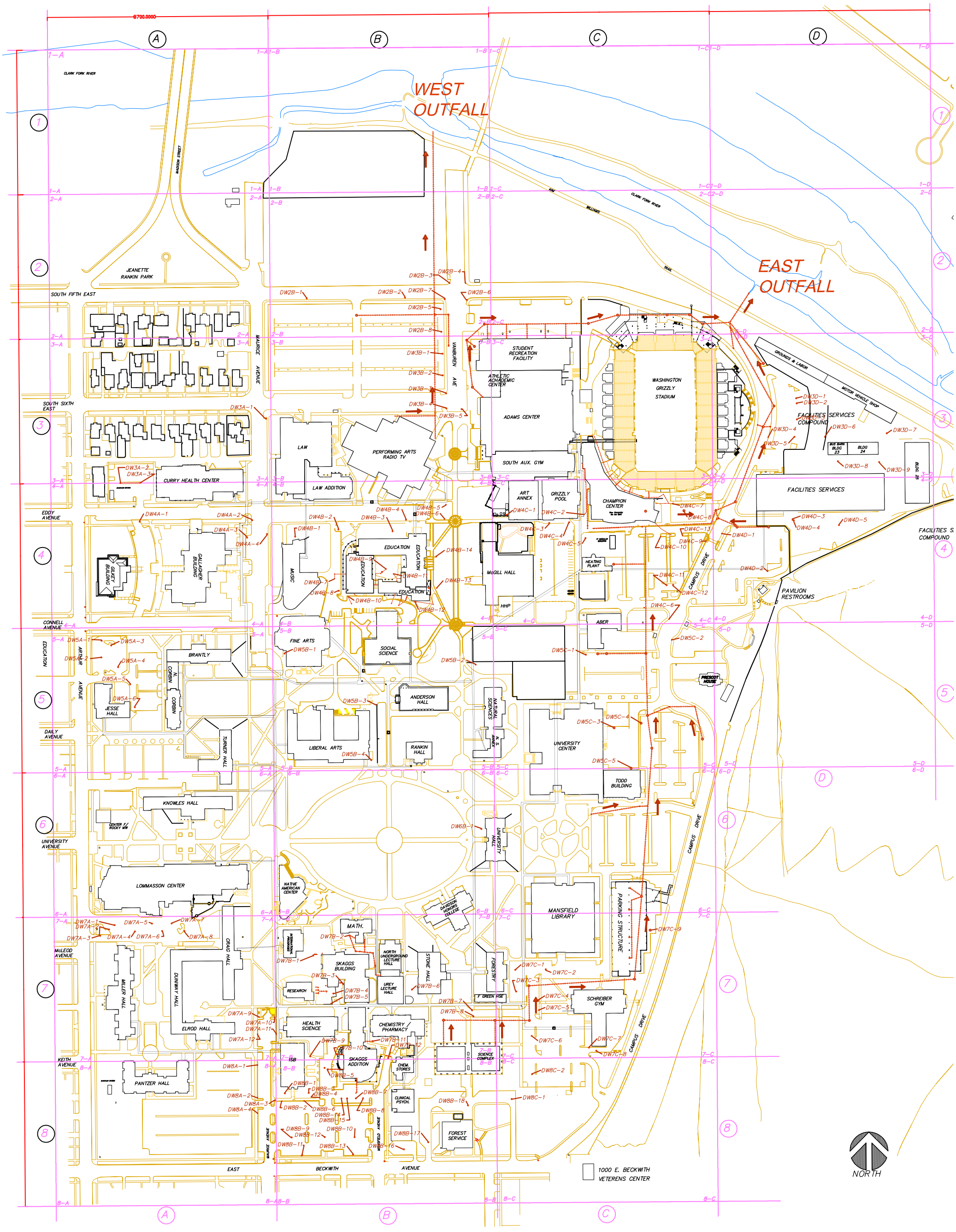
(4) How was this annual reporting calendar year's approach to allocate resources different than the previous year's approach?

The 2019 DEQ MS4 audit underscored the University's degree of non-compliance with the MS4 permit requirements. The University now has a better understanding of the efforts and resources needed to become an effective and fully compliant MS4.

(5) Was the permittee successful in their request for budget allocations? Describe the outcome and factors that affected or resulted in that outcome.

The DEQ MS4 audit of December, 2019 highlighted the University's degree of non-compliance with the MS4 permit. This has demonstrated the need for the University to expend more resources, both in terms of personnel and funding, in order to properly execute the requirements of the MS4 permit.

Small MS4 2019 Annual Report
Attachment 3
Storm Water Map



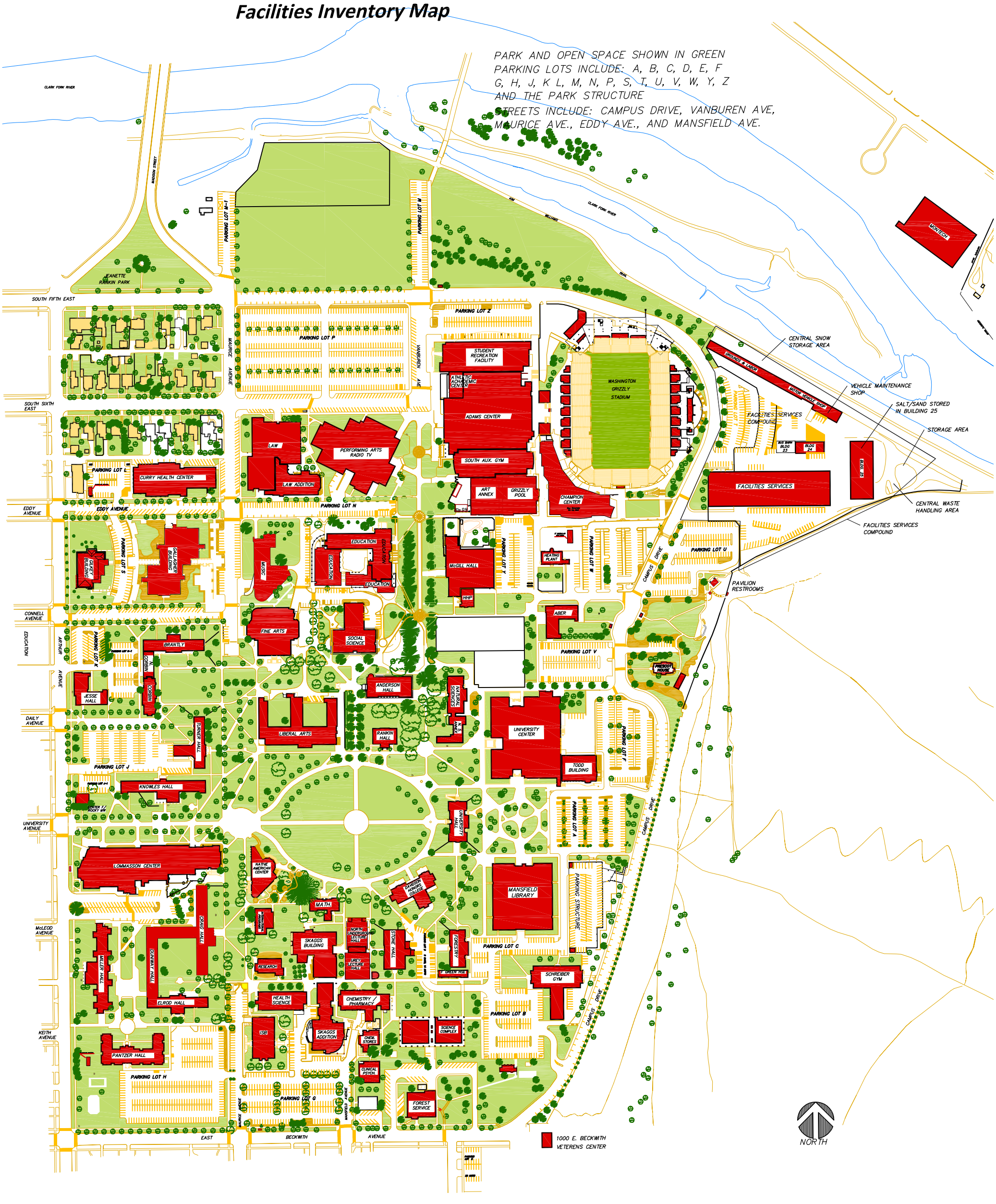
TUNNEL MAP
UTILITY TUNNEL

STORM DRAIN MAP
STORM DRAIN
STORM DRAIN MAN HOLE
5 FT. CONC. DRYWELL

Small MS4 2019 Annual Report
Attachment 4
Facilities Inventory

Area	Activities	Potential Pollutates	Responsible Department	Notes
Facilities Services Compound	maintenance and storage yards trash management vehicle fleet maintenance shops vehicle maintenance snow storage area	trash sediment vehicle fluids	Facilities Services	
Park and open space	ground maintenance storage and application of fertilizer and herbicides erosion and sediment control trash management	Organic materials herbicides pesticides sediment	Grounds Department	
Parking lots and streets	street and parking lot maintenance catch basin cleaning trash management	trash sediment vehicle fluids	Labor Department	

