Municipality/Organization: City of Newton, MA

EPA NPDES Permit Number: MAR 041080

MaDEP Transmittal Number: W-W-039247

Annual Report Number & Reporting Period:

No. 9: April 2011 – March 2012

NPDES PII Small MS4 General Permit Annual Report April 2012

Part I. General Information

	Contact Person	: David Turocy	Title: Public Works Commissioner		
Telephone #:617-796-1000Email: dturocy@newtonma.gov	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:	fr	
Printed Na	ame: Setti D. Warren	·
Title:	Mayor	
Date:	5/1/12	
	/ /	

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, except 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 9 with respect to MS4 General Permit goals and objectives.

Administrative

- Budgeted \$725,000 in FY12 for stormwater management and capital projects.
- Drafted a new ordinance to update our stormwater rate structure, which once adopted will increase our revenue for stormwater management by approximately \$300,000.

Programmatic & Drainage System

- Newton was honored to receive a partner award from the Charles River Watershed Association for significant contributions towards the restoration of the Charles River at a ceremony on March 22, 2012.
- Sections of storm drains are routinely inspected (video camera) for water quality issues (based upon bacteria sampling data) and flood conveyance checks. As needed these drain lines are cleaned (i.e., roots cut and sediment removed) by DPW.
- Re-testing of sanitary sewer work as part of the Area B Rehabilitation contract is ongoing. This is done to check that joints were sealed and underdrain access ports were successfully sealed / separated from the sewer. Additional sewer and underdrain rehabilitation work is in the design phase, and a new project is in the investigation phase.

Good Housekeeping & Illicit Discharge Detection and Elimination

- Our 2011 Household Hazardous Waste (HHW) collection program ran from May 11th through October 15th. Last year, we collected 128 Tons of HHW that may otherwise find its way into the trash or the storm drain system. Please see Attachment A for a detailed breakdown of HHW and visit: <u>http://www.newtonma.gov/gov/dpw/recycling/default.asp</u>
- The Parks and Recreation Department strives to use very little, if any, pesticides. Any application of pesticides or herbicides on City property is done in accordance with our Integrated Pest Management (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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
1.1	Develop Stormwater Press Release	Engineering, M. Rose	Submit annual press release to newspaper / CATV.	Distributed "Please Scoop the Poop" pet waste postcards to all registered dog owners in the City. Example provided in	Wrote an article for the Crystal Lake Conservancy Newsletter- to be published in May 2012.
Revised		DPW Utilities, M. Rose		Attachment B. Press release submitted to the NewtonTAB on guidelines for draining pools and spas (printed Sept. 2011).	Waiting for new permit requirements.
1.2	Develop Stormwater Web Site	Engineering, M. Rose	Prepare web site on stormwater issues.	Complete. http://www.ci.newton.ma.us/stormwater/	None, BMP complete. Continuance under BMP 1.4
Revised		DPW Utilities, M. Rose			
1.3 Revised	Develop Stormwater Brochures	Engineering, M. Rose DPW Utilities, 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 Famers Market in May and June 2011. Examples 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 DPW Utilities,	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	Maintain and update stormwater web page as needed.
1.5	Establish Volunteer Database	M. Rose Environmental, M. Rose	Solicit volunteer educators to promote awareness of water quality	page. Database established and is used mostly to encourage participation in Annual Charles River Clean-up & storm drain stenciling.	None, BMP complete.
Revised		DPW Utilities, M. Rose			

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
1.6	Partner with Schools	Environmental, M. Rose	Obtain and distribute educational resources to schools.	We continued to offer specialized School Education Programs; see website for info: http://www.newtonma.gov/gov/dpw/water/stormwater.as	Continue with implementation of various school education and
Revised		DPW Utilities, M. Rose		During this permit period, "Drinking Water Decisions" was taught at the Oak Hill Middle School. We also assist High School students with their Environmental Service Projects, as requested.	partnering programs.
1.7	Develop Education Program	Environmental, E. Gentile and 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 green habits exhibit,	Continue promoting water conservation, organic and environmentally-friendly
Revised		Change division for M. Rose to DPW Utilities		We also held a Go Green Giveaway for individuals that completed a survey. The exhibit & survey cards circulated to several locations in the City. <i>See</i> <i>Attachment B</i> for survey results and additional information.	lawn care methods and no phosphorus fertilizers.
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: Save the	Maintain active participation and collaboration with the CRWA.
Revised		DPW Utilities, M. Rose		Bay – Narragansett Bay RI, New England Water Environment Association; and SuAsCo Watershed; M. Rose provided presentations on stormwater financing.	

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
2.1 Revised	Establish Stormwater Advisory Committee	DPW Utilities, 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 Delete T. Daley Add D. Turocy	Hold meetings once per year, publish results.	DPW gave a presentation at the Crystal Lake Conservancy Annual Meeting held at the Newton Public Library on October 24, 2011.	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	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 (FHG) 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.
Revised		Delete T. Daley Add D. Turocy		Coordinates with FHG for the Annual Charles River Cleanup.	
2.5	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	BMP Complete. Continue with storm drain marking program.
Revised				City.	
2.6	Promote Community Clean-Up day	Parks & Recreation; & M. Rose	Promote annual community clean-up day	M. Rose is a Regional Volunteer Coordinator and has served on the Charles River Clean-up Steering Committee for the past 6 years.	Continue with annual community clean-up day. See also BMP 1.8
				Newton Serves was held on May 15, 2011. Volunteer groups target specific areas of the City for clean-up. For more info, visit: <u>http://newtoncommunitypride.org/NewtonSERVES.htm</u> 1	
Revised					

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3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
3.1	Establish Stormwater System Map	Engineering, T. Jerdee	Update GIS information, locate all outfalls.	BMP previously completed.	BMP Complete.
Revised		DPW Utilities, F. Russell			
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	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 2012.
Revised		DPW Utilities, F. Russell			
3.5	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: 275 catch basins were cleaned	Continue with efforts to find and remove indirect (underdrains) and direct illicit discharges.
Revised				and approx. 4700 linear feet of drains were cleaned.	
3.6	Establish Illicit Discharge Hotline	Engineering, 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.
Revised		DPW Utilities, M Rose			

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
3.7	Train Employees	Utilities, T. Jerdee	Employees to help identify illicit discharges.	Training on this topic was conducted in prior years.	BMP Complete.
Revised				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 104 outfalls were inspected with sampling occurring at 65 of	Continue with implementation of IDDE program.
Revised		Change division for M. Rose to DPW Utilities		these locations. See Attachment C for Annual Inspection and Sampling Plan.	

