Part I. General Information

Contact Person: Silke Psula
Title: Solid Waste Coordinator

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Email: spsula@cityofportsmouth.com

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: David Allen, P.E.
Title: Public Works Deputy Director
Date: 4/29/11

Part II. Self Assessment
The City of Portsmouth has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, with the possible exception of the following provisions:

Part I. C. 1. The permittee must determine whether storm water discharges from any part of the MS4 contribute, either directly or indirectly, to a 303(d) listed water body.

2. The storm water management program must include a section describing how the program will control the discharge of the pollutants of concern and ensure that the discharges will not cause an instream exceedance of the water quality standards. This discussion must specifically identify control measures and BMPs that will collectively control the discharge of the pollutant(s) of concern. Pollutant(s) of concern refer to the pollutant identified as causing the impairment.

Part I. D. 1. Determine whether the approved TMDL is for a pollutant likely to be found in storm water discharges from the MS4.
2. Determine whether the TMDL includes a pollutant waste load allocation (WLA), BMP recommendations or other performance requirements for storm water discharges. This storm water WLA may be expressed in the TMDL as a gross allotment for the impaired water body.

The City remains committed to resolving whether these conditions have been met and believes that critical data is needed which would, among other things, help establish whether certain water bodies are in fact impaired and if so for which pollutants.
1. **Public Education and Outreach**
   The Permittee must implement a public education program to distribute educational material to the community. The public education program must provide information concerning the impact of storm water discharges on water bodies. It must address steps and/or activities that the public can take to reduce the pollutants in storm water runoff.

