Municipality/Organization:	**Town of Plymouth**
EPA NPDES Permit Number:	**MAR 041150**
MaDEP Transmittal Number:	**W-40949**
Annual Report Number & Reporting Period:	**No. 3: March07 – March08**

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APR 29 2008

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: David Gould **Title:** Environmental Manager

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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: David Gould

Printed Name: **David Gould**

Title: **Environmental Manager**

Date: 4/29/08

Part II. Self-Assessment

The Town of Plymouth has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions:

Part 1.B.2 (e) (Vi) — **The Town of Plymouth's permit eligibility with regard to the Endangered Species Act is still pending at the time of our NOI submission. Our MS4 discharges will have the potential to impact the existence of specific species protected under the Endangered Species Act. We will investigate more on this issue of concern.**

Part 1.B.2 (k) — **Some discharges have been determined (through DMF Sanitary Survey) to be contributing to exceedance of water quality standards in Plymouth Harbor. These discharges have been made priorities in our NPS Pollution Grant Program.**

Part 11.B.8 — **The DPW Engineering and Planning Departments are working jointly on a "Guide for the Design of Storm Drainage Facilities in the Town of Plymouth, Massachusetts". The guideline document is currently in progress and is expected to be completed in 2007. The guidelines will be presented at Spring Town Meeting 2008 to be implemented as standards for the Town. The guidelines will include, but not limited to, the following tasks:**

- **Acceptable Best management Practices with specific reference to State of Massachusetts BMP standards including Low Impact Standards and Conventional Standards for various structures and functions including nutrient removal in harbors and ponds, total suspended solids(TSS) removal in streams, resource crossing regulations and standards including fish passage and openness ratios, and removal rates;**
- **Plant selection guidelines for vegetated BMPs;**
- **Water quality and water quantity management guidelines;**
- **Design guidelines for BMPs Low Impact Design (LID) standards and Conventional Standard Design standards for various structures including those functions listed above;**
- **Selection criteria for BMPs;**
- **Incentives for implementing LID practices.**

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 4 (Reliance on non-municipal partners indicated, if any)	Progress on Goal(s) Permit Year 5
1-1	Educational Flyer	Town Engineer/ Town Manager	Post in all schools & Town buildings	The Town is working in collaboration with Greenscapes in the distribution of brochures and pamphlets on BMP's. The Town has also placed educational posters in the DPW offices in the Town Hall facility.	The Town established a stormwater webpage, purchased SuAsCo educational materials, distributed educational materials to the School Dept, purchased "Sprink" educational computer games and public service announcments for a year on public access cable television. A SuAsCo stormwater educational display was posted in Town Hall, DPW Day, Harbor One Bank and public library for the past year.
Revised					
1-2	Form Public Education Task Force	Town Engineer/ Environmental Manager	Participation in town wide events & schools	Establishing the task force through advertisement and interviewing. Holding one workshop per year.	The Town conducted two workshops and one public meeting on the new stormwater management guidelines.
Revised	Educational Workshops	Town Engineer/ Environmental Manager	Schedule Workshops		
1-3	Air stormwater message on local cable access channel	Town Engineer	Post one message every month	None to date	Four (4) "Sprink" public service announcements were purchased and ran on local cable for one year.
Revised					
1-4	Storm Drain Stenciling	Town Engineer/Conservation Comm./Environmental Manager	Stencil Storm Drains with Messages (25% each year)	Have received the storm drain markers. 50 are all in place.	Storm drain markers were installed at several locations throughout Town.
Revised	Storm drain Markers	Environmental Manager	50 per year		

1-5	Map outfalls and receiving waters	Town Engineer	Map of discharge pipes to waters & wetland (20%/yr.)	100% of Outfalls have been located by GPS. Catch basins are approximately 50-70% complete.	Completed GPS location efforts and completed mapping of outfalls and catch basins.
Revised					
Revised					

