

University of Wisconsin – Parkside Storm Water Management Program

Program Overview

UW-Parkside is a MS4 permit holder located within the Village/Town of Somers. The UW-Parkside storm sewer system feed into the Village/Town of Somers storm water system. UW-Parkside has 2 executed MOUs in place with Kenosha County and Root Pike Watershed Initiative Network. Each of these MOUs create partnership that aid UW-Parkside in water quality projects and education in the community. This program document will be updated on an annual basis to maintain compliance with the MS4 permit program.

Definitions/Abbreviations

MS4 – Municipal Separate Storm Sewer System

BMP – Best Management Practice

DFD – Division of Facilities Development (part of the Wisconsin Department of Administration)

UWSA – University of Wisconsin - System Administration

UWP – University of Wisconsin - Parkside

FM – UW-Parkside Facilities Management Department

RPW – Root Pike Watershed Initiative Network

KC – Kenosha County

TMA – UW-Parkside work order management system – used to schedule, perform, and track work

Category	Responsibility/Tracking Method
Storm Water Management Program	FM is responsible for the compilation and submittal of the MS4 program, including coordination and communication with other campus departments/community entities to collect, distribute, assemble information for this program. FM will maintain this program document and provide UW-System Administration & DNR with a copy of this program, along with any future updates to the program document.
Annual Reporting	FM is responsible for compilation and submittal of the MS4 annual report. FM will coordinate and communicate with all other campus departments/community entities to collect, distribute, assemble information for the annual report. FM will submit the annual report to the DNR, retain copies of each submittal, and provide UW-System Administration with a copy of each annual report submittal.

2.1 Public Outreach & Education Program

The items identified below are used to inform and educate the campus community about storm water management on campus. FM is responsible for compilation of this information. Any changes to the public outreach and education program will be identified and updated in this document as applicable. Other campus committees and groups involved in storm water outreach and education that will be contacted, consulted with, and will provide updates include:

- DFD
- UWSA – Capital Planning and Budgeting office
- Root Pike Watershed Initiative Network
- UW-Parkside Safety & Risk Management Department
- UW-Parkside Land Use Committee

#	Topic Area	Delivery Method	Description of Actions Taken by Campus
1	Illicit Discharge Detection and Elimination	Targeted Group Training for Employees	FM will provide annual training in coordination with the campus Safety & Risk Management Office on IDDE to its employees.
2	Household Hazardous Waste Disposal/Pet Waste Management/Vehicle Washing	Workshop	FM hosts an annual workshop on campus with our hazardous waste disposal contractor to educate the campus and community on proper handling, labeling and disposal of hazardous waste.
3	Household Hazardous Waste Disposal/Pet Waste Management/Vehicle Washing	Other: Recycling/Receiving Stations on Campus	The campus office of Safety and Risk Management provides: <ol style="list-style-type: none"> 1. A secure drop box at our police station for safe disposal of medications. Open to the campus and surrounding community. 2. Recycling stations across campus offices and student areas for safe disposal of batteries that cannot go into the landfill.
4	Household Hazardous Waste Disposal/Pet Waste Management/Vehicle Washing	Educational Activity	The campus Office of Safety and Risk Management, along with the University Police actively participate in National Take Back Day in an effort to safely dispose of household medications. The event is publicized to the campus and community via social media and email release. The event is open to all on campus and in the surrounding community.
5	Yard Waste Management/Pesticide and Fertilizer Application	Targeted Group – Employees & Contractors	FM grounds staff collects lawn clippings and leaf material and composts it on campus. Staff regularly turn the piles to promote the composting process. Campus also allows local tree cutting firms to drop off their wood chips to campus for the campus use in landscaping planting beds and around trees on campus. FM grounds staff apply fertilizer in accordance with best practices. Pesticides are applied by contractors in accordance with best practices.
6	Stream and Shoreline Management	Workshop	FM & RPW organize a workshop once per year to clear out invasive species along the Pike River on campus. The event is advertised via social media and email release to the campus and community at large. The event is an effort to remove invasive plant species and allow for native plants to take hold along the river to help stabilize the river banks.

