

Municipality/Organization: Rochester, New Hampshire

EPA NPDES Permit Number:

NHDES Permit Number: NHR041028

Annual Report Number (Report No. 15)
& Reporting Period: April 1, 2017 – March 31, 2018

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2018)

Part I. General Information

Contact Person: Michael Bezanson Title: City Engineer

Telephone #: 603-332-4096 Email: Michael.Bezanson@rochesternh.net

Mailing Address: 45 Old Dover Road, Rochester, NH 03867

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: Daniel Fitzpatrick

Title: City Manager

Date: 4/30/18

Part II. Self-Assessment

The City of Rochester has continued to operate under the practices and procedures put into place during the 2003-2008 permit period and will continue to do so until the new General Permit becomes effective on July 1, 2018. We continue to refine our local stormwater program including changes to permitting, enforcement, mapping, interdepartmental and agency coordination. We are currently drafting revisions to our local Stormwater Management Ordinance and reviewing language in light of new General Permit language. Revisions include providing guidance on the application, review, approval and recordation process, identifying erosion controls standards during construction, citing current guidance documents, establishing standards for redevelopment while updating the standards required for new development, incorporating Low Impact Development (LID) strategies and Green Infrastructure components, updating definitions, creating a construction checklist to help ensure proper compliance, adding requirements regarding pre-treatment, treatment and infiltration, and other needed changes. The City of Rochester is also working closely with the USEPA Office of Wastewater Management out of Headquarters in Washington DC to create a long-term stormwater plan that promotes effective stormwater management while supporting economic growth, infrastructure improvement, environmental compliance, and overall quality of life. The long-term stormwater plan is expected to be finalized in late 2018 or early 2019. The City of Rochester was also selected for a Greening America's Communities (GAC) project through the USEPA Office of Sustainable Communities. Through this GAC project USEPA's consultant, Stockwell Engineers of South Dakota, will create a design charrette for two areas within the City that are in need of stormwater improvements that benefit not only stormwater issues, but the community as a whole. The design charrette is intended to be completed by the end of 2018. The two areas being addressed are a stretch of roadway between a new intersection that will be updated to a roundabout (Strafford Square Roundabout) in 2019 and the downtown, and a municipal parking lot that is located within the downtown and is in need of renovation.

A new computer software program was implemented two years ago to track and monitor permits issued by the City, including stormwater permits. Currently, the software is utilized by City staff who enter stormwater permit application information; however, an external interface will soon be accessible to the public to increase education and to streamline the application process. The revised ordinance and permitting software advances demonstrate Rochester's commitment to improve the water quality of our receiving waters. During this reporting period we processed 103 local construction-related stormwater permits. There are three levels of permit requirements: one level for site disturbances of between 5,000 and 20,000 square feet (SF) where there is a simplified permit review process by the Department of Public Works (DPW) in place; 20,000 SF to 1 acre where a local stormwater management plan is required to be submitted and reviewed by DPW; and, 1 acre and more in which DPW receives notification of the implementation of the Federal Notice of Intent program including the Stormwater Pollution Prevention Plan (SWPPP). As part of the review process, DPW reviews the drainage analysis and the overall design of the stormwater management system including pre-treatment and water quality systems. Although this information is often included as part of the NHDES Alteration of Terrain permit which is also reviewed by the DPW (required by NHDES if the project disturbs over 100,000 SF or 50,000 SF in Shoreland Protection) this information is also required if there is an increase in impervious area and disturbance over 5,000 SF. Projects within the City are incorporating LID practices such as porous pavement, gravel wetlands, rain gardens, bio-retention swales and other green technologies.

The design and construction of multiple City projects have occurred over the past year. Many of these projects include improvements to the stormwater systems. A new retail development, Granite Ridge, was expanded with

additional City streets which will include the installation of off-line deep sump catch basins, gravel wetlands, rain gardens, underground infiltration structures, the relocation of an intermittent stream and the restoration of a perennial stream. The City completed the construction of a new pedestrian bridge over the Cocheco River which resulted in the removal of four in stream piers and created a 200-foot clear span crossing that eliminated all impacts to the flood zones through that section of the river.