Small MS4 2019 Annual Report
Attachment 5
Facilities Inventory Map

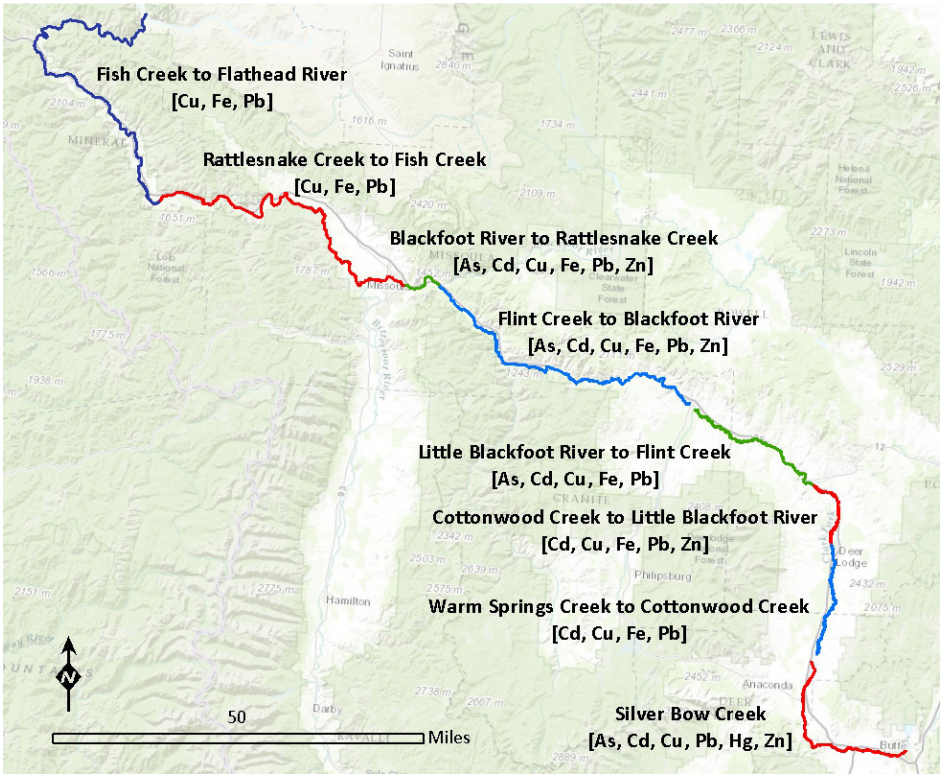


Small MS4 2019 Annual Report
Attachment 6
Outfalls That Discharge to Impaired Waterbodies and Associated Pollutants

University of Montana East Outfall
Location: 46.864888, -113.980524

University of Montana West Outfall
Location: 46.866459, -113.984491

Pollutants of Impairment To Clark Fork River



Small MS4 2019 Annual Report
Attachment 7
Outfall Monitoring Results

Sample Date:	6/18/2018		8/27/2018		6/27/2019		9/27/2019		Long Term Median	
	East Outfall	West Outfall	East Outfall	West Outfall	East Outfall	West Outfall	East Outfall	West Outfall	East Outfall	West Outfall
Total Suspended Solids TSS, mg/L	12.000	15.000	102.000	46.000	362.000	99.000	42.000	ND	72.000	46.000
Chemical Oxygen Demand COD, mg/L	133.000	154.000	380.000	354.000	338.000	375.000	224.000	253.000	281.000	303.500
Total Phosphorus, mg/L	0.090	0.056	0.167	0.063	0.635	0.283	0.187	ND	0.177	0.063
Total Nitrogen, mg/L	0.451	0.336	1.150	0.603	11.200	6.380	1.960	0.752	1.555	0.678
pH, standard units	7.310	7.370	6.700	6.300	6.400	5.700	6.800	7.200	6.750	6.750
Total Copper, mg/L	0.006	0.016	0.018	0.016	0.033	0.022	0.029	0.002	0.023	0.016
Total Lead, mg/L	0.001	0.001	0.009	0.005	0.014	0.005	0.003	0.000	0.006	0.003
Total Zinc, mg/L	0.048	0.043	0.169	0.078	0.258	0.165	0.085	0.030	0.127	0.060
Estimated Flow, gpm	577	819	577	2,135	398	3,161	57	385	488	1,477
Oil and Grease, mg/L	ND	ND	3.290	4.470	2.270	1.400	3.750	ND	3.290	2.935
Total Iron, mg/L	0.374	0.239	3.160	1.900	6.560	1.620	1.110	0.099	2.135	0.930
Total Arsenic, mg/L	ND	ND	ND	ND	0.0026	0.0024	0.0004	ND	0.001	0.002
Total Cadmium, mg/L	ND	ND	0.0002	0.0002	0.0019	0.0004	ND	ND	0.001	0.000

Small MS4 2019 Annual Report

Attachment 8

Public Education and Outreach

Public Education Content below is from Facilities Services' Storm Water website:

Storm Water

STORM WATER PROGRAM

The University of Montana, along with Missoula City and County, Montana DOT, and the Missoula Water Quality District, has applied for a storm water permit to protect the surface waters of the Clark Fork River from contamination.

This permit puts certain requirements on UM to ensure that the potential for pollution is minimized. Some of these requirements are as follows:

• Storm drain cleaning as needed.
• Parking lot and street cleaning as needed.
• Maintain a used oil recycling program.
• Spill prevention plan for the UM with spill response personnel on campus
• Hazardous material storage, management, and disposal program.
• Stenciling storm drains.
• Education of campus community on storm water issues.
• Monitor for fuel release at fueling sites.
• Public participation.
• Ground truthing system so no illicit discharge will occur.

STORM WATER ISSUES

Pollution of surface waters due to storm water runoff is of great concern. As rainwater drains off the land and into the storm water system, it picks up various pollutants and contaminants. These pollutants icause problems for waterways and aquatic organisms. Included are:

Automotive fluids - often contain toxic chemicals, metals, and organic hydrocarbons

Sediment and silt - can adversely affect the natural habitat of aquatic life

Landscaping chemicals - can contain chemicals toxic to aquatic life and nutrients which contribute to the reduction of available oxygen in water

Pet wastes - can contribute to the reduction of available oxygen

Litter - macro pollutant which has many adverse effects

Yard waste - potential impacts including macro pollutants, and reducing oxygen as they decompose. Decomposition products can also be toxic to aquatic life.

REPORTING ILLICIT DISCHARGES

The Missoula Valley Water Quality District (MVWQD), a division within the Missoula City-County Health Department, responds to illicit discharges.

If you would like to report an illicit discharge or have a storm water construction site concern you may use the online reporting form or call 406-258-4890 during regular business hours or for an after-hours matter, please call 911.

Below is a handout that is passed out at Storm Water Outreach meetings:

Storm Sewer Systems

- UM has a storm sewer system on the eastern side of campus. The remaining surface drains are "dry wells" or "sumps" that drain water directly back down into the ground. The storm sewer system is actually a hybrid, each vault has a gravel bottom so it is a sump, draining water back down into the ground, but also connected to a storm sewer pipe that discharges the overflow of those sumps to the river.

Permitting

- UM is required to have a storm water permit.
- A permit is required to protect the water quality of surface waters. This means protecting rivers from pollution that is introduced via the storm sewers.

Water Quality

- Many materials are potential pollutants to the rivers. Aside from the obvious ones of vehicle chemicals (oil, antifreeze, etc), chemical spillage (fuel, hazardous materials), and trash there are the not-so-obvious ones of sand and silt, leaves and other organic waste. Sand and silt are river pollutants as they fill up the nooks and crannies in a riverbed that support the foundation of the ecological life (bugs, fish eggs), and organic matter robs the river of oxygen as it breaks down. While both of those materials naturally occur in the river, they become pollutants when large quantities are washed into it from a much larger area than normal.

What is UM doing?

