

Municipality/Organization: City of Nashua, NH

EPA NPDES Permit Number: NHR041021

Annual Report Number

& Reporting Period: No. 4: 5/1/06 – 4/30/07



NPDES Phase II Small MS4 General Permit Annual Report

General Information

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Printed Name: Richard S. Seymour, Jr.

Title: Director, Public Works Division

Date: April 30, 2007



Part I. Self-Assessment

The City of Nashua is under an EPA Consent Decree (Civil Action No. 05-376-PB), dated December 26, 2005 (based on the Long-Term Water Quality and Infrastructure Control Plan), to mitigate Combined Sewer Overflows (CSOs). Currently, there are eight CSO outfalls that are a part of the City's sewer collection system, four that discharge to the Nashua River and four that discharge to the Merrimack River. CSOs have been identified as a probable source for the *Escherichia coli* impairment of the portions of the Nashua and Merrimack Rivers located nearest to the City, as identified in Appendix A of this report. In October 2006, the construction of the 60 mgd Wet Weather Flow Treatment Facility (WWFTF), located at the Nashua Wastewater Treatment Facility, to capture and treat combined (sanitary and stormwater) flow began. This WWFTF will greatly reduce the occurrence of CSOs and the volume of combined flows that is discharged to these rivers. Also, urban stormwater runoff from approximately 30 percent of the City, which is part of the combined flow, can now be conveyed to the WWFTF where it will be treated before being discharged to the Merrimack River. Completion is expected in January 2009.

Separation of some combined sewers continued. The design of a replacement outfall to convey the treated stormwater to the Merrimack River was completed in August 2007. This outfall provides a discharge point for stormwater from a recently separated 38-acre drainage area near South Main Street. Prior to discharge out the outfall, the stormwater passes through a treatment train consisting of a swirl separator unit, detention pond and created wetlands. This stormwater previously would have discharged as combined sewage at this location. Construction of the outfall began in October 2006 with completion expected in May 2007. Construction of replacement sewers and new storm drains for a portion of Ledge Street was completed in June 2006. Catch basins in the project area had hoods installed to treat the stormwater runoff.

Best Management Practices were incorporated in the design for the new City of Nashua Municipal Complex on Riverside Street, completed in March 2007. Best management practices constructed at the site include a rain garden, porous pavement, infiltration trenches, a Stormceptor unit and hoods.

The City installed eleven more Wetland Buffer Markers during this reporting period in addition to the 64 Wetland Buffer Markers that were installed during previous reporting periods for a total of 75 Wetland Buffer Markers. The purpose of the markers is to encourage residents not to dump debris in wetland areas. When proposed developments include wetland impacts, the Nashua Conservation Commission includes requirements for markers to be installed in the buffer areas of impacted wetlands.

A letter was finalized and sent to approximately 2,400 residents whose properties are adjacent to wetlands to provide information on wetlands and encourage residents not to place debris in the wetland or its buffers. A brochure titled "Guide to Protect Nashua's Wetlands and Wetland Buffers" was revised and printed. This brochure was also included with the letter that was sent to abutters of wetlands.

The Enviroscope Watershed/Non-point Source Model was used as part of a stormwater education program presented to middle and elementary school students, Boy Scouts, and regional Stakeholders. The model was used as a part of the program to educate the public about watersheds and nonpoint source pollution. The model will be used in classroom presentations and public events in the next permit period.

Revisions were made to the Chapter 16 – Land Use Code of the Nashua Revised Ordinances, effective January 2, 2006. This included lengthy revisions to Article III -Division 10 Wetlands and to Article V- Division 11 Stormwater Management. The City continues to implement these new regulations.

