Municipality/Organization:	**City of Newton, MA**
EPA NPDES Permit Number:	**MAR 041080**
MaDEP Transmittal Number:	**W- W-039247**
Annual Report Number & Reporting Period:	**No. 11** **April 2013 –March 2014**

NPDES PII Small MS4 General Permit
Annual Report
April 2014

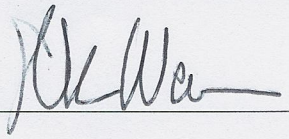
Part I. General Information

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: 5/1/2014

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 11 with respect to MS4 General Permit goals and objectives.

Administrative

- Budgeted $752,900 in FY14 for stormwater management and capital projects.
- Retained Weston & Sampson Engineers to prepare a Stormwater Infrastructure Improvement Plan which includes an assessment of our streams, drainage infrastructure and IDDE program.
- Drafted a new ordinance to update our stormwater rate structure. The ordinance is scheduled to be implemented after the City-wide stormwater assessment is complete and we have a better handle on our long-term stormwater operation and management needs.

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 last year. Although Newtonôs sanitary sewers are separate from our drains, there are locations where indirect cross-communication between sewers and drains may occur due aging infrastructure. The Sewer CIP rehabilitates and restores the sewer mains.

Good Housekeeping & Illicit Discharge Detection and Elimination

- Our 2013 Household Hazardous Waste (HHW) collection program ran from May 11th through October 26th. Last year, we collected more than 112 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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
1.1	Develop Stormwater Press Release	DPW Utilities, M. Rose	Submit annual press release to newspaper / CATV.	ñTips for draining pools and spasò was submitted to the NewtonTAB and printed on Sept. 4, 2013. An article was written for the Crystal Lake Conservancyôs Fall 2013 newsletter on the new water quality inserts that the City installed in the storm drains within the lake watershed. Copies provided in Attachment B.	Re-run press release or develop a new one. Waiting for new permit requirements.
Revised					
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 SuAsCoôs Stormwater Community Assistance Program. We also distributed door hangers in neighborhoods were pet waste was 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 Cityôs 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 Newtonôs 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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
1.6 Revised	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 During this permit period, a watershed lesson and storm drain stenciling project was coordinated with the Oak Hill Middle School.	Continue with implementation of various school education and partnering programs.
1.7 Revised	Develop Education Program	Environmental, E. Gentile and M. Rose	Implement stormwater pollution prevention program	April is ñGreenUp **Newton**ò where DPW promotes and hosts various educational programs at locations throughout the City including: the river clean-up, a rain barrel sale, composting demonstrations, and more. In addition to our educational efforts, three environmental advocacy groups in Newton joined forces to hosted a forum entitled: ñ*Better Lawn, Better Lake: How to have a Green Lawn without having a Green Crystal Lake*ò on May 9th. *See Attachment B* for more information and event flyers.	Continue promoting water conservation, organic and environmentally-friendly lawn care methods and no phosphorus fertilizers.
1.8 Revised	Partnering with Watershed Associations	Engineering, L. Taverna DPW Utilities, M. Rose	Promote meetings with Charles River Watershed Association (CRWA). Attend meetings and partner with the Crystal Lake Working Group	Newton actively supports CRWA programs and initiatives including workshops and the Annual Charles River Clean-up. A new group ñCrystal Lake Working Groupò 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, swimming advocates 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.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
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 newly formed Crystal Lake Working Group.	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 at least one meeting per year of the Friends of Hemlock Gorge (FHG) and the Crystal Lake Conservancy. DPW supports these groupsô efforts and addresses any concerns as the need arises. M. Rose gave a presentation at the Crystal Lake Conservancy Annual Meeting held on October 6, 2013.	Continue to provide support to these groups and foster a partnership approach with the City.
Revised					
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 City.	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 28, 2013. Volunteer groups target specific areas of the City for clean-up and revitalizing. For more info, visit:	Continue with annual community clean-up day. See also BMP 1.8