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
4.1	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	BMP Complete.
Revised				process. Most construction projects regardless of size are required to provide soil erosion control measures. DPW has two inspectors who ensure the measures shown on Approved Site Plans are implemented.	
4.2 Revised	Implement Review of Construction Documents	Engineering, J. Daghlian	Establish policy for submittal of erosion control plans.	BMP Complete.	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.	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	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9	Planned Activities – Permit Year 10
		Name		(Reliance on non-municipal partners indicated, if any)	
4.6	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	BMP complete. Continue with implementation.
Revised				log book of key events.	
4.7	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.
Revised					

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
5.1	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.
Revised					
5.2	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.
Revised					
5.3 Revised	Develop Stormwater Operations and Maintenance Policy	Engineering, J. Daghlian	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.
Keviseu					
5.4	Implement Controls to Minimize Impacts to Water Quality	Engineering, J. Daghlian / 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	BMP Complete. Continue with implementation and stormwater recharge requirements.
Revised		Change division for M. Rose to DPW Utilities		supplemental requirements are outlined for smaller construction projects in the City's Stormwater Management Policy.	
5.5	Encourage Reducing Directly Connected Impervious Surfaces	Engineering, J. Daghlian	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
Revised		Add M. Rose			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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
5.6 Revised	Determine Capacity of Stormwater System Elements	Engineering, J. Daghlian	Perform capacity analysis for wet weather events.	Sewer and drainage improvements on Old Farm Road & vicinity are completed. The 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.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
6.1	Develop Staff Training Program	Environmental, E. Gentile	Train staff on spill prevention control, vehicle maintenance, and lawn care.	Municipal staff training on Phosphorus Reduction tools was provided to our staff by the Charles River Watershed. Newton hosted this workshop which was open to	None.
Revised		Add M. Rose		other Charles River communities in the middle and lower watershed.	
6.2	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,	Develop a Stormwater Pollution Prevention Plan for DPW Yards.
Revised		Add M. Rose		good housekeeping practices in place; however, improvements can be made.	
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	Establish Inspection Procedures	Utilities, T. Jerdee	Inspect storm drain system using visual inspection and CCTV.	Inspected 104 outfalls and collected 65 samples from these outfalls (those flowing). Cleaned approximately 1 mile of the City's	Continue to inspect storm drain system.
Revised				storm drainage system.	
6.5	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	BMP Complete. Review needs for other stormwater retrofit / improvement projects.
Revised		Delete S. Tocci Add Brian Zaniboni		Crystal Lake Bath house parking lot.	
6.6 Revised	Establish Maintenance Procedures	Utilities, T. Jerdee	Vactor/flush storm drains to remove sedimentation	BMP Complete.	BMP Complete. Continue with implementation.

6. Pollution Prevention and Good Housekeeping in Municipal Operations

City of Newton NPDES Phase II MS4 Permit Annual Report No. 9

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) –	Planned Activities –
ID #		Dept./Person		Permit Year 9	Permit Year 10
		Name		(Reliance on non-municipal partners	
				indicated, if any)	
	Establish Maintenance	Utilities,	Clean drainage brooks to	Design plans are complete for the dredging	Construction of the pond dredging
6.7	Procedures	T. Jerdee	remove sedimentation.	of three inter-connected lobes of a pond.	project in FY13. Two culverts that
Revised				The permitting phase is complete and we	discharge into this pond will also be
				are awaiting funding approval from the	cleaned as part of this project.
				Board of Alderman.	
	Establish Maintenance	Utilities,	Clean catch basins every	We cleaned 275 catch basins during this	Continue with catch basin cleaning
6.8	Procedures	T. Jerdee	2 years.	reporting period.	program.
Revised					
		** * 1			
	Establish Maintenance	Highway,	Sweep streets 2 times per	Streets were swept 5 times in 2011 and in	Continue with street sweeping
6.9	Procedures	S. Tocci	year.	some locations as many as 8 times.	program.
Revised		Delete S. Tocci			
		Add Brian			
		Zaniboni			

6.10 Revised	Establish Maintenance Procedures	Highway, S. Tocci B. Zaniboni	Calibrate salt spreaders annually.	Salt spreaders calibrated fall 2011.	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 approx. one day 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) <<i f 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 DPW Utilities, 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	(\$)	\$725,000
Manager, and four DPW Utilities labor positions, public educations and maintenance) for FY11		

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 12 th Annual Earth Day	(y/n or mi.)	8+ miles
Charles River Cleanup; 12 community groups participated in Newton)		
Household Hazardous Waste Collection Days (May 2011 to Oct. 2011)		
 days sponsored 	(#)	19
 community participation 	(%)	39%
 Material collected: CRTs, auto & button batteries, fluorescent bulbs, paint, waste oil, 	(tons or gal)	See Attach-
thermostats, thermometers, and elemental mercury. (some of which are collected year round)		ment A
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 			X	
Erosion & Sediment Control	Х			
 Post-Development Stormwater Management 		X		
Accompanying Regulation Status (indicate with "X")				
 Illicit Discharge Detection & Elimination 			Х	
 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

Number of construction starts (>1-acre) [Chestnut Hill Square]	(#)	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 %)	Warnings issued*
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	2*
*from smaller residential construction projects, not the two projects listed above		

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-	(%)	100%
construction stormwater control		
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	(#)	275
Storm drains cleaned	(LF or mi.)	4700 LF
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	124 tons†
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	\$ 3,100 †
†Estimated. Catch basin material is currently stockpiled and awaiting disposal. This material will be		
combined with additional catch basin cleaning material currently being collected.		

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)	Ν
Manual control spreaders used	(y/n)	Ν
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)	Ν

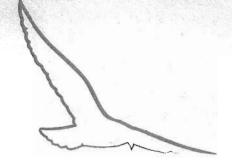
Attachment A

Copies of:

Copy of CRWA Partner Award to the City of Newton

Memo from Newton's Director of Environmental Affairs on HHW and Universal Waste Collection days and Rain barrels sold in 2011

Department of Parks and Recreation's 2011 Pesticide Usage



2011 Thiess International Riverprize

City of Newton

a partner of the

Charles River Watershed Association

for significant contributions to the restoration of the Charles River.







CITY OF NEWTON DEPARTMENT OF PUBLIC WORKS

ENVIRONMENTAL AFFAIRS

Memorandum

TO:	Maria Rose, Environmental Engineer
FROM:	Elaine Gentile, Director of Environmental Affairs
DATE:	April 18, 2012
RE:	NPDES Info
CC:	David Turocy, Commissioner

HHW/Universal Waste Information:

- 1. Number of rain barrels sold: >100 hh
- 2. Number of hhw collection days: 19
- 3. Number of universal collection days: 300
- 4. Percent population: 39.3% (Based on 585 cars for hhw, 12,000 cars for universal)
- 5. Universal collection B/D:
 - Elemental Hg: 19.4 lbs
 - ➢ Waste oil/auto/antifreeze: 2.66 T
 - Button batteries:
 - Freon appliances: 105 T
 - CRTs/Electronics:
 - > Paint swap: 6.34 T
- 6. HHW Collection: 7.9 T
- 7. Thermometers: 47 units
- 8. Thermostats: 246 units
- 9. Switches: 23 units
- 10. Sphygmomanometers: 5 units
- 11. Barometer: 3 unit
- 12. Fluorescent Bulbs: 5.7 T

Total universal/hhw tons: 128 T; does not include elemental mercury, button batteries, items by units or CRT/Electronics. Tonnage down from last year due to the fact that CRTs and electronics are now by fee and people have started to use free services, i.e. Best Buy, Staples, etc.

