CITY OF EASTHAMPTON

DEPARTMENT OF PUBLIC WORKS
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Office of the City Engineer

CITY ENGINEER
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Received
9-9-05

September 1, 2005

United States Environmental Protection Agency
Region 1
1 Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

Attn: Thelma Murphy, Stormwater Coodinator

Re: NPDES Phase II Annual Report

Dear Ms. Murphy:

Enclosed please find our Annual Report for the year March 2004 to March 2005. My apologies for the lateness of this report. The fiscal situation for the past two years has been very difficult for municipal departments such as ours. We will make every attempt to continue progressing toward the goals of the Phase II Program, however, I am afraid our progress may be in the form of very small steps. Hopefully our fiscal situation will improve in the near future.

Yours truly,

James A. Gracia, PE
City Engineer

Municipality/Organization: **EASTHAMPTON, MA**

EPA NPDES Permit Number: **MAR041006**

MaDEP Transmittal Number: **W-036183**

Annual Report Number & Reporting Period: **No. 2: March 04-March 05**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: James A. Gracia Title: City Engineer

Telephone #: 413-529-1423 Email: jgracia@crocker.com

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: Michael A. Tautznik

Title: Mayor

Date: 9-1-2005

Part II. Self-Assessment

The City of Easthampton has completed the required self-assessment and has determined that out municipality is in compliance with all permit conditions, except for the following provisions:

Part II.B.1 Public education and outreach program has not been initiated yet. Plans are under way for an open forum to present the requirements of our expanded Stormwater Management Program, that which will go beyond the requirements already being enforced under the Massachusetts Department of Environmental Protection Stormwater Management Guidelines. The planned open forum will be aimed at local land developers, excavation contractors, farmers, and private property owners.

Part II.B.2 The Public Involvement and Participation Component of the permit requirements has only been partially instituted. Upon initiation of the public education component mentioned above, the public shall be allowed to provide input to the program, through open public sessions. An existing volunteer group has been in existence for a number of years already, acting as a "watch dog" group for the Nashawannuck Pond and its tributaries. This group has been responsible for a number of improvements in the pond and its tributaries, with the goal of improving the water quality and removing the pond from the 303d listing of impaired waters. We are making progress toward dredging the pond which will be a focal point for future public education concerning stormwater management and erosion control.

Part II.B.4 The Construction Site Stormwater Control program is in need of additional local regulatory controls which specifically target construction activities outside of the jurisdiction of the local Conservation Commission and the MA Wetlands Protection Act. Discussions have taken place concerning updates to our local Subdivision Control Law, however, no definitive progress has been made in this regard. Open public discussions concerning the needed local regulatory updates will be addressed during the open forum mentioned in Part II.B.1 listed above.

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
1	Promote a Stormwater Program	DPW, Planning Board, Conservation Commission, Board of Health, Mayor	Easthampton will present to the public at a public meeting Easthampton's draft Comprehensive Stormwater Management Program	Preparation for this planned program has been limited to discussions at this time.	Produce literature for distribution at local Fall Festival and in a display in Municipal Office Building. Hold open forum with local boards and all interested parties to discuss potential modifications to our local subdivision control law and wetland regulations.
Revised					
2	Identify financial support for a Stormwater Program	DPW	Identify appropriate sources of funding assistance (grants) and apply for assistance in implementing portions of Stormwater Management Program	Due to severe local budget restrictions during this past fiscal year, no new sources of financial support were identified.	Target more grant programs with the aim of enhancing and evaluating the existing in-house data and mapping. Utilize existing budgets to whatever extent possible to continue stormwater management of municipal facilities and roadways.
Revised					
3	Target groups likely to impact stormwater	DPW	Produce literature targeting specific groups and activities which impact stormwater	Continued to compile a list of local contractors and land developers which must be made aware of, or brought up to speed on any new stormwater requirements. Development proposals brought before the City in the past year have been made aware of the requirement to file for the federal stormwater permit. Samples of specific literature have been collected, but a comprehensive brochure has not been prepared yet.	Finalize and publish literature for distribution. Prepare literature for broadcast on local public access television.
Revised					

