

5/5/11

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Municipality/Organization: City of Newton, MA

EPA NPDES Permit Number: MAR 041080

MaDEP Transmittal Number: W- W-039247

**Annual Report Number
& Reporting Period:** No. 8: April 2010 –March 2011

NPDES PII Small MS4 General Permit Annual Report April 2011

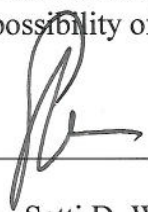
Part I. General Information

Contact Person: David Turocy **Title:** Interim Public Works Commissioner

Telephone #: 617-796-1000 **Email:** dturocy@newtonma.gov

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: Setti D. Warren

Title: Mayor

Date: May 2, 2011

Part II. Self-Assessment

The City of Newton, Massachusetts has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions. However, for Minimum Control Measure #3 Illicit Discharge Detection and Elimination (IDDE), the City has found bacteria contamination in some of its storm drains and brooks, particularly in areas where sanitary sewer infrastructure is aging, underdrains are co-located, and underground pathways or conduits to our drainage systems exist. Newton is proactively finding and eliminating illicit connections to the storm drainage system. In addition, we feel that our Comprehensive Stormwater Plan is an effective program to address IDDE in more detail than this permit requires.

The following is provided to highlight key accomplishments made in Permit Year 8 with respect to MS4 General Permit goals and objectives.

Administrative

- Budgeted \$725,000 in FY11 for stormwater management and capital projects.
- Retained a consultant to evaluate our existing stormwater utility rate structure and develop a planning level budget for the next five years. This evaluation and updated rate structure will put the City in a better position to address future NPDES permit requirements and aging infrastructure needs.

Programmatic & Drainage System

- A sanitary sewer and underdrain rehabilitation contract was awarded to National Water Main Cleaning Company in November 2009. The work commenced in Spring 2010 and was completed by the end of the 2010. The contract included heavy sewer and manhole cleaning, joint testing and sealing, cured-in-place liners and sealing of underdrain access ports.
- Sections of storm drains are routinely inspected (CCTV) for water quality issues (based upon bacteria sampling data) and flood conveyance checks. As needed these pipes are cleaned (i.e., roots cut and sediment removed) by DPW.

Good Housekeeping & Illicit Discharge Detection and Elimination

- Our 2010 Household Hazardous Waste (HHW) collection program ran from May 12th through October 16th. Last year, we collected 407.3 Tons of HHW that may otherwise find its way into the trash or the storm drain system. Please see Attachment A for a more detailed breakdown and website: <http://www.ci.newton.ma.us/DPW/recycling/default.asp>
- The Parks and Recreation Department strives to use very little, if any, pesticides. Any application of pesticides or herbicides on City property is approved by our IPM Committee and in accordance with our IPM Policy. A report from Parks & Recreation is included in Attachment A.
- Newton monitors 143 stormwater discharge points to the Charles River, including the many brooks that feed into the Charles, by conducting wet and dry weather sampling.

Public Education and Involvement

- Numerous activities and events listed in the following table.

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 – Permit Year 9
1.1 Revised	Develop Stormwater Press Release	Engineering, M. Rose	Submit annual press release to newspaper / CATV.	On July 16 th the Env. Engineer and Recycling Manager were guests on WNTN radio station to talk about water conservation tips and techniques. Distributed "Please Scoop the Poop" pet waste postcards to all registered dog owners in the City at the end March / early April. Example provided in Attachment B. Complete.	Record a short segment on Newton's stormwater program as a preview to the "After the Storm" film produced by The Weather Channel and EPA and air program on Newton's CATV.
1.2 Revised	Develop Stormwater Web Site	Engineering, M. Rose	Prepare web site on stormwater issues.	http://www.ci.newton.ma.us/stormwater/	None, BMP complete. Continuance under BMP 1.4
1.3 Revised	Develop Stormwater Brochures	Engineering, M. Rose	Distribute brochures with water/sewer bills	Newton purchases material from the SuAsCo's Stormwater Community Assistance Program. We also distributed brochures on phosphorus (from CRWA) at the Newton Pride event in May 2010. Examples of this literature are provided in Attachment B.	BMP Complete. However, new brochures and literature will be continually added to our stock, as needed.
1.4 Revised	Provide Stormwater News on City's web site	Engineering, L. Taverna & M. Rose	Post stormwater and/or project news once per year	Stormwater information and news is posted on the main page of the City of Newton's website and our Stormwater web page.	Maintain and update stormwater web page as needed.
1.5 Revised	Establish Volunteer Database	Environmental, M. Rose	Solicit volunteer educators to promote awareness of water quality	Database established and is used mostly to encourage participation in Annual Charles River Clean-up & storm drain stenciling.	None, BMP complete.

