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Municipality/Organization: City of Nashua, NH

EPA NPDES Permit Number: NHR041021

Annual Report Number
& Reporting Period: No. 8: 4/1/10 – 3/31/11



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: Lisa Fauteux

Title: Director, Division of Public Works

Date: April 29, 2011





Introduction

This is the eight annual report to comply with the conditions of the 2003 Small MS4 General Permit. The City of Nashua (City) is anticipating the issuance of the 2011 Permit for Small MS4 General Permit for New Hampshire later this year.

The City continues to experience a lack of funding dedicated to providing maintenance to culverts, wetlands, brooks, catch basins, and drain lines and capital improvements to the drainage system. While the City has a sewer user fee, these funds should be directed only to the sanitary and combined sewer system, not the storm drainage system. In addition, federal mandates by the NPDES Phase II Stormwater permit have placed further requirements relating to stormwater upon the City. Knowing that legal authority was given to NH municipalities in 2008 to form stormwater utilities under RSA 149-I, the City applied for and received a grant from the NH Department of Environmental Services to complete a Stormwater Utility Feasibility Study. Using some City funds as well as the grant, the City hired a consultant to conduct the feasibility study. The draft Feasibility Study was submitted in March 2011 and is under review. The public awareness and outreach component will be initiated in the next permitting cycle.

Part I. Self-Assessment

CSO Program

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. Several projects related to the Consent Decree, and are discussed below, are ongoing and will reduce the amounts of CSOs occurring in the Nashua and Merrimack Rivers.

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 is now online, reducing the occurrence of CSOs and the volume of combined flows that is discharged to these rivers. Also, more urban stormwater runoff from approximately 30 percent

of the city, which is part of the combined flow, will now be conveyed to the WWFTF where it will be treated before being discharged to the Merrimack River.

Planning and design for mitigation of discharges at CSO 003 and CSO 004 is continuing. The proposed storage tanks would reduce the amount of combined sewerage discharging to the Merrimack River. Preliminary analyses indicate that the sewer separation work completed upstream of CSO 003 has greatly reduced the volume of combined sewage so that no storage tank will be needed at CSO 003 to contain overflow up to a 2 year storm event. Evaluation of the needed infrastructure near CSO 004 continues.

The construction of an automated sluice gate within the CSO 006 regulator chamber to control flow during wet weather events was completed during the reporting period and is now online. With the addition of a sluice gate at this location, excess volume in the 108" Nashua River Interceptor can be used to store combined flow, reducing the frequency and volume of combined sewage overflowing into the Nashua River.

Construction of drop over structures constructed on the North Merrimack River Interceptor was completed during this reporting period. These structures reduce discharges to the Merrimack River at CSO 005 by allowing combined sewage flow from a 2-year and higher storm event in sewer pipes on East Hollis and Crown Streets to flow directly into the larger interceptor that flows directly to the wastewater treatment facility.

Separation of combined sewers in the Harbor Avenue area will reduce the volume of combined sewage flowing to the CSO 005 regulator on the Merrimack River. An additional benefit is the localized flooding of combined sewage in the street will be eliminated. Stormwater will be captured and treated prior to being discharged into Salmon Brook. The design of this project was completed in this reporting period and the construction is to be completed by October 2012.

In addition to the Consent Order related projects, completion of a sewer separation project in the Haines Street area was achieved during this reporting period, reducing the volume of combined sewage flowing to the CSO 4 regulator. Stormwater from this 21 acre drainage basin was removed from the combined system. Hoods are being installed in the catch basins to treat the stormwater prior to it being discharged to Salmon Brook through an existing outfall.

Also, improvements to a culvert that carries Harris Brook are being designed. During large rain events, the flow in the brook overtops the roadway, picking up road debris, which is carried back into the brook system.

A study is being completed in the Manchester Street area to address surface flooding and sewage surcharging in low lying areas. Low impact development initiatives are being considered as an alternative.

Public Education and Participation

The City continues to be a member of the Nashua Area Stormwater Coalition and is currently chairing the group. Two meetings were held with the area Phase II communities. One of the meetings was held in Manchester with the Manchester Area and Seacoast Area Coalition groups. The three groups discussed successes and challenges in addressing their stormwater management programs and compliance with the Phase II regulations.

