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Municipality/Organization: Town of Billerica

EPA NPDES Permit Number: MA041182

Mass DEP Transmittal Number: W-040980

Annual Report Number & Reporting Period: Year 7
April 1, 2009 – March 31, 2010

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2010)


Part I. General Information

Contact Person: Kelley Conway **Title:** Town Engineer

Telephone #: 978-671-0955 **Email:** kconway@town.billerica.ma.us

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: John C. Curran

Title: Town Manager

Date: 4/29/2010

Part II. Self-Assessment

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

Planned activities for the next permit term have not been designated unless a BMP under this permit term was not fully completed or is an ongoing effort. Once the General Permit for the next five years is available from EPA, the Town will prepare and submit a Notice of Intent to MassDEP and EPA for compliance with the new General Permit.

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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
1.3.1 Revised	Partner with local organization	Engineering	Partner with one organization each year.	Continued support with SuAsCo. Partnered with Central Massachusetts Mosquito Control Project.	BMP Complete
1.3.2 Revised	Public Education Materials	BOH & DPW	Stormwater brochures available at Town offices and booth at Health Fair	A variety of brochures and books are available at various offices around town (Water Dept, Conservation, DPW, BOH). Stormwater info included in annual water report and distributed to all town residents and businesses. Stormwater bulletin board at Town Hall was updated. Distributed information at the Health and Recreation Fair on 4/11/09. Information distributed at the Yankee Doodle Homecoming on 9/12/09.	BMP Complete
1.3.3 Revised	Local schools education program	School Dept.	Present stormwater to two schools each year.	Partnered with Woodard and Curran and the Ditson School to participate in World Water Monitoring Day. Partnered with local resident to participate in EnviroScapes watershed modeling with Middle School Students at Health & Recreation Fair on 4/11/09.	BMP Complete
1.3.4 Revised	Stormwater Web Page	Engineering	Develop stormwater web page	Web page continually updated with additional links and information. Stormwater Think Green presentation added to website. Annual Report available for viewing. http://www.billericadpw.org	BMP Complete
1.3.5 Revised	Cable Access TV Show	Engineering	Select a stormwater program for viewing on BATV.	After <i>The Storm</i> DVD was played on Billerica Access TV multiple times. Think Green - Stormwater presentation played on BATV multiple times.	BMP Complete

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
1.3.6 Revised	Public Access GIS Tool	Engineering	Provide public access to maps of streams, rivers, storm drains and water quality data by Year 5.	Provided online access to several maps including the Green Engineering Flood Plain maps and the Stormwater system map through the Billerica DPW website.	Determine maps that should be available for public use and provide public access in the future.
1.4.1 Revised	Stormwater flyer to residents	SuAsCo & DPW	No Goal(s) for Yr. 7	Stormwater Flyers are available at various offices around town (Water Dept, Conservation, DPW, BOH).	BMP Complete
1.4.2 Revised	Stormwater lesson plan	SuAsCo & DPW	No Goal(s) for Yr. 7	The School Department has a copy of the lesson plan available for the teachers to use.	BMP Complete
1.4.3 Revised	Media toolkit and stormwater PowerPoint program	SuAsCo & DPW	Media Packet to local Media	Presented Stormwater Power Point Program to public at the Health and Recreation Fair on 4/11/09.	BMP Complete
1.4.4 Revised	Business Flyer & Storm Drain Marking	SuAsCo & DPW	Stormwater flyer to 50% of Town businesses	Stormwater Business Flyers are available at various offices around town (Water Dept, Conservation, DPW, BOH). Continued storm drain marking program See BMP 2.3.2.	BMP Complete
1.4.5 Revised	Stormwater Outreach Materials	SuAsCo & DPW	No Goal(s) for Yr. 7	Stormwater postcards distributed to different Town departments for handout and display. Pet Waste postcards distributed with new dog licenses. Stormwater Think Green powerpoint presentation played on BATV several times.	BMP Complete

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
2.3.1 Revised	Partner / Support a Watershed Organization	Engineering	Partner with one local organization each year.	Continued partnership with SuAsCo. Attended Massachusetts Watershed Coalition Annual Meeting on 2/11/10. Participated in SuAsCo Workshop on 3/26/10.	BMP Complete
2.3.2 Revised	Storm drain stenciling program	Engineering	Develop & Implement drain marking program	Continued with storm drain marking program. Volunteers installed storm drain markers at schools and on several major roadways throughout Town.	BMP Complete
2.3.3 Revised	Stormwater Public Meetings Program	Engineering	Discuss stormwater at one or more public meetings each year	The Stormwater Management Regulations were adopted at the Board of Health Public Hearing held on April 5, 2010.	BMP Complete
2.3.4 Revised	Substituted 2.3.7 in Permit Year 4	DPW	No Goal(s) for Yr. 7	N/A	BMP Complete
2.3.5 Revised	Recreation Department Public Education Program	Engineering	Involve Recreation Department in stormwater public education program each year.	Recreation Dept has stormwater posters and postcards on display. Billerica Recreation continues to support the Take 5 Patch Program and continually educates the public about proper pet care. Pet Waste Stations are installed and maintained at most public parks throughout Billerica.	BMP Complete

