

Municipality/Organization: City of New Bedford, MA

EPA NPDES Permit Number: MAR041140

MA DEP Transmittal Number: X265492

**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: Jamie Ponte **Title:** Commissioner

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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: Jamie Ponte _____

Title: Commissioner, Department of Public Infrastructure _____

Date: _____

Part II. Self-Assessment

The City of New Bedford has completed the required self-assessment, and has determined that the 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's Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
1-1	Education Flyer / Fact Sheet Distribution	Public Infrastructure	Flyer / Fact Sheet Update and distribute per time line	<p>Researched and ordered pre-printed brochures and children's educational booklets for public distribution. Many were placed in public locations such as City Hall, Libraries, and Public Infrastructure Office. Others were used during exhibits or classroom education.</p> <p>Tables with brochures, pamphlets, and give away items of can covers, and plate scrapers were set up on April 1, August 3, August 14, 2017 and March 29, 2018 at Farmers' Markets, and on September 9, 2017 at an outdoor City event. A Healthy Kids Day event at the YMCA was also attended on 4/29. These 6 events were attended by approximately 1000 people, which again allowed for one-on-one contact and explanations to the public.</p> <p>The City conducted a Rain Barrel Program in May, where residents were encouraged to use rain barrels lowering stormwater pollution amounts and were able to purchase Rain Barrels at a discounted price.</p> <p>The Area Chamber of Commerce held it's Home Show on 5/20 where the Rain Barrels were displayed and brochures, kid's activity booklets, pamphlets, were distributed and allowed one-on-one outreach. This was attended by another 1000 residents of all ages. Give away items of "Can The Grease" can covers, Plate Scrapers and kids wrist bands were distributed.</p>	<p>Continue working with the schools, in Farmers' Markets, and other venues to distribute stormwater education materials. Increase visibility and one-on-one education of the FOG and Non-Flushable Programs to the public by setting up exhibitor tables at other public events.</p> <p>Continue placing brochures and flyers at City locations.</p>

1-1				<p>A school presentation of Fats, Oil, and Grease (FOG); Non-Flushables; and Storm Water Pollution were presented during the reporting period. Activity booklets and "Captain Plunger" wristbands were given to each child. This presentation reached 30 children and teachers through this endeavor.</p> <p>80 Storm Water Pollution pamphlets (in English and Spanish) were distributed to residents in the area of an illegal storm drain dumping on 5/4.</p> <p>1000 giveaway items (500 each of the can covers and plate scrapers) were ordered and imprinted with the Captain Plunger icon and "Cease the Grease". These were to be distributed at the outreach events. 800 child size and 100 adult size wristbands imprinted with "Captain Plunger" were also ordered for distribution during classroom presentations and other public outreach events.</p> <p>"Do Not Flush / Cease the Grease" flyers were distributed to homeowners at each of the City's 88 blocked drain calls during this reporting period.</p>	
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1-1				The City's FOG Program inspected each of the 382 Food Service Establishments, twice during this reporting period. Each permit required weekly self-inspections of Grease Traps and monthly cleanings. The permit also included Best Management Practices (BMPs) to be used at each location to reduce FOG problems in their drains and the City's collection system. The inspections also are placing an emphasis on the BMPs as listed with the permit.	
1-2	Annual Meeting	Public Infrastructure	Public Meeting Advertised and Conducted	The City again participated at other public events totaling over an additional 3000 residents reached. Based on prior formal public meetings, these events captured a greater audience of not only residents of New Bedford but regionally to surrounding communities.	Continue coordinating outreach efforts on a project-specific basis and with more focused area-specific local meetings including local neighborhood associations that are better attended than Citywide public meetings. Continue public meetings with City neighborhood associations.
1-3	Web-page Flyer	MIS	Placement of stormwater flyer on City's website	Posted a flyer with information and instructions for residents to obtain a rain barrel. A copy of the city's stormwater management rules and regulations are posted on the website.	Continue placing brochures and flyers at City locations.

