

**Municipality/Organization:** Newburyport  

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**EPA NPDES Permit Number:** MAR041213  

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**MassDEP Transmittal Number:** W-040792  

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**Annual Report Number & Reporting Period:** Year 11  
April 1, 2013 – March 31, 2014  

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**NPDES PII Small MS4 General Permit  
Annual Report  
(Due: May 1, 2014)**

**Part I. General Information**

Contact Person: Anthony Furnari Title: Director, Department of Public Services  

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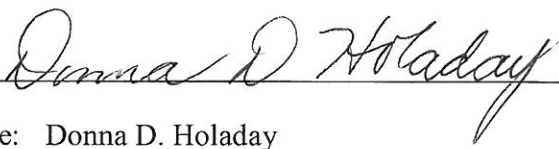
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Certification:

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:   

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Printed Name: Donna D. Holaday  

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Title: Mayor, City of Newburyport  

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Date: 4/30/14  

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## **Part II. Self-Assessment**

Mayor Holaday is a strong proponent of projects that provide stormwater improvements (both quality and quantity) in the City of Newburyport. In effort to support our position as a Green Community, Mayor Holaday and City staff established a tree nursery for the City, homeowners, and businesses to plant trees in the public right-of-ways and private properties to encourage best management practices and help mitigate stormwater and flooding. Approximately 80 trees were planted in the nursery, which is located at the existing composting facility.

The Newburyport Department of Public Services has been exceptionally proactive in regards to the inspection and maintenance of the City's stormwater system and structures. In this past permit year the City has cleaned 1,044 catch basins, repaired 48 catch basins, 4 drain manholes, and 3 storm drain main spot repairs. The swales in the Virginia Lane neighborhood were cleaned and reshaped to improve and mitigate stormwater and flooding and we continue to work in our Business Park (formerly the Industrial Park) to improve flood control.

The City's Stormwater Advisory Committee has made significant progress by adopting the City's first Stormwater Ordinance and associated Rules and Regulations. The Stormwater Rules and Regulations include a City Stormwater Permit, fee system, and retention standard. The Stormwater Permit will be required on all projects where 10,000 square feet or more shall be disturbed. The Stormwater Advisory Committee is currently exploring various funding options, including the formation of a Stormwater Utility, as a means of revenue to fund improvements to the stormwater discharges into our waterbodies.

The City and MVPC member communities have recently received a Community Innovation Challenge (CIC) Grant from the State to assist member communities in all aspects of the NPDES MS4 permit compliance. The work involved with this grant combined with the implementation of our local ordinance and rules & regulations, the City is poised to ensure that our best efforts are put forth to keeping our water clean.

Finally, other annual maintenance and outreach activities were achieved. The City continues to maintain and implement signs and brochures developed in previous years. City field crews continue to mark up stormwater system maps printed from the latest GIS layer and the City has received new flood maps from FEMA from the flood mitigation project. The City has been routinely meeting with MVPC to discuss further possibilities of utilizing and improving our GIS system. In part, the City and MVPC plans on using Computer Maintenance Management Software (CMMS), which is an asset management system, to record and maintain trees and the City stormwater system. In combination with roadway designs and construction, the City will insist on adding grass strips to sidewalks and including trees where possible. The City will continue to follow good housekeeping and pollution prevention procedures with street sweeping, catch basin cleaning, and other municipal operations.

**Part III. Summary of Minimum Control Measures**

**Note on format for this annual report:**

1. Newly revised items for year 11 work are noted as such.

**1. Public Education and Outreach**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 11</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 12</b>
1-1	Newsletter/brochure about stormwater distributed once annually	Department of Public Services	Newsletter/Brochure distributed to all households in Newburyport	Measure completed. DPS distributed a brochure on lawn care with sewer bills to all households in Newburyport.	Distribute information on stormwater management program annually in the spring. Explore distributing stormwater information using green options (i.e. website, email).
1-2	Educate dog owners about picking up dog waste	Department of Public Services	Distribute Fact Sheet to Dog Owners	Fact sheet continues to be made available to all dog owners through the City website, various City departments including City Hall, Sustainability and Health Department.	Continue to distribute fact sheets to dog owners.
Revised for Year 11		Health Department			
1-3	Stormwater education program for school children	Stormwater Advisory Committee	Inquire about presentation to Middle or Elementary School children	A new educational center has been constructed as part of the new Yard Waste Facility. The center is maintained by DPS and the Health Department and includes information	DPS and Health Department continue to plan and finalize children’s summer program to include stormwater education. Explore options to regionalize or collaborate