				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.	
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
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 Spring 2014.
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: 2,963 catch basins were	Continue with efforts to find and remove indirect and direct illicit discharges.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
Revised				cleaned and approx. 4,800 linear feet of drains were cleaned.	
3.6	Establish Illicit Discharge Hotline	DPW Utilities, 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					
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.	BMP Complete.
Revised					
3.8	Monitor Cityôs 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 48 outfalls were inspected during wet and dry weather events with sampling occurring whenever flow is detected. A summary of our stormwater outfalls and which were inspected / sampled in 2013 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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
4.1	Review existing Ordinances and determine whether they adequately regulate construction site stormwater runoff	Engineering, L. Taverna	Obtain Law Deptôs 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. DPW has two inspectors who ensure the measures shown on Approved Site Plans are implemented.	BMP Complete.
Revised					
4.2	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.
Revised					
4.3	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.
Revised					
4.4	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.
Revised					
4.5	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.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
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 log book of key events.	BMP complete. Continue with implementation.
Revised					
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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
5.1	Review existing Ordinances and determine whether they adequately regulate post construction stormwater runoff	Engineering, L. Taverna	Obtain Law Deptôs 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. 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.
Revised					
5.4	Implement Controls to Minimize Impacts to Water Quality	Engineering, J. Daghlian 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 Cityôs Stormwater Management Policy.	BMP Complete. Continue with implementation and stormwater recharge requirements.
Revised					
5.5	Encourage Reducing Directly Connected Impervious Surfaces	Engineering, J. Daghlian 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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
5.6	Determine Capacity of Stormwater System Elements	Engineering, J. Daghlian & 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. A grant application was submitted and approved by FEMA and MEMA to increase capacity of the culvert. Design work will commence in summer 2014.	BMP Complete.
Revised					
5.7	Review existing Ordinances and determine whether they adequately regulate recharges to groundwater	Engineering, J. Daghlian	Obtain Law Deptôs opinion regarding existing practice and appropriateness of regulating recharges to groundwater	Current practices include on-site stormwater recharge requirements for new construction.	BMP Complete.
Revised					
5.8	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.
Revised					
5.9	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.
Revised					
5.10	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. .
Revised					

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
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 on-going and as needed basis: 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					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
6.6	Establish Maintenance Procedures	Utilities, T. Jerdee	Vactor/flush storm drains to remove sedimentation	Cleaned approximately 4800 LF of the Cityôs storm drainage system. Approximately 3000 catch basins were cleaned out 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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11
6.7	Establish Maintenance Procedures	Utilities, T. Jerdee	Clean drainage brooks to remove sedimentation.	A pond dredging project in front of City Hall was completed in June 2013. The scope of work included the removal of 3,000 CY of sediment from the pond. Brook walls were repaired and sediment removed for the section of Cheesecake Brook closest to the Charles River. Brook wall repair and limited sediment removal also occurred for South Meadow Brook.	Completion of pond dredging project.
Revised					
6.8	Establish Maintenance Procedures	Utilities, T. Jerdee	Clean catch basins every 2 years.	We cleaned 2,963 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 2013 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 2013.	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	BMP Complete. City will continue to operate HHW collection facility.

Revised				Env. Affairs in Attachment A.	

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
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 Newtonôs 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 ï 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 ï 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 FY15	($)	$752,900

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 14th Annual Earth Day Charles River Cleanup; numerous community groups participated in Newton)	(y/n or mi.)	7+ miles
Household Hazardous Waste Collection Days (*May 2013 to Oct. 2013*)		
▪ days sponsored	(#)	19
▪ community participation	(%)	42%
▪ Material collected: CRTs, auto & button batteries, fluorescent bulbs, paint, waste oil, thermostats, thermometers, and elemental mercury. (*some of which are collected year round*)	(tons or gal)	See Attach-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 ñ**X**ò)				
▪ Illicit Discharge Detection & Elimination			X	
▪ Erosion & Sediment Control	X			
▪ Post-Development Stormwater Management	X			
Accompanying Regulation Status (indicate with ñ**X**ò)				
▪ 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): No new large construction starts. Several from the previous reporting period were on-going during this reporting period.	(#)	0
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	(#)	2
**Dust complaints for the Chestnut Hill Square Project, the Board of Health handled complaints*		

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	(#)	2,963
Storm drains cleaned	(LF or mi.)	4,800 LF
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	†
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill cover
Cost of screenings disposal	($)	$ 50,000 †
†Estimated, CB cleaning contract is currently on-going. Final quantities and cost will be determined once the contract is complete next month.		

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: (ñN/Aò = never used; ñ100%ò = elimination)		
▪ Fertilizers	(lbs. or %)	30 %
▪ Herbicides	(lbs. or %)	75 %
▪ Pesticides	(lbs. or %)	75 %
* Newtonôs 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 % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	96% 0 2% 0 0 0 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) [with the exception of 2 months after Hurricane Sandy. One of our salt sheds was damaged during this storm]	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	Y

Attachment A

Copies of:

Memo from Newtonôs Director of Environmental Affairs on HHW and Universal Waste Collection days and Rain barrels sold in 2013

Department of Parks and Recreationôs 2013 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 28, 2014

RE: NPDES Info

CC: David Turocy, Commissioner

HHW/Universal Waste Information:

1. Number of rain barrels sold: 57
2. Number of hhw collection days: 19
3. Number of universal collection days: 300
4. Percent population: 42% (Based on 639 cars for hhw, 13,000 cars for universal)
5. Universal collection B/D:

    - Elemental Hg: 13 lbs
    - Waste oil/auto/antifreeze: 4.37 T
    - Batteries, appliances, electronics, CRTs: 72.50 T
    - Button Batteries: 18 lbs
    - Paint swap: 27.3 T

Note: There are now many outlets for people to recycle appliances, crts, etc. Hence, the tonnage is smaller. Also, since Freon is no longer in many appliances, the many appliances are now counted as metal only.

