

JOSEPH STIGLIANI
SUPERINTENDENT

RANDY SYLVESTER
ASSISTANT SUPERINTENDENT

101 HERSEY STREET
HINGHAM, MA 02043
TEL (781) 741-1430
FAX (781) 741-1432

TOWN OF HINGHAM



HIGHWAY

TREE AND PARK

RECYCLING/TRANSFER

RECREATION

DEPARTMENT OF PUBLIC WORKS

April 28, 2006

U. S. Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114



MAY - 1 2006

**Re: NPDES Stormwater General Permit
2005-2006 Annual Report
Town of Hingham, MA**

To Whom It May Concern:

Enclosed for your records is the NPDES Stormwater General Permit 2005-2006 Annual Report for the Town of Hingham, MA. The Annual Report has simultaneously been filed with the Massachusetts DEP.

If you have any questions or require any additional information, please do not hesitate to call me at 781-741-1430 or our Consultant, Rich Niles with Comprehensive Environmental Inc. at (800)725-2550 ext. 307.

Sincerely,

Town of Hingham, Massachusetts

Randy Sylvester
Assistant Superintendent of Public Works

cc: Massachusetts Department of Environmental Protection, Worcester Office
Rich Niles, Comprehensive Environmental Inc.

Enclosure – NPDES Phase II Small MS4 General Permit 2005-2006 Annual Report

Municipality/Organization: Town of Hingham, MA

EPA NPDES Permit Number: MAR041100

MADEP Transmittal Number: W-041003

**Annual Report Number
& Reporting Period: No. 3: May 1, 2005-April 30, 2006**

MAY - 1 2006

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Joseph Stigliani

Title: DPW Superintendent

Telephone #: 781-741-1430

Email:

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: Charles Cristello

Title: Town Administrator

Date: 4/28/06

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 of Hingham's permit eligibility with regard to the National Register of Historic Places was pending at the time of the NOI submission. During this reporting period, the Town evaluated all historic places for any adverse effects from their MS4 to verify compliance with the requirements of the MS4 Permit and National Historic Preservation Act. The World's End Reservation (Boston Harbor Archaeological District) was not evaluated because the Town does not own or operate the property. The list of historic places on the National Register was finalized in permit year 2 and field inspection of outfalls in proximity to historic places was completed in permit year 3 (June 2005). This information is also discussed in BMP 3D.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
1A	Distribute Brochures and Fact Sheets to Businesses & Residents	Department of Public Works (DPW)	Copies of materials.	The progress of the Phase II program was discussed at a Town Selectman’s meeting in May 2005. New stormwater educational materials were ordered in April 2006 and will be distributed to public facilities when they arrive. Educational information was distributed to residents around Accord Pond.	Present the progress of the Phase II program to the Town Selectmen in May 2006. Discuss the Phase II Program at Town Department Coordinator meetings. Make copies of handouts available at public facilities throughout the year.
Revised					
1B	Send Out Stormwater Press Releases	DPW	Copies of articles.	<ul style="list-style-type: none"> A press release about current Town stormwater activities was published in the local paper during the Spring of 2006. A flyer was mailed to residents in April 2006 advertising the May 2006 Household Hazardous Waste Collection Day¹. 	Continue press releases to outline the ongoing stormwater activities led by the Town and others. Discuss the availability of the stormwater video and hotline.
Revised					
1C	Develop Stormwater Section of Town Website	DPW and Town Website Manager(s)	Measure number of hits annually.	Additional stormwater runoff informational links/material were posted on the website in April 2006. The website was set up to enable the Town to query the number of hits at any time.	The website will be updated and expanded as the Phase II program develops and hits will be measured annually.
Revised					
1D	Create a Stormwater Educational Display	Conservation Commission	Track quantity of take home materials taken quarterly.	The Town’s stormwater outfall map. An EPA poster, and other educational material were displayed at the office of the Conservation Commission at Town Hall.	Update stormwater display materials at public facilities and track quantities of take home material.
Revised					

¹The Household Hazardous Waste Collection Day flyer discusses the purpose of the event and explains that materials can contaminate soil and groundwater if not properly disposed of. The collection event will also be advertised at the Hingham Transfer Station with flyers, on the DPW section of the Town website and through local cable broadcasts.