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<thead>
<tr>
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<td>1.A. Develop and distribute/post a minimum of 2,000 impressions via print, local TV, local radio or other appropriate media during the life of the permit.</td>
<td>Storm Water information on the web, # of hits.</td>
<td>6,753 visits were registered on the storm water website.</td>
<td>Continue to update stormwater web page(s) to educate public on City initiatives, changing regulations and information residents need to know and will find useful.</td>
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<tr>
<td>DPW</td>
<td>Produce education material for distribution, # of pamphlets/flyers/postings of information regarding stormwater.</td>
<td>Distributed <em>The Solution to Storm Water Pollution</em> pamphlets HHW Collection event held September '10. A total of 167 cars attended the event and received a pamphlet.</td>
<td>Continue to distribute storm water pollution prevention pamphlets at appropriate events.</td>
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<td>The 2009 CCR (Water Quality Report) includes an educational component regarding stormwater. An estimated 7,500 reports mailed to Portsmouth water customers, distributed throughout New Castle and available at the Portsmouth Library and Portsmouth City Hall. The report was distributed June 2010.</td>
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<td>50 signs posted throughout the City advising dog owners to pick up their pet’s waste. In 2010 no signs were damaged and therefore did not require replacing.</td>
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<td>Continue to have signs posted and replace any damaged signs due to weather / exposure. Post 2 additional signs on Kent St.</td>
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<td>A storm water educational “sound bite” was included in e-newsletter, January 20, 2010. Distribution list includes 1,500 email addresses.</td>
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<td>Continue to include storm water information in e-newsletter and web.</td>
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* Permit issued for 5 years. 2007 was the 5th year of the permit. 2008 permit requirements not yet stipulated by the EPA. The City continues to operate under the provisions of the previous permit.
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<td>1.B. Educate local residents participating in local government; groups; organizations.</td>
<td># of public events storm water issues are presented and # of attendees.</td>
<td>The City had a booth at the May 8, 2010 Sustainability Fair, which had more than 1,200 people attend. City personnel working the booth provided educational information on sustainable issues to include stormwater pollution prevention. The City also introduced its rain barrel initiative at the Fair. Rain barrels are offered to Portsmouth water customers at a discounted price.</td>
<td>Continue to make presentations as opportunities present.</td>
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<td>DPW</td>
<td></td>
<td>Nov 20, 2010, the City Council held a “Goals Setting” workshop. Stormwater and the Stormwater Utility Feasibility Study was a part of the agenda.</td>
<td>Continue updates to City Council throughout Master Plan process and other venues as appropriate.</td>
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<td>1.C. Educate the general public and public school children about the storm water / sewer system, so that they understand the City water management systems and pollution issues</td>
<td># of presentation and # of attendees.</td>
<td>Life Wise/Water Guardian presentation given: Portsmouth Middle School, January 18 Greenland Central, May 14 Piscataqua Waterfront Festival, June 5</td>
<td>There is a lack of funding through EPA grant renewal. Seek funds from NOAA. Continue to make presentations as funding allows and opportunities present.</td>
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| 1.D. Collaborate with public and private entities to maximize efforts of reducing contaminants from Portsmouth waterways. | # of initiatives the City leads, supports, is involved with, or has an employee acting as a representative on a committee ensuring the inclusion/addressing of storm water issues. | 1) Coordinated effort between the City and the Blue Ocean Society for volunteer litter and debris cleanup projects:  
