

APR 28 2009

Municipality/Organization: Town of Weymouth
EPA NPDES Permit Number: MA041070
MaDEP Transmittal Number: W-035571
Annual Report Number & Reporting Period: No. 6: April 1, 2008 – March 31, 2009

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Andrew P. (Chip) Fontaine, P.E. Title: Town Engineer
Telephone #: 781-337-5100, ext. 318 Email: cfontaine@weymouth.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: Susan M. Kay
Printed Name: Susan M. Kay
Title: Mayor
Date: 4/22/09

Part II. Self-Assessment

In 2001, the Town of Weymouth ("Town") entered into a \$200,000 contract with engineering consultants BETA ("BETA"), to develop a watershed master plan for Whitman's Pond which, in separate sections, is both a recreational part of the Town's drinking water supply. That project included analysis of stormwater impacts and recommendations to reduce stormwater pollution. Half of the funding for that project was provided by the Massachusetts (MA) Department of Environmental Management ("DEM").

In 2002, the Town fully funded a \$330,000 contract with BETA to create the first draft of the Town's Storm Water Management Plan (SWMP). A major component of both of these projects was to clean all town catch basins and inspect the entire catch basin inspection data was used to create town-wide drain system mapping and data management in a Geographic Information System (GIS).

Although these projects represent a major financial commitment by the Town, as well as a significant technical and engineering analysis effort, these accomplishments are in addition to pre-existing Town stormwater management activities (notably such as Best Management Practices or "BMPs"). Some of these BMPs have been performed by the Town itself while others have been performed by grassroots organizations. These existing BMPs are identified in Part III of this report.

In July of 2004, town representatives involved with development of the SWMP met with USEPA representatives to discuss the program thus far (see attached letter dated 8/23/04). SWMP development efforts have since included work on the SWMP and the EPA letter as identified below.

In 2008, the Mayor and Town Council approved two new ordinances relative to stormwater management: the Stormwater Management Ordinance and the Illicit Connection/Discharge Ordinance. These ordinances establish requirements per the NPDES permit for Storm Water Discharges from Small MS4s, including procedures to apply for town permitting and penalties for non-compliance.

Also in 2008, the town, through the Conservation Administrator, obtained a MA Coastal Zone Management (CZM) grant to fund the design stormwater remediation for the Weymouth Herring Run. The Herring run is the watercourse that flows from the Herring Run to the Back River and is an important smelt spawning habitat and herring migratory corridor. This project is currently 75% design plans almost completed for three structural stormwater BMP retrofit sites. Once designs are completed, the town will pursue funding for construction.

Notice of Intent (NOI)

The town has obtained plans of Massachusetts Highway Department (MHD) drainage in Weymouth in the past and will continue to do so. MHD has completed mapping the locations of all of their outfalls as part of their SWMP effort and we have received a GIS file of those locations. The Town had already provided Mass. Highway's consultant engineer (ENSR) with Town of Weymouth GIS data layers showing Town drainage along MHD corridors for use in developing MHD's SWMP. We will continue to coordinate storm water management with MHD, including obtaining updated drain system/outfall mapping and providing them with our GIS drain system layer when they have a need for it.

Our SWMP prioritizes identification and removal/reduction of bacteria levels in storm water, particularly where pathogens are identified as impacting certain receiving waters. Our SWMP does identify the water bodies that are identified as Category 5 (impaired/threatened, requiring a TMDL) in the MA Integrated List of Waters [Clean Water Act Sections 303(d) and 305(b)] although MA DEP has yet to develop final TMDLs for these water bodies. A Draft Pathogen TMDL for the Boston Harbor Watershed, which includes the Weymouth and Weir Rivers Sub-basin which encompasses most of the Town of Weymouth, is now posted on the MA DEP website.

Updates to previous submitted information:

Part I.B.2(e) In our Year 1 annual report ('03 - '04), the Town reported to have determined that we meet Criteria D from Appendix A (EPA Endangered Species Act) of the MA NPDES General Permit based on information provided by BETA, our SWMP consultant. It has now come to our attention that we actually meet Criteria A based on the fact that there are no endangered or threatened species or critical habitat in proximity to our MS4 or points where authorized discharges reach the receiving waters.

