Municipality/Organization: **Town of Billerica**

EPA NPDES Permit Number: **MA041182**

MaDEP Transmittal Number: **W- 040980**

Annual Report Number & Reporting Period: **No. 2: March 04-March 05**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Paul Starratt Title: Interim Town Engineer

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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:

Printed Name: Paul Watson

Title: Interim Town Manager

Date: 6/9/05

Part II. Self-Assessment

The Town of Billerica has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
1.3.1	Partner with local organization	DPW	Partner with one organization each year.	In addition to charter membership with SuAsCo, Billerica joined efforts with O.A.R. for river sampling and employee training.	Continue support and assist in the development of outreach material with SuAsCo. Review and revise Employee training with O.A.R.
Revised			Increased to two organizations year 2.		
1.3.2	Public Education Materials	BOH	SW brochure and booth at Health Fair	This BMP was launched a year early since BMP 1.3.1 materials were in place. The Health Fair is a major event in Town with over 2500 in attendance.	Update brochure materials and recruit volunteers to staff the event.
Revised					
1.3.3	Local schools education program	School Dept.	Present SW to two schools each year.	Completed development of Stormwater Matters Lesson Plan for 5th & 6th Grade with SuAsCo.	Implement classroom outreach to 5th & 6th grade classes using curriculum developed in BMP 1.3.1
Revised					
1.3.4	Stormwater Web Page	Information Management	No Goal(s) for Yr. 2.	SW Web Page with critical hyperlinks for information and education developed and launched 2 years ahead of schedule.	Update Web Page and add additional links and information.
Revised		Engineering	Develop SW Web Page for early launch.		
1.3.5	Cable Access TV Show	BOH	Produce SW cable access show each year.	Posted air dates for *After the Storm* on Town's SW web page. Program aired on June 26 and September 18 on the Weather Channel.	Obtain VHS copies of *After the Storm* from National Service Center for Environmental Publications for Billerica Access TV.
Revised					
1.3.6	Public Access GIS Tool	Engineering	Provide public access to GIS SW mapping Year 5.	Development of Billerica Web GIS is ahead of schedule by almost 3 years. A Beta version of the Web GIS is now available to Town employees for review and comments before public release.	Open Web GIS for public access of SW mapping, drainage outfalls and drainage infrastructure 2 years ahead of schedule.
Revised			Provide Town Hall access to GIS SW mapping Year 2.		

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
2.3.1	Partner / Support a Watershed Organization	DPW	Partner with one local organization each year.	Town participated with Organization of Assabet River (O.A.R.) for Concord River sampling and retained O.A.R.'s services for employee training.	Review and revise Employee training with O.A.R. Encourage upstream communities to participate in O.A.R. employee training program.
Revised					
2.3.3	Stormwater Public Meetings Program	DPW	Discuss SW at one public meeting ea. year	Stormwater presentations made at 5 Neighborhood Meetings conducted by the Town Manager and Selectmen in various parts of Town.	Continue to take part in Neighborhood Meetings during '05-'06.
Revised					
2.3.5	Recreation Department Public Education Program	DPW	Involve Recreation Department in SW public education program each year.	This Measurable goal was revised for completion in Year 1 with SW literature included in Recreation Department's annual mailing to Town residents.	Revise SW literature to be included in Year 3 mailing by Recreation Department.
Revised					
Revised					
Revised					
Revised					

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
3.4.1	Asset Management Program	DPW	Develop SW Asset Management program.	Retained the consultant services of Woodard & Curran to develop A/M plan. Implementation Plan adopted.	Incorporate A/M into capital improvement planning.
Revised					
3.4.2	Storm Drain Map	DPW	GPS field effort of drainage structures.	Retained the consultant services of Woodard & Curran for comprehensive GPS survey of drainage structures.	Verify accuracy and completeness of consultant's drain map.
Revised					
3.4.3	TMDL, Critical Habitat, Historic Property	DPW	Monitor changes in TMDL, Critical Habitat & Historic Site	The Town has investigated the eligibility criteria for "listed species", critical habitats, historic sites and TMDL requirements are met.	Remediate discharges from effected areas and monitor changes in TMDL.
Revised					
3.4.4	Stormwater By-Law	Planning Board	Develop SW By-law	Collected existing by-laws, regulations and policies regarding drainage and stormwater management to identify overlaps in current SW guidelines.	Develop SW By-Law for presentation to Town Meeting.
Revised		DPW			
3.4.5	Illicit Discharge Detection Program	DPW	Develop phased illicit discharge detection program.	Contracting with Woodard & Curran to develop illicit discharge detection program.	Work with Woodard & Curran to Implement illicit discharge detection program.
Revised					
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
4.2.1-4.2.3	Regulatory Controls	Engineering	Develop Erosion & Sediment Control by-law	The BOH has taken the lead on developing policies and guidelines that will fit within their existing by-laws.	Draft BOH guidelines for review by Department heads.
Revised		BOH			
4.2.4	Procedures for Handling Public Comments	DPW	Develop & implement public comment procedure.	Complaints & comments taken online or through complaint tracking form when received by phone call or over the counter.	Develop procedures for receipt and consideration of information submitted by public.
Revised					
Revised					
Revised					
Revised					
Revised					