- New Castle: 3/19/10  
- 4/30/10  
- 5/21/10  
- 10/22/10  
- Odione Pt: 4/14/10  
- 8/21/10  
- 10/23/10  
- 11/20/10  
- 12/18/10  
- Pierce Island: 4/17/10  
- 10/24/10  
- South Mill Pond: 1/6/10  
- 2/19/10  
- 3/10/10  
- 4/23/10  
- 5/21/10  
- 6/22/10  
- 7/21/10  
- 8/27/10  
- 9/14/10  
- 10/25/10  
- 12/14/10 | 1) Continue assisting in clean-up activities @ key locations throughout the City. |
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<td>1.D. Collaborate with public and private entities to maximize efforts of reducing contaminants from Portsmouth waterways.</td>
<td># of initiatives the City leads, supports, is involved with, or has an employee acting as a representative on a committee ensuring the inclusion/addressing of storm water issues.</td>
<td>2) Sept '09, the City’s DPW personnel participated in the formation of Southeast Watershed Alliance. 8 formal meetings were held to establish operating procedures and organizational structure. Final version submitted to the Attorney General, May 2010. June 2010 a Board of Directors was elected, which meets monthly. Committees and working groups meet on their own schedules. The Alliance created and maintains a web dedicated exclusively to its purposes. Activities are implemented based on low cost/high yield to improve water quality as well as ensure decision making is solidly science based and will produce quantifiable results. <strong>Priority Tasks:</strong> - develop consistent stormwater regulations and BMPs - Identify “hot spots”, i.e. sources and land practices that degrade water quality along with locating funding sources to enable prerequisite research and corrective actions to be undertaken - Landowner outreach and municipal involvement in addressing the water quality benefits of routine septic system maintenance, proper use of fertilizers and low impact landscaping.</td>
<td>2) Ongoing participation in organization. Activities include: - further development and implement the initial priority activities - actively pursue funding resources, including public and private grants, in-kind services and municipal contributions - identify and develop additional priority activities, including long term planning and implementation actions - host a science symposium to better define the state of scientific understanding of problems and focus additional research for the use of limited financial resources.</td>
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<td># of initiatives the City leads, supports, is involved with, or has an employee acting as a representative on a committee ensuring the inclusion/addressing of storm water issues.</td>
<td>3) City purchased stormwater stencils. Stenciling Activity coordinated through the Hodgson Brook Advisory Committee in conjunction with New Franklin School and Lister Academy. Stenciling of storm drains around Dennett St and Thornton St – all the way to Mill Pond way and Jackson St. 4) In conjunction w/ the Hodgson Brook Advisory Committee and Coakly Rd neighborhood, Oct thru Nov 2009, installed 3 tree box filters in the Coakley Rd neighborhood. Tree box filters cleaned out Oct 2010. 5) Collaboration between Hodgson Brook Advisory Committee, Rutgers, NJ Cooperative Ext., UNH Cooperative Extension and Coakley Rd residents. Installed Oct 25 &amp; 26, 2010 rain garden.</td>
<td>3) Continue to provide supplies (stencils, map of storm drain system, paint, etc.) to assist in stenciling project and support the Hodgson Brook Advisory Committee and Public Schools with the stormwater drain stenciling project. 4) Continue routine annual inspection, removal of sediment and replacement of dead plant matter. In order to continue improvements to Hodgson Brook and the watershed a similar approach will be made in the Pannaway Manor neighborhood to include 2 rain gardens/bioretention areas and 1 tree box in the Great Bay Community College area. 5) Return in the spring of 2011 to determine how the rain garden is functioning and/or has become established. Perform routine maintenance as necessary.</td>
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2. **Public Involvement and Participation**

The Permittee must provide opportunity for the public to participate in the development, implementation and reviews of storm water management program(s).