City if Newton Department of Parks and Recreation Division of Maintenance 2011 - 2012 Pesticide Usage 3/31/12

Three pesticide applications occurred from April 2011 - March 2012.

	H	ERBICIDE	AMOUNT USED	DATE
	1.	Roundup	.5 gallons	3/22/12
	2.	Roundup	.6 gallons	3/23/12
	3.	Roundup	1.1 gallons	3/26/12
LOC	ATI	ONS		DATE
1. Cypr	ess S	treet Municipal Parking Lot Mulch B	eds	3/22/12
2. Cypr	ess S	treet Municipal Parking Lot Mulch B	eds	3/23/12
3. Elm	Stree	t Municipal Parking Lot Mulch Beds		3/26/12

The material was applied by Derek Mannion of the Newton Parks and Recreation Department.

Attachment B

Public Education and Outreach Materials

12th Annual Earth Day Charles River Cleanup



Thank you for volunteering! The 12th Annual Charles River Clean Up held April 16th was a tremendous success. **3,000 volunteers** worked to remove **50 tons** of trash from **150 sites** in **22 different communities.**

We appreciate your efforts, as does everyone who enjoys walking, biking, jogging or fishing along the river. Thanks to your help, the Charles River Watershed is cleaner, more beautiful, and a healthier habitat for wildlife.

We hope to see you again next year!



Thanks from the Cleanup Organizers: Eivy Monroy, Amber DiNucci, Julie Wood, Jessica Blohm, Teressa Bryant, Susan Ekstrom, David Dobrzynski, Kevin Hollenbeck, Matthew McKenna, Maria Rose, Logan Walsh



Organized by: Charles River Watershed Association, Senator Steve Tolman's Office, Charles River Conservancy, The Trustees of Reservations, Emerald Necklace Conservancy, Department of Conservation and Recreation, The Esplanade Association, and the City of Newton Public Works





Major 2011 Sponsors: Hyatt Regency Cambridge, New Balance, and Mix 104.1

Photo credits: Top left to right: T. Zeitler; E. Gildegame; T. Zeitler; Bottom left to right: A. Ash; E. Gildegame; M. Rose; T. Zeitler.



The Green Bin

Volume 4, Issue 1

April 2011

Newton, MA



Welcome to Spring!

GREAT NEWS! For the first time, the City's recycling rate is above 50%! For Fiscal Year 2010, the City of Newton's recycling rate was 52% That is an increase of 7% over the previous year! Trash tonnages are down by 2500 Tons (or 10%), which equals 208 trash trucks filled to capacity! Recycling has increased by over 3700 Tons (or 18%), that's the same as 804 elephants! Keep up the excellent work!

<u>Yard Waste Collections</u> resume the week of April 11th. Please place in paper yard waste bags or barrels labeled with "YARD WASTE ONLY" labels and put to the curb prior to 7am on your collection day. (Stickers available at City Hall Customer Service Center) Plastic bags are NOT accepted. <u>Click here</u> for more details.

Interested in composting at home? The City sells low-cost bins and provides how-to tips, <u>click here</u> for more information!





Rain Barrels for Sale! Interested in Water Conservation? Collect rain water runoff to water your garden! Rain barrels can be purchased for \$72.70 online at <u>New England Rain Barrel</u> or by calling 1.877.977.3135.

Pickup dates for Newton will be Saturday, April 23rd and Tuesday, April 26th at the Rumford Avenue Recycling Depot. Please note rain barrels must be purchased by Monday April 18th.

<u>NEW SCHEDULE! Household Hazardous Waste Drop-offs</u> resume Wednesday, May 11th from 7:30am-12:30pm. Drop-offs for 2011 will be every Wednesday until June 29th and then again from September 7th-- October 12th at the <u>Rumford Ave Recycling Depot</u>. There will also be drop-offs on four separate Saturdays: May 21, June 25, September 17, and October 15. The facility will be closed in July and August, except for July 20th and August 17th.



For a listing of accepted materials, managing hazardous waste, alternative products and how to transport materials safely, <u>click here.</u>

Sharps Take Back Day Do you have used needles from medical treatment? Do you want to safely dispose of your pet's



medication syringes? The City of Newton will take your used sharps for safe disposal from Newton Residents on **Saturday**, **May 21 from 7:30 a.m. to 12:30 p.m.** at the <u>Runford Avenue Recycling Depot</u>.

To take part in this free service, residents must bring their sharps in a puncture resistant container such as a detergent bottle or red medical waste container. The container should be tightly closed. Loose needles and lancets will not be accepted. To make this program cost effective, containers should be nearly full. <u>Click here</u> for more information.

Program Updates

Styrofoam Recycling Pilot The <u>Rumford Avenue Recycling Depot</u> now accepts clean white Styrofoam for recycling! Packing pieces, trays, coffee cups, all types of white Styrofoam! All Styrofoam MUST be in bags (no loose Styrofoam will be accepted) please NO packing peanuts.



DPW Division of Environmental Affairs recycling@newtonma.gov 617.796.1000 www.newtonrecycles.com

Follow us on Twitter! Newton Recycles is now on Twitter!

Helpful Links: Automated Program Questions

Single Stream Recycling Guidelines

The Recycling Depot at Rumford Ave

Recyclopedia-A-Z guide

We hope you enjoy the Green Bin—a quarterly newsletter from the Newton DPW Division of Environmental Affairs.

Please share!

To subscribe/unsubscribe to the Green Bin, <u>click here.</u>

Press Release: May 6, 2011

Go Green Giveaway!

The Public Works Department invites you to visit their **Green Habits Exhibit** currently on display at the Auburndale Branch Library and at the Spring Farmer's Market on Tuesdays at the American Legion Post 440 on California Street. Learn about better ways to care for your vehicle; where to take used motor oil; why it's important to avoid fertilizing your lawn before it rains – or better yet, use natural fertilizers like compost; and in general how to Green-up Newton! Find out if you are a "stormwater star" by taking a short self test! Everyone who completes the self test will be entered into a drawing to win some great raffle prizes including: a Rain Barrel donated by the New England Rain Barrel Company, a car wash donated by Dr. Detail Car Wash, organic fertilizer donated by Swartz True Value Hardware and more.

How "Green" Are Your **Stormwater Habits?**

Circle the answer that best describes your personal habits.

If a question doesn't apply, answer what you would most likely do in that situation. Be true to yourself!