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 – Permit Year 9
1.6	Partner with Schools	Environmental, M. Rose	Obtain and distribute educational resources to schools.	We continued to offer specialized School Education Programs (see Attachment B). During this permit period, “ <i>Dwayne the Drain</i> ” lesson was taught at the Horace Mann Elementary School. We also assisted two High School students with their Environmental Service Projects.	Continue with implementation of various school education and partnering programs.
Revised					
1.7	Develop Education Program	Environmental, M. Rose	Implement stormwater pollution prevention program	April is “GreenUp Newton” where DPW promotes and hosts various educational programs at locations throughout the City including a recycling exhibit at the Library, a green habits exhibit at City Hall, composting demonstrations and more. <i>See Attachment B.</i> Every April, DPW coordinates the sale of rain barrels to residents. Residents picking up rain barrels are given a stormwater pollution prevention brochure.	Continue promoting water conservation, organic and environmentally-friendly lawn care methods and fertilizer efforts.
Revised					
1.8	Partnering with Watershed Associations	Engineering, L. Taverna M. Rose	Promote meetings with Charles River Watershed Association (CRWA).	Newton actively supports CRWA programs and initiatives including workshops and the Annual Charles River Clean-up. At the request of the following organizations: New England Water Environment Association; APWA; the Norfolk, Bristol & Middlesex Highway Association; and SuAsCo Watershed; M.Rose prepared and presented presentations on stormwater financing.	Maintain active participation and collaboration with the CRWA.
Revised					

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 – Permit Year 9
2.1 Revised	Establish Stormwater Citizen Advisory Com.	Engineering, F. Russell	Committee to meet once per year	BMP Completed in prior years.	None.
2.2 Revised	Implement Public Meetings for Citizen Input	DPW, T. Daley M. Rose	Hold meetings once per year, publish results.	On September 21 and October 26, 2010, the League of Women Voters organized two forums on “Floods and Stormwater in Newton”. The first forum included a presentation from the Commissioner of Public Works and the second forum featured a presentation from the Chief Operating Officer. Both forums were well attended and informative.	None, coverage under new Permit.
2.3 Revised	Encourage Citizen Communication and Reporting	Engineering, L. Taverna	Establish stormwater hotline for illicit discharges.	Customer service center and phone number established at City Hall. All stormwater questions and comments directed to Engineering or Utilities.	BMP Complete. Continue with current protocols.
2.4 Revised	Network with Local Community Groups	Engineering, M. Rose T. Daley	Observe outfalls, report illicit discharges & stream clean-up.	Staff attends at least one meeting per year of the Friends of Hemlock Gorge and the Crystal Lake Conservancy. DPW supports these groups’ efforts and addresses any concerns as the need arises.	Continue to provide support to these groups and foster a partnership approach with the City.
2.5 Revised	Implement Storm Drain Marking Program	Utilities, T. Jerdee M. Rose	Volunteers mark catch basins with decals.	Permanent storm drain markers were installed along side of catch basins in the City. Storm drain stenciling was completed by volunteers at various locations in the City.	BMP Complete. Continue with storm drain marking program.
2.6 Revised	Promote Community Clean-Up day	Human Services B. Droz Parks & Recreation	Promote annual community clean-up day	M. Rose is on the Charles River Clean-up Steering Committee for the past 5 years. Information included in Attachment B. Newton Serves held April 25, 2010. Volunteer groups target specific areas of the City for clean-up. For more info, see: www.ci.newton.ma.us/Human%20Services/NewtonServes/default.html	Continue with annual community clean-up day. See also BMP 1.8