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
2.3.6 Revised	Annual “Clean the Stream” program	Recreation	Recruit volunteers for each years’ stormwater cleaning effort	Held annual Town wide “Clean-up/Green-up” event. Contracted with the Commonwealth of Massachusetts Middlesex Sheriffs Office for assistance with cleaning and preparations of parks, playgrounds, and beach. Contracted with Central Massachusetts Mosquito Control Project to clean 2,245’ of streams and 81 culverts. Participated in the Sudbury, Assabet & Concord Wild & Scenic River Stewardship Council Riverfest in June. BMP Complete	OAR Riverfest scheduled for June 12-13, 2010. Working with Billerica Community Alliance for Clean-up/Green-up for May 1, 2010.
2.3.7 Revised	Develop Stormwater By-Law Advisory Group	Stormwater By-Law Working Group	No Goal(s) for Yr. 7	BMP Complete	BMP Complete
2.4.1 Revised	Stormwater traveling display	SuAsCo & DPW	No Goal(s) for Yr. 7	Display used annually at the Health and Recreation Fair. New ‘Think Green’ display received in Year 6 and exhibited at the Town Hall.	BMP Complete
2.4.2 Revised	Stormwater poster contest	SuAsCo & DPW	No Goal(s) for Yr. 7	Year 3 product eliminated by SuAsCo	N/A
2.4.3 Revised	Stormwater photo contest	SuAsCo & DPW	No Goal(s) for Yr. 7	Year 3 product eliminated by SuAsCo	N/A
2.4.4 Revised	Stormwater summit special event	SuAsCo & DPW	No Goal(s) for Yr. 7	BMP Complete in Permit Year 5	BMP Complete
2.4.5 Revised	Stormwater super summit	SuAsCo & DPW	No Goal(s) for Yr. 7	BMP Complete in Permit Year 5	BMP Complete

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
3.4.1 Revised	Asset Management Program	Engineering	Develop stormwater Asset Management program.	Continued with implementation of asset management program to track public complaints, catch basin cleaning efforts, and drainage repairs. Coordinated with Highway Division regarding implementation of the catch basin O&M forms.	BMP Complete
3.4.2 Revised	Storm Drain Map	Engineering	GPS field effort of drainage structures.	All of the Town's outfalls have been mapped. Continue to verify accuracy and completeness of drain map. Efforts not complete.	On going review of drain map.
3.4.3 Revised	TMDL, Critical Habitat, Historic Property	Engineering	Monitor changes in TMDL, Critical Habitat & Historic Site	No additional TMDLs have been finalized for Billerica's receiving waters, and there are no changes to the Town's General Permit eligibility under the ESA or National Historic Preservation Act.	BMP Complete
3.4.4 Revised	Stormwater By-Law	Board of Health	Develop stormwater requirements regulated by Board of Health	The "By-law Governing Discharges to the Municipal Storm Sewer System" was adopted as Article XXVI in the Town's General By-laws. The Stormwater Management Regulations were adopted at the Board of Health Public Hearing held on April 5, 2010.	BMP Complete
3.4.5 Revised	Illicit Discharge Detection Program	DPW	Develop phased illicit discharge detection program.	Based on results of dry weather sampling conducted in 2005, 6 outfalls were resampled in April 2008. Follow-up of the possible illicit connection was performed in 2009 and no illicit connection was found. No further action is required at this time.	BMP Complete

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
3.4.6 Revised	Illicit Discharge Elimination Program	Board of Health	Enforce illicit discharges by-law	The "By-law Governing Discharges to the Municipal Storm Sewer System" was adopted as Article XXVI in the Town's General By-laws. Continue to investigate possible illicit discharges, respond to public complaints, and take appropriate action.	Enforce the new by-law by responding to public complaints and through ongoing illicit discharge detection activities by the DPW
3.4.7 Revised	Resident education program	DPW	Develop and distribute fliers defining illicit discharges and summarizing the Town Stormwater Regulations	Information regarding the new stormwater management by-laws was included in the annual Water Quality Report which is distributed to all Town Residents. Information regarding the by-laws is on the DPW website and is available at the Board of Health for viewing.	BMP Complete

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
4.2.1 Revised	Regulatory Controls	Board of Health	Develop “Erosion & Sediment Control” by-law	Erosion and sediment control was incorporated into the Stormwater Management By-law which was adopted as Article XXV in the Town’s General By-Laws.	BMP Complete
4.2.2 Revised	Review and site inspection procedures	Board of Health	Sanctions developed and included in regulations to ensure compliance	Construction site review and site inspection procedures are included in the Stormwater Management By-law and in the Stormwater Management Regulations. The Stormwater Management Regulations were adopted at the Board of Health Public Hearing held on April 5, 2010.	BMP Complete
4.2.3 Revised	Enforcement procedures	Board of Health	Develop and implement enforcement procedures and sanctions for stormwater violators	Enforcement procedures and sanctions for stormwater violators are included in the Stormwater Management By-law and in the Stormwater Management Regulations. The Stormwater Management Regulations were adopted at the Board of Health Public Hearing held on April 5, 2010.	BMP Complete
4.2.4 Revised	Procedures for Handling Public Comments	DPW	Develop & implement public comment procedure	Currently using the DPW website to receive comments.	Continue to work with other Departments to track these.