The Town has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

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 – Permit Year 6
1-1 Revised	Classroom Education	School Dept.	High school Environmental Science class will include stormwater management issues.	Stormwater pollution awareness and management issues have been included in this class for the last 15+ years. The major topics covered are: watersheds and land uses, impact of impervious surface on I/R ratios, types of non point source pollution, storm water pollutants, storm water infrastructure, storm water management and BMPs, impact of storm water on surface waters, sanitary sewers, sewage treatment and septic tanks, eutrophication and several labs dealing with testing storm water quality and the quality of the receiving surface waters.	This classroom training will continue.
1-2 Revised	Flyer and Brochure Distribution	DPW	Obtain stormwater-related flyers and distribute them to the public	The town continued its partnership with the Greenscapes program and the North and South Rivers Watershed Association (NSRWA), other environmental agencies, and various South Shore communities. Recycling flyers were distributed in water & sewer bills. Also made available to all residents by placement at various public buildings was the 2009 Greenscapes Guide (see http://www.greenscapes.org/). The DPW also has stormwater flyers and other environmental information available to the public at several locations in the building.	Relevant flyers will continue to be developed or obtained and will be distributed to the public.

1-3	Using the Media	DPW	Once a year, do a local cable TV public service announcement. Twice a year do a newspaper press release/article.	Household hazardous waste day, which is held in fall and spring, was announced on cable TV, emailed to members of a town email list, posted on the South Shore Recycling Cooperative website, and published in the newspaper. Town-wide, Waterfront and Whitman's Pond Cleanup Days were also identified in the newspaper. The local cable TV station was previously provided with the video "Stormwater Runoff, There is No Away" to be run periodically based on available programming space.	This practice will continue with increasing focus on specific stormwater management issues.
Revised					
1-4	Hazardous Waste Management	DPW	Conduct Household Hazardous Waste Collection Day twice a year. Will be advertised in newspaper. Quantity of waste collected will be tracked.	Household Hazardous Waste Collection Day is conducted in the spring and in the fall and is advertised in the newspaper, is posted on the town website, and is sent to all subscribers of the town email list. The town hires a contractor who specializes in hazardous material clean up and collection to operate the collected days and dispose of all of the collected materials. Additionally, during the rest of the year, residents were allowed to drop off the following hazardous materials at the DPW which were then picked up and disposed of by qualified contractors: flammable liquids and latex or oil based paint; TVs, computer monitors, refrigerators, air conditioners, microwave ovens, assorted other electronic items; propane tanks. Records of quantities of hazardous materials collected are kept on file at the DPW.	These practices will continue.
Revised					

2. Public Involvement and Participation

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 – Permit Year 6
2-1 Revised	Adopt-A-Stream/Drain Program	DPW	All town water bodies will be adopted. Track amount of trash removed. Continue supporting the various associations that have adopted water bodies and continue to track amount of trash removed.	The Whitman's Pond Association, the Herring Run Warden and the Isaac Walton Fishing Association continue to "adopt" Whitman's Pond, the Herring Run and Old Swamp River, respectively. The Fore River Watershed Association has adopted the Fore River and the Back River Watershed Association has adopted the Back River. The DPW provides support to these associations, when requested, in the form of manpower and trucks for clean-up events. The amount of collected trash is tracked.	Will continue to provide support to these associations. Amount of trash removed will be tracked.
2-2 Revised	Pond & Stream Cleanup & Monitoring	DPW	Coordinate and track cleanup activities.	Cleanup days were held for Whitman's Pond, the Herring Run, Old Swamp River, the Back River and the Fore River. The Whitman's Pond Committee, the Herring Run Warden and the Back River and Fore River Watershed Associations are non-municipal partners.	With assistance from the DPW, these cleanups will continue. Additional pond and stream cleanups will also be arranged as much as possible.
2-3 Revised	Stencil Storm Drains	DPW	Stencil 300 or more catch basins each year.	More catch basins that are in the Whitman's Pond watershed, as needed based on previously stenciled paint fading or never before stenciled, were stenciled by the Whitman's Pond Association using stencils and paint purchased by the DPW.	Additional catch basins will be stenciled as needed.
2-5 Revised	Community Hotline/Weblink	DPW	Create a Stormwater Hotline/Weblink. Track # of calls and remedied problems.	The town continued to maintain a Stormwater web page with a hotline/weblink. It is part of the DPW web page on the town website (see http://www.weymouth.ma.us/). There is also a link to contact the Mayor or DPW for emergencies and there is a Mayor's Hotline (800-297-5733). There is also a town emailing list which residents can sign up for to be notified of town activities, including cleanups. The Greenscapes Newsletter is also accessible from the town DPW web page and contains a link to the Greenscapes website.	Continue to update the SWMP webpage on the town web site. Track calls and problem remedies.

