

Municipality/Organization: City of Newton, MA

EPA NPDES Permit Number: MAR 041080

MaDEP Transmittal Number: W- W-039247

Annual Report Number No. 12

& Reporting Period: April 2014 –March 2015

NPDES PII Small MS4 General Permit Annual Report April 2015

Part I. General Information

Contact Person: David Turocy

Title: Public Works Commissioner

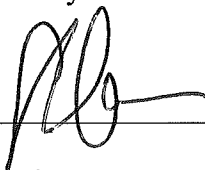
Telephone #: 617-796-1000

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:

4/28/15

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 located, and underground pathways or conduits to our drainage systems exist. Newton is proactively investigating and eliminating illicit connections to the storm drainage system when discovered. 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 12 with respect to MS4 General Permit goals and objectives.

Administrative

- Budgeted \$752,900 in FY15 for stormwater management and capital projects.
- Completed a Stormwater Infrastructure Improvement Plan which includes an assessment of our streams, drainage infrastructure and IDDE program, and the development of a Capital Improvement Plan (CIP) spanning 20 years.
- Proposed an increase in our stormwater user fees to begin funding the Stormwater CIP in FY2016.

Programmatic & Drainage System

- Sections of storm drains are routinely inspected (video camera) for water quality issues (based upon sample results) and flow conveyance. As needed these drain lines are cleaned (i.e., roots cut and sediment removed) by DPW.
- A 10-year Sewer Capital Improvement Plan was developed and implementation commenced in 2013. Although Newton's sanitary sewers are separate from our drains, there are locations where indirect cross-communication between sewers and drains may occur due to aging infrastructure. The Sewer CIP rehabilitates and restores the sewer mains.

Good Housekeeping & Illicit Discharge Detection and Elimination

- Our 2014 Household Hazardous Waste (HHW) collection program ran from May 10th through October 25th. Last year, we collected more than 42 Tons of HHW and Universal waste material that may otherwise find its way into the trash or the storm drain system. Please see Attachment A for a detailed breakdown from the Environmental Affairs division and visit: <http://www.newtonma.gov/gov/dpw/recycling/default.asp>
- The Parks and Recreation Department strives to use little pesticides. 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

- Several 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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
1.1	Develop Stormwater Press Release	DPW Utilities, M. Rose	Submit annual press release to newspaper / CATV.	ôTips for draining pools and spasô was submitted to the NewtonTAB on Sept. 4, 2014.	Re-run press release or develop a new one.
Revised				Alderman Crossley wrote an article titled ôWater Undergroundô which was published in the Newton Conservators Fall 2014 newsletter. The article discusses Newton's sewer and stormwater infrastructure and the need to invest and maintain this infrastructure. Copies provided in Attachment B.	Waiting for new permit requirements.
1.2	Develop Stormwater Web Site	DPW Utilities, M. Rose	Prepare web site on stormwater issues.	Complete. http://www.newtonma.gov/gov/dpw/water/stormwater.asp	None, BMP complete. Continuance under BMP 1.4
Revised					
1.3	Develop Stormwater Brochures	DPW Utilities, M. Rose	Distribute brochures to target groups	Newton purchases material from the SuAsCo's Stormwater Community Assistance Program. We also distributed door hangers in neighborhoods when pet waste is found in our storm drains.	BMP Complete. However, new brochures and literature will be continually added to our stock, as needed.
Revised					
1.4	Provide Stormwater News on City's web site	DPW Utilities, 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.
Revised					
1.5	Establish Volunteer Database	DPW Utilities, 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.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
1.6	Partner with Schools	DPW Utilities, M. Rose	Obtain and distribute educational resources to schools.	We continued to offer stormwater School Education Programs; see website for info: http://www.newtonma.gov/gov/dpw/water/stormwater.asp	Continue with implementation of various school education and partnering programs.
Revised				During this permit period, staff visited the Jackson School and presented a hands-on watershed lesson to three 5 th grade classes. Visit was made on January 14, 2015.	
1.7	Develop Education Program	Environmental, E. Gentile and M. Rose	Implement stormwater pollution prevention program	April / May is óGreenUp Newtonô where we promote and host various educational programs at locations throughout the City including: the river clean-up, a rain barrel and compost bin sale and demonstrations. In addition to our educational efforts, Green Decade Newton Coalition, the Newton Conservators and Crystal Lake Conservancy offer workshops, special events and newsletters that educate our community on a variety of topics, including natural landscaping, pesticide reduction, recycling, how to reduce our carbon footprint and more. <i>See Attachment B</i> for more information and visit www.greendecade.org	Continue promoting water conservation, organic and environmentally-friendly lawn care methods and no phosphorus fertilizers.
Revised					
1.8	Partnering with Watershed Associations	Engineering, L. Taverna DPW Utilities, M. Rose	Attend meetings and partner with the Crystal Lake Working Group	Newton supports CRWA programs and initiatives including workshops and the Annual Charles River Clean-up. A new group óCrystal Lake Working Groupô was formed under the direction of the Parks & Recreation Dept. in the summer of 2012. The group is comprised of members from Crystal Lake Conservancy, Friends of Crystal Lake, engaged residents and City Staff. The mission of the group is to investigate and make recommendations to protect and preserve the Lake.	Maintain collaboration with the CRWA and/or the Crystal Lake Working Group.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
2.1	Establish Stormwater Advisory Committee	DPW Utilities, F. Russell	Committee to meet once per year	BMP Completed in prior years.	None.
Revised					
2.2	Implement Public Meetings for Citizen Input	DPW, D. Turocy M. Rose	Hold meetings once per year, publish results.	Opportunities for public input include Public Facilities and other Board of Alderman sub-committee meetings, as well as the Crystal Lake Working Group meetings.	None, coverage under new Permit.
Revised					
2.3	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.
Revised					
2.4	Network with Local Community Groups	Engineering, M. Rose D. Turocy	Observe outfalls, report illicit discharges & stream clean-up.	Staff attends one meeting per year of the Friends of Hemlock Gorge (FHG) and the Crystal Lake Conservancy. We support these groups' efforts and address any concerns as the need arises.	Continue to provide support to these groups and foster a partnership approach with the City.
Revised				M. Rose gave a presentation at the NEWEA Watershed & Stormwater Mgmt. Conference on October 16, 2014.	
2.5	Implement Storm Drain Marking Program	Utilities, T. Jerdee M. Rose	Volunteers mark catch basins with decals.	Permanent storm drain markers were installed next to catch basins in village centers. Storm drain stenciling is completed by volunteers on a rolling basis as groups ask to do so.	BMP Complete. Continue with storm drain marking program as need arises.
Revised					
2.6	Promote Community Clean-Up day	Parks & Recreation; & M. Rose	Promote annual community clean-up day	Newton Serves was held on April 27, 2014. Volunteer groups target specific areas of the City for clean-up and revitalizing. For more info, visit: http://newtoncommunitypride.org/NewtonSERVES.html Green Decade Newton Coalition has taken over the role of Regional Volunteer Coordinator for the Annual Charles River Clean-up Day in April.	Continue with annual community clean-up day. See also BMP 1.8

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
3.1	Establish Stormwater System Map	DPW Utilities, F. Russell	Update GIS information, locate all outfalls.	BMP previously completed.	BMP Complete.
Revised					
3.2	Establish Stormwater Database Management System	Utilities, T. Jerdee	Add stormwater information to Hansen database.	BMP previously completed.	BMP Complete.
Revised					
3.3	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.
Revised					
3.4	Review existing Ordinances & determine whether they adequately prevent Illicit Discharges	Engineering, L. Taverna DPW Utilities, F. Russell	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 Fall 2015.
Revised					
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 we inspected and where flowing collected samples at 58 outfalls.	Continue with efforts to find and remove indirect and direct illicit discharges.
Revised					
3.6	Establish Illicit Discharge Hotline	DPW Utilities, M Rose	Receive and track citizen reports of illicit discharges.	Hotline established (customer service center). We received 1email on December 29, 2015 for orange discolored water in Wareö's Cove. It	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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
Revised				turned out to be naturally occurring iron bacteria.	
3.7	Train Employees	DPW 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	DPW Utilities, T. Jerdee M. Rose	Observe major outfall discharges.	A comprehensive outfall monitoring program has been in place since 2006. During this reporting period 58 outfalls were inspected during wet or dry weather events with sampling occurring whenever flow is detected. A summary of our stormwater outfalls and which were inspected / sampled in 2014 is provided in Attachment C.	Continue with implementation of IDDE program.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
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 process. Most construction projects regardless of size are required to provide soil erosion control measures.	BMP Complete.
Revised				DPW has two inspectors who ensure the measures shown on Approved Site Plans are implemented.	
4.2	Implement Review of Construction Documents	Engineering, J. Daghlia	Establish policy for submittal of erosion control plans.	BMP Complete.	BMP Complete. Continue with plan reviews for building permits.
Revised					
4.3	Implement Construction Inspection Program	Engineering, J. Daghlia	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.
Revised					
4.4	Educate Developers on Proper Erosion Control Techniques	Engineering, J. Daghlia / M. Rose	Distribute erosion control procedures to all applicants.	Engineering requires erosion control BMPs for all construction.	BMP Complete. Continue with implementation.
Revised					
4.5	Provide opportunity for citizen review and input on construction projects	Engineering, J. Daghlia	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.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
4.6	Establish Information Management System	Engineering, J. Daghljan	Track construction reviews and construction inspections.	An inspector is assigned to all construction projects ≥ 1 acre (as well as many < 1 ac). This person maintains a personal field log book of key events.	BMP complete. Continue with implementation.
Revised					
4.7	Establish Standards for Erosion and Sedimentation Controls	Engineering, J. Daghljan	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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
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	BMP Completed in prior year.	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	Develop Stormwater Operations and Maintenance Policy	Engineering, J. Daghljan	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.
Revised					
5.4	Implement Controls to Minimize Impacts to Water Quality	Engineering, J. Daghljan and Utilities, 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.
Revised					
5.5	Encourage Reducing Directly Connected Impervious Surfaces	Engineering, J. Daghljan M. Rose	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.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
5.6 Revised	Determine Capacity of Stormwater System Elements	Engineering, J. Daghljan & Dir. of Utilities	Perform capacity analysis for wet weather events.	A segment of Hammond Brook where it moves from open channel to pipe flow was studied and determined to be under-capacity. In July 2014 we were awarded a grant to help fund the design and construction to upgrade this culvert. Design work commenced in the fall 2014.	BMP Complete.
5.7 Revised	Review existing Ordinances and determine whether they adequately regulate recharges to groundwater	Engineering, J. Daghljan	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. Daghljan	Explore adaptation of MADEP SWMP Standard 3	Engineering requires implementation of MADEP SWMP Standard 3 for all construction projects > 1 acre.	BMP Complete.
5.9 Revised	Implement Post Development Peak Discharge Rates	Engineering, J. Daghljan	Implement adaptation of MADEP SWMP Standard 2	Engineering requires implementation of MADEP SWMP Standard 2 for all construction projects > 1 acre.	BMP Complete.
5.10 Revised	Implement Requirements for Removal of 80% TSS	Engineering, J. Daghljan	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.