- Fortunately, UM was already doing many things that protect surface waters from Storm Sewer systems. Those include street, parking lot, and sidewalk sweeping (remove gravel and silt), using de-icer instead of gravel, periodically cleaning sumps and drywells, spill protection at fueling stations, recycling used oil, and maintaining a hazardous materials management plan.
- Facility Services has a Storm Water Pollution Prevention Plan (SWPPP) which includes emergency response spill containment covers for sumps and oil absorbent pads. All Crafts, grounds and labor employees need to know where these are stored and how to use these in an emergency to contain a spill.
- UM has mapped the storm sewer system, and verifying that there are no cross connects with municipal sewer or other sources of contaminants. This is done with visual inspections of the storm sewer water that discharges to the river.

What can you do?

- Take care not to pour, slop or spill wastes onto our parking areas or roadways. Remind co-workers, students and staff of the importance of keeping our campus pollution free. Each of us has the responsibility to protect our drinking water supply and our rivers.
- Report plugged sumps. UM cleans out drains as needed, and help in identifying which ones need cleaning is useful.

Audience Feedback:

The University mostly interacts with 2 stakeholder groups – employees and students. Feedback during outreach and training sessions is supportive. Some employee groups (custodial) don't initially appreciate the role they play in helping to manage storm water pollution, but soon comprehend. Students have been sympathetic towards storm water management.

Small MS4 2019 Annual Report

Attachment 9

Public Involvement and Participation

In 2019, the University added another dimension to new student orientation entitled “Big Sky Experience.” It includes several team-building experiences, one of which was to have new students go around campus stenciling storm water drains with the warning: “Do not dump. Drains to River.” Facilities Services created new metal stencils (the old ones were cardboard) which will help make this activity easier going forward. About 6 students participated under the guidance of Facilities Services paint foreman. This occurred during the week of August 17 to August 24.

A broader community-wide stakeholders’ group meeting was convened on 12/6/2019. Members from Missoula County, City of Missoula, students, staff, and faculty were all invited and solicited for input as to how to better evolve the University’s storm water management plan. The group was informed about the upcoming DEQ MS4 audit to take place 12/10/19.

Small MS4 2019 Annual Report
Attachment 10
Non-Storm Water Discharges

Landscape irrigation and annual inspections of fire hydrants across the campus are examples of non-storm water discharges however, they are not considered significant contributors of pollutants. Since such water is potable, domestic water, chlorine would be the pollutant associated with these non-storm water discharges. UM will be working on standard operating procedures for irrigation maintenance and fire hydrant flushing to reduce these sources of non-storm water discharges.

Small MS4 2019 Annual Report
Attachment 11
MCM 3. Illicit Discharge Detection & Elimination

b.i) List occasional incidental non-storm water discharges and pollutants associated with each.

The University of Montana considers the following occasional incidental non-storm water discharges into the storm water system allowable. Such discharges are minor and will not introduce any additional pollutants into the storm water system. Since most of the water involved in such occasional non-storm water discharges is potable domestic water, the pollutant of concern would be chlorine which quickly dissipates in the environment.

- Landscape irrigation
- Uncontaminated groundwater infiltration
- Uncontaminated pumped groundwater
- Discharges from potable water sources
- Air conditioning/steam condensate
- Water from crawlspace pumps
- Footing drains
- Small scale vehicle washing
- Discharge from fire sprinkler system maintenance
- Sidewalk/street wash sweeping water
- Discharges or flows from emergency firefighting activities
- Insignificant losses from cooling tower losses

Small MS4 2019 Annual Report
Attachment 12
MCM 3. Illicit Discharge Detection & Elimination

e.ii) List high priority outfalls.

The University of Montana possesses only 2 outfalls and it therefore deems both outfalls high priority. These outfalls do not drain industrial areas, have not had any illicit discharges detected, and are not prone to illegal dumping. These outfalls do discharge into the Clark Fork, which is an impaired water body.

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Clark Fork		Outfall ID: East Outfall	
Today's date: 11/22/2019		Time (Military): 10:29	
Investigators: Brian P. Kerns		Form completed by: Brian P. Kerns	
Temperature (°F):	Rainfall (in.): Last 24 hours: 0.0	Last 48 hours: 0.0	
Latitude: 46.864888	Longitude: -113.980524	GPS Unit: mobile app	GPS LMK #:
Camera: Casio EX-S770		Photo #s: E Outfall-2019-11-22.jpg	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☒ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): University of Montana street drainage.

Section 2: Outfall Description

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

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☒ Flow #1	Volume	5 gal	Liter	Bottle
	Time to fill	10'33'' 0.47 GPM	Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

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

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

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

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

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

Section 6: Overall Outfall Characterization

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

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

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

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Clark Fork		Outfall ID: West Outfall	
Today's date: 11/22/2019		Time (Military): 10:19	
Investigators: Brian P. Kerns		Form completed by: Brian P. Kerns	
Temperature (°F):	Rainfall (in.): Last 24 hours:	Last 48 hours:	
Latitude: 46.866459	Longitude: -113.984491	GPS Unit: mobile app	GPS LMK #:
Camera: Casio EX-S770		Photo #s:	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☒ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): University of Montana street drainage.

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 21 in. ID	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

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

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

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

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

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

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

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

Section 6: Overall Outfall Characterization

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

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

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

Small MS4 2019 Annual Report
Attachment 14
Illicit Discharge Investigation and Corrective Action Plan

The University of Montana purchased and implemented a new work order system in the summer of 2019. The new work order system allows for tracking incidents that occur on the campus. UM is utilizing this software tool to track investigations into reports of illicit discharges. Attached are the four reports of illicit discharges from 2019.

Paul Trumbley

Create Incident | Find Incident | Dashboard | Run Report

GENERAL INFORMATION

Edit this Incident

Incident ID:	15	Incident Status:	Open
Property:	000 Grounds	Space/Floor:	General
Incident Type:	Storm Water	Incident Sub Type:	Illicit Discharge
Location:	Parking Lot U	Incident Date:	11/19/2019 11:30 AM
Root Cause:		Incident End Date:	
Other:		External Incident ID:	
Company Doing Work:	University of Montana	Asset:	
Confidential:	No		

INCIDENT SUMMARY

Incident Description I:	While traversing parking lot U during a rain event, I noticed an oil sheen flowing down the lot towards a storm water drain. Source appeared to be coming from a parked vehicle.
Incident Description II:	Paul Trumbley & I applied 2 all-purpose automobile fluid absorbent pads - one covering the drain opening and the other at the source of the oil. Took video of sheen event.
Incident Description III:	Took another video of East Outfall where the affected storm drain discharged. Could notice a slight oil sheen on outfall pool.
Root Cause Investigation:	Apparent vehicle was not the culprit.

INCIDENT REPORTED BY

First Name:	Brian	Last Name:	Kerns
Company/Department:		Occupation:	
E-mail Address:	brian.kerns@umontana.edu	Phone:	406-243-2144

INCIDENT ENTERED BY

First Name:	Brian	Last Name:	Kerns
Company:	University of Montana	E-mail Address:	brian.kerns@umontana.edu
Phone:	406-243-2144	Fax:	

TIMELINE Show Audit Entries | Add Line Item

PERSONS INVOLVED Add Person

FILE ATTACHMENTS Add File Attachment

Oil Sheen1 Lot U-2019-11-19.AVI	video	EDIT
Lot U Oil at E Outfall-2019-11-19.AVI	Video of oil event at east outfall	EDIT

WORK ORDERS Create Request

COSTS AND RECOVERY

OTHER OPTIONS

PRINT INCIDENT Format: Incident Template PRINT

OTHER OPTIONS: Outbound | Reclassify

INCIDENT REPORT

Incident ID:	16	**Incident Status:**	Open
Property:	000 Grounds	**Space/Floor:**	General
Incident Type:	Storm Water	**Incident Sub Type:**	Illicit Discharge
Location:	Facilities Services yard behind Bldg 25	**Incident Date:**	12/5/2019 10:00 AM
Root Cause:		**Incident End Date:**	NA
Other:		**External Incident ID:**	
Company Doing Work:	University of Montana	**Asset:**	
Confidential:	No		

INCIDENT SUMMARY

Incident Desc 1:	Citizen was utilizing the trail connecting the M trailhead to the Kim Williams trail that follows the eastern fence of Facilities Services plant yard. The Citizen took photos of trash scattered around on both sides of fence and filed a complaint with the Missoula Valley Water Quality District (MVWQD). UM received an email from MVWQD advising us to clean up and keep trash containized. Photo meta data indicates that the photos were taken 11/22/2019
Incident Desc 2:	UM issued Word Order #9043 on same day to clean up. Training was also recently (12/4 & 12/5) held to all trade staff and custodial.
Incident Desc 3:	Recent wind event apparently knocked over some recycling dumpsters and scattered debris around plant yard and other local environs.
Incident Root Cause:	Dumpsters may not have had covered closed or properly secured. Grounds staff and custodial have been alerted to the importance of keeping dumpsters covered. May also be attributed to Republic services pinning the top open when they replace the dumpster after tipping.

