

**Municipality/Organization:** Town of Hingham, MA

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**EPA NPDES Permit Number:** MAR041038

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**MADEP Transmittal Number:** W-041003

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**Annual Report Number  
& Reporting Period:** No. 10: May 1, 2012 -April 30, 2013

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## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

**Contact Person:** Randy Sylvester

**Title:** DPW Superintendent

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**Telephone #:** 781-741-1430

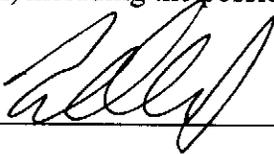
**Email:** sylvesterr@hingham-ma.com

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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:** Ted Alexiades

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**Title:** Town Administrator

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**Date:**

5/1/13

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**Part II. Self-Assessment**

The Town of Hingham has completed the required self-assessment of the annual compliance review for the Phase II Stormwater Program. In accordance with the NPDES Phase II Stormwater requirements, the following topics were evaluated for the completion of the Annual Report:

1. Compliance with the Phase II Permit Conditions
2. Appropriateness of the Selected BMPs
3. Progress Towards Achieving the Program’s Measurable Goals
4. Results of Any Information that has been Collected and Analyzed
5. Activities for the Next Reporting Cycle
6. Changes in Identified BMPs or Measurable Goals

The Town has determined that our municipality is in compliance with all permit conditions.

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

**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 10</b>	<b>Planned Activities – Next Permit Term</b>
1A	Distribute Brochures and Fact Sheets to Businesses & Residents	Department of Public Works (DPW)	Copies of materials.	Stormwater educational materials were made available to the public at the Town Hall and Town Public Library. The Conservation Commission maintained the stormwater display at the Town Hall.	Continue to discuss the Phase II Program at Town Department coordination meetings.
Revised				The Phase II program was discussed at Town Department coordination meetings on a bi-monthly basis.	Continue to make copies of handouts and brochures available at public facilities and track the number distributed. Maintain the stormwater display at public places and consider updating the content/messages.

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1B Revised	Send Out Stormwater Press Releases	DPW	Copies of articles.	<p>A flyer was mailed to all residents advertising the 2012 Household Hazardous Waste Collection (HHWC) Day on May 18, 2012<sup>1</sup>.</p> <p>Copies of the stormwater video “Reigning in the Storm” were made available for borrowing through the Public Library.</p> <p>The stormwater hotline was published in the newspaper, flyers, and on the Town website.</p>	<p>Submit at least one press release in the Fall and one in the Spring to highlight the ongoing stormwater activities led by the Town and others and to promote the stormwater hotline.</p> <p>Additional HHWC press releases are scheduled to be completed in May 2013 for the upcoming event.</p>
1C Revised	Develop Stormwater Section of Town Website	DPW and Town Website Manager(s)	Measure number of hits annually.	<p>Tips for pollution prevention, the stormwater hotline and a link to a US EPA stormwater web page were posted on the DPW web page.</p> <p>The web page is periodically updated with new messages.</p>	<p>Update and expand Town website as the Phase II program changes and additional information becomes available.</p> <p>Ensure links to USEPA and other agencies and groups are maintained and updated.</p>
1D Revised	Create a Stormwater Educational Display	Conservation Commission	Track quantity of take home materials taken quarterly.	<p>The educational display was maintained at the Conservation Commission office in Town Hall.</p> <p>Approximately 12 handouts were taken by residents from the display.</p>	<p>Continue to exhibit and update stormwater display materials at public facilities and track quantities of take home material distributed.</p> <p>Evaluate ways to improve public interest and exposure to materials, such as adding display locations.</p>
<p><sup>1</sup>The collection event is also advertised at the Hingham Transfer Station with flyers, in newspaper publications, on the DPW section of the Town website and through local cable broadcasts. The information outlines proper practices for disposal of wastes to help prevent dumping.</p>					

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1E	Develop and Broadcast Stormwater Presentation on Local Cable Network	DPW and Town Officials	Cable TV tapes of presentations. Show annually during permit term.	The household hazardous waste collection days were broadcast weekly on cable prior to the event and on the Town website.	Continue to broadcast the stormwater videos, appropriate stormwater-related Selectmen’s meetings, announcements events and other stormwater-related advertisements.
Revised	Broadcast the Progress of the Phase II Program w/ Selectmen Meetings		Use of EPA video & broadcast of Town Selectmen Meetings	Beginning in February 2011, DPW began running stormwater educational tips on the local cable network. The topic was changed several times throughout the year.	
1F	Establish a Program for Free Stormwater Video Rentals	DPW and Planning Board	Track video rentals annually.	Two copies of the EPA video “After the Storm” and a copy of “Reigning in the Storm” were advertised on the Town website and made available at the Town public library for rental; the video “Reigning in the Storm” was rented 5 times.	Continue to offer the videos “After the Storm” and “Reigning in the Storm” at the Town public library for loan.  Continue to advertise the video’s availability on the Town website and cable channel. Coordinate with the elementary schools to promote the use of the videos in their curriculum.
Revised					