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
6.1	Develop Staff Training Program	Environmental, E. Gentile M. Rose	Train staff on spill prevention control, vehicle maintenance and lawn care.	Completed in prior years.	BMP Complete.
Revised					
6.2	Develop Stormwater Pollution Prevention Plan	Environmental, E. Gentile M. Rose	Develop spill prevention control procedures.	Good housekeeping practices are in place based upon a self-audit of DPW Yards conducted previously; however, improvements can be made.	Develop a Stormwater Pollution Prevention Plan for DPW Yards.
Revised					
6.3	Develop Flood Mitigation Plan	Utilities, T. Jerdee	Develop plan, perform exercises.	BMP Complete.	Continue field exercises and update the flood mitigation plan, as needed.
Revised					
6.4	Establish Inspection Procedures	Utilities, T. Jerdee	Inspect storm drain system using visual inspection and CCTV.	Storm drains are inspected with our CCTV truck on an as needed basis and: to troubleshoot infrastructure problems, prior to paving / pavement restoration and as part of the IDDE program.	Continue to inspect storm drain system.
Revised					
6.5	Incorporate BMPs into Standard Procedures	Utilities, T. Jerdee	Establish BMPs for municipal operations and maintenance.	Stormwater BMPs are designed into new or redevelopment projects for City-owned property, most recently would be the new Angier School design and water quality inserts in the storm drains around Crystal Lake.	BMP Complete. Review needs for other stormwater retrofit / improvement projects.
Revised					
6.6	Establish Maintenance Procedures	Utilities, T. Jerdee	Vector/flush storm drains to remove sedimentation	Cleaned approximately 8,367 LF of the City's storm drainage system and 7076 catch basins were cleaned during this reporting period.	BMP Complete. Continue with implementation.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
6.7	Establish Maintenance Procedures	Utilities, T. Jerdee	Clean drainage brooks to remove sedimentation.	No drainage channel or brook maintenance work was completed during this reporting period.	Begin funding work in our Stormwater Infrastructure Improvement Plan.
Revised					
6.8	Establish Maintenance Procedures	Utilities, T. Jerdee	Clean catch basins every 2 years.	We cleaned 7,076 catch basins during this reporting period.	Continue with catch basin cleaning program. Annually we clean half of our 13,000 catch basins (between 6,500 -7000 per year)
Revised					
6.9	Establish Maintenance Procedures	Highway, Brian Zaniboni	Sweep streets 2 times per year.	All city streets were swept a minimum of 4 times in 2014 with village centers and main streets swept 5 times per week for 36 weeks of the year.	Continue with street sweeping program.
Revised		Delete Zaniboni Add E. Gentile			
6.10	Establish Maintenance Procedures	B. Zaniboni	Calibrate salt spreaders annually.	Salt spreaders calibrated fall 2014.	Calibrate salt spreaders every year.
6.11	Implement Household Hazardous Waste Program	Environmental, E. Gentile	Collect waste oil, antifreeze, paint, pesticides.	Household Hazardous Waste (HHW) is collected one to two days per week from May through October. See memo from Env. Affairs in Attachment A.	BMP Complete. City will continue to operate HHW collection facility.
Revised					

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
7.1	Check Criteria for Meeting TMDL	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					
Revised					

7a. Additions –N/A

7b. WLA Assessment – N/A

Part IV. Summary of Information Collected and Analyzed

Please refer to Part IIA ñ 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 ñ 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 FY16	(\$)	\$1,900,000

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	1,000
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 15 th Annual Earth Day Charles River Cleanup; numerous community groups participated in Newton)	(y/n or mi.)	7+ miles
Household Hazardous Waste Collection Days (<i>May 2014 to Oct. 2014</i>)		
▪ days sponsored	(#)	18
▪ community participation	(%)	42%
▪ Material collected: CRTs, auto & button batteries, fluorescent bulbs, paint, waste oil, thermostats, thermometers, and elemental mercury. (<i>some of which are collected year round</i>)	(tons or gal)	See Attachment 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	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	(#) (est. gpd)	9 2,000+
% of population on sewer	(%)	98.5
% of population on septic systems	(%)	1.5

Construction

Number of construction starts (>1-acre): Angier School.	(#)	1
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed (work is on-going)	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections 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	(#)	7,076
Storm drains cleaned	(LF or mi.)	8,367 LF
Qty. of screenings/debris removed from storm sewer infrastructure	(tons)	1896
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill cover
Cost of screenings disposal	(\$)	\$ 29,578

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	4
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	10+
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: (óN/Aô = never used; ó100%ô = elimination)		
▪ Fertilizers	(lbs. or %)	30 %
▪ Herbicides	(lbs. or %)	75 %
▪ Pesticides	(lbs. or %)	75 %
* 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)	Y

Attachment A

Copies of:

Memo from Newton's Director of Environmental Affairs on HHW and
Universal Waste Collection days and Rain barrels sold in 2014

Department of Parks and Recreation's 2014 Pesticide Usage

**CITY OF NEWTON
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL AFFAIRS**

Memorandum

TO: Maria Rose, Environmental Engineer
FROM: Elaine Gentile, Director of Environmental Affairs
DATE: April 15, 2015
RE: NPDES Info
CC: David Turocy, Commissioner

HHW/Universal Waste Information:

1. Number of rain barrels sold: 47
2. Number of hhw collection days: 18
3. Number of universal collection days: 300
4. Percent population: 42% (Based on 611 cars for hhw, 13,000 cars for universal)
5. Universal collection B/D:
 - Elemental Hg: 11 lbs
 - Waste oil/auto/antifreeze: Approx 4.00 T
 - Batteries: 3,922 lbs
 - Paint swap: 26.8 T

Note: There are now many outlets for people to recycle appliances, crts, etc. We therefore cannot track this accurately. Also, since Freon is no longer in many appliances, these appliances are now counted as metal only.

6. HHW Collection: 8.55 T
7. Thermometers (40): 46 units
8. Thermostats: 81 units
9. Barometers: 0 units
10. Fluorescent Bulbs: 55,166 lf
11. Compacts: 6,300 units
12. U-tubes: 688 units
13. HID: 0 units
14. Circular: 33 units
15. UV Tanning Bulbs: 50

Street Sweeping:

- All 1,400 streets were swept 4 full sweeps and a fifth partial
- 29 main streets and 13 village squares were swept 180 times (5x/week @ 36 weeks); 17 municipal parking lots and 23 school and municipal building parking lots were swept 4 times

City of Newton
Department of Parks and Recreation
Division of Maintenance
2014 - 2015 Pesticide Usage

These pesticide applications occurred from April 2014 - March 2015.

HERBICIDE	AMOUNT USED	DATE	LOCATION
1. Roundup	.73 gallons	5/6/14	NNHS mulch beds
2. Roundup	.6 gallons	5/7/14	NNHS mulch beds
3. Roundup	1.33 gallons	5/8/14	NNHS mulch beds
4. Roundup	1.33 gallons	5/12/14	NNHS mulch beds
5. Roundup	.6 gallons	6/18/14	Burr Park tennis courts
6. Roundup	1.33 gallons	8/1/14	City Hall mulch beds
7. Roundup	1.0 gallon	8/5/14	Public Building Dept mulch beds

6.92 gallons

This herbicide was applied by Derek Mannion of the Newton Parks and Recreation Department.

