

Municipality/Organization: Worcester State College

EPA NPDES Permit Number: MAR042022

MassDEP Transmittal Number: W-040406

**Annual Report Number
& Reporting Period:**

April 1, 2006 – March 31, 2007

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2007)

Part I. General Information

Contact Person: Robert Daniels

Title: Environ. Health and Safety Officer

Telephone #: 508-929-8099

Email: : rdaniels@worchester.edu

Mailing Address: 486 Chandler Street, Worcester, MA 01602

Certification:

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

Signature:

Printed Name: Sandra K. Olson

Title: Director of Facilities

Date:

Part II. Self-Assessment

Worcester State College has completed a Self Assessment of the Storm Water Management Plan. Although the College has met the requirements of the permit, opportunities to upgrade and improve the plan were recognized. Over the next permit year, Worcester State College will review the entire SWMP and implement any necessary changes using the MS4 Evaluation Guide, developed by EPA, as the baseline for its review. Any changes to the Plan will be included in next year's annual report.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
100.1 (2005)	Distribution of Educational Materials	Robert Daniels	Design a SW Management information page on campus web-site that will be accessible by all students, faculty., administrators and general public.	Green Campus Initiative-Website launched in October 2006 SW page is currently under development to include-Contractor pamphlet, written SWMP, links to EPA, Student Guidance on proper storm water management	Launch SW information page by July 2007. Keep the web-page updated
Revised					
100.2 2006	Distribution of Educational Materials	Robert Daniels	Designed a pamphlet for contractors to explain the expectations WSC has for contractors working on-site	Pamphlet has been reviewed and updated and was printed in-house and distributed by the facilities department when new contractors come on-site.	Review and if needed update pamphlet.
Revised					
Revised					

1a. Additions

100.3 2007	Distribution of Educational Materials	Robert Daniels	Download EPA's "After the Storm" pamphlet.		Distribute the pamphlet during the campus clean-up day which will take place in May 2007.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
200 Revised	Storm Drain Stenciling	Robert Daniels	Restencil drains by September 2007	Continue stenciling project to include new construction as a result of expansion and renovation	Research additional signage to say “Only Rain Down the Drain”. Restenciling to be completed by September, 2007.
200.1 Revised	Campus Clean-up Day	Rich Korcez	Annually in April-May	Incentive based springtime cleanup, involving the entire campus community. Rake, pick-up trash, plant flowers, beautify campus.	Will be held in April-May annually.
Revised 200.2 2006 Revised	Lake Ellie Beautification	Peter Fenuccio/Bob Daniels	Dredge Lake Ellie by summer of 2007	Removed 5 tons of debris (e.g., leaves, organics) from Lake Ellie using a vacuum truck in July 2006.	Dredging will occur in summer of 2007. Due to major construction projects on campus and site logistics, the Beautification project has been postponed and will be incorporated into Future Campus Greening Projects
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
300.2	Dry Weather Inspections	Robert Daniels	Semiannual Inspections	Visible inspections yielded dry weather flow traced to groundwater infiltration.	On-going inspections
Revised					
Revised					
Revised					

3a. Additions

300.4	New SW Site Plans-as part of Campus Utilities Plans	Sandy Olson	New SW Site Plan	In 2006, WSC hired BSI –Subsurface Utility Engineering to do a thorough investigation of subsurface utilities. As part of this project, catch basin clean outs and piping were verified. An underground heating loop which contained only water, no chemicals, was leaking into ground. The leak was investigated and has been partially corrected. One SW drain was discharging to city sewer.	In FY 08, the plan will be updated to include any storm water system modifications as a result of construction. Further investigation will be made and repairs will be made. SW will be redirected to SW drain.
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4. Construction Site Storm Water Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
400.1 Revised	Develop Construction Site Run Off Plan	Robert Daniels	Update Construction Run-off Program	No actions taken -----	Construction Run-off Program will be updated by September 2007
400.2 Revised	Construction Run-Off Plan Training	Robert Daniels	Implementation of periodic training	No actions taken -----	WSC will provide retraining in September 2007. (Initial training implemented in January 2006) -----
400.3 2006 Revised	Develop an enforcement strategy when construction inspections and BMPs are not being implemented	Robert Daniels and Facilities Department	Document all Stop Work notices that are generated	No stop work orders issued	In order to protect SW quality on campus, WSC Facilities Department will have the power to issue Stop Work Notices if the Construction Site Operators are not complying with the BMPs included in their SWP3.

4a. Additions

400.4 2007	SW Review with Construction Site Personnel and MSCBA	Robert Daniels	Meet with construction company and MSCBA before and during construction projects	Met with construction company and MSCBA before start-up of parking garage construction to discuss expectations WSC had related SW management. Construction company submitted NOI to get coverage under the General Construction Permit and developed a SWP3 for the project.	Continued meetings with construction company and MSCBA, as needed.
400.5 2007	Construction Site Inspections	Robert Daniels	Periodic construction site inspections	Conducted site inspections of the Parking Garage project. In cases where BMPs were not effective, corrective actions were taken.	Continue inspection through the completion of the garage construction project

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
500	Develop a Post Construction Storm Water Management Plans an appendix to Storm Water Management Plan	Robert Daniels	Update Post Construction SWM Plan	No actions taken	Update Post Construction SWM Plan by September 2007
Revised					
500.1	Implement training for Post Construction SWM	Robert Daniels	Implementation of periodic training	No actions taken	WSC will provide retraining in September 2007. (Initial training implemented in January 2006)
Revised					
500.2 2006	Research alternatives to sand/road salt for road and walkway deicing.	Robert Daniels	Get prices and do a cost benefit analysis	Used Magic salt (Rock salt sprayed with magnesium chloride) around the LRC, Student Center and Administration Village in winter 2006-2007 The Magic salt did not spread easily.	Will continue the evaluation of Magic Salt Use in Winter 2007-2008
Revised					

5a. Additions

500.3 2007	Catch basin clean out	Robert Daniels	Clean catch basins	Cleaned out catch basins June 20, 2006	Will clean out catch basins and Vortech units by September 2007
500.4 2007	Soil stabilization for Parking Garage construction site	Consigli Construction	Stabilized soil in project area	Not applicable	Soil in area of Parking Garage construction site will be stabilized with vegetation at the end of the project.

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
600 2007	Develop a training program for Facility Personnel	Robert Daniels	Implementation of periodic training	No action taken	WSC will provide retraining in September 2007. (Initial training implemented in January 2006)
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

6a. Additions

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
	NA				
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2006 through March 31, 2007)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures **	(\$)	
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
Regulatory Mechanism Status (indicate with “X”)					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					
Accompanying Regulation Status (indicate with “X”)					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					

Mapping and Illicit Discharges

	(Preferred Units)	Response
Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened **	(# or %)	
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	
Site inspections completed **	(# or %)	
Tickets/Stop work orders issued **	(# or %)	
Fines collected **	(# and \$)	
Complaints/concerns received from public **	(#)	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	
Qty of structures cleaned **	(#)	
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	
• Disposal cost**	(\$)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	
• % Structures cleaned with vector **	(%)	

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)
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▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/l _n mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l _n mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	