**1a. Additions – None at this time**

**2. Public Involvement and Participation**

<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 10</b>	<b>Planned Activities – Next Permit Term</b>
2A	Establish a Stormwater Telephone Hotline	DPW and Town Website Manager(s)	Record number of phone calls to hotline, copies of advertisements.	The hotline number is provided on the Town website. No calls were received during the Permit Year. Stormwater-related calls are made to the Fire Department and DPW.	Calls will continue to be tracked with records of follow-up actions. Explore ways to further promote the stormwater hotline.
Revised		Local Emergency Planner			

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2B	Mark Storm Drains with Buttons or Stencils	DPW and Volunteers	50% of storm drains marked by Year 5 with door hangers placed in associated neighborhoods.	In Permit Year 9, Eagle Scouts put down over 100 buttons to mark storm drains. Approximately 1,650 storm drains were marked in previous years.	Continue to work with volunteers to mark additional storm drains in Town.
Revised		Conservation Commission	Downtown area marked	Volunteer recruitment was successful in Year 10. Volunteers and DPW staff refreshed previously marked storm drains in the downtown and coastal areas in Fall 2012.	
2C	Develop and Implement a Native Tree/Shrub Planting Program	DPW, Conservation Commission, and Volunteers	Record the number, location, and kind of tree or shrub planted.	The Town of Hingham continued its tree/shrub replanting program as funds were available. The ongoing Train Track Cap program restored trees and landscaping with ~10 volunteers during the Summer 2012. Approximately 60 trees and shrubs were planted.	Continue existing practices for tree/shrub replacement as budget allows. Solicit volunteers to participate in future planting programs for stormwater and environmental restoration projects.
Revised					

### 2a. Additions

<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 10</b>	<b>Planned Activities – Next Permit Term</b>
2D	Perform Wetland and Waterbody Cleanups	DPW, Conservation Commission, and Volunteers	Track areas cleaned within the Town, amount of debris removed	~35 volunteers performed a wetlands cleanup in the vicinities of Cushing Pond (10), Trihammer Pond (5) and Weir River (20). Trash and other debris were removed from the area and the program was funded through the Bottle & Can program.	Continue to coordinate volunteers and work with partnering organizations to perform cleanup activities.
Revised				In Permit Year 9, the Junior class from the local high school conducted a cleanup for the Hingham Harbor Beach that included ~20 high school students. The now Senior class performed this cleanup again in Permit Year 10.	

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10	Planned Activities – Next Permit Term
3A Revised	Hold Annual Household Hazardous Waste Collections	DPW	Document quantity of wastes collected annually.	<p>The Town of Hingham participates in regional collections as part of the South Shore Recycling Cooperative. A collection event was held on May 18, 2012. A total of 278 cars were recorded for the event and approximately 14,350 lbs were collected.</p> <p>DPW continued its mercury thermometer exchange program.</p>	<p>Continue participation in the South Shore Recycling Cooperative. The annual collection event is scheduled for May 18, 2013.</p> <p>Evaluate ways to further promote the annual event.</p>
3B Revised	Develop Primary Town Storm Drain System Map	DPW	70% of system mapped on GIS.	<p>70% of the drainage system was mapped on GIS in Permit Year 1. The Town continued to use a GPS unit to collect data for the storm drain network during catch basin cleaning activities. System mapping is approximately 90% complete.</p>	<p>Continue to map the storm drain network in the field using a GPS and evaluate the most effective method for updating the existing storm drain system map in GIS.</p>
3C Revised	Complete Mapping of Stormwater Outfalls	DPW and Contractor	<p>All outfalls mapped by year 4.</p> <p>75% of outfalls mapped by end of year 4. Source identified and removed within one year.</p>	<p>All outfall locations were field verified during Permit Year 5. The total number of outfalls remains at 329. As discussed under BMP 3B, the Town continued mapping the remaining storm drain network, which will assist with future outfall and catchment assessments.</p>	<p>Update the outfall base map as needed and upon installation of new drainage systems.</p>
3D Revised	Evaluate Stormwater Discharges to Historic Places	DPW, Conservation Commission, and Contractor	<p>Final list of historic places in Hingham.</p> <p>Results of evaluation.</p>	<p>This BMP was completed in June 2005.</p>	<p>No further action is needed at this time.</p> <p>Update this evaluation once the new permit is available.</p>