2-6	Public Workshops	DPW	Develop and advertise public workshops to disseminate information to and receive input from the public.	The DPW Water & Sewer Division continues to be a partner in Greenscapes Massachusetts and through that partnership, has sponsored several free workshops relative to stormwater management. For more information, see the Greenscapes Massachusetts website and the past issues of the Greenscapes E-Newsletter that described the workshops.	Public workshops, particularly those put on by Greenscapes Massachusetts, will continue to be planned and advertised with a frequency goal of at least one per year.
Revised					
2-8	Pet Waste Collection	Town Council	Create and enforce an ordinance. Track # of signs posted.	The town has an ordinance that requires people to clean up after their dog (Ordinance 6-801). The town also continues to provide pet waste warning signs and "Mutt Mitt" dispensers at various sites in town where dog walking is common to encourage dog owners to clean up their pet's waste. Mutt Mitt dispensers now exist at O'Sullivan, Negus and Weston Parks, Humphrey Field, the School House Rd. soccer fields and Webb State Park. Local athletic clubs provide bags at the dispensers.	Continued placement of pet waste warning signs and Mutt Mitt dispensers as new desirable locations are identified. Continued stocking of bags in the dispensers.
Revised					
Revised					

3. Illicit Discharge Detection and Elimination

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 – Permit Year 6
3-1 Revised	Inspect and sample all town discharges	DPW	Continue program to locate, sample and test.	All outfalls were inspected and dry weather flows sampled and tested in Year 1. We continue to obtain and test additional samples when requested by the Health Dept. or when any potential surface water pollution is suspected.	When identified, suspect discharges will be sampled and tested.
3-2 Revised	System mapping development	DPW	Complete system map. Add soils and land use maps.	Townwide GIS drain system mapping was completed in 2004 and we continue to publish a printed atlas set of drain system maps. Soil and land use exists as GIS layers. The DPW Engineering Division and GIS staff update the GIS drain layer annually as the system is modified, expanded or as discrepancies are discovered.	The GIS drain system mapping will continue to be kept up to date.
3-3 Revised	Illegal dumping enforcement/education	DPW DPW, Health and Police Depts.	Flyers; track and prosecute illegal dumping.	Existing ordinances prohibit discharge of untreated waste, garbage, etc. Signs prohibiting dumping of waste are posted at various locations throughout town. A container for residents to dispose of their motor oil exists next to the DPW building. "No dumping" signs exist at yard waste drop off locations and town beaches and a new one was placed at the Wharf St. entrance to the capped landfill. Video and still cameras have also been installed in the Weymouth Landing and East Weymouth parking lots, O'Sullivan Playground, and the DPW. Violators have been identified and prosecuted.	Will continue to and post signs in areas known for illegal dumping. Will continue to set up cameras and prosecute offenders. Will continue to work on creating and distributing flyers.
3-4 Revised	Septic system controls	Health Dept. Health Dept. & DPW	Track #, location and inspection of septic systems.	In 2008, 26 septic system sites were switched to the town sewer system, leaving 540 septic systems currently still in use. Town Ordinance 8-201 requires properties with septic systems to connect to the town sanitary sewer system when certain conditions exist.	The locations of septic systems will continue to be tracked and inspection records will be obtained whenever they are available. Continue converting properties on septic systems to sewer.

3-5	Create illicit discharge ordinance	DPW	Eliminate illicit discharges to the drain system.	Ordinance 8-702 (Illicit Connection/Discharge Ordinance) was added to the town ordinances last year. Existing ordinances already prohibited discharge of untreated waste, garbage, etc. (Ordinances 6-901, 6-1214, 7-401, 11-101 and 12-103).	These ordinances will be used to control illicit discharges.
Revised	DPW, Town Council				