Attachment B

Public Education and Outreach Materials

Charles River Watershed Association's

15th Annual Earth Day

CHARLES RIVER CLEANUP

Saturday, April 26, 2014 from 9:00am - 12:00pm



Make a difference in your community this Earth Day!

#charlesrivercleanup

Join over 4,000 volunteers for one of the largest single-day river cleanups in the country!

All volunteers will receive cleanup supplies, snacks and an official 2014 Charles River Cleanup T-shirt!

Register online at www.charlesriver.org/cleanup.html



The 15th Annual Earth Day Charles River Cleanup is organized by:



STATE SENATOR
BROWNSBERGER

WHEN:

Pick up date:
Saturday, April 26
9am to 11am

WHERE:

Recycling Depot at
115 Rumford Ave
in Auburndale



- 100% recycled containers
- Versatile design
- Choice of three environmentally compatible colors
- 20 years of satisfied customers

WHY A RAIN BARREL?

Have you ever wondered how much water runs off your roof?

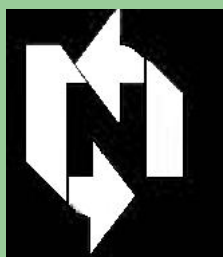
During a typical moderate storm, over 700 gallons of water will run off the average 1200 sq.ft roof.

That same roof will shed over 4,000 gallons of water from April to August.



The Great American Rain Barrel Company

And the City of Newton Department of Public Works



Division of
Environmental
Affairs

Department of Public Works
1000 Commonwealth Avenue
Newton, MA 02459

Phone: 617.796.1000

Website:
www.newtonrecycles.com

The City of Newton DPW is selling rain barrels to residents at 40% off retail!
Newton residents can purchase rain barrels from The Great American Rain Barrel Company for **\$69!**

Order online at

www.greatamericanrainbarrel.com

or Call 800 - 251 - 2352

e-mail: info@tgarb.com

Orders must be placed by April 19th



News Details

Newton Celebrates International Compost Awareness Week, May 5-10

Compost: The Solution to Sustainable Soil and Water



April 14, 2014

Newton residents are being encouraged to try composting as another way of helping the environment and diverting the waste that goes in the trash carts.

Residents can sign up for a tour of the Compost Facility at the Resource Recovery Center at Rumford Ave to see first-hand how the leaves and yard waste collected curbside is turned into valuable compost! Tour attendees will be entered in a raffle for a chance to win a home composting bin. Tours will be offered Wednesday, May 7th at 11am and on Saturday, May 10th at 1pm.

On Thursday, May 8th residents can sign up for a free Home Composting workshop – learn how to turn your spoils into soil! Workshop attendees will be entered in a raffle for a chance to win a home composting bin. Held at Newton City Hall, War Memorial Auditorium at 7pm.

All residents are encouraged to visit the Recycling Depot at Rumford Ave and take home small quantities of compost free of charge. The Depot is open Monday-Saturday from 7:30am-2:30pm.

According to the U.S. EPA, more than a quarter of what we throw away is organic kitchen and garden material. This could easily be turned into compost and the nutrients put back in to the garden. Composting is not only great for the garden, it also diverts a lot of waste from landfills and incinerators. With increasing numbers of people dedicated to recycling, home composting is rapidly becoming a key way that everyone can get involved on a daily basis. Since Newton began selling home composting bins in 2000, over 1200 units have been sold! Newton offers two types of composting bins, starting at \$40, plus tax. Kitchen scrap buckets are also available. Stop by City Hall, 1000 Commonwealth Ave, to purchase one. Once purchased, bins are picked up at the Recycling Depot.

To sign up for events and to learn more about the benefits of composting, please visit newtonrecycles.com or call Customer Service at 311 (617.796.1000 from cell phones)

[Sign up for the Compost Site Tour, Wednesday, May 7th at 11am or Saturday, May 10th at 1pm](#)

[Sign up for the Home Composting Workshop, Thursday May 8th at 7pm](#)

1000 Commonwealth Ave, Newton Centre, MA 02459

Tel: 617-796-1000 **TDD/TTY:** TRS 711 | **Mon. - Fri.** 8:30 am - 5:00 pm **Tue.** 8:30 am - 8:00 pm

Directions to City Hall

[About Newton](#) • [City Government](#) • [Residents](#) • [Businesses](#) • [Schools](#) • [How Do I?](#) • [My Nev](#)



**Over-feeding
our lawns may also
green our rivers
and ponds!**

Green Lawns Without Green Waters!

Applying more fertilizer than the label recommends or your soil needs won't improve your lawn, and instead the extra fertilizer may wash off into nearby waterways. Just as fertilizer helps plants grow on the land, it encourages algae and other aquatic plants to grow in water. Dense weeds and algae reduce oxygen in the water, which in turn harms fish and other aquatic life. "Green water" is also much less attractive for boating, swimming and other human uses.

Please help keep our local waters clean:

- 🐟 Test your lawn soil and calibrate your spreader.
- 🐟 Use fertilizers, pesticides, and herbicides sparingly. Sweep any overspray back onto the lawn.
- 🐟 Mow 2.5 to 3 inches high with a sharp blade to encourage dense growth and deter weeds.
- 🐟 Leave grass clippings on the lawn to lessen the need for fertilizer.
- 🐟 Never discard yard waste down storm drains or into waterways.
- 🐟 Water deeply and infrequently, and time watering to avoid evaporation and runoff.
- 🐟 Reseed bare areas with drought-tolerant varieties of grass.

**For more information, visit our community's website
or go to www.stormwatermatters.org.**



**NEWTON
CONSERVATORS**

F A L L I S S U E

NEWSLETTER

Newton's land trust working to preserve open space since 1961

WWW.NEWTONCONSERVATORS.ORG • FALL 2014

Officers and Directors

2014

Beth Wilkinson,
President

George Mansfield,
Vice President

AnnaMaria Abernathy,
Secretary

Katherine Howard,
Treasurer

Beth Schroeder,
Past President

Board of Directors

Margaret Albright

David Backer

Dan Brody

Lalor Burdick

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Michael Clarke

Margaret Doris

Henry Finch

Robert Fizek

Maurice Gilmore

Daniel Green

William Hagar

Chris Hepburn

Ted Kuklinski

Jane Sender

Larry Smith

Willis Wang

Water Underground

By Alderman Deborah Crossley



Over the past two years, Newton has accomplished a lot of good work that you cannot see.

That is, the city has been steadily and planfully investing in restoring our sewer and water systems. This year we have set our sights on restoring the stormwater system – that vast network of catch basins, main drains, open streams and culverts that are there to keep our neighborhoods and village centers above water.

Many Conservators are aware that Newton's stormwater system is in need of much repair, that heavy rainstorms cause periodic flooding in some areas around the city, and, as well, that new state requirements are forthcoming that will exact more stringent standards of water quality where our storm water discharges into the environment. Many have observed that the level of system maintenance is inadequate to keep the existing vast network of catchbasins and pipes clean and well functioning.

Neither flooding nor pollution are acceptable outcomes: we want a plan that will bring us to an effective and reliable stormwater management system for the city that will have the least impact on the environment.

When I last wrote to the Conservators in late 2012, (www.newtonconservators.org/storm_water.htm), the city had only begun to implement the strategic plan to restore Newton's sewer and water systems, adopted and funded with the July 2012 (FY13) budget. We drew big plans and they are fully underway.

In fact we have accelerated the sewer restoration work to put the city on track to complete that work in ten, rather than eleven, years. This is the work to clean, line and repair – and occasionally replace – the public sewer mains and manholes in ten Project Areas comprising the entire city.

Remember, work to repair our leaky sewer system is essential and important to keeping our groundwater and stormwater outflows clean. In particular, over a century ago about 70 miles of Newton's sewer mains were installed over underdrains designed to remove water from utility trenches and to divert the natural ground water to allow for development. These are being systematically disconnected and sealed off from the sewer mains as we restore each section of the sewer system. In addition to restoring capacity to the system, cleaning and lining of pipes to remove infiltration (ground water seeping



Continued on page 2

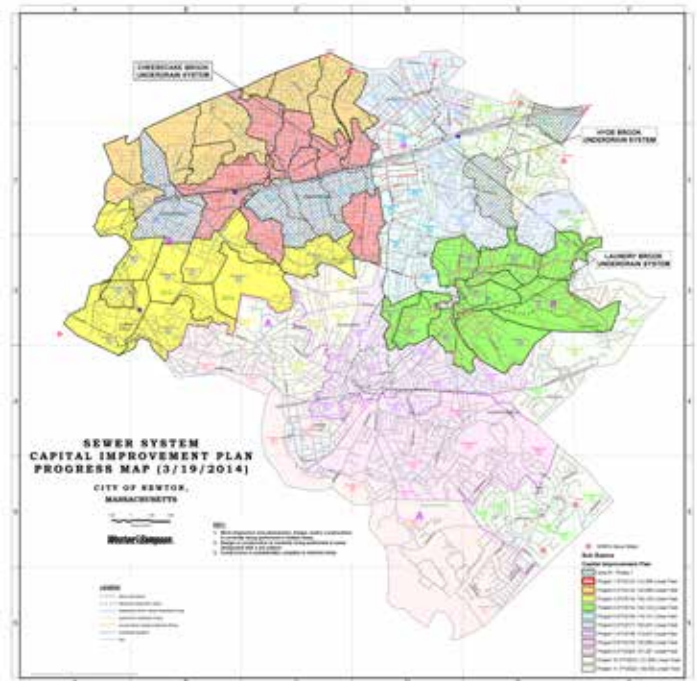
So, sewer work is going forward according to plan, and we are beginning to reap the benefits of reducing the amount of clean water Newton pays to process at Deer Island. Weston & Sampson have been engineering solutions and overseeing construction operations; our assertive long-range planning has been recognized by the MWRA; and, in addition, Newton is in line for some significant additional monies in new MWRA grant/loan programs that will be ready to use starting July 2015 (FY16).