Revised for Year 11	Stormwater education program for children	Department Of Public Services and/or Health Department	Meet and outline stormwater programs; Number of programs.	on the Parker River watershed and stormwater impacts. The educational center has also been added as a new stop for the EcoTours program, where participants explore the City on bicycles. In addition, DPS worked with Newbury and Rowley stormwater coordinators to host a “Stormwater Faire” in April for students and the public to learn about water quality in our local resource areas.	with other municipalities. DPS has been working with surrounding municipalities on a regional Stormwater Faire for next permit year.
1-4	Maintain pet waste clean-up signs at schools, parks, and beaches	Department of Public Services	Signs posted.	Measure completed. Signs posted and inspected.	Inspect quality of existing signs and maintain as required.
Revised for Year 11		Health Department			
1-5	Annual update of SWMP at a televised City Council Meeting	Department of Public Services and/or Conservation Commission	Update City Council on SWMP status.	Measure completed. At last permit year’s City Council annual update, it was stated that DPS would wait for the new permit to be released. DPS will review the new permit and present a proposal describing DPS needs to stay in compliance.	Provide an annual update of the SWMP to the City Council at a televised meeting. Review new Phase II MS4 Permit and present needs to City Council.
Revised for Year 11		Department of Public Services			

**1a. Additions**


## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
2-1	Form Stormwater Advisory Committee	Department of Public Services	Form Committee during fourth permit year.	Measure completed.	Measure completed.
2-2	Comply with state public notification guidelines at MGL Ch. 39 s. 23B.	City Clerk	Notices posted in library and current locations.	Measure completed. Conservation Commission, Sewer Commission, Planning Board, and Stormwater Advisory Committee meetings are filed with the City Clerk, posted, and open to the public.	Continue throughout permit term.
2-3	Stencil catch basins with don't dump message	Department of Public Services	Identify and prioritize catch basins to be stenciled with "Don't Dump" message.	Stenciling was not performed this year due to a lack of funding and manpower.	DPS will work with local schools and volunteers to perform stenciling.

### 2a. Additions


### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
3-1	Conduct dry weather outfall screening and inspection	Department of Public Services	Screen outfalls upon identifying or confirming location of outfalls within regulated area during first year of permit term.	All outfalls have been identified and some have been screened.	City will schedule and budget accordingly to screen and inspect accessible outfalls by foot or boat and attempt to identify any illicit connections.
3-2	Map stormwater outfalls	Department of Public Services	Locate outfalls on a map within regulated area.	Measure completed. Maps will be updated as new information becomes available.	Measure completed. Maps will be updated as new information becomes available.
3-3	Assess need for stormwater GIS layer	Department of Public Services	Decision on whether to go forward with a stormwater GIS within first two years of the permit.	Updates to the stormwater GIS layer continued throughout the permit year by MVPC. A significant amount of new and red-marked survey data was collected by DPS crews.	Continue to improve stormwater GIS layer. Continue to work with MVPC to update GIS layer with FEMA flood maps, red-marked field book, and. Continue to red mark field book through permit year.
3-4	Develop and implement plan to identify and remove non-stormwater discharges	Department of Public Services	Number of illicit connections found and removed.	No illicit discharges were identified during this permit year.	Continue to identify and further investigate illicit discharges in the system.
3-5	Develop a bylaw to require inspection of construction sites.	Department of Public Services	Draft Ordinance	Measure completed. The City's Stormwater Management Ordinance has been adopted by City Council and approved by the Mayor and is effective as of September 24, 2010.	Measure completed. The City's Stormwater Management Ordinance will be updated as necessary.

#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
4-1	Construction site Erosion Sediment Control Ordinance for construction sites greater than 1 acre in area	Department of Public Services	Draft Ordinance by end of third permit year.	Measure completed. Requirements for erosion sediment control have been identified and specified in the City’s Stormwater Management Ordinance, which has been adopted by City Council.  The Stormwater Advisory Committee	Measure complete.
Revised for Year 11	Construction site Erosion Sediment Control Ordinance for land disturbance of 10,000 square feet or greater.		Draft Stormwater Management Rules and Regulations	has finalized the Stormwater Management Rules & Regulations, including permit fees, effective April 28, 2014.	
4-2	Require a waste management plan at construction sites larger than one acre.	Department of Public Services	Draft Ordinance by end of third permit year.	Measure completed. Requirements for a waste management plan on construction sites 10,000 square feet or greater have been identified and specified in the City’s Stormwater Management Ordinance and Rules & Regulations.	Measure complete.
Revised for Year 11	Require a waste management plan for land disturbance of 10,000 square feet or greater.		Draft Stormwater Management Rules and Regulations		

4-3	Review site plans for stormwater impacts.	Department of Public Services	Policies for Site Plan Review developed.	Reviewed all of City's Site Plan Reviews (SPR) from City Planning Department.	Measure is ongoing.
Revised for Year 11		Planning Department		The Stormwater Advisory Committee has finalized the Stormwater Management Rules & Regulations, including permit fees, effective April 28, 2014.	
4-4	Consider public input.	Department of Public Services	Number of Public Hearings held.	Stormwater issues were discussed at Stormwater Advisory Committee meetings, which were public meetings.	Continue to make Stormwater Advisory Committee meetings open to the public.
Revised for Year 11		Stormwater Advisory Committee			
4-5	Inspect erosion and sediment controls	Department of Public Services	Develop procedure, including inspection checklist, and commence reviews by end of third permit year.	Reviewed all of City's SPR's from City Planning Department.	Measure is ongoing.