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3E	Develop Illicit Discharge Prohibition Bylaw	Board of Health	Obtain authorization to control inputs to the municipal drainage system. Bylaw at Town meeting by end of year 2.	As an alternative to creating a new bylaw, the Board of Health (BOH) has enforceable regulations that encompass illicit discharge prohibition.	No further action is needed
Revised	Enforce Illicit Discharge Prohibition through the BOH	Conservation Commission	Creation of Board of Health regulations		
3F	Develop Illicit Discharge Detection and Elimination (IDDE) Plan and Implement Activities	DPW and Board of Health	All outfalls examined by year 4. Sources traced and results documented within one year of discovery.	100% of all outfall locations were field verified and screened for illicit discharges during Permit Year 5, resulting in a total of 329 outfalls. As discussed under BMP 3B, the Town continued to use a GPS unit to collect data for the storm drain network during catch basin cleaning activities.  No illicit discharges were identified during the permit term; however, the DPW addressed multiple issues related to blockages in the storm drain system.	The Town will continue field inspections of the drainage system and pursue the removal of identified illicit discharges.  Continue to map the storm drain network in the field using a GPS and evaluate the most effective method for updating the existing storm drain system map in GIS. This storm drain system mapping will assist with future outfall and catchment assessments.
Revised			75% of outfalls examined by year 4.		
3G	Incorporate Information on Illicit Discharges into Public Education and Outreach Topics	DPW and Board of Health	Copies of materials.	As discussed under BMP 1A-1C and 1E, information on illicit discharges was advertised through existing public education avenues, including the reporting hotline.	Continue to incorporate illicit discharge information into existing public education activities.
Revised			# materials distributed.		
3H	Setup and Advertise a Hotline for Illicit Discharges	DPW, Fire Department, and Board of Health	Log of complaints and actions taken.	Refer to BMP 2A. No calls were received during the Permit Year.	Continue to track calls with records of follow-up actions.
Revised		Local Emergency Planner			

**3a. Additions – None at this time**

#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10	Planned Activities – Next Permit Term
4A	Develop Erosion Control Bylaw	Planning Board	Bylaw at Town meeting by end of Year 2.	The Planning Board addressed stormwater management through modifications to existing regulations rather than the development of new Stormwater and BMP By-Laws. LID principles and practices were incorporated into the Subdivision Regulations and the off-street parking regulations of the Zoning By-Law. These changes were adopted at the 2008 Town Meeting.	Continue to enforce LID techniques in the Subdivision Regulations.
Revised		Conservation Commission	Draft bylaw end of Year 4.		
4B	Establish a Procedure for the Receipt of Information Submitted by the Public	Planning Board and DPW	Record number of phone calls to hotline, copies of articles.	Complaints regarding construction site erosion are handled by the Conservation Commission, DPW, and Planning Board, as appropriate. No calls were received through the stormwater hotline.  The Town utilizes VUEWorks for asset management and to track information, work orders, etc.	Continue record keeping program with regulatory updates. Continue tracking calls and records of enforcement.
Revised		Conservation Commission			
4C	Conduct Inspections for Erosion Controls	Planning Board, DPW and Consultant	Inspection checklist and documented inspections.	The various departments coordinate efforts to oversee sites. Inspection and enforcement issues are handled by the most appropriate enforcement agent <sup>2</sup> . An inspection checklist is in use to document inspections and corrective actions. Inspection activities are ongoing during the construction process by the appropriate department.	Continue inspections in accordance with the existing Zoning Bylaws and updated Planning Board Regulations.
Revised					

<sup>2</sup>Complaints regarding construction site erosion are received by staff at all of the Land Use Board, including the Conservation Commission, Board of Health, Building Commissioner and Planning Board. Smaller issues are generally handled directly by staff from the department under whose jurisdiction the project was approved (Building, Planning, Health) or the staff with appropriate enforcement authority (Building, Conservation Commission, Health). In an effort to coordinate the Town's response, ongoing issues and more serious complaints are addressed at a weekly coordination meeting held with staff from all of the land use boards. For projects approved by the Planning Board (Subdivisions, Flexible Residential Developments), regular construction site inspections are done by a consulting inspection agent paid for by the developer in accordance with a procedure set forth in the Subdivision Rules and Regulations.