6. HHW Collection: 7.95 T
7. Thermometers: 20 units
8. Thermostats: 61 units
9. Barometers: 4 units
10. Fluorescent Bulbs: 28,958 lf
11. Compacts: 2,350 units
12. U-tubes: 846 units
13. HID: 42 units

Street Sweeping:

- All 1,400 streets were swept 4 times
- 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 if Newton
Department of Parks and Recreation
Division of Maintenance
2013 - 2014 Pesticide Usage
9/7/13

These pesticide applications occurred from April 2013 - March 2014.

	HERBICIDE	AMOUNT USED	DATE	LOCATION
1.	Roundup	1.33 gallons	7/27/13	City Hall Drive
2.	Roundup	.6 gallons	7/29/13	Main Library parking lot mulch beds
3.	Roundup	.73 gallons	7/30/13	City Hall War Memorial
4.	Roundup	1.33 gallons	8/1/13	NNHS mulch beds
5.	Roundup	3.33 gallons	8/3/13	NNHS mulch beds
6.	Roundup	2.66 gallons	8/16/13	NNHS mulch beds
7.	Roundup	1.0 gallons	9/7/13	NNHS mulch beds, Newton corner island
		10.98 gallons		

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

Attachment B

Public Education and Outreach Materials

WHEN:
Pick up date:
Saturday, April 27
9am to 11am

WHERE:
Recycling Depot at
115 Rumford Ave
in Auburndale

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.

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

"When it Rains... You Save!"

The Great American Rain Barrel Company

The Great American Rain Barrel Company

And the City of Newton Department of Public Works

The City of Newton DPW is selling rain barrels to residents at 40% off retail! Newton residents can purchase rain barrels from The New England 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

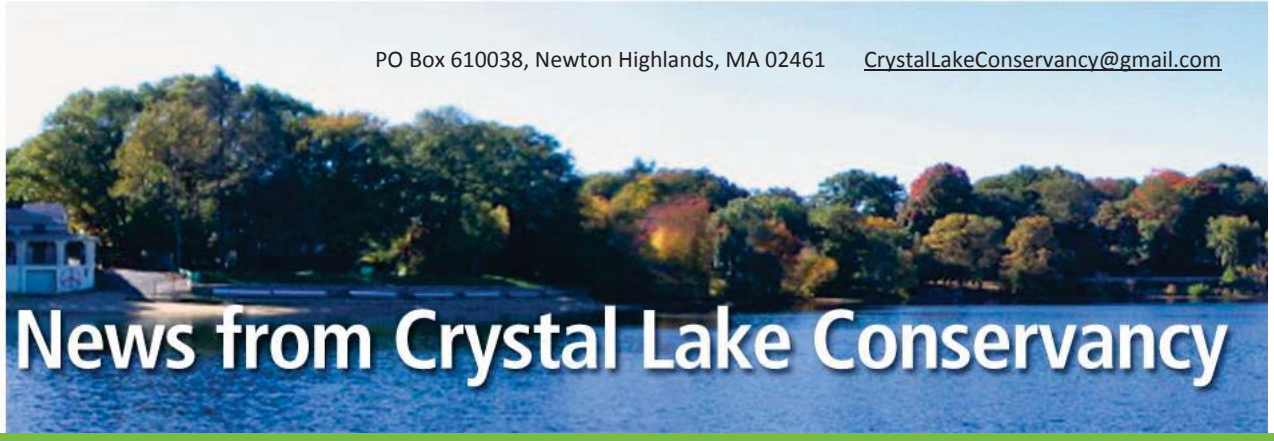
Division of Environmental Affairs

Department of Public Works
1000 Commonwealth Avenue
Newton, MA 02459

Phone: 617.796.1000

Website:
www.newtonrecycles.com

PO Box 610038, Newton Highlands, MA 02461 CrystalLakeConservancy@gmail.com



News from Crystal Lake Conservancy

Spring 2013

The Crystal Lake Conservancy is dedicated to the preservation and protection of Crystal Lake for the benefit of the public by promoting and supporting the unique natural beauty and enjoyment of the Lake.

Better Lawn, Better Lake!

May 9, 2013 7:00pm – 9:00pm

Druker Auditorium, Newton Free Library

Guest Speaker: Mary Owen, Turf Specialist, UMass-Amherst

Waterways abound in New England. In Newton alone we have Cheesecake Brook, Laundry Brook, Crystal Lake and more.
Protecting our vast network of interconnected waterways is imperative, especially when it comes to decisions on how to care for our lawns.