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 – Permit Year 9
3.1 Revised	Establish Stormwater System Map	Engineering, T. Jerdee	Update GIS information, locate all outfalls.	BMP previously completed.	BMP Complete.
3.2 Revised	Establish Stormwater Database Management System	Utilities, T. Jerdee	Add stormwater information to Hansen database.	BMP previously completed.	BMP Complete.
3.3 Revised	Locate and Inspect all Outfalls	Utilities, T. Jerdee & M. Rose	Collect outfall data for Hansen database.	BMP previously completed.	Continue with monitoring and sampling program.
3.4 Revised	Review existing Ordinances & determine whether they adequately prevent Illicit Discharges	Engineering, L. Taverna	Propose to BOA revisions to stormwater ordinance/ policies, as appropriate	A Draft IDDE Ordinance has been prepared and included in annual reports No. 5 and 6. It was unable to be approved at that time, but we have since revised and will try again with new Administration.	Present draft ordinance to the Board of Alderman in the Spring of 2011.
3.5 Revised	Identify Illicit Discharge Sources	Utilities, T. Jerdee F. Russell	Identify bacteria sources via visual and CCTV inspections, dye and/or pressure tests.	DPW continually monitors and investigates potential indirect and direct illicit discharges to our storm drainage infrastructure. During this permit period: 6,495 catch basins were cleaned and approx. 5 miles of drains were cleaned.	Continue with efforts to find and remove indirect (underdrains) and direct illicit discharges.
3.6 Revised	Establish Illicit Discharge Hotline	Engineering, L. Taverna M. Rose	Receive and track citizen reports of illicit discharges.	Hotline established (customer service center). No calls received regarding illicit discharges during this period.	BMP Complete. Continue to encourage citizen reporting of illicit discharges.

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 – Permit Year 9
3.7	Train Employees	Utilities, T. Jerdee	Employees to help identify illicit discharges.	Training on this topic was conducted in previous years. Most recently in March 2010, Emergency Spill Response Training was conducted.	BMP Complete.
3.8	Monitor City's infrastructure for illicit discharges and non-point source pollution	Utilities, T. Jerdee Engineering M. Rose	Observe major outfall discharges.	A comprehensive outfall monitoring program has been in place for numerous years. During this reporting period 121 outfalls were inspected with sampling occurring at 78 of these locations. See Attachment C for Annual Inspection and Sampling Plan.	Continue with implementation of IDDE program.

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 – Permit Year 9
4.1 Revised	Review existing Ordinances and determine whether they adequately regulate construction site stormwater runoff	Engineering, L. Taverna	Obtain Law Dept's opinion regarding existing practice and appropriateness of regulating construction site stormwater runoff.	Currently, there are numerous mechanisms through which new construction site runoff is prevented and controlled. These mechanisms include: an existing Ordinance (Sec 30-5c and 5d), DPW / Eng. Division Policy and the Special Permit approval process. Most construction projects regardless of size are required to provide soil erosion control measures.	BMP Complete.
4.2 Revised	Implement Review of Construction Documents	Engineering, J. Daghlian	Establish policy for submittal of erosion control plans.	DPW has two inspectors who ensure the measures shown on Approved Site Plans are implemented. BMP Complete. Continue with plan reviews for building permits.	BMP Complete. Continue with plan reviews for building permits.
4.3 Revised	Implement Construction Inspection Program	Engineering, J. Daghlian	Develop guidelines, training, inspection of construction sites > 1 acre.	All construction sites inspected by Engineering. BMP guidelines followed.	Continue with inspection of all construction sites. Develop training for construction inspectors.
4.4 Revised	Educate Developers on Proper Erosion Control Techniques	Engineering, J. Daghlian / M. Rose	Distribute erosion control procedures to all applicants.	Engineering requires erosion control BMPs for all construction. Wall poster of proper erosion control techniques posted at permit application counter.	BMP Complete. Continue with implementation.
4.5 Revised	Provide opportunity for citizen review and input on construction projects	Engineering, J. Daghlian	Ensure citizen review procedures for construction projects > 1 acre.	Citizen input of construction projects occurs during Conservation Commission, Land Use, and Board of Survey public hearings. Citizen review also occurs when Environmental Impact Reports are required.	BMP Complete. Continue with implementation.