1a. Additions

1a.	Media coverage	Town Engineer	Story coverage on NPS Pollution Projects.	Coverage in the local newspaper.	Additional coverage's in local newspaper.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
2-1	Hazardous waste collection	DPW Recycling Coordinator	Twice/yr. (min.)	Two events were held in 2006. There were 572 participants from the community.	Two events were held 2007.
Revised		DPW			
2-2	Volunteer Water Quality Monitoring	Town Engineer/Natural Resources Officer	Level of participation	Natural resources officer with the help of volunteer group has completed thirty (30) ponds.	Sought and received $15,000 in funding for a pond monitoring program Plan to continue this effort and increase sampling efforts. The Town proactively made available and sold 126 rain barrels for residents in Plymouth.
Revised		Town Engineer/Environmental Manager			
2-3	Citizen Stormwater Committee/Lake Associations	Town Engineer/Natural Resources Officer	Hold meeting to plan for stormwater issues/mgmt.	Establishing the task force through advertisement and interviewing.	Not completed
Revised		Town Engineer/Environmental Manager			
2-4	"Adopt a Storm Drain Program"	Town Engineer/Natural Resources Officer	Participation in Community Clean-ups	Working with volunteer group to establish the program.	Three community clean-ups were organized and held.
Revised					
2-5	Citizen watch Groups	Town Engineer/Natural Resource Officer	Aid Local Enforcement author. In the identification of polluters	Establishing the task force through advertisement and interviewing.	Not complete
Revised					
Revised					

2a. Additions

3. EIlicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
3-1	Develop illicit dischg. id. & elim. plan	Town Engineer/BOH/ Environmental Manager/ Planning Bd.	Make recommendations for the plan	Working with engineering interns in the determinations of illicit discharges during GPS mapping for catch basins and outfalls. The Town is continuing the Infiltration and Inflow Control Studies.	Investigating drainage area of outfalls, and to locate sources when and if will be identified.
Revised	Screen outfalls for Illicit connections	Public Works	Screen outfalls by Winter 07-08		
3-2	Drainage Network Mapping	Town Engineer	Drainage of urbanized areas	100% of outfalls have been located. 50-70% of catch basins have been located.	Outfalls and catch basins have been completed.
Revised					
3-3	Public Info. on illicit connections/illegal discharges	Town Engineer/Board of Health	Educating the public-hazards associated with these activities	The DPW completed the draft Sewer Division Rules & Regulations in which there will be a presentation at Spring Town Meeting.	Section twelve of the Sewer Division Rules & Regulations has been approved and states that surface runoff is prohibited.
Revised					
3-4	Develop/Modify general illicit discharge bylaw	BOH/Planning Board	Developing/modifying the plan	DPW has completed the draft Sewer Rules & Regulations that address illicit discharges.	The Town adopted a Guide for Storm Drainage Facilities that address illicit discharges in 2008 by Planning Board, DPW and Inspectional Services.
Revised					

3-5	Present Bylaw for town meeting action	BOH/Planning Board	Make presentations for town Meeting action	DPW has completed the draft Sewer Rules & Regulations that address illicit discharges.	Section twelve of the Sewer Division Rules & Regulations has been approved and states that surface runoff is prohibited. The Guide for Storm Drainage Facilities was adopted in 2008 by Planning Board, DPW & Inspectional Services.
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
4-1	Wetlands by-law for stormwater management	Conservation Commission	Town Meeting Action	The Town is currently, 2007, working on stormwater guidelines and regulations for BMPs. This will be completed in 2007.	Adopted by Town Meeting – Fall 2007
Revised					
4-2	Subdivision regulations for stormwater management	Planning Board	Change subdivision Rules and Regulations	The Town is currently, 2007, working on stormwater guidelines and regulations for BMPs. This will be completed in 2007.	Included in The Guide for Storm Drainage Facilities was adopted in 2008 by Planning Board, DPW & Inspectional Services.
Revised					
4-3	Erosion control by-law	Planning/Zoning Board of Appeals	Town Meeting Action	The Town is currently, 2007, working on stormwater	Included in The Guide for Storm Drainage