**4a. Additions – None at this time**

**5. Post-Construction Stormwater Management in New Development and Redevelopment**

<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 10</b>	<b>Planned Activities – Next Permit Term</b>
5A	Develop BMP Bylaw	Planning Board	Bylaw at Town meeting by end of Year 2.	As discussed under BMP 4A, the Planning Board addressed stormwater management through modifications to existing regulations rather than the development of new Stormwater and BMP By-Laws. LID principles and practices were incorporated into the Subdivision Regulations and the off-street parking regulations of the Zoning By-Law. These changes were adopted at the 2008 Town Meeting.	Continue to enforce LID techniques in the Subdivision Regulations.
Revised			Draft bylaw end of Year 4.		
5B	Develop and Implement Inspection Program	Planning Board, DPW, Building Inspector, and Consultant	Copies of maintenance reports received annually, plus records of inspections completed and results.	<p>Inspections were conducted by DPW and the Building Inspector for BMPs in Town. Streets and roadways that are accepted by the Town are inspected regularly by DPW. An inspection checklist is in use to document inspections and corrective actions. DPW uses a catch basin inspection form to track cleaning activities. Operation and Maintenance (O&amp;M) plans were considered and reviewed.</p> <p>Projects approved by the Planning Board, which include privately owned and maintained stormwater facilities, are required to submit an annual inspection report to the Planning Board.</p>	<p>Continue inspections and document inspections and corrective actions using the checklist. Coordinate with efforts for BMP 4C.</p> <p>Review inspection protocols and enforcement strategies to evaluate their effectiveness at minimizing pollutants discharging to streams and the MS4.</p>
Revised					

**5a. Additions – None at this time**

## 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 10	Planned Activities – Next Permit Term
6A Revised	Clean Catch Basins	DPW	Clean all catch basins.	Continued cleaning catch basins biannually, removing approximately 900 tons of sediment during the Permit Year. Catch basin inspection forms were completed to document maintenance needs. Catch basins at the Transfer Station were cleaned four or more times.	Clean each catch basin biannually, as budget allows. Monitor and record the amount of material removed from each basin.
6B Revised	Sweep Streets in Town	DPW	Priority plan of sweepings based on water quality impact. Volume of sweepings collected.	Continued street sweeping program in Town to collect 400 tons of material and included: sweeping of downtown area biweekly depending upon visual inspection and traffic; sweeping environmentally sensitive areas 2-3 times annually, and sweeping the Transfer Station every 1-2 weeks.	Continue street sweeping program annually and evaluate future sweeping priorities. Record and log sediment quantities and when streets are swept.  Currently, street sweepings are mixed with compost and reused along non-residential roadways in town.
6C Revised	Develop an Inspection and Maintenance Plan	DPW	Written schedule. Records of inspections and maintenance.	The DPW continued to use the form for catch basin inspections during Permit Year 10, which includes information related to potential illicit discharges.  The Town reused maintenance wastes at the Hingham Landfill until final closure in November 2011. Street sweepings are added to the Town compost, but catch basin cleanings are stored at the landfill for subsequent disposal.  DPW allocated funding to begin evaluating a potential Beneficial Use Determination (BUD) for the reuse of maintenance wastes.	Reuse street sweepings in accordance with the pre-approved reuse policy by MassDEP. Evaluate reuse options for catch basin cleanings under a BUD.