A grant to the New Hampshire Department of Environmental Services (NHDES) Watershed Management Bureau Exotic Species Program to control exotic Aquatic Plants was applied for in October 2005 and approved in December 2006. The grant is to treat water milfoil and fanwort in the Mill Pond and Nashua Canal. However, when the Special Permit to apply the herbicide was received from the New Hampshire Department of Agriculture, Markets & Food, Division of Pesticide Control was received, a condition to keep the flow through the Mill Pond and Canal at 10 cfs was included in the permit. The Vendor stated that the herbicide would only be effective if flow was reduced to no more than 3 cfs. The Permit condition will not allow the valve controlling flow into the Mill Pond to be closed, reducing the flow during the period of treatment. Therefore, at this time, the City will not be pursuing treatment of the invasive aquatic plants.

Other activities completed during the permit period May 2006 through April 2007 are included in the Part II of this report.

To address Part I.C.1 of the City's General Permit, Table A is included in **Appendix A**. Listed on Table A are the water bodies within the City limits that are on the NHDES Final 2006 List of Threatened or Impaired Waters that require a TMDL (303(d) list). Included in the table is the Best Management Practice to address the cause of impairment.

No TMDL has been approved for any water body into which the City of Nashua discharges, as required of Part I.D. The schedule for required TMDL's is listed in Table A, located in **Appendix A**.

The City of Nashua has completed the required self-assessment and has determined that the City is in compliance with all permit conditions.

Part II. Summary of Minimum Control Measures

The summary of the activities completed in the Permit Year 4, May 2006 through April 2007, of the six Minimum Control Measures is listed on the attached table. Planned activities for Permit Year 5, May 2007 through April 2008, are also listed. Revisions to the Best Management Practices have been noted in the table.

Section II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 4	Planned Activities Permit Year 5
1.00	Public Education				
1.01	Storm water education program for school children	Purchase Enviroscope Watershed/Nonpoint Source model	DPW (1) - Amy Gill	Presentations using the Enviroscope were given to Middle School students, Volunteer groups(Boy Scouts, City Year), city employees, regional stormwater coalition. Twenty-one presentations given.	Continue presentation in the schools and at other events. Establish more contacts with educators.
Revision		Number of presentations given using Enviroscope			
1.02	Insert flyer in local newspaper describing city wide storm water program	Number of inserts distributed annually	DPW - Amy Gill	No action. Due to excessive costs, newspaper inserts will not be used	
1.03	Create web page on City web site	Web page online by 12/05	DPW - Stephen Dookran, Amy Gill	New City web page online. Draft for stormwater information being developed.	Review and update stormwater web page.
Revision		Web page online by 12/08			
1.04	Create Public Service Announcements	Run Announcement quarterly on cable TV channel access	DPW - Amy Gill	Municipal channel reorganized. Text and voice announcements played October and November 2006. Power point slides being drafted for inclusion on cable	Create Public Service Announcements and run on cable access television channel.
Revision		Number of days presentation runs			
1.05	Create brochure and presentation to inform businesses and industrial users about illicit discharges	Distribute to businesses and industrial users once every two years	DPW - Mario Leclerc, Phil Appert	No action taken yet on this item.	Begin development of brochure.
1.06	Run three videos on Cable Access TV. "After the Storm", "Stormwater is Never Away" and "A River Reborn"	Number of times videos are run.	DPW - Amy Gill	No action taken on this item. Public access channel being restructured.	Continue to run videos.
1.07	Create board for display at functions where the public is gathered.	Number of times display is used.	DPW - Amy Gill	Board use about 20 times as tool during classroom/volunteer presentations.	Update board and continue to display board at various public events.

