

Municipality/Organization: Town of Scituate, MA
EPA NPDES Permit Number: MAR041060
MassDEP Transmittal Number: W-041143
Annual Report Number & Reporting Period: Year 8
April 1, 2010 – March 31, 2011

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2011)

Part I. General Information

Contact Person: Albert Bangert **Title:** Director, DPW
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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: Albert Bangert

Title: Director, DPW

Date: 26 April 2011

Part II. Self-Assessment

The town of Scituate has completed the required self-assessment of the annual compliance review for the NPDES Phase II Stormwater General Permit. The following topics were evaluated for the completion of the Annual Report:

1. Compliance with the NPDES Phase II General Permit conditions
2. Appropriateness of the selected Best Management Practices (BMPs)
3. Progress towards achieving the program's measurable goals
4. Results of any information that has been collected and analyzed
5. Activities for the next reporting cycle
6. Changes in identified BMPs or measurable goals

Based upon review of the above, the town has determined that our municipality is in compliance with permit conditions, either through completed activities or planned activities, except for:

- The town failed to submit Year 5 annual report on or before May 1, 2008.
- The town failed to submit Year 6 annual report on or before May 1, 2009. The engineering firm of Weston & Sampson was retained to prepare and submit the annual report for year 6.

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
1A Revised	Develop Stormwater Section of Town Website	Town Website Manager	Measure number of hits twice per year	Water protection information is on the site.	Additional stormwater information and guidance items are being added to the website. The website will be maintained and updated with appropriate information. A means to measure the number of hits will be incorporated into the website page.
1B Revised	Distribute Fact Sheets to Businesses and Residences	DPW, Conservation	Copies of the materials	Fact sheets available in town hall.	Distribute fact sheets in the town offices. Maintain supply of fact sheets and replenish as needed.
1C Revised	Develop a Poster Display Regarding Stormwater Issues	DPW, Conservation	List of display locations	Posters are hanging in various municipal buildings: Town Hall bulletin board, Water Department, Department of Public Works, Schools.	Once a year, the town will check that the posters remain viewable. Replacements will be provided if the posters are missing or in disrepair.
Revised					
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities --
2A Revised	Mark Storm Drains with Stencils and brass drain markers	DPW	10% of Storm Drains Marked by Year 1 100% of catch basins marked in year 7.	100% of catch basins marked in year 7.	All drains marked – BMP completed
2B Revised	Conduct River, Stream, and Pond Cleanups	Volunteer Groups	Cleaner streams documented by before and after photos	The First Herring Brook Watershed Initiative holds an annual cleanup day and the town provides assistance.	Continue to provide assistance. Identify and document before and after conditions.
2C Revised	Establish a Stormwater Telephone Hotline	DPW	Record number of phone calls to hotline, copies of articles	Appropriate town offices have been provided with phone logs to take hotline calls.	Continue to log the phone calls received.
2D Revised	Public Meetings to Discuss Stormwater Issues	DPW, Conservation	Minutes from each meeting	The town has participated in a number of public meetings to discuss stormwater issues involving the Mass DEP, Mass Coastal Zone Management (CZM), and Metropolitan Area Planning (MAPC).	Continue participation with state and local agencies and groups.
2E 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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
3A Revised	Develop Town Storm Drain Outfall GIS Map	DPW	Entire system mapped and outfall locations verified	The town has mapped its stormwater collection system including known outfalls and their receiving waters. The stormwater collection system has been included as a separate layer in the town's GIS system.	The GIS drainage layer will continue to be revised and updated throughout the permit term as existing outfall structures are located, repaired, or modified, and as additional drainage components (e.g. new developments or new structures added to existing systems) are constructed.

