

JAN 20 2010

Municipality/Organization: Town of Winthrop

EPA NPDES Permit Number: MAR051085

MaDEP Transmittal Number: W-050721

**Annual Report Number
& Reporting Period:** No. 6: March 08-March 09

NPDES PII Small MS5 General Permit Annual Report

Part I. General Information

Contact Person: David J. Hickey, PE **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: DAVID HICKEY

Title: PUBLIC WORKS DIRECTOR

Date: 12/24/09

Part II. Self-Assessment

Due to unprecedented budget cuts both at FY start and in mid year the DPW was forced to layoff our sole dedicated engineering staff member and several programs were significantly scaled back. Our focus during this report period was on the programs that we believe have been the most effective such as the catch basin cleaning, street sweeping, the HHW collection program, and the beach / park seasonal cleanup events.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2009 and beyond
1a Revised	Nonpoint Source Pollution Posters	DPW Director	Hang Posters	Verified posters remain in originally posted locations.	Replace posters as needed.
1b Revised	Local Cable Messages	DPW Director	Create/develop PSA's Air PSA's Air PSA's	The DPW continues to air PSA's on Winthrop Cable Access Television and added a PowerPoint presentation	Continue with rotation of messages and evaluation of new topics for PSA's
1c Revised	Auto Repair Shop Brochures	DPW Director	Print and mail letters	None required.	Distribute new letters in August of 2010
1d Revised	Update Town Web Site	DPW Director and Winthrop GIS Department	Frequent update	quarterly messages	Post annual stormwater information
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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2009 and beyond
2a	Form Stormwater Advisory Committee (SAC)	DPW Director		SAC was formed, reviewed ordinance/by-law changes, made recommendations and was disbanded.	None
Revised	<i>Eliminate requirement</i>				
2b	Household Hazardous Waste Collection	DPW	Collect once per month years 3-5	Conducted 6 HHW collection events	Plan to increase public announcement in anticipation of possible further event reductions due to budget constraints
Revised					
2c	Implement Catch Basin Stenciling Program	DPW Director	Purchase and install decals	Program suspended due to lack of funding	Re-initiate program for a minimum of 50 catch basins
Revised					
2d	Hold Water Resource Cleanup Days	DPW Director & Conservation Commission	Collect trash and debris	Town participated and publicized cleanups at Yirrell Beach, Donanvans Beach, the Town Landing, Winthrop Beach and the Bell Isle Marsh	Continue existing program
Revised					

Revised						
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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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2009 and beyond
3a Revised	Map Outfalls and Receiving Waters	DPW Director	Update Existing Maps Field verify information	Verified location of outfalls during routine operations and maintenance.	Complete outfall inspections including GPS coordinates as budget allows.
3b Revised	Review Existing Bylaws and Regulations	Planning Board & DPW Director	Draft & Pass storm water Bylaws	Review completed prior to year 6.	
3c Revised	Develop Illicit Discharge Detection & Elimination Plan	Planning Board & DPW Director	Draft & Pass storm water Bylaws	None	Complete IDDE plan on schedule in EPA order
3d Revised	Develop/Modify General Illicit Discharge Bylaw	Planning Board & DPW Director	Draft & Pass storm water Bylaws	None	Have bylaw adopted by Town Council
3e Revised	Present Bylaw for Town Meeting Action <i>Present to Town Council</i>	Planning Department Planning Board & DPW Director	Town Council to adopt	None	Have bylaw adopted by Town Council

Revised							
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3a. Additions

4. Construction Site Storm Water Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2009 and beyond
4a Revised	Review Existing Site Inspection Practices	Planning Board & DPW Director	Develop regulatory compliance analysis Develop site inspection checklists	DPW working closely with Building Dept and Con Com to co-ordinate inspections and clarify contractor expectations	Continue site plan submittal process
4b Revised	Develop/Modify Site Inspection Program	Planning Board & DPW Director	Draft program and review with SAC	Utilized building dept checklists and sign-offs	Continue site plan submittal process
4c Revised	Review Existing Bylaws and Regulations	Planning Board & DPW Director	SAC adequacy report on existing practices and field controls SAC disbanded, DPW to complete	None	DPW to issue a report on program
4d Revised	Develop/Modify Bylaws for Construction Site Runoff	Planning Board & DPW Director	Develop bylaw based on 4a thru c	DPW analysis indicates that existing building codes and Wetlands bylaws appear to be adequate for construction control	None

4e	Present Bylaw to Town Council	Planning Board & DPW Director	Submit Town Meeting Article	None	None
Revised	<i>Not necessary/delete</i>				

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2009 and beyond
5a	Review Existing Site Inspection Practices	Planning Board & DPW Director	Develop regulatory compliance analysis Develop site inspection checklists	DPW & Con Com staff active during construction inspection	Formalize field inspector training and field checklist
Revised					
5b	Develop/Modify Inspection & Maintenance Practices	Planning Board & DPW Director	Draft program and review with Building Dept	DPW staff reviewed EPA IDDE guidance manual and initiated draft	Complete IDDE plan, pursue grants and funds to support implementation
Revised					
5c	Review Existing Bylaws and Regulations	Planning Department	Develop report on existing practices and field controls	None	DPW to report to Manager and Planning Board
Revised					