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 progress of the Phase II program was discussed at a Town Selectman's meeting in May 2005. The meetings were broadcast on local cable. The EPA videos "After the Storm" and "Reigning in the Storm" were broadcast on the local cable channel.	Continue to broadcast the EPA videos "After the Storm" and "Reigning in the Storm" on a monthly basis on the local cable channel. Continue to broadcast the stormwater updates at Selectmen meetings discussed in BMP 1A on the local cable channel.
Revised	Broadcast the Progress of the Phase II Program w/ Selectmen Meetings		Use of EPA video & broadcast of Town Selectmen Meetings		
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 made available at the Town library for rental, however, no residents rented the videos. The videos were also made available for rental at the Hingham Public Library.	Continue to offer the videos "After the Storm" and "Reigning in the Storm" at the Town library for rental. Continue to advertise the video rentals on the Town website and cable channel.
Revised					

1a. Additions – None at this time

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
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 was added and described on the Town website and advertised in the flyer discussed in BMP 1B. There were no recorded calls made during this permit year.	Calls will continue to be tracked with records of follow-up actions and service updated throughout Permit Years 4-5.
Revised		Local Emergency Planner			
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.	Volunteer recruitment was unsuccessful and no progress was made on this task during this permit year.	The DPW plans to recruit volunteers to continue marking storm drains.
Revised					
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 planted 30 native trees and shrubs in public right of ways. Records for each planting are maintained at the Hingham Tree	Continue existing practices for tree/shrub replacement throughout Permit Years 3-5. Solicit volunteers to participate in planting programs

Revised					
---------	--	--	--	--	--

2a. Additions – None at this time

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
3A Revised	Hold Annual Household Hazardous Waste Collections	DPW	Document quantity of wastes collected annually.	A collection event was held in May 2005 and the Town of Hingham participates in regional collections as part of the South Shore Recycling Cooperative. Residents can visit collection sites in nearby towns throughout the year.	A collection event is scheduled for May 20, 2006. Continue participation in the South Shore Recycling Cooperative.
3B Revised	Develop Primary Town Storm Drain System Map	DPW	70% of system mapped on GIS.	70% of the drainage system was mapped on GIS in permit year 1.	No further action is needed.
3C Revised	Complete Mapping of Stormwater Outfalls	DPW and Contractor	All outfalls mapped by year 4. 75% of outfalls mapped by end of year 4. Source identified and removed within one year.	One hundred and twenty six (126) outfall locations were investigated in the highest priority subwatersheds A, B, F, O and P. Flow was observed at twenty-one (21) of the outfalls and water quality parameters/observations indicated potential illicit discharges at 13 outfalls. The stormwater outfall map was updated.	Flowing outfalls that are suspected illicit discharges will be sampled for laboratory analysis and the source of the flow will be traced. Field verification of stormwater outfalls will resume in the highest priority sub-basins and continue throughout Town in permit years 4-5.
3D Revised	Evaluate Stormwater Discharges to Historic Places	DPW, Conservation Commission, and Contractor	Final list of historic places in Hingham. Results of evaluation.	Field investigations at seven historic places and six historic districts were completed in June 2005. Thirteen outfalls were inspected and no adverse effects were observed.	No further action is needed.

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.	The Conservation Commission held a meeting to discuss the development of a comprehensive stormwater bylaw. Model bylaws were obtained for further review.	A draft bylaw will be developed and presented to Town counsel to meet the Phase II illicit discharge requirements.
Revised		Conservation Commission	Draft bylaw at end of year 4.		
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.	An IDDE work plan was developed for outfall inspections. Outfall inspections began during this permit period in the highest priority sub-basins.	The Town is planning to continue outfall inspections during permit years 4 and 5.
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.	Illicit discharge information was included in a flyer that was distributed to all residents (refer to BMP 1B).	Continue distributing illicit discharge information in flyers, meetings and press releases and incorporating materials into public education and outreach topics and activities (BMPs 1A through 1F).
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.	A hotline number was established by the Local Emergency Planner in Permit year 2 (refer to BMP 2A). No complaints have been received regarding illicit discharges.	Calls will continue to be tracked with records of follow-up actions and service updated throughout Permit Years 4-5.
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
4A	Develop Erosion Control Bylaw	Planning Board	Bylaw at Town meeting by end of year 2.	The Conservation Commission held a meeting to discuss the development of a comprehensive stormwater bylaw. Model bylaws were obtained for further review.	A draft bylaw will be developed and presented to Town counsel to meet the Phase II illicit discharge requirements.
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.	Coordinate record keeping program with the development of the comprehensive stormwater bylaw, track calls and records of enforcement.
Revised		Conservation Commission			
4C	Conduct Inspections for Erosion Controls	Planning Board, DPW and Consultant	Inspection checklist and documented inspections.	Construction site inspections are ongoing and are conducted by the Building Inspector, Conservation Commission and DPW. The various departments coordinate efforts to oversee sites and issues are handled by the most appropriate enforcement agent. Sample inspection checklists were considered and reviewed to document future inspections and corrective actions.	Finalize a standardized inspection checklist. Continue inspections throughout the permit years in accordance with the existing Zoning Bylaws and Planning Board Regulations.
Revised					

