TOWN OF WINTHROP

05

1084

Office of the
Department of Public Works
100 Kennedy Drive
Winthrop, MA 02152
David J Hickey, Jr, Director
Phone: (617) 846-1341
Fax: (617) 539 1545

3/15/05 received SP

March 4, 2005

Mr. Jason Turgeon
US EPA, Region 1
One Congress Street
Suite 1100 (SEW)
Boston, MA 02114-2023

Re: Town of Winthrop Annual Report
EPA NPDES Permit No MAR 041084

Dear Mr. Turgeon

Please find attached the Town of Winthrop's Annual Report. The report documents the conditions, to the best of my knowledge and belief at this time. As has been documented there have been some delays in implementing all of the permit requirements. This is largely due to significant management changes at the department principally responsible for the program. Furthermore a lack of funding, staffing and difficulties in effecting regulation changes have been and will continue to be impediments for the program.

At this point the Town believes that if the objective is to set reasonable and achievable goals, it is appropriate to delay the permit by a year. Most of what has been accomplished was scheduled for permit year 1. We would like to start permit year 2 this April. This concern has been expressed to Jack Healy and Shelley Puleo of the EPA who advised us to re-visit the issue with you after submitting this annual report. Additionally the DPW believes that education efforts would be more fruitful that a Catch Basin Stenciling program due to the uniqueness of our Town. In Winthrop every street is no more than a ½ mile to the bay or ocean. Our experience indicates that the residents need to understand that there are separate systems for sewer and storm drain as opposed to the proximity and the sensitivity of the receiving water. We request that you contact us after you have had a chance to review this package. Be assured the Town of Winthrop has, and will continue to do the best it possible can, within our resources, to protect the environment.

In direct response to your February 18, 2005 letter, the Town wants to note that while we were contacted in July and September, we have not been unresponsive. The Winthrop DPW contacted Thelma Murphy of the EPA and Paul Hogan of the MA DEP to notify both agencies that there were significant recent management changes and that the Town would be delayed with submissions as well as with some components of the permit.

The Town of Winthrop is proud of our past efforts to protect the surrounding water resources and we fully intend to comply with all permit requirements as soon as possible.

Sincerely,

David J. Hickey, Jr. PE
Director of Public Works

Cc: Winthrop Board of Selectman
Winthrop Conservation Commission
SAC Committee Members
Ms. Domizio, MA DEP

Municipality/Organization: **Town of Winthrop**

EPA NPDES Permit Number: **MAR041084**

MaDEP Transmittal Number: **W-040721**

Annual Report Number & Reporting Period: **No. 1: March 04-March 05**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: David J. Hickey, PE Title: Director of Public Works

Telephone #: 617 846 1341 Email: dhickey@town.winthrop.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: DAVID HICKEY

Title: DIRECTOR OF PUBLIC WORKS

Date: 3/7/05

Part II. Self-Assessment

The Town has been delayed in implementing some of the permit conditions due to personnel changes within the department that is most responsible for compliance; the Department of Public Works (DPW). The Town hired a new DPW director and operation manager in the summer of 2004 and is working toward full compliance. It is likely that the Town will require an additional year to reach full compliance. The required self-assessment has been completed and the Town has determined that our municipality is in compliance with all permit condition except for the following provisions:

NOI section D.1.1a – Distribution and Posting of Nonpoint Source Pollution Posters. The Town recently obtained artwork for some posters and expects to have printing, distribution and posting complete by the end of March.
NOI section D.1.1c – Obtain and distribute auto repair shop brochures. The Town is in the process of developing a letter for mailing to the nine auto repair shops. We expect the mailings to be complete by the end of March.
NOI section D.1.1d – Adding stormwater information to the Towns website. The Town recently contracted with a consultant to improve our website, the DPW is working with the consultant to include stormwater information on the updated website. This is work is ongoing, a time frame for completion is not currently available but is expected for the fall of 2005.