7	Residential Infiltration – Winter Weather Management	Targeted Group Training - Employees	FM sends all new grounds employees to training about winter de-icing means and methods. All staff that work on winter weather management attend a Salt Wise training annually to stay informed and up to date on current winter weather management practices.
8	Construction Sites and Post Construction Storm Water Management	Other	During construction DFD is responsible for the construction sites and activities as they are the contract holder. If storm water BMPs are incorporated in a capital project those items would be discussed during the design phase of the project and FM would be have input on the development of those BMPs. Post-construction FM would be provided any MOUs and maintenance procedures developed as a part of the project. FM would then be responsible for review and implementation of the maintenance of the storm water BMPs.
9	Green Infrastructure/Low Impact Development	Distribution of Print Media via Email	FM will work with the campus community to annually highlight installations of green infrastructure on campus, and/or provide information about the benefits of green infrastructure to storm water management.
10	UW-Parkside Courses that Support Water Quality Education	Targeted Group	BIOS 305 – General Ecology BIOS 333 – Restoration Ecology GEOS 301 – Geomorphology

2.2 Public Involvement & Participation Program

The items identified below are used to provide opportunities to be involved in storm water related activities on campus. FM is responsible for compilation of this information. Any changes to the public involvement and participation program will be identified and updated in this document as applicable. Other campus committees and groups involved in storm water outreach and education that will be contacted, consulted with, and will provide updates include:

- DFD
- UWSA – Capital Planning and Budgeting office
- Root Pike Watershed Initiative Network
- UW-Parkside Safety & Risk Management Department
- UW-Parkside Land Use Committee

Activity	Delivery Method	Target Audience	Method of Involvement
Annual Report	Website	Campus General public	The MS4 annual report is posted to the FM page and is available to the campus community for review and comment.
Storm Water Management Plan & Program	Website	Campus General public	The Storm Water Management Plan and Program documents are posted to the FM page and are available to the

			campus community for review and comment.
Volunteer Engagement Opportunities	BMP maintenance, community planting or clean up event	Campus General Public	UW-Parkside is in a long-term partnership with RPW. RPW coordinates volunteer opportunities on the campus and in the community aimed at addressing water quality improvements. These typically have been planting, maintenance or clean-up events on the campus.
Volunteer Engagement Opportunities	Stream Monitoring	Students	Faculty in the College of Natural and Health Sciences take water samples on an annual basis from the Pike River that runs through the campus to monitor the water quality.

2.3 Illicit Discharge Detection & Elimination

The items identified below are used to identify actions taken by UW-Parkside to inspect and address illicit discharge within the campus system. FM is primarily responsible for detection and elimination of illicit discharge on campus. Inspections, documentation, monitoring, repairs, etc. are performed by FM staff or vendor contracted by FM.

Category	Description
Potential Illicit Discharge Sources	<ul style="list-style-type: none"> Parking lots, campus streets, and sidewalks – deicing products Rooftops & downspouts Heating & Chilling Plant reserve fuel oil tanks Fleet gasoline and diesel fuel tanks Fleet garage – automobile wash bay, oil, grease and solvents used in equipment maintenance Elevator machine rooms – hydraulic fluid Science labs – chemicals for lab use
Outfall Inspections	Campus owned outfalls are identified on the campus storm water map. Outfall inspection occur once per permit cycle and include a visual inspection with lab sampling for pH, chlorine, copper, and phenol and detergents if flow is observed.
Non-Storm Water Discharges; Not Illicit	<ul style="list-style-type: none"> Water line flushing – Annually, fire suppression systems are flushed as a required inspection/maintenance of our life safety systems. Campus has no in-ground irrigation system so irrigation is run from the hydrants on campus as needed to maintain the grounds. Uncontaminated pumped groundwater – electrical/steam pits on campus require periodic pumping of groundwater to the surface; newer utility pits have sump pumps connected directly to storm sewer. Building foundation drains – campus buildings require the use of sump pumps to mitigate ground water infiltration into the building.
Inspection & Reduction	Storm water BMPs are inspected annually. Inspection information is maintained in TMA.