5d	Develop/Modify Bylaws for Post Construction Site Runoff	Planning Board & DPW Director	Develop bylaw based on 5a thru c	None	Draft by-law and pursue grants and funds to support implementation
Revised					
5e	Present Bylaw to Town Council	Planning Board & DPW Director	Submit Town Meeting Article	None	
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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2009 and beyond
6a	Maintain Street Sweeping Program	DPW	Sweep all streets twice per year	Swept all streets 4 times minimum, 6 times on high traffic and high risk areas	Sweep streets 4 times a year minimum
Revised					
6b	Maintain Catch Basin Cleaning Program	DPW	Check basins annually Clean basins as required	20% of the catch basins were cleaned; reduced funding contracted scope of program	Clean catch basins 2 days per week, non-winter months [CLARIFY]
Revised					

6c Revised	Perform Site Visits to Examine Existing Practices at Facilities	DPW Director	Target all applicable municipal facilities by year 3	Town Buildings inspected in spring and fall	Continue inspections
6d Revised	Train Municipal Employees at Each Facility	DPW Director	Target all applicable municipal facilities by year 3	None	Pursue grants for training
6e Revised	Perform Follow-ups to ensure Required Practices are Met	DPW Director	Target all applicable municipal facilities by year 6	All buildings inspected by Town Staff and audited by MIAA (insurance provider)	Continue program
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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2009 and beyond
7a Revised	Implement BMPs listed in Section 3	DPW Director	During years 2 & 3	None	Pass stormwater by law
7b	Review Winthrop Bay Existing Water Quality Data	DPW Director	Determine Winthrop contribution in year 6	Review and communicates with MyRWA	Continue communication

Revised							
7c	Review Effect of MWRA CSO on Water Quality	DPW Director	Determine MWRA CSO contribution year 6	None	Review and communicate with MWRA		
Revised							
7d	Initiate Illicit Connection Detection and Elimination Plan	DPW Director	Begin plan during year 6	Initiated draft plan	Complete plan, begin field inspection		
Revised							

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

The Mystic River Watershed Association collected stormwater in Bell Isle Marsh. The samples were collected on 10/24/07 & 1/30/08. The winter sample was clean, the October sample indicated above average levels of enterococcus. The report raised some concerns about a possible broken pipe: the DPW investigated the pipe and found no evidence of illicit discharge.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	NO
Annual program budget/expenditures – Extreme mid-year cuts resulted in the loss of a jr engineer and reductions in the catch basin stenciling, cleaning & street sweeping programs.	(\$)	5,000

Education, Involvement, and Training

Estimated number of residents reached by education program(s) *5-10% by WCAT, 5-10% by posters	(# or %)	10 to 20% estimated*
Stormwater management committee established – later disbanded	(y/n)	No
Stream teams established or supported – MyRWA and Friends of Bell Isle serve this function	(# or y/n)	?
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes
Household Hazardous Waste Collection Days		
<ul style="list-style-type: none"> ▪ days sponsored ▪ community participation ▪ material collected 	(#) (%) (tons or gal)	6 days 10% 25 tires, 73 lbs of CRT's 81 gals of paint 71 gals of waste oil 4 post-consumer mercury items
School curricula implemented – focused on recycling	(y/n)	Yes

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")		In Place Prior to Phase II	Under Review	Drafted	Adopted
<ul style="list-style-type: none"> ▪ Illicit Discharge Detection & Elimination 	X	occasional self audits and MWRA community assistance programs	X	X	
<ul style="list-style-type: none"> ▪ Erosion & Sediment Control – covered by Con Com & Building Dept ▪ Post-Development Stormwater Management – active inspection process 	X		X		X
Accompanying Regulation Status (indicate with "X")					
<ul style="list-style-type: none"> ▪ Illicit Discharge Detection & Elimination ▪ Erosion & Sediment Control – by Con Com & Building Dept ▪ Post-Development Stormwater Management - 				X	
			X		X
			X		

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	71 ¹
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	100
▪ CADD	(%)	60
▪ GIS	(%)	0

¹ Winthrop's Notice of Intent included 106 outfalls. However, by letter dated September 25, 2009, Winthrop provided EPA notice that 35 of the outfalls included in its NOI were separate from its stormwater system and operated and maintained by the Commonwealth's Department of Conservation and Recreation.

Outfalls inspected/screened	(# or %)	810
Illicit discharges identified – several water system repairs	(#)	1
Illicit connections removed	(#)	1
	(est. gpd)	
% of population on sewer	(%)	100
% of population on septic systems	(%)	0

Construction

Number of construction starts (>1-acre)	(#)	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100
Site inspections completed	(# or %)	0
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 %)	0
Estimated volume of stormwater recharged – added the Atlantis Marina Project and included in planning for the Dalryple School and Winthrop Hospital projects	(gpy)	Approx, 40,000 gals, with 100,000 galls planned for the future
<i>Comment: Recharge estimate based on two new school sites (Banks and Cummings) where large infiltration structures have been constructed</i>		

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	Every other year
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1
Total number of structures cleaned	(#)	130
Storm drain cleaned	(LF or mi.)	75
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	250 tons
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	17,000

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	4
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	6
Qty. of sand/debris collected by sweeping	(lbs. or tons)	140 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	\$45 / ton
Vacuum street sweepers purchased/leased	(#)	1
Vacuum street sweepers specified in contracts	(y/n)	N

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

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % K _{ac} % KCl % Sand	100
Pre-wetting techniques utilized	(y/n)	Occasionally
Manual control spreaders used	(y/n)	No
Automatic or Zero-velocity spreaders used	(y/n)	No
Estimated net reduction in typical year salt application	(lbs. or %)	5%
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	