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<td>2.A. The City will involve stakeholder groups, including local governments, businesses, and citizens in making decisions about storm water management priorities and programs throughout the City.</td>
<td>Annual presentation to City Council on storm water issues. Presentations will be made during official meetings, which are open to public attendance and televised on the gov. TV.</td>
<td>The City signed on a consultant to assist with a Stormwater Utility Feasibility Study. The project formally began May 2010. Background material was collected to include present needs and budget and projected needs and budget. The first of 3 workshops was held, May 19 &amp; 20, 2010, presenting and working through the issues with City employees (the internal customer) the compelling case for a stormwater utility.</td>
<td>Develop strategies from lessons learned from the City of Dover’s failed attempt to establish a utility. Identify “next steps” with DES, City personnel and consultant.</td>
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<td>City Hall/DPW</td>
<td>Collaborate with public and private entities to increase awareness, as well as improve on design and implementation of storm water treatment issues related to building and site development design and construction throughout the City.</td>
<td>1) The Technical Advisory Committee (TAC) is responsible to review plans and proposals of public and private lands/construction projects and make recommendations to the Planning Board the Board; recommendations include appropriate storm water features. In 2010 TAC met 11 times. A total of 41 sites were reviewed; of that a total of 20 sites included in depth discussion addressing stormwater issues and use of BMPs at the sites. 2) In 2009, the City applied for and was awarded ARRA / DWSRF grant money for the purchase and sale of rain barrels. In 2010, 1,000 rain barrels were purchased; 700 rain barrels were sold to Portsmouth water customers.</td>
<td>1) TAC to meet once a month and continue to incorporate stormwater pollution prevention recommendations to the Board when reviewing plans. 2) Market, sell and distribute the remaining 300 rain barrels to Portsmouth water customers.</td>
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<td>Collaborate with public and private entities to increase awareness, as well as improve on design and implementation of storm water treatment issues related to building and site development design and construction throughout the City.</td>
<td>3) Oct 25 &amp; 26, 2010 Rain garden installed at Coakley Rd residential neighborhood – a result of collaboration between Hodgson Brook Advisory Committee, Rutgers NJ Cooperative Extension, UNH Cooperative Extension and Coakley Rd Portsmouth residents. 4) November 3, 2010, City officials met with the Pease Development Authority to discuss opportunities for collaboration regarding stormwater best management practices in the vicinity of 555 Market St / Grimmel Industries.</td>
<td>3) Return in the Spring of 2011 to determine how the rain garden is functioning and/or has become established. Perform routine maintenance as necessary. In order to continue improvements to Hodgson Brook and the watershed a similar approach will be made in the Pannaway Manor neighborhood, to include 2 rain gardens/ bioretention areas and 1 tree box at the Great Bay Community College.</td>
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<td>Collaborate with public and private entities to increase awareness, as well as improve on design and implementation of storm water treatment issues related to building and site development design and construction throughout the City.</td>
<td>5) In 2009, a goal to partner w/ NH Coastal Protection Project to build a rain garden at the City’s Recycling Center was identified. In 2010, a number of bids from professional contractors were received. The cost of the proposed rain garden would be between $3,500 - $4,000; the cost was far more than the $500.00 grant money awarded, the identified materials to be donated and volunteers to perform the work. The collaborated effort had planned to use volunteer labor and donated supplies, which would significantly reduce the cost. Unfortunately, the need to remove significant amount of asphalt and work in close proximity to underground electrical wiring led the partners to believe professional help would be needed to accomplish the project in a safe and responsible manner. Further, after more formal assessing the stormwater runoff at the Recycling Center, a much more elaborate and expensive design would be needed to handle the volume of stormwater encountered. Despite best efforts the project was aborted.</td>