INCIDENT REPORTED BY

First Name:	Brian	**Last Name:**	Kerns
Company/Department:		**Occupation:**	
Email:	brian.kerns@umontana.edu	**Phone:**	406-243-2144

INCIDENT ENTERED BY

First Name:	Brian	**Last Name:**	Kerns
Company:	University of Montana	**Email:**	brian.kerns@umontana.edu
Phone:	406-243-2144	**Fax:**	

INCIDENT TIMELINE

PERSONS INVOLVED

Paul Trumbley

Create Incident | Find Incident | Dashboard | Run Report

GENERAL INFORMATION

Edit this Incident

Incident ID:	17	Incident Status:	Open
Property:	032 Facilities Services	Space/Floor:	001
Incident Type:	Storm Water	Incident Sub Type:	Illicit Discharge
Location:	Trades Parking Lot	Incident Date:	12/14/2019 11:20 AM
Root Cause:		Incident End Date:	
Other:		External Incident ID:	
Company Doing Work:	University of Montana	Asset:	
Confidential:	No		

INCIDENT SUMMARY

Incident Description I: Chuck Christensen reported an oil sheen in the parking lot south of the Facilities Services Building. We tracked it back to Mike Schalk's personal vehicle. He had his oil changed and the oil cap was left off. We used white spill pads to clean up the oil spots and the oil sheen. Pads were placed under the vehicle for the rest of the day. The car was parked closest to dry sump in parking lot south of Facilities Services Building.

Incident Description I has been updated. See Timeline Audit Entries to view update history.

Incident Description II: Reported incident to Water Quality District

Incident Description III:

Root Cause Investigation:

INCIDENT REPORTED BY

First Name:	Paul	Last Name:	Trumbley
Company/Department:		Occupation:	
E-mail Address:	paul.trumbley@umontana.edu	Phone:	406-243-2127

INCIDENT ENTERED BY

First Name:	Paul	Last Name:	Trumbley
Company:	University of Montana	E-mail Address:	paul.trumbley@umontana.edu
Phone:	406-243-2127	Fax:	

TIMELINE

Show Audit Entries | Add Line Item

PERSONS INVOLVED

Add Person

FILE ATTACHMENTS

Add File Attachment

1.jpg	Photo 1	EDIT
2.jpg	Photo 2	EDIT
3.jpg	Photo 3	EDIT
4.jpg	Photo 4	EDIT

WORK ORDERS

Create Request

COSTS AND RECOVERY

OTHER OPTIONS

PRINT INCIDENT Format: Incident Template

Paul Trumbley

Create Incident | Find Incident | Dashboard | Run Report

GENERAL INFORMATION

Edit this Incident

Incident ID:	18	Incident Status:	Open
Property:	000 Grounds	Space/Floor:	General
Incident Type:	Storm Water	Incident Sub Type:	Illicit Discharge
Location:		Incident Date:	12/23/2019 10:13 AM
Root Cause:		Incident End Date:	
Other:		External Incident ID:	
Company Doing Work:	University of Montana	Asset:	
Confidential:	No		

INCIDENT SUMMARY

Incident Description I:	Investigate the continuous water flow from our East Outfall.
Incident Description II:	Entered WO 9506 for Plumbing Shop to investigate continuous flow at East Outfall
Incident Description III:	Luke Woodward thinks he has traced flow back to AC units in Facilities Services that use potable water that is dumped into roof drains
Root Cause Investigation:	

INCIDENT REPORTED BY

First Name:	Paul	Last Name:	Trumbley
Company/Department:		Occupation:	
E-mail Address:	paul.trumbley@umontana.edu	Phone:	406-243-2127

INCIDENT ENTERED BY

First Name:	Paul	Last Name:	Trumbley
Company:	University of Montana	E-mail Address:	paul.trumbley@umontana.edu
Phone:	406-243-2127	Fax:	

TIMELINE — Show Audit Entries | Add Line Item

PERSONS INVOLVED — Add Person

FILE ATTACHMENTS — Add File Attachment

WORK ORDERS — Create Request

COSTS AND RECOVERY

OTHER OPTIONS

PRINT INCIDENT Format: Incident Template ▼ PRINT

OTHER OPTIONS: Outbound | Reclassify

Small MS4 2019 Annual Report
Attachment 15
Construction Site Storm Water Management

The University of Montana lands within the building code jurisdiction of the City of Missoula. Construction and development plans currently undergo a review and permitting process with the City of Missoula. City of Missoula inspectors also currently inspect campus projects. In order to not duplicate effort, UM has had preliminary discussions with the City of Missoula Storm Utility staff about the possibility of UM construction and development falling under the City of Missoula Construction Site Storm Water Management Program. UM's plan over the next year is to formalize an agreement between the City of Missoula and the University of Montana to define roles and responsibilities.

Small MS4 2019 Annual Report
Attachment 16
Post-Construction Facility Inventory

University of Montana Post Construction Facility Inventory

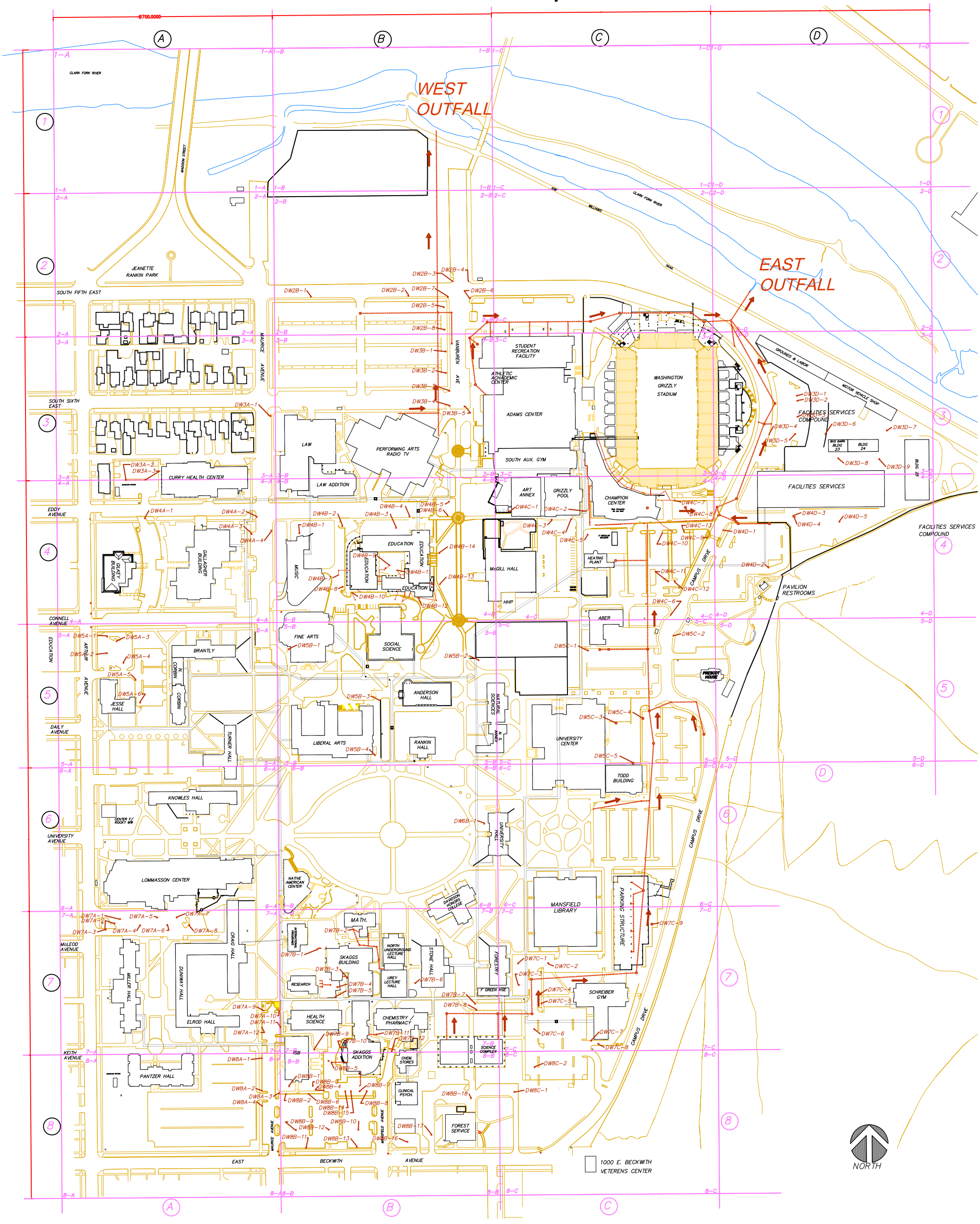
Facility #	Grid Location	Type	Notes
DW3A-1	3A	Dry Well/Sump	
DW3A-2	3A	Dry Well/Sump	
DW3A-3	3A	Dry Well/Sump	
DW4A-1	4A	Dry Well/Sump	
DW4A-2	4A	Dry Well/Sump	
DW4A-3	4A	Dry Well/Sump	
DW4A-4	4A	Dry Well/Sump	
DW5A-1	5A	Dry Well/Sump	
DW5A-2	5A	Dry Well/Sump	
DW5A-3	5A	Dry Well/Sump	
DW5A-4	5A	Dry Well/Sump	
DW5A-5	5A	Dry Well/Sump	
DW5A-6	5A	Dry Well/Sump	
DW7A-1	7A	Dry Well/Sump	
DW7A-2	7A	Dry Well/Sump	
DW7A-3	7A	Dry Well/Sump	
DW7A-4	7A	Dry Well/Sump	
DW7A-5	7A	Dry Well/Sump	
DW7A-6	7A	Dry Well/Sump	
DW7A-7	7A	Dry Well/Sump	
DW7A-8	7A	Dry Well/Sump	
DW7A-9	7A	Dry Well/Sump	
DW7A-10	7A	Dry Well/Sump	
DW7A-11	7A	Dry Well/Sump	
DW7A-12	7A	Dry Well/Sump	
DW8A-1	8A	Dry Well/Sump	
DW8A-2	8A	Dry Well/Sump	
DW8A-3	8A	Dry Well/Sump	
DW8A-4	8A	Dry Well/Sump	
DW2B-1	2B	Dry Well/Sump	
DW2B-2	2B	Dry Well/Sump	
DW2B-3	2B	Dry Well/Sump	
DW2B-4	2B	Dry Well/Sump	
DW2B-5	2B	Dry Well/Sump	
DW2B-6	2B	Dry Well/Sump	
DW2B-7	2B	Dry Well/Sump	
DW2B-8	2B	Dry Well/Sump	
DW3B-1	3B	Dry Well/Sump	
DW3B-2	3B	Dry Well/Sump	