An Urban Collector roadway in Rochester, known as Franklin Street, was completely reconstructed two years ago and the scope of the project has now increased to include other adjacent roadways. The work includes new drainage lines, new outfalls with headwalls, deep sump catch basins, a new gravel wetland installed within City-owned property, and grass treatment swales. These improvements to the stormwater system are partly funded by NHDES through the 319 grant program.

The City completed its first contract with a private consulting firm to geo-locate our drainage infrastructure with field verification work and to digitize our existing paper records and incorporate them into our GIS system, further developing a comprehensive infrastructure geodatabase for the City's stormwater system. This work also includes the procurement a Trimble GPS unit, which will be retained by the City and used by City staff to update the stormwater infrastructure geodatabase in the future. The City plans to finalize this work by hiring a new GIS/construction technician who will be field verifying the data and filling in any potential gaps that we may find during review. The position is currently open for applications, with the intent of filling the position as soon as possible. The end product of this GIS effort will exceed all of the requirements of the new General Permit.

A project on Salmon Falls Road was completed this past year that was funded by the NHDOT Highway Safety and Infrastructure Program (HSIP). This project included major upgrades to ditches, swales, and roadway culverts as part of realigning two dangerous curves on this rural collector.

The Strafford Square Roundabout replacement project previously mentioned in the description of the Greening America's Communities project as the limits of the charrette, will begin construction this season as overhead utilities are relocated underground in preparation for the construction of the roundabout, which will include upgrades to the current drainage system. These upgrades include deep sump catch basins, upgraded transmission systems, an underground infiltration system, and outfall redesign considerations.

The City's Utility Division continues to be sensitive to and looks for any illicit connections into the storm sewer system as they perform their routine cleaning and maintenance activities. One such connection was discovered on 16 February 2018 during routine cleaning. The connection occurred when a contractor mistakenly attached the outgoing sewer line from the funeral home into the roof drain leaders instead of the sewer lateral. The connection was severed within a few hours and completely corrected within two days. The issue was reported to the NHDES and the USEPA within the required twenty-four hours and five-day reporting windows. As these types of connections are identified, our utility crews make it the highest priority to correct the problem. The City uses its new sewer television camera in addition to the more traditional investigation tools to locate illicit connections when evidence of an illicit discharge is detected (e.g. gray water and solids).

This year, utility crews cleaned 749 catch basins as part of the ongoing efforts to maintain all basins within the city limits, including areas outside of the regulated urbanized area. The new Vac-Con that was purchased three years ago has greatly assisted in the routine cleaning of the closed drainage system. Additionally, the City GIS

Coordinator has created an online web application that allows for tracking of each basin as it is cleaned. This allows for exact tracking or numbers in addition to notes as to the condition of the structure, types of material, pipe type and condition, and the depth of the sediment accumulated. This allows for detailed tracking of sediment accumulation and will better allow the City to optimize it's catch basin cleaning moving forward. The City also purchased a new vacuum street sweeper in the fall of 2015, which has improved our street sweeping capabilities. An estimated 500 cubic yards of material were removed from the roadways last year by street sweeping.

In terms of public participation and educational efforts, the City has continued to sponsor events such as the Earth Day/Rochester Pride Day neighborhood cleanup-held each April; and the household hazardous waste collection day-held every May. Rochester Main Street worked with the Rochester Recreation Department to organize the Earth Day/Rochester Pride Day City-wide cleanup. Over 200 volunteers participated in the event which included approximately 20 miles of roadway cleanup, over 100 bags of litter, old fencing, logs and brush were removed. Numerous public spaces were cleaned, raked and mulched and perennial gardens were included. The City once again sponsored a household hazardous waste collection event for residents of Rochester and nine smaller surrounding communities on May 6, 2017. The event serviced approximately 485 households containing hazardous waste for drop-off.