A. Litter habits: 1) I sometimes litter 2) I never litter and usually recycle 3) #2 above plus I have participated in a neighborhood, park or river cleanup B. Storm drains: 1) I have put pet waste, trash, yard waste, oil, or paint down a storm drain 2) I never dispose of anything down a storm drain 3) #2 above plus I sweep leaves and debris AWAY from nearby storm drains. C. After my lawn is mowed, the grass clippings are: 1) collected and tossed onto the road-side, a stream bank, or "vacant" land 2) collected and used as compost/mulch or disposed of as yard waste 3) left in place on the lawn D. The following approach is used when fertilizing my lawn: 1) the more fertilizer, the better, and leave overspread where it is 2) follow the guidelines on the fertilizer bag, and sweep up overspread 3) use fertilizer only as needed or not at all, and avoid any overspread E. I manage steep slopes on my property by: 1) ignoring any runoff that washes off and erodes the slope 2) channeling rainwater away from the slope to where it can slowly seep into the ground 3) maintaining native vegetation on the slope to stop erosion F. When walking my dog, I usually: 1) leave the waste where it is or drop it down a storm drain 2) move the waste to a less traveled location such as a field or woods 3) pick up the waste and dispose of it down the toilet or in the trash G. Most of the rainwater running off my roof is directed to flow: 1) down the driveway 2) onto my lawn or garden(s) 3) into a rain barrel H. I typically wash my car: 1) in my driveway where the wash water flows into the street 2) on my lawn where the wash water can seep into the soil at a commercial carwash where the wash water is recycled and treated 1. Car care: 1) I ignore fluid leaks from my car for as long as possible 2) I check for fluid leaks and repair them promptly 3) #2 above plus I follow my car's complete maintenance schedule J. My driveway is made of: 1) asphalt or a similar NON-porous pavement 2) sand or gravel 3) porous or permeable pavement Add up your score using the number of your answer as its point value, and check your rating below! 11-20: 1-10: 21-30: "Stormwater Smart" "Stormwater Starter" "Stormwater Star" By greening up your You're already helping to Congratulations on being stormwater habits, you will improve local water quality, a good stormwater citizen! significantly help to improve but you can still do more! Please keep up the good the water quality in our work, educate others, and community! strive for all 30 points! By **GREENING** our stormwater habits, we can keep our waterways BLUE!

mail

debris as it flows over the land

bacteria, oil, sand, and other

water after it rains or snows.

Stormwater is the runoff

Stormwater picks up litter,

Take the guiz on the back to find out

Nolor

ormwater

areen" are

⁻or more information, visit our community's website

go to www.stormwatermatters.org.

ъ

impact on stormwater, we can all mprove the water quality in our

ocean.

community by adopting green slormwater habits.

ORMWATE matters.

rivers, lakes, wetlands, and the Because we all have an

carries these pollutants to our

and into storm drains; and it

Results from Green Habits Survey: May - July 2011

Green Habits Survey Results May - July 2011

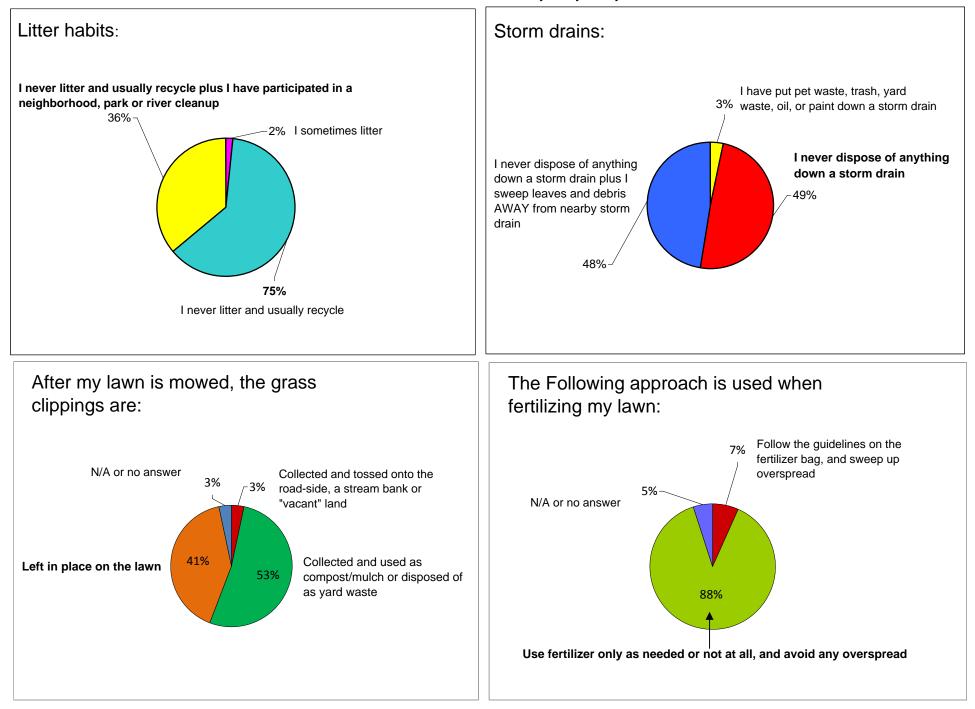
Surveys Returned

61 as of 07/07/11

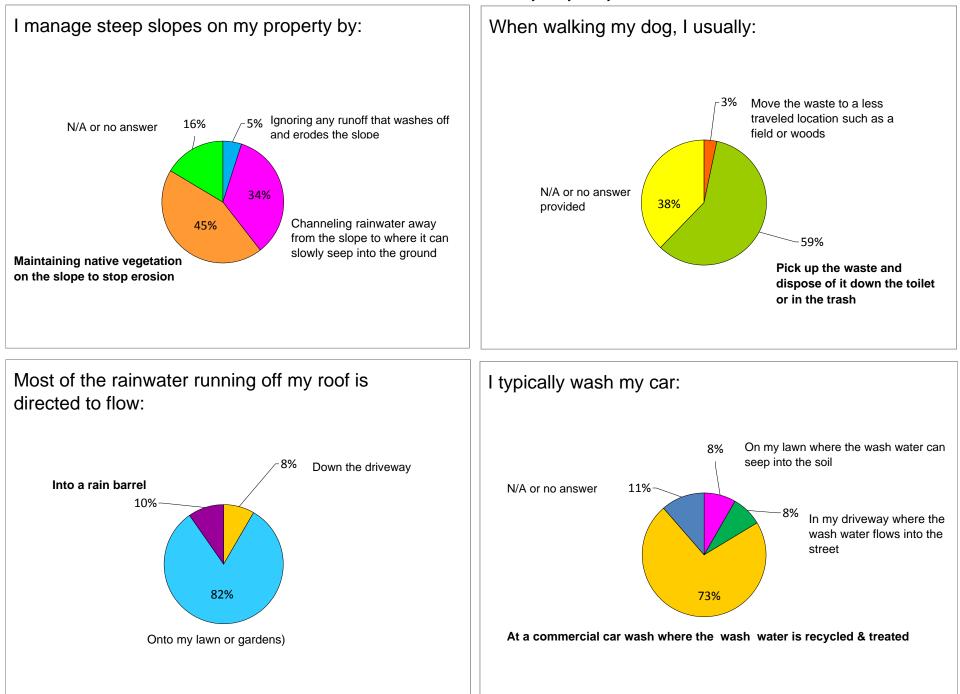
		Answers									
	Question Number	А	В	С	n/a	Total					
1	Litter habits:	1	38	22	0	61					
		А	В	С							
2	Storm drains:	2	30	29	0	61					
		А	В	С							
3	After my lawn is mowed, the grass clippings are:	2	32	-	2	61					
		А	В	С							
4	The following approach is used when fertilizing my lawn:	0	4	54	3	61					
		А	В	С							
5	I manage steep slopes on my property by:	3	21	27	10	61					
		А	В	С							
6	When walking my dog, I usually:	C	2	36	23	61					
		А	В	С							
7	Most of the rainwater running off my roof is directed to flow:	5	50	6	0	61					
		А	В	С							
8	I typically wash my car:	5	5	44	7	61					
		А	В	С							
9	Car care:	1	23	36	1	61					
		А	В	С							
10	My driveway is made of:	50	3	6	2	61					

Best answers are shown in bold.