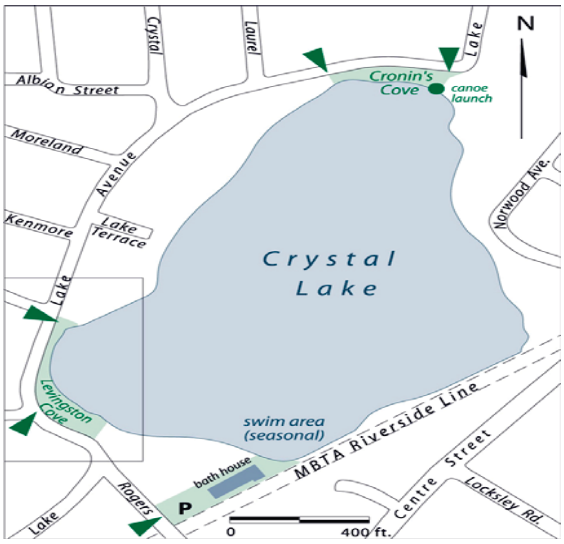
Join Mary Owen, Extension Turf Team Leader and Specialist for the University of Massachusetts, for a program that will help you understand how you can have a good-looking functional lawn while protecting and enhancing the local environment, especially Crystal Lake. Putting rain in the ground and not in storm drains will prevent pollution and reduce costs for in-lake treatments.

Topics will include:

- How to prevent landscaping nutrients from moving into water
- Soil testing
- What to look for when purchasing grass seed
- How to transition your lawn to lower input grasses
- Matching your maintenance to your landscape
- Making the best of 'rainfall only' watering
- Fertilizing

Mary Owen is a veteran educator who directs the development of outreach turf publications and programs, and provides instruction for professional turf management programs such as the UMass Winter School for Turf Managers. She is an active participant in several industry organizations including the New England Sports Turf Managers Association, the New England Regional Turfgrass Foundation and the Massachusetts Association of Lawn Care Professionals.

- Cosponsored by the Crystal Lake Conservancy, Green Decade/Newton and the Newton Conservators



Come and discover the impact of your lawn treatments on the watershed and the lake!

To learn more about the Crystal Lake Conservancy, visit our website at www.CrystalLakeConservancy.org

Preventing another Summer Algae Bloom in Crystal Lake

As many residents are aware, Crystal Lake suffered a substantial algae bloom last summer resulting in a premature shut down of the swimming season. The Crystal Lake Conservancy (CLC) has been monitoring several locations across the lake for various bacteria, phosphorus, nitrates, herbicides, pesticides, water visibility and temperature with help from dedicated volunteers and Larry Beals, our limnologist, for the past four years. The City tests only the bathhouse swimming area for bacteria and algae blooms.

Algae blooms typically are normal. Algae blooms thrive in water rich with nutrients such as phosphorus. Normal lake activity during the spring and fall involves surface water layers cycling downward and deeper water layers cycling upward stirring up phosphorus-rich debris from the lake bottom, which can cause a short bloom.

Why are these recent algae bloom different? The algae blooms are occurring much earlier than usual and lasting longer due to ***too many extra nutrients from the watershed run-off.*** Crystal Lake is so high nutrient levels that any prolonged heat, low rain, and warm nights will quickly tip the lake into one or multiple algae blooms.

WHAT CAN YOU DO TO HELP CRYSTAL LAKE?

It is important for you to realize that your household is in the Crystal Lake Watershed area. What does that mean? That means all the runoff from your property including lawn treatments, (chemical or manure), car detergents, and household chemicals actually get washed down the street into the City catch basins (storm drains). Contents in the catch basins then drain into the lake via seven different outfall areas.

What you do at home directly affects Crystal Lake!
We know you care about this lovely asset in your neighborhood. We wanted to encourage you to read the articles contained within this newsletter and consider **HOW YOU CAN HELP DECREASE THE IMPACT ON CRYSTAL LAKE**.

Remember last summer!! ***Help us help Crystal Lake!!***

To learn more about Crystal Lake please visit www.CrystalLakeConservancy and www.newtonma.gov/parks.

Algae blooms decrease Crystal Lake's visibility. Water clarity less than four feet prevents lifeguards from seeing into the water, and the swimming area is closed for safety.

An abundance of algae adds a characteristically "green hue" to the water. Some varieties of algae can be toxic to pets and humans.

Using a Rain Garden to Help the Environment

-Ed Himlan, Massachusetts Watershed Coalition

What is a rain garden?

A rain garden has a bowl-shaped landform that collects the rain that runs off from a roof, driveway, parking area or yard. This 6 - 9-inch deep basin fills with runoff and allows it to seep into the ground in a few hours. The rain garden plants and soils cleanse pollutants that would harm the quality of the rivers and lakes that would receive the water that otherwise would run off your property. Letting rain soak in, rather than go into the street, increases groundwater that keeps streams flowing during dry times. A constant supply of clean groundwater is essential to stream and pond life.

Benefits of Rain Gardens

Storm runoff is the leading source of water pollution that harms aquatic life and spoils recreational uses of lakes and brooks. Creating rain gardens has many water quality benefits:

- Gardens remove dirt, oil and metals in storm water.
- Plants recycle phosphorus and other nutrients that would be harmful if they reached local lakes and rivers.
- Microbes in soils reduce bacteria levels in runoff. Rain gardens also attract birds and beneficial insects like butterflies and bees that pollinate plants, as well as dragonflies that eat mosquitoes. Your family and friends will enjoy watching these wildlife habitats that enrich your yard and neighborhood.