3B	Develop Illicit Discharge Detection and Elimination Plan	DPW	30% of all outfalls will be sampled by year 2 Outfalls were reviewed for suspicious flows and sampled as appropriate.	As part of the Stormwater Management Plan, a total of 200 outfalls were located and screened in the field. Conditions at each outfall were noted and an inspection form completed.	The town will continue to evaluate dry weather flows and inspect drainage components for illicit connections as necessary. A database will be developed to track inspections and observations of dry weather flows. Those outfalls with dry weather flows suspected of contamination will be investigated.
3C	Develop Illicit Discharge Prohibition Ordinance	DPW, BOH	Bylaw at Town Meeting by end of year 3. Bylaw at Town Meeting by end of Year 5.	Scituate's <i>Sewer Rules and Regulations</i> prohibit the discharge of wastewater or other polluted waters, unless suitable treatment is provided, to any natural outlet. In addition, the Department of Public Works has the authority to enforce the removal of illicit discharges/connections. Stormwater bylaw was approved at 2008 Annual Town Meeting during Permit Year 5.	None anticipated – measure completed.
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
4A	Develop Erosion Control Regulation	DPW	Bylaw at Town Meeting by End of Yr 3 Bylaw at Town Meeting by end of Year 5.	The town worked with Metropolitan Area Planning (MAPC) and Mass Coastal Zone Management (CZM) under a grant program to develop erosion control regulations. An ordinance was drafted and presented for Town Meeting consideration/action in Permit Year 5. Stormwater bylaw was approved at 2008 Annual Town Meeting during Permit Year 5.	None anticipated – measure completed.
4B	Develop Design Standard for Erosion Control	DPW	Inspection checklist and documented inspections.	The Planning Board, Conservation Commission, Zoning Board of Appeals, and their consultant engineers regularly review all proposed development plans for proper erosion and sediment controls during construction.	Municipal boards will continue to review proposed development plans. DPW and Conservation Commission inspections to be conducted throughout the permit term and logs/checklists maintained.

4C	Procedure for Receiving Info Submitted by the Public	DPW	Record number of phone calls to hotline, copies of articles.	Those developments that are permitted by the Planning Board, Conservation Commission, and Zoning Board of Appeals are reviewed at public hearings in which public comments are accepted. Stormwater related calls are currently taken by town staff. A log is kept of all calls.	Municipal boards will continue to accept information and input from the public as part of project reviews. Continue to operate hotline and record the number of phone calls.
Revised					
Revised					
Revised					

4a. Additions

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
5A Revised	Develop BMP Regulation	DPW	Bylaw at Town Meeting – Yr 3 Bylaw at Town Meeting – Yr 5	The town worked with Metropolitan Area Planning (MAPC) and Mass Coastal Zone Management (CZM) under a grant program to develop erosion control regulations. An ordinance was drafted and presented for Town Meeting consideration/action in Permit Year 5. Stormwater bylaw was approved at 2008 Annual Town Meeting during Permit Year 5.	None anticipated – measure completed.
5B Revised	Develop and Implement Inspection Program	DPW	Copies of maintenance reports plus inspection records.	The town DPW Engineering Department, Conservation Commission Agent, and consultant engineers retained by the planning board for private developments inspect projects to ensure that they are constructed in accordance with approved plans, including erosion control measures.	This program will continue throughout the permit term. The number of inspection visits will be monitored and inspection records maintained.
5C Revised	Develop BMP Design Standards	DPW	Improved Bylaws – Yr 4 Design standards referenced by End of Yr 4.	The Planning Board and their consultant engineer, Conservation Commission, and Zoning Board of Appeals regularly review all proposed development plans for proper erosion and sediment controls during construction.	Municipal boards will continue to review proposed development plans. DPW and Conservation Commission inspections to be conducted throughout the permit term and logs/checklists maintained.
Revised					