Our stormwater system required further investigation before we could begin to understand the scope of work ahead. The information we had was incomplete and not organized in a useful way.

After interviewing several firms, the project to conduct a citywide stormwater system assessment and develop a Stormwater Infrastructure Improvement Plan (SIIP) was awarded to Weston & Sampson engineers. They hit the ground running, completing all of the field investigation and assimilation of data over the spring and summer. In addition, they have drafted criteria we can use to prioritize the work, which we are reviewing in light of how much work the city can fund and manage in the short and longer term.

Remember that Newton's stormwater system comprises a vast network of interconnected parts, pieced together over a century of development on land that was once laced with open waterways. The water is, of course, still there, but has been engineered to get it 'out of the way' of our homes and neighborhoods. It is captured via over 12,750 catch basins that have to be kept clean and funneled through about 320 miles of main drains, walled open stream beds and underground culverts.

Engineers walked over 14 miles of stream beds, photographed debris, sediment, etc., identified all 200+ interior inlets and outfalls (to and from culverts), noting conditions. We can now complete the map of the entire system, both above and below ground. They identified and mapped ten flood prone areas around the city. In each case, the problem is defined, visible conditions measured and photographed (such as sediment and debris in open stream beds and culverts), a scope of work anticipated – and needed information identified. It is a comprehensive investigation, sufficient to bring us to the strategic planning stage.



What is the nature of the work that is indicated?

There are many repairs to be made to improve the conditions of system elements. We can see crumbling outfalls, spalled concrete, undermined masonry walls fallen into confined stream beds, sediment deposits and debris. There will certainly be some pipe replacements needed. Another way to look at initial projects, however, would be to address a range of repairs specific to resolving problem areas—particularly in flood prone areas. Repairs to improve capacity via increased on-site absorption may as well involve naturalizing certain areas, such as has been proposed for Cheesecake Brook.

Over the next few months, our consultants will be working with city staff from both public utilities and environmental engineering to help us evaluate and to prioritize the work over a period of time, according to relative levels of urgency. The City is planning to incorporate work into next years' capital improvement plan and budget. We are on track to have a plan by the end of the calendar year and to present it to the Board of Aldermen early in the new year.

Which brings us to a big question: *How do we pay for this additional work?*

Newton was among the first Massachusetts communities to establish a stormwater utility fund. We each pay a flat fee into this fund every quarter – and have been for many years. Residents pay \$25/year, and commercial businesses pay \$150/year. The fund accrues about \$750,000 annually,

but this is not sufficient to cover more than adequate maintenance, operations and small repairs. There is little left over for capital work.

We hope to implement a stormwater fee that is based on impervious area, a proposal first made a few years ago. The goal is to generate sufficient funds to do the capital work and as well as funding a maintenance program that protects our investment.

Using a typical residential property as a base unit (and they are remarkably consistent), commercial rates would vary according to the amount of impervious area they own. So restructured, the corner barber shop would pay a nominal fee, but a mall with a huge parking lot would pay many more times that fee.

What can you do? Stay tuned.

Both the League of Women Voters' Environmental committee, the new Green Decade Water committee and many members of the Newton Conservators have been following our work, including several who have related expertise. We welcome your input. This fall and winter, there will be several meetings of the Board of Aldermen to discuss the stormwater work to and consider rates and the funding plan.

Although many of the participants have changed, the Water-Sewer-Stormwater (WSS) working group continues to meet regularly to review progress and further our goals. Alderman Fuller and I provide updates to the Board of Aldermen several times a year in the Board Friday packet. ■

Wilderness Act Turns Fifty

The Wilderness Act was signed by President Lyndon Johnson fifty years ago—on September 3, 1964. That act set created 54 wilderness areas, a total of 9.1 million acres of land.

The act defined a wilderness as “an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.”

In the past fifty years, the extent of the protected wilderness has grown to 750 areas and 110 million acres (approximately 5% of the land in the United States), and thirty additional areas await the approval of Congress. In an article on Huffingtonpost.com, Senator Edward Markey points out that areas such as Georges Bank, the Arctic National Wildlife Refuge and the Red Rock wilderness in Utah are yet to be protected.

What was not foreseen in 1964 is the way that humans would affect those wilderness areas through climate change, leading to a marked increase in invasive plant species, a change in water patterns from decreased snow pack (with more flooding in winter and drought in summer), and the



shift of species of plants and animals and decreased biodiversity as the climate warms. Those issues may well lead us to reconsider the current hands-off management approach—not only to wilderness tracts but also to our local conservation lands

For more on the current state of the wilderness in our country, see Senator Markey's thoughts about how we can do more to protect the wilderness at http://www.huffingtonpost.com/rep-ed-markey/from-walden-pond-to-wilde_b_5759694.html.

There is an interesting and well-researched overview of how climate change is likely to affect those areas at www.fs.usda.gov/ccrc/topics/wilderness.

Ron Meador at MinnPost provides an interesting overview of writing on the wilderness at www.minnpost.com/earth-journal/2014/09/happy-50th-wilderness-act-excerpts-weeks-best-coverage. ■

—Beth Wilkinson

President's Message

As you undoubtedly know, the mission of the Newton Conservators is to promote the creation and preservation of open space in the city. Our members fulfill our mission in a variety of ways, including leading the fascinating walks listed at the end of this issue, overseeing the invasive-plant pulls described in Katherine Howard's article, and sponsoring the informative talks at our annual meeting and at the library throughout the year.

The Conservators hold the conservation restrictions on eight properties owned by the city (including the Commonwealth Golf Course and the public path by Levingston Cove at Crystal Lake) and actually own three properties that were gifts from generous residents: Dexter Woods, Ordway Park, and Awtrey Dell. Caring for those properties is an important and demanding task for a small group of volunteers, and they need some help and support from other Conservators members and supporters.

This summer, several large red oaks in small Dexter Woods, the quarter-acre property on Dexter Road in Newtonville, needed attention. The trees, which grow along the bottom edge of the steep property, stretch toward the street and the properties on the other side to reach sunlight over the tops of the houses. Because only the tops of the trees reach the sunlight, all of the branches are clustered at the top of the trees, putting a lot of weight and stress on the healthy trunks. In July, one of the trunks broke. For safety, we thinned the tops of trees and had to remove one tree that could not be reduced further. We did, however, leave a 20-foot "snag," that will provide nourishment to insects and local birds that make their homes on the property.



Dexter Woods Tree Thinning

We give thanks to arborist Nate Ceniz of CedarlawnTree, who gave us a reduced price on the work and also offered to donate his time to supervise a volunteer cleanup day on the property this fall or next spring, whenever the poison ivy on the property has died back enough so that we can work without fear of an allergic reaction.

In the previous year, we worked on Ordway Park, the half-acre park in Newton Centre that was willed to the Conservators by Priscilla Ordway. Again with Nate's help, we cut back rotting tree limbs, removed Norway maple seedlings, and spent a morning working with our volunteers and neighbors to do general pruning and to put new woodchips on the path through the property that's enjoyed by many neighbors.

Next on our list is Awtrey Dell, the half-acre property in Newtonville that was donated by the Awtrey family and that's home to Hyde Brook. We are at work to install signage and to talk with Pam and Tony Awtrey about what needs to be done on the property.

The donors (and the neighbors at Ordway Park) set up funds to help pay for the care of the properties, but ongoing upkeep through the years requires the work of many volunteers and soon costs more money than the funds that were provided.

Over the coming months, we will turn to you, our members, for volunteer help. We also hope that when renewing your membership at year end, you will consider making an extra donation for the continuing maintenance of these sites.