DW3B-3	3B	Dry Well/Sump	
DW3B-4	3B	Dry Well/Sump	
DW3B-5	3B	Dry Well/Sump	
DW4B-1	4B	Dry Well/Sump	
DW4B-2	4B	Dry Well/Sump	
DW4B-3	4B	Dry Well/Sump	
DW4B-4	4B	Dry Well/Sump	
DW4B-5	4B	Dry Well/Sump	
DW4B-6	4B	Dry Well/Sump	
DW4B-7	4B	Dry Well/Sump	
DW4B-8	4B	Dry Well/Sump	
DW4B-9	4B	Dry Well/Sump	
DW4B-10	4B	Dry Well/Sump	
DW4B-11	4B	Dry Well/Sump	
DW4B-12	4B	Dry Well/Sump	
DW4B-13	4B	Dry Well/Sump	
DW4B-14	4B	Dry Well/Sump	
DW5B-1	5B	Dry Well/Sump	
DW5B-2	5B	Dry Well/Sump	
DW5B-3	5B	Dry Well/Sump	
DW5B-4	5B	Dry Well/Sump	
DW6B-1	6B	Dry Well/Sump	
DW7B-1	7B	Dry Well/Sump	
DW7B-2	7B	Dry Well/Sump	
DW7B-3	7B	Dry Well/Sump	
DW7B-4	7B	Dry Well/Sump	
DW7B-5	7B	Dry Well/Sump	
DW7B-6	7B	Dry Well/Sump	
DW7B-7	7B	Dry Well/Sump	
DW7B-8	7B	Dry Well/Sump	
DW7B-9	7B	Dry Well/Sump	
DW7B-10	7B	Dry Well/Sump	
DW7B-11	7B	Dry Well/Sump	
DW7B-12	7B	Dry Well/Sump	
DW8B-1	8B	Dry Well/Sump	
DW8B-2	8B	Dry Well/Sump	
DW8B-3	8B	Dry Well/Sump	
DW8B-4	8B	Dry Well/Sump	
DW8B-5	8B	Dry Well/Sump	
DW8B-6	8B	Dry Well/Sump	
DW8B-7	8B	Dry Well/Sump	
DW8B-8	8B	Dry Well/Sump	
DW8B-9	8B	Dry Well/Sump	
DW8B-10	8B	Dry Well/Sump	
DW8B-11	8B	Dry Well/Sump	
DW8B-12	8B	Dry Well/Sump	
DW8B-13	8B	Dry Well/Sump	

DW8B-14	8B	Dry Well/Sump	
DW8B-15	8B	Dry Well/Sump	
DW8B-16	8B	Dry Well/Sump	
DW8B-17	8B	Dry Well/Sump	
DW8B-18	8B	Dry Well/Sump	
DW4C-1	4C	Dry Well/Sump	
DW4C-2	4C	Dry Well/Sump	
DW4C-3	4C	Dry Well/Sump	
DW4C-4	4C	Dry Well/Sump	
DW4C-5	4C	Dry Well/Sump	
DW4C-6	4C	Dry Well/Sump	
DW4C-7	4C	Dry Well/Sump	
DW4C-8	4C	Dry Well/Sump	
DW4C-9	4C	Dry Well/Sump	
DW4C-10	4C	Dry Well/Sump	
DW4C-11	4C	Dry Well/Sump	
DW4C-12	4C	Dry Well/Sump	
DW4C-13	4C	Dry Well/Sump	
DW5C-1	5C	Dry Well/Sump	
DW5C-2	5C	Dry Well/Sump	
DW5C-3	5C	Dry Well/Sump	
DW5C-4	5C	Dry Well/Sump	
DW5C-5	5C	Dry Well/Sump	
DW7C-1	7C	Dry Well/Sump	
DW7C-2	7C	Dry Well/Sump	
DW7C-3	7C	Dry Well/Sump	
DW7C-4	7C	Dry Well/Sump	
DW7C-5	7C	Dry Well/Sump	
DW7C-6	7C	Dry Well/Sump	
DW7C-7	7C	Dry Well/Sump	
DW7C-8	7C	Dry Well/Sump	
DW7C-9	7C	Dry Well/Sump	
DW8C-1	8C	Dry Well/Sump	
DW8C-2	8C	Dry Well/Sump	
DW3D-1	3D	Dry Well/Sump	
DW3D-2	3D	Dry Well/Sump	
DW3D-3	3D	Dry Well/Sump	
DW3D-4	3D	Dry Well/Sump	
DW3D-5	3D	Dry Well/Sump	
DW3D-6	3D	Dry Well/Sump	
DW3D-7	3D	Dry Well/Sump	
DW3D-8	3D	Dry Well/Sump	
DW3D-9	3D	Dry Well/Sump	
DW4D-1	4D	Dry Well/Sump	
DW4D-2	4D	Dry Well/Sump	
DW4D-3	4D	Dry Well/Sump	
DW4D-4	4D	Dry Well/Sump	

DW4D-5	4D	Dry Well/Sump	

Small MS4 2019 Annual Report
Attachment 17
Post-Construction Storm Water Controls Map



TUNNEL MAP

UTILITY TUNNEL

STORM DRAIN MAP

STORM DRAIN

STORM DRAIN MAN HOLE

5 FT. CONC. DRYWELL

Small MS4 2019 Annual Report
Attachment 18

Post-Construction Storm Water Management
Inspection Form

Name of Inspector: Paul Trumbley

Inspection Date: 12-19-19

Date of most recent rain event: 12-19-19

Rain Condition (circle one):