**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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
5-1	Develop a draft ordinance to apply Standards 2, 3, 4, 7, and 9 of the Massachusetts Stormwater Policy to the entire municipality. Present to City Council.	Department of Public Services	Draft ordinance by end of third permit year.	Measure completed. The City’s Stormwater Management Ordinance has been adopted by City Council.	Measure completed.
Revised for Year 11		Stormwater Advisory Committee	Finalize Stormwater Management Rules and Regulations.	Measure completed. The Stormwater Advisory Committee has finalized the Stormwater Management Rules & Regulations, including permit fees, effective April 28, 2014.	
5-2	Specify a stormwater BMP manual to be used for consistent design and performance standards	Department of Public Services	Select BMP Manual by end of third permit year.	Measure completed. The City’s Stormwater Management Rules and Regulations identify and require the use of Massachusetts DEP’s list of BMP’s.	Measure completed.
5-3	Develop draft ordinance that ensures long-term maintenance of private Structural BMPs. Present to City Council.	Department of Public Services	Compliance with regulations, present to City Council by end of third permit year.	Measure completed. The City’s Stormwater Management Ordinance has been adopted by City Council.	Measure completed.

### 5a. Additions

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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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
6-1	Identify sensitive receptors within the City	Conservation Commission	List of sensitive receptors developed, staff notified by the end of first permit year.	Measure completed.	Measure completed.
6-2	Street Sweeping	Department of Public Services	Continue street sweeping procedures.	Street sweeping operations are continuous. 100% of streets are swept at least annually and high traffic and curbed areas are swept multiple times. The City has implemented better street sweeping routes and schedules.	Continue sweeping 100% of streets at least annually and high priority areas as needed throughout permit year.
6-3	Sidewalk Sweeping	Department of Public Services	Continue sidewalk sweeping procedures.	Sidewalk sweeping operations are continuous. Sidewalks in downtown area are swept at least annually.	Continue sweeping all sidewalks in downtown at least annually throughout permit year.
6-4	Roadway deicing	Department of Public Services	Amounts of deicing compounds used.	For the winter of 2013/2014, the City used 3,202 tons of salt and 5,950 gallons of pretreatment (CaCl).	Document deicing compounds used by the City for the winter of 2014/2015.
6-5	Minimize impacts from vehicle maintenance	Department of Public Services	Amount of hazardous materials used.	Continued use of proper procedures for minimizing impacts from vehicle maintenance.	Continue throughout permit term.
6-6	Maintain storm drain system	Department of Public Services	Number of catch basins cleaned annually	DPS has implemented a storm drain cleaning system. 1,044 catch basins were cleaned by August/September 2013 by clam shell and visually inspected for necessary repairs. 48 catch basins, 4 drain manholes and 3 storm drain main pipe sections were newly installed or repaired during the last permit year.	Continue identifying and cleaning critical catch basins throughout permit year. DPS plans on cleaning and inspecting approximately 1,000 catch basins next permit year. Assess storm drain cleaning system.

6-7	Minimize pesticide and fertilizer use for parks and other landscaped areas	Department of Public Services	Training conducted; amount of herbicides/fertilizers	DPS does not use pesticides or fertilizers for landscaping parks and other areas in the City.	Continue use of green landscaping procedures and communicating with pesticide control when necessary during permit year.
6-8	Control of illegal dumping	Department of Public Services	Number of signs posted; number of sites cleaned up.	Continued identifying, monitoring, and cleaning-up dump sites and posting signs.	Continue monitoring and cleaning-up dump sites and posting signs.

**6a. Additions**


**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities – Permit Year 12</b>
Revised					
Revised					
Revised					
Revised					
Revised					

**7a. Additions**


**7b. WLA Assessment**

**Part IV. Summary of Information Collected and Analyzed**

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

(Since beginning of permit coverage unless specified otherwise by a \*\*, which indicates response is for period covering April 1, 2011 through March 31, 2012)

**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
<b>Regulatory Mechanism Status (indicate with "X")</b>					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					
<b>Accompanying Regulation Status (indicate with "X")</b>					
▪ 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)	(%)	
<b>Mapping method(s)</b>		
▪ 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 ln 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 <sub>2</sub> % MgCl <sub>2</sub> % 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 <sub>n</sub> mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l <sub>n</sub> 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	
<ul style="list-style-type: none"> <li>Treatment units induce infiltration within 500-feet of a wellhead protection area</li> </ul>	# or y/n	