The Enviroscope Watershed/Non-point Source Model was used as part of a stormwater education program. The model was used to educate the public about watersheds and nonpoint source pollution during an Earth Day celebration on April 24 at the Four Hills Landfill. The model will continue to be used in classroom presentations and public events in the next permit period.

The Paulie the Pickerel "Let Only Rain go down the Storm Drain" logo continues to be used for marketing the stormwater management program in the City. Magnets with the logo continue to be distributed during educational presentations. Door hangers containing information about stormwater dos and don'ts were distributed during presentations and are available in locations frequented by residents in City Hall and other public buildings. The Hollis Crossing Condominium complex, which has 3,000 feet of frontage on the Nashua River, distributed informative doorhangers to about 400 units on its property through its homeowner association.

The Nashua Green Team continues to meet and engage residents, businesses and others in discussions to make Nashua a Green City. Education about stormwater, water quality and water bodies is an important element of these efforts and several schools have participated in projects throughout the city.

The Mine Falls Park Advisory Committee sponsored six Trail Days during the period. In addition to general park maintenance, trash and debris were removed from the waterways and banks of the Nashua River, Nashua Canal and Mill Pond.

An update of stormwater issues was presented at each of the monthly meetings of the Board of Public Works. The Board of Public Works is a five member body of the elected officials that are responsible for the overall direction and performance of the Division of Public Works. This is a public meeting that is recorded and broadcasted repeatedly on the government access channel. The stormwater update discusses city-wide drainage issues, capital project needs, the progress of the stormwater utility and any other items that are related to stormwater.

Illicit Discharge Detection and Elimination

The Geographic Information System (GIS) mapping program of outfalls was updated with new information and corrected when discrepancies were found.

New aerial photography including using Color Infrared Imagery was completed and put online during this reporting period. A city-wide impervious surface layer was generated so a calculation

of impervious surface for each parcel is possible. The information has been used in the analyses of a proposed stormwater utility fee. This information will be used for better land use planning and in more comprehensive design of stormwater systems.

One instance of a painting contractor cleaning out painting material into a catch basin was reported, investigated and confirmed. The homeowner and painting contractor were contacted.

Culverts continued to be cleaned and maintained. When a new culvert was identified, the GIS mapping system was updated with accurate culvert information based on the field verification. Where necessary, maintenance work orders were generated using the IntelliGov system.

Construction of a new inlet structure on Lincoln Brook was completed during this reporting period. This new structure will prevent the culvert from being blocked with debris.

Construction Site and Post-Construction Runoff Control

The Nashua Land Use Code addresses land use planning issues through a variety of provisions related to stormwater management including the protection of wetlands, floodplain regulations, landscaping requirements, impervious surface requirements, open space requirements, and designs issues discussed during the development review process. Each contributes to improving the stormwater directly or indirectly. During the development review process of subdivisions and site plans, landscaping plans are carefully reviewed by a staff landscape architect. Generally, applicants are asked to increase the amount of plantings and make other improvements to the plans submitted. The open space, impervious surface, parking and other zoning provisions are addresses as part of the process as well.

Wetlands and wetland buffer areas are protected and proposals to impact these areas are carefully reviewed by the Nashua Conservation Commission who makes a formal recommendation to the Zoning Board of Adjustment. Wetland Buffer Markers continue to be required to be installed in the buffer areas of impacted wetlands by the Nashua Conservation Commission when proposed developments include wetland impacts. The purpose of the markers is to encourage residents not to dump debris in wetland areas.

The Nashua Conservation Commission retained the services of the Nashua River Watershed Association (NRWA) to conduct a baseline monitoring study of the over 1,000 acres of conservation easement areas within the city. The study was presented to the NCC in April 2010. This study now serves as the baseline to address how these areas will be managed, and many of them contain wetlands.

The Nashua Conservation Commission/City was successful in purchasing an additional 86 acres for conservation purposes. These lands will be left in their natural state and provide passive recreational opportunities. These lands include wetlands and forested landscapes. The NCC continues to consider other parcels for purchase to preserve additional open space in the City.

The Nashua Green team is also a forum during which “green initiatives” including stormwater management issues can and have been discussed. The Green Team meets monthly.