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6D	Continue Existing Pollution Prevention and Good Housekeeping Practices at the DPW Facility	DPW	Ensure existing practices are continued.	Continued existing practices for pollution prevention at the DPW Facility: indoor vehicle maintenance, immediate repair of leaking vehicles, proper handling/storage and disposal of hazardous materials and wastes, covered salt storage and indoor vehicle washing.	Continue existing practices and inform new employees of pollution prevention and good housekeeping practices.
Revised					
6E	Ensure Proper Cleaning of Vehicle Leaks at the DPW Facility	DPW	No significant vehicle leak stains at the facility.	Vehicle leaks were cleaned promptly at the facility.	Continue to prevent vehicle leaks and repair leaking vehicles promptly.
Revised					
6F	Rinse Vehicles Indoors at the DPW Facility	DPW	Record of memo.	Vehicle rinsing was conducted indoors to the best extent practicable and proper vehicle rinsing and washing activities were discussed at regular DPW meetings.  The oil/water separator associated with the indoor wash area is serviced once a year (sometimes twice).	Continue proper rinsing activities and continue to include vehicle rinsing procedures in the employee training program or during staff meetings, as needed.
Revised					
6G	Divert Stormwater Runoff Away From the White Building at the DPW Facility	DPW	Record of before and after photos.	This task was completed in Permit Year 3. Additionally, this building is not in use since the new DPW facility was constructed.	No further action is needed.
Revised					
6H	Ensure Covered Storage for Salt Materials at the DPW Stockyard	DPW	All salt is covered.	All salt materials are covered in the salt storage shed at the DPW Facility.	Continue to maintain all salt materials inside the salt storage shed.
Revised					
6I	Improve Covering and Evaluate BMPs for the Sand/Salt Pile at the DPW Stockyard	DPW	No rain contact with pile. No significant runoff contact with pile.	The DPW began use of a salt storage facility in July 2009 which has a holding capacity of 4,000 tons to adequately contain materials.	Utilize the storage shed for all activities to reduce potential exposure of sand and salt materials.
Revised					

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6J	Construct Berms at the DPW Stockyard to Contain Earth Materials	DPW	Berms constructed. Before and after photos.	Earth berms and BMPs were maintained to prevent off-site migration of earth materials.	Continue to maintain earth berms and BMPs as needed to prevent sediment migration from the site.
Revised					
6K	Disconnect Floor Drains and Prohibit Vehicle Washing at the Tree & Park Barn Facility	DPW	Floor drains disconnected as shown by closure records. Record of memo.	Floor drains were plugged with cement in May 2009 and outside vehicle washing activities remained prohibited. Vehicles were washed at the DPW Facility.	Continue proper rinsing activities at the DPW facility and continue to include vehicle rinsing procedures in the employee training program or during staff meetings, as needed.
Revised					
6L	Prevent Stormwater Contact with Vehicle Leaks and Maintenance Areas at the Recycling Facility	DPW	No significant vehicle leak stains at the site.	Vehicles and equipment were maintained at the DPW Facility indoors and only light maintenance activities occurred at the Recycling Facility. This BMP is also being addressed as part of the facility's SWPPP.	Continue to prevent vehicle leaks and repair leaking vehicles promptly.
Revised					
6M	Store Batteries Under Cover at the Recycling Facility	DPW	No uncovered outdoor storage of batteries.	Batteries were stored indoors.	Continue storing batteries indoors.
Revised					
6N	Comply with DEP Policy for Vehicle Washing at the Recycling Facility	DPW	Record of memo.	Outdoor vehicle washing and rinsing was prohibited.	Continue to prohibit outdoor vehicle washing.
Revised					
6O	Prevent Stormwater Discharges from Recycling Bales and Loading/Unloading Areas at the Recycling Facility	DPW	No contact with plastic bales and no stormwater discharges from the unloading area.	Plastic bales were stored in a covered roll off container. The bale unloading area was swept on a regular basis to remove debris and drips.	Continue to sweep and clean (using dry methods) the bale unloading area on a regular basis to remove debris and drips.
Revised					

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6P	Conduct a Feasibility Study For the Trash Trailer Bays at the Transfer Station	DPW	Copy of the feasibility study report. Plans or sketches.	The trailer bays were cleaned on a regular basis to minimize stormwater contact with debris. Dry cleaning methods such as sweeping were used where possible.	Continue cleaning procedures at the trash trailer bays to prevent stormwater contact.
Revised	Address Landfill Leachate Entering the Drainage System		Trash trailer bay cover installation, landfill closure.	The landfill was capped and closed in November 2011 and leachate issues were addressed as part of closure. This has addressed the potential for leachate to enter the drainage system.	
6Q	Continue Existing Pollution Prevention and Good Housekeeping Practices at the Bus Depot	School Department and Contractor	Ensure existing practices are continued.	Continued the following pollution prevention practices at the Bus Depot: indoor vehicle maintenance for School Department vehicles; and bus washing using a collection system for off-site disposal of wash water.	Continue existing practices.
Revised					
6R	Modify Downspout Discharges at the Fueling Station	School Department and DPW	Downspout discharges modified as shown by before/after photos.	The downspouts were modified to divert stormwater away from the fueling area in Permit Year 3.	No further action is needed.
Revised					
6S	Install a Spill Kit at the Fueling Station	School Department	Spill kit installed. Record of memo.	The spill kit was maintained at the station with a memo posted to describe the kit and its location.	Ensure kit is fully stocked with spill materials and memo remains posted.
Revised					
6T	Ensure Compliance for Floor Drain Systems in the Bus Depot Building	School Department	Record of inspections and changes to floor drain systems, if any.	Town staff met to discuss options for addressing the floor drains.	Floor drains are scheduled to be plugged in the next few months.
Revised					
6U	Continue Existing Facility Practices at the Town Hall and Building #104	Police Department and Department of Public Works	Ensure existing practices are continued.	Continued practices at the Town Hall for washing police vehicles off-site at an approved facility.	Continue existing practices.
Revised					
6V	Ensure Compliance for Floor Drains at the North Fire Station	Fire Department	Sketches or inspection memos.	Town staff met to discuss options for addressing the floor drains. A committee was formed to address station needs.	Develop options for abandoning floor drains.
Revised					