Section II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 4	Planned Activities Permit Year 5
1.08	Install Wetland Buffer Markers to encourage no dumping of debris in a wetland area.	75 markers to be installed in 3 years.	DPW - Scott Pollock, Amy Gill	Wetland markers continue to be installed by new developers as stipulations for approval by the Conservation Commission. Locations of markers being included on GIS mapping. 75 markers installed by City.	Installations of wetland markers will continue to be stipulated by the Conservation Commission as part of the approval process.
1.09	Mail letters to owners/residents that abut wetland to explain importance of wetland and encourage no dumping in wetland area.	Number of letters mailed to abutters	DPW - Amy Gill, NCC(2)	Letter finalized. Mailing lists finalized. Approximately 2,400 letters to abutters of wetland areas were mailed.	
1.10	Design sign for brook/stream crossings	Percent design completed	DPW - Amy Gill, NCC	Continue to discuss the concept with other departments.	Design sign.
1.11	Present Stormwater Management Program at Public Meetings	Number of Presentations	DPW- Amy Gill	Presented stormwater projects at October 3, 2006 public meeting.	Continue to make presentations.
1a.	Addition				
1.12	Purchase and distribute Magnets with "Paulie the Pickerel" logo at public functions	Number of magnets distributed	DPW - Amy Gill	1000 additional magnets purchased. Magnets distributed during classroom/education presentations. Magnets given to city departments for distribution to staff and public.	Continue to distribute magnets.
1.13	Develop informative flyer about stormwater pollution and include in wastewater bills and display at public places.	Number of flyers distributed	DPW- Mario Leclerc, Amy Gill	Approximately 18,000 inserts were printed and distributed as an insert in the wastewater bills and at public locations.	Continue to distribute flyer.

Section II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 4	Planned Activities Permit Year 5
2.00	Public Participation				
2.01	Attach Storm Drain Markers in or near Catch Basins discharging to open water body	40% installed by 11/04, 80% installed by 11/05, 100% by 11/06	DPW - Amy Gill, Pennichuck Water Works, Inc.	500 more markers purchased. Survey of previously applied markers indicates that 50 percent of markers remained after 3 years. Markers applied by various volunteer groups (High school students, Boy Scouts, City Year) and summer interns. Approximately 1,023 markers installed.	Continue to have public involved in applying markers.
Revision		50% installed by 10/08			
2.02	Continue phone hotline service for stormwater related concerns	Establish a hotline. Record number of phone calls concerning drainage issues	DPW- Mario Leclerc, NWTF(3)	Hotline for drainage issues continues. Record violations and report to USEPA(4) and NHDES(5) as needed.	Continue hotline for drainage issues.
2.03	Meet with local communities, and the NHDOT. Meeting coordinated by the Nashua Regional Planning Commission (NRPC)	Meet every two months for a total of 6 meetings per year	DPW - Amy Gill, NRPC (6)	Representatives from Amherst, Merrimack, Nashua, Hollis, Hudson, Milford, NRPC and NHDOT attend meetings. Five meetings attended.	Continue to meet with members of the surrounding communities.
2.04	Create door hanger with tips on preventing stormwater pollution	Number of door hangers distributed	DPW - Amy Gill	Door hangers were distributed as a part of the catch basin marker program and made available at public areas in City Hall. Door hangers distributed during classroom presentations and Enviroscape presentations. Over 4,000 doorhangers distributed.	Continue to distribute door hangers to the public.
2.05	Provide email links for stormwater related concerns	Number of times email received	DPW	Frequent emails received to report stormwater issues. At least 25 emails received.	Continue to monitor and response to emails.

