Municipality/Organization:	**Town of Dighton, MA**
EPA NPDES Permit Number:	**MAR041105**
MassDEP Transmittal Number:	**W-040738**
Annual Report Number & Reporting Period:	**No. 6: April 08-March 09**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Nancy J. Goulart — Title: Board of Selectman, Chairman; Board of Health Member

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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: Nancy J. Goulart

Title: Chairman, Board of Selectmen

Date:

Part II. Self-Assessment

The Town of Dighton has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

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 6 (Reliance on non-municipal partners indicated, if any)	Completed Activities – Permit Year 6
1-1	Continue working with schools to get info out to public	Nancy Goulart	Look into possible expansion of program	Contacted principals of local schools re stormwater info for curricula. No major changes made in teaching materials. Bristol County Agricultural High School includes stormwater as part of Soil Sciences and Nature Studies Program.	Schools continued to have stormwater as part of their curricula. Task completed.
1-2	Provide stormwater info in public area at town hall	Nancy Goulart	Continue to have information on Stormwater available in Town Hall for the public.	Extra copies of bulk mailing available in public info area at town hall.	Task completed.

1a. Additions

1-3	Work on methods of getting info out to the public re stormwater	Nancy Goulart	Public meetings to discuss proposed waiver to allow infiltration basins for stormwater disposal/management	See Addendum #1 re this.	See Addendum #1 for more info. Task completed.

2. Public Involvement and Participation

BMP ID #	**BMP Description**	**Responsible Dept./Person Name**	**Measurable Goal(s)**	**Progress on Goal(s) – Permit Year 6** (Reliance on non-municipal partners indicated, if any)	**Planned Activities – Permit Year 6**
2-1	Research infiltration basins for stormwater disposal and management	Nancy Goulart	Conduct field trips and site visits to view/inspect infiltration basins	Worked with engineer for proposed 40B development re research and inspection of infiltration basins, detention basins, and retention basins	See Addendum #1 for more info. Task completed.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
3-1	Review existing outfall maps and update as needed	Highway Supt.	Check outfalls and inspect to see if there are any others that may have been overlooked during past inspections	No new outfalls detected	Task completed.
3-2	Detect and eliminate discharges	Highway Superintendent	Check for any new discharge sites	No new discharge sites located by storm drain system cleaning contractor or by highway dept. employees	Task completed
3-3	Conduct Illicit Discharge Education Program	Highway Superintendent	Review illicit discharge training with new employees	Covered this as part of on-the-job training for new hires	Task completed
3-4	Check on bylaw implementation	Nancy Goulart	Reviewed implementation with Planning Board and Conservation Commission	No problems reported with implementation of stormwater bylaw for the reporting period	Task completed

3-5	Check on implementation of stormwater regulations	Nancy Goulart	Reviewed implementation of stormwater regulations with Planning Board and Conservation Commission	No problems reported with implementation of stormwater regulations during the reporting period.	Task completed

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
4-1	Revise Site Plan Review section of Zoning Bylaw	Zoning Board	Reviewed site plan for possible revisions.	No revisions required.	Task completed
4-2	Review procedures for receipt and consideration of information submitted by the public.	Planning Board	Review procedures for possible revisions. No public input received	Planning Board review showed no revisions required during reporting period.	Task completed
4-3	Revise Site Inspection and Enforcement Control Measures Program	Planning Board	Program will be evaluated and if necessary modified by the end of Year 6.	No modifications required.	Task completed

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
5-1	Review to see if need to modify Zoning Bylaw	Planning Board	Check to see if Stormwater Bylaw conflicted with any Zoning bylaws or if Stormwater Bylaw caused any permitting difficulties	No conflicts found that resulted in permitting difficulties	Task completed
5-2	Revise Subdivision Rules and Regulations	Planning Board	Determine if any subdivision rules and regulations needed further revision	Review completed for reporting period and no revision needed. No problems encountered or conflicts with existing subdivision rules and regulations and new Stormwater Bylaw and Regulations	Task completed
5-3.1	Ensure Adequate Long-term O & M of BMPs	Highway Superintendent	Annual review process used to determine if O&M of BMP's are practical in application or if there needs to be changes to accommodate changes in conditions or processes during reporting period.	Completed review. May need to make revisions to BMP's during next year. No major problems detected.	Task partially completed. Need to monitor this area for possible revision in next reporting period.
5-3.2	Ensure Adequate Long-term O & M of BMPs	Planning Board	Any proposed change or revisions in 5-3.1 above will be discussed with the Planning Board and any other appropriate board or commission.	No action required during reporting period..	Task completed