4	Identify alternative information sources	DPW	Post links on local website(s) to CT River Watershed Council website and to MA DEP and USEPA websites	MA DEP, USEPA, and CT River Watershed Council websites have been reviewed, but links to each have not been implemented yet.	Contact City of Easthampton website administrator about adding links to the appropriate websites.
Revised					
5	Utilize local public access channel	DPW	Post public meeting notices concerning review of Easthampton Comprehensive Stormwater Management Program on local community access channel	No meetings have been held yet.	Plan and schedule public meetings and post on local Community Access Channel
Revised					
6	Develop, conduct, and document educational programs	DPW, CT River Watershed Council Liaison	City to appoint liaison to CRW Council to disseminate info on programs and activities of CRWC	Regional CR Watershed Coordinator's position was modified due to budget cuts. Former Coordinator was a city resident therefore a separate liaison was not needed. We no longer have that built in connection, therefore, a liaison must be appointed.	Meet with Mayor and/or City Council to solicit and appoint a new liaison.
Revised					

1a. Additions

7	Promote household waste recycling	DPW, Board of Health	Sponsor Hazardous Waste Recycling Days	Held two hazardous waste collection days in conjunction with the City of Northampton and a City wide Bulk Waste pick up on May 1, 2004.	Will continue to hold HW collection days on an annual basis, assuming budgets allow. Another Bulk Waste pick up was held in May 2005.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
8	Storm Drain Stenciling	DPW	Work with local youth groups to develop stenciling projects	Stenciling of catch basins was last done by an Eagle Scout candidate in 2002. No other youths have been recruited to continue the project.	A main thoroughfare will be reconstructed during the 2006 construction season, including replacement of all catch basins on the street. We will ask local schools and scout troops for volunteers to stencil the new basins upon completion of the roadway paving.
Revised					
9	Community Wetland Resource Area Clean-Up Days	DPW, Conservation Commission	City will encourage local stream clean-ups by local residents and youth groups. Solicit volunteers and sponsors in local access TV channel	Annual Community clean-up day held again this year. Clean-up along Nashawannuck Pond was included. Local business owner group along the pond provide funding and volunteer labor to keep edge of pond clean.	Try to expand clean-up day to include tributary streams feeding Nashawannuck Pond.
Revised					
10	Community Clean-Up Days	DPW	City to provide trucks and equipment for community clean-up efforts and disposal of waste	Annual Community Clean-up Day held in May. Clean-up Day has been held for last several years.	Continue Community Clean-up Day
Revised					
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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
11	Identify Financial Assistance for inventory and Mapping of Storm Drain System	DPW	Identify appropriate sources of funding assistance (grants) and apply for assistance in implementing portions of Stormwater Management Program	A grant application was submitted (Federal 604b Funds) for continued stormwater management work, however, the grant was denied. Grant requested funds to enhance our existing stormwater mapping.	Submit another grant request for 604b funding to do the same type of work. Watch for additional grant sources.
Revised					
12	Mapping and identification of outfalls and receiving waters	DPW	Continue to maintain and update maps of all outfalls and receiving bodies of water	Prior mapping of all known outfalls, drainage structures, and conveyances has been updated with new information obtained in the field. New catch basins installed and existing catch basins replaced were documented on plans. Original mapping did not accurately show the route of all pipelines from structure to structure, therefore, corrections and edits were made to the base map as information became available.	Continue to edit drainage system base map. Location of any un-mapped stormwater outfalls shall be determined and added to the maps. Stormwater systems on new subdivisions to be added as plans become available and systems are constructed.
Revised					
13	Identification/description of problem areas	DPW	Continue to develop and implement an Illicit Discharge Detection and Elimination plan.	Prior mapping and dry weather sampling has already identified and prioritized outfalls which require additional investigation. No new illicit connections were repaired.	Continue to investigate and correct, where feasible, known problem outfalls.
Revised					