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 – Permit Year 9
4.6 Revised	Establish Information Management System	Engineering, J. Daghlian	Track construction reviews and construction inspections.	An inspector is assigned to all construction projects over 1 acre (as well as many <1 ac). This person maintains a personal field log book of key events.	BMP complete. Continue with implementation.
4.7 Revised	Establish Standards for Erosion and Sedimentation Controls	Engineering, J. Daghlian	Establish adaptation of MADEP SWM Standard 8	Engineering requires implementation of MADEP SWMP Standard 8 for all construction projects > 1 acre.	BMP Complete. Continue with implementation.

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 – Permit Year 9
5.1 Revised	Review existing Ordinances and determine whether they adequately regulate post construction stormwater runoff	Engineering, L. Taverna	Obtain Law Dept's opinion regarding existing practice and appropriateness of regulating post construction stormwater runoff	Collaborated with the Planning Dept. and Inspectional Services Dept. regarding our existing ordinances and permit requirements. At this time, these provide adequate protection.	BMP Complete.
5.2 Revised	Develop Stormwater Management Policy	Engineering, L. Taverna	Establish policy to establish minimum BMPs for developers.	BMP Complete. Continue with implementation.	BMP Complete. Continue with implementation.
5.3 Revised	Develop Stormwater Operations and Maintenance Policy	Engineering, J. Daghlia	Establish policy to establish minimum operations and maintenance plans.	Engineering requires the submittal of stormwater operations and maintenance plans for all construction > 1 acre.	BMP Complete. Continue with implementation.
5.4 Revised	Implement Controls to Minimize Impacts to Water Quality	Engineering, J. Daghlia / M. Rose	Implement use of structural and non-structural BMPs.	DPW/Eng. requires developers to implement MADEP Stormwater Standards (1-8) for applicable projects. Separate and supplemental requirements are outlined for smaller construction projects in the City's Stormwater Management Policy.	BMP Complete. Continue with implementation and stormwater recharge requirements.
5.5 Revised	Encourage Reducing Directly Connected Impervious Surfaces	Engineering, J. Daghlia	Encourage the use of grass swales and filter strips.	Recommended to developers during development review team meetings.	Continue to recommend for all construction projects > 1 acre. Continue to be a resource for developers and homeowners on alternatives to asphalt pavement.

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 – Permit Year 9
5.6 Revised	Determine Capacity of Stormwater System Elements	Engineering, J. Daghlian	Perform capacity analysis for wet weather events.	Several recommendations from the Old Farm Road System Evaluation study are in design and will be implemented in FY12. This southeastern corner of the City has historically been plagued with flooding and SSO's issues.	BMP Complete.
5.7 Revised	Review existing Ordinances and determine whether they adequately regulate recharges to groundwater	Engineering, J. Daghlian	Obtain Law Dept's opinion regarding existing practice and appropriateness of regulating recharges to groundwater	Current practices include on-site stormwater recharge requirements for new construction.	BMP Complete.
5.8 Revised	Implement Use of Groundwater Recharge Rates	Engineering, J. Daghlian	Explore adaptation of MADEP SWMP Standard 3	Engineering requires implementation of MADEP SWMP Standard 3 for all construction projects > 1 acre.	BMP Complete. Continue with implementation.
5.9 Revised	Implement Post Development Peak Discharge Rates	Engineering, J. Daghlian	Implement adaptation of MADEP SWMP Standard 2	Engineering requires implementation of MADEP SWMP Standard 2 for all construction projects > 1 acre.	BMP Complete. Continue with implementation.
5.10 Revised	Implement Requirements for Removal of 80% TSS	Engineering, J. Daghlian	Implement adaptation of MADEP SWMP Standards 4 & 7	Engineering requires implementation of MADEP SWMP Standard 4 & 7 for all construction projects > 1 acre.	BMP Complete. Continue with implementation.