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6W	Ensure Compliance for Floor Drains and Vehicle Washing Activities at the Central Fire Station	Fire Department	Sketches or inspection memos. Record of memo.	Floor drains are connected to the sanitary sewer system for proper disposal of vehicle washing wastes.	Continue proper vehicle washing practices.
Revised					
6X	Evaluate Alternative Vehicle Washing Options at the Hingham Light Plant	Light Plant	New methods for handling vehicle wash water at the site by the end of Year 2. End of Year 3.	Outdoor vehicle washing was prohibited. Alternative washing was evaluated as part of the evaluation for a new building for Light Plant operations.	Continue to prohibit outdoor vehicle washing practices and evaluate appropriate alternatives.
Revised					
6Y	Use IPM Program for Application of Pesticides in Town	DPW	Copy of IPM Program.	Continued practice of IPM program.	Continue existing practices and continue to document protocols.
Revised					
6Z	Use Licensed Applicators for Fertilizers and Pesticides in Town	DPW	Record quantities of fertilizers and pesticides purchased annually.	9,753 lbs of organic fertilizer was used by at the town schools in Permit Year 10. No other applications occurred on town property.  No herbicides were purchased in Permit Year 10. No rodent control poison was used at the Transfer Station. Licenses were maintained for all Town employees that may need to apply chemicals.	Continue existing practices and employ methods to maintain public property without the use of chemical applications.
Revised					
6AA	Calibrate Salt Spreading Equipment	DPW	Record quantity of salt purchased annually.	Salt spreading equipment was calibrated to ensure proper application rates.	Continue to calibrate salt equipment and track salt/Ice-Ban purchases.  Continue to maintain copies of records with the Stormwater Management Plan and periodically evaluate salt use and reduction effectiveness.
Revised					

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6AB	Use Low Salt Applications at Designated Areas	DPW	Document application rate in Accord Pond watershed compared to other watersheds.	Low salt applications were again used to reduce salt applications in the Accord Pond watershed for water supply protection, which includes the following streets: Gardner St., Mallard Run, Winfield Rd., Accord Pond Dr., Devon Terrace, Farm Hills Rd., Peter Hobard Rd, Hazelwood Dr. and Harvest Lane.  DPW continued to use a reduced application of sand at approximately 10% of the overall winter roadway treatment materials.	Continue existing practices.
Revised					
6AC	Ensure Proper Waste Disposal in Town for Hazardous and Special Wastes	DPW	Document quantity of wastes collected annually.	Tracking continued for special and regulated wastes (e.g., waste oil, batteries, light tubes, CRTs, electronic equipment) at the Hingham Transfer Station and as part of the Household Hazardous Waste Collection event held on May 18, 2012. The following amounts of materials were collected in Permit Year 10: - Oil – 2,050 gallons - Batteries – 285 units - Fluorescent Light Tubes – 12,658 straight; 1,126 compact; 205 u-tube/circular - Mercury – 114 lbs - TV’s – 2,441 units - Monitors – 1,011 units	Continue existing practices at the Hingham Transfer Station for the collection of special and regulated wastes and document results over time.  Continue to offer Household Hazardous Waste Collections annually and track Town participation and quantities collected.
Revised					