14	Enforcement procedures addressing illicit discharges	Planning Board, City Council, Board of Health	Review whether local authority is appropriate and able to respond to potential illicit discharges. New bylaws, if necessary, to be proposed	Existing City of Easthampton Ordinances allow the Board of Health or their agent to enforce blatant illicit discharges. More study is needed to determine if existing ordinances are sufficient for proper enforcement of illicit discharge prohibitions.	Review existing ordinances as they pertain to illicit discharges into stormwater system or open water bodies.
Revised					
15	Public Information program regarding hazardous wastes and dumping	DPW, Board of Health	Provide educational brochures to residents promoting proper disposal of household hazardous wastes	A display is maintained by the Board of Health and the City Planner containing pamphlets and literature for a number of different good house keeping procedures as they pertain to household hazardous waste storage and disposal.	Maintain a supply of brochures at counter in municipal office building which explains potential problems with illicit dumping of hazardous waste.
Revised					
16	Initiation of Recycling Programs	DPW, Board of Health	Apply for funding assistance from DEP Recycling Grant Program for assistance in public education and the purchase of recycling materials	City currently maintains and operates a recycling center at the Highway Department Yard. Recyclables accepted are paper/cardboard products, glass, cans, bottles, plastics, metals, automotive batteries, and yard wastes. Waste oil is also collected and burned in waste oil furnaces in the Highway Department buildings. Bulky appliances are accepted if refrigerants are properly removed.	City Planning Department will continue to apply for grants as they become available for all phases of the recycling program.
Revised		Add Planning Department			

3a. Additions

17	Watershed Assessments and studies	DPW, Conservation Commission, Board of Health Add Planning Department	Identify opportunities for funding assistance from 604b and 319 grant programs and from MA DEM Lakes and Ponds Grant Program to support watershed assessment and implementation activities. Tasks can include design and installation of stormwater BMP's and public outreach including storm drain stenciling. Emphasis will be on assessments and remediation of stormwater related problems impacting water quality in Nashawannuck Pond, which has been identified as impaired on the DEP 303d list.	The US Army Corp of Engineers have funded a dredging feasibility study of Nashwannuck Pond in anticipation of dredging the pond in the future. The ACOE has moved forward with engineering plans required to dredge the Pond. A 319 grant provided funding to install 3 new enhanced treatment chambers (manufactured by Vortechnics) on three separate stormwater outfalls which discharge into Nashawannuck Pond and its tributary, Broad Brook. Also included was the installation of 8 new deep sump catch basins. Work was completed on these three installations during the past year. Water quality testing was done at the three outfalls for pre- and post-development conditions.	Applications will be submitted for any new grants which become available for stormwater work.
18	Watershed Assessments and studies	DPW, Water Department	Water Department will apply for funding assistance from DEP's Source Water Protection Program for grant assistance to develop wellhead protection plans and stormwater management plans within Zone II's	No new grants or funding assistance was obtained for Watershed Assessment.	Submit applications for grants to assist with a stormwater management plan within our Zone II's.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
19	Bylaw: Stormwater Management regulations for constructions sites 1 acre or larger	Planning Board, Conservation Commission, City Council, Board of Health, ZBA	Review model bylaw developed by DEP and Attorney General's Office	City Engineer researched model bylaws in preparation for working with local Boards toward adopting bylaw. Copies of bylaws from other area communities were obtained for use as a guideline for our bylaw.	Provide copies of model bylaw(s) to local Boards for review in anticipation of holding open public meetings to discuss the bylaw and educate the public about its need and usefulness.
Revised					

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
20	Bylaw: Require post-construction runoff controls	Planning Board, Conservation Commission, City Council, Board of Health, ZBA	Review model bylaw developed by DEP and Attorney General's Office.	City Engineer researched model bylaws in preparation for working with local Boards toward adopting bylaw. Copies of bylaws from other area communities were obtained for use as a guideline for our bylaw.	Provide copies of model bylaw(s) to local Boards for review in anticipation of holding open public meetings to discuss the bylaw and educate the public about its need and usefulness.
Revised					