4. Construction Site Stormwater Runoff Control

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 – Permit Year 6
4-1 Revised	Ordinance review and update	Town Council & Planning Dept. DPW, Town Council	Develop erosion and sediment control ordinance/regulation.	Ordinance 8-701 (Stormwater Management Ordinance) was added to the town ordinances last year to control erosion and sedimentation at construction sites.	Together with assistance from the Conservation Administrator, Building Inspector, and Planning Dept., this ordinance will be used to control erosion and sedimentation at construction sites.
4-2 Revised	Construction inspection	DPW & Building Dept. DPW, Conservation, Planning & Building Depts.	Track inadequate sites/plans and # of non-compliant permit.	The Building, Public Works and Conservation Depts. inspected various construction projects as required under existing procedures and addressed stormwater related issues where noted. Under the Stormwater Management Ordinance, as well as existing permit procedures, stormwater quality issues will be monitored and addressed through the construction inspection process.	These responsible departments will continue to perform construction inspection and will continue to monitor and address stormwater quality issues.
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
5-1	Regulations for post-construction runoff	Town Council/DPW	Develop public works construction rules and regulations, including storm drain connection regulation.	The DPW storm drain connection regulation was utilized for permit issuance under the Stormwater Management Ordinance when required.	As applicable, projects will be reviewed to ensure compliance with the Stormwater Management Ordinance.
Revised		DPW			
5-2	BMP inspection and maintenance	DPW	Inspect structural BMPs once a year; document problems.	Drainage structures were inspected where deemed necessary. The DPW structural BMP tracking spreadsheet is used to identify structure characteristics and track inspections.	Continue identification of structural BMPs in the Drain GIS and the BMP tracking spreadsheet. Continue inspecting structural BMPs.
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
6-1 Revised	Catch basin cleaning program	DPW	Develop program, collect data, refine program.	The town utilizes 2 vacuum trucks and 1 clamshell to clean catch basins throughout the town for most of the year, as needed. A record to track catch basins cleaned is being used. Catch basins are prioritized for cleaning based on the greater sensitivity of areas such as the Great Pond and Whitman's Pond watersheds.	Regular cleaning of catch basins under this program will continue.
6-2 Revised	Street sweeping	DPW	Sweep all roads annually, track quantity of sweepings.	All roads were swept. The approximate amount of sand that was swept up is tracked.	Sweep all roads. Continue to track quantity of sweepings.
6-3 Revised	Pipe inspections	DPW	Inspect drain lines on as-needed basis.	Numerous drain lines were inspected. At times, this is accomplished with the town's own transporter-mounted video camera. However, more often a contractor, such as NEPCCo, is hired to perform this work.	Continue inspections as needed.
6-4 Revised	Pipe cleaning	DPW	Clean and flush drain lines as needed.	Numerous drain lines were cleaned out by flushing with high pressure hose. Like the pipe inspections, this was done at times by DPW staff with DPW equipment but more often a contractor was hired to perform this work, particularly lines with significant root growth in them.	Continue cleaning pipes as needed.

6-5	New pipe & structural installations	DPW	Replace drain pipes, catch basins and other drain structures as needed.	Repairs to the town stormwater collection system were performed as needed. The town, through the Conservation Administrator, using a MA Coastal Zone Management (CZM) grant, is designing structural stormwater BMPs to improve stormwater quality that flows to the Herring Run.	Drain structures will be replaced or repaired where required and as funding allows. The Conservation Herring Run stormwater remediation project design will be completed. Funds for construction will be pursued.
	Revised				
	Revised				

6a. Additions

6-6	Employee Training	DPW/ Planning	Develop and implement employee SWMP training program.	Construction inspectors received SWMP training.	SWMP training will continue as needed.
	Revised				
6-7	Spill Containment	DPW/Fire	Implement structural components and training to address spill containment at the DPW	Spill containment training was provided to DPW personnel by the Fire Dept. to ensure proper use of the kit that is in place next to the DPW refueling area. In addition to action by town departments, Clean Harbors (http://www.cleanharbors.com/) is contacted immediately upon knowledge of a hazardous material spill to assist in the containment and cleanup.	Additional spill containment equipment, training and procedures will be implemented at the DPW as required. Also coordinate with the Fire Dept. on their spill containment procedures for spills at any location in town.
	Revised				