Revised					
4-4	Reporting hotline	Town Engineer/Planning Board	Set up procedures in response to info submitted by public	Establishing the telephone No. will continue to advertise telephone number.	Hotline number was included within the Sprink PSA's and on the Town website.
Revised					
4-5	Site plan review/constr. Site inspection program	Town Engineer, Planner/Building Inspector	Review all plans, inspect, & visit construction site	Drafting to implement an interim policy for all current jurisdictional projects that requires Eng. To review and approve ESC plans.	Included in The Guide for Storm Drainage Facilities was adopted in 2008 by Planning Board, DPW & Inspectional Services
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
5-1	Stormwater Mange. By-law-Development Construction Site Runoff Control and Pretreatment	Planning/Zoning Bd. & Conservation Commission	Strategies to be developed	The Town is currently, 2007, working on stormwater guidelines and regulations for BMPs. This will be completed in 2007.	Included in The Guide for Storm Drainage Facilities was adopted in 2008 by Planning Board, DPW & Inspectional Services.
Revised					
5-2	Stormwater Mange. By-law Development Post Construction Stormwater Management	Planning/Zoning Bd. & Conservation Commission	Formulation of the By-law	The Town is currently, 2007, working on stormwater guidelines and regulations for BMPs. This will be completed in 2007.	Included in The Guide for Storm Drainage Facilities was adopted in 2008 by Planning Board, DPW & Inspectional Services.
Revised					

5-3	Conservation Comm. Wetlands By-law	Planning/Zoning Bd. & Conservation Commission	Presentation for Town Meeting Action	The Town is currently, 2007, working on stormwater guidelines and regulations for BMPs. This will be completed in 2007.	Conservation incorporated the Guide for Storm Drainage Facilities manual in the regulations.
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
6-1	Street sweeping program	Highway	Spring annual sweeping record sweeping as needed	Completed annual sweeping program. Sweeping program is now in place.	Continue program.
Revised					
6-2	Catch basin/drain cleaning	Highway	500 per year (record)	2000 catch basins were cleaned in 2006.	2000 catch basins were cleaned in 2007.
Revised			Clean all catch basins once every 3 years.		
6-3	Annual training at town facilities	Town Engineer	Conduct training, prepare literature, record attendance	Conducted ½ -day training to all key department staff regarding pollution prevention practices and SWMP implementation.	Continue to conduct ½-day training.
Revised					
6-4	Policy Guide	Town Engineer	Developing the Policy Guide	Inventory town-owned BMP's and drafting O & M procedures	Included in The Guide for Storm Drainage

Revised	**O & M program for town-owned structural BMP's**		**Implement O & M program by Spring 06**		
6-5	**Permit filing for the town's activities related to Phase II**	**Town Engineer**	**Permits Filed as needed**	**Permits filed for our DPW facilities.**	**Continue program.**

6a. Additions

6.6	**Vehicle washing**	**Public Works**	**Implemented washing policy and constructed washing facility.**	**Implemented policy to wash only within designated locations, without the use of cleaners or degreasing agents.**	**Continue program.**
6.7	**Implement Integrated Pest Management (IPM) at Town Facilities**	**Parks & Recreation**	**Train facility employees and practice IPM town-wide by Summer 2008.**	**Inventory current chemicals, quantities, and practices used on town parcels.**	**Host an IPM/lawn care workshop for staff and lawn care professionals in conjunction with Greenscapes Program.**

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 1** (Reliance on non-municipal partners indicated, if any)	**Planned Activities – Permit Year 2**
Revised					
Revised					
Revised					
Revised					

Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

As noted in the Mapping Section below and in the attached map the town has completed the outfall mapping and is 100% complete with the catch basin mapping.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures	($)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	

Shoreline clean-up participation or quantity of shoreline miles cleaned	**(7 mi.)**	
Household Hazardous Waste Collection Days		
▪ **days sponsored**	**(2 days)**	
▪ **community participation**	**(139 Vehicles)**	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Phase II	Review	**Prior to** Drafted	**Under** 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				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				

Mapping and Illicit Discharges

Outfall mapping complete	**(100%)**	
Estimated or actual number of outfalls	**(#350)**	
System-Wide mapping complete	**(100%)**	
Mapping method(s)		
▪ **Paper/Mylar**	**(NA)**	
▪ **CADD**	**(NA)**	
▪ **GIS**	**(100%)**	

Outfalls inspected/screened	**(100%) mapped and conditions noted**	
Illicit discharges identified	**(#0)**	
Illicit connections removed	**(#0) (est. gpd)**	
% of population on sewer	**(5%)**	
% of population on septic systems	**(95%)**	

Construction

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

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	

Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	
Total number of structures cleaned	**(#2000)**	
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	($)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	
Cost of sweepings disposal	($)	
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	

Manual control spreaders used	(y/n)	
Automatic or Zero-velocity spreaders used	(y/n)	
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	
Storage shed(s) in design or under construction	(y/n)	