Revised					

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
6-1	Educate Municipal Employees	Highway Superintendent	Update employee training	Town has implemented training program on stormwater management, including methods for spotting problems, illicit discharges or suspicious storm drain discharges.	Town will continue to update training as required and as new stormwater management information becomes available. .
6-2 Revised	Develop & Implement plan to prevent and reduce pollutant runoff from municipal operations.	Highway Superintendent	More work on Municipal Operations Stormwater Plan (MOSP) needed	Town worked toward development of MOSP. .	Town will continue to expand MOSP.
6-3 **Revised 2008**	Catch Basin Cleaning	Highway Superintendent	Clean and inspect all catch basins annually.	Through the use of a subcontractor, all catch basins were cleaned during Year 6.	Annual catch basin cleaning will continue. Due to retirement of highway supt and hiring new supt., errors found in total catchbasin count as reflected in this report.

6a. Additions

6-4	Street Sweeping	Highway Department	Perform sweeping on all Town Roads annually.	Street Sweeping was conducted on all streets during Year 6.	Annual street sweeping of all town roadways will continue.

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
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, 2008 through March 31, 2009)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures **	($)	$33,996
Total program expenditures since beginning of permit coverage	($)	$63,563
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General Fund

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	N
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	N
Shoreline cleaned since beginning of permit coverage	(mi.)	N
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	N
▪ community participation **	(# or %)	N
▪ material collected **	(tons or gal)	N
School curricula implemented	(y/n)	Y

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					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	(#)	27
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100
Mapping method(s)		
▪ Paper/Mylar	(%)	100
▪ CADD	(%)	0
▪ GIS	(%)	0
Outfalls inspected/screened **	(# or %)	100
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	0
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	0
% of population on sewer	(%)	20% (townwide)
% of population on septic systems	(%)	80% (townwide)

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	1
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100
Site inspections completed **	(# or %)	100
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and $)	0
Complaints/concerns received from public **	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100
Site inspections (for proper BMP installation & operation) completed **	(# or %)	100
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	Y
Low-impact development (LID) practices permitted and encouraged	(y/n)	Y

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 ** (# reported in 2008 an estimate. This is actual count.)	(#)	727
Qty. of storm drain cleaned **	(%, LF or mi.)	100%
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	Est. 1960 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill, Compost

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	$14,037
• Hourly or per basin contract rate **	($/hr or $ per basin)	$25/hr.
• Disposal cost**	($)	0
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1
• Vacuum truck(s) owned/leased	(#)	0
• Vacuum trucks specified in contracts	(y/n)	N
• % Structures cleaned with clam shells **	(%)	100
• % Structures cleaned with vactor **	(%)	0

	(Preferred Units)	Response
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)	Est. 4800 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill, Compost
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	$19,959
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	$51.32/hr.
• Disposal cost**	($)	0
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	0
• % Roads swept with rotary brush sweepers **	%	100
• % Roads swept with vacuum sweepers **	%	0

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

	(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	15% 85%
Pre-wetting techniques utilized **	(y/n or %)	N
Manual control spreaders used **	(y/n or %)	Y
Zero-velocity spreaders used **	(y/n or %)	N
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	No change
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	No change
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction	(y/n or #)	N

100%of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Y
Water Supply Protection Storm water outfalls to public water supplies eliminated or relocated	# or y/n	N
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	N
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	N

ADDENDUM #1
NPDES PII Small MS4 General Permit
Annual Report

AS REFERENCED IN BMP 1-3 AND 2-1

Municipality/Organization:	**Town of Dighton, MA**
EPA NPDES Permit Number:	**MAR041105**
Mass DEP Transmittal Number:	**W-040738**
Annual Report Number & Reporting Period:	**No. 6: April 08-March 09**

The Dighton Board of Health (BoH) was called upon by the Dighton Zoning Board of Appeals (ZBA) to act on the request for a waiver from a Ch. 40B developer. The BoH has a regulation that prohibits above-ground detention ponds or basins and retention basins. The developer wanted a waiver so that two infiltration basins could be installed. The area to be developed is part of the highest hill in town and consists of a large amount of ledge and open space.

The BoH decided to conduct an in-depth study of infiltration basins to determine if a waiver could be granted. The study consisted of research that included but was not limited to, purpose, design, function, maintenance, and efficacy. The research included discussions with engineers, site visits to infiltration basins (one of old design and one of new design), a site visit to the proposed development location in town, and Internet research. Data was collected and photographs were taken at all sites. The inspection of infiltration basins took place following a period of precipitation.