This reporting year was the third full year of the new position for a full time Assistant City Engineer, who's duties include the review of development projects together with the design, construction and maintenance of their erosion control and stormwater systems, to execute City objectives related to the General Permit and periodically monitor areas where construction has been completed to ensure BMPs are maintained and operating. This employee participates in the Technical Review Group (TRG) that meets regularly with developers and representatives from City Boards and Departments to review and discuss the technical components of all proposed development projects, including the proposed stormwater mitigation measures. The newly hired staff has created a letter of non-compliance system for stormwater enforcement that has been very successful. Several sites that were out of compliance and did not show any initial signs of self-correcting these issues, have been brought into compliance through this process. The hiring of this employee further establishes Rochester's commitment to stormwater monitoring and compliance. The City also contracted with an outside Engineering Consultant as our Stormwater Consultant to provide guidance and assistance with the design and implementation of the City's stormwater objectives.

City staff has continued their participation in regional stormwater management organizations, including the Seacoast Stormwater Coalition and the Great Bay Pollution Tracking and Accounting Pilot Project (PTAPP). PTAPP partners and Great Bay watershed communities have worked together to create a database for consistent regional tracking of pollutant load reductions.

During this interim period since the expiration of the 2003 General Permit and subsequent reissuance of the next General Permit the City has worked to continue the momentum that was established to solidify practices and processes that were implemented through the years and continue under the General Permit and Stormwater Management Plan.

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – (until a new General Permit is issued).
01-01	Prepare Stormwater Video	Public Works/ Engineering Division	Cable Access, school and library showings	<p>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 occasionally on the City’s government cable television channel. This is augmented by other productions that we have obtained on the same subject.</p> <p>Presentations are periodically given to City Council and aired on the City’s government cable channel.</p>	Will continue to use the stormwater video as an educational resource.
01-02	Support Annual Hazardous Waste Day	Public Works/ Office Manager	Coordinate & fund w/ Strafford Planning Commission; publicity	<p>Community held household hazardous waste collection in Rochester on May 6, 2017. Again the city managed and coordinated regional collection for the city and nine surrounding communities. Collected significant quantities of hazardous waste from approximately 485 households.</p> <p>Household hazardous waste (HHW) day video continues to be shown occasionally prior to HHW day on the City’s government cable television channel.</p>	<p>City is continuing to manage, publicize, and finance this regional effort annually. Next Household Hazardous Waste Collection is scheduled for May 5, 2018.</p> <p>Will continue to use HHW video as an educational resource.</p>

01-03	Produce a Stormwater Brochure	Public Works/ Engineering Division	Have available for public access locations in City	Continued to make brochures available at local City venues where there is public access using materials produced in previous years.	A new brochure is actively being coordinated with other members of the Seacoast Stormwater Coalition to be ready for distribution this year.
01-04	Localized Website/ Cable Access Television Channel	Public Works; Government Channel Coordinator	Tie in with City Webpage	<p>City's stormwater website was available to the public throughout the year. Analysis of the City's website suggested that the stormwater page on the City's website had 136 unique user pageviews during the reporting year.</p> <p>The City has been regularly using social media (Facebook) to inform the public on a variety of items such as construction projects, water conservation tips and hydrant flushing.</p> <p>The City has employed a public relations firm, John Guilfoil Public Relations LLC (JGPR), to assist in getting out messages and pertinent information. DPW staff are working with this firm to produce and disseminating stormwater related messages.</p>	<p>The City will continue to monitor the effectiveness of the website by reviewing traffic. The City will continue to use social media to publicize information of interest on a variety of topics including infrastructure improvements, construction activity, and development.</p> <p>The DPW will endeavor to create a stormwater press release that will be managed by the JGPR firm.</p>
01-05	School Involvement	Various Teachers/ Public Works	Promote Stormwater as a topic in the classroom	<p>The City makes the stormwater video available for local schools to use in the classroom. DPW personnel are always available for presentations when requested by the School Department.</p> <p>The Public Works Department continues to offers internships for students in the nearby Monarch School.</p>	Stormwater presentations will continue as opportunities arise. Continue project partnership and monitoring of existing LID sites and providing outreach tours. Water Conservation Plan implementation will provide an opportunity to include stormwater-related elements in any presentation. DPW personnel are always available for presentations when requested by the School Department. Continue work to identify areas for LID.