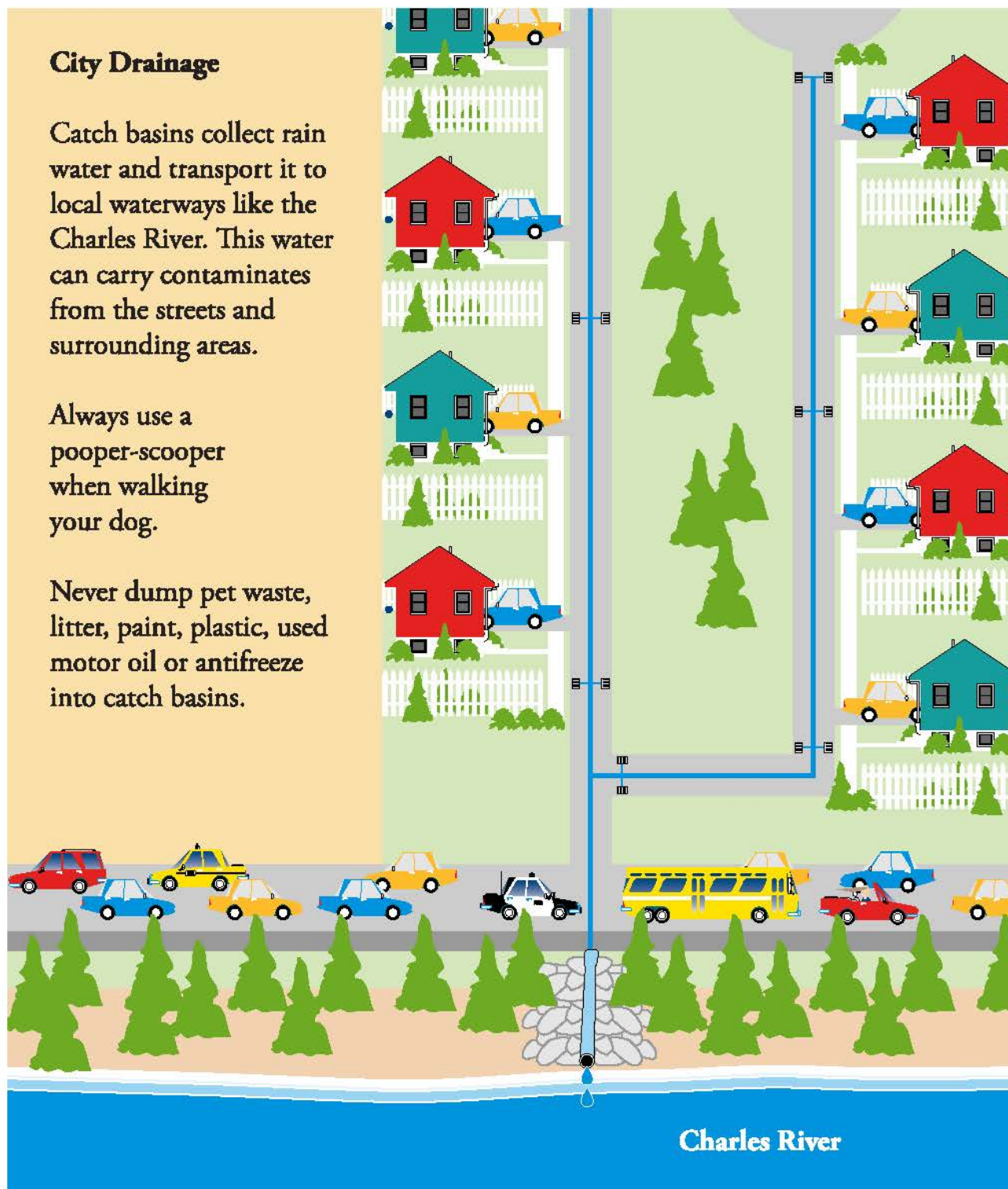
Beth Wilkinson

City Drainage

Catch basins collect rain water and transport it to local waterways like the Charles River. This water can carry contaminants from the streets and surrounding areas.

Always use a pooper-scooper when walking your dog.

Never dump pet waste, litter, paint, plastic, used motor oil or antifreeze into catch basins.



Understanding Newton's Sewer & Drain Collection Systems



This pamphlet is published by the Newton Department of Public Works. Its purpose is to increase public knowledge, understanding, appreciation and care of our water resources.



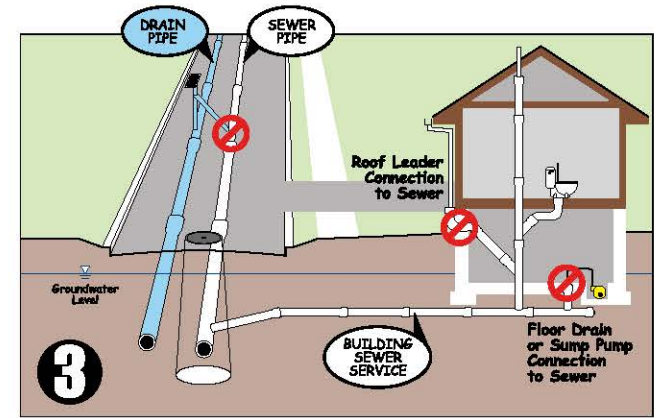
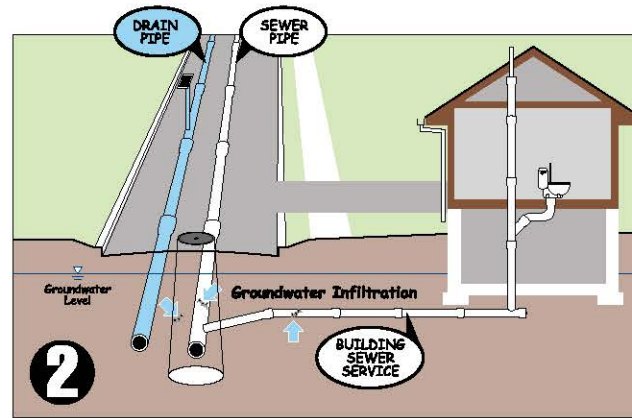
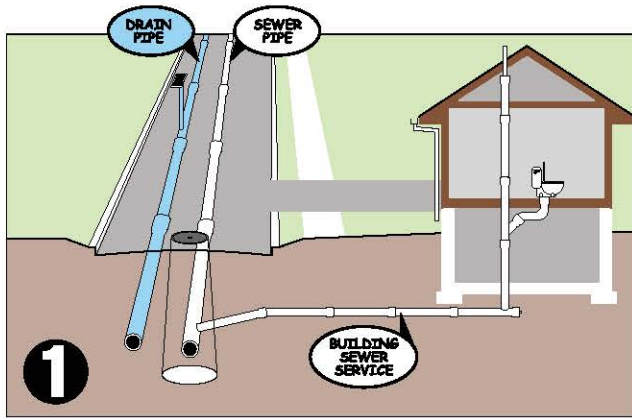


Figure 1

In Newton, there are two pipes that collect water underground. **Drain Pipes** carry rain water to local streams and ponds, and **Sewer Pipes** carry dirty water (wastewater) from homes to the Deer Island Wastewater Treatment Plant.

Figure 2

Infiltration is clean water from below the ground (known as groundwater) that enters sewer pipes through cracks in manholes and defective sewer structures.

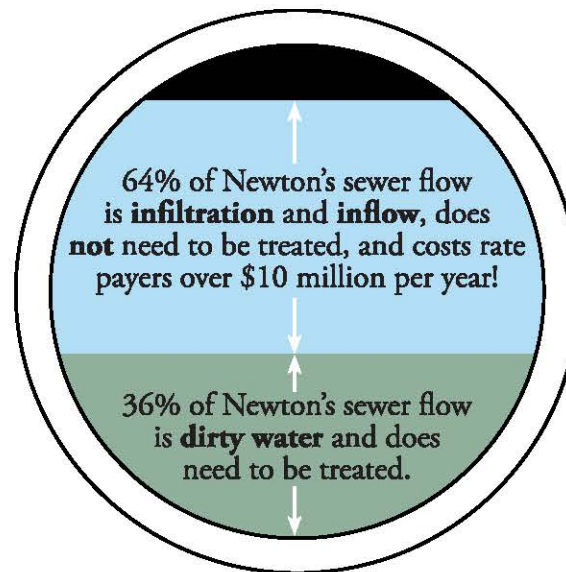
Figure 3

Inflow is rain water that enters sewer pipes through a mistake in the piping which directs rain water to the sewer pipe instead of the drain pipe.

Basement sump pumps are a source of Inflow and should NOT discharge into Newton's sewer system.

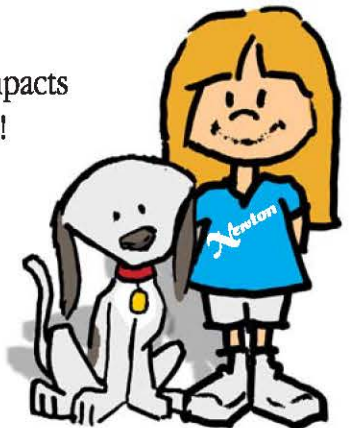


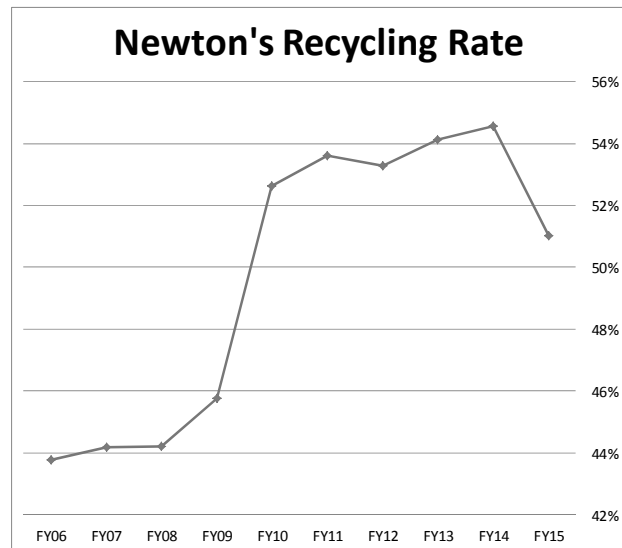
Deer Island Wastewater Treatment Plant



Inside of Sewer Pipe

Your behavior impacts our environment! Please do your part to help keep Newton's waters clean.