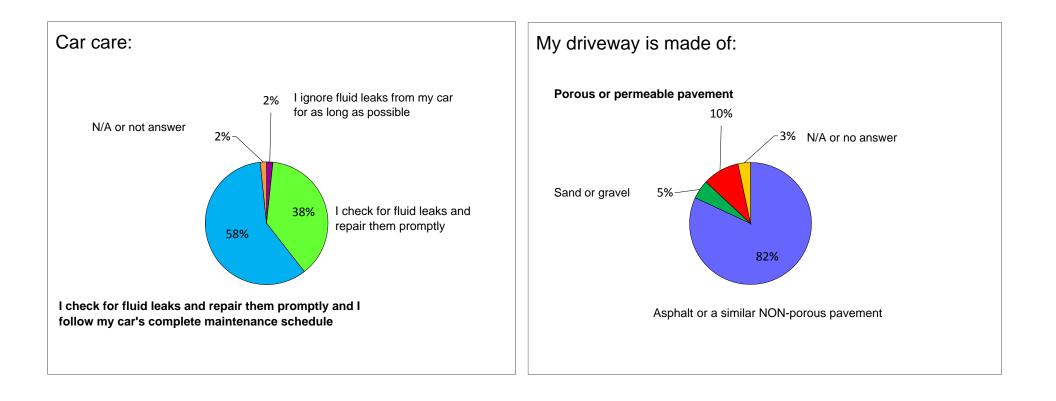
Results from Green Habits Survey: May - July 2011



Results from Green Habits Survey: May - July 2011



Results from Green Habits Survey: May - July 2011





Please Scoop the Poop!

Here's why:

Pet waste can cause environmental and health problems if it isn't disposed of properly.

Stormwater, the runoff water after it rains, may wash pet waste off the ground into ponds, streams or coastal waters, either directly or via storm drains. Pet waste contains germs and nutrients that can be harmful to human health and to our waterways.

Please help keep our local waters clean:

Pick up after your pet.

- Dispose of pet waste by flushing it down the toilet or putting it in the trash.
- >>> Never throw pet waste into a storm drain or waterway.

Picking up pet waste is not only good for the environment, it's also courteous and it gives you insight into your pet's health.



For more information visit our website: www.ci.newton.ma.us/stormwater; or go to www.stormwatermatters.org



Municipal Staff Training for Phosphorus Reduction October 12, 2011, 10 am-2pm

Utilities Service Building 60 Eliot Street, Newton Highlands, MA 02461



Photo Source: Stormwater Compliance LLC

Charles River Watershed Association will be joined by Stormwater Compliance, LLC to conduct a half-day, detailed training program on municipal phosphorus reduction for staff from Public Works and Parks & Recreation Departments, City of Newton, MA. Topics covered will include improved playing field management and maintenance techniques (low- or no-fertilizer approaches, vegetation management, good housekeeping), techniques to enhance operations and maintenance practices at DPW facilities, structural BMP maintenance, demonstration of street sweeping and introduction to a simple tracking tool to quantify phosphorus reduction.

The training is also open to staff from other municipalities in the lower Charles River watershed, but since space is limited and lunch will be provided, we are requesting that staff from other municipalities RSVP to Alexandra Ash at 781.788.0007 ext. 200 or <u>aash@crwa.org</u> by October 10th 2011. This training is funded by the EPA Source Reduction Assistance Grant Program. For questions regarding the training, please contact Pallavi Mande at 781.788.0007 ext. 232 or <u>pmande@crwa.org</u> and for more information on the Charles River Municipal Phosphorus Reduction Program visit http://www.crwa.org/projects/psourcecontrol.html



Municipal Staff Training on Phosphorus Reduction October 12, 2011, 10 am-2 pm

Utilities Service Building 60 Elliot Street, Newton Highlands, MA 02461

Agenda

10:00 - 10:10 - Welcome and Introductions (Maria Rose, Newton DPW)

10:10 - 10:20 – Project Goals and Training Objectives (Kate Bowditch, CRWA)

10:20 - 10:30 – Phosphorus free fertilizer use and low impact development (LID) best management practices (BMP) maintenance case studies (Kate Bowditch, CRWA)

10:30 - 11:00 – Techniques to enhance operations and maintenance practices at DPW facilities, structural BMP maintenance and street sweeping (Gregg Novick, Stormwater Compliance LLC)

11:00 - 11:30 - Introduction to a tracking tool for quantifying phosphorus reduction (Julie Wood, CRWA)

11:30 - 12:10 - Discussion on current town practices and existing barriers to improving stormwater management practices (CRWA & City Staff)

12:10 - 12:40 – Lunch

12:40 - 1:10 – Vacuum Sweeping Demonstration (Gregg Novick, Stormwater Compliance LLC)

1:10 - 1:50 – Hands on training on DPW facility maintenance practices (Gregg Novick, Stormwater Compliance LLC)

1:50 - 2:00 - Training wrap up



Stormwater Utility Districts: Success Stories From New England

A New Approach to Financing Stormwater Management: Stormwater Utility Districts Second in a Workshop Series

November 17, 2011 Culinary Arts Museum, Johnson & Wales Providence Campus 2:30 pm – 5:00 pm

Program

2:30-3:00 Light Refreshments and Registration

3:00-3:15 Introduction, Topher Hamblett, Save the Bay

3:15-4:45 Panelist Discussion

Moderated by James Riordan, AICP, LEED AP, Fuss & O'Neill, Inc.

- Thomas J. DiPietro Jr., Stormwater Superintendent South Burlington Stormwater Utility City of South Burlington, VT
- Maria P. Rose, CFM Environmental Engineer Department of Public Works City of Newton, MA
 - Brutus Cantoreggi Director
 Department of Public Works
 Town of Franklin, MA

4:45-5:00 Discussion with Panelists

5:00 Wrap-up and Adjourn, Elizabeth Scott, Rhode Island Department of Environmental Management

What Is The Workshop About?