1-4	Household Hazardous Waste Collection Day	Greater New Bedford Regional Refuse Management	Two sets of Collection Days Held per Year (April/May and September/October)	Household Hazardous Waste Collection Days were held on April 29 and September 23, 2017. Car tire drop off days were held on April 22 and September 9, 2017. Paper Shredding Days were held on May 6 and Sept. 16, 2017 resulting in 3 ¾ tons of paper shredded for recycling. Drug Take Back Day was held on October 28, 2017. These events collected 6415 gallons of waste and 237 tires.	Will continue with Recycling Days. Household Hazardous Waste Collection Day will be held June 2 and October 27, 2018. Tire Recycling Days are scheduled for May 12, and Sept. 22, 2018. Paper Shredding Days are scheduled for May 19 and fall 2018.
1-5	Stencil Catch Basins	Public Infrastructure	Catch Basins Stenciled	Public Infrastructure has and continues to install permanent medallions on catch basins stating "Do Not Dump – Drains to Bay" as the inlets are replaced. During this reporting period, the City installed 17 permanent medallions.	Continue to install permanent medallions on all new or replaced catch basins.

1a. Additions

The Mayor has publicly promoted the City's initiatives to plant 500 trees per year within the City. Last year, 470 trees were planted. DPI continues to implement these improvements.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept. / Person's Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
2-1	Encourage Public Participation	Public Infrastructure	Mail flyer for distribution and hold annual public meeting	As summarized under BMP 1-1, participated in multiple public events by passing out educational material and promoting the rain barrel program.	Continue to participate in public events and distribute educational materials.
2-2	Establish Stormwater Management Committee	Public Infrastructure	Committee meets to review program's progress	The City's Stormwater Committee submitted to City Council the Stormwater Ordinance that was enacted by the City Council on October 15, 2015.	Review requirements of the new MS4 permit and prepare to implement any changes.
2-3	Stencil Catch Basins	Public Infrastructure	Catch Basins Stenciled	Public Infrastructure has and continues to install permanent medallions on catch basins stating "Do Not Dump – Drains to Bay" as the inlets are replaced. 17 medallions were installed during this reporting period.	Continue to install permanent medallions and stencil catch basins with the assistance from environmental groups.

2a. Additions

The City is coordinating public outreach efforts for the stormwater system in conjunction with proper use of the sanitary wastewater collection system through their CMOM program and IPP initiatives.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept. / Person's Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
3-1	Discharge Identification	Public Infrastructure	Stormwater Outfalls Mapped	<p>In summer 2017, to update the existing outfall mapping, city record drawings and available mapping from the Buzzards Bay National Estuary Program and MassDOT was reviewed. Field staff visited each mapped outfall in person to verify coordinate locations and collect basic information on the outfall characteristics (size, material, conditions, etc).</p> <p>The process of incorporating the updated mapping and location efforts with the City's Computerized Maintenance Management System (CMMS) was begun. Incorporation of this data will ultimately be used to track preventive maintenance and work orders within the drainage system.</p>	Continue to update GIS mapping with any new stormwater discharge points. Continue to refine integration of stormwater mapping with the CMMS.