(Drizzle) / Shower / Downpour / Other _____

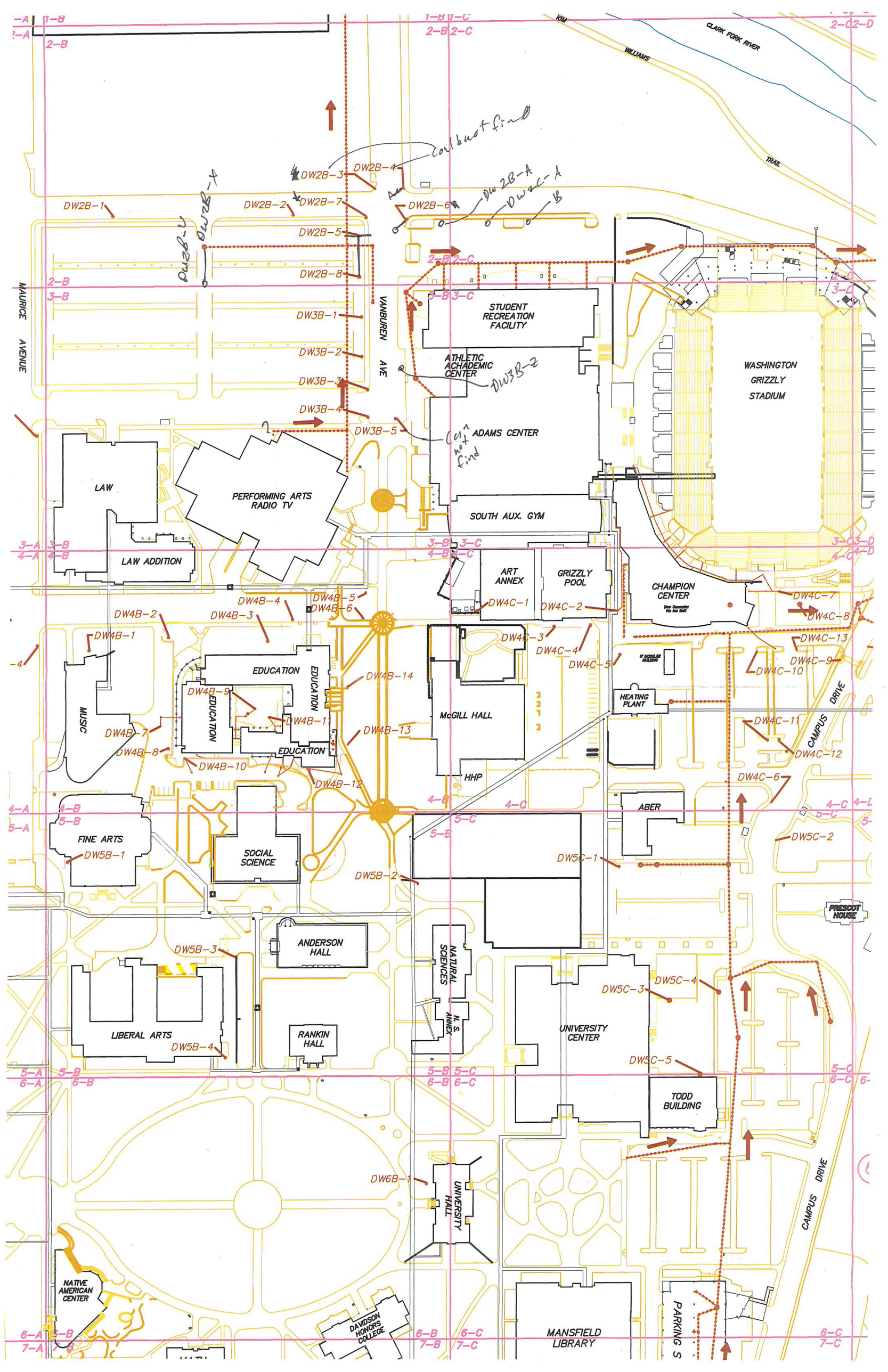
Ground Condition (circle one):

Dry / (Moist) / Ponding / Submerged / Snow accumulation

Inspect the sumps that feed into west outfall

Sump Tag	Properly Shown on Map	Inlet Condition	Debris/Sediment in sump	WO #	Notes
DW2B-7	Y	Very Dirty could not inspect sump		11568	clean grate
DW2B-6	Y	clean	leaves + dirt		
DW2B-5	Y	clean	leaves + dirt		
DW2B-X	N	clean	leaves + dirt		label on map
DW2B-Y	N	clean	leaves + dirt		Add this sump to map
DW2B-8	Y	clean	leaves + dirt		
DW2B-1	Y	clean	Full of water - sump is not draining	11568	Needs to be vaccumed out

Sump Tag	Properly Shown on Map	Inlet Condition	Debris/Sediment in sump	WO #	Notes
DW3B-2	Y	Clean	Standing water	11568	Vaccum out
DW3B-3	Y	Clean	Full of debris	11568	Vaccum out
DW3B-4	Y	Clean-Broken	Appears to be half full of sand	11568	Vaccum out
DW3B-5	N				Could not locate this sump
DW3B-Z	N	clean	Full of ice & dirt 2' down		
DW2B-A	N	clean	leaves		Dry Sump Add to MaP
DW2C-A	N	clean	leaves		Dry Sump Add to Map
DW2C-B	N	clean	leaves		Dry Sump Add to Map
DW2B-3	N				Could not find sump
DW2B-4	N				Could not find sump


KIM WILLIAMS
CLARK FORK RIVER TRAIL
MAURICE AVENUE
VANBUREN AVE
DW2B-1
DW2B-2
DW2B-3
DW2B-4
DW2B-5
DW2B-6
DW2B-7
DW2B-8
DW3B-1
DW3B-2
DW3B-3
DW3B-4
DW3B-5
STUDENT RECREATION FACILITY
ATHLETIC ACHADEMIC CENTER
ADAMS CENTER
WASHINGTON GRIZZLY STADIUM
LAW
LAW ADDITION
PERFORMING ARTS RADIO TV
SOUTH AUX. GYM
ART ANNEX
GRIZZLY POOL
CHAMPION CENTER
DW4B-1
DW4B-2
DW4B-3
DW4B-4
DW4B-5
DW4B-6
DW4B-7
DW4B-8
DW4B-9
DW4B-10
DW4B-11
DW4B-12
DW4B-13
DW4B-14
DW4C-1
DW4C-2
DW4C-3
DW4C-4
DW4C-5
DW4C-6
DW4C-7
DW4C-8
DW4C-9
DW4C-10
DW4C-11
DW4C-12
DW4C-13
MUSIC
EDUCATION
EDUCATION
EDUCATION
McGILL HALL
HHP
HEATING PLANT
ABER
CAMPUS DRIVE
FINE ARTS
DW5B-1
SOCIAL SCIENCE
DW5B-2
DW5B-3
DW5B-4
DW5C-1
DW5C-2
DW5C-3
DW5C-4
DW5C-5
ANDERSON HALL
NATURAL SCIENCES
N.S. ANNEX
LIBERAL ARTS
RANKIN HALL
UNIVERSITY CENTER
TODD BUILDING
PRESCOT HOUSE
DW6B-1
UNIVERSITY HALL
NATIVE AMERICAN CENTER
DAVIDSON HONORS COLLEGE
MANSFIELD LIBRARY
PARKING S
Can not find
Could not find

Small MS4 2019 Annual Report
Attachment 19
Standard Operating Procedures

GROUND MAINTENANCE – Grounds Department

Purpose of SOP: To protect storm water system by using proper mowing and ground maintenance techniques.

The Grounds Department performs ground maintenance on campus. The grass clippings are mulched in place and additional vegetation (i.e. leaves and vegetative debris) are collected and removed from campus. Lawn mowers, weed eaters, blowers, etc. are maintained and stored within the Grounds and Labor Shop on concrete floors.

Always:

- Mow only as low as needed for the areas intended use.
- Water at appropriate times.
- Manage leaves, clippings, and compost so that runoff does not enter storm drain system.
- Use caution when fueling equipment so not to spill any fuel.

Whenever Possible:

- Keep mower blades sharpened to avoid damaging grass leaf tissue.
- Sweep/blow lawn clippings and debris off of sidewalks and roadways back onto the lawn instead of using water.
- Mulch grass clippings using a mulching mower.
- Collect and remove additional vegetation (leaves and vegetative debris) to permitted landfill.

Never:

- Never dump gas, wastes or contaminated water down storm drains.
- Never refuel or change the mower oil near storm drains.

Standard Operating Procedures for:

STORAGE AND APPLICATION OF FERTILIZER AND HERBICIDES – Grounds Department

Purpose of SOP: To protect storm water system by properly storing and applying fertilizers and herbicides.