Keep up the great work! Since we switched to automated collections and single stream recycling, our overall recycling rate has been above 50% But there is still more work to be done, check out the tips on the next page!

how do I get involved?

Newton Recycles is always looking for volunteers to help with ongoing programs and work on one-time projects. Currently, we are searching for volunteers to help staff our Recycling Depot. We also welcome new members to the Solid Waste Commission.

how do I stay informed?

Sign up to receive our quarterly email newsletter, *The Green Bin*.

Like NewtonRecycles on Facebook

Follow us on Twitter @NewtonRecycles

questions?

For more information about our programs, to request a additional recycling cart, or to report any solid waste issues, please call **617.796.1000**,

visit our website www.newtonrecycles.com



Trimming your Waste-line!

Let's talk trash. Did you know that every year Newton residents throw away about 20,000 Tons of trash? That's enough to fill Fenway Park to the height of the Green Monster, a total of 38 feet!

simple things you can do:

1. **Recycle more!** Clip out the curbside recycling guidelines in this brochure and post on your fridge.
2. **Choose products with minimal packaging and buy in bulk.** Avoid individually-wrapped items. A jumbo box of cereal uses less packaging than several single serving-sized boxes, and saves you money!
3. **Choose durable, reusable products over single-use, disposable items.** Use cloth napkins instead of paper ones. Get your coffee in a refillable mug. Use canvas bags for shopping.
4. **Reduce junk mail.** Stop by City Hall for a free junk mail reduction kit or visit www.mass.gov/consumer to get your name off unwanted mailing lists.
5. **Reuse bags, containers, packaging material, and other items.**
6. **Compost.** Recycle leaves, grass, food scraps and paper towels into great garden soil.
7. **Donate unwanted items.** Visit our website for more information.
8. **Choose items with a recycled-content label.** This saves precious resources and closes the recycling loop! If you are not buying recycled, you are not really recycling.
9. **Keep toxic home and garden products out of the trash.** Learn about non-toxic alternatives and safe disposal on our website.
10. **Reduce your use of paper.** Use e-mail, get bank statements and newsletters on-line, and use the library.



Why Recycle?

- ✓ **SAVES MONEY!** For every 1 Ton we recycle, we save over \$50 in avoided disposal costs.
- ✓ **CREATES JOBS!** In general, recycling creates 6 times more jobs than landfilling or incineration.
- ✓ **SAVES ENERGY!** The energy saved from recycling 1 glass bottle will operate a 100-watt light bulb for 4 hours.
- ✓ **REDUCES GREENHOUSE GAS EMISSIONS!** Recycling 1 Ton of aluminum is equivalent to not releasing 13 Tons of CO₂ into the air.
- ✓ **PRESERVES NATURAL RESOURCES!** Recycling 1 Ton of paper saves 17 trees and 7,000 gallons of water.



**Newton
Recycles**

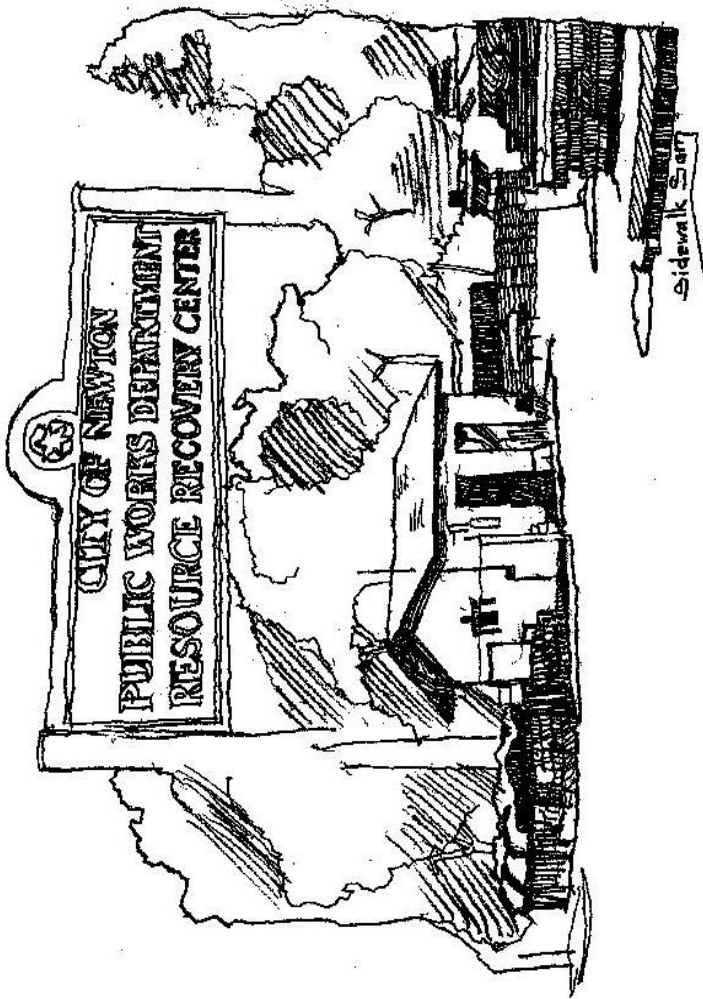
City of Newton
Public Works Dept.
1000 Commonwealth Ave.
Newton, MA 02459



Printed on recycled paper

2015

A Comprehensive Guide to Reducing Our Waste



Department of Public Works
1000 Commonwealth Avenue
Newton, MA 02459
617.796.1000
www.newtonrecycles.com



**More than
Just
Recycling:**

curbside guidelines* - it takes two, green and blue!

- Please use blue cart for trash and green cart for recycling. Contaminated carts will not be collected.
- Set carts out by 7am on your collection day or as early as 4pm the day before
- Please be sure your trash and recyclables fit into the carts. Close the lids. Please see below for information about extra trash or recycling
- Do not place paper, containers, or yard waste in plastic bags
- Place your cart within 3 feet of the curb with the handle facing the house
- Please keep 4 feet between your cart and other items—such as other carts, poles, cars, trees, etc.

(*for residents with municipal solid waste collection)

single stream recycling—simple as ever, just put it all together



- Place loose in green carts:
- cardboard and paperboard (cereal, shoe boxes, etc.)
 - newspapers, magazines, phone books, junk mail (envelopes OK)
 - all office paper (staples, paper clips OK)
 - all plastic bottles , leave caps ON, “check for the neck”
 - plastic food tubs (yogurt, cottage cheese)
 - glass containers (all colors)
 - aluminum pie plates, trays, and foil
 - metal cans (steel, tin, aluminum)
 - empty aerosol cans
 - beverage containers, drink boxes, milk/juice cartons

All items must fit into the recycling cart with the lid closed tight, bring extras to the Recycling Depot or...
Need another recycling cart?
Extra recycling carts are provided free-of-charge to residents. Requests accepted April-November.

- ✓rinse and flatten containers
- ✓place items loose in bin
- ✓DO NOT use plastic bags

Missed pick up?
If was out by
7am, please call
617.796.1000

please:

- No paper take-out containers
- No plastic bags
- No Styrofoam
- No plastic utensils
- No plastic toys
- No clothes hangers
- No window glass
- No dishes or glassware
- No Pyrex
- No light bulbs
- No paint cans
- No textiles



trash collection guidelines



Please recycle all paper, cardboard, glass, metal, and plastic containers. Recycling saves the City money and is required by City Ordinance. Help us promote waste reduction by donating or selling unwanted items in good condition: see our website or call for more information. To prevent litter, please do not place loose trash directly in the cart.

Bulky Item Pickup

The City will pick up 5 bulky items per week, please call by 3:30pm the business day before your collection day to schedule:

- tires (2 per week, no rims)
- carpets (cut, rolled and tied into bundles less than 4 ft.)
- lumber, lengths less than 4 feet in bundles less than 50 lbs.
- furniture } consider donation!
- mattresses }
- other oversized items that are not metal or plastic, bring these to Depot

Call a private hauler:

- construction materials (if useable, please contact the Building Materials Resource Center 617.442.8917)
- Odd items longer than 4 feet and heavier than 50 pounds



Appliances. Electronics

&Metals: Call for a special pick up:

- computers, monitors, and printers**
- TVs, stereos, etc.**
- Metal items—cabinets, shelving, etc*
- refrigerators, air conditioners, freezers*
- water heaters, stoves, washers and dryers, etc.*

*appliances, Freon, and metal items can be brought to the Depot
**electronics accepted the 3rd Fri and Sat of each month at the Depot. \$18/CRT

Bring to the Depot:

- motor oil
- fluorescent bulbs
- non-alkaline batteries
- mercury items
- Rigid plastic (lawn furniture, toys, barrels, etc)
- lawn mowers
- scrap metal
- appliances and freon items (or call for curbside pick up)
- household hazardous waste and paint (during collection times)



Have more trash than fits in your cart? For occasional overflow trash, you can purchase 33-gallon orange “overflow” bags at participating local stores; call or visit the website for details.