Section II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 4	Planned Activities Permit Year 5
2.06	Request public input for ordinance revision to Stormwater Management and Wetlands sections	Number of meetings held	CDD (7)	Continued to obtain public comment on ordinances.	Continue to obtain public comment on ordinances.
3.00	Illicit Discharge Detection and Elimination				
3.01	Map outfalls and waters of the United States in Nashua city limits	Complete by 11/04. Count number of outfalls identified	DPW - Amy Gill	392 outfalls have been identified. Continued updating GIS maps based on field verifications of drainage systems and outfalls, and completion of new drainage systems.	Continue to update GIS maps based on field verification of outfalls and newly constructed outfalls.
3.02	Prepare an Illicit Discharge Detection and Elimination (IDDE) Plan	Complete final plan 10/04	DPW - Amy Gill	Continue to develop Draft IDDE.	Complete IDDE Plan.
Revision		Complete final plan 10/08			
3.03	Review illicit discharge ordinance	Amend ordinance as necessary by 12/ 07	DPW - Amy Gill	Review of ordinance ongoing, with final submittal by May 2007.	Begin process to make changes to ordinance if needed.
3.04	Continue dry weather field survey of outfalls.	Complete survey of outfalls. Locate other outfalls in water bodies not included in original survey	DPW - Mario Leclerc, Amy Gill	Continue survey of outfalls as part of sampling program.	Update outfall list as new outfalls are constructed.
3.05	Conduct sampling of dry weather discharges and attempt to trace source of illicit discharge	Sample and identify source of suspect outfalls	DPW - Amy Gill	Dry weather discharge discovered and source identified at Allds Street.	Sample suspect sources as needed.
3.06	Remove illicit discharges as budgetary funding allows	Track number of illicit discharges detected and removed	DPW - Mario Leclerc, Scott Pollock	One illicit discharge identified and removed at 26 Allds Street.	Continue testing and tracking suspect discharges.
3.07	Continue Regional Hazardous Waste Collection Days	Conduct 5 collection days per year	DPW - Sally Hyland, Solid Waste	Hazardous waste collection days held on 5/6,6/15, 8/5, 10/7, and 11/4/2006 and 4/14/2007. Event coordinated with NRPC. Annual Report provided in Appendix D.	Hazardous waste collection days scheduled for 6/7, 8/4, 10/6, and 11/3/2007 for this year.

Section II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 4	Planned Activities Permit Year 5
3.08	Track Hazardous Spills	Number of Spills identified	DPW - Mario Leclerc	One ruptured vehicle gas tank spilled in to catch basin. NHDES notified.	Report on spills as necessary.
3.09	Conduct watershed audit for input in NRPC report	Complete audit	DPW, CDD, NRPC	Audit completed.	
3.10	Sample outfalls in water body RIV700061201-05, identified on the Impaired waters list	Number of outfalls sampled	DPW - Mario Leclerc	Meeting held with NWTF staff. Sampling scheduled for spring/summer 2007.	Sample outfalls and trace source, if possible.
4.00	Construction Site Runoff Control				
4.01	Review procedure for site plan review to consider if potential water quality impacts are included	Complete review by Dec. 31, 2005	DPW - Amy Gill, CDD	Implemented Revised Land Use Ordinance.	Continue review of implementation of new ordinances.
4.02	Review requirements for construction operators to control demolition waste, chemicals, sanitary waste and other waste at the construction site	Complete review by Dec. 31, 2005	DPW - Amy Gill	Implemented Revised Land Use Ordinance.	Continue review of implementation of new ordinances.
4.03	Review existing city ordinances concerning stormwater management at construction sites (Sec 16-145) and modify as necessary	Make recommendations for improvements by June 2006. Passage of ordinance by Dec. 2007	DPW - Amy Gill	Implemented Revised Land Use Ordinance.	Continue review of implementation of new ordinances.
Revision	Ordinance located in Division 11 of Revised Ordinances				
4.04	Develop standard drawings of runoff prevention BMPs to be used by site developers	Produce document containing at least 7 alternative erosion protection measures by Dec. 2006	DPW - Amy Gill	Details used on previous drawings are being used as standards.	Continue to compile drawings electronically.

Section II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 4	Planned Activities Permit Year 5
4.05	Review procedures for inspection of construction sites to see if BMPs are in place and functioning correctly	Complete review by Dec. 2006	DPW - Amy Gill, CDD	CDD contacted and informed that procedures need to be reviewed.	Complete review of inspection procedures.
4.06	Review procedures for enforcement of improper functioning sediment and erosion control measures	Complete review by Dec. 2006	DPW - Amy Gill, CDD	CDD contacted and informed that procedures need to be reviewed.	Complete review of inspection procedures.
5.00	Post Construction Runoff Control				
5.01	Review existing ordinance Sec. 16-145 which requires post development peak discharges be no greater than predevelopment discharges. Modify as necessary	Make recommendations for improvements by June 2006. Passage of ordinance by Dec. 2007	DPW - Amy Gill	Implemented Revised Land Use Ordinance.	Continue review of implementation of new ordinances.
Revision	Ordinance located in Division 11 of Revised Ordinances				
5.02	Review ordinance Sec 16-145 for ground water recharge required on new site plans	Make recommendations for improvements by June 2006. Passage of ordinance by Dec. 2007	DPW - Amy Gill	Implemented Revised Land Use Ordinance.	Continue review of implementation of new ordinances.
Revision	Ordinance located in Division 11 of Revised Ordinances				
5.03	Implement Annual Operations and Maintenance requirement for BMPs on private properties	Implement by Dec. 2007	DPW - Amy Gill	Implemented Revised Land Use Ordinance.	Implement requirement that the Operation and Maintenance Plans be submitted by private development according to the Revised Land Use Ordinance.
5.04	Develop enforcement measures and assign internal staff to enforce requirements	Implement by Dec. 2007	DPW - Amy Gill	Enforcement authority given according to Revised Land Use Code.	Report on enforcement actions.

Section II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 4	Planned Activities Permit Year 5
5a.	Addition				
5.05	Install Low Impact Development items on Municipal Properties	Design and Construct on Riverside Street Property	DPW - Steve Dookran	Rain Garden and Porous Pavement installed at 9 Riverside Street.	
5.06	Incorporate stormwater Treatment in 101A expansion project	Design and construct treatment facilities and track by percent complete	DPW - Mendola	Design initiated.	Continue to design treatment facilities.
6.00	Municipal Good Housekeeping				
6.01	Hazardous waste training program for applicable employees	Employees attend annual hazardous spill training program beginning May 2005	DPW - Mario Leclerc	Consultant hired to train NWTF staff about hazardous wastes.	Continue to train employees.
6.02	Storm water discharge training program for applicable municipal employees on preventing non-storm water discharges	Employees attend annual storm water discharge training program beginning May 2005	DPW - Mario Leclerc	DPW personnel attended workshop at UNH Stormwater Center. DPW personnel attend NEWPC and NEWEA Conference.	Continue selection of outside program for DPW employees to attend
6.03	Review program for handling fertilizer on city property	Complete review July 2005	DPW - Nicholas Caggiano, Amy Gill	Fertilization policy near wetlands reviewed and found to be satisfactory.	Continue implementation of fertilization policies.
6.04	Continue litter management program by street sweeping entire City at least once a year.	Review program annually and record number of lane miles swept	DPW - Scott Pollock	Program began in March 2006, earlier than usual due to a mild winter. Entire City swept once, with commercial/arterial or other critical streets being swept up to 6 times per year. Sidewalk sweeper purchased.	Replacement street sweeper budgeted to be purchased. Continue street sweeping.
6.05	Review snow dumping procedure to allow snow storage in areas away from surface waters	Complete review July 2005	DPW - Scott Pollock	Program reviewed. Snow continues to be stored in an area where stormwater treatment is available before the melted snow is discharged to a water body. Area is swept during and after snow melt.	Review program annually.