<td>5) Construct a rain garden at the Portsmouth High School. Two science teachers at Portsmouth High School together with students in their science classes put together a grant application to build a rain garden on the High School Campus. Assistance was provided from the Planning Department and the Department of Public Works. The teachers secured the grant funds from the Piscataqua Region Estuaries Partnership. The Department of Public Works will connect the rain garden to the City’s stormdrain system and excavate the area where the rain garden will be installed. The students and volunteers will put plants in the rain garden develop interpretive materials and conduct sampling that will be used in their class room. The students will learn about the impacts which come from non-point source pollution, ways to assess and the importance of water quality.</td>
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<td>Collaborate with public and private entities to increase awareness, as well as improve on design and implementation of storm water treatment issues related to building and site development design and construction throughout the City.</td>
<td>6) Many of the undeveloped parcels are part of a drainage easement for stormwater structures built prior to the comprehensive stormwater regulations. These sites present an opportunity to upgrade old drainage structures that degrade the water quality of wetlands and surface waters.</td>
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<td>City Hall/DPW</td>
<td>6) Identified induced growth issues. Zoning ordinance modified to ensure induced growth does not occur in an area that has been identified as environmentally sensitive. Zoning ord. passed Dec 2009; effective Jan 2010. Article 10 specifically addresses quality of surface waters and ground water by controlling the rate and volume of stormwater runoff and preserving the ability of wetlands to filter pollution, trap sediment, retain and absorb chemicals and nutrient and produce oxygen; and to prevent the destruction of, or significant change to wetlands.</td>
<td>The City developed and completed an undeveloped land assessment, which looks at all undeveloped City owned properties. As part of this work each property was assessed for its potential for stormwater treatment. A total of 91 properties were assessed and stormwater treatment opportunities identified.</td>
<td>Wherever non-point source discharges were identified in this inventory, there is the potential for installation of a stormwater BMP (Best Management Practice). These management suggestions are for capital improvements which must be prioritized based on, budget constraints, and will often include developing partnerships with abutting property owners to implement these management suggestions.</td>
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The report is on the City’s website [http://www.cityofportsmouth.com/planning/PULA_complete_final.pdf](http://www.cityofportsmouth.com/planning/PULA_complete_final.pdf)
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<td>2.A. The City will involve stakeholder groups, including local governments, businesses, and citizens in making decisions about storm water management priorities and programs throughout the City. City Hall/DPW</td>
<td>The Technical Advisory Committee (TAC) review and approval of construction projects from private contractors.</td>
<td>In 2010, 11 TAC meetings were held. A total of 41 sites were reviewed; of that a total of 20 sites reviewed included in-depth discussion addressing stormwater issues.</td>
<td>Continue Site Review process under the new Zoning Ord., requirements.</td>
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<td>Reduce the total bacteria loads from the MS4 to Little Harbor by 5% (Per TMDL study for bacteria in Little Harbor. Report published August 2006.)</td>
<td>Continuation of the sewer system project in the Pleasant Point area (on going project since '08 w/ previous stormwater pollution prevention success – see previous annual reports). Preliminary design plan with cost estimates developed. Meetings held w/ benefiting parties (private as well as the Town of Rye invited to collaborate). Town of Rye voted to allow for extension of Portsmouth sewer system in Foyes Corner. Wastewater Master Plan completed; developing alternatives for secondary treatment is a component of the Plan. Piloting of secondary treatment technologies included in the upgrade of Pierce Island Wastewater Treatment Plant.</td>
<td>Continue to work w/ private property owners and Town of Rye to negotiate agreement for sewer extension and obtain approvals from local and state authorities.</td>
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### 3. Illicit Discharge Detection and Elimination