01-06	Stormwater related displays in City government buildings	DPW / Chief Water Plant Operator/other departments	Casually inform the public, while in a captive setting	<p>The City Clerk's office has continued to make an effort to promote the importance of "picking up after your dog" during this past year through the use of brochures and public information displays at key City buildings during its annual dog licensing drive. Information is also available on the City's website.</p> <p>"Have a little common courtesy and clean up after your pet – it's the law - \$100 Fine" signage has been placed in parks and dog friendly areas.</p>	These will continue to be used throughout the year.
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2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any).	Planned Activities – (until a new General Permit is issued).
02-01	Promote Riverbank Cleanups	Rochester main Street /RRA	Periodic Cleanup Days	Rochester Main Street worked with the Rochester Recreation and Area (RRA) to organize the Earth Day/Rochester Pride Day City-wide cleanup. Over 200 volunteers participated in the event. Work included roughly 20 miles of roadway cleanup and removal of over 100 bags of litter.	More of the same will continue on at least a semi-annual basis between the RRA and Rochester Main Street.

02-02	Watershed Monitoring	Conservation Commission and DPW	Periodic Reviews of Watershed	<p>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.</p> <p>The City's Conservation Commission continues to review and monitor wetland impacts a presented by applicants.</p> <p>The City contracted with an engineering consultant who developed a resource document detailing the land uses within the City and Watersheds.</p>	<p>Current efforts will continue.</p> <p>With the on-going participation with the Southeast Watershed Alliance, Seacoast Stormwater Coalition and PTAPP additional tracking and accounting is anticipated to identify and improve areas where the quality of the waters are of concern.</p> <p>Minimizing the impact to wetlands will further protect water resources.</p> <p>The City will work toward developing a Water Quality Response plan as is anticipated as a requirement of the next permit.</p>
02-03	Greater Involvement of Rochester Recreation and Arena (former RAYS)	RRA Neighborhood Coordinator	Greater awareness and participation among City's neighborhood groups.	RRA has been spearheading neighborhood cleanup days. Continued to be a conduit for outreach to local neighborhoods. Stormwater awareness is promoted at several events promoted by RRA throughout the year.	Continue to promote stormwater as a cause.
02-04	Downtown Riverwalk	Planning Dept. – Riverwalk Committee	Focus attention on Cocheco River in Downtown area - Downtown Enhancement	The City continued to maintain the recent improvements to the downtown riverwalk area. The Riverwalk Committee is exploring opportunities to potentially expand the Riverwalk and enhance the area and bring more of the community to the riverfront.	Continue to promote a clean water front and riverwalk area. Work with the Main Street Community on a riverwalk beautification project that brings public to the riverway to observe the natural state of the river.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – (until a new General Permit is issued).
03-01	Identify and map outfalls and receiving waters	Public Works/ Engineering Division	Map all outfalls in GIS by Spring 08.	<p>Performed visual monitoring of outfalls around the City. A few outfalls have been replaced and the City has continued inspections of various outfalls from stormwater systems within accepted developments and subdivisions.</p> <p>A full time GIS specialist position has been added to the DPW to manage assets and better coordinate installation and maintenance programs moving forward.</p> <p>Updated GIS locations with latitude/longitude and now elevations are being added to the City’s system and are yielding a higher level of accuracy than previously obtained.</p>	<p>Continue ongoing efforts. Collect additional samples from outfalls for analysis in-house (at WWTP) as resources allow in preparation and practice for requirements in new permit.</p> <p>Finalize GIS collections and data analysis within the next year well ahead of schedule of the new permit requirements.</p> <p>The new GIS position is developing street sweeping and catch basin cleaning online templates to better track future maintenance. This will be extended to stormwater features as well in the future.</p>
03-02	Screen outfalls for Illicit Connections	Public Works/ Municipal Services Utilities Division	<p>Screen all outfalls by Spring '05.</p> <hr/> <p>Revised: Further investigate and locate the source of those identified during the 2004 screening effort.</p>	Fitting this effort in with other responsibilities of limited utility staffing.	Continue to use existing resources to locate and eliminate illicit connections from the stormwater conveyance system.