This workshop will feature a panel comprised of municipal officials with experience in establishing stormwater utilities in their communities. Panelists from nearby Massachusetts as well as South Burlington, VT will share their experiences including how they arrived at a stormwater utility, practical realities, and how the steady revenue stream provided by the utility impacts programmatic efforts and capital improvement projects. Each panelist will speak for approximately 20 minutes immediately followed by a 10 minute question and answer period to facilitate discussion.

Who Should Attend?

Public works directors, council members, managers, planners and other board/commission members

Advisory to communities participating in the Phase II Stormwater Education and Outreach Program: MS4s attendance at this workshop is **mandatory**.

How Do I Register?

Cost is **FREE** but registration is required. Please visit our website (<u>www.uri.edu/ce/wq/NEMO/Workshops-Support/index.htm</u>) for registration details. **Please register early.** Space is limited and registrations will be accepted in the order received.

What Are The Other Workshops In The Series?

October 25, 2011 Managing Stormwater in Tough Budget Times

January 26, 2012 Stormwater Utilities: Rhode Island Moves Forward



From:	Maria Rose <mrose@newtonma.gov></mrose@newtonma.gov>
To:	Jane Maddox <jmaddox25@yahoo.com></jmaddox25@yahoo.com>
Subject:	(Fwd) (Fwd) Re: river monitoring
Copies to:	Julie Wood <jwood@crwa.org>, "Kate Bowditch" <kbowditch@crwa.org>,</kbowditch@crwa.org></jwood@crwa.org>
Date sent:	Tue, 29 Nov 2011 16:01:49 -0500

Jane,

I am not sure if anyone from the City has replied to your email, so I wanted to reply and let you know that I will look into this right away and will collect a sample early tomorrow morning. The following attachment shows a photo of the City's outfall pipe closest to Lyons Field. We identify it as NEW-58/58A (two 36" diameter pipes, that are usually partially under water). Based upon your description this where I think you are talking about. Is that correct? If not please provide more details (e.g., closest address, landmarks, etc.).

Unfortunately, there is a good chance that the discharge you described has stopped by now. If you reply back with a phone # or home address, I will drop off a sterile sample container and gloves for you to collect a sample - should the milky yellow-brown

discharge re-appear.

Maria

------ Forwarded message follows ------From:"Fred Russell" <frussell@newtonma.gov>To:mrose@newtonma.govDate sent:Tue, 29 Nov 2011 14:49:13 -0500Subject:(Fwd) Re: river monitoringSend reply to:frussell@newtonma.govPriority: normal

Maria,

Can you check this out in your travels?

Fred

Frederick W. Russell, PE Director of Utilities City of Newton Dept. of Public Works 60 Elliot Street Newton, MA 02461 (617) 796-1640

------ Forwarded message follows ------Received: from spooler by newtonma.gov (Mercury/32 v4.62); 29 Nov 2011 12:21:14 -0500 X-Envelope-To: frussell@newtonma.gov From: "Dave Turocy" <dturocy@newtonma.gov> To: frussell@newtonma.gov <frussell@newtonma.gov>, "Griffey Karen" <griffey@newtonma.gov> Date: Tue, 29 Nov 2011 12:18:29 -0500 MIME-Version: 1.0 Subject: Re: river monitoring

Attachment C

2011 Stormwater Outfall Sampling and Inspection Locations

			Size	April	May	June	July	August	Sept	o ^{ct.}	H04.	Dec
Outfall ID	Location	Туре	(inches)	Ph A	Mer	70.	20.0	AU	500	0°	H ₀	\$ °
	Saw Mill Brook Parkway (100' from end of							_				
NEW-01	the road) Wells Ave - south; across from #120	RCP	60		1			Dry				
NEW-02	(approx. 30 ft from Rd)	Concrete	36					Dry				
11211 02	Wells Ave - north (Country Club Brook)	001101010	00		1			Diy				
NEW-03	Across from #60	Culvert	48x72					Dry				
	#1 Wells Ave - Commercial Bldg. Parking							· · · · ·				
NEW-03A	lot; 150' Southwest of Rd)	Concrete	12					Dry				
	#1 Wells Ave - South Parking Lot 100'	0	40					_				
NEW-03B	West of NEW-3A #1 Wells Ave - Behind Building across	Concrete	12					Dry				
NEW-03C	from loading area	HPDE	8					Dry				
11211 000	#1 Wells Ave - north parking lot; approx.		Ŭ		1			Diy				
NEW-03D	40' from end of lot	Concrete	12					Dry				
NEW-04	Off Nahanton St @ the access road to the	Concrete	12					,				
NEVV-04	park; near NEW-04	Concrete	12					Dry				
NEW-04 B	Off Nahanton St. close to NEW-04	Concrete	12					Dev				
	Winchester St. 250' left of entrance to							Dry				
NEW-04A	Nahanton Park	Concrete	15					Dry				
NEW-04C	Winchester St. Across access rd from	CMP	12					_				
	NEW-4A	-						Dry				
NEW-05	Wallace Ave @ Rivers Edge	Concrete	15					Dry				
NEW-06	Charles River Terrace @ Rivers Edge	Concrete	15					Dry				
NEW-07	Bank St. @ Rivers Edge	Concrete	24									
	Christina St. between #85 and Old RR	Concrete	24					Dry				
NEW-08	Bridge	Concrete	12					Dry				
	Parking Lot at #25 Christina St. Rear lot		1					,				
NEW-09	Upstream of building	PVC	10- ¹ / ₂ "					Dry				
NEW-09A	Parking Lot at #25 Christina St. Rear lot	PVC	10									
	Upstream of building	1.10	10		-	-					-	
NEW-09B	Parking Lot at #25 Christina St. Rear lot, Behind building	PVC	10									
	Parking Lot at #25 Christina St; 4'					-						
NEW-09C	Downstream of NEW-09	RCP	12									
NEW-09D	Parking Lot at #25 Christina St, just	PVC	10			Privately	owned outfalls	s. Inspected an	d sampled in p	past years.		
INE W-03D	downstream of bldg	1 00	10									
NEW-09E	320 Needham St. Parking Lot, Near Suite	Concrete	12									
	150 320 Needham St. Parking Lot; 125'	1			1	_						
NEW-09F	Upstream of bridge	PVC	10									
		0	40				1			1		
NEW-10	Needham St. in wall @ Bridge West Bound	Concrete	12						Dry			
NEW-11	Needham St Culvert, South Meadow Brook	Culvert	60 x72						_			
L								<u> </u>	Dry			
NEW-12	Abbott St. @ end of road	PVC	10						Dry			
		D.0.D	40					1	Diy			
NEW-13	Williams Ct @ End of Rd	RCP	12						Dry			
NEW-13A	Williams Ct @ 50' Down from NEW-13	VCP	8									
			~			1			Dry		l	