The Permittee must develop, implement and enforce a program to detect and eliminate illicit discharges.

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| 3. B. Identify any illicit discharges and eliminate. | Number of illicit discharges detected and/or eliminated. | Investigated or resolved the following ID:  
1) Thornton St.: root removal in the 24" cross country line; and Green St.: cleaning of lines. Result: approximately 17 yards of debris removed, over a five week cleaning period from the 24" main, eliminating two sources of heavy rain sewer overflows.  
2) From Victory Lane to Borthwick Ave: a high fecal count in the Liberty Mutual pond led to the inspection of both sewer and drain lines. No cross connection was found and no sign of sewage was found in the drain system.  
3) Sewer mains bordering the north of Sagamore Creek, i.e.: Hillside Dr., Greenleaf Ave. and Lafayette Rd.: cleaning and inspection of all the was completed with no problems found.  
4) The sewer mains bordering the northwest side on the North Mill Pond outlet, Michael Succi Dr., Chase Dr and the cross country line to Kearsage Way: cleaned and inspected with no problems found. | Commence Lincoln Area Sewer Separation (project 3A): reduce load of stormwater going to WWTP; eliminate IDDE/sump pumps from residential housing within construction area; remove 5,000 linear feet of combined sewer. Project scheduled for completion 2012.  
Continue to follow up investigations and enforcement of complaint phone calls and routine patrols. |
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| 3.B. Identify any illicit discharges and eliminate. DPW | Number of illicit discharges detected and/or eliminated.                        | 5) State St. and Columbia St. area: QA on mapping of the drain system; changes submitted to IT dept for updates to VueWorks.  
6) Cass, Middle and Islington St. boundary: cleaned and inspected all the sewer lines. | Inspect and clean in the downtown area before warm weather hits, tourist season begins and the streets become too crowded. |
|                           | Linear feet of sewer / storm drain system video taped / inspected.             | In 2010 cleaned and inspected 34,000 linear feet of sewer mains and 3,600 linear feet of drain lines.                                                                                                                         | Continue to inspect sanitary and storm sewers. In the course of inspections and identifying ID, work orders and/or projects will be undertaken to implement corrective action/remove ID.  
Complete QA of mapping of the drain system in the State St. and Columbia St. area |
| 3.C. Establish legal authority for enforcement actions. City Hall | The City to adopt means that provides enforcement mechanisms and penalties to halt illegal stormwater discharges and/or enhance stormwater / surface water quality. | New Zoning Ord., updated and passed Jan 2010, and are considered progressive – specifically addressing quality of surface waters and ground water by controlling the rate and volume of stormwater runoff; preserving the ability of wetlands to filter pollution, trap sediment, retain and absorb chemicals and nutrients and produce oxygen; and to prevent the destruction or significant change to wetlands.  
These requirements invite landowners/developers and contractors to work collectively for good alternatives and solutions, proposing BMPs for stormwater control incorporated in their request for developing properties.  
Further there is an enforcement provision to suspend a building permit providing compliance. |
4. CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

The Permittee must develop, implement and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance greater than or equal to 1 acre.

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<td>4.A. Establish a set of minimum erosion and sediment control (ESC) requirements for construction sites. City Hall / DPW</td>
<td>Require ESC plans for any land disturbance greater than 5,000 square feet. Site Review procedures to include storm water pollution prevention activities.</td>
<td>Zoning Ordinance updated and passed Dec 2009; effective Jan 2010. Zoning Ord., considered progressive – specifically addresses quality of surface waters and ground water by controlling the rate and volume of stormwater runoff and preserving the ability of wetlands to filter pollution, trap sediment, retain and absorb chemicals and nutrients and produce oxygen; and to prevent the destruction or, or significant change to wetlands. Subsequently Site Review Regulations also updated and in effect January 2010. The City developed and completed an undeveloped land assessment, which looked at all undeveloped City owned properties. Each property was assessed for its potential for stormwater treatment. A total of 91 properties were assessed and stormwater treatment opportunities identified. The report is on the City's website <a href="http://www.cityofportsmouth.com/planning/PULA_complete_final.pdf">http://www.cityofportsmouth.com/planning/PULA_complete_final.pdf</a></td>
<td>Many of the undeveloped parcels are part of a drainage easement for stormwater structures built prior to the comprehensive stormwater regulations. These sites present an opportunity to upgrade old drainage structures and improve the water quality of wetlands and surface waters. Wherever non-point source discharges were identified in this inventory, there is the potential for installation of a stormwater BMP (Best Management Practice). These management suggestions are for capital improvements which must be prioritized based on, budget constraints, and will often include developing partnerships with abutting property owners to implement these management suggestions.</td>
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<tr>
<td>4.A. Establish a set of minimum erosion and sediment control (ESC) requirements for construction sites.</td>
<td>Enforce new ordinance / site review.</td>
<td>Zoning Ordinance passed Dec 2009; effective Jan 2010. Subsequently Site Review Regulations also updated and came into effect January 2010. Pursuant to TAC meetings, the City may require an independent consulting engineer to inspect construction sites during a project. “Deemed necessary” is based upon the complexity, size of project and other variables discussed during the TAC meeting. In 2010, 11 TAC meetings were held. A total of 41 sites were reviewed; of that, a total of 20 sites reviewed included in-depth discussion addressing stormwater issues.</td>
<td>549 Route One By-Pass (Meadow Brook) construction project, TAC stipulation mandated to have an oversight engineer on site to follow the design and construction of the site. It was determined to be a big project and necessary to ensure the gravel wetland is done to specifications</td>
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5. **POST-CONSTRUCTION RUNOFF CONTROL**

The Permittee must develop, implement and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than 1 acre and discharge into the municipal system.