A number of public meetings were conducted to allow residents an opportunity to express their opinions and get information about the proposal. The meetings were also attended by the developers, their spokesperson, engineer for the project, ZBA members, Conservation Commission members, and counsel for the town. In addition, the town's engineer reviewed the basin plans. There was a great deal of opposition to the project by neighbors. Concerns included additional water flowing onto the street and adjacent property.

Some abutters objected to the project because they did not want thirty-six homes built in the area.

Discussions were held in open session with the developers and their engineer. The entire process took six months. The BoH granted a conditional waiver. Included in the waiver conditions were requirements that the infiltration basins be fenced; 48-hour drainage requirements; frequent inspections by an engineer during and following construction; and, monitoring of the town's street and existing drainage system by the Highway Department. The natural flow of rainwater prior to, during, and following construction will be observed.

The decision to grant the conditional waiver is for this one development. The regulation pertaining to below ground drainage systems is still in effect. Future waiver requests for above ground infiltration basins will require the same type of studies and information prior to a decision for a waiver.

Included in the conditional waiver are the following definitions for infiltration basin, detention basin, and retention basin. These definitions will be added to our Stormwater Regulations when they are reviewed during the next reporting period.

Infiltration Basin: An infiltration basin is a stormwater management facility designed to direct all or part of the stormwater into the soil. Infiltration is the process by which runoff percolates through the unsaturated overburden and fractured bedrock to the water table. Infiltration does not include incidental wetting of soil in ditches, detention basins or the equivalent; wetting of underdrained basins, dry swales, or similar filtration systems; or wetting of buffers meeting the town's requirements for use as stormwater control.

Discharge of runoff to areas of the site where the water will collect and percolate into the ground is considered infiltration if the volume, rate, or quality of the discharge exceeds the runoff capacity of the area. Underdrained swales, underdrained ponds, and similar practices that discharge to surface waters or to buffer strips meeting the town's requirements for stormwater buffers are not considered infiltration systems, although these maybe used to treat runoff prior to discharge to an infiltration area.

Detention Basin: A detention basin is a stormwater management facility installed on, or adjacent to, tributaries of rivers, streams, lakes or bays that is designed to protect against flooding and, in some cases, downstream erosion by storing water for a limited period of a time. These basins are also called "dry ponds", "holding ponds" or "dry detention basins" if no permanent pool of water exists. Some detention ponds are also "wet ponds" in that they are designed to permanently retain some volume of water at all times. In its basic form a detention basin is used to manage water quantity while having a limited effectiveness in protecting water quality, unless it includes a permanent pool feature

Retention Basin: A retention basin is a type of best management practice (BMP) that is used to manage stormwater runoff to prevent

flooding and downstream erosion, and improve water quality in an adjacent river, stream, lake or bay. Sometimes called a wet pond or wet detention basin, it is essentially an artificial lake with vegetation around the perimeter, and includes a permanent pool of water in its design.

It is distinguished from a detention basin, sometimes called a dry pond, which temporarily stores water after a storm, but eventually empties out at a controlled rate to a downstream water body. It also differs from an infiltration basin, which is designed to direct stormwater to groundwater through permeable soils.

Wet ponds are frequently used for water quality improvement, groundwater recharge, flood protection, aesthetic improvement or any combination of these. Sometimes they act as a replacement for the natural absorption of a forest or other natural process that was lost when an area is developed. As such, these structures are designed to blend into neighborhoods and viewed as an amenity

OTHER ACTIVITIES

The town participated in meetings to support and expand ACEC designation for the Three Mile River all the way to the Taunton River.

The town has two bridge projects slated to begin shortly. The replacement of the Berkley Dighton Bridge over the Taunton River and the reconstruction of Center Street are scheduled to begin on May 11, 2009. This project consists of the construction of a temporary bridge followed by removal of the113 year old bridge. The permanent bridge will be constructed in the location of the present bridge. Then the temporary bridge will be removed. The reconstruction of Center Street includes replacement of the stormwater drainage system. As part of that reconstruction, there is a proposal by the Bristol County Agricultural High School to extend the town's municipal sewer line east on Center Street to the Taunton River.

The replacement of the bridge between Dighton and Taunton over the Three Mile River is scheduled to go out to bid later this year. All of this construction will be monitored by appropriate state and local officials and we anticipate that mention of these projects may become part of future annual stormwater reports.