Staff provides ongoing assistance to residents with flood insurance and floodplain management questions. This serve as an opportunity to educate the public about floodplain management and the relationship to stormwater management.

Staff routinely provided educational literature to the NCC and Planning Board on issues related to environmental protections such as stormwater management, erosion control and use of salt/sand in winter deicing applications.

Good Housekeeping

Good housekeeping measures included the continuous street sweeping program. Sweepers operate 16 hours a day on week days from April 1 to June 1 and 8 hours per day until December 1. Winter salt and sand use was monitored and controlled.

Pet Waste Stations were again in use with over 5000 waste bags being provided. A grant application to purchase 10 more Pet Waste Stations was submitted.

Video inspections of culverts and the storm drain system using a CCTV system and a hand operated pole camera were completed. This equipment assisted in detecting infrastructure issues. Over 1,500 feet of the closed pipe drainage system were inspected using cameras.

The Parks Department continues its practice of Integrated Pest Management (IPM) principles and reduced the amount of pesticides that was applied. Also, during the reporting period, the department determined that turf growth regulators were effective in reducing the amount of fertilizer and water that is needed on the fields and will continue to be used.

Engineering summer interns located, documented and inspected over 40 drainage easements. Structural impediments to accessing the drainage system were noted.

The IntelliGov Work Order Management System continues to be used to track work orders. This system allows entering and tracking of all work orders within the Division of Public Works, many of which are related to stormwater management.

Additional activities completed during the permit period are included in Part II of this report.

Impaired Waters

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 2010 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 is the source of impairment has been identified by the NHDES.

The NHDES Final Report for Statewide TMDL for Bacteria Impaired Waters has been approved by the EPA. Certain segments of the Nashua and Merrimack Rivers and portions of Salmon Brook have been identified as being impaired for Escherichia coli. The CSO Program is addressing this impairment in the Nashua and Merrimack Rivers. Sampling of Salmon Brook will be scheduled to attempt to identify sources of this pollutant in the waterway. In order to address Part I.D, the schedule for required TMDLs is listed in Table A, located in Appendix A.

Permit Compliance

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

Part II. Summary of Minimum Control Measures

The summary of the activities completed in Permit Year 8 of the six Minimum Control Measures is listed on the attached table, Part II Summary of Minimum Control Measures. Planned activities for the next permitted year, April 2011 through March 2012, are also listed. Revisions to the Best Management Practices have been noted in the table.

Part II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 8	Planned Activities Next Year
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 during Earth Day celebrations at landfill in April 2011. About 15 presentations were given to residents.	Continue presenting 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	Newspaper articles on Earth Day and Nashua River were printed in local paper.	Continue to seek newspaper coverage on stormwater issues.
1.03	Create web page on City web site	Web page online by 12/05	DPW - Stephen Dookran, Amy Gill	Draft for stormwater information being developed. Status of CSO and stormwater projects listed.	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	Power point slides developed and played on local cable channel.	Continue playing educational PowerPoint presentations on local and government cable access channels.
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 - Phil Appert	Visits to SIU and deficiencies discussed with property owners. Discussion of stormwater BMPs included in visits.	Continue visiting SIUs.
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	Public meetings where stormwater issues discussed replayed on local cable channel.	Continue to replay meetings.
1.07	Create board for display at functions where the public is gathered.	Number of times display is used.	DPW - Amy Gill	Board used as tool during Earth Day celebration.	Update board and continue to display board at various public events.
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 - Roy Sorenson	Task complete. Wetland markers continue to be installed by developers as stipulations for approval by the Conservation Commission.	Installations of wetland markers will continue to be stipulated by the Conservation Commission as part of the approval process.

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 8	Planned Activities Next Year
1.09	Mail letters to owners/residents that about wetland to explain importance of wetland and encourage no dumping in wetland area.	Number of letters mailed to abutters	DPW - Amy Gill, NCC(7)	Task completed.	
1.10	Design sign for brook/stream crossings	Percent design completed	DPW - Amy Gill, NCC	Sign locations identified and draft sign concept developed. Discuss concept with City Departments.	Design sign.
1.11	Present Stormwater Management Program at Public Meetings	Number of Presentations	DPW- Amy Gill	Monthly Stormwater Issue update given monthly and EPA CSO reports presented quarterly at Board of Public Works meeting which is carried and replayed on Government access channel.	Continue monthly and quarterly updates.
1.12	Purchase and distribute Magnets with "Paulie the Pickerel" logo at public functions	Number of magnets distributed	DPW - Amy Gill	Magnets continue to be distributed in city offices and at public demonstrations using the Enviroscope.	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	Inserts and doorhangers continue to be made available at public locations. Hollis Crossing Condominium complex distributed about 400 doorhangers to unit owners.	Continue to distribute information flyers/doorhangers.
1a.	Addition				
1.14	Develop Power point to run on Public Access television	Number of days presentation runs	DPW- Amy Gill	Power point slides developed and played on local cable channel October 2010.	Update and run informational slides.
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.	Previously placed markers inspected to determine durability of marker.	Continue to have public involved in applying markers.
Revision		50% installed by 10/08			

Part II. Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 8	Planned Activities Next Year
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(2)	Hotline for drainage issues continues. Record violations and report to NHDES(3) and USEPA(4) as needed. Intelligov Work Order Management System used to track phone calls.	Continue hotline for drainage issues.
2.03	Meet with local communities, and the NHDOT(9). Meeting coordinated by the Nashua Regional Planning Commission (NRPC). Group called Nashua Stormwater Coalition.	Meet every two months for a total of 6 meetings per year	DPW - Amy Gill, NRPC (8), NHDES	Two meetings held. Nashua is chair of Coalition. One meeting was joint meeting with Manchester area and Seacoast area groups to discuss programs.	Continue to meet with members of the surrounding communities. NHDES to take lead in organizing the meeting. Nashua to host meeting for the next reporting period.
2.04	Create door hanger with tips on preventing stormwater pollution	Number of door hangers distributed	DPW - Amy Gill	Door hangers were distributed during Earth Day celebration and made available at public areas in City Hall. Hollis Crossing Condominium complex distributed about 400 doorhangers to unit owners.	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.	Continue to monitor emails.
2.06	Request public input for ordinance revision to Stormwater Management and Wetlands sections	Number of meetings held	CDD (5)	Continue 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	Update 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 10/06			

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 8	Planned Activities Next Year
3.03	Review illicit discharge ordinance	Amend ordinance as necessary by 12/07	DPW - Amy Gill	Begin process to make changes to ordinance if needed.	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 survey by 11/04	DPW - Mario Leclerc, Amy Gill	Continue survey of outfalls on smaller brooks and ponds. Additional outfalls documented.	Update outfall list as outfalls are located or newly 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	Sampling of stream and brooks scheduled for summer to attempt to trace illicit discharges.	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, Roy Sorenson	Visual inspections of outfall continue in trying to identify suspect discharges.	Continue testing and tracking suspect discharges.
3.07	Continue Regional Hazardous Waste Collection Day	Conduct 5 collection days per year	DPW - Sally Hyland, NRPC	Hazardous waste collection days occurred on 4/24, 5/ 8, 6/3, 8/7, 10/2 and 11/6/2010 for this year. An estimated 478 households participated bringing 27,700 lbs of waste.	Hazardous waste collection days scheduled for 4/23, 6/2, 6/3, 10/1 and 11/5/2011 for this year.
3.08	Track Hazardous Spills	Number of Spills identified	DPW - Mario Leclerc	No spills reported.	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	Waterway continues to be visually inspected. No suspect sources noted.	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	CDD- Lucy St. John	Land use ordinance revised and updated, effective October 2010.	Continue review of implementation of new ordinances.