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<td>5. A. Improve the quality of storm water runoff by disconnecting impervious surfaces and installing and maintaining structural storm water controls.</td>
<td># of structural controls installed.</td>
<td>1) Bartlett St project: 2007 to install a stormwater treatment device. Total design, construction and installation cost $86,178.22. In 2008 attempt to obtain easement rights to property. City held Public Necessity Hearing and initiated imminent domain proceedings. In 2009 City acquired legal interest necessary for project. Oct 2010 sewer separation complete, including stormwater treatment device. 2) Incorporated into State Street CSO project, to include:  - 3 bio-retention tree wells;  - sand filter capable of treating stormwater events up to ¾&quot; of rain fall for entire project area; and  - 1 stormwater quality unit and sand filter</td>
<td>1) Additional sewer and other components of system in design for Lovel St and Cass St, which ties into the same outfall structure were planned for. Due to economic constraints postponed. 2) Planting of trees in tree boxes. Complete State Street CSO separation project. Regular inspection and maintenance is critical to effective operation of underground sand filter. The City will maintain in accord with minimum design standards. See #6A for in-house training activities planned for 2011.</td>
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Based on pollutant load model, expected treatment performance:

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<tr>
<td>TSS</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>TP</td>
<td>&gt;40%</td>
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<tr>
<td>TPH</td>
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<td>TZN</td>
<td>&gt;95%</td>
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</table>

Construction on State St CSO project near completion.
<table>
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<tr>
<th>BMP / ID Responsible Party</th>
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<th>Progress on Goal(s)</th>
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<tbody>
<tr>
<td>5. A. Improve the quality of storm water runoff by disconnecting impervious surfaces and installing and maintaining structural storm water controls.</td>
<td># of structural controls installed.</td>
<td>3) Coakley neighborhood project included the installation of: 1 rain garden 3 tree box filters 1 biofiltration/buffer area</td>
<td>4) In order to continue improvements to Hodgson Brook and the watershed a similar approach will be made in the Pannaway Manor neighborhood, to include 2 rain gardens / bio-retention areas and 1 tree box filter at the Great Bay Community College.</td>
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<td>DPW</td>
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<td>4) 207 International Dr.: included Downstream Defender</td>
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<td>5) 195 Hanover St.: 3 outlets equipped w/treatment devices</td>
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<td>6) 3612 Layfayette Rd.: • Porous concrete for sidewalk; • Grease trap</td>
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<td>7) 175 Fleet St.: automated grease removal vs. underground storage tank</td>
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<td>8) 20 Columbia St.: rain garden</td>
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<td>9) 155 Parrot Ave (Middle School): Completed design and received approval. Project includes 6 bio-retention tree box wells as well as separating entire 10 acre parcel from combined sewer system. Trees &amp; Greenery Committee consulted for planting materials to address salt tolerance among other things.</td>
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<td>10) 744 Middle St.: rain garden</td>
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<td>11) 2995 Lafayette Rd: rain garden.</td>
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| 5. A. Improve the quality of storm water runoff by disconnecting impervious surfaces and installing and maintaining structural storm water controls. DPW | # of conventional BMPs, such as swales and retention ponds, low impact development (LID) designs and manufactured BMPs such as filtration and infiltration units and hydrodynamic separators. | 1) Rt 33 project in design completed in '07. Construction begun in '08. Project completed in '10.  
2) 150 Mirona Rd.: Increased detention basin 20% in storage volume;  
• Providing a new detention pond outlet structure with trash rack and overflow structure;  
• Rain garden  
3) 800 Lafayette Rd: to include removing some of the pavement (impervious pavement)  
4) 126 Land Rd.: reduce impervious area by 1,154 sf; existing detention pond filled to work as a wetland  
5) 549 Route One By-Pass:  
• Drainage to include subsurface infiltration to handle roof run off from buildings and significant gravel wetland for removal of pollutants and suspended solids from stormwater stream  
• Storm inceptor | Continue to incorporate structural BMPs and LID into construction projects throughout the City as appropriate. |
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| 5. A. Improve the quality of storm water runoff by disconnecting impervious surfaces and installing and maintaining structural storm water controls. DPW | # of conventional BMPs, such as swales and retention ponds, low impact development (LID) designs and manufactured BMPs such as filtration and infiltration units and hydrodynamic separators. | 6) 215 Commerce Way:  
- Retrofitting catch basins with oil separator hoods  
- Reduce pervious area on site and increase open space  
7) 933 Route One By-Pass: includes porous pavement.  
8) 1808 Islington St.: tie into sewer system and abandon septic system.  
9) New Franklin School: replaced impervious concrete (50’ x 30’) pad leading to entrance of school with a reduced asphalt pad (50’ x 15’) and installed a garden. Result of ½ of the area now pervious.  
10) Met w/ Pease Development Authority and private business (Lonza) to develop a plan for maintenance and cleaning of drainage ditch discharging into the Hodgson Brook. | 10) Secure wetlands permit; finalize plan and proceed with maintenance and cleaning plan. 1,275 linear feet of road side drainage swale to be restored. 477 cubic yards of sediment to be removed from drainage swale. |
| 5.B. Improve the quality of storm water runoff through inspection/follow-up/enforcement of private stormwater management plans. DPW | # of inspections / contact with / enforcement action taken with entities of private stormwater management plans | Build in-house program to manage the oversight of stormwater management plans in existence / approved by Planning Dept.; track stormwater management activities and follow up action as appropriate. The City has a program layer in VueWorks to manage City owned stormwater devices. | Develop a layer in VueWorks to manage the oversight of privately owned stormwater management devices. |
6. **GOOD HOUSEKEEPING**

The Permittee must develop and implement a program with a goal of preventing and/or reducing pollutant runoff from municipal operations. The program must include an employee training component, including, at a minimum, maintenance activities for parks and open space, fleet and building maintenance, new construction roadway drainage and stormwater system maintenance. During the implementation of the stormwater management program, the Permittee must address recharge and infiltration for the minimum control measures as well as reasons for not implementing.

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| 6. A. Reduce the amount of nutrients and sediments entering receiving waters through education of municipal employees about spill prevention and control, vehicle washing, lawn activities, etc. | # of in-house training sessions held and number of attendees.  
1) Two DPW employees attended 2-day workshop, Oct 25 & 26 “Rain Garden Site Selection and Installation Maintenance”  
2) Four DPW employees attended “Salt Reduction for Parking Lots and Private Roads” workshop, May 13, 2010. | Continue to host and provide training for employees as appropriate and opportunities present.  
WRT the State St CSO Separation Project (see #2A), which included the installation of sand filtration, regular inspection and maintenance is critical to effective operation of underground sand filter. The City will train personnel on maintenance, establish a maintenance schedule in order to ensure unit is functioning within minimum design standards.  
In-house training to include maintenance program of ADS Water Quality Unit and Sanfilter at St. Street and other units that are under the City’s control. |                                                                                                                                           |
<p>| DPW                       | # of maintenance / inspection / cleanings of City’s structural stormwater units. | Inspected five units twice each in 2010.                                                                                                                                                            | Continue maintenance program of structures in accord with manufacturers’ specifications. |</p>
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<td>6. B. Reduce the amount of nutrients and sediments entering receiving waters through mechanical and operational means.</td>
<td>Storm/Sanitary Sewer Separation Quantify separation of sewers.</td>
<td>1) Lincoln Area – Project 3A (formally referred to as the Miller Ave sewer separation project) – no progress in '07. Design and proposals for Miller Ave sewer separation went out '08. Lincoln Area (Project 3A) design substantially complete. Project initiated Sept 2010. 840 linear feet CSO separated/eliminated. 2) Bartlett St. intersection sewer separation designed. Installed stormwater treatment device in Fall '09. Project completed October 2010. 2740 linear feet separated / eliminated.</td>
<td>1) Project scheduled for completion 2012. Remove remaining 5,000 linear feet of combined sewer.</td>
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<td>6. B. Reduce the amount of nutrients and sediments entering receiving waters through mechanical and operational means.</td>
<td>Storm/Sanitary Sewer Separation Quantify separation of sewers.</td>
<td>1) Lincoln St. area project separated / eliminated 840 linear ft of combined sewer. 2) Bartlett St. intersection separated / eliminated 2740 linear ft of combined sewer. 3) State St. project separated / eliminated 420 linear ft of combined sewer.</td>
<td>1) Remove remaining 5,000 linear feet of combined sewer.</td>
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<tr>
<td># of storm drains fitted with storm drain sacks</td>
<td>Identified storm drains in need of BMPs due to litter, cigarette butts, etc. Met with vendors to identify BMPs for storm drains; identify funding for equipment.</td>
<td>As pilot project install up to 10 FABCO storm drain sacks in business district.</td>
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<tr>
<td>City to identify critical catch basins and frequency for cleaning.</td>
<td>In 2010, 1,070 structures were cleaned. 155 tons of catch basin cleaning disposed.</td>
<td>Continue to use data base to optimize stormwater program. Based on field observations and conditions of the stormwater system a list of identified critical basins for regular cleaning to be developed. Presently the following areas have been identified: Downtown Miller Ave – b/w Lincoln Ave &amp; South St Aldrich Rd at Boss Ave Bartlett St at Islington St Maplewood Ave at Fairview Dr.</td>
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<td>In April ’09 updates made to VUEWORKS to include a form for field work documentation of manhole and catch basin cleaning/inspections.</td>
<td></td>
<td>Provide training as needed on use and data entry of forms; ensure users are utilizing tools provided to them in the field.</td>
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<td>6. B. Reduce the amount of nutrients and sediments entering receiving waters through mechanical and operational means.</td>
<td>Miles of City streets swept.</td>
<td>Street sweeping 6 days/week in the downtown area commenced March 2010. (Essentially the area encompassing from Court St., to Middle St., to Marcy St., and Deer St.); and the 7 parking lots. All of Portsmouth’s streets were swept twice, commencing March 8, 2010 until completion Oct 10, 2010. 220.92 tons of street sweepings were disposed of.</td>
<td>Continue street sweeping program.</td>
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<tr>
<td>Implement BMPs at snow disposal collection site.</td>
<td>Winter 2004/2005 a site was designated for temporary storage of snow pursuant to the snow removal ops. The area is enclosed with silt fence; disposed snow is stored at least 25’ from high water mark; debris in snow storage area to be cleared prior to snow storage; all subsequent debris accumulated in snow storage area cleaned from site and properly disposed of no later than May 15th. There are no wells at the snow storage collection site.</td>
<td>Continue maintaining the site and using for snow disposal.</td>
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<tr>
<td>City to incorporate storm water treatment units in long term control plan/separation project.</td>
<td>Bartlett St stormwater unit installed and sand filter on State St CSO project installed. Drainage system on Bartlett St and installation of tree box filters on State St complete 2010.</td>
<td>Vortecnic Unit incorporated in Parrot Ave project.</td>
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<tr>
<td>BMP / ID Responsible Party</td>
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<td>Progress on Goal(s) Permit Year 5</td>
<td>Planned Activity for calendar year 2011*</td>
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<tr>
<td>6. B. Reduce the amount of nutrients and sediments entering receiving waters through mechanical and operational means.</td>
<td>Number of activities the DPW coordinates or conducts to clean up public lands of debris / pollutants around sensitive watersheds/water bodies.</td>
<td>Coordinated effort between the City and the Blue Ocean Society to clean litter on Pierce Island. Once a month, throughout the year, volunteers organized and took part in cleaning debris on Pierce Island. Specific items of waste were categorized and a substantial amount of litter was removed from the area and kept out of City storm drains and open water bodies. (See #1D)</td>
<td>Continue to support initiatives.</td>
</tr>
<tr>
<td>6. C. Reduce the amount of hazardous waste being disposed of inappropriately through programs/services, education of municipal employees and local residents.</td>
<td>i. The number of household hazardous waste collection events and the volume (i.e. gallons) of household hazardous waste disposed (in accord with hazardous waste regs and diverted from the landfill).</td>
<td>Household Hazardous Waste Events held May ’10 &amp; October ’10 – a total of 481 cars attended the events and over 10,000 gals of hazwaste collected.</td>
<td>Hold two Household Hazardous Waste Collections scheduled for 2011; expand collection to include expired prescription and illegal drugs.</td>
</tr>
</tbody>
</table>