			Size	à		-81		August	\$			
Outfall ID	Location	Туре	(inches)	April	May	June	JUNY	AU9	5ept	0 ^{ct.}	40 ^{4.}	Dec
NEW-13B	Saco St. Apt on right @ the end of the Complex and the edge of River	Concrete	15						Dry			
NEW-13C	TV Tower off Chestnut St 30 ft SE of last utility pole	CMP	8						Dry			
NEW-14	River Ave.@ End of Rd	Concrete	12						Dry			
NEW-15	Elliot St.Eastbound next to bridge	RCP	36						Dry			
NEW-15B	Elliot St. Westbound next to bridge	Concrete	15						Dry			
NEW-16	Ellis @ Rt 9E exist east side of small spillway. (Hemlock Gorge)	Concrete	12						Dry			
NEW-16B*	Ellis @ Rt 9E Exit West side of small spillway, 30' Upstream (Hemlock Gorge)	Concrete	12						Dry			
NEW-17	Quinobequin Rd. @ RT. 9 West on ramp 50' from on-ramp	Concrete	30						Dry			
NEW-17A*	Quinobequin Rd. @ RT. 9 West on ramp close to City line	Concrete	12						Dry			
NEW-18	Quinobequin Rd. 100' downstream of Rt. 9 on-ramp	Concrete	12						Dry			
NEW-18A*	Quinobequin Rd. across driveway of House # 744	Concrete	18						Dry			
NEW-19	Quinobequin Rd. across from house #696 and near utility pole #369-79 (Dresser	Concrete	72									
NEW-19A	Quinobequin Rd; 75' downstream of NEW- 19	DI	4									
NEW-20	Quinobequin Rd.NW side of Dresser Brook Pond	Concrete	24									
NEW-21	Quinobequin Rd. @ Radcliff Rd	VCP	8									
NEW-22	Quinobequin Rd. 200' Downstream of Radcliff Rd	Concrete	12									
NEW-22A*	Across From #584 Quinobequin Rd. (350' east/southeast of Larkspur)	HPDE	24									
NEW-23	Quinobequin Rd. @ Larkspur (New outfall installed summer 2005)	Concrete	24									
NEW-24	Quinobequin @ York Rd.	Concrete	12									
NEW-24A	Quinobequin Rd (40 ft upstream of NEW- 25)	Concrete	10									
NEW-25	Quinobequin @ Gould Rd	VCP	30									
NEW-25A	Quinobequin Rd Between House #486 & #494 (across the Road)	Concrete	12									
NEW-26*	Quinobequin Rd Between House #478 & # 470 (across the Rd)	Concrete	18									
NEW-27	Quinobequin @ Annawan	PVC	14									
NEW-27A	Quinobequin Rd. 150' Downstream of Annawan Rd	Concrete	12									
NEW-27B	Quin Rd. 75 ft downstream of Irwin Rd	Concrete	12									
NEW-28	Quinn Rd. between house #350 & #360 across the Rd	VCP	12									
NEW-28A*	Quinn Rd. across from house #328 [State owned]	DI and VCP	10"/10"				Ī					

Outfall ID	Location	Туре	Size (inches)	April	May	June	July	August	Sept	o ^{ct.}	N04.	
NEW-29	Quinobequin & Carlton Rd	Concrete	18		Wet	Dry						
NEW-29A*	Quinobequin Rd across from #286 [State Owned]	Concrete	15		Wet	Dry						
NEW-30	Quinobequin Rd & Dhwinda	VCP	10		Wet	Dry						
NEW-30A*	Quinobequin Rd Across from #242 [State	Concrete	10									
NEW-30B*	Owned] Quinobequin Rd Across from #216 [State	Concrete	10		Wet	Dry						
NEW-30C*	Owned] Quinobequin Rd Across from #196 [State	Concrete	10		Wet	Dry						
NEW-30D*	Owned] Quinobequin Rd Across from #188 [State	Concrete	10		Wet	Dry						
NEW-30D*	Owned] Quinobequin Rd Across from # [State				Wet	Dry						
	Owned] Quinobequin Rd Across from #164 [State	Concrete	10		Wet	Dry						
NEW-31a* NEW-31B*	Owned] Rt. 128 South Near natural gas pump	Concrete HDPE	10 10				MassDOT	owned outfalls				
	station close to Rd [State Owned] Rt. 128 South Near natural gas pump						Massbol	owned outlans				
NEW-31C*	station at Rivers Edge [State Owned] Quinobeguin Rd.100' downstream to	CMP	12			1	i		1			
NEW-32	access Rd for NEW-31B /31C	Concrete	36		Wet	Dry						
NEW-32A	Quinobequin Rd. 3 ft from NEW-32	Concrete	24		Inacc	essible						
NEW-33	Wales St. between Washington St	VCP	24			Dry						
NEW-34	Washington St. near Executive Park Drive	VCP	12			Dry		Wet				
NEW-35	Washington St. #2300 Next to Elderly Housing	Concrete	15			Dry & Wet						
NEW-35A	Washington St. #2300 Next to Elderly Housing; 2 ft from NEW-35	Concrete	12			Dry & Wet						
NEW-36	2310 Washington St. Parking lot [Close to Post office]	Concrete	24			Dry		Wet				
NEW-36A	Washington St behind Post office	Concrete	12			Dry		Wet				
NEW-37	Washington St between liquor store and post office	Concrete	12			Dry		Wet				
NEW-38	Washington St Lower Falls under bridge West-bound side	VCP	12"			Dry		Wet				
NEW-39	Concord St across from cemetery	Concrete	10			;		Wet				
NEW-40	Concord St.@ Hagar Path, just over fence in wall	Concrete	10					Wet		1		
NEW-41	Concord St. just Upstream of old RR Bridge	Concrete	15		1		 	Wet				
NEW-42	Grayson Lane at end; Straight out from pump to River	Concrete	12					Wet				
NEW-43	Concord St.at the Charles River (next to Leo J. Martin Golf Course)	Concrete	15					Wet				
NEW-44	Clearwater Rd (bet #74 -#78 at the River)	Concrete	36		1			Wet	1	1		
NEW-44A*	Deforest Rd @ River near Rt. 128 South [30 ft from Rt. 128: State Owned]	Concrete	30		1		 1	Wet				
NEW-44B*	Rt. 128N to Exit 25 (Rt. 90) between Ramp & 128 North; approx. 225 ft from River	Concrete	30							I	I Ingradient i	
NEW-44C*	Rt. 128 North after exit 23-25; approx. 430 ft past old RR bridge	Concrete	12					State-owned outfalls, no place to sample upgradient in line				