Section II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 4	Planned Activities Permit Year 5
6.06	Continue city wide program to clean catch basins	100% of all catch basins cleaned once every 3 years	DPW - Mario Leclerc	Approximately 2,000 catch basins were cleaned.	Continue catch basin cleaning program.
6.07	Continue SSO(6) correction and mitigation program for SSOs that discharge to water bodies	Record number of SSOs corrected.	DPW - Mario Leclerc	Three SSOs were reported that affected a water body. See Appendix E.	Continue correction of SSOs.
6.08	Television inspection of storm drains as needed	Record number Inspect as needed	DPW - Mario Leclerc	Approximately 21,000 LF of Storm Drain were inspected with the robotic camera.	Continue inspection as needed.
6.09	Calibrate salt and sand truck spreaders	Complete annually before November 1st	DPW - Scott Pollock	Calibrated salt and sand trucks in November 2006.	Calibrate trucks in fall 2007.
6.10	Review pooper scooper ordinance	Review ordinance by July 2005	DPW- Amy Gill, Nick Caggiano	Ordinance reviewed and found adequate. Four Doggie Convenience Stations were monitored. Bags holders are being emptied and replaced approximately monthly..	Monitor the use of the Doggie Convenience Stations. Add more stations if funding allows.
6.11	Disseminate information contained within city developed Alternative Storm Water Management Methods guide for Storm Water Control	Make available to developers as guide by July 2004	DPW - Amy Gill	Manual being reconsidered for applicability to City.	Continue to evaluate manual for possible distribution.
Revision		Make available by July 2005			
6.12	Develop a ditch/swale cleaning program	Develop program by July 2005	DPW - Mario Leclerc	Swales continue to be cleaned. Approximately 21 swales/ditches were inspected and 4 were cleaned. Preliminary inventory of swales of completed. Need field verification.	Continue to inventory swales. Develop program and inspect swales.
6.13	Develop culvert maintenance program.	Develop and Implement program by 2007	DPW - Mario Leclerc	List continues to be updated and field verified.	Continue to field verify locations of culverts.
6a.	Addition				
6.14	Implement Automated Trash System	Begin program by 2003	DPW - Solid Waste	Contiued automated trash collection.	Continue expansion of automated trash and recycle programs.

Section II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 4	Planned Activities Permit Year 5
7.00	Impaired Waters				
	No TMDL is listed for any water body into which the City stormwater discharges. See Table A for more information.				

- (1) DPW - Division of Public Works Division, City of Nashua
- (2) NCC - Nashua Conservation Commission
- (3) NWTF -Nashua Wastewater Treatment Facility, City of Nashua
- (4) USEPA - United States Environmental Protection Agency
- (5) NHDES - New Hampshire Department of Environmental Services
- (6) NRPC - Nashua Regional Planning Commission
- (7) CDD - Community Development Division, City of Nashua
- (8) SSO - Sanitary Sewer Overflow

Part III. Summary of Information Collected and Analyzed

Additional equipment has been purchased to complete the sampling program. Materials include a canoe, grab pole, sampling bottles and transport containers. Sampling is scheduled for Spring/summer 2007.

Volunteers with the Souhegan Watershed Council continue to monitor several outfall locations in Nashua.

Part IV. Implementation Schedule

The Stormwater Management Program Implementation Schedule for the Best Management Practices is outlined on the attached table.

BMP ID #	PERMIT YEAR ONE				PERMIT YEAR TWO				PERMIT YEAR THREE				PERMIT YEAR FOUR				PERMIT YEAR FIVE			
	Spring 03	Summer 03	Fall 03	Winter 04	Spring 04	Summer 04	Fall 04	Winter 04-05	Spring 05	Summer 05	Fall 05	Winter 05-06	Spring 06	Summer 06	Fall 06	Winter 06-07	Spring 07	Summer 07	Fall 07	Winter 07-08
1.01																				
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Part IV. SWMP Implementation Schedule

BMP ID #	PERMIT YEAR ONE				PERMIT YEAR TWO				PERMIT YEAR THREE				PERMIT YEAR FOUR				PERMIT YEAR FIVE			
	Spring 03	Summer 03	Fall 03	Winter 04	Spring 04	Summer 04	Fall 04	Winter 04-05	Spring 05	Summer 05	Fall 05	Winter 05-06	Spring 06	Summer 06	Fall 06	Winter 06-07	Spring 07	Summer 07	Fall 07	Winter 07-08
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Bold Text indicates revision or addition.