For regular amount of overflow trash, you can purchase an extra 35-gallon or 64-gallon cart for an annual fee. Payment of the annual fee must be current. You can pick up a form at Newton City Hall, 1000 Commonwealth Ave, Newton MA 02459 or purchase online.

www.newtonrecycles.com

617.796.1000

yard waste



Place in paper yard waste bags or barrel labeled “YARD WASTE” (stickers available at City Hall):

- leaves, grass and plants
- tree and shrub prunings and twigs
- wood chips and other vegetative matter
- bundle large limbs (6 inches or less in diameter) with rope or twine in lengths less than 4 feet and thinner than 3 feet in diameter.

How to prepare:

- face labels to the street
- branches must not protrude from the barrels
- bags and barrels must not exceed 40 gallons or 50 pounds
- do not use plastic bags
- do not use wire or plastic to bundle
- do not include: tree stumps, root balls, rocks, food, or trash

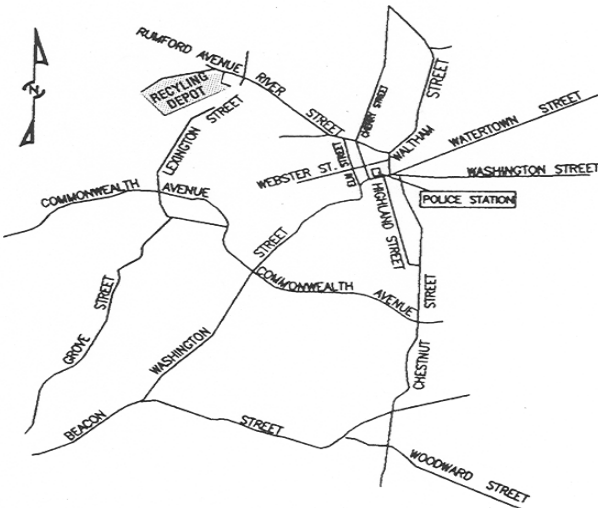
**Collection begins in April and runs through early December, weather permitting. Call for exact dates.

recycling depot—rumford ave resource recovery center

Monday—Saturday 7:30am-2:30pm, closed Sundays and Holidays. Please check during times of extreme weather (heat, snow, rain). City of Newton residents only; for material generated from Newton residences, no commercial or business materials. Proof of Residency required upon request.

BRING to the depot:

- Paper
- Plastic bottles; glass and metal containers
- Cardboard (unflattened OK)
- Non-alkaline batteries (alkalines are safe to throw in the trash)
- Clothing and fabric
- Clean expanded polystyrene (Styrofoam)
- Rigid Plastics (lawn furniture, toys, barrels, etc.)
- Scrap metal
- Lawn mowers, snow blowers, etc.
- Appliances and Freon items (or call for curbside pick up)
- Used motor oil, filters, and antifreeze
- Empty propane tanks
- Fluorescent bulbs and other mercury containing items such as thermostats, thermometers, and flowmeters
- Printer cartridges
- Cell phones



RUMFORD AVE RESOURCE RECOVERY CENTER

paint exchange:

May –October, Monday - Friday 7:30am-2:30pm

- Bring useable paint and paint products, cans must be at least half full and less than 3 years old.
- Small amounts of dried paint can be set out with the regular trash (remove lid and use kitty litter or sand to help dry)

Please, NO trash or yard waste collection at the DEPOT

home composting bins

Please consider composting your own leaves, grass clippings and food waste. Bins and kitchen scrap buckets are available for sale at City Hall. For a free guide, visit our website or call!



household hazardous waste

Drop-off collections are held at the Depot from mid-May to mid-October. Weather dependent. Proof of Residency REQUIRED. No more than 5 gallons of a single item accepted. No more than 5 gallons combined accepted.

Materials accepted include:

- Adhesives and glues
- Old paint products
- Hobby and art supplies
- Household cleaners
- Photo chemicals and chemistry sets
- Insecticides and weed killers
- Pool chemicals
- Floor and furniture polishes



To ensure safety:

- Leave materials in original container
- Tighten caps and lids
- Never mix chemicals
- Do not put into trash bags
- Never smoke while handling hazardous materials

Visit our website for more information!

Attachment C

2014 Stormwater Outfall Sampling and Inspection Locations

Attachment C
2014 IDDE Inspections and Outfall Sampling Plan (ACTUAL)

Outfall ID	Location	Type	Size (inches)	Jan	Feb	March	April	May	June	July	August	Sept	Oct.	Nov.	Dec
NEW-01	Saw Mill Brook Parkway (100' from end of the road)	RCP	60						Wet						
NEW-02	Wells Ave - south; across from #120 (approx. 30 ft from Rd)	Concrete	36						Wet						
NEW-03	Wells Ave - north (Country Club Brook) Across from #60	Culvert	48x72						Wet						
NEW-03A	#1 Wells Ave - Commercial Bldg. Parking lot; 150' Southwest of Rd)	Concrete	12	Privately owned outfalls. Inspected and sampled in prior years. No longer test.											
NEW-03B	#1 Wells Ave - South Parking Lot 100' West of NEW-3A	Concrete	12												
NEW-03C	#1 Wells Ave - Behind Building across from loading area	HPDE	8												
NEW-03D	#1 Wells Ave - north parking lot; approx. 40' from end of lot	Concrete	12												
NEW-04	Off Nahanton St @ the access road to the park; near NEW-04	Concrete	12						Wet						
NEW-04B	Off Nahanton St. close to NEW-04	Concrete	12						Wet						
NEW-04A	Winchester St. 250' left of entrance to Nahanton Park	Concrete	15						Wet						
NEW-04C	Winchester St. Across access rd from NEW-4A	CMP	12	Connects to NEW-4A, no need to monitor in addition to 4A											
NEW-05	Wallace Ave @ Rivers Edge	Concrete	15						Wet						
NEW-06	Charles River Terrace @ Rivers Edge	Concrete	15						Wet						
NEW-07	Bank St. @ Rivers Edge	Concrete	24						Wet						
NEW-08	Christina St. between #85 and Old RR Bridge	Concrete	12						Wet						
NEW-09	Parking Lot at #25 Christina St. Rear lot Upstream of building	PVC	10-1/2"						Wet						
NEW-09A	Parking Lot at #25 Christina St.	PVC	10	Privately owned outfalls. Inspected and sampled in past years.											
NEW-09B	Parking Lot at #25 Christina St.	PVC	10												
NEW-09C	Parking Lot at #25 Christina St	RCP	12												
NEW-09D	Parking Lot at #25 Christina St	PVC	10												
NEW-09E	320 Needham St. Parking Lot, Suite 150	Concrete	12												
NEW-09F	320 Needham St. Parking Lot; 125'	PVC	10												
NEW-10	Needham St. in wall @ Bridge West Bound	Concrete	12						Wet						
NEW-11	Needham St Culvert, South Meadow Brook	Culvert	60 x72						Wet						
NEW-12	Abbott St. @ end of road	PVC	10						Wet						
NEW-13	Williams Ct @ End of Rd	RCP	12										Wet		
NEW-13A	Williams Ct @ 50' Down from NEW-13	VCP	8										Wet		
NEW-13B	Saco St. Apt on right @ the end of the Complex and the edge of River	Concrete	15										Wet		
NEW-14	River Ave. @ End of Rd	Concrete	12										Wet		
NEW-15	Elliot St. Eastbound next to bridge	RCP	36										Wet		
NEW-15B	Elliot St. Westbound next to bridge	Concrete	15										Wet		

Attachment C
2014 IDDE Inspections and Outfall Sampling Plan (ACTUAL)

Outfall ID	Location	Type	Size (inches)	Jan	Feb	March	April	May	June	July	August	Sept	Oct.	Nov.	Dec
NEW-16	Ellis @ Rt 9E exist east side of small spillway. (Hemlock Gorge)	Concrete	12										Wet		
NEW-16B*	Ellis @ Rt 9E Exit West side of small spillway, 30' Upstream (Hemlock Gorge)	Concrete	12	State-owned and no flow contribution from Newton (no sampling)											
NEW-17	Quinobequin Rd. @ RT. 9 West on ramp 50' from on-ramp	Concrete	30										Wet		
NEW-17A*	Quinobequin Rd. @ RT. 9 West on ramp close to City line	Concrete	12	State-owned and no flow contribution from Newton (no sampling)											
NEW-18	Quinobequin Rd. 100' downstream of Rt. 9 on-ramp	Concrete	12										Wet		
NEW-18A*	Quinobequin Rd. across driveway of House # 744	Concrete	18										Wet		
NEW-19	Quinobequin Rd. across from house #696 and near utility pole #369-79 (Dresser	Concrete	72										Wet		
NEW-19A	Quinobequin Rd; 75' downstream of NEW-19	DI	4										Wet		
NEW-20	Quinobequin Rd. NW side of Dresser Brook Pond	Concrete	24											Wet	
NEW-21	Quinobequin Rd. @ Radcliff Rd	VCP	8											Wet	
NEW-22	Quinobequin Rd. 200' Downstream of Radcliff Rd	Concrete	12											Wet	
NEW-22A*	Across From #584 Quinobequin Rd. (350' east/southeast of Larkspur)	HPDE	24											Wet	
NEW-23	Quinobequin Rd. @ Larkspur (New outfall installed summer 2005)	Concrete	24											Wet	
NEW-24	Quinobequin @ York Rd.	Concrete	12											Wet	
NEW-24A	Quinobequin Rd (40 ft upstream of NEW-25)	Concrete	10											Wet	
NEW-25	Quinobequin @ Gould Rd	VCP	30											Wet	
NEW-25A	Quinobequin Rd Between House #486 & #494 (across the Road)	Concrete	12											Wet	
NEW-26*	Quinobequin Rd Between House #478 & #470 (across the Rd)	Concrete	18	State-owned and no flow contribution from Newton (no sampling)											
NEW-27	Quinobequin @ Annawan	PVC	14											Wet	
NEW-27A	Quinobequin Rd. 150' Downstream of Annawan Rd	Concrete	12											Wet	
NEW-27B	Quin Rd. 75 ft downstream of Irwin Rd	Concrete	12											Wet	
NEW-28	Quinn Rd. between house #350 & #360 across the Rd	VCP	12											Wet	
NEW-28A*	Quinn Rd. across from house #328 [State owned]	DI and VCP	10"/10"	State-owned and no flow contribution from Newton (no sampling)											
NEW-29	Quinobequin & Carlton Rd	Concrete	18												Wet
NEW-29A*	Quinobequin Rd across from #286 [State Owned]	Concrete	15												Wet