Where to build your rain garden

First, walk your yard in the rain to see where runoff from your roof, driveway and patio flows. Choose a spot where runoff naturally goes; the rain garden should be placed between the source of runoff and where it flows out of your yard. If the runoff stays in your yard and already soaks into the ground, a rain garden may not be worthwhile. When choosing the location, your rain garden should be:

- at least 10 feet from the house foundation and 25 feet from a septic leach field or a well
- away from underground utilities (Call Dig Safe at 811 before digging your garden.)
- away from wet/soggy places where ponding persists after a storm
- away from tree roots that can be injured when digging the garden.

Cost for Building Rain Garden

The cost of your garden will vary depending on what you want and are able to do. If you design, dig and collect seeds or plants from other gardens, the cost is minimal. Alternatively, you can hire a contractor to install your garden. Costs for a do-it-yourself garden are about $2 – $5 per square foot, depending on the plants and accessories that you want. Many landscapers are expert in building rain gardens, and costs are likely to range from $8 – $12 per square foot, again depending on what plants you want.

To learn more about rain gardens, visit our website and click on "creating a rain garden" under Keep the Lake Healthy.

Help us stay green AND save paper and printing costs—sign up for our electronic newsletter by going to our website at www.CrystalLakeConservancy.org

Water Sampling and Testing for 2013 Season

For the fourth season, with the help of volunteers, the Crystal Lake Conservancy will again collect multiple water samples and monitor water visibility and temperature readings.

Water Sampling
Volunteers will collect samples from five specific locations around the lake:
Levingston Cove, Cronin's Cove, Lake Terrace, Bathhouse, and center of the Lake. Samples will again be analyzed by State Certified G&L Laboratory in Quincy MA. The water sampling will include bacterial analysis for E. coli and Enterococci. Spring testing for potential lawn and garden chemicals will include herbicides, pesticides, nitrate, ammonia and total phosphorus.

Water Testing/Monitoring Program
Volunteers will conduct weekly monitoring of the temperature and visibility readings via boat at three different depths, at six different sites around Crystal Lake.

Volunteer
Want to help? Please contact us by visiting our website under the volunteer section.

Newton Highlands Village Day

Please visit our booth during Village Day!
Sunday, June 10, 2013
Lincoln St, Newton Highlands
Village Center
12 noon - 5pm.

Come learn more about last year's algae bloom and the Conservancy's efforts. Pick up a copy of our newsletter, provide your email so we can keep you informed, and find out how to become involved, become a member or sign up to volunteer!

Summer Supplies
Do you know someone who has fond memories of swimming at Crystal Lake and would enjoy a reminder of those experiences? Support our efforts and browse through our merchandise to find that unique gift of note cards (new!), a mug, water bottle, pin, poster, or T-shirt.

NEW! NEW! NEW!

Limited Editions and Folklorica to stock CLC merchandise

Now you can get merchandise bearing the attractive CLC logo to support the Conservancy. Check out Limited Editions (Newton Highlands) and Folklorica (Newton Centre) or go to our website for the full array of products.

PRODUCT IMAGES ARE AVAILABLE ON OUR WEBSITE.

Go to www.crystallakeconservancy.org then click on the "Order" tab at the top. If you submit the order form on-line, someone will contact you ASAP for delivery.

Storm water Management Glossary

Below are some common terms that are often used when discussing storm water issues.

Bio-retention: Method of catching and storing rain water runoff using certain landforms and plantings such as vegetated wetlands, rain gardens, green roofs.

Biofiltration swale or Bioswale: A long, gently sloped, vegetated ditch designed to filter pollutants from storm water. Grass is the most common vegetation, but wetland vegetation can be used if the soil is saturated.

Catch basin: A device to slow or screen storm drainage in order to separate solids that can then be removed.

Conveyance system: Drainage facilities and features that collect, contain, and provide for the flow of surface and storm water from the highest points on the land down to the receiving water. Conveyance systems are made up of natural elements and of constructed facilities.

Drainage facility: A constructed or engineered feature that collects, conveys, stores or treats surface and storm water runoff. Drainage facilities include but are not limited to constructed or engineered streams, pipelines, channels, ditches, gutters, lakes, wetlands, water quality treatment facilities, and erosion and sedimentation control facilities.

Embankment: A raised structure of earth, gravel, or similar material to form a pond bank or foundation for a road.

Eutrophic: A stage in the gradual deterioration of a water body in which excess nutrients, particularly phosphorous, stimulate the growth of aquatic plant life usually resulting in the depletion of dissolved oxygen. It often results from runoff carrying fertilizers. Also referred to as "Nutrient loading." **Crystal Lake is an Eutrophic lake at present.**

Impervious surface: A hard surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development; and/or a hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development.

Low Impact Development (LID): Development that employs natural onsite drainage features and landscaping techniques to help control and contain storm water to increase natural recharge and reduce pollution.

Nonpoint source (NPS) pollution: Occurs when rainfall, snowmelt, or irrigation runs over land or through the ground, picks up pollutants, and deposits them into water bodies or introduces them into ground water.