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 – Permit Year 9
6.1 Revised	Develop Staff Training Program	Environmental, E. Gentile	Train staff on spill prevention control, vehicle maintenance, and lawn care.	BMP Complete.	None.
6.2 Revised	Develop Stormwater Pollution Prevention Plan	Environmental, E. Gentile	Develop spill prevention control procedures.	A self-audit of DPW Yards was conducted in April 2009. Spill prevention procedures and spill kits are on premises. In general, good housekeeping practices in place; however, improvements can be made.	Develop a Stormwater Pollution Prevention Plan for DPW Yards.
6.3 Revised	Develop Flood Mitigation Plan	Utilities, T. Jerdee	Develop plan, perform exercises.	BMP Complete.	Continue field exercises and update the flood mitigation plan, as needed.
6.4 Revised	Establish Inspection Procedures	Utilities, T. Jerdee	Inspect storm drain system using visual inspection and CCTV.	Inspected 121 outfalls in 2010 with 78 samples collected. Cleaned approximately 5 miles of the City's storm drainage system.	Continue to inspect storm drain system.
6.5 Revised	Incorporate BMPs into Standard Procedures	Utilities, T. Jerdee Highway, S. Tocci	Establish BMPs for municipal operations and maintenance.	Stormwater BMPs are designed into new or redevelopment projects for City-owned property, most recently would be stormwater management BMPs for the Crystal Lake Bath house parking lot.	BMP Complete. Review needs for other stormwater retrofit / improvement projects.
6.6 Revised	Establish Maintenance Procedures	Utilities, T. Jerdee	Vactor/flush storm drains to remove sedimentation	BMP Complete.	BMP Complete. Continue with implementation.

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 – Permit Year 9
6.7 Revised	Establish Maintenance Procedures	Utilities, T. Jerdee	Clean drainage brooks to remove sedimentation.	Design plans are complete for the dredging of three inter-connected lobes of a pond. The project is currently in the permitting phase.	Construction of the pond dredging project in FY12. Two culverts that discharge into this pond will also be cleaned as part of this project.
6.8 Revised	Establish Maintenance Procedures	Utilities, T. Jerdee	Clean catch basins every 2 years.	We cleaned over 6,495 catch basins during this reporting period.	Continue with catch basin cleaning program.
6.9 Revised	Establish Maintenance Procedures	Highway, S. Tocci	Sweep streets 2 times per year.	Streets were swept 5 times in 2010 and in some locations as many as 8 times.	Continue with street sweeping program.

6.10 Revised	Establish Maintenance Procedures	Highway, S. Tocci	Calibrate salt spreaders annually.	Salt spreaders calibrated fall 2010.	Calibrate salt spreaders every year.
6.11 Revised	Implement Household Hazardous Waste Program	Environmental, E. Gentile	Collect waste oil, antifreeze, paint, pesticides.	Household Hazardous Waste (HHW) is collected two days per week from May through October. See attached memo from Env. Affairs on results.	BMP Complete. City will continue to operate HHW collection facility.

