

Municipality/Organization: Town of Mansfield
EPA NPDES Permit Number: MAR 041126
MassDEP Transmittal Number: W-039460
Annual Report Number & Reporting Period: Year 15
April 1, 2017 – March 31, 2018

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2018)

Part I. General Information

Contact Person: Richard C. Alves, Jr., P.E. **Title:** Town Engineer/Ass't DPW Dir.
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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: Richard C. Alves Jr.

Title: Town Engineer/Ass't DPW Dir.

Date: May 1, 2018

Part II. Self-Assessment

The Town of Mansfield has completed the required self-assessment, and has determined that our Municipality continues to be 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	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-1	Identify existing programs to be included in SMP	Engineering	Completed: See Report No. 1	
1-2	Develop NPDES materials for homeowner education	Engineering	Materials Posted and distributed	Mansfield will continue to use EPA, State, and local posters and publications which are displayed and offered at town offices as handouts to keep the public aware of the need for good stormwater management.
1-3	Distribute materials to identified programs	Engineering/ DPW	Completed: See Report No. 4.	Continue to work with others
1-4	Implement Catch Basin Stenciling Program	DPW	The Town uses the Highway Department to continue the installation of Almetek “No dumping” (fish symbol) 4” stainless, storm drain markers.	We continue to investigate these permanent markers, damaged or missing logo’s, and replace on an as needed basis.
1-5	List of Department names on Website	Town Administrator	The Town has maintained an updated list of Department head names , contact numbers, and email addresses	Continue to communicate with residents

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2-1	Sponsor Hazardous Waste Collection Day	Health	The Health Department had hazardous waste collection day on April 14, 2018.	Reduce illegal dumping of hazardous material
2-2	Sponsor Recycle Center	DPW	The Recycle Center/Compost Area is open Saturday, Monday, & Tuesday for collections. The center is advertised on the Town and E-CALL website.	Funding passed Recycle Center available
2-3	Identify existing volunteer environmental groups	Engineering	Continue to work with the Keep Mansfield Beautiful Committee and the Downtown Committee on several projects.	Continue to work with others
2-4	Stream Cleanup Day	Engineering/DPW	We continue to work with Mansfield Scouts, Conservation, & D.P.W. on stream cleaning.	Continue to work with others
2-5	Implementation and Review	Engineering	Continued to update GIS mapping w/As-Builts from accepted Subdivisions and our designs.. Updated the Town website on the Storm water Phase II Program.	Continue to update as necessary

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3-1	Drainage System Map	Engineering/ MIS	Completed: See Report No.1.	Continue to add structures as necessary.
3-2	Inspect outfalls, catch basins, and manholes	Engineering/ DPW	Completed. See Report No. 2. Inspected and incorporated storm water structure into the GIS database.	Continue to add field data into GIS database.
3-3	Draft by-law prohibiting discharges into system	Engineering/ Health	Completed: See Report No. 4. Proposed by-law was accepted at the 5/23/06 session of the 4/11/06 Annual Town Meeting.	Continue to Implement the By-Law
3-4	Develop plan to identify non-storm water discharges	Engineering/ DPW	Continued with plan to identify non-storm water discharges, including illegal dumping, by periodically reviewing the identified problem sites and cleaning the sites as necessary. No new illegal dumpsites identified.	
3-5	Dry weather screening (identify illicit discharges)	Engineering/ DPW	Due to lack of funding and man power, the Town has halted additional efforts on verifying unknown outfalls which remain.	Continue the program as manpower becomes available.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4-1	Review existing Planning Board Regulations	Engineering/ Planning/ ConCom	Amended Subdivision Regulations	Continue with the approval process
4-2 ----- Revised (In Report No. 2)	Present recommended changes to existing regulations ----- Comprehensive Storm-Water Management By-Law	Engineering/ Planning/ ConCom -----	Completed: See Report No. 4. Proposed Storm Water Management By-Law was accepted at the 5/23/06 session of the 4/11/06 Annual Town Meeting.	
4-3 ----- Revised (In Report No. 2)	Review Site Plan By-Laws vs. EPA model -----	Engineering/ Building/ ConCom -----	Completed: See Report No. 4. The Storm Water Management By-Law was accepted at the 5/23/06 session of the 4/11/06 Annual Town Meeting.	
4-4 ----- Revised (In Report No. 2)	Site Plan By-Law change -----	Engineering/ Building/ ConCom -----	Completed: See Report No. 4. The Storm Water Management By-Law was accepted at the 5/23/06 session of the 4/11/06 Annual Town Meeting, and implemented.	
4-5	Develop control measures at construction sites	Planning/ Building/ ConCom/Engineering	The Conservation agent, Building Inspector, and Engineering Division inspect all construction sites as required to assure compliance with any permits.	Continue with site inspections conducted to assure compliance