The Grounds Department currently has five employees that have Department of Agriculture Pesticide Applicator License. The Grounds and Labor Shop is the location for fertilizer and herbicide storage. The Grounds Department uses a variety of fertilizers and pesticides in the maintenance of campus grounds. All fertilizer and pesticides are applied following manufacture instructions. The fertilizers and herbicides are stored inside on concrete floors.

Always:

- Store fertilizers and herbicides in high, dry locations, according to manufacturer's specifications and applicable regulations.
- Clearly label secondary containers.
- Properly dispose of fertilizers and herbicides according to manufacturer's specifications and applicable regulations.
- Regularly inspect fertilizer and herbicide storage areas for leaks or spills.
- Clean up spill and leaks of herbicides and fertilizers to prevent the chemicals from reaching the storm drain system.

Whenever Possible:

- Use all fertilizers and herbicides appropriately to minimize the amount of chemicals requiring disposal.
- Apply fertilizers during period of maximum plant uptake (spring and fall).
- Aerate grassed areas to improve drainage and bring more oxygen to the soil.

Never:

- Never dispose of fertilizers or herbicides in a storm drain.
- Never fertilize before a forecasted heavy rainfall.
- Never leave unlabeled or unstable chemicals in uncontrolled locations.

Standard Operating Procedures for:

Vehicle Maintenance – Vehicle & Transportation Department

Purpose of SOP: To protect storm water system by using proper vehicle maintenance procedures.

The Motor Vehicle Shop is located in the Facilities Services Compound on the east side of campus. The vehicle maintenance garage has floor drains that flow into the sanitary sewer system.

Always:

- Apply absorbents on all spills from vehicle maintenance.
- Dispose of used oil into the recycling barrel for pick-up.
- Dispose of used antifreeze into the recycling barrels for pick-up.
- Inspect parking areas for stain/leaks on a regular basis.

Whenever Possible:

- Maintain vehicles to prevent leaks.

Never:

- Store leaking vehicles over a storm drain.

Standard Operating Procedures for:

Erosion and Sediment Control – For self-performed projects Grounds or Labor Departments

Purpose of SOP: To protect storm water by using proper erosion and sediment control procedures.

Always:

- Use erosion control techniques or devices to stabilize disturbed areas.
- Use effective site planning.
- Keep land disturbance to a minimum.
- Inspect erosion control devices weekly.
- Install erosion control devices properly.
- Remove sediment accumulated during construction from permanent BMPs once construction is complete.
- Minimize slope lengths to reduce the velocity of storm water runoff.
- Prevent erosion by covering bare soil and stockpiles with mulch or other cover.
- Protect existing storm water structures from sediment by using temporary sediment traps, silt fences, hay bales, or perforated risers.

Whenever Possible:

- Install erosion control blankets when seeding drainage ways.
- Establish vegetative cover with good root systems prior to freeze/thaw cycles.

Never:

- Divert runoff into a sensitive area.
- Remove temporary measures before construction is complete.

Standard Operating Procedures for:

Trash Management – Custodial and Labor Departments

Purpose of SOP: To protect storm water system by using proper trash management procedures. The Grounds Department sweeps campus for trash Monday-Friday and after large events.

Always:

- Cover trash bins to keep trash in and wind and rain out.

Whenever Possible:

- Place dumpsters on a flat, concrete surface that does not slope or drain directly into the storm drain system.
- Locate dumpsters and trash cans in convenient, easily observable areas.
- Provide properly-labeled recycling bins to reduce the amount of trash disposed.
- Inspect trash bins for leaks regularly, and have repairs made immediately by responsible party.
- Keep bins free of improperly discarded trash.
- Provide training to employees to prevent improper disposal of general trash.
- Request/use dumpsters without drain holes.

Never:

- Place hazardous wastes in a dumpster or trash bin.
- Place gasoline-contaminated wastes in a trash bin.
- Place oil-contaminated materials that release free draining oil into a trash bin.

Standard Operating Procedures for:

Catch Basin Cleaning – Plumbing Department

Purpose of SOP: To protect storm water system by using proper catch basin cleaning procedures.

Always:

- Conduct a visual inspection annually.
- Place a work order for cleaning if inspection shows cleaning is needed.
- Clean catch basins on dry weather days.
- Place debris in dumpster for proper disposal.

Whenever Possible:

- Use a Vacuum truck for cleaning.

Never:

- Flush debris down the catch basin.

Standard Operating Procedures for:

Street and Parking Lot Maintenance – Labor Department

Purpose of SOP: To protect storm water system by using proper street and parking lot maintenance procedures.

Street and parking lot storm drainage flows into either a piped storm water system or drywells.

Always:

- Each spring campus streets and parking lots will be swept to collect sand and sediment applied throughout the winter.
- Each morning the Grounds Department canvas streets and parking lots for trash Monday-Friday and after large events.

Whenever Possible:

- Facilities Services staff to keep an eye open for vehicles leaking fluids.

Never:

- Never sweep sediment or debris into street or parking lot catch basins

Storm Water Pollution Awareness and Prevention Training

For the University of Montana at Missoula

UNIVERSITY OF MONTANA

Training Topics

- What is Storm Water?
- What is an Illicit Discharge?
- Possible Sources for Pollution on our Campus
- Allowable Non-Stormwater Discharges
- Vehicle and Equipment Fueling
- Outdoor Storage
- Waste Containers and Drum management
- Vehicle Parking Lots
- Grounds Maintenance and Conservation Management
- Good Housekeeping
- Preventive Maintenance
- Spill Prevention and Response
- Illicit Discharge Detection and Reporting

What is Storm Water?

- Storm water is untreated water created from rain or melting snow that does not soak into the ground, but runs into nearby waterways.
- Storm water does not flow into a wastewater treatment system, it flows directly into our surface waters
  - Our storm water system consists of our gutters, storm drains, underground pipes, sumps and culverts. Our storm water system discharges into the Clark Fork River.
- What we do on the land affects the water quality and the habitat of our creeks and rivers. It also affects our quality of life, our fisheries, and our recreation.

Why Clean Water is Important

All these life forms depend on clean water for their existence

What is an Illicit Discharge?

- Illicit Discharge is any discharge of pollutants or non-storm water materials allowed to enter the storm sewer systems from overland flows or direct dumping of materials into a catch basin.
- Examples of Illicit Discharge: Sand and Dirt from construction sites washing into drains, Dumping Toxic Chemicals into drain, Chemical and Fuel Spills, overuse of Fertilizers and Pesticides, and Trash not picked up allowed to go into drains.

Possible sources for pollution on our campus

- Sediment generated by construction activities that can be washed into the storm sewer system.
  - Sediment is the number one source of pollution to our rivers and streams.
- Waste and litter that can be washed into the storm sewer system if not picked up on a regular basis.
- Improper disposal of liquids such as cleaning solutions, laboratory chemicals, or other liquid wasted that can leak out of solid waste containers and drain with storm water into the storm sewer system.
- Chemicals that may spill as a result of accidents during loading or unloading at UM's shipping and receiving docks.

Sources of pollution continued...

- Spills of fuel that can occur during the filling of equipment or storage tanks.
- Fertilizers and pesticides used in maintaining UM grounds if application rates and timing of applications are inappropriate or if spills of these chemicals occur and our not properly contained and cleaned up.
- Deicer chemicals, salt, and sand used on the streets and parking areas during winter months may be carried to the storm sewer system when snow, accumulated in piles during routine snow removal activities, melts.
- Spills and leaks on parking lots from parked cars and grounds service vehicles allowed to flow into storm drains.

Allowable by permit storm sewer system non-storm water discharges

- Landscape Irrigation
- Water Line Flushing and potable water discharges
- Uncontaminated groundwater infiltration and pumped
- Air conditioning and steam condensate
- Water from crawlspace pumps and footing drains
- Small scale vehicle washing
- Discharges from fire system testing and maintenance
- Discharge from emergency firefighting activities
- Sidewalk/street washing sweeping water
- Insignificant losses from cooling towers
- EVERYTHING ELSE IS NOT ALLOWED DOWN THE DRAIN!

Vehicle and Equipment Fueling

- When fueling vehicles exercise caution to prevent spills. If a spill occurs, inform your manager and take necessary measures to contain and clean the spill immediately.

Outdoor Storage

- Examine parked vehicles for leaks. If a leak is discovered place absorbent material under the leak.
- Fuel and chemical storage tanks should be inspected periodically for the presence of leaks. If a leak is discovered contact your manager immediately.
- Sand and Soil stockpiles should be far away storm drains and gutters to prevent rain and snow melt water from washing particulates into the storm system.