<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 10</b>	<b>Planned Activities – Next Permit Term</b>
6AD	Ensure Compliance for Snow Disposal in Town	DPW	Utilize designated snow disposal location.	Snow storage and disposal was conducted at the Town bathing beach parking lot. The buffer areas were cleaned by hand in the spring to remove accumulated materials. The parking lot is designed with vegetative buffers and sediment traps to filter snowmelt from the parking lot, before draining to Hingham Harbor.	Continue existing practices of snow disposal to ensure surface water quality protection.  Maintain vegetative buffers and sediment traps at snow disposal areas.
Revised					
6AE	Ensure Water Quality Improvements are Considered for Flood Projects.	DPW	Records of flood control projects.	Flood control projects are reviewed through the Conservation Commission to ensure that water quality improvements are considered. No projects were reviewed during the permit term.	Continue review of projects through Conservation Commission to ensure that water quality improvements are considered.
Revised					
6AF	Conduct Town Employee Stormwater Training	DPW	Attendance sheet and copy of program	Pollution prevention topics were informally discussed as part of routine DPW operations meetings. Transfer Station employees received informal, on-site stormwater training.  SPCC and SWPPP training for DPW employees will occur by Summer 2013.	Evaluate and update curricula to provide pollution prevention training for all DPW employees.
Revised					

**6a. Additions – Four Additions at this time**

<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 10</b>	<b>Planned Activities – Next Permit Term</b>
6AG	Develop and Implement a SPCC Plan at the Transfer Station	DPW	Copy of SPCC Plan & inspection records	A SPCC Plan was developed and implemented at the Transfer Station in Permit Year 5 to address aboveground oil storage. Measures to prevent and protect against an oil release were inspected and maintained in accordance with the SPCC Plan.	Continue compliance with the SPCC Plan and update as necessary.
Revised					

<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 10</b>	<b>Planned Activities – Next Permit Term</b>
6AH	Conduct biannual inspections of solid waste at Transfer Station in accordance with SPCC Plan and SWPPP.	DPW	Copy of SPCC Plan & inspection records	Solid waste operations were inspected by an engineer twice to assist in meeting the requirements outlined in the facility SPCC Plan, SWPPP and MassDEP Solid Waste Regulations. DPW performs ongoing inspections as part of its routine operations.	Continue the engineer's biannual inspections for solid waste at the Transfer Station. Continue ongoing inspections by the DPW.
Revised					
6AI	Ensure Compliance for Floor Drains at the Transfer Station	DPW	Sketches or inspection memos.	The existing leaching area associated with the former floor drain system was tested and closed in July 2010. The industrial wastewater holding tank to properly handle floor drain discharges was installed in November 2011.	Continue proper waste handling and disposal practices for floor drain discharges at the site.
Revised					
6AJ	Update SWPPP for the Hingham Recycling & Trash Transfer Facility	DPW and Consultant	Updated SWPPP & coverage under the MSGP	The Hingham Recycling & Trash Transfer Facility continued to comply with the approved SWPPP.	Continue to comply with the SWPPP. Update as necessary.
Revised					

**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 10</b>	<b>Planned Activities – Next Permit Term</b>
7A	Develop a Water Quality Strategy for 303d Waters	DPW, Conservation Commission, and Consultant	Summary of pollution prevention efforts, future needs, and responsible parties. Copy of Surface Water Quality Strategic Plan.	The Town continued with implementation of the existing SWMP to address impaired waters.  The Town previously evaluated program and funding needs for the next permit term and decided to incorporate the preliminary strategy into the SWMP Update that will be required following the permit re-issuance.	Develop the water quality strategy as part of the SWMP Update that will be required following the permit re-issuance. Consider information collected as part of the Phase II Stormwater Program and any new information available from TMDL or other studies.
Revised					

<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 10</b>	<b>Planned Activities – Next Permit Term</b>
7B	Implement BMP's from Water Quality Strategy	DPW, Conservation Commission, and Consultant	Photographs, logs, and BMP descriptions for completed efforts and water quality improvements.	This will commence upon developing a water quality strategy.	This will commence upon developing a water quality strategy, based on available resources and funds for implementation. Pursue funding sources for this effort.
Revised					

**7b. WLA Assessment**

The Town of Hingham has five 303d listed waters that are classified as Category 5 “Waters Requiring a TMDL” as follows:

1. Hingham Harbor (MA70-08), impaired for pathogens
2. Crooked Brook Meadow (MA74-01), impaired for nutrients, organic enrichment/low DO, and noxious aquatic plants
3. Foundry Pond (MA74011), impaired for nutrients, siltation and noxious aquatic plants
4. Weir River (MA74-02), impaired for pathogens
5. Weymouth Back River (MA74-13), impaired for pathogens

Water quality concerns associated with 303d waters will be addressed through the implementation of BMPs under the six minimum measures for Phase II, as outlined in the Hingham Stormwater Management Plan (SWMP). 303d waters are highlighted in the Hingham SWMP as a priority for implementation activities throughout the permit term. The WLA Assessment will be addressed as part of the Town’s SWMP, as TMDL studies are completed for 303d waters in Hingham or those water bodies with watersheds in Hingham. The Town is also considering hiring a consultant to conduct water quality tests that would assess the condition of the above 303d listed waters to determine how Town efforts have affected their condition.

