

Municipality/Organization: Westwood Massachusetts

EPA NPDES Permit Number: MA 041069/MA DEP

MaDEP Transmittal Number: W- 036108

**Annual Report Number
& Reporting Period:** **No.15: March 17-March 18**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Todd Korchin **Title:** Director of Public Works

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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: Todd Korchin

Title: Director of Public Works

Date: April 25, 2018

Part II. Self-Assessment

In the past year, the Town of Westwood has continued to successfully implement the best management practices submitted with the Notice of Intent and established under General Permit No. MA041069/MA DEP.

Public education and participation has continued through the school system and community through mailings, information on websites, articles in the newsletter and newspaper, trash cleanups, and other mechanisms.

Water quality testing continues in partnership with the Neponset River Watershed Authority.

Although construction in Westwood is largely residential, all development projects continue to be reviewed and conditioned by the Conservation Commission to meet or exceed Massachusetts DEP Stormwater Management Standards. BMPs are installed and maintenance responsibilities clearly specified.

Planning, including TV inspection of sewer main, for Infiltration/Inflow (I/I) reduction work has been ongoing. The work for Phase 1 I/I rehabilitation included Cleaning and TV inspection of 20,000 LF of sewer main; installing 5020 LF of CIP pipe; performing 112 lateral connection repairs; raising 17 manhole frames & covers to grade; replacing 3 manhole frames & covers and rehabilitating 19 sewer manholes (via cementitious and epoxy lining). Project work was performed in the following areas: Pond Plain Road to Oak Street / Pond Street Fill-in Area / High Street to Oriole Road / Stanford Road to Sunrise Road. Phase 1 work began June 2017 and, except for the Stanford to Sunrise easement, is complete.

Phase 2 I/I investigation includes cleaning and TV inspection of 15,000 LF of sewer main and performing topside manhole inspections of 75 sewer manholes. Project work will be performed in the following areas: School Street Area / Hartford Street Fill-in Area / Lake Shore Drive to High Street / Lake Shore Drive to Arcadia Road / Sycamore Drive to Arcadia Road. Phase 2 work is scheduled to begin in Summer 2018 and be completed in Fall 2018.

Automated solid waste and recycling collection continues in its fifth year, with success. Westwood's recycling program continues to experience a boost due to the implementation of automated collection. The continuation of leaf and grass clipping pick ups, ten per year, eliminates these products from entering the solid waste stream.

The Town provides opportunity for residents to dispose of household hazardous waste once during the year at the DPW facility. The DPW contracts with a hazardous waste disposal service to collect and dispose of items that residents drop off during that day. This helps prevent illegal and detrimental disposal of oils, paints and chemicals into our environment and ultimately to our waterways.

The Town's continuing participation in the Neponset Valley Stormwater Collaborative (NepRWA) has delivered example public outreach material, assistance with delineation of drain catchments, model bylaws and the ability to work with our neighboring communities on the same issues. This year NepRWA worked with the town on the following:

- Worked with town clerk to design, print and distribute educational inserts regarding pet waste with the mailing of dog license renewal.
- Implemented a 5th-grade school-based stormwater and water conservation education curriculum.
- Catchment delineation using the MAPC catchment delineation tool and the town's stormwater GIS mapping.
- Population of the IDDE Prioritization Tool with water quality data and other catchment information.

The Town continues to work with Engineering Consultants to review all existing material and to prepare for the new EPA permit upon release. We have begun implementing some of the anticipated required measures and plan to continue to implement the existing program during the upcoming year. Upon adoption of the new General Permit, the Town's staff will be working to plan and implement a new stormwater program that will comply with all new regulations.

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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
1.1	Develop brochure to be Distributed with sewer bills.	DPW/ T Korchin	Brochure 1/yr for 3 years	Brochure mailed in 2 nd quarter sewer bills	Continue program.
Revised			Brochures continue to be distributed.		
1.2	Newsletter Article	DPW/ T Korchin	Article 1/yr for 3 years	Articles continue to be published	Continue program.
Revised			Articles continue to be published		
1.3	Establish storm water hotline.	DPW/ T Korchin	Storm water hotline 781-326-8661	The City maintains an online and app-based program called “See, Click, Fix” that allows residents to notify the City of any public safety and infrastructure issues including storm water.	Encouraging the public to report drainage and pollution issues to the Town via the webpage.
Revised					
1.4	Newspaper Article	DPW/ T Korchin	Article 1/yr	Articles continue to be published	Continue program.
Revised			Articles continue to be published.		
1.5	Survey of public awareness	DPW/ T Korchin	Survey of Public Awareness	Survey completed in 2015. Results have been used in conjunction with NepRWA to target educational materials.	Continue to use survey results to tailor future storm water program education and outreach.
Revised					

