05/01/07 P

Municipality/Organization: Westwood Massachusetts

EPA NPDES Permit Number: MA 041069/MA DEP

MaDEP Transmittal Number: W- 036108

Annual Report Number & Reporting Period: **No. 4: March 06-March 07**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Timothy Walsh Title: Director of Public Works

Telephone #: 781-326-8661 Email: twalsh@townhall.westwood.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: Timothy Walsh

Printed Name: Timothy Walsh

Title: Director of Public Works

Date: April 30, 2007

Part II. Self-Assessment

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

Part 1.5 Survey of public awareness. The Survey has been posted online, the public has been notified and responses are on their way. (Attached)

Part 1.10 Catch Basin Stencil. A search is in process to find a company to create the stencils.

Part 3.13 Effective storm sewer bylaw – Bylaw has been written, needs to be reviewed by stormwater committee and needs approval.

Part 3.31 TMDL plans for implementation of BMP's to clean up polluted water bodies is in progress but yet to be completed.

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)	Planned Activities – Permit Year 5
1.1	Develop brochure to be Distributed with sewer bills.	DPW/ J.T. Walsh	Brochure 1/yr for 3 years	Year 4 – Brochure was printed and mailed (see enclosure)	Adjust brochure based on responses from public survey.
Revised			Brochures continue to be distributed.		
1.3	Establish storm water hotline.	DPW/ J.T. Walsh	Storm water hotline 781-326-8661	Maintained on website.	Continue program.
Revised					
1.4	Newspaper Article	DPW/ J.T. Walsh	Article 1/yr for 3 years	Article run in local paper explaining proposed by-law. (see enclosure) A second article was published describing an illicit connection.	An article will be written to address concerns raised from the public survey, after a substantial amount of them can be reviewed.
Revised			Articles continue to be published.		
1.5	Survey of public awareness	DPW/ J.T. Walsh	Compilation of survey data	Survey has been placed online and results have been coming in.	Review survey results and adjust public education based on those results.
Revised					
Revised					
Revised					

1a. Additions

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
2.6	Signage for major tributaries	DPW/ J.T. Walsh	Signs	Completed - Signs installed	Maintain signs as needed.
Revised					
2.7	Storm water planning committee	DPW/ J.T. Walsh	Storm water planning committee		Reestablish committee. Review first 5 years of program, assess progress.
Revised					
2.8	Volunteer water quality monitoring	DPW/ J.T. Walsh	Monitoring results, identify cleanup if needed	Work done with NepRWA, sampling of brooks in Westwood. Volunteers take samples during dry weather and wet weather events. "Town Cleanup" website created by resident. http://www.keepourtownclean.com/ma/westwood/westwood.php	Continue work with NepRWA Establish "Adopt a Stream/Area of Town" program to get residents involved.
Revised					
2.10	Catch basin stencil program	DPW/ J.T. Walsh	Catch basin Stenciling	Work was done to create the stencils to be used.	Catch basins already stenciled will be identified and new basins will be stenciled.
Revised					
2.11	Establish Education Program	Sch. Dept.	Engender public education support	Working with existing 7th grade program. Added program on watersheds and stormwater. Watershed in a box and 2' Topo mapping.	Continue with this program.
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
3.12	Map outfalls & receiving waters	DPW/ J.T. Walsh	GPS/GIS mapping	Completed - 100% of drainage and sewer system mapped, including 220 outfalls.	Add new drainage as needed.
Revised					
3.13	Effective storm sewer bylaw	DPW/ J.T. Walsh	Storm Sewer Bylaw	Bylaw has been drafted.	Have stormwater committee review bylaw, and then obtain approval of selectmen and town meeting vote.
Revised					
3.14	Dry weather screening of outfalls	DPW/ J.T. Walsh	Report on dry weather screening	Samples taken of flowing outfalls during dry weather. One illicit connection found and removed.	Re-Inspect all outfalls during dry weather to determine if any have illicit connections. Program up to date and ongoing.
Revised					
3.15	Develop system for elimination of illicit discharges	DPW/ J.T. Walsh	Identification of illicit discharges	Combined efforts of the Engineering and Sewer department take several steps to identify source of E. Coli and Fecal Coli form in streams.	Program up to date. Continue program.
3.16	Apply the system from BMP 15, above	DPW J.T. Walsh	Remove Illicit discharge	Steps were applied and illicit connection was found and removed.	Program up to date. Continue program.
3.18	Hazardous waste recycling day	DPW/ J.T. Walsh	Hazardous Waste Recycling Day	A town wide hazardous waste recycling day in September 2007.	Anticipated Hazardous Waste Recycling Day in Fall 2008
Revised					
3.20, 21,22	Dry & Wet weather sampling	DPW/ J.T. Walsh	Reports on sampling	Dry weather sampling see enclosed.	Program ongoing and up to date.
Revised					
3.23	Dye test to find source of identified illicit discharge	DPW/ J.T. Walsh	Reports for dye tests on identified illicit Discharge	Dye testing was the final step to determine the source of the illicit connection.	Identification Completed.
Revised					