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
1a	Nonpoint Source Pollution Posters	DPW Director	Obtain Artwork Print Posters Distribute Posters	The Town has obtained the artwork, an outside vendor (Earth911) was utilized	None originally planned, due to a late start, the printing and distribution may take place during permit year 2
Revised					
1b	Local Cable Messages	DPW Director	Obtain PSA's Air PSA's	The Town has completed these goals with the assistance of an outside vendor (Earth911) and the Winthrop Cable Access Television	Rotate messages
Revised					

1c	Auto Repair Shop Brochures	DPW Director	Draft letter Selectman and legal counsel approve Print and mail letters	The DPW is currently drafting the letter	Distribute letters
Revised					
1d	Update Town Web Site	DPW Director	Hire outside vendor Develop DPW web page with stormwater information and links	The DPW is working with the GIS department and an outside vendor	Update to address seasonal concerns
Revised		And Winthrop GIS Department			
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
2a	Form Stormwater Advisory Committee (SAC)	DPW Director	Form SAC Conduct meetings	The SAC was formed in the winter of permit year 2, inclement weather has limited the number of meetings	Conduct quarterly meetings, review current by-laws and practices
Revised					
2b	Hazardous Waste Collection	DPW	Collect once per month years 3-5	Collected HHW from residents during the first Saturday of each month April	Continue activity Possible expansion to address peak

Revised	Household Hazardous Waste Collection	And the Winthrop Recycling Committee	Collect once per month during non-winter months		
2c	Implement Catch Basin Stenciling Program	DPW Director	Design & obtain stencil Organize stencils groups	None Required	
Revised	Eliminate this component				
2d	Hold Water Resource Cleanup Days	DPW Director	Collect trash and debris	No requirements in permit year 1, however the Town cleaned Yirrell Beach in the fall and participated in cleanup days at Winthrop Shore Beach (DCR event), Bell Isle Marsh (Friends of Bell Isle Marsh event) and Snake Island (local volunteers)	The Town expects to participate in the same events and to possible expand or create new cleanup days at Donovan's Beach and the town Landing
Revised		Conservation Commission			
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
3a	Map Outfalls and Receiving Waters	DPW Director	Update Existing Maps Field verify information	None required	Field investigate outfalls, Create Digital Maps from Existing Records Update Existing Records
Revised					

3b	Review Existing Bylaws and Regulations	Planning Department	SAC review and recommendations for bylaw changes	None required	Review bylaws, regulations and policies Identify deficiencies Research applicable bylaws Prepare bylaws changes, if applicable
Revised		Planning Board & DPW Director			
3c	Develop Illicit Discharge Detection & Elimination Plan	Planning Department	SAC review of exiting policies and development of a plan	None required	Review past practices and reports Develop plan Modify SWMP
Revised		Planning Board & DPW Director			
3d	Develop/Modify General Illicit Discharge Bylaw	Planning Department	Develop Bylaw based on 3a thru c	None required	Research similar bylaws Meet with MWRA Develop sample bylaw Conduct hearings
Revised		Planning Board & DPW Director			
3e	Present Bylaw for Town Meeting Action	Planning Department	Submit Town Meeting Article	None required	Prepare cost estimate Prepare Town Meeting Article Prepare for presentation in permit year 3
Revised		Planning Board & DPW Director			
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
4a	Review Existing Site Inspection Practices	Planning Department	Develop regulatory compliance analysis Develop site inspection checklists	None required	Meet with Building Inspectors and DPW staff to document practices Develop inspection checklist Conduct and document results of site inspections Examine EPA & DEP requirements
Revised		Planning Board & DPW Director			
4b	Develop/Modify Site Inspection Program	Planning Department	Draft program and review with SAC	None required	Modify checklist based on experience Estimate costs and examine applicability of fees Develop program
Revised		Planning Board & DPW Director			
4c	Review Existing Bylaws and Regulations	Planning Department	SAC adequacy report on existing practices and field controls	None required	Document costs Documents results
Revised		Planning Board & DPW Director			
4d	Develop/Modify Bylaws for Construction Site Runoff	Planning Department	Develop bylaw based on 4a thru c	None required	Research similar bylaws Meet with local contractors Develop sample bylaw Conduct hearings
Revised		Planning Board & DPW Director			
4e	Present Bylaw for Town Meeting	Planning Department	Submit Town Meeting Article	None required	Prepare cost estimate Prepare Town Meeting Article Prepare for presentation in permit year 3
Revised		Planning Board & DPW Director			

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
5a	Review Existing Site Inspection Practices	Planning Department	Develop regulatory compliance analysis Develop site inspection checklists	None required	Meet with Building Inspectors and DPW staff to document practices Develop inspection checklist Conduct and document results of site inspections Examine EPA & DEP guidelines
Revised		Planning Board & DPW Director			
5b	Develop/Modify Inspection & Maintenance Practices	Planning Department	Draft program and review with SAC	None required	Modify checklist based on experience Estimate costs and examine applicability of fees Develop program
Revised		Planning Board & DPW Director			
5c	Review Existing Bylaws and Regulations	Planning Department	SAC adequacy report on existing practices and field controls	None required	Document costs Documents results
Revised					
5d	Develop/Modify Bylaws for Post Construction Site Runoff	Planning Department	Develop bylaw based on 4a thru c	None required	Research similar bylaws Meet with local contractors Develop sample bylaw Conduct hearings
Revised		Planning Board & DPW Director			