The Town previously reviewed the requirements of the draft Phase II Permit for the Interstate, Merrimack and South Coastal Watersheds and considered previous work/progress under the current program to develop a preliminary outline of program needs over the 5-year permit term and a budget for the first year of the permit. The Town anticipates that activities to address impaired waters will be specifically addressed in the SWMP update in Year 1 of the new permit.

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

All outfall locations were field verified and screened for illicit discharges during Permit Year 5. A total of 329 outfalls have been inspected to date. The Town continued to use a GPS unit to collect data for the storm drain network during catch basin cleaning

activities.

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

**Programmatic**

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	

**Education, Involvement, and Training**

Estimated number of residents reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes (Jr/Sr class cleanup)
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	278 cars
▪ material collected	(tons or gal)	7.2 tons
School curricula implemented	(y/n)	No

**Legal/Regulatory**

In Place  
Prior to  
Phase II      Under  
Review      Drafted      Adopted\*

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

▪ Post-Development Stormwater Management				X
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\* LID principles and practices were incorporated into the Subdivision Regulations and the off-street parking regulations of the Zoning By-Law and adopted at the 2008 Town Meeting. The Town previously updated its subdivision and site plan requirements to address Phase II requirements in Permit Year 1.

### Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	329 known
System-Wide mapping complete	(%)	90%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	329*
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	0
% of <u>properties</u> on sewer	(%)	33%
% of <u>properties</u> on septic systems	(%)	67%
*The Hingham DPW inspects stormwater outfalls on an annual basis for drainage and erosion problems and has developed an inspection form for drainage structures and outfalls.		

### Construction

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

## Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	Not Assessed
Site inspections completed	(# or %)	Multiple
Estimated volume of stormwater recharged	(gpy)	Not Assessed

## Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1 (at least)
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1-2/yr <sup>1</sup>
Total number of structures cleaned	(#)	2,500
Storm drain cleaned	(LF or mi.)	0
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	900 tons
Disposal or use of cleanings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of cleanings disposal	(\$)	\$11,685
1. Some drainage structures in the downtown area are cleaned more frequently based on the rate of sediment accumulation and historical flooding issues.		

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	Varies <sup>1</sup>
Qty. of sand/debris collected by sweeping	(lbs. or tons)	400 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Compost
Cost of sweepings disposal	(\$)	N/A
Street sweepers purchased/leased	(#)	2 owned
Vacuum street sweepers specified in contracts	(y/n)	N/A
1. The downtown area is typically swept 8-10 times each year, but was swept daily due to ongoing roadway construction. Environmentally sensitive areas, such as the roads near Accord Pond (surface drinking water supply), are swept 2-3 times each year.		

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
<ul style="list-style-type: none"> <li>▪ Fertilizers (organic fertilizers only)</li> </ul>	(lbs. or %)	Used 9,753 lbs in Permit Year 10
<ul style="list-style-type: none"> <li>▪ Herbicides</li> </ul>	(lbs. or %)	100%

▪ Pesticides	(lbs. or %)	N/A
<i>The DPW performs routine inspections of town-maintained lands for pests to determine the appropriate management approach for shade trees and Town-owned lands. DPW continued to employ methods to maintain public property without the use of chemical applications. Pesticides are applied only when necessary by a Tree and Park Department licensed pesticide applicator.</i>		
<p><b>Anti-/De-Icing products and ratios:</b>  <i>Prior to Permit Year 8, Ice-Ban (MgCl<sub>2</sub>) was applied to a 75:25 sand/salt mixture with a sprayer as the materials are dispensed from trucks during de-icing activities. This salt catalyst replaced the liquid sodium chloride that was applied in the past. As a result, the Hingham DPW has observed continuous improvements in shade tree conditions along streets.</i></p> <p><i>During Permit Year 10, DPW used Ice-Ban for limited salt application areas and generally applied a mixture of 10% sand with salt. DPW estimates that the rate of application and amount of salt per storm event did not increase. On some occasions, straight salt applications are used in town.</i></p>	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % Sand	10%
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	Zero Velocity (some)
Estimated net reduction in typical year salt application	(lbs. or %)	0%
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	No