Outfall: A point where collected and concentrated surface and storm water runoff is discharged from a pipe system or culvert.

Rain Garden: A planted depression that allows rainwater runoff from impervious surfaces like roofs, drives, walks, and compacted lawn areas the opportunity to be absorbed.

Runoff: Water originating from rainfall and other precipitation that ultimately flows into drainage facilities, rivers, streams, springs, seeps, ponds, lakes, and wetlands as well as shallow groundwater.

-Compiled by the Environmental Committee of the League of Women Voters of Newton

Help us stay green AND save paper and printing costs—sign up for our electronic newsletter by going to our website at www.CrystalLakeConservancy.org

New Storm Drain Filters Installed by City of Newton for Crystal Lake

By Maria Rose, City of Newton, Environmental Engineer

Have you noticed anything different on the streets around Crystal Lake? It may not be something that catches our eye as we walk or drive by, but it's very good news for the health of lake! Looking down into the storm drains (also known as *catch basins*) you will see something unusual inside many of the catch basins along the streets around Crystal Lake. There are 49 catch basins in the Crystal Lake Watershed that collect stormwater runoff from impervious surfaces and discharge into the Lake untreated –that is, until now. Twenty-seven (27) catch basins have been fitted with "water quality" units. These units each consist of a large, stainless steel tray to capture trash and debris, a sump to hold water and a filter cartridge and were installed by the Public Works Utilities Division this past July (see inset photo of a finished installation). The proprietary water quality units are manufactured by Fabco Industries and were selected due to their cost effectiveness, ease of installation and their ability to reduce nutrient and bacteria levels in stormwater.

New Storm Drain Filters

Stormwater (the runoff water after it rains or snows) flows from driveways, parking lots and streets into storm drains to prevent flooding. This stormwater also picks up trash and pollution along the way, which can wash into Crystal Lake. Trash and organic matter (e.g., leaves and sand) are caught by the catch basins – which are exactly why they are called "catch" basins; however, some things are more difficult to capture, like dissolved chemicals from fertilizers, oil and bacteria. The purpose of these units is to filter the water before it enters a waterbody, like Crystal Lake. Due to the algae bloom issues that have plagued Crystal Lake, we chose cartridges that are specifically designed to reduce nutrient concentrations. Nutrients, like phosphorus and nitrogen, are essential for plant growth, but in excess can trigger an algae bloom in lakes and ponds. As we monitor the effectiveness of these units through water quality sampling, we may change the cartridge type to suit our future needs and requirements.

Due to the added time needed to filter the stormwater through the cartridges you may notice a small amount of "ponding" around one of these retrofitted catch basins. Should ponding last more than hour after a storm is over or is creating a public safety concern, please contact the City's customer service number and report the problem.

Help us stay green AND save paper and printing costs—sign up for our electronic newsletter by going to our website at www.CrystalLakeConservancy.org

CITY UPDATE

Mayoral debate set for Sept. 12

The League of Women Voters of Newton and NewTV will host a mayoral debate between all four candidates in advance of the Sept. 17 preliminary election.

The debate will be held at 7 p.m., on Thursday, Sept. 12, at the NewTV studios at 23 Needham St. The show will air live on NewTV's government channel and on the web at newtv.org.

Organizers are asking residents to send questions for the candidates about the issues they think are important. Questions can come in before or during the debate. Questions can be sent to info@lwvnewton.org before the debate. They also can be submitted to NewTV via Facebook and Twitter. While the moderators say they might not be able to ask every question, they will try to cover all the topics and follow-up questions suggested.

Viewers also are welcome to watch the debate in the NewTV conference room during the broadcast.

Cultural council seeks grant proposals

The Newton Cultural Council has set a postmark deadline of Oct. 15 for organizers, groups and individuals to apply for grants to support cultural activ-

grants -- a slight increase over last year's distribution. Previously funded projects include chamber music concerts by the Boston Artists Ensemble, concerts by Cappella Clausura, whose performances consist of music written by women, and the annual jazz series offered by Highland Jazz, now celebrating its 31st season.

The Newton Cultural Council is part of a network of 329 local councils serving all 351 cities and towns in the state. The funding network supports thousands of community-based projects in the arts, sciences and humanities every year. The state legislature provides an annual appropriation to the Massachusetts Cultural Council, a state agency, which then allocates funds to each community.

Go to the city's website newtonma.gov for specific guidelines, complete information and an application. Click on "city government," "cultural affairs" and then "Newton Cultural Council." Applications should be sent to Newton Cultural Council, Newton City Hall, 1000 Commonwealth Ave., Newton, MA 02459, postmarked no later than Oct. 15.

Application forms are also available at the Mayor's Office for Cultural Affairs offices at City Hall.

Newton BoxART seeks proposals

Department of Public Works Environmental Affairs Division, Newton Community Pride and Newton Open Studios invites artists to participate in this public art project, which has recently been redesigned to enable artists to participate in multiple media.