03-03	Review and Development Stormwater Ordinance	Technical Review Group/ City Council	Adoption of Ordinance by Fall of 2006	<p>City Council adopted the original stormwater ordinance on May 6, 2008. The City has contracted with an engineering consultant to revise the Chapter 50 Stormwater Ordinance. The goal of the revision is to revise the existing regulatory stormwater documents which the city can use to require the implementation of the best and most current stormwater mitigation practices with a focus on Low Impact Development strategies and Green Infrastructure components. Additionally, the City is adapting the new ordinance to better reflect the upcoming MS4 permit expected to become effective in 2018.</p>	<p>As of this report, the draft revised Ordinance is back in review and will be submitted to the City Council for approval once the needed changes are made to reflect the new permit.</p> <p>Continue to review development projects promote the use of LID practices and monitor maintenance of stormwater systems.</p>
03-04	Illicit Connection Elimination Plan	Public Works Documentation/ Municipal Services Utilities Division	<p>Plan Development by Summer 2006, assuming meaningful data is obtained during 03-02 effort</p> <hr/> <p>Revised: Plan Development by 2008</p>	<p>Was an active participant in the development of the Guidelines and Standard Operating Procedures for Illicit Discharge Detection and Elimination and Pollution Prevention/Good Housekeeping Plan for Stormwater Phase II Communities in New Hampshire as developed by the Seacoast Stormwater Coalition. This City has adopted this as its own blueprint for identifying and detecting and eliminating illicit connections.</p>	<p>Will continue to implement this plan within the framework of existing staffing.</p>

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
04-01	Review stormwater features during land development process	Planning Department/ Technical Review Group	Development of Site Review Standards	The new Assistant City Engineer is a Professional Engineer and is a representative for the Public Works Department as part of the Technical Review Group (TRG). Along with Planning Staff and other City employees, they participate in the TRG that meets regularly with developers and representatives from City Boards to review and discuss the technical components of all proposed development projects, including the proposed Stormwater Mitigation measures.	Continue Technical Review Group efforts. Continue to work with the Planning Board and Conservation Commission to educate members on LID practices.
04-02	Revise Subdivision and Site Plan Regulations	Planning/ Technical Review Group	Adoption of Site Plan Regulations/Subdivision /Stormwater Ordinance	Revised Site Plan Regulations implemented in March 2012. The Aquifer Protection Ordinance was modified and approved by City Council in June 2015. The Ordinance was revised to correlate with the revised Stormwater Ordinance and provide addition protection for the City's water resources..	The City will continue to monitor their regulations to address the effects of development on City infrastructure as well as downstream resources.