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
21	Develop a municipal operations and maintenance plan	DPW	Using regulations and recommendations from DEP and EPA, develop and update an operations and maintenance plan to include proper disposal of street sweepings, catch basin cleanout, snow disposal, roadway de-icing procedures, vehicle washing, and outside storage of materials.	A review of existing municipal operations was completed by our consultant (Tighe & Bond) to study our existing Highway Department facilities and operations and prepare a Pollution Prevention Plan. The review was centered on Stormwater Management and on Spill Prevention and Control. The Spill Prevention and Control plan has been completed and implementation is under way.	Institute recommendations included in the Spill Prevention and Control Plan, including employee training and regular inspections of facilities.
Revised					
22	Develop Storm Sewer Inspection Program	DPW	Implement a formal inspection program, including maintenance logs and scheduling, for catch basin cleanings, repairs, and new installation.	City Engineer has begun preparations for program, including system to record maintenance, repair, and construction of storm sewer system.	Instruct department personnel in documentation of maintenance, repair, and construction of storm sewer system. Initiate formal record keeping procedure.
Revised					
23	Develop and implement training program for municipal employees	DPW	Send minimum of 5 public works employees to annual training seminars sponsored by relevant agencies and/or vendors.	City Engineer, Utilities Supervisor, Sewer Department Foreman, Water Department Foreman, and 5 other public works employees have attended seminars and trade shows associated with public works related operations.	Expand the attendance of seminars by employees involved in snow removal and street cleaning operations, sewer system maintenance and repair, and sanitary sewer maintenance connections.
Revised					

24	Review storm drainage infrastructure needs	DPW	Incorporate storm drain infrastructure review in Chapter 90 project utilizations	City engineer has included storm drainage improvements and maintenance in all Chapter 90 projects for the last several years. Improvements have been made by either municipal forces prior to contracted road work operations begin, or include drainage system work in Chapter 90 contract. An estimated total of 20 new catch basin installations were done in the past year, most of which were replacements of existing substandard basins which did not have adequate sumps to collect roadway sediments.	Continue to include storm drainage upgrades, wherever feasible, in all Chapter 90 work to be undertaken.
Revised					
Revised					
Revised					

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

No Tmdls Established In Easthampton

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
Revised					
Revised					

Revised					
Revised					
Revised					
Revised					

7a. Additions

Part IV. Summary of Information Collected and Analyzed

- Edits and corrections have been done to our stormwater system maps. Original mapping project located all drainage system structures (catch basins, manholes, headwalls, and culverts) by GPS methods. The map which resulted showed pipelines connecting structures according to the flow pattern. Some errors were made in the depiction of pipelines between structures. These errors must be systematically investigated and the map corrected. Some omissions were also made and they have been added to the map.

- As part of a 319 grant, three Vortechnic enhanced treatment stormwater chambers were installed along with 8 new deep sump catch basins at locations which discharge stormwater into Nashawannuck Pond and its tributary, Broad Brook.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	($)	0

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	500
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	No new teams
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes 0.1 mi.
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	2
▪ community participation	(%)	1%
▪ material collected	(tons or gal)	1000 gals.
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				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				
Accompanying Regulation Status (indicate with "**X**")				

Mapping and Illicit Discharges

Outfall mapping complete	(%)	95%
Estimated or actual number of outfalls	(#)	140
System-Wide mapping complete	(%)	95%
Mapping method(s)		
▪ Paper/Mylar	(%)	75%
▪ CADD	(%)	95%
▪ GIS	(%)	95%
Outfalls inspected/screened	(# or %)	64
Illicit discharges identified	(#)	11
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	90%
% of population on septic systems	(%)	10%

Construction

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

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

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)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Compost
Cost of sweepings disposal	($)	
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 %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	Y
Manual control spreaders used	(y/n)	Y
Automatic or Zero-velocity spreaders used	(y/n)	Y
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	N