There remain at least 50 unattractive traffic control boxes throughout the city, according to city officials.

Artists may submit jpegs of work in any media, such as photography, painting, quilting, collage or photos of sculpture. A jury team of professional artists and city officials will make the selection, and the accepted works will be applied as commercial signage wraps to the traffic control boxes. There is currently a sample wrapped traffic box for inspection at the corner of Commonwealth Avenue and Chestnut Street.

The deadline for the first round of submissions is Sept. 10. Visit www.newtoncommunitypride.org or call the Mayor's Office for Cultural Affairs at 617-796-1540 for more information.

Konowitz foundation to host fundraiser

The Lily Konowitz Foundation for Women's Safety will host a fundraiser on Tuesday, Sept. 10, at the Sheraton Needham Hotel.

The foundation is hosting the event at the hotel, located at 100 Cabot

money to provide educational materials and training equipment to organizations teaching self defense and rape prevention classes.

The group was founded two years ago by the family of Lily Konowitz, who was a senior at Newton South High School in 2011 when she went to Aruba with family friends. While there, Konowitz was attacked in a restaurant bathroom and used self-defense techniques learned in a class sponsored by the Newton Police Department to escape with only physical injuries that could have been far worse if she hadn't fought back, according to organizers.

The second annual fundraiser, titled "Together We Can Fight Back for Women's Safety," is aiming at raising funds to provide educational material and purchase additional equipment, which will be used in self-defense classes. Organizers hope to encourage and assist other communities to follow Newton's model and offer self-defense programs to students and women in their community, too.

Since the group was founded it has purchased self-defense equipment benefitting more than 400 women. They have sponsored classes and activities and trained several local school employees to be rape, aggression and

defense program instructors. Organizers are seeking to expand their efforts in the year ahead.

Chamber leads 'buddy' group

The Newton Needham Chamber of Commerce has openings on its buddy group.

The group is intended to help individuals in career transition by providing support and accountability during a job search. The group meets every Monday morning at the chamber offices at 281 Needham St. to review the previous week's efforts and map out the week ahead.

Interested parties are asked to contact the group's facilitator, Joe Sanroma, at jsanroma@computer.org.

DPW provides tips for draining pools

The Department of Public Works is providing tips for draining pools and spas that will help minimize impacts to your neighbors and the environment, as the swimming season comes to a close.

Most swimming pool chemicals have an impact on fish, plants and other aquatic life, according to the department. Chlorine damages fish gills, which can cause fish to drown.

Bromine sanitizes swimming pools, but in high doses it can also damage fish gills.Copper, which is used to kill algae in filter systems, is toxic to fish.

Pool water can be also be warm compared to a river or stream and can stress aquatic life.

The city recommends discontinuing the addition of chemicals one week prior to draining.

This will allow the chemicals to evaporate before draining.

Test the chlorine and sanitizer levels in the pool before draining to ensure there is no residual chlorine or sanitizers.

Drain the pool slowly to avoid runoff onto neighboring properties and over-saturation of the soil. Consider draining some or all of the water to your yard, where your lawn and trees can benefit from deep fall watering and where it will be filtered naturally and recharge deep into the ground – overflow to the storm drains in the street is OK. Another option is to pump your pool water to the sanitary sewer. This can be achieved by pumping to a basement sink or your sewer clean out in your home. This option provides for treatment of the pool water by the regional wastewater treatment plant. If you have any questions, please contact customer service at 617-796-1000 and ask for the environmental engineer.

Thank you so much

Storm Drain

Only rain should be in your STORM DRAIN

[redacted] Maria Rose,

Thanks to you and all the city of Newton our Team 6-3 from Oak Hill Middle School has labled storm drains all over Newton! Thank you again!

Team 6-3

Don't Dump

Drains To Charles River

THANK YOU!

Attachment C

2013 Stormwater Outfall Sampling and Inspection Locations

Attachment C

2013 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										Dry		
NEW-02	Wells Ave - south; across from #120 (approx. 30 ft from Rd)	Concrete	36										Dry		
NEW-03	Wells Ave - north (**Country Club Brook**) Across from #60	Culvert	48x72										Dry		
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										Dry		
NEW-04**B**	Off Nahanton St. close to NEW-04	Concrete	12										Dry		
NEW-04A	Winchester St. 250' left of entrance to Nahanton Park	Concrete	15										Dry		
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					Dry		
NEW-06	Charles River Terrace @ Rivers Edge	Concrete	15										Dry		
NEW-07	Bank St. @ Rivers Edge	Concrete	24										Dry		
NEW-08	Christina St.between #85 and Old RR Bridge	Concrete	12										Dry		
NEW-09	Parking Lot at #25 Christina St. Rear lot Upstream of building	PVC	10-1/2"										Dry		
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										Dry		
NEW-11	Needham St Culvert, South Meadow Brook	Culvert	60 x72					Wet					Dry		
NEW-12	Abbott St. @ end of road	PVC	10										Dry		
NEW-13	Williams Ct @ End of Rd	RCP	12										Dry		
NEW-13A	Williams Ct @ 50' Down from NEW-13	VCP	8										Dry		
NEW-13B	Saco St. Apt on right @ the end of the Complex and the edge of River	Concrete	15										Dry		
NEW-14	River Ave.@ End of Rd	Concrete	12										Dry		
NEW-15	Elliot St.Eastbound next to bridge	RCP	36					Wet							
NEW-15B	Elliot St. Westbound next to bridge	Concrete	15					Wet							