	<p>Parking lots/grounds - collection of debris is conducted by the FM staff multiple times per week</p> <p>Grass clippings – generally mulched in place and any clippings on the sidewalk and roadways are removed; grass clippings are collected at times in the year when mulching is not possible due to rapid growth; grass clippings that are collected are taken to compost pile</p> <p>Leaf clean-up – leaves are vacuumed from the grounds and taken to compost pile</p>
Investigation and Elimination	<p>Observed or suspected illicit discharges are to be reported to FM for evaluation and to initiate corrective actions immediately.</p> <p>FM will consult with the campus safety & risk management department, the campus spill response plan, and MS4 permit guidance for required actions when illicit discharges are discovered. Perpetrators of illicit discharges may be held responsible under UWS 18.06 Protection of Resources.</p>
Spill Prevention, Control & Countermeasures	<p>UW-Parkside has a spill prevention plan that is referenced when necessary. The spill prevention plan is assembled and maintained by the Safety/Risk Management office. FM staff are trained annually on this plan.</p>

2.4 Construction Site Pollutant Control

UW-Parkside adheres to all DFD policies and procedures ([DFD Earthwork – Master Specifications/Design Guidelines](#)) to guide design and implementation of erosion and sediment control measures on construction sites. UW-Parkside falls under the jurisdiction of the central construction authority for capital projects. The State of Wisconsin’s Department of Administration and Division of Facilities Development is responsible for the construction sites and activities as they hold the contracts, as well as being responsible and signatory for establishing any required post-project memorandums of understanding or maintenance which are then turned over to campus.

For smaller campus-level projects, such as landscaping, the FM grounds department utilizes erosion control measures as necessary to prevent illicit discharge until the area is stabilized. All seeded areas are covered with a germination blanket to eliminate erosion. All planting beds are mulched to cover any exposed soil.

2.5 Post-Construction Storm Water Management

Upon completion of construction, DFD will turn the project boundaries over to UW-Parkside for occupancy. FM will confirm proper installation of site components with DFD and utilize TMA to implement and schedule maintenance and inspection requirements, as required based upon the BMP installed. In general, project close-out documents provided to UW-Parkside by the installing contractor will be used to inform maintenance and inspection requirements.

Permanent storm water management measures (BMPs) are considered and incorporated where possible in project design. The architect/engineer of record for every project is expected to adhere to all storm water management and erosion control requirements applicable to the project and the campus. All designs should incorporate sustainable BMPs that can be reasonably maintained by the campus.

2.6 Pollution Prevention BMP Inventory & Inspection

The FM department is responsible for oversight and management of the pollution prevention and storm water management plan for the campus. FM maintains an inventory of the campus owned storm water BMPs within TMA. Maintenance and inspection requirements are identified in TMA. Inspection

procedures that include dates, inspection items, comments, observations, and any other applicable documentation are attached to this plan and are maintained within TMA.

BMP	Information
BMP Schedule	A schedule of BMPs can be referenced on the campus storm sewer map.
Outfall Inspections	Annual inspections are scheduled for outfalls through TMA and include a visual inspection and lab sampling for pH, chlorine, copper, and phenol and detergents if flow is observed.
Storm Inlets	Storm inlets are monitored, cleaned of debris, and repaired as needed. Annual inspections are completed and tracked through TMA. Sump catch basins are cleaned and pumped out on an annual basis.
Bioswales/Retention Ponds	Devices are monitored and cleaned of debris as needed. Annual inspections are completed and tracked through TMA.
Fleet Garage	Maintenance and washing of vehicles and equipment is conducted within the fleet garage. Drains flow to a retention sump that is pumped out by a service company regularly, when needed.
Grass Clippings	Grass clippings generally mulched in placed and any clippings on the sidewalk and roadways are removed; grass clippings are collected at times in the year when mulching is not possible due to rapid growth; grass clippings that are collected are taken to compost pile
Leaf Management	Leaves are vacuumed from the grounds and taken to compost pile
Nutrient Management	FM follows a nutrient management plan to ensure proper application of fertilizer, including protection of storm water infrastructure.
Winter Weather Activities	FM utilizes Mg/Cl or Ca/Cl (granules and brine) for deicing in winter weather. Winter weather plans are updated annually to reflect BMPs. FM staff are provided annual refreshers on the use of the equipment and application practices. Each piece of the equipment is calibrated annually following BMP's for snow and ice control.
Outdoor Trash/Recycle	FM department is responsible for monitoring and emptying outdoor trash and recycle receptacles on a regular basis. FM grounds department cleans up debris and trash on campus grounds on a regular basis and items are properly disposed of or recycled when possible.
Site Development Efforts	UW-Parkside partners with RPW to develop green infrastructure projects on the campus. UW-Parkside utilizes the 6-year capital plan presented to UWSA as a method for developing and seeking funding for improvements to the water quality infrastructure on campus.