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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
5.3.1 Revised	Structural stormwater controls	Planning Board	Revise subdivision rules and regulations with new BMP's	Planning Board is in the process of reviewing the subdivision rules and regulations to make them consistent with the Town's new stormwater by-laws and regulations and incorporate LID features into the regulations.	BMP Complete
5.3.2 Revised	Local By-Laws	Stormwater By-Law Working Group	Develop General By-Law	The Stormwater Management By-law was adopted as Article XXV in the Town's General By-laws. By-law addresses post-construction stormwater management.	BMP Complete
5.3.3 Revised	Planning Strategies	Engineering	Review Current Town Master Plan	Draft stormwater management language sent to Planning Division in 2009 for insertion with the next version of the Master Plan. Language includes a write-up on how the Town's Stormwater Management Program protects water resources, mitigates non-point source pollution, and protects sensitive areas from development.	BMP Complete
5.3.4 Revised	Conditions for private stormwater systems	BOH	Develop maintenance requirements for private stormwater systems	The Stormwater Management By-law was adopted as Article XXV in the Town's General By-laws. The By-law addresses post-construction stormwater management. The Stormwater Management Regulations were adopted at the Board of Health Public Hearing held on April 5, 2010 and include operation and maintenance requirements for private stormwater systems.	BMP Complete
5.3.5 Revised	Stormwater infrastructure inspection program	Engineering	Develop technology based inspection program	Working to implement the asset management program to track BMP Maintenance.	BMP Complete

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
6.3.5 Revised	Street Sweeping Program	Highway Dept.	Sweep Streets each year and monitor pounds of sediment removed.	Street sweeping of all Town roadways was conducted from May thru Sept 2009. Highway Division monitored sediment removed. Highway Division works with Shawsheen Technical Regional High School to sweep their facilities.	BMP Complete
6.3.6 Revised	Operations and Maintenance	DPW	Inventory ongoing stormwater maintenance activities	Performed updates to SWPPP for all Town facilities.	BMP Complete
6.3.7 Revised	Reporting	DPW	Continue to track stormwater management activities and submit annual report	Continued to track stormwater management activities and submitted annual report.	BMP Complete

6a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
6.3.8 Revised	Mosquito Control Project & Drainage System Maintenance	Engineering	Record of improved drainage system inspection and maintenance.	Through the efforts of the Central Massachusetts Mosquito Control Project, brush and other accumulated debris was removed from culverts and streams. Efforts also included insertion of larvacides in Town catch basins. This year, 489 tires were removed from the Town through a grant received by Mosquito Control.	BMP Complete

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit
7.2.1	Monitor Current Impairment Lists	DPW	Continue to monitor TMDL studies annually and develop programs as appropriate.	Reviewed the <i>Bacteria for Shawsheen River Basin</i> report and the <i>Draft Pathogen TMDL for the Concord River Watershed</i> report. Created plan to summarize Town's actions to address TMDL recommendations and recommended future actions.	BMP Complete
Revised					

7b. WLA Assessment

BillERICA's MS4 discharges into the Shawsheen River, which has an approved Final TMDL for Bacteria. Because the TMDL is for a pollutant likely to be found in stormwater discharges from BillERICA's MS4, their Stormwater Management Program includes BMPs that address the waste load allocation (WLA) from point sources that include illicit connections to the drainage system and urban stormwater runoff. BillERICA is making steady progress towards meeting the Shawsheen River Fecal Coliform WLAs through implementation of a number of existing stormwater control measures, as reported in the above Annual Report, that address pollutants of concern in water quality impaired waters.

To address Illicit Sewer Connections WLA, the Town has implemented the following BMPs under the Illicit Discharge Detection and Elimination Minimum Control Measure:

- Asset Management Program including improvements in BillERICA's public complaint response and tracking (BMP 3.4.1);
- Storm Drain Mapping (BMP 3.4.2);
- Stormwater By-law that addresses illicit discharges and illegal dumping, adopted at the October 2007 Town Meeting (BMP 3.4.4);
- Illicit Discharge Detection Program, which is ongoing (BMP 3.4.5);
- Illicit Discharge Elimination Program, now enforceable by the Board of Health through the new stormwater by-law (BMP 3.4.6); and
- Resident Education (BMP 3.4.7).

To address the Urban Stormwater Runoff WLA, the Town has implemented the following BMPs in the Stormwater Management Program:

- Construction Site Runoff Control through BillERICA's Stormwater Management Bylaw, adopted at the October 2007 Town Meeting (BMPs 4.2.1, 4.2.2 and 4.2.3);
- Post-construction Stormwater Management through BillERICA's Stormwater Management Bylaw (BMPs 5.3.2 and 5.3.4); and
- Catch Basin Cleaning and Street Sweeping Programs to keep debris from filling catch basins and maintain proper drainage system function (BMPs 6.3.4 and 6.3.5).