Attachment C
2014 IDDE Inspections and Outfall Sampling Plan (ACTUAL)

Outfall ID	Location	Type	Size (inches)	Jan	Feb	March	April	May	June	July	August	Sept	Oct.	Nov.	Dec
NEW-30	Quinobequin Rd & Dhwindia	VCP	10												Wet
NEW-30A*	Quinobequin Rd Across from #242 [State Owned]	Concrete	10				State / DCR-owned outfalls								
NEW-30B*	Quinobequin Rd Across from #216 [State Owned]	Concrete	10												
NEW-30C*	Quinobequin Rd Across from #196 [State Owned]	Concrete	10												
NEW-30D*	Quinobequin Rd Across from #188 [State Owned]	Concrete	10												
NEW-30D*	Quinobequin Rd Across from # [State Owned]	Concrete	10												
NEW-31	Quinobequin Rd at Varick Rd	VCP	20				MassDOT owned outfalls								Wet
NEW-31a*	Quinobequin Rd Across from #164 [State Owned]	Concrete	10												
NEW-31B*	Rt. 128 South Near natural gas pump station close to Rd. [State Owned]	HDPE	10												
NEW-31C*	Rt. 128 South Near natural gas pump station at Rivers Edge [State Owned]	CMP	12												
NEW-32	Quinobequin Rd. 100' downstream to access Rd for NEW-31B /31C	Concrete	36												Wet
NEW-32A	Quinobequin Rd. 3 ft from NEW-32	Concrete	24												Wet
NEW-33	Wales St. between Washington St	VCP	24												Wet
NEW-34	Washington St. near Executive Park Drive	VCP	12												Wet
NEW-35/35A	Washington St. #2300 Next to Elderly Housing	Concrete	15												Wet
NEW-36	2310 Washington St. Parking lot [Close to Post office]	Concrete	24												
NEW-36A	Washington St.- behind Post office	Concrete	12												
NEW-37	Washington St.- between liquor store and post office	Concrete	12												
NEW-38	Washington St.- Lower Falls under bridge West-bound side	VCP	12"												
NEW-39	Concord St.- across from cemetery	Concrete	10												
NEW-40	Concord St.@ Hagar Path, just over fence in wall	Concrete	10												
NEW-41	Concord St. just Upstream of old RR Bridge	Concrete	15												
NEW-42	Grayson Lane at end; Straight out from pump to River	Concrete	12												
NEW-43	Concord St.at the Charles River (next to Leo J. Martin Golf Course)	Concrete	15												
NEW-44	Clearwater Rd (bet #74 -#78 at the River)	Concrete	36												
NEW-44A*	Deforest Rd @ River near Rt. 128 South [30 ft from Rt. 128: State Owned]	Concrete	30								State-owned outfalls, no place to sample upgradient in line				
NEW-44B*	Rt. 128N to Exit 25 (Rt. 90) between Ramp & 128 North; approx. 225 ft from River	Concrete	30												
NEW-44C*	Rt. 128 North after exit 23-25; approx. 430 ft past old RR bridge	Concrete	12												
NEW-45*	Rt. 128; 300 Ft East of Deforest Rd			REMOVED by MassHighway											

Attachment C
2014 IDDE Inspections and Outfall Sampling Plan (ACTUAL)

Outfall ID	Location	Type	Size (inches)	Jan	Feb	March	April	May	June	July	August	Sept	Oct.	Nov.	Dec
NEW-46	Rt. 128N @ Rt. 90 exit 23 Recreation Rd; 450 ft past old RR bridge	Concrete	12												
NEW-46A	Rt. 128N to Exit 25 (Rt. 90); Approx. 125 downstream from NEW-44B	Concrete	12												
NEW-47	Grove St.-behind Riverside MBTA; approx. 360 ft downstream from Recreation Rd	Concrete	60												
NEW-48	Grove St.-behind Riverside MBTA; approx. 500 ft downstream from NEW-47	Concrete Culvert	36 x48												
NEW-49	Riverside Rd behind DCR building 75 ft from bridge	CMP	18												
NEW-50	Evergreen behind fences next to Rt. 90E	Concrete	12												
NEW-51	Oakland Ave. between #69 & Rt. 90 on-ramp	Concrete	18												
NEW-51A	So. Side of Bridge @ Commonwealth Ave. (20' upstream from bridge)	Concrete	12												
NEW-51B	North Side of Bridge @ Commonwealth Ave. (20' downstream of bridge)	CMP	12												
NEW-52A	Comm Ave @ Canoe/Kayak bldg (150 ft west of building) inaccessible	Concrete	18												
NEW-53	Marriott Parking Rear Lot (NE corner, approx. 65' from catch basin)	Concrete	18												
NEW-54	Malvern Terrace between #17 and #9 @ Rivers Edge	Concrete	12												
NEW-55	Between #264 Islington Rd and #1 Malvern Terrace @ Rivers edge	Concrete	12												
NEW-56	Islington Rd East of #296 under wood dock at rivers edge	Concrete	12												
NEW-57	Duffield Rd. #37 northeast corner, approx. 60' from house	Concrete	12												
NEW-58	Comm Ave Lyons Field, approx. 140' from minor league home plate	Concrete	36 (twin)												
NEW-58A	Comm Ave Lyons Field, approx. 100' from minor league home plate	Concrete	12												
NEW-59	Chaske Ave @ Kaposia, 50' north of pump house pipe	VCP	15												
NEW-60	West Pine St. at Auburndale Playground	PVC	14												
NEW-60 A	83 Staniford Ave Back lot of Condos behind Pine Trees	Concrete	12	Privately owned not tested.											
NEW-61	Staniford St behind Shed of #79 Back side of hill in woods	Concrete	12												
NEW-62	Staniford St 285' away from #19 back side of landfill behind fence	Concrete	60												
NEW-63	Riverview Ave. #209; Southeast corner in Parking lot	concrete	12												
NEW-64	Forest Grove Dewatering Pump	DI	15												
NEW-65	Rumford Ave.	CMP	60												
NEW-65A	Rumford Ave.	DI	18												
NEW-66	DMH: Decatur St. in Cemetery at Waltham line	Culvert	48 x60												

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2014 IDDE Inspections and Outfall Sampling Plan (ACTUAL)

Outfall ID	Location	Type	Size (inches)	Jan	Feb	March	April	May	June	July	August	Sept	Oct.	Nov.	Dec
NEW-67	DMH @ 200 North St	Concrete	14												
NEW-68	Albemarle Rd. (Cheesecake Brk)	Fieldstone	4ft x 8ft												
NEW-69	Bemis St. End of the road; 75' out from the road	Concrete	12												
NEW-70	Wyoming Rd. @ Parkway 100 ft from the road	Concrete	12												
NEW-71	Thaxter St. at Parkway														
NEW-72	California St.& Colonial Ave (under walk way bridge)	VCP	15												
NEW-73	Bridge St. (Upstream side of bridge)	CMP	24												
NEW-74	California St. behind house #315	VCP	20												
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-75A	Riverdale 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					Wet							
NEW-78	Boyd St. @ South Park St on South Park	Concrete	20					Wet							
NEW-79	Centre St @ Carleton, 30' North of Hydrant	Concrete	12					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. Newton no longer monitoring this location											
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	State-owned. Newton no longer monitoring these locations											
NEW-82*	Nonantum Rd. Approx. 170' downstream from NEW-81	Concrete	10												
NEW-83*	Nonantum Rd. behind #23/#25 St. James Ter.	Concrete	10												
NEW-84*	Nonantum Rd. behind #57/59 Charlesbank Rd	Concrete	10												
NEW-85C*	Nonantum Rd. behind #49 Charlesbank Rd [Unable to locate]	Concrete	10												
NEW-86	Nonantum Rd. 250' Upstream from Yacht club (2 lines)	RCP/ CMP	12					Wet							
NEW-86A	Nonantum Rd		12					Wet							
NEW-87	Nonantum Rd. Due west of skating rink	RCP	48					Wet							

Notes:

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

 A 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
Updated April 24, 2015