04-03	Construction Monitoring of Site Development	Public Works/ Engineering Department	Visit each site; engage in corrective action	<p>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. Continue to monitor development of subdivisions with streets that will eventually be owned by the City as well as significant site developments with an emphasis on maintaining appropriate erosion controls. Inspections are routinely done and reports are prepared and forwarded to the developer. Conservation Commission continues to take an active role at reviewing developments and investigating complaints.</p> <p>Developers of new projects are required to pay City for inspection efforts; this gives the City the flexibility to hire outside consultants to assist with inspections in the event activity exceeds the ability of City staff to adequately monitor the pace of development.</p>	<p>Continue with current practices as resources permit. Continue to work with Planning Department and Conservation Commission to ensure development projects get scrutiny. The City has enforced stormwater BMPs at some of the largest, incomplete residential subdivisions with positive results. Continue to enforce and require owners to provide a Drainage Maintenance Agreement that eventually is recorded and part of the property title.</p> <p>Using the new software establish yearly inspection for maintenance of stormwater facilities.</p> <p>Non-compliant sites are being brought back into accord with their approved plans, city ordinances, and state and federal regulations through a three strike warning letter process. This has been successful on several projects and will continue to be used.</p>
04-04	Public Information / Pamphlet for Site Developers	Planning/ Conservation Commission/ Technical Review Group	Development projects are required to have a preconstruction meeting with City staff to outline requirements	Continued the practices devised in previous years. Holding preconstruction meetings for all significant projects which are attended by representatives of the owner, contractor, DPW, Planning, Economic Development, and Code Enforcement Departments. Stormwater management is always a topic on the agenda.	Continue this practice.
04-05	Encourage Innovative and Low-impact Development Practices	Planning/ Conservation Commission/ Technical Review Group	Encourage and promote low-impact development practices during site and subdivision review	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, LID Strategies are encouraged.	Continue this practice, continue to monitor the construction and then performance of recently approved projects and encourage more where feasible.

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
05-01	Establish Drainage Maintenance Agreement Program	Planning/Public Works	Adopt as part of planning process	<p>City has established a program as part of the planning process, which requires owners of site plans with stormwater conveyance, detention systems, infiltration basins, and treatment practices to maintain these systems so they work as designed.</p> <p>Failure to maintain gives City the right to access the property to maintain them and recover the costs from the owner. Continued this practice.</p> <p>The city has acquired new software that will assist in tracking BMPs for inspection and continued maintenance.</p>	<p>Continue with the drainage maintenance agreement process.</p> <p>Provide owners with a yearly reminder that they need to follow their approved operation and maintenance plan for their stormwater system. Conduct inspections as needed for existing BMPs.</p>
05-02	Revise Regulations for Stormwater Management	Planning/Public Works	Adoption of Regulations	<p>A Stormwater Management Permit system was implemented in the summer 2008 in response to the adoption of the ordinance. Have coordinated with Planning and Code Enforcement Departments to establish process whereby Building Permit will not be issued unless Stormwater Permit obtained where required. This is now a backup to the non-compliance letter system that has been established.</p>	<p>The City continues to require a Stormwater Permit. This permit is issued in accordance with the proper design of a stormwater system and in conjunction with appropriate erosion and sediment controls.</p>