Waste Containers and Drum Management

- Trash cans and dumpsters should be periodically checked to prevent overfilling and possible trash washing into a drain. Trash should never be pilled outside any trash receptacle.
- Water from rinsing out dirty trashcans is an Illicit Discharge and should not be allowed to enter storm drains. Dispose or rinse water into sanitary sewer system.
- Regularly check dumpster to ensure that the lids are closed and the dumpsters are in good condition.
  - If dumpsters are found that have leaks or do not close properly, waste removal contractors must be notified that repair or replacement of the damaged items is necessary.
- Chemical storage drums (empty and full) should be properly sealed with covers and bungs to prevent leaks. And preferably stored in a secondary containment area.

Vehicle Parking Lots

Parking lots contribute largely to storm water pollution. Mainly because of sand, dirt, oil and other chemicals from cars is washed off the parking lot and into a drain after a rain or melting snow.

What can I do?

- If you see possible illicit discharges from cars inform your manager and take necessary measures to prevent from going into a drain.
- Parking lots need to be periodically swept to prevent the buildup of sand, dirt and other debris. Although care must be taken while sweeping to ensure material is not swept into drain.
- Snow needs to be placed in locations that are far away from storm drains as possible, preferably on dirt or grassy surfaces.
  - This allows the snow to melt and soak into the ground rather then melt and wash sand, dirt, oil, etc. to wash into the drain.

Grounds Maintenance and Conservation Management

Fertilizers and pesticides can pose as a significant pollutant to our storm water system if not used properly.

- Only use the amount of fertilizer and pesticide that is recommended. Overuse leads to additional water consumption and the chance that extra product can be washed off into our streams and rivers.
- Ensure pesticides and fertilizers are not inadvertently placed in gutters, on sidewalks, and in streets. Water can wash the chemicals placed on these surfaces into our storm sewer system.
- Clean up spills immediately.

Grass and Tree Care

- Do not over water grass surfaces. Use only the amount of water needed. Over watering is wasteful and could lead to erosion of the soil into our drains.
- Ensure sprinklers are properly adjusted to only water grass and other vegetation. Water the sidewalks and streets can lead to sediments and or chemicals flowing into storm drains.
- Do not sweep grass clippings into a storm drain or allow them to be washed into one after a storm.
- Clean fallen leaves from gutters and around storm drains before there allowed to enter the storm sewer system.

Good Housekeeping

- Make sure that there are no discharges from the building to storm water through doorways or other pathways
- Make sure that spill response equipment is readily available in areas where a spill or leak is more likely to occur.
- Report spills
- Promptly clean up any spills
- Clean the floors and do not allow the wash water to discharge outside
- Use biodegradable cleaning solvents whenever practical.

Preventive Maintenance

- Routine sediment/debris removal and surface cleaning of storm water inlet grates.
- Routine inspection of storm water outlets for dry weather discharges
- Routine inspections of equipment and chemical storage
- Regular maintenance of equipment to prevent leaks from occurring
- If you see the potential for an illicit discharge down one of our storm drains do what you can to help prevent it. Whether that's picking up trash you see on the ground or informing management about a spill

Spill Prevention and Response

Spill Prevention and Response

- Clean all small fuel spills and leaks, and to report significant fuel spills to management immediately!
- Always document spills and the location of the occurrence.
- When transporting liquids exercise caution.
- Make sure the lid is on and tightened at all times on chemical and fuel containers.
- Keep a vigilant eye for spills
- REMEMBER SPILLS ARE CAUSED, THEY DO NOT JUST HAPPEN!!

Spill Prevention and Cleanup Procedure

- 1. In the event of a large spill Notify Management
- 2. Contain
- 3. Locate and Stop the Source
- 4. Clean Up
- 5. Dispose of Properly
- 6. Document Release and/or Report if over the applicable threshold
- 7. Follow Up:
  - Implement changes to prevent re-occurrence
  - Replace spill response equipment used

Illicit Discharge Detection and Reporting

- If you have pollution concerns for areas outside the construction zones contact: **Facilities Services Work Order Desk**
- If you see illegal dumping on campus property or into storm drains contact: **Facilities Services Work Order Desk.** If possible give description of area and what is being dumped.
- Storm water pollution is everybody's problem so do your part and help us keep the campus free of debris and trash.

Small MS4 2019 Annual Report
Attachment 21
Storm Water Pollution
Prevention Training Sign In Sheet

Trades Staff

UNIVERSITY OF MONTANA

TRAINING DOCUMENTATION FORM

Date: 12/4/19 **Training Topic:** Parking Lot/Road Spill Response

Time: 10:30 – 11:30 **Location:** Facility Services Custodial Conference Room

Course Outline:

Common spills or releases
Types of spill absorbents
Storm Sewer discharge update
Response protocol
Proper clean-up and disposal

#	Name (Print)	Signature	ID Number
1	James Lion		
2	Slade Johnson		
3	Luke Woodward		
4	Dan Pigatti		
5	James Verbrance		
6	Greg Terrell		
7	Stacy Finn		
8	Mick Alvis		
9	Steve Dray		
10	Tyrone Jim		
11	Dillon Lapsys		
12	Rudy Federici		
13	Jason Shelton		
14	Kevin Harris		
15	Mike Schalk	Mike Schalk	

Instructor Signature:

Title: Safety Mgr.

TRAINING DOCUMENTATION FORM

Page 2

#	Name (Print)	Signature	ID Number
16	Chuck Christensen		
17	Jeremiah Conroy		
18	Justin O'Brien		
19	Martin Fatter		
20	Nilton Conway		
21	Kelly Copeland		
22	Bill Hemphill		
23	John Brewing		
24	David Demick		
25	Alex Fradkin		
26	Shawn Monson		
27	Chris Newlan		
28	Dennis Hardiek		
29	ED TOMICEK		
30	C. Adam Ca		
31	James Coyne		
32	BEN Carson		
33	Marshall Wissu		
34	Alex Cordero		
35	Kyrie McWlagh		
36	Ryan Robertson		
37			
38			
39			
40			

UNIVERSITY OF MONTANA

TRAINING DOCUMENTATION FORM

Date: 12-5-19 **Training Topic:** Parking Lot/Road Spill Response

Time: 4:30 pm **Location:** Facility Services Custodial Conference Room

Course Outline:

Common spills or releases
Types of spill absorbents
Storm Sewer discharge update
Response protocol
Proper clean-up and disposal

#	Name (Print)	Signature	ID Number
1	Reina Sherman		
2	Jason Waldtwedt		
3	Tim Jiran		
4	Traci Bauman		
5	Katrina Martin		
6	Joe Peterson		
7	Casey Murphy		
8	Tim Garrett		
9	Chuck Bordell		
10	Laurie Halcomb		
11	Jim Penden		
12	Sean Reilly		
13	Lesley Clark		
14	Jory Dali		
15	Robin Weber		

Instructor Signature: Paul Trumbly

Title: Assco. Dir Eng & Utilities

TRAINING DOCUMENTATION FORM

Page 2

#	Name (Print)	Signature	ID Number
16	Melissa Massholt	Melissa Massholt	
17	Caleb Glaser		
18	Mary Gray	Mary Gray	
19	Jack Richlie	Jack Richlie	
20	Amber McCall	Amber McCall	
21	Christoph Feichtinger	Christoph Feichtinger	
22	Mike Huber	Mike Huber	
23	Brad Lipnicky		
24	BRAD LARSEN		
25	Tom Hamilton		
26	Leonard Harrison	Leonard Harrison	
27	Bob Kimbell	Bob Kimbell	
28	Dylan Myhre	Dylan Myhre	
29	Marina VanDenBerg	Marina VanDenBerg	
30	Nickolas Bahn		
31	Zachary Emerson	Zachary Emerson	
32	Gail Harrison	Gail Harrison	
33	Gwen Hastings	Gwendolyn Hastings	
34	AARON Shull	Aaron Shull	
35	Curtis Lewis		
36	COREY NEWELL		
37	Austin Southwick	Austin Southwick	
38	JARROD GOLDING		
39	Mary Frey	Mary Frey	
40	Kristen Hoffman	Kristen Hoffman	

TRAINING DOCUMENTATION FORM

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#	Name (Print)	Signature	ID Number
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42	Philip Bartlett	Philip Bartlett	790-22-1491
43	Doug Santos	Doug Santos	
44	Shane Fancler	Shane Fancler	790-788-078
45	Alex Struzynski	Alex Struzynski	790-747-997
46	Cheryl Krudop	Cheryl Krudop	790-193-1129
47	Todd Sanford		
48	Stephanie Lyons		790-23-2738
49	Tim Elliott		790-37-2918
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