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1-1 Revised	Classroom Education	School Dept.	High school Environmental Science class will include stormwater management issues.	Stormwater pollution awareness and management issues have been included in this class for the last 15+ years. The major topics covered are: watersheds and land uses, impact of impervious surface on I/R ratios, types of non point source pollution, storm water pollutants, storm water infrastructure, storm water management and BMPs, impact of storm water on surface waters, sanitary sewers, sewage treatment and septic tanks, eutrophication and several labs dealing with testing storm water quality and the quality of the receiving surface waters.	This classroom training will continue.
2-2 Revised	Pond & Stream Cleanup & Monitoring	DPW	Coordinate and track cleanup activities	Cleanup days were held for Whitman's Pond, the Herring Run, Old Swamp River, the Back River and the Fore River. The Whitman's Pond Committee, the Herring Run Warden and the Back River and Fore River Watershed Associations are non-municipal partners.	With assistance from the DPW, these cleanups will continue. Additional pond and stream cleanups will also be arranged as much as possible.
2-3 Revised	Stencil Storm Drains	DPW	Stencil 300 or more catch basins each year.	More catch basins that are in the Whitman's Pond watershed, as needed based on previously stenciled paint fading or never before stenciled, were stenciled by the Whitman's Pond Association using stencils and paint purchased by the DPW.	Additional catch basins will be stenciled as needed.
3-1 Revised	Inspect and sample all town discharges	DPW	Continue program to locate, sample and test.	All outfalls were inspected and dry weather flows sampled and tested in Year 1. We continue to obtain and test additional samples when requested by the Health Dept. or when any potential surface water pollution is suspected.	When identified, suspect discharges will be sampled and tested.

3-3 Revised	Illegal dumping enforcement/education	DPW DPW, Health and Police Depts.	Flyers; track and prosecute illegal dumping.	Existing ordinances prohibit discharge of untreated waste, garbage, etc. Signs prohibiting dumping of waste are posted at various locations throughout town. A container for residents to dispose of their motor oil exists next to the DPW building. "No dumping" signs exist at yard waste drop off locations and town beaches and a new one was placed at the Wharf St. entrance to the capped landfill. Video and still cameras have also been installed in the Weymouth Landing and East Weymouth parking lots, O'Sullivan Playground, and the DPW. Violators have been identified and prosecuted.	Will continue to and post signs in areas known for illegal dumping. Will continue to set up cameras and prosecute offenders (one case is now pending.) Will continue to work on creating and distributing flyers.
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7a. Additions

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7b. WLA Assessment

The MA DEP has not yet developed final TMDLs for any Weymouth's water bodies that are identified as Category 5 (impaired/threatened, requiring a TMDL) in the MA Integrated List of Waters [Clean Water Act Sections 303(d) and 305(b)]. However, a Draft Pathogen TMDL for the Boston Harbor Watershed, which includes the Weymouth and Weir Rivers Sub-basin which in turn encompasses most of the Town of Weymouth, is now posted on the MA DEP website.

Continued cleaning of all town catch basins (approximately 4,000) every other year provides a tremendous benefit by removing waste and pollutants from the stormwater that then flows into water resources. Sweeping all town streets likewise prevents the sand, dirt and road debris that carries pollutants from entering the drain system and eventually polluting the environment. A record keeping procedure was initiated in December '06 to track what catch basins are cleaned and note any structural deficiencies, which will improve catch basin maintenance and functionality.

The Town will continue to utilize, and update when needed, the Whitman's Pond watershed master plan and the SWMP, both developed by BETA. Although numerous BMPs are currently in use and more will be implemented per the recommendations in the BETA reports, a detailed Waste Load Allocation Assessment has not yet been done. The Town will continue to work towards performing this assessment.

Part IV. Summary of Information Collected and Analyzed

As the GIS-based Drain Atlas maps are used by various departments, we are constantly updating and correcting the existing data. Each year, updates are accomplished by DPW and GIS staff. This work will continue to enhance the accuracy and completeness of this data. This data includes identification and database data management for all town structural BMPs.

The significant quantities of hazardous waste and recycled materials collected during town Household Hazardous Waste Days, as well as those received at and/or collected by the DPW throughout the year, (as described in Section III.1-4) confirms that the town is providing an important service to residents who are very willing to properly dispose of these materials when a means to do so is available. The impact on storm water quality and the environment in general from these programs, as well as the various water body adoptions, clean-up days, Mutt Mitt dispensers, and conversions from septic system to sewer, is a difficult to quantify, but undeniable, benefit.

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2008 through March 31, 2009)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures **	(\$)	
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

Education, Involvement, and Training

Estimated number of property owners 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 **	(y/n or mi.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		