05-03	Introducing Low-Impact Development Practices to Willow Brook Watershed	DPW/UNH Stormwater Center/	Complete Grant objectives	<p>Cocheco River Watershed Coalition and City applied for and received a Section 319 Grant from NHDES to investigate the Willow Brook (tributary to Cocheco River) watershed to identify extent of impervious cover in the watershed and to look for opportunities to reduce areas of impervious cover through the implementation of LID practices. This publication was completed in 2011.</p> <p>Two years ago the city received another Section 319 Grant for the implementation of the Franklin Street Improvements Project which includes improvements to the drainage system by constructing a gravel wetland, rain gardens and grass treatment swales. This grant also required the City to conduct a public outreach and education program. This area is within the Willow Brook Watershed.</p>	The City continues to seek funding for projects within the watershed.
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05-04	Introducing Low-Impact Development Practices to City Construction Projects	Public Works	Complete Construction Projects	<p>The new retail development is expanding and will construct several city streets that included off-line deep sump catch basins, a large gravel wetland, small rain gardens, and underground infiltration structures to minimize offsite runoff.</p> <p>Major construction has been completed on two dangerous corners with poor drainage along the Salmon Falls Road. The slopes and ditches were realigned and restabilized to minimize erosion and runoff.</p> <p>A new pedestrian bridge was constructed over the Cocheco River that removed four (4) piers from the river and made the entire crossing a 200 foot clear span to better allow water passage.</p>	<p>Complete the construction of the Franklin Street, Western Avenue and Adams Avenue project to include constructing a gravel wetland, rain gardens and grass treatment swales.</p> <p>Start the work on the Strafford square replacement project which will include underground infiltration systems and upgraded drainage networks which already include vortechnic units located adjacent to the Cocheco River that this area drains to.</p> <p>Continue to finalize the updating process of our paper records into GPS located and GIS integrated mapping networks for our drainage network.</p> <p>Provide LID alternatives to existing dry wells located within the Wakefield Street corridor.</p> <p>Provide improved outfall for the Congress Street area in the Woodman Street Area Infrastructure Improvements project if the project gets funded.</p>
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05-05	Restrict Fertilizer Use	Public Works/ Technical Review Group	Revised Regulations	<p>The land surface within 25 feet of the edge of the wetland shall not be altered. Herbicides and heavy equipment are prohibited within 25 feet of the edge of the wetland. New lawns may be established beyond 25 feet from the edge of the wetland provided the wetland has been delineated/flagged by a Certified Soil Scientist. Fertilization shall be limited to lime and wood ash.</p> <p>No fertilizer, except limestone, can be used within 25 feet of the reference line. Beyond 25 feet, slow or controlled release fertilizer may be used. Pesticide use is prohibited within 25 feet of the reference line per Administrative Rules Pes 1001.01 (NH Dept. of Agriculture) and may only be applied by a licensed applicator with a permit from the NH Agricultural Department.</p> <p>Site Plan Regulations require plants with minimized need for fertilizer be selected</p>	<p>Technical Review Group to continue to recommend low nitrogen fertilizers and minimized fertilizer use.</p>
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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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
06-01	Catch Basin Cleaning Program	Public Works/Highway Lead or Foreman	Establish Priorities	<p>The City uses Vac-Con trucks to clean catch basins and manholes. There was complete cleaning of 749 basins in this last year. Prioritized is shown to the downtown area where the basins are cleaned more frequently. Staffing levels do not allow a dedicated crew to do every day. This practice continued as staffing allowed.</p> <p>City maintains Vortech units on a recurring schedule in addition to upstream catch basins in May and November.</p>	Continue the same.
06-02	Street Sweeping Year Road	Public Works/Highway Lead or Foreman	Install Heating System in Garage for Winter Sweeper Storage	<p>City has a new vacuum street sweeper. 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 the sweeper removes debris throughout the City. Downtown areas emphasized. The City removed over 500 cubic yards of material from the streets this year. Winter sand has been minimized by the City switching to salt only.</p>	<p>Continue the same. In order to have street sweeping capabilities during the winter months, a garage bay will need to have heat installed or a new heated garage bay installed. Will continue to salt to treat roads during winter snow removal as long as motorist safety is not compromised. Funding for a new public works facility has been approved. Location and design are being finalized prior to construction. In the meantime, continue to investigate options for the existing DPW facility.</p>
06-03	Training of DPW Personnel			<p>Continued with training new personnel on importance of limiting application of salt and sand to only what is necessary to ensure public safety during winter operations.</p> <p>Personnel have also attended training on culvert maintenance.</p>	<p>Will continue to participate in regional training opportunities as they become available.</p>

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures **	(\$)	
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
Regulatory Mechanism Status (indicate with “X”)					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					
Accompanying Regulation Status (indicate with “X”)					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					

Mapping and Illicit Discharges

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

Construction

(Preferred Units) Response

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 \$)	
Complaints/concerns received from public **	(#)	

Post-Development Stormwater Management

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

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	
Qty of structures cleaned **	(#)	
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	

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

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or lane mile contract rate **	(\$/hr. or In mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

Reduction (since beginning of permit coverage) in application on public land of:
 (“N/A” = never used; “100%” = elimination)

▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/l _n mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l _n mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	