Updated April 28, 2014

Attachment C

2013 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												
NEW-16B*	Ellis @ Rt 9E Exit West side of small spillway, 30' Upstream (Hemlock Gorge)	Concrete	12												
NEW-17	Quinobequin Rd. @ RT. 9 West on ramp 50' from on-ramp	Concrete	30												
NEW-17A*	Quinobequin Rd. @ RT. 9 West on ramp close to City line	Concrete	12												
NEW-18	Quinobequin Rd. 100' downstream of Rt. 9 on-ramp	Concrete	12												
NEW-18A*	Quinobequin Rd. across driveway of House # 744	Concrete	18												
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"												
NEW-29	Quinobequin & Carlton Rd	Concrete	18												
NEW-29A*	Quinobequin Rd across from #286 [State Owned]	Concrete	15												

Attachment C

2013 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 & Dhwinda	VCP	10												
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												
NEW-31a*	Quinobequin Rd Across from #164 [State Owned]	Concrete	10				MassDOT owned outfalls								
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												
NEW-32A	Quinobequin Rd. 3 ft from NEW-32	Concrete	24												
NEW-33	Wales St. between Washington St	VCP	24												
NEW-34	Washington St. near Executive Park Drive	VCP	12												
NEW-35/35A	Washington St. #2300 Next to Elderly Housing	Concrete	15												
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

2013 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					Wet							
NEW-51A	So. Side of Bridge @ Commonwealth Ave. (20' upstream from bridge)	Concrete	12					Wet							
NEW-51B	North Side of Bridge @ Commonwealth Ave. (20' downstream of bridge)	CMP	12					Wet							
NEW-52A	Comm Ave @ Canoe/Kayak bldg (150 ft west of building) inaccessible	Concrete	18					Wet							
NEW-53	Marriott Parking Rear Lot (NE corner, approx. 65 ' from catch basin)	Concrete	18					Wet							
NEW-54	Malvern Terrace between #17 and #9 @ Rivers Edge	Concrete	12						Wet						
NEW-55	Between #264 Islington Rd and #1 Malvern Terrace @ Rivers edge	Concrete	12						Wet						
NEW-56	Islington Rd East of #296 under wood dock at rivers edge	Concrete	12						Wet						
NEW-57	Duffield Rd. #37 northeast corner, approx. 60' from house	Concrete	12						Wet						
NEW-58	Comm Ave Lyons Field, approx. 140' from minor league home plate	Concrete	36 (twin)						Wet						
NEW-58A	Comm Ave Lyons Field, approx. 100' from minor league home plate	Concrete	12						Wet						
NEW-59	Chaske Ave @ Kaposia, 50' north of pump house pipe	VCP	15						Wet						
NEW-60	West Pine St. at Auburndale Playground	PVC	14						Wet						
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						Wet						
NEW-62	Staniford St 285' away from #19 back side of landfill behind fence	Concrete	60						Wet						
NEW-63	Riverview Ave. #209; Southeast corner in Parking lot	concrete	12						Wet						
NEW-64	Forest Grove Dewatering Pump	DI	15												
NEW-65	Rumford Ave.	CMP	60						Wet						
NEW-65A	Rumford Ave.	DI	18												
NEW-66	**DMH**: Decatur St. in Cemetery at Waltham line	Culvert	48 x60										Wet		

Attachment C

2013 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										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												Wet		
NEW-72	California St.& Colonial Ave (under walk way bridge)	VCP	15										Wet		
NEW-73	Bridge St. (Upstream side of bridge)	CMP	24										Wet		
NEW-74	California St. behind house #315	VCP	20										Wet		
NEW-74A	California St. West of #440 Post (225' W of the bldg)	Concrete	15												
NEW-74B	California St. behind #440, 20' west of path sitting area @ river	Concrete	12												
NEW-75	Rustic St. at the end of the Rd	DI	12												
NEW-76	California St - Derby Brook	Culvert	48 x 36												
NEW-77	Jackson Rd in Left Field: LAUNDRY BROOK	Culvert	72 x 144												
NEW-78	Boyd St. @ South Park St on South Park	Concrete	20												
NEW-79	Centre St @ Carleton, 30' North of Hydrant	Concrete	12												
NEW-80	Nonantum Rd. near Island for Maple Street at Rivers Edge	VCP	10												
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												
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												
NEW-86A	Nonantum Rd		12												
NEW-87	Nonantum Rd. Due west of skating rink	RCP	48												

Notes:

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

À 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 28, 2014