Outfall ID	Location	Туре	Size (inches)	April	May	June	JUNY	August	sept	o ^{ct.}	Non.
NEW-45*	Rt. 128; 300 Ft East of Deforest Rd				y MassHighw						
	Rt. 128N @ Rt. 90 exit 23 Recreation Rd;	a .			ĺ	Ĺ	<u>+</u>	1			
NEW-46	450 ft past old RR bridge	Concrete	12					Wet			
	Rt. 128N to Exit 25 (Rt. 90); Approx. 125						!	wei			
NEW-46A		Concrete	12								
Ļ	downstream from NEW-44B							Wet			
NEW-47	Grove Stbehind Riverside MBTA; approx.	Concrete	60								
	360 ft downstream from Recreation Rd	Concrete	00				:	Wet			
	Grove Stbehind Riverside MBTA; approx.	Concrete									
NEW-48	500 ft downstream from NEW-47	Culvert	36 x48					Wet			
	Riverside Rd behind DCR building 75 ft						t				
NEW-49	from bridge	CMP	18				:		Wet		
							8		vvei		
NEW-49A	Central St between 387 & 399 @ River;	PVC	12								
	approx. 30 ft U/S from Foot bridge	-							Wet		
NEW-49B	Riverside Rd near Antiques mall 100'	VCP	5								
INC W-43D	upstream of RR Bridge	VCI	5						Wet		
		0	10				:				
NEW-50	Evergreen behind fences next to Rt. 90E	Concrete	12				I		Wet		
	Oakland Ave. between #69 & Rt. 90 on-		1	1	1	1		†		1	
NEW-51		Concrete	18				I		M/ot		1
	ramp							<u> </u>	Wet		
NEW-51A	So. Side of Bridge @ Commonwealth Ave.	Concrete	12				I				1
	(20' upstream from bridge)								Wet		
NEW-51B	North Side of Bridge @ Commonwealth	CMP	12				I	1			
	Ave. (20' downstream of bridge)	CIVIE	12					1	Wet		
	Comm Ave @ Canoe/Kayak bldg (150 ft	.	4.0				1				
NEW-52A	west of building) inaccessible	Concrete	18				1		Wet		
	Marriott Parking Rear Lot (NE corner,						1		WCI		
NEW-53	approx. 65 ' from catch basin)	Concrete	18						Wet		
									vvei		
NEW-54	Malvern Terrace between #17 and #9 @	Concrete	12				-				
	Rivers Edge	001101010								Wet	
	Between #264 Islington Rd and #1 Malvern	Comente	12								
NEW-55	Terrace @ Rivers edge	Concrete	12								
	Islington Rd East of #296 under wood dock										
NEW-56	at rivers edge	Concrete	12								
	Duffield Rd. #37 northeast corner, approx.						ū				
NEW-57		Concrete	12								14/-1
	60' from house										Wet
NEW-58	Comm Ave Lyons Field, approx. 140' from	Concrete	36 (twin)	1	1		I				
	minor league home plate	33		I	<u> </u>		<u> </u>			<u> </u>	Wet
NEW-58A	Comm Ave Lyons Field, approx. 100' from	Concrete	12								
AQC-AA TN	minor league home plate	Concrete	12	1	1						Wet
	Chaske Ave @ Kaposia, 50' north of pump			1	1		l	İ			
NEW-59	house pipe	VCP	15								Wet
							ł			1	vvel
NEW-60	West Pine St. at Auburndale Playground	PVC	14							10/	
			l	I	I			ļ		Wet	
NEW-60 A	83 Staniford Ave Back lot of Condos	Concrete	12	1	1						
	behind Pine Trees	0010101010		1	1		<u>I</u>				
	Staniford St behind Shed of #79 Back side	Comment	40								
NEW-61	of hill in woods	Concrete	12	1	1		I			Wet	
	Staniford St 285' away from #19 back side		1	1	1	1		†	1		
NEW-62	of landfill behind fence	Concrete	60	1	1		I			M/ot	
							-	<u> </u>		Wet	
NEW-63	Riverview Ave. #209; Southeast corner in	concrete	12				I	1			
50	Parking lot			1	1					Wet	
NEW-64	Forest Grove Dewatering Pump	DI	15				I				
	Forest Grove Dewatering Fump	וט	15							Wet	
	Desident Asia	0145	<u> </u>	1	1			1		1	
NEW-65	Rumford Ave.	CMP	60								Wet
				1	1		ł	1		1	*****
NEW-65A	Rumford Ave.	DI	18				:				14/-/
							I				Wet
	DMH: Decatur St. in Cemetery at Waltham										

Outfall ID	Location	Туре	Size (inches)	April	May	June	JUN	August	Sept	O ^{ct.}	MON.	Dec
NEW-67	DMH @ 200 North St	Concrete	14									Wet
NEW-68	Albemarle Rd. (Cheesecake Brk)	Fieldstone	4ft x 8ft								Wet	
NEW-69	Bemis St. End of the road; 75' out from the road	Concrete	12								Wet	
NEW-70	Wyoming Rd. @ Parkway 100 ft from the road	Concrete	12									Wet
NEW-71	Thaxter St. at Parkway						ļ					Wet
NEW-72	California St.& Colonial Ave (under walk way bridge)	VCP	15				į					Wet
NEW-73	Bridge St. (Upstream side of bridge)	CMP	24				ļ					Wet
NEW-74	California St. behind house #315	VCP	20				Ì					Wet
NEW-74A	California St. West of #440 Post (225' W of the bldg)	Concrete	15				!					Wet
NEW-74B	California St. behind #440, 20' west of path sitting area @ river	Concrete	12									Wet
NEW-75	Rustic St. at the end of the Rd	DI	12									Wet
NEW-76	California St - Derby Brook	Culvert	48 x 36									Wet
NEW-77	Jackson Rd in Left Field: LAUNDRY BROOK	Culvert	72 x 144				į					Wet
NEW-78	Boyd St. @ South Park St on South Park	Concrete	20				İ					Wet
NEW-79	Centre St @ Carleton, 30' North of Hydrant	Concrete	12				İ					Wet
NEW-80	Nonantum Rd. near Island for Maple Street at Rivers Edge	VCP	10				!					Wet
NEW-80A*	Nonantum Rd. behind #62 Maple St @ Rivers Edge	VCP	10				State-owned	l. Newton no lo	onger monitorii	ng this locatior	ı	
NEW-81	Nonantum Rd Behind the end of Maple St - Hyde Brook	Culvert	60 x 66									Wet
NEW-81A*	Nonantum Rd. 20' Downstream from Hyde Brk	VCP	15				-					
NEW-82*	Nonantum Rd. Approx. 170' downstream from NEW-81	Concrete	10									
NEW-83*	Nonantum Rd. behind #23/#25 St. James Ter.	Concrete	10				State-owned.	Newton no lon	ger monitoring	g these location	ns	
NEW-84*	Nonantum Rd. behind #57/59 Charlesbank Rd	Concrete	10		1							
NEW-85C*	Nonantum Rd. behind #49 Charlesbank Rd [Unable to locate]	Concrete	10		1							
NEW-86	Nonantum Rd. 250' Upstream from Yacht club (2 lines)	RCP/ CMP	12				ļ					Wet

Notes:

Dry = dry weather inspection and sample if flowing Wet = wet weather sample to be collected and documented

† Outfall discharges to ground and is a significant distance from the Charles River.

* - State owned outfalls: 16B, 17A, 18A, 22A, 24A, 25A, 30A-30C, 31A -31C, 44A-44C, 46A, 80A, 81A, 82, 83, 84, 85