4a. Additions – None at this time

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
5A	Develop BMP Bylaw	Planning Board	Bylaw at Town meeting by end of year 2.	The Conservation Commission held a meeting to discuss the development of a comprehensive stormwater bylaw. Model bylaws were obtained for further review.	A draft bylaw will be developed and presented to Town counsel to meet the Phase II illicit discharge requirements.
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.	Inspections were conducted by DPW and the Building Inspector for BMPs in Town. Sample inspection checklists and Operation and Maintenance (O&M) plans were considered and reviewed to establish standardized forms.	Finalize standard inspection checklist and O&M plan. Continue inspections and document inspections and corrective actions (coordinate with efforts for BMP 4C).
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
6A	Clean Catch Basins	DPW	Clean all catch basins.	Continued cleaning catch basins in town at least once and completing catch basin inspection forms to document maintenance needs.	Continue catch basin cleaning program annually. Utilize inspection forms to begin recording structure conditions and sediment data for future cleaning priorities.
Revised					
6B	Sweep Streets in Town	DPW	Priority plan of sweepings based on water quality impact. Volume of sweepings collected.	Continued street sweeping program in town that included: swept downtown area daily; and swept environmentally sensitive areas 2-3 times, such as the roads near Accord Pond (surface drinking water supply). The Transfer Station was swept every 1-2 weeks.	Continue street sweeping program annually and begin recording sediment data for future sweeping priorities.
Revised					

6C	Develop an Inspection and Maintenance Plan	DPW	Written schedule. Records of inspections and maintenance.	The DPW developed a form for catch basin inspections during Permit year 1. The DPW began evaluating disposal/reuse options for maintenance generated wastes.	A disposal policy for maintenance generated wastes will be developed prior to the final closure of the Hingham Landfill.
Revised					
6D	Continue Existing Pollution Prevention and Good Housekeeping Practices at the DPW Facility	DPW	Ensure existing practices are continued.	Continued ongoing practices at the DPW Facility: indoor vehicle maintenance, immediate repair of leaking vehicles, proper handling/storing and disposing 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 ensure proper cleaning of leaks.
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 the DPW training session (April 7, 2005).	Continue proper rinsing activities and address vehicle rinsing as part of 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.	The DPW constructed a berm to divert runoff away from the White Building in May-June 2005.	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 were covered.	Continue covering salt materials.
Revised					
6I	Improve Covering and Evaluate BMP's for the Sand/Salt Pile at the DPW Stockyard	DPW	No rain contact with pile. No significant runoff contact with pile.	Tarps were maintained to cover the sand/salt pile and the area around the pile was periodically swept to contain the pile, minimize runoff contact and the migration of sediments.	Continue sweeping practices and evaluating BMP's to prevent runoff from salt/sand pile.
Revised					

6J	Construct Berms at the DPW Stockyard to Contain Earth Materials	DPW	Berms constructed. Before and after photos.	Earth berms were constructed/ repaired to prevent off-site migration of earth materials. Additional riprap was placed at stormwater outlet locations to trap sediment. Arborvitae were planted along the slope to prevent erosion. Berm conditions have been documented with photos.	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.	Continued prohibiting vehicle washing and equipment storage inside the building to ensure wastes were not disposed to the floor drains. Rubber covers were used to prevent materials from entering drains. Floor drain closure options were evaluated.	The Town plans to properly close floor drains at the facility in accordance with DEP requirements.
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 leak stains 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.	Sweep and clean (using dry methods) the bale unloading area on a regular basis to remove debris and drips.
Revised					

6P	Conduct a Feasibility Study For the Trash Trailer Bays at the Transfer Station	DPW	Copy of the feasibility study report. Plans or sketches.	Temporary and permanent cover options were evaluated for the compactors and ends of trailers to prevent rainwater contact. The trailer bays were cleaned on a regular basis to minimize stormwater contact with debris.	A covering option will be selected and installed, pending available funds. Continue to address the landfill leachate problem as part of landfill closure activities.
Revised	Address Landfill Leachate Entering the Drainage System		Trash trailer bay cover installation, landfill closure.		
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 and after photos.	The downspouts were modified to divert stormwater away from the fueling area.	No further action is needed.
Revised					
6S	Install a Spill Kit at the Fueling Station	School Department	Spill kit installed. Record of memo.	A spill kit was installed at the station and a memo posted (conspicuously describing the kit and its location) in May 2005.	Insure 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.	No progress has been made on this task to date.	Evaluate floor drains and modify system if needed.
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 and at Building #104 for indoor storage of DPW vehicles and equipment.	Continue existing practices.
Revised					
6V	Ensure Compliance for Floor Drains at the North Fire Station	Fire Department	Sketches or inspection memos.	No progress has been made on this task to date.	Evaluate floor drains and modify system if needed.
Revised					