5a. Additions

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
6A Revised	Clean Catch Basins	DPW	Clean all Basins – Ongoing	The town has developed a catch basin cleaning program to prioritize catch basin cleanings.	Continue implementation of prioritized cleaning schedule. Monitor number of basins cleaned.
6B Revised	Sweep Streets in Town	DPW	Volume of sweepings collected – report annually	The sweeper is run from April until October. All town streets are swept once annually.	Sweep streets and record the volume of sweepings collected annually.
6C Revised	Ensure Proper Disposal for Hazardous Wastes	DPW, BOH	Accept motor oil, batteries, appliances, propane tanks at Recycling Center	Residents are encouraged to drop off motor oil, batteries, appliances, propane tanks at Recycling Center and other hazardous wastes at nearby facilities.	Residents are encouraged to drop off motor oil, batteries, appliances, propane tanks at Recycling Center and other hazardous wastes at nearby facilities.
6D Revised	Develop an Inspection and Maintenance Plan	DPW	Written schedule, records of inspections and maintenance	The Highway Department has a new wash bay.	Installed and used wash bay. Continue to inspect municipal facilities and keep records of maintenance activities.
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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
7A Revised	Develop a Water Quality Strategy for 303d Waters	DPW	Copy of Water Quality Strategy Plan, summary effort	303d waters have been evaluated within the Stormwater Management Master Plan. See BMP # 7B.	No further action planned – no TMDLs have been finalized and approved by the EPA.
7B Revised	Implement BMPs from Water Quality Strategy	DPW	Summary of efforts and water quality improvements	A number of water quality BMPs have been constructed in priority areas under two 319 Grant Projects. 2 water quality swales, 19 leaching catch basins, 1 rain garden, and 3 hydrodynamic stormwater treatment units have been installed within the First Herring Brook watershed.	Continue construction of water quality BMPs in priority areas under future grant programs.
7C Revised	Categorize Drainage System	DPW	Map of system categorization by end of Yr 3	Categorization of drainage system is complete. Results reported in the Scituate Stormwater Management Master Plan.	No further action planned – no TMDLs have been finalized and approved by the EPA.
7D Revised	Evaluate Hydraulic Capacity in Areas of Concern	DPW	Report detailing results by end of Yr 3	Simulated hydrologic and pollution potential. Results reported in the Scituate Stormwater Management Master Plan.	No further action planned – no TMDLs have been finalized and approved by the EPA.

Revised						
Revised						

7a. Additions

7b. WLA Assessment

Not applicable – while there are several Category 5 “Waters Requiring a TMDL” water bodies and/or segments identified in the Final 2008 Integrated List of Waters, there are no approved TMDL reports. Therefore, there are no WLAs to be implemented. MassDEP has issued a Draft of the South Coastal Watershed Pathogen TMDL.

Part IV. Summary of Information Collected and Analyzed

There is no information or data that was collected during Permit Year 8 that is not included elsewhere in this report.

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, 2010 through March 31, 2011)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed Civil engineers recently hired to oversee program	(y/n)	y
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.)	y
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	1
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

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

Mapping and Illicit Discharges

	(Preferred Units)		Response
Outfall mapping complete	(%)		100
Estimated or actual number of outfalls	(#)		200
System-Wide mapping complete (complete storm sewer infrastructure)	(%)		
Mapping method(s)			
▪ Paper/Mylar	(%)		
▪ CADD	(%)		
▪ GIS	(%)		100
Outfalls inspected/screened **	(# or %)		100%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)		100%
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)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1
Qty of structures cleaned **	(#)	all
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 vactor **	(%)		
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	1	
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	1	
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 In 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)			
▪ Fertilizers	(lbs. or %)		
▪ Herbicides	(lbs. or %)		
▪ Pesticides	(lbs. or %)		
Integrated Pest Management (IPM) Practices Implemented			

Average Ratio of Anti-/De-Icing products used **		
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)		
	% NaCl	90%
	% CaCl ₂	
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	
	% Sand	10%
Pre-wetting techniques utilized **	(y/n or %)	Y
Manual control spreaders used **	(y/n or %)	Y
Zero-velocity spreaders used **	(y/n or %)	Y
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/lb mi. or %)	-35%
Estimated net reduction or increase in typical year sand application rate **	(±lbs/lb mi. or %)	-90%
% of salt/chemical pile(s) covered in storage shed(s)	(%)	90%
Storage shed(s) in design or under construction	(y/n or #)	Y
100% of salt/chemical pile(s) covered in storage shed(s) by May 2012	(y/n)	Y

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	Y
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	