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5-1	Review existing by-laws, ordinances and regulations	Engineering	Completed: See Report No.1.	Continue to enforce regulations as needed
5-2 ----- Revised (In Report No. 2)	Draft changes to regulations for runoff controls -----	Engineering/ Planning -----	Completed: The Storm Water By-Law was accepted at the 5/23/06 session of the 4/11/06 Annual Town Meeting.	Continue to enforce regulations as needed
5-3	Select appropriate BMP's to be used by planners	Engineering/ Planning	Completed: See Report No. 4. Post Construction run-off control was included in the Comprehensive Storm Water Management By-Law, accepted on 5/23/06 at the Annual Town Meeting.	
5-4	Develop O&M manual for BMPs	Engineering/ DPW	The Engineering Division and the Conservation agent developing O&M procedures within the Town	Continue to work with others to improve the Town's O&M procedures
5-5	Multi-Department Reviews	Planning and Building	Multi-Department reviews are conducted on all site plans and subdivision projects	The Conservation Commission, Planning Board, Building, Engineering, and Fire and Police Departments review all aspects of projects which affect their departments

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6-1	Identify and map sensitive receptors within municipality	Engineering	Completed: See Report No. 1. Supports future activities.	
6-2	Review and modify current street sweeping program	DPW	Completed: See Report No. 4.	Continue to use good housekeeping practices during daily activities
6-3	Develop a CIP for equipment needs	DPW	Completed: See Report No. 4.	
6-4	Develop policies for snow removal and disposal	DPW	Completed. See Report No. 2. Established a written policy for snow removal and disposal, with consideration given to environmental impacts.	
6-5	Conduct employee training for vehicle washing practices	DPW	Completed: A written policy for vehicle washing had previously been established. See Report No. 2. The new truck wash facility, in a new water treatment facility adjacent to the Highway Garage, became fully operational; and the written policy to support full operation of the new vehicle wash facility was finalized.	Continue to train new employees as needed

6-6	Program for storm water system maintenance	DPW	Completed. See Report No. 2. Established a schedule for catch basin cleaning, 879 basins cleaned). The Mansfield D.P.W. uses CaCl₂ (a natural salt brine that is exothermic and hygroscopic) which has reduced the accumulation of sand within the catch basins.	Continue with our maintenance program cleaning catch basins and mapping. Maps could be furnished upon request
6-7	Develop plan for illegal dumping control	DPW	Completed. Established a written inventory of significant (illegal) dumping sites, and posted 28 signs to date. In Year 3, prepared an Illicit Discharge By-Law within the proposed Comprehensive Storm water By-Law. The Storm water By-Law was accepted at the 5/23/06 Annual Town Meeting.	

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
7-1	Install new drainage structures	DPW	Eliminate TSS	The DPW replaced/installed over 18 substandard catch basins with new deep sump catch basins with hoods

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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, 2017 through March 31, 2018)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures **	(\$)	
Total program expenditures since beginning of permit coverage	(\$)	\$1,200,000
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		Borrowed

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	Unknown
Stormwater management committee established	(y/n)	N
Stream teams established or supported (Canoe River Aquifer Advisory Committee)	(# or y/n)	Y
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 **	(#)	1
▪ community participation **	(# or %)	Unknown
▪ material collected **	(tons or gal)	Unknown
School curricula implemented	(y/n)	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					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	(%)	95%
Estimated or actual number of outfalls(waiting response from EPA)	(#)	389
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	95%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
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 **	(%)	100%
Site inspections completed **	(# or %)	100%
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and \$)	0
Complaints/concerns received from public **	(#)	unknown

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(as needed)
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1(as needed)
Qty of structures cleaned **	(#)	50%/yr
Qty. of storm drain cleaned **	(%, LF or mi.)	As needed
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	unknown
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	(#)	1/owned
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	45%
• % Structures cleaned with vector **	(%)	5%

(Preferred Units) Response

Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	Full Spring
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	10± Ton
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	(#)	2
• 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 **	%	N/A

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	0
▪ Herbicides	(lbs. or %)	0
▪ Pesticides	(lbs. or %)	0
Integrated Pest Management (IPM) Practices Implemented	(y/n)	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	100% Future Future 0%
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/lb mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/lb mi. or %)	N/A
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
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)	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	
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	