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 8	Planned Activities Next Year
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	CDD- Lucy St. John	Land use ordinance revised and updated, effective October 2010.	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. Proceed through internal process to change ordinance by Dec. 2007	CDD- Lucy St. John	Land use ordinance revised and updated, effective October 2010.	Continue review of implementation of new 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	Sample drawings gathered and compile into standards. The standard for driveway construction revised. Requesting new driveway runoff be contained on site.	Index drawings and finalize drawings. Compile drawings electronically.
4.05	Review procedures for inspection of construction sites to see if BMPs are in place and functioning correctly	Complete review by Dec. 2006	CDD	CDD reviews construction sites of concern and as the availability of staffing allows.	Continue review of inspection procedures and continue to inspect sites.
4.06	Review procedures for enforcement of improper functioning sediment and erosion control measures	Complete review by Dec. 2006	CDD	Enforcement procedures continued to be reviewed and revised.	Continue 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. Proceed through internal process to change ordinance by Dec. 2007	CDD- Lucy St. John	Land use ordinance revised and updated, effective October 2010. Sectioned renumbered to 190-215.	Continue review of implementation of new ordinances.

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 8	Planned Activities Next Year
5.02	Review ordinance Sec 16-145 for groundwater recharge required on new site plans	Make recommendations for improvements by June 2006. Proceed through internal process to change ordinance by Dec. 2007	CDD- Lucy St. John	Land use ordinance revised and updated, effective October 2010. Staff continues to make recommendations on improving the quality of landscaping plans submitted.	Continue review of implementation of new ordinances.
5.03	Implement Annual Operations and Maintenance requirement for BMPs on private properties	Implement by Dec. 2007	CDD- Lucy St. John	Land use ordinance revised and updated, effective October 2010.	Continue review of implementation of new ordinances.
5.04	Develop enforcement measures and assign internal staff to enforce requirements	Implement by Dec. 2007	CDD	Review of enforcement procedures ongoing.	Continue review of requirements.
5a.	Addition				
5.05	Install Low Impact Development items on Municipal Properties	Design and Construct on Riverside Street Property	DPW - Steve Dookran	Task complete.	
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	NWTF staff reviewed procedures for handling hazardous wastes.	Continue to train employees and review procedures.
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	EPA Stormwater Web Casts viewed by staff. Employees attended various conferences and seminars (APWA, UNH T2, NEWEA).	Continue to train employees.
6.03	Review program for handling fertilizer on city property	Complete review July 2005	DPW - Nicholas Caggiano, Amy Gill	Task complete.	Continue implementation of fertilization policies.

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 8	Planned Activities Next Year
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 - Roy Sorenson	Program began in March 2010. Entire City swept once, with commercial/arterial or other critical streets being swept up to 6 times per year.	Continue street sweeping.
6.05	Review snow dumping procedure to allow snow storage in areas away from surface waters	Complete review July 2005	DPW - Roy Sorenson	Program reviewed. Snow continues to be stored in areas 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.
6.06	Continue city wide program to clean catch basins	100% of all catch basins cleaned once every 3 years	DPW - Mario Leclerc	At least 563 catch basin were cleaned, an increase of 33% over the last reporting period.	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 were reported.	Continue correction of SSOs.
6.08	Television inspection of storm drains as needed	Record number Inspect as needed	DPW - Mario Leclerc	Approximately 1,500 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 - Roy Sorenson	Calibrated salt and sand trucks in November 2010. Ordinance reviewed and found adequate.	Calibrate trucks in fall 2011.
6.10	Review pooper scooper ordinance	Review ordinance by July 2005	DPW- Amy Gill, Nick Caggiano	Four Doggie Convenience Stations were monitored. Over 5,000 bags were dispensed. Stations frequently vandalized.	Monitor the use of the Doggie Convenience Stations. Grant to install 10 more stations being pursued.

BMP ID#	Best Management Practice	Measurable Goal	Responsible Party	Progress on Goals Permit Year 8	Planned Activities Next Year
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	Low impact development ideas continued to be discussed with developers.	Continues discussion with developers the advantages of LIDs.
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 inspected and cleaned as needed. Preliminary inventory of swales identified in GIS of completed.	Clean swales as necessary.
6.13	Develop culvert maintenance program.	Develop and Implement program by 2007	DPW - Mario Leclerc	Ninety-two culverts were cleaned. Continued to document, and inspect culverts as they were identified. GIS mapping updated.	Continue to locate culverts and clean culverts as needed. Update GIS system as necessary.
7.00	Impaired Waters				
	The NHDES Final Report for Statewide TMDL for Bacteria Impaired Waters has been approved by the EPA. See Appendix A for a listing Impaired Waters and the schedule for TMDL studies for waterway within the city limits.				

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