Municipality/Organization: **Town of Dighton, Ma**

EPA NPDES Permit Number: MAR041105

MassDEP Transmittal Number: **W-040738**

Annual Report Number & Reporting Period: **Year 13** **April 1, 2016 – March 31, 2017**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2017)

Part I. General Information

Contact Person: Thomas Pires Title: Board of Health

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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: Thomas J Pires

Printed Name: Thomas Pires

Title: Chairman Board of Health

Date: 5/1/2017

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-1	Continue working with schools to get info out to public	Thomas J. Pires	Expansion of Program	Students from Bristol County Agricultural High school will continue to identify and map coordinates of outfalls in their area	. Planning to prepare new educational materials in 2017
Revised					
1-2	Provide storm water info in public area at Town Hall	Thomas J. Pires	Continue to have information on Stormwater available in Town Hall for the Public	Ongoing	Working with Srpedd to Develop updated information for the public
Revised					
Revised					
Revised					
Revised					
Revised					

1a. Additions

3	Work on methods of getting info out to the public re: storm water	Thomas J. Pires	Continue to explore new sources to educate public on importance of Storm water monitoring and control	Information remains available in public buildings within the town, Storm water addressed on local cable television and during Selectmen's Meeting	Continue to pursue new way of getting information out to public

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2-1	Research infiltration basins for stormwater disposal and management	Board of Health Planning Board	To conduct site visits semi- annually of existing above or below ground systems to ensure they are being maintained and functioning properly	The type of system to be installed for Storm water control still rest with the Planning Board and Consulting Engineer.	Board of Health and Planning Board will continue to monitor systems. Will modify as situation or regulation change.
Revised					
Revised					
Revised					
Revised					
Revised					
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3-1	Review existing outfall maps and update as needed	Highway Supt.		We collected all GPS Coordinates of Catch basin and outflows and have uploaded to our GIS Mapping	To collect GPS Coordinates of new structures and outflow and add them to our GIS Mapping
Revised					
3-2	Detect and eliminate discharges	Highway Supt.	Check for any new discharge sites	No new discharge sites located by Storm Drain System Cleaning by Highway Dept. Employees	Continue to monitor
Revised					
3-3	Conduct illicit Discharge Education program	Highway Supt.	Review illicit discharge training with new employees	Covered as part of on the job training for new hires	Task Completed
Revised					
3-4	Check on By- Law implementation	Thomas J. Pires	Monitor size of disturbed area that requires permit.	Size of area disturbed that requires a permit remains at 35,000 sq.ft	Continue to monitor and adjust if necessary
Revised					
3-5	Check on implementation of storm water regulation	Highway Superintendent and Building Commissioner	Investigated and resolved one complaint of storm water violations. Found not to be a violation.	Continue to investigate all complaints of potential violations and enforce by law if necessary	Frequency of violations has been reduced due to the awareness of Storm water.
Revised					
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4-1	Revise Site Plan, Review section of Zoning Bylaw	Planning Board	Explore and implement Storm Water Control	No Revisions required	Task Completed and On Going Review
Revised					
4-2	Review procedures for receipt and consideration of information submitted by the public	Board of Health Planning Board Conservation Commission	Propose changes in By- Law regulation resulting from ongoing monitoring or input from residents	Change in land disturbance are approved by Boards and Voters	Task Completed
Revised					
4-3	Revise Site Inspection and Enforcement Control Measures program	Board of Health Planning Board Conservation Commission	Investigation and site visit for all potential violations	No Complaints	We continue to monitor all construct and land disturbance areas covered by the Bylaw
Revised					
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5-1	Review to see if need to modify Zoning By-law	Planning Board	Continue to monitor Storm water by-law conflicts with Zoning By-law or if Storm Water by- law caused any permitting difficulties.	No conflicts found that resulted in permitting difficulties during this reporting period	On going
Revised					
5-2	Revise Subdivision Rules and Regulations	Planning Board	Review Subdivision Rules and Regulations to determine if revision is needed	Review complete for reporting period and no revision needed. No problems encountered or conflicts with existing subdivision rules and regulations and storm water by- law and regulations	Ongoing
Revised					
5-3.1	Ensure adequate Long term O&M of BMP'S	Highway Supt Thomas J. Pires	Annual Review process used to determine if O&m of BMP;s are practical in application or if there need to be changes in conditions or processes during reporting period	Completed Review. No major problems detected.	Ongoing
Revised					
5-3.2	Ensure Adequate Long-term O&M BMP'S	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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6-1	Educated Municipal Employees	Highway Superintendent	Update Employee training	Town has updated training program on stormwater management including methods for spotting problems, illicit discharges or suspicious storm drain discharges.	Ongoing
Revised					
6-2	Develop & Implement plan to prevent and reduce pollutant runoff from municipal operations	Highway Superintendent	Continue work on Municipal Operations stormwater Plan (MOSP) needed	Town continues to work toward development of MOSP. The Town continues to review and expand MOSP	Ongoing
Revised					
6-3	Catch Basin Cleaning	Highway Superintendent	Clean and inspect all catch basins annually	Will continue to conduct catch basin cleaning annually	Annual Catch basin cleaning will continue
Revised					
6-4	Street Sweeping	Highway Superintendent	Continue to perform on all Town Roads bi-annually	Street Sweeping was conducted on some of the Streets due to the late spring we will continue to sweep all Town roads	Street Sweeping on Town Roads will continue bi-annually
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
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, 2012 through March 31, 2013)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	y
Annual program budget/expenditures **	($)	51,233.00
Total program expenditures since beginning of permit coverage	($)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		Storm water budget

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	y
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 **	(#)	0
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
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	(#)	37
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100
Mapping method(s)		
▪ Paper/Mylar	(%)	100
▪ CADD	(%)	0
▪ 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)	(#)	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
% of population on septic systems	(%)	80

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	6
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)	n

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	2
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1
Qty of structures cleaned **	(#)	1000
Qty of storm drain cleaned **	(%, LF or mi.)	100
Qty of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	Est 1400 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill compost

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	21,044.48
• Hourly or per basin contract rate **	($/hr or $ per basin)	6,400/basin if contracted out
• 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)	2
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 1200 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Land fill , compost pipe bedding
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	15,500.88
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	47.67/hr Per contract
• 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

I. Public Education and Outreach

The Bristol County Agricultural High School Natural Resource Management (NRM) Department faculty has been diligently working to adjust their curriculum in order to achieve alignment with the draft (i.e., new) vocational curriculum frameworks. This curriculum alignment effort demanded considerable faculty time and effort which left less for cooperative projects, such as the Dighton Storm Water Mapping and Monitoring work. Existing maps of the stormwater elements were updated and new maps were created of each street in Dighton. Each element was labeled using a numbering system and naming system to allow for easy identification in the future. For example, catch basins were given the designation CB, manholes, MH, and headwalls HW. Each element was given a number in the order that it was mapped. ArcGIS was used to generate a shapefile with the coordinates of the drainage system.

There were 1300 stormwater elements mapped during the course of this project. Two illicit discharges were identified during the course of the mapping projects, which aided in their quick resolution. The shape file was added to the town's MapGeo system to provide information for town officials and residents. This mapping project allowed Dighton to gain more information about its storm water drainage system that it can use to protect its drinking water resources. This increased surveillance of the basins will allow for rapid identification of contaminated water sources and prevent illegal discharges into the rivers.

The Highway Department has eliminated the output of sand by using a new product to mix with our salt, we have increased the capacity of our catch basins.