6W	Ensure Compliance for Floor Drains and Vehicle Washing Activities at the Central Fire Station	Fire Department	Sketches or inspection memos. Record of memo.	No progress has been made on this task to date.	Floor drains will be addressed as part of building renovations at the Central Fire Station.
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.	No progress has been made on this task to date.	Prohibit outdoor vehicle washing and post employee memo for appropriate vehicle washing. Evaluate and implement alternative washing methods.
Revised			End of year 3.		
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.	10,000 pounds of fertilizers was purchased in permit year 3. The Town did not purchase any pesticides or herbicides. Chemical applications were minimized.	Continue existing practices and record quantities applied annually.
Revised					
6AA	Calibrate Salt Spreading Equipment	DPW	Record quantity of salt purchased annually.	Salt spreading equipment was calibrated to ensure proper application rates. Salt quantities were tracked through purchase records.	Continue to calibrate salt equipment and track salt purchases. Maintain copies of records with the Stormwater Management Plan and periodically evaluate salt use and reduction effectiveness.
Revised					
6AB	Use Low Salt Applications at Designated Areas	DPW	Document application rate in Accord Pond watershed compared to other watersheds.	Low salt applications were used in the Accord Pond watershed for water supply protection.	Continue existing practices and compare application to other watersheds.
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) that are received by residents at the Hingham Transfer Station. The following amounts of materials were collected: Oil – 4100 gallons Batteries – 516 units Fluorescent Light Tubes – 4179 Lin. Ft. TV's – 1803 units Monitors – 1887 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, if possible.
Revised					
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 the Hingham Harbor.	Continue existing practices of snow disposal to ensure surface water quality protection.
Revised					
6AE	Ensure Water Quality Improvements are Considered for Flood Projects.	DPW	Records of flood control projects.	No flood projects were evaluated during permit Year 3. The Town is working with the MBTA to address tidal and surcharge impacts to Town Brook and associated drainage systems.	Develop a review program through DPW for new flood projects to ensure that water quality improvements are considered for flood projects.
Revised					
6AF	Conduct Town Employee Stormwater Training	DPW	Attendance sheet and copy of program	Stormwater pollution prevention training was held on April 29, 2006 for Highway and Transfer Station staff.	Conduct refresher training. Oil spill prevention training for staff is planned for May 2006.
Revised					

6a. Additions – None at this time

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
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.	NOI specified to begin this BMP in Permit Year 5.	Summarize pollution prevention future needs and responsible parties in permit Year 5.
Revised					
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.	NOI specified to begin this BMP in Permit Year 5.	Obtain funds and begin BMP implementation for Water Quality Strategies in Permit Year 5. Document BMP implementation through photographs, logs, and BMP descriptions for completed efforts and water quality benefits.
Revised					

7a. Additions – None at this time

7b. WLA Assessment

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

Part IV. Summary of Information Collected and Analyzed

No significant data has been collected at this time.

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 %)	
Stormwater management established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	N/A
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	No

Legal/Regulatory

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

Mapping and Illicit Discharges

Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	126 known
System-Wide mapping complete	(%)	70%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	126*
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. Future inspections will target water quality issues for stormwater management and illicit discharge detection.		

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	Multiple
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	(%)	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
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1-2/yr ¹
Total number of structures cleaned	(#)	TBD
Storm drain cleaned	(LF or mi.)	0
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	3,000 tons ²
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	N/A
<p>1. Some drainage structures in the downtown area are cleaned more frequently based on the rate of sediment accumulation and historical flooding issues.</p> <p>2. Approximately 3,000 tons of catch basins cleanings and street sweepings are collected each year. Estimates for each activity are not available at this time.</p>		

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 ¹
Qty. of sand/debris collected by sweeping	(lbs. or tons)	3,000 tons ²
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	N/A
Vacuum street sweepers purchased/leased	(#)	2 owned
Vacuum street sweepers specified in contracts	(y/n)	N/A
<p>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.</p> <p>2. Approximately 3,000 tons of catch basins cleanings and street sweepings are collected each year. Estimates for each activity are not available at this time.</p>		

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

▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	N/A
<i>The DPW performs routine inspections of town-maintained lands for pests to determine the appropriateness of chemical applications for shade trees and Town-owned lands. Chemical applications are minimized to the best extent possible and Pesticides are applied only when necessary by a Tree and Park Department licensed pesticide applicator.</i>		

<u>Anti-/De-Icing products and ratios:</u> <i>Ice-Ban (MgCl₂) is 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 has replaced the liquid sodium chloride that was applied in the past. As a result, the Hingham DPW has observed improvements in shade tree conditions along streets. On some occasions, straight salt applications are used in town.</i>	% NaCl % CaCl ₂ % MgCl ₂ % Sand	
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	Zero Velocity
Estimated net reduction in typical year salt application	(lbs. or %)	Not Assessed
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	Yes ¹
1. The Town of Hingham is currently evaluating a new DPW facility that will consider salt storage at its location and the new facility.		