3.24	Clean 5 miles of sanitary sewer each year	DPW/ J.T. Walsh	Reports on cleaned sewer	Cleaned 14.3 miles of sanitary sewer cleaned.	Anticipated 10 miles of sanitary sewer will be cleaned.
Revised					
3.25	Camera to identify problem areas of sanitary sewer	DPW/ J.T. Walsh	Reports on cleaned sewer	14.3 miles of sanitary sewer televised.	Anticipated 10 miles of sanitary sewer will be cleaned.
Revised					
3.28	Publicize Reports of illicit discharges	DPW/ J.T. Walsh	Newspaper article publicizing reports	Article in local newspaper and the NepRWA newsletter.	If illicit connection found, publicize report.
Revised					
3.29	Sump pumps – 5 year program to eliminate surcharge.	DPW/ R. Angelo	Elimination of illegal connections	House to house inspections have continued.	Continue house inspections within sewer I&I program.
Revised					

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
4.35	Conduct regular inspections during construction	DPW/ J.T. Walsh	Inspections	Engineering Dept and Conservation Agent conduct inspections during construction	Continue Program
Revised					
4.37	Mechanism for inquiries of on-going projects	DPW/ J.T. Walsh	Mechanism for public inquiries	Monthly update on Web site	Continue program, website to be expanded.
Revised					
4.45	Inspection of sites by Town Engineer w/ checklist	DPW/ J.Bertorelli	Construction site inspection by checklist	Checklist has been established.	Checklist will be used throughout the upcoming construction season. Permit will be distributed to bldg. department for earth removal and const. Sites.
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
5.48	Add specific BMPs to Subdivision Rules/Regs	PL.BD		Revised Planning Board Rules/Regs being done.	Complete Rules/Regs.
Revised					
5.49	Require installation of Water Quality Enhancment	PL.BD	Water Quality Structures	Water quality structures included in design of new land development.	Continue to require water quality structures for development. Incorporate LID as part of plan review.
Revised					
5.50	Yearly report on installed BMPs				
Revised					
5.51	Inspect discharges once a year	DPW/ J.T. Walsh	Inspect Discharges	Samples of known problems areas were taken.	Re-inspect all outfalls during dry weather.
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
6.53	Improve street and parking lot sweeping	DPW/ J.T. Walsh	Cleaner streets and parking areas.	Major roads are swept twice a year, Secondary roads once a year and then as needed.	Continue street sweeping program.
Revised					
6.55	Experiment with alternatives to road salt.	DPW/ J.T. Walsh	Alternative roadway De-icing methods.	Ice-Ban is used to aid in de-icing roadways.	Ice-Ban use will continue.
Revised					
6.54	Improve CB operations.	DPW/ R. Phaneuf	Report on material removed.	All 2141 catch basins were cleaned in 2006.	Catch basins will be cleaned in 2007.
Revised					
Revised					
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

The Town of Westwood's Phase II plan includes BMPs to identify bacteria sources in the stormwater system. Public education will provide residents with information about potential problems added to bacteria counts in the system. A program has been in place to teach the 7th graders in the Town of Westwood about stormwater and watersheds and how pollution can affect their lives. Field inspections and dry weather sampling have been conducted to detect bacteria in stormwater outfalls. Work has also been conducted with the Neponset River Watershed Association. Along with inspecting stormwater outfalls, approximately twelve miles of the sewer system was cleaned and videoed to detect any potential deficiencies.

Part IV. Summary of Information Collected and Analyzed

The outfall to Mill Brook described in last years report was found to have an illicit connection in the drainage system upstream. This connection was located and has been corrected.
Several other outfalls were tested on August 31, 2006 and the results were not representative of any problems.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	n
Annual program budget/expenditures	($)	7000

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	14000
Stormwater management committee established	(y/n)	y
Stream teams established or supported	(# or y/n)	n
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	n
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1/yr
▪ community participation	(%)	12
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	y

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	(%)	100%
Estimated or actual number of outfalls	(#)	220
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	100%
▪ CADD	(%)	0
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	100%
Illicit discharges identified	(#)	1
Illicit connections removed	(#) (est. gpd)	1
% of population on sewer	(%)	96%
% of population on septic systems	(%)	4%

Construction

Number of construction starts (>1-acre)	(#)	2
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100
Site inspections completed	(# or %)	1/wk
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and $)	0
Complaints/concerns received from public	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
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)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1
Total number of structures cleaned	(#)	2141
Storm drain cleaned	(LF or mi.)	2 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.)		Landfill
Cost of screenings disposal	($)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2/yr
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Compost
Cost of sweepings disposal	($)	600
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	0

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	0
▪ Herbicides	(lbs. or %)	0
▪ Pesticides	(lbs. or %)	0

Anti-/De-Icing products and ratios: straight salt and magic used as needed Ice Magic at 8 gallons per ton of salt Magic = MgCL2 15.11% Protein 4.50% Iron 0.20ppm Cacl2 1.5% Fat 0.80% Copper 0.70ppm Crube Fibre 1.2% Manganese 0.50ppm Kcl 1.00% Phosphorous 0.34% Zinc 1.3ppm Nacl 1.00% Sulfur 0.34% Carbohydrates 11% Magic is bio-degradable, safte around vegetation and people	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	20% +/-
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	No
Estimated net reduction in typical year salt application	(lbs. or %)	10%
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	No