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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 8
7.1 Revised	Check Criteria for Meeting TMDL	Engineering M. Rose	EPA criteria for TMDLs checked.	Participated in MaDEP Advisory Group Sub-committee on the phosphorus TMDL for the Charles River.	Work towards reducing phosphorus load from Newton's brooks and conduits to the Charles River.
Revised					
Revised					
Revised					

7a. Additions – N/A

7b. WLA Assessment – N/A

Part IV. Summary of Information Collected and Analyzed

Please refer to Part IIA – Self Assessment for the City summary of information collected and analyzed.

We are hopeful that the information provided is adequate to demonstrate our commitment to improving our SWMP and ultimately ensuring the quality of our stormwater discharges meets or exceeds standards.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic: Stormwater User Fee created, effective July 1, 2006.

Stormwater management position created/staffed – Environmental Engineer	(y/n)	Yes
Annual program budget/expenditures (catch basin cleaning, materials, one Stormwater Program Manager, and four DPW Utilities labor positions, public educations and maintenance) for FY11	(\$)	\$725,000

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	2,000
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	Y (Charles river)
Shoreline clean-up participation or quantity of shoreline miles cleaned (during 10 th Annual Earth Day Charles River Cleanup; 12 community groups in Newton participated)	(y/n or mi.)	8+ miles
Household Hazardous Waste Collection Days (May 2010 to Oct. 2010)		
▪ days sponsored	(#)	24
▪ community participation	(%)	39%
▪ Material collected: CRTs, auto & button batteries, fluorescent bulbs, paint, waste oil, thermostats, thermometers, and elemental mercury. (some of which are collected year round)	(tons or gal)	See Attachment A
School curricula implemented	(y/n)	Y

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")				In Place Prior to Phase II	Under Review	Drafted	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

Outfall mapping complete		(%)		100%
Estimated or actual number of outfalls		(#)		143
System-Wide mapping complete		(%)		100%
Mapping method(s)				
▪ Paper/Mylar		(%)		100%
▪ CADD		(%)		100%
▪ GIS		(%)		100%
Outfalls inspected/screened		(# or %)		100%
Illicit discharges identified (mostly underdrains) total # since issuance of NPDES MS4 permit		(#)		12
Illicit connections removed		(#)		9
		(est. gpd)		2,000+
% of population on sewer		(%)		98.5
% of population on septic systems		(%)		1.5

Construction

City of Newton
NPDES Phase II MS4 Permit
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Number of construction starts (>1-acre) [Boston College- Stokes Hall, and 192 Lexington St.]	(#)	2
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	Warnings issued*
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	3*
<i>*from smaller residential construction projects, not the two projects listed above</i>		

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	100%
Estimated volume of stormwater recharged	(gpy)	Unknown**
**This value would take significant time to quantify, but most likely would be > 100,000 gallons/yr		

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	Once every other year
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	Once per year
Total number of structures (CBs) cleaned	(#)	6,495
Storm drain cleaned	(LF or mi.)	5 miles
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	2,000 tons†
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	\$ 50,000 †
†Estimated. Catch basin sediment material is about to be transported to the Former Upton Landfill		

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	5
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	8
Qty. of sand/debris collected by sweeping	(lbs. or tons)	Unknown
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Beneficial use
Cost of sweepings disposal	(\$)	0
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	0

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	30 %
▪ Herbicides	(lbs. or %)	98 %
▪ Pesticides	(lbs. or %)	98 %
* Newton's Integrated Pest Management Policy was provided in the Year 5 report. See also Parks & Recreation Info on Pesticides usage for this past year.		

Anti-/De-Icing products and ratios	% NaCl	96%
	% CaCl ₂	0
	% MgCl ₂	2%
	% CMA	0
	% Kac	0
	% KCl	0
	% Sand	2%
Pre-wetting techniques utilized	(y/n)	N
Manual control spreaders used	(y/n)	N
Automatic or Zero-velocity spreaders used	(y/n)	Y
Estimated net reduction in typical year salt application	(lbs. or %)	0
Salt pile(s) covered in storage shed(s)	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	N