1a. Additions

1.6	Public Education	DPW/School Department	Yearly program in school system as part of curriculum.	In collaboration with NepRWA, implemented a 5 th grade school-based stormwater and water education curriculum.	Continue program, possibility to expand in classroom learning.
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2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
2.7 Revised	Signage for major tributaries	DPW/ T Korchin	Signs installed & Maintained	Signs installed in 2015.	Maintain signs as needed.
2.8 Revised	Storm water planning committee	DPW/ T Korchin	Storm water planning committee	New program and committee will be established with new permit adoption.	Committee will review new permit, goals, and stormwater management plan.
2.9 Revised	Volunteer water quality monitoring	DPW/ T Korchin	Monitoring results, identify cleanup if needed	Water quality monitoring in partnership with NepRWA.	Continue work with NepRWA
2.11 Revised	Catch basin stencil program	DPW/ T Korchin	Catch basin Stenciling	Catchbasins stenciled utilizing Boy Scouts.	Continue program.
2.12 Revised	Establish Education Program	Sch. Dept.	Engender public education support	In collaboration with NepRWA, implemented a 5 th grade school-based stormwater and water education curriculum.	Continue program.
2.13 Revised	Keep Westwood Clean Committee	Keep WW clean committee	Number of residents involved and sites cleaned up.	“Town Cleanup” website continued by resident. http://www.keepourtownclean.com/ma/westwood/westwood.php	Continue with program. Keep wetlands and streams clean.

2a. Additions

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3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
3.14	Map outfalls & receiving waters	DPW/ T Korchin	GPS/GIS mapping	100% complete. PDF atlases created with user friendly format. NepRWA has provided catchment delineations using the MAPC Catchment Delineation Tool.	Add new drainage as needed, review and edit existing mapping, update catchment delineations as needed.
Revised					
3.15	Effective storm sewer bylaw	DPW/ T Korchin	Storm Sewer Bylaw	Storm water Management Regulations adopted June 10, 2015 to meet MS4 and accommodate LID techniques.	Update regulations as necessary upon adoption of new permit.
Revised					
3.16	Dry weather screening of outfalls	DPW/ T Korchin	Report on dry weather screening	Screenings in collaboration with NepRWA.	Continue collaboration with NepRWA.
Revised					
3.17	Develop system for elimination of illicit discharges	DPW/ T Korchin	Identification of illicit discharges	Through combined efforts of the Engineering and Sewer department illicit discharges are investigated and followed up on. Video inspection of existing sewer lines is ongoing.	Continue investigation and identification.
Revised					
3.18	Apply the system from BMP 15, above	DPW/ T Korchin	Remove Illicit discharge	No Illicit discharges identified.	Program up to date. Continue program.
Revised					
3.20	Hazardous waste recycling day	DPW/ T Korchin	Hazardous Waste Recycling Day	In 2017, a town wide hazardous waste recycling day was held in September.	For 2018, a Hazardous Waste Recycling Day is planned for September and a Westwood Recycling Day (incl. electronics) in October.
Revised					
3.21, 22,23	Dry & Wet weather sampling	DPW/ T Korchin	Reports on sampling	Cooperative effort with NepRWA.	Continue program based on new permit.
Revised					