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Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering May 1, 2006 through April 30, 2007)

Programmatic

	Preferred Units	Response
Stormwater management position created/staffed	(y/n)	yes
Annual program budget/expenditures ** <i>Currently being evaluated. Rough estimates.</i>	(\$)	at least \$750K/\$400K
Total program expenditures since beginning of permit coverage <i>Currently being evaluated. Rough estimates.</i>	(\$)	at least \$3.1 mil/\$1.6 mil
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		Enterprise and General Fund

Education, Involvement, and Training

Estimated number of property owners reached by education program(s) <i>via wastewater bill insert</i>	(# or %)	90% estimated
Stormwater management committee established	(y/n)	yes – Regional (NRPC)l
Stream teams established or supported	(# or y/n)	Yes - MFPAC
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	Yes Unknown
Shoreline cleaned since beginning of permit coverage	(mi.)	unknown
Household Hazardous Waste Collection Days <i>Regionally sponsored</i>		
▪ days sponsored **	(#)	6
▪ community participation ** <i>Nashua only</i>	(# or %)	792 households
▪ material collected ** <i>Entire region</i>	(tons or gal)	69,764 pounds
School curricula implemented <i>Classroom presentations</i>	(y/n)	Yes

Legal/Regulatory

	In Place prior to Phase II	Reviewing Authorities	Drafted	Draft in Review	Adopted
Regulatory Mechanism Status (indicate with "X") <i>Revised Land Use Code adopted January 2, 2006</i>					
• Illicit Discharge Detection & Elimination	X				
• Erosion & Sediment Control	X				
• Post-Development Stormwater Management	X				
Accompanying Regulation Status (indicate with "X") <i>Revised Land Use Code adopted January 2, 2006</i>					
• Illicit Discharge Detection & Elimination	X				
• Erosion & Sediment Control	X				

• Post-Development Stormwater Management	X				
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Mapping and Illicit Discharges

Outfall mapping complete	(%)	99%
Estimated or actual number of outfalls	(#)	392
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	99%
Mapping method(s)		
▪ Paper/Mylar	(%)	99%
▪ CADD	(%)	50% estimated
▪ GIS	(%)	99%
Outfalls inspected/screened **	(# or %)	25 estimated
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	392
Illicit discharges identified **	(#)	1
Illicit discharges identified (Since beginning of permit coverage)	(#)	2
Illicit connections removed **	(#); and (est. gpd)	1
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	2
% of population on sewer	(%)	90% estimated
% of population on septic systems	(%)	10 % estimated

Construction

Tracking not available at this time

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

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100
Site inspections (for proper BMP installation & operation) completed **	(# or %)	unknown
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	Yes
Low-impact development (LID) practices permitted and encouraged	(y/n)	Yes

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	0.1/year
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	0.5/year
Qty of structures cleaned **	(#)	at least

Qty. of storm drain cleaned **	(%, LF or mi.)	21,000 LF
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	unknown
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	N/A
• Disposal cost**	(\$)	\$90 per ton
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1
• Vacuum truck(s) owned/leased	(#)	2
• Vacuum trucks specified in contracts	(y/n)	N/A
• % Structures cleaned with clam shells **	(%)	10%
• % Structures cleaned with vector **	(%)	90%

Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	6
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	6
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	not documented
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$290,000
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	N/A
• Disposal cost**	(\$)	0
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1
• Vacuum street sweepers owned/leased	(#)	4
• Vacuum street sweepers specified in contracts	(y/n)	N/A
• % Roads swept with rotary brush sweepers **	%	1
• % Roads swept with vacuum sweepers **	%	99

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination) <i>Public land has increased since beginning of reporting period therefore use of fertilizers has increased</i>		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	Yes

Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) <i>A blended mix of salt and sand is used on city streets.</i>	% NaCl % CaCl₂ % MgCl₂ % CMA % Kac % KCl % Sand	
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Italicized text is Comment made by City.

N/A: Not Applicable