3-2	Drainage Mapping	Public Infrastructure	Map of Stormwater System	<p>During the outfall inspection conducted over the summer, existing GIS mapping of the stormwater system was utilized. As inspections proceeded, any inconsistencies in the mapping and observed conditions (such as missing structure or structure located in the wrong positions) was noted, if observed. Field notes from the field staff was then incorporated into the city's GIS mapping.</p> <p>The mapping is also in the process of being updated with the location of all municipally-owned stormwater BMPs to facilitate better maintenance tracking.</p> <p>Based on the outfall field program, the city's existing mapping, and available topographic data, draft watersheds are being delineated for each stormwater outfall. Once delineation is completed, the draft watersheds will be incorporated into the stormwater system maps.</p>	Continue to refine GIS based on record drawings, field observations, and as-built drawings from new construction.
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3-3	Illicit Discharge Identification	Public Infrastructure	Correct Illicit Discharges	<p>In support of the city's illicit discharge detection and elimination (IDDE) program, a draft written IDDE plan was created. The Plan outlines the goals, specific responsibilities and written procedures for implementation of the overall IDDE program.</p> <p>Following standard operating procedures in the draft IDDE plan, field staff conducted a dry weather inspection at each of the city's 187 outfalls over summer 2017. Samples were taken from outfalls (or upstream structures if the outfall was submerged) that exhibited dry weather flow and tested for ammonia, chlorine, conductivity, salinity, surfactants, temperature, bacteria (E. coli or enterococcus), and any pollutants of concern, depending on the receiving water.</p> <p>As part of the IDDE plan, an initial outfall inventory and priority ranking was developed. Outfalls were evaluated for their potential to contain illicit discharges based on available record data including surrounding land use, historic uses, water quality data, and other relevant characteristics. Results from the 2017 sampling program were also used to further refine the prioritization; outfalls with high pollutant results were given higher priority scores.</p> <p>City conducted an IDDE program in Outfall 027 area with the goal of identifying illicit connections. One illicit connection was identified in this area within the reporting period and has been corrected.</p>	<p>Continue implementing the written procedures and goals outlined within the IDDE plan.</p> <p>Follow up on outfalls that scored highly within the priority table. Subsequent programs are expected to include dry weather testing within the upstream system, wet weather sampling at the outfalls, and detailed programs to identify specific sources (dye testing, CCTV, etc).</p> <p>Continue dye testing to identify any illicit connections in Outfall 027 area.</p> <p>Incorporate IDDE program in Outfall 027 area as well as other areas of the City into the alternatives analysis being completed as part of the City's LTCP / Integrated Capital Plan.</p>
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3-4	Enforce compliance to minimize illicit connections	Public Infrastructure	Correct Illicit Discharges	Stormwater Ordinance with provisions for enforcement of correction of illicit connections was amended and passed on October 15, 2015.	Continue enforcement of the Stormwater Ordinance and regulations.
3-5	Education Flyer / Fact Sheet Distribution	Public Infrastructure	Flyer / Fact Sheet Update and distribute per time line to include illicit discharges	<p>Distributed flyers at the Home Show and at City-owned locations.</p> <p>School programs for children covering Fats, Oil, and Grease (FOG); Non-Flushables; and Stormwater Pollution were presented throughout the reporting period. Activity booklets and wristbands were given to each child. There were over 100 children reached through this endeavor.</p> <p>There was a display table set up at a Citywide event in a public park "I Love My City" (Sept. 9), and at Farmers' Markets (April 1, Aug. 3, and 14, 2017; and March 29, 2018). The tables displayed non-flushable demonstration items, pamphlets, and the can covers with "Cease the Grease" printed on them as giveaway items. This provided an opportunity for one-on-one education to the public also. All events totaled over 2100 residents contacted.</p>	<p>Continue to update flyers and distribute them at more public events.</p> <p>Expand the educational outreach program of school age children.</p> <p>Continue to participate in the Home Show and Farmers' Markets. Increase visibility and one-on-one education of the FOG and Non-flushable Programs to the public by setting up exhibitor tables at other public events.</p>

3a. Additions

No additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept. / Person's Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
4-1	By-law Review / Stormwater Ordinance	Stormwater Committee	Review / modify existing by-laws to ensure they adequately address permit requirements	Stormwater Ordinance with provisions for low impact development and other permit requirements was amended and passed on October 15, 2015.	Review requirements of the new MS4 permit and prepare to implement any changes.
4-2	Subdivision Regulation Review	Planning Department	Review / modify existing regulations to ensure they adequately address permit requirements	Stormwater Ordinance with provisions for subdivision regulations and other permit requirements was amended and passed on October 15, 2015.	Continue enforcement of the amended City Ordinance and review requirements of the new MS4 permit and prepare to implement any changes.
4-3	Zoning By-Law Review	Planning Department	Review / modify existing regulations to ensure they adequately address permit requirements	Stormwater Ordinance with provisions for low impact development and other permit requirements was amended and passed on October 15, 2015.	Continue enforcement of the amended City Ordinance and review requirements of the new MS4 permit and prepare to implement any changes.

4a. Additions

No Additions.

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

BMP ID #	BMP Description	Responsible Dept. / Person's Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
5-1	By-law Review	Stormwater Committee	Review / modify existing regulations to ensure they adequately address permit requirements	Stormwater Ordinance with provisions for low impact development and other permit requirements was amended and passed on October 15, 2015.	Continue enforcement of the amended City Ordinance and review requirements of the new MS4 permit and prepare to implement any changes.
5-2	Subdivision Regulations Review	Planning Department	Review / modify existing regulations to ensure they adequately address permit requirements	Stormwater Ordinance with provisions for low impact development and other permit requirements was amended and passed on October 15, 2015.	Continue enforcement of the amended City Ordinance and review requirements of the new MS4 permit and prepare to implement any changes.
5-3	Zoning By-Law Review	Planning Department	Review / modify existing regulations to ensure they adequately address permit requirements	Stormwater Ordinance with provisions for low impact development and other permit requirements was amended and passed on October 15, 2015.	Continue enforcement of the amended City Ordinance and review requirements of the new MS4 permit and prepare to implement any changes.