3.24	Dye test to find source of identified illicit discharge	DPW/ T Korchin	Reports for dye tests on identified illicit Discharge	Through combined efforts of the Engineering and Sewer department illicit discharges are investigated and followed up on, including dye testing if necessary.	Continue program.
BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
3.26	Clean 5 miles of sanitary sewer each year	DPW	Reports on cleaned sewer	Complete.	Continue program.
Revised					
3.27	Camera to identify problem areas of sanitary sewer	DPW	Reports on cleaned sewer	Sewer Division has continued video inspection of existing sewer pipes to identify problem areas.	Continue investigation and identification.
Revised					
3.28	Rehabilitate, patch, etc. problem areas.	DPW	Reports on areas rehabbed.	A comprehensive I&I study is ongoing to investigate problem areas in the sewer system.	Continue to investigate problem areas and develop a plan of action. Phase 1 I/I project is nearing completion. Phase 2 I/I project is planned for 2018.
Revised					
3.30	Publicize Reports of illicit discharges	DPW	Newspaper article publicizing reports	NA	If illicit connection found, publicize report.
Revised					
3.31	Sump pumps – 5 year program to eliminate surcharge.	DPW	Elimination of illegal connections	I&I study is ongoing to investigate and eliminate any illegal connections to the sanitary sewer system.	Continue investigation and identification.
Revised					
3.33	Work with DEP – TMDL plans	DPW/ T Korchin	TMDL Plan, BMP Implementation	The Town continues to work with engineering consultants to prepare for the new permit requirements including a TMDL plan.	Will work with CRWA and DEP for new BMP implementation and TMDL plan upon adoption of new permit.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
4.35	Conduct regular inspections during construction	Conservation/DPW	Inspections	Engineering Dept and Conservation Agent conduct inspections during construction.	Continue program.
Revised					
4.37	Mechanism for inquiries of on-going projects	Conservation/Planning	Mechanism for public inquiries	Conservation Commission/Planning Board meetings advertised meeting agendas and minutes on website as well as videos of previously recorded Planning Board Meetings.	Continue program.
Revised					
4.47	Inspection of sites by Town Engineer w/ checklist	DPW	Construction site inspection by checklist	Inspections completed using checklist.	Inspect using checklist.
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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
5.50	Add specific BMPs to Subdivision Rules/Regs	PL.BD		Subdivision Rules/Regs include accommodations for LID techniques.	Continue to encourage LID techniques for development.
Revised					
5.51	Require installation of Water Quality Enhancement	PL.BD/Conservation	Water Quality Structures	Water quality structures and LIDs are included in consideration for plan review of new land development.	Continue to require water quality structures for development.
5.52	Yearly report on installed BMPs	Conservation		Conservation Commission maintains a list of O&M plans and collects reports on required maintenance.	Continue to work with Conservation to make sure maintenance is being completed.
Revised					
5.53	Inspect discharges	DPW/ T Korchin	Inspect Discharges	DPW investigates suspect discharges and continues to work with engineering consultants on a program to comply with anticipated new permit requirements.	Update program based on new permit.
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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
6.55 Revised	Improve street and parking lot sweeping	DPW/ T Korchin	Cleaner streets and parking areas.	Major roads were swept twice this year, Secondary roads once a year and then as needed.	Continue street sweeping program.
6.56 Revised	Improve CB operations.	DPW/ T Korchin	Report on material removed.	All (2,200) catch basins were cleaned in Fall of 2017.	Catch basins will be cleaned in Fall of 2018.
6.57	Experiment with alternatives to road salt.	DPW/ T Korchin	Alternative roadway De-icing methods.	Safe-Melt is used to aid in de-icing roadways.	Alternatives, such as salt brine will be researched.
6.59	Investigate Alternative Planting/Landscape	DWWD/ B. Lexander	Alternative schemes for landscaped areas	Link from Dedham Westwood Water District website to EPA Watersense http://epa.gov/watersense/	Continue program.
6.61 Revised	Investigate recycling program enhancement	DPW/ T Korchin	Expanded recycling program	Continued recycling program. Westwood Recycling Day held in May 2017.	Assess the Town's current recycling efforts and work towards encouraging increased recycling. Westwood Recycling Day to be held October 2018.
6.64	Expand employee training	DPW/ T Korchin	Training	Integrated with training for field personal.	Will train all employees with new material and new permit when adopted.
6.65	Develop yard clipping ordinance	Planning Board	Ordinance	Leaves and grass clippings are collected separate from solid waste 10 times per year.	Continue program.
6.64	Prepare SWPPP	DPW/ T Korchin	Plan	Updated original SWPPP with new contact information and buildings.	Will propose new plan upon adoption of new permit.

Part IV. Summary of Information Collected and Analyzed

Water quality testing continues in participation with the Neponset River Watershed Authority.

The Town continues its participation in the Neponset Valley Stormwater Collaborative which most recently has delivered example public outreach material and assistance with delineation of drain catchments.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	n
Annual program budget/expenditures	(\$)	30,000

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	13000
Stormwater management committee established	(y/n)	y
Stream teams established or supported	(# or y/n)	y
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	n/a
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1/yr
▪ community participation	(%)	6
▪ material collected	(tons or gal)	Unknown
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			Adopted June 10, 2015.	
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				

Accompanying Regulation Status (indicate with “X”)			
▪ Illicit Discharge Detection & Elimination			Adopted June 10, 2015.
▪ Erosion & Sediment Control			
▪ Post-Development Stormwater Management			

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	227
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	100%
▪ CADD	(%)	0
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	97%
% of population on septic systems	(%)	3%

Construction

Number of construction starts (>1-acre)	(#)	~10
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 %)	n/a
Estimated volume of stormwater recharged	(gpy)	Unknown

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	(#)	~2200
Storm drain cleaned	(LF or mi.)	2000(ft)
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	Unknown
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Recycle
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)	minimal
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Compost
Cost of sweepings disposal	(\$)	\$750
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 %)	Reduced in wetland buffers
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios: straight salt and Safe Melt used as needed Safe Melt is bio-degradable, safe around vegetation and people	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl	5% +/- 5% +/-
Pre-wetting techniques utilized	(y/n)	Yes
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