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
5.3.2	Zoning Requirements	Zoning Board	Evaluate Zoning By-laws	Zoning By-laws, including recent revisions, reviewed for coverage of drainage and stormwater requirements.	Apply findings to BMP 3.4.4 and incorporate missing components in proposed new SW By-laws.
Revised					
5.3.3	Planning Strategies	DPW	Review Current Town Master Plan	Created fast track for GIS mapping as part of the Town's Master Plan	Enhance Town Master Plan to include SW management.
Revised					
Revised					
Revised					
Revised					
Revised					

5a. Additions

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
6.3.1	Pollution Prevention Planning	Highway Dept.	Conduct DPW meeting on SW pollution prevention	This BMP was not required by NPDES Phase II, but was added as means to address the storage and handling of materials and prevent pollution runoff.	Conduct DPW meeting on SW pollution prevention. Develop Stormwater Pollution Prevention Plan.
Revised					
6.3.2	Employee Training Program	Highway Dept.	Develop training program and training tracking system.	Developed original employee training program with O.A.R. for all DPW workers that highlighted Billerica's natural resources and the impact that DPW workers can make on local environment.	Develop training program and training tracking system for department employees.
Revised		DPW	Train Division Leadership		
6.3.3	Recycling Program	Highway Dept.	Review current recycling programs	Annual hazardous waste day and continuously operated oil recycling program available on monthly basis.	Monitor and enhance recycling program.
Revised					
6.3.4	Catch Basin Cleaning Program	Highway Dept.	Clean catch basins each year	Continuous catch basin cleaning by Highway Dept.	Clean catch basins and use A/M tool to monitor pounds of cleanings removed.
Revised					
6.3.5	Street Sweeping Program	Highway Dept.	Sweep Streets each year.	Street sweeping across 440 lane miles by Highway Dept.	Sweep streets each year.
Revised					
Revised					

6a. Additions

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
7.2.1	Monitor Current Impairment Lists	DPW	Monitor TMDL studies annually and develop programs as appropriate.	Reviewed Integrated List of Waters 303(d) to verify that no new water bodies have been added for the Town of Billerica.	Continue to monitor TMDL studies annually and develop programs as appropriate.
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

N/A

Part IV. Summary of Information Collected and Analyzed

N/A

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	Yes	
Annual program budget/expenditures	$170,000.00	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	100 % of 13,000 Households	
Stormwater management committee established	No	
Stream teams established or supported	Yes	
Shoreline clean-up participation or quantity of shoreline miles cleaned	Yes	
Household Hazardous Waste Collection Days		
▪ days sponsored	1 event	
▪ community participation	350	
▪ material collected	1,500 gal	
School curricula implemented	Partial	

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	Yes	
Estimated or actual number of outfalls	>1,120	
System-Wide mapping complete	85%	
Mapping method(s)		
▪ Paper/Mylar		
▪ CADD		
▪ GIS	100%	
Outfalls inspected/screened	60%	
Illicit discharges identified	Underway	
Illicit connections removed	Underway	
% of population on sewer	65%	
% of population on septic systems	35%	

Construction

Number of construction starts (>1-acre)	<12	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	Not Year 2	
Site inspections completed	Not Year 2	
Tickets/Stop work orders issued	Not Year 2	
Fines collected	Not Year 2	
Complaints/concerns received from public	Not Year 2	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	Not Year 2	
Site inspections completed	Not Year 2	
Estimated volume of stormwater recharged	Not Year 2	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	Not Year 2	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	Not Year 2	
Total number of structures cleaned	Not Year 2	
Storm drain cleaned	Not Year 2	
Qty. of screenings/debris removed from storm sewer infrastructure	Not Year 2	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	Not Year 2	
Cost of screenings disposal	Not Year 2	

Average frequency of street sweeping (non-commercial/non-arterial streets)	Not Year 2	
Average frequency of street sweeping (commercial/arterial or other critical streets)	Not Year 2	
Qty. of sand/debris collected by sweeping	Not Year 2	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	Not Year 2	
Cost of sweepings disposal	Not Year 2	
Vacuum street sweepers purchased/leased	Not Year 2	
Vacuum street sweepers specified in contracts	Not Year 2	

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	Not Year 2	
▪ Herbicides	Not Year 2	
▪ Pesticides	Not Year 2	

Anti-/De-Icing products and ratios	Not Year 2	
Pre-wetting techniques utilized	Not Year 2	
Manual control spreaders used	Not Year 2	
Automatic or Zero-velocity spreaders used	Not Year 2	
Estimated net reduction in typical year salt application	Not Year 2	
Salt pile(s) covered in storage shed(s)	Not Year 2	
Storage shed(s) in design or under construction	Not Year 2	