5a. Additions

To protect Sassaquin Pond, a jellyfish stormwater filter was installed at the corner of Leroy Street and Morton Avenue. Sassaquin Pond has experienced several swimming closures and water quality issues over recent periods. In addition to installation of the filter, 16 tree wells were installed within the surrounding area and two headwalls to the pond were updated.

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept. / Person's Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
6-1	Protocol Implementation	Public Infrastructure	Implement preventive maintenance techniques	<p>The city is in the process of updating its maintenance guidelines to create specific standard operating procedures for stormwater-related activities including winter road maintenance, catch basin cleaning, street sweeping, and proper use of potential pollutants (e.g., landscaping materials, vehicle washing).</p> <p>Maintenance of the stormwater system, including maintenance of existing pipes and outfalls, catch basin cleaning, and street sweeping are performed year-round.</p> <p>DPI is responsible for the operation and maintenance of a number of retention/detention ponds and stormwater screens. In this reporting period, the City continued with actively maintaining 19 ponds including cleaning/clearing of outfall pipes, removal of sediment and debris from screens,</p> <p>Park and Landscape Maintenance – Coordinated with Buttonwood Park Zoo to address non-point source pollution prevention measures. Purchased pet waste bags for placement at City parks.</p> <p>Trash Cleanup – DPI actively maintained City trash receptacles. The City routinely conducts street sweeping and trash clean-up along City streets and in City owned property. Trash barrels are located within City streets and City owned property, which are emptied on a routine basis. Implemented “bin” system for trash collection Citywide.</p>	<p>Continue to develop and propagate SOPs related to maintenance of the system.</p> <p>Continue enforcement of the amended City Ordinance and review requirements of the new MS4 permit and prepare to implement any changes.</p> <p>Continue to maintain the system, including cleaning catch basins, sweeping streets, maintaining city-owned BMPs, refilling pet waste bags, and regularly emptying public trash bins.</p>

6-2	Annual Training	Public Infrastructure	Train staff on stormwater and pollution prevention techniques	Conducted training of City DPI staff related to CMOM program including: <ol style="list-style-type: none"> 1. NASSCO PACP and MACP training for proper inspection of pipelines and manholes to document condition and prioritize repairs. 2. Conducted workshops on GIS and CMMS systems to begin garnering input on needed improvements and needs of the Department. 	DPI is in the process of developing standard operating procedures related to stormwater maintenance activities. As these SOPs are finalized, staff who perform these activities will receive training.
6-3	Permit Filing	Public Infrastructure	Permits filed, as needed	For city projects, crews coordinated with the Conservation Commission prior to construction.	Continue coordinating with Conservation Commission.
6-4	Street Sweeping	Public Infrastructure	Sweep 2,600 miles annually	The City swept 11403 miles of city streets.	Continue street sweeping program on an annual basis.
6-5	Catch Basin Cleaning	Public Infrastructure	Clean a minimum of 1,000 catch basins annually	The City cleaned 254 catch basins.	Continue to clean catch basins on an annual basis.
6-6	Pet Waste Collection	Public Infrastructure	Purchase pet waste collection bags	Purchased pet waste collection bags for placement at various locations to mitigate non-point source pollution.	Continue to purchase pet waste collection bags.

6a. Additions

No additions.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

Not Applicable

Part IV. Summary of Information Collected and Analyzed

Water quality information was collected as part of the outfall inspection program. This data will be analyzed and incorporated into the city's IDDE program.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	Y
Annual program budget/expenditures	(\$)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	2130
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	8
▪ community participation	(%)	
▪ material collected	(tons or gal)	6415 Gallons of household waste, 237 tires, 3.75 tons of paper
School curricula implemented	(y/n)	Y

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	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

Outfall mapping complete	(%)	100
Estimated or actual number of outfalls	(#)	29
System-Wide mapping complete	(%)	90
Mapping method(s)		
▪ Paper/Mylar	(%)	90
▪ CADD	(%)	N/A
▪ GIS	(%)	100
Outfalls inspected/screened	(# or %)	164
Illicit discharges identified	(#)	1
Illicit connections removed	(#) (est. gpd)	1
% of population on sewer	(%)	97
% of population on septic systems	(%)	3

Construction

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 completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	Weekly
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	Weekly
Total number of structures cleaned	(#)	254
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	(\$)	
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	Daily
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	Daily
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	Y
Manual control spreaders used	(y/n)	Y
Automatic or Zero-velocity spreaders used	(y/n)	N
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	N