UW-Parkside is currently working with both Kenosha County and Root Pike Watershed Initiative Network on design and funding of storm water infrastructure projects on the campus. The table below outlines those proposed improvements.

BMP	Information
Pike River Erosion Controls	KC designed and is seeking grant money to make repairs to the stream banks of the Pike River in the county. They have completed the first of a 5-phase project to restore the stream bank on the river through a

	stretch that includes the UWP campus. UWP and the campus land Use Committee are working with KC to develop the phase of the project that will run through the campus land.
Bioswale Development	FM and RPW have completed design concepts for replacing ditches and turf along the University Drive on the west and north ends of campus with bioswales. These areas currently turf or weeds and do not effectively reduce the velocity of the flow of storm water from the impermeable surfaces on campus.
Wyllie Hall Parking Lot Development	FM and RPW are working on design concepts for a future parking lot that will take into account best practices for storm water management in parking lots.
Parking Lot Redevelopment	FM and RPW are currently working on strategies for redevelopment of two parking lots on campus that have historical storm water retention issues that are causing the continued breakdown of the parking surfaces.

STORM SEWER FACILITY INSPECTION PROCEDURE

*Reference manufacturer's recommendations for inspection/maintenance of specialty structures.

Action	Yes	No	Observations/Actions/Comments
Obstruction(s) present in inlet(s) or outlet(s)?			<i>Manually clean out structure. A list of inaccessible structures should be compiled for cleaning by mechanical means. Notes to be recorded in TMA.</i>
Sediment, trash, or debris accumulations that require cleaning or removal?			<i>Manually clean out structure and remove foreign debris. A list of inaccessible structures should be compiled for cleaning by mechanical means. Notes to be recorded in TMA.</i>
Evidence of concrete cracks, broken/damaged/loose components, exposed rebar, etc?			<i>Notify supervisor of deterioration so repairs can be coordinated. Notes to be recorded in TMA.</i>
Are erosion repairs needed?			<i>Notify supervisor of deterioration so repairs can be coordinated. Notes to be recorded in TMA.</i>
Is there evidence of illicit discharge?			<i>Notify supervisor of any suspected illicit discharge so further investigation can be completed. Notes to be recorded in TMA.</i>
Are there any other observations of concern or that require attention?			<i>Notify supervisor of any areas of concerns so that an investigation can be completed. Notes to be recorded in TMA.</i>

ADDITIONAL INSPECTION FOR OUTFALL LOCATIONS ONLY

Outfalls should be inspected during a time of on-going dry weather.

Action	Yes	No	Observations/Actions/Comments
Observe conditions of outfall			<i>Document any notable color, odor, turbidity, oil sheen, surface scum, flow rate or other relevant items. Notes to be recorded in TMA.</i>
Is there water flow?			<i>If water flow is present, collect a water sample to determine pH, total chlorine, total copper, total phenol, and detergents. Notes to be recorded in TMA.</i>

ADDITIONAL INSPECTION FOR RETENTION BASIN ONLY

Action	Yes	No	Observations/Actions/Comments
Does the vegetation require maintenance?			<i>Notify supervisor of overgrowth, excess foreign debris, or decline of vegetative state so appropriate actions can be coordinated. Notes to be recorded in TMA.</i>
Does any riprap require repair/maintenance?			<i>Notify supervisor of repair needs so appropriate actions can be coordinated. Notes to be recorded in TMA.</i>