Municipality/Organization: Town of Easton

EPA NPDES Permit Number: MAR041111

MassDEP Transmittal Number: W-

Annual Report Number & Reporting Period: **April 1, 2006 – March 31, 2007**

NPDES PII Small MS4 General Permit Annual Report
(Due: May 1, 2007)

Part I. General Information

Contact Person: Wayne P. Southworth Title: Director, Public Works

Telephone #: 508-230-0810 Email: wsouthworth@easton.ma.us

Mailing Address: 417 Bay Rd, South Easton, MA 02375

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: Wayne P. Southworth

Title: Director, Public Works

Date: 4/3/07

Part II. Self-Assessment – The Town of Easton has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions. A list of highlight activities which were accomplished during Permit year 4 are as follows:

The DPW sponsored annual Household Hazardous Waste collection day removed over $20,000 worth of chemical wastes from the community.

Water Division personnel have spoken before youth groups on water conservation and the importance of storm water management.

Both the Planning Board and Conservation Commission have been requiring BMP's for erosion and sediment control on all projects.

During Permit year 4, Easton's drainage system maps were completed as scheduled. The DPW has purchased a new "D" sized copier which will enable the scanning of the drainage system maps into a computer as soon as practicable. In addition, all of Easton's known outfalls have been shown on maps and located by street address. Over 90 percent of these outfalls were visited, inspected, and also photographed.

A dry weather stream sampling program was initiated this reporting period to characterize pollutant loads in Easton's streams if any, and to establish baseline water quality for future comparisons.

Easton has created a new position "DPW Operations Manager" whose duties include investigating and repairing drainage problems as soon they occur, and collecting field data of Easton's drainage system (catch basins, manholes, pipes, and culverts) and putting the data into digital format using spreadsheets for archiving and planning purposes.

With a view towards Storm Water Management, the DPW purchased a new catch basin cleaner which is more efficient than the old one and is capable of cleaning all of Easton's catch basins in one year rather than taking two years to clean all of its catch basins.

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
1A	Education Materials	Dept. of Public Works	Materials Posted and distributed	EPA, State, and town of Easton posters and handouts were displayed offered at town offices including "When It Rains It Drains", "Protect Our Health From Source To Tap", "Preliminary Data Summary of Urban Storm Water BMP's", "Free Consumer Publications from MADEP", Water A Vital Resource", "Annual Water Quality Report", and "The Canoe River".	EPA, State, and Local educational materials will continue to be displayed and distributed to the Public periodically.
Revised					
1B	Coordination with Others	DPW Director	Meetings held with Others	Benefits of Storm Water Regulations on the quality of drinking water were presented to the Public at the Water Division Open House. The DPW Director and Asst. Water Superintendent participated in Dr. Seuss day at the Easton Elementary Schools discussing Storm Water runoff. The Water Division conducted their annual Open House and poster contest with the theme of Storm Water Runoff. Coordination with the Canoe River Aquifer Advisory Committee regarding Storm Water Runoff was accomplished during this period. Water Division employees spoke before youth groups on water conservation and storm water runoff.	Coordination with others will continue to be part of Easton's Storm Water Management program.
Revised					
Revised					

1C	Use of Media	Dept. of Public Works	Local media used to promote Storm Water Management Program.	Cable television, the Easton Journal, and Easton's Internet was used to advertise and promote Storm Water Management related issues and events, including the Water Division Open House, Household Hazardous Wastes Day, airing of the Water Division Open House proceedings, displaying the winning bookmark storm water poster designs, and educating the populace on storm water information and issues.	Continued use of the local media will be used to promote Easton's Storm Water Management Program.
Revised					
1D	Citizen Watch Dog Group	Dept. of Public Works	Encourage Citizens to become "Watch Dogs"	Citizens were reminded of Easton's "Hot Line" to report any illegal dumping into our catch basins or streams, however, no calls were received during Permit Year 4.	The Dept. of Public Works will promptly investigate any reports of illegal dumping into our catch basins or streams.
Revised					
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
2A	Public Hearings	Planning and Zoning Board	Public Hearings on Storm Water Management held.	Task completed. No Public Hearings on Storm Water Management were scheduled for Permit Year 4.	None scheduled.
Revised					
2B	Local Interest Groups	Dept. of Public Works	Local interest groups contacted to support the Storm Water Management Program.	The Natural Resources Trust (NRT), Canoe River Aquifer Advisory Committee, School Committee, Boy Scouts, and Lions Club were contacted to continue their support of the Storm Water Management Program.	Local Interest Groups will continue to be contacted to support Easton's Storm Water Management Program.
Revised					
2C	Stream Cleanup Days	Dept. of Public Works	Stream Cleanup Days arranged.	A street clean-up day was conducted during Year 4 in lieu of a stream cleanup day. The Massachusetts Mosquito Control Office is contacted to cleanup any streams in serious need of clearing. In addition, the DPW conducts normal stream maintenance activities annually as needed.	Volunteer groups will continue to be asked to participate in street cleaning activities with the assistance of DPW personnel and equipment.
Revised			Stream Cleanup Days has been replaced with a Street cleanup day which is a much safer alternative for volunteer groups.		
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
3A	Drainage System Map	Dept. of Public Works	Drainage map developed.	Drainage system maps are completed and updated to include new subdivision drainage systems. A "D" sized scanner has been purchased to copy our drainage system maps into a computer.	The drainage system maps will continue to be updated to include new subdivisions as needed, and scanned into a computer.
Revised					
3B	Modify Existing Regulations	DPW Director and Storm Water Advisory Committee	Modification of existing regulations completed.	No further action was needed on this completed task. Existing regulations have been modified to reflect New storm water management requirements.	No action needed.
Revised					
3C	Identify Illicit Discharges	Dept. of Public Works	Establish a dry weather sampling program.	A field kit to sample the waters of our streams has been purchased and base line water quality has been established as part of our dry weather sampling program. In addition, Easton's outfalls were located by street address, visited and inspected, and photographs taken.	Our dry weather sampling of our steams will be continued and periodic visits will be made to our outfalls by DPW personnel.
Revised					
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
4A	Erosion/Sediment By-Laws	Storm Water Advisory Committee	Erosion and sediment control regulations in place.	No further action was needed on this completed task relative to erosion and sediment control.	No action needed.
Revised					
4B	Sanctions	Board of Selectmen	Sanctions written into by-laws.	No further action was needed on this completed task. Fines of $100 may be levied for any illicit discharges is enforceable.	No action needed.
Revised					
4C	BMP's for Erosion and Sediment Control	Planning and Zoning Board	Erosion and sediment control requirements written into by-laws	No further action was needed on this completed task. Erosion and sediment control requirements are included in Storm Water Management by-laws.	No action needed.
Revised					
4D	Control of Construction Wastes	Board of Health and Building Inspection Dept.	Site inspections conducted to assure compliance.	The Land Use Engineer and Building Inspection Dept. has inspected all construction sites as required.	Construction sites will continue to be inspected by the Land Use Engineer and Building Inspection Dept.
Revised					
4E	Information from Public	Chairman, Storm Water Advisory Committee	Establish a "Hot Line" for citizens to report violations.	Easton's "Hot Line" remains in place and residents reminded in their water bills to report all Storm Water Management violations.	Easton's "Hot Line" will continue to be maintained to take proper action on any reported Storm Water Management violations.
Revised					
4F	Inspection and Enforcement	Board of Health and Building Inspection Dept.	Inspection and enforcement procedures in place.	Land Use Engineer has routine inspