

Municipality/Organization: Rochester, New Hampshire

EPA NPDES Permit Number: _____

NHDES Permit Number: NHR041028

**Annual Report Number
& Reporting Period:** April 1, 2006 – March 31, 2007
(report no. 4)

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NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2007)

Part I. General Information

Contact Person: Thomas H. Willis, Jr., PE **Title:** City Engineer

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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: John Scruton

Title: City Manager

Date: 04/30/2007

Part II. Self-Assessment

The City of Rochester has continued to work to comply with the requirements of the Stormwater General Permit. All efforts have been performed using existing staff. There have been no permanent staff hired dedicated to stormwater management rather, existing staff have been continuing to train themselves on stormwater requirements and attempting to implement them in association with their normal duties. This continues to be a difficult task. Rochester continues to be one of the fastest growing communities in the region. City planning and engineering staff have been forced to devote most of their time to dealing with the growth.

This does not mean that the City has been ignoring the best management practices that have been promoted by this program. To the contrary, the city has instituted processes and controls that require that the contractor use best management practices to control stormwater. This is done through the project design review process as well as during the construction process.

An independent third party consulting engineer, who reports their findings back to the planning and engineering staff and ultimately to the planning board, reviews all significant development plans in a comprehensive fashion. This third-party engineer has been required by the city to consider stormwater management as part of the review criteria. The City continues to be more proactive in monitoring stormwater management practices at construction sites. The city's conservation commission has begun taking a more active role in monitoring construction sites particularly those that occur near wetlands.

The City is continuing its efforts to promote the Cocheco River as an amenity to the City's vibrancy. The City's riverwalk committee has continued its work on the riverwalk proposal. This effort has continued this year. This year a consulting planning and engineering firm was hired by the riverwalk committee to look at the details of creating this riverwalk vision. Stakeholders have been contacted and conceptual plans have been completed.

The planning board has completed work on and is implementing a conservation overlay zone that has established 50-foot buffers to all wetland areas. These buffers are intended to filter contaminants generated in the built environment from being carried by stormwater into the wetland areas. This practice is consistent with the goals of the stormwater program.

The City has been a charter member and an active participant in the Seacoast Stormwater Coalition, an organization of other MS4 communities in the Seacoast region of New Hampshire with the goal of leveraging resources and sharing information to achieve common goals particularly as it relates to training and outreach.

It was originally the city's intention to implement many of the goals in the management plan using existing city staff, with

targeted assistance from outside consultants. Meeting all of the goals outlined in the stormwater management plan has proven to be a challenge using existing city staff due to the growth that the city is enduring and the ambitious capital improvement program that has been approved by the City Council. With only 13 months remaining in this current general permit, it is clear that the city is going to need outside assistance to meet all of our stormwater management plant goals. The Public Works Department has requested funds in its FY 2008 capital improvement program for \$200,000 to hire a consultant to complete bring all of its goals to conclusion. As the status report shows, the city has performed work on most of them, however they are a “work in progress” that is attended to during lulls in the construction season or when there are opportunities to leverage resources in a regional fashion through the Seacoast Stormwater Coalition and the New Hampshire Estuaries Program and State Resources, notably, the Department of Transportation (NHDOT) and the Department of Environmental Services (NHDES).

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
01-01 Revised	Prepare Stormwater Video	Public Works /Commissioner	Cable Access, school and library showings	The Stormwater video continues to be a valuable tool for informing the public on the importance of stormwater stewardship and management. The video continues to be shown periodically on the city’s government cable television channel.	This program has matured. Will continue to use this as an educational resource. No change.
01-02 Revised	Support Annual Hazardous Waste Day	Public Works/ Office Manager	Coordinate & fund w/ Strafford Planning Commission; publicity	Community held household hazardous waste collection in Rochester on May 6, 2006. Managed and coordinated regional collection with 8 surrounding communities. Collected significant quantities of hazardous waste from 239 vehicles representing 262 households.	City is continuing to manage, publicize, and finance this regional effort annually. Another Household Hazardous Waste Collection is scheduled for May 5, 2007. Because of funding rules changes that the city leverages from NHDES HHW program, the city will continue to have only one collection per year. If funds are available this will be increased to two times per year.
01-03 Revised	Produce a Stormwater Brochure	Public Works/ City Engineer	Have available for public access locations in city	Continued local production. Handed out brochure at appropriate events – HHW day. – no change from previous year.	This effort will be part of the program that will be delegated to the consultant described in the “self-assessment” unless this is cut by the city council.
Revised	Localized Website	Cochecho Watershed Coalition; Public Works	Tie in with City Webpage	Have created the framework for and have completed about 60 percent of the prototype site. It has yet to be uploaded to the City’s website as it is still fragmented and disjointed – no change	This effort will be part of the program that will be delegated to the consultant described in the “self-assessment” unless this is cut by the city council.

1a. Additions

01-05	School Involvement	Various Teachers/ Public Works	Promote Stormwater as a topic in the classroom	The City's chief water treatment plant operator has made several presentations to school children promoting water use and conservation in general. Stormwater management is included as a component.	Promote topic to School Districts curriculum director. Continue these presentations as opportunities arise.
01-06	Stormwater related displays in city government buildings	DPW / Chief Water Plant Operator	Casually inform the public, while in a captive setting	DPW began a program of setting up rotating displays in the library and the city's revenue office. One of the displays relates to stormwater management (others include drinking water, water conservation, etc.)	These will continue in use throughout the year.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any).	Planned Activities – Permit Year 5
02-01	Promote Riverbank Cleanups	Conservation Commission/ Cocheco River Watershed Coal.	Periodic Cleanup Days	Watershed Coalition continued with canoe trips down Cocheco River to draw attention to the river quality. RAYS conducted organized riverbank clean-ups on 4/22/06. Groups went to clean up along riverbanks downtown and elsewhere.	City participated in promoting greater awareness of the importance of stormwater runoff to this group, so membership can be savvier in noticing, identifying, and reporting problems. More of the same.
Revised		Dept of Recreation Arena and Youth Services.			
02-02	Watershed Monitoring	Conservation Commission and Cocheco Watershed Coalition	Periodic Reviews of Watershed	Cocheco Watershed Coalition has been active in monitoring the Cocheco River and its tributaries. These efforts continued during this reporting period. City of Rochester supported these efforts by conducting the laboratory analyses of the water samples collected from the Cocheco River by this organization. The City also participated in the Cocheco Watershed Restoration Plan directed by the Cocheco Watershed Coalition.	Current efforts will continue. Development of data to find locations of emphasis for monitoring underway. Much data collected and now under evaluation. The City will continue to work with the Coalition to identify and improve areas where the quality of the river is of concern.
Revised					
02-03	Greater Involvement of Dept of Recreation Arena and Youth Services (RAYS)	RAYS Neighborhood Coordinator	Greater awareness and participation among city's neighborhood groups.	RAYS has been spearheading neighborhood cleanup days in conjunction with Earth Day (April 22, 2006). Continued to be a conduit for outreach to local neighborhoods.	Incorporate stormwater as a cause at many of the other events that RAYS sponsors throughout the year including National Night Out, Halloween Event, and in the summer youth camps Continue to foster and build on this relationship. Continue to promote stormwater as a cause.
Revised					

2a. Additions

02-04	Downtown River Walk	Planning Dept – Riverwalk Committee	Focus attention on Cocheco River in Downtown area - Downtown Enhancement	Riverwalk Committee has evolved and continues to meet as a separate organization. Hired a consultant to explore options for the river walk. Consultant has provided a report that is now being evaluated by the committee. City approved new water front redevelopment project that is now under construction. Developer has agreed to build the portions of the riverwalk that will traverse his site.	Downtown improvement and associated tie-in to nearby Cocheco River will continue to evolve with assistance and involvement by key city departments. Monitor private, re-development efforts currently being planned along riverfront, which will likely provide seed for first section of river walk.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
03-01 Revised	Identify and map outfalls and receiving waters	Engineering Division	Map all outfalls in GIS by Spring 08.	The City hired an intern in FY 2007, but was only available to staff the position for 8 weeks. Attention was focused on GPS location more drainage structures in the drainage network and expand on the work that was done in 2004.	This effort will be part of the program that will be delegated to the consultant described in the “self-assessment” unless this is cut by the city council. The consultant will be expected to tie together the efforts done thus far and bring together a completed stormwater map
03-02 Revised	Screen outfalls for Illicit Connections	Public Works	Screen all outfalls by Spring '05. Further investigate and located the source of those identified during the 2004 screening effort.	Staffing limitations did not enable us to actively investigate all suspected sources of contamination that had been discovered previously. The city did discover three illicit connections to the sewer system, eliminating two of them. These discoveries were largely the result of obtaining a fully functional sewer television camera truck in June 2006.	Eliminate the illicit connection located Lambert Court that was identified late in the reporting period. Rely on the consultant to build on the work that was completed in 2004 and use the camera system that was purchased in the last year to aid in this effort.
03-03 Revised	Review and Development Stormwater Ordinance	Public Works/City Council	Adoption of Ordinance by Fall of 2006 Presentation of the draft ordinance to the City Council by Spring 2008 – following draft by consultant.	Identified and located several stormwater ordinances from other communities in the state as well as from other places in the country. Began reviewing to determine what would be right and politically palatable for this community. Still assimilating data. Little progress was made on a dedicated ordinance, however work continues on amending the city’s subdivision regulations to permit more oversight of drainage and stormwater related issues.	Rely on the consultant to prepare a draft ordinance for review by the Planning Board and City Council and begin the political process in getting an ordinance adopted.

03-04	Illicit Connection Elimination Plan	Public Works Documentation	Plan Development by Summer 2006, assuming meaningful data is obtained during 03-02 effort	Mapping efforts conducted in 2004 have identified nine outfalls that need additional investigation. Will continue with identification and eradication efforts.	Plan to focus efforts on tracing the path of these outfalls and locating possible illicit connections, first by sampling outfalls of interest for e. coli bacteria. Work conditional on hiring another intern and consultant for FY 2008. Use of TV camera continuing to aid in locating and illicit connections, however is not available for a constant defined focused effort.
Revised			Plan Development by 2008		

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
04-01	Review Stormwater features during land development process	Planning/chief planner and Public Works/city engineer	Development of Site Review Standards	Technical staff continues to meet bi-weekly to review and discuss all new development proposals before going to planning board. Each proposal is scrutinized for stormwater impacts. City now mandates a 3rd party engineer; reporting to City Engineer, review all larger development projects. This ensures that time is available and devoted to a comprehensive design review including stormwater impacts.	In connection with planning and the City's design review consultant, continue emphasize state of the art stormwater management on new development projects where prudent in the context of current regulations and best management practices.
Revised					
04-02	Revise Subdivision and Site Plan Regulations	Planning/chief planner	Adoption of Site Plan Regulations	The planning board began adding to their Notices of Decision on each project language that formally notifies the applicant of federal and state notification requirements for construction projects that disturb over 1 acre. This is now a precedent condition of approval of all applicable site plans and subdivisions. .	City Council plans to begin focused review of zoning ordinance change in Fall 2007, with a goal of adopting ordinance by end of 2007. Immediately upon adoption of the zoning ordinance, subdivision regulations will be finalized get presented to full planning board and then to the full city council for review and possible adoption.
Revised					

04-03	Construction Monitoring of Site Development	Public Works/ Inspection Engineer	Visit each site; engage in corrective action	Engineering personnel continue to visit each site plan and subdivision at regular intervals. Stormwater management, erosion control, and adherence to construction plans and city standards are emphasized. Developed an inspection procedure with form to document inspections and report results to property owners and others. 2006 reporting year continued rapid pace of development and limited staffing has resulted in city not visiting projects as often as desired. Conservation Commission is taking a more and more active role at reviewing developments and investigating complaints.	Continue with current practices as resources permit. Continue to work with planning department and conservation commission to ensure development projects get scrutiny. Planning and Public Works Department has requested an additional staff person, whose task it will be to monitor all private development. Adopted a program that requires developers to pay city for inspection efforts. Moving toward hiring consultants to conduct periodic construction inspections to supplement city staff and get better coverage.
Revised					
04-04	Public Information / Pamphlet for Site Developers	Planning/ Conservation Commission	Pamphlet for site developers	Continued the practices devised in previous years.	Continue this practice. Create a more formal pamphlet to hand out to developers and contractors during pre-construction meetings.

Revised			Significant projects are required to have a preconstruction meeting w/ city staff to outline requirements		
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4a. Additions

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
05-01	Establish Drainage Maintenance Agreement Program	Planning/Public Works	Adopt as part of planning process.	City has established a program as part of the planning process, which requires owners of site plans with stormwater conveyance and detention systems to maintain these systems so they work as designed. Failure to maintain gives city the right to access the property to maintain them and recover the costs from the owner. Continued this practice	Continue with the drainage maintenance agreement process.
Revised					
05-02	Revise Regulations for Stormwater Management	Planning/Public Works	Adoption of Regulations		
Revised				Began identifying and reviewing regulations from other municipalities both inside and outside the state. Began reviewing to determine what would be right and politically palatable for this community. Still assimilating data. (See BMP 03-03)	Begin to tailor a program that will work in Rochester, as the extent of the stormwater system becomes known. Collection of data will aid in how to proceed with development of regulations. A consultant will likely do this.
Revised					
Revised					

5a. Additions

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
06-01	Catch Basin Cleaning Program	Public Works/Highway Lead or Foreman	Establish Priorities	City uses VAC-Con truck to clean catch basins and manholes. Try to get to each of them every two years. Prioritized to the downtown area where they are cleaned more frequently. Staffing levels do not allow a dedicated crew to do this everyday. This practice Continued as staffing allowed.	Continue as previously. City is maintaining Vortech units on a recurring schedule as well as upstream catch basins. Focus on routine maintenance of Vortech units (May and November).
Revised		Public Works/Highway/Fleet Supervisor			
06-02	Street Sweeping Year Road	Public Works/Highway Lead or Foreman	Install heating System in Garage for winter sweeper storage	City has two street sweepers. All winter sand is removed from the streets and sidewalks beginning in April and is an annual priority until complete. Throughout the spring, summer, and fall months both sweepers sweep and remove debris throughout the city. Downtown areas emphasized. Winter sand cannot be removed in winter because there is no heated place to store sweepers, so they must be winterized to prevent freeze-ups.	Continue the same. In order to have street sweeping capabilities during the winter months, two garage bays will need to have heat installed or new heated garage bays installed. Will continue to use less sand to treat roads during winter snow removal as a long as motorist safety is not compromised.
Revised		Public Works/Highway/Fleet Supervisor			
Revised					

6a. Additions

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	~\$10,000
		For HHW

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	Unk
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	Yes – Coheco
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes - ~5 mi
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	~1 percent
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	No

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control			X	
▪ Post-Development Stormwater Management				X
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				

Mapping and Illicit Discharges

Outfall mapping complete	(%)	70
Estimated or actual number of outfalls	(#)	138
System-Wide mapping complete	(%)	60
Mapping method(s)		
▪ Paper/Mylar	(%)	50
▪ CADD	(%)	
▪ GIS	(%)	70
Outfalls inspected/screened	(# or %)	30
Illicit discharges identified	(#)	12 – 3 this year
Illicit connections removed	(#) (est. gpd)	2
% of population on sewer	(%)	Approx 40
% of population on septic systems	(%)	Approx 60

Construction

Number of construction starts (>1-acre)	(#)	18
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	75
Site inspections completed	(# or %)	100 percent
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	Approx. 15

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections completed	(# or %)	100 percent immediately following construction
Estimated volume of stormwater recharged	(gpy)	undetermined

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1
Total number of structures cleaned	(#)	Not recorded
Storm drain cleaned	(LF or mi.)	Not recorded
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	Approx 80 tons
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill

Cost of screenings disposal	(\$)	0 – Landfill Host Community

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	6
Qty. of sand/debris collected by sweeping	(lbs. or tons)	~150 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	0 – Landfill Host Community
Vacuum street sweepers purchased/leased	(#)	Own 2, 0 this year
Vacuum street sweepers specified in contracts	(y/n)	Sometimes on municipally managed projects in urban areas

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	No Meaningful reduction
▪ Herbicides	(lbs. or %)	No Meaningful reduction
▪ Pesticides	(lbs. or %)	No Meaningful reduction

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	+Varies according to storm Varies according to storm
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Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	No
Estimated net reduction in typical year salt application	(lbs. or %)	Not Meaningful
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	Deferred by city council