4e Revised	Present Bylaw for Town Meeting	Planning Department Planning Board & DPW Director	Submit Town Meeting Article	None required	Prepare cost estimate Prepare Town Meeting Article Prepare for presentation in permit year 3
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
6a Revised	Maintain Street Sweeping Program	DPW	Sweep all streets twice per year	Main roads swept in fall	Town meeting approval for sweeper replacement Sweep all streets
6b Revised	Maintain Catch Basin Cleaning Program	DPW	Check basins quarterly Clean basins up to twice per year Check basins annually Clean basins as required	Approval for and purchase of Clam Shell Catch Basin Truck Clean basins in flood prone areas	Town meeting appeal for disposal funds Town wide cleaning
6c Revised	Perform Site Visits to Examine Existing Practices at Facilities	DPW Director	Target all applicable municipal facilities by year 3	None required	Site inspections and documentation

6d Revised	Train Municipal Employees at Each Facility	DPW Director	Target all applicable municipal facilities by year 3	None required	Develop site specific checklist Meet with Housing Department, Police Chief, Fire Chief, School Superintendent and Custodial staff
6e Revised	Perform Follow-ups to ensure Required Practices are Met	DPW Director	Target all applicable municipal facilities by year 4	None required	Develop reports from field inspections and sample check lists Conduct follow-up meeting
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 1** (Reliance on non-municipal partners indicated, if any)	**Planned Activities – Permit Year 2**
7a Revised	Implement BMPs listed in Section 3	DPW Director	During years 2 & 3 Quantify sweeping and catch basin volumes Submit 3 bylaw changes/modifications	None required	Track sweeping and catch basin cleaning activities Work with SAC to develop bylaws and obtain Town approval
7b Revised	Review Winthrop Bay Existing Water Quality Data	DPW Director	Determine Winthrop contribution in year 4	Worked with regional group (Mystic River Watershed Association) to arrange testing	Review test results and

7c Revised	Review Effect of MWRA CSO on Water Quality	DPW Director	Determine MWRA CSO contribution year 4	None required	Meet with MWRA and Surrounding community DPW's to update current CSO status
7d Revised	Initiate Illicit Connection Detection and Elimination Plan	DPW Director	Begin plan during year 5	None required	None planned
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

The Mystic River Watershed Association collected stormwater samples in Boston Harbor, Bell Isle Marsh and Lewis Lake. The samples were collected on August 24, 2004 under dry conditions and during a falling tide. Eight samples were taken along the Winthrop frontage. Enterococus Levels, Temperature, Dissolved Oxygen, Conductivity, and salinity were measured. The Enterococus Levels ranged from non-detect to 178. It was noted that the areas of slightly elevated bacteria levels could be associated with dense bird activities. The temperatures ranged from 17.9 to 20.9 .

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	NO
Annual program budget/expenditures	($)	None

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	Not determined
Stormwater management committee established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	8 days
▪ community participation	(%)	
▪ material collected	(tons or gal)	18 tires 28 vehicles batteries 136 lbs of CRT's 22 propane tanks 78 gals of paint 44 gals of waste oil
School curricula implemented	(y/n)	No

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination	X occasional self audits and MWRA community assistance programs			
▪ 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	(%)	90%
Estimated or actual number of outfalls	(#)	106
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	100
▪ CADD	(%)	20
▪ GIS	(%)	0
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	2

Illicit connections removed	(#) (est. gpd)	1
% 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	(%)	0
Site inspections completed	(# or %)	3
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and $)	0
Complaints/concerns received from public	(#)	0
Comment: DPW inspected home construction sites on Ingleside Ave, Upland Rd and a commercial site on Veterans Rd		

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	(gpy)	Approx, 70,000 gals
Comment: Recharge estimate based on two new school sites (Banks and Cummings) where large infiltration structures have been constructed		

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	(#)	20*
Storm drain cleaned	(LF or mi.)	0
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	25
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	($)	$75 / ton
** The catch basin truck din not arrive until mid December, therefore the Town has been delayed in getting the catch basin cleaning program started*		

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2
Qty. of sand/debris collected by sweeping	(lbs. or tons)	25 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	($)	$75 / ton
Vacuum street sweepers purchased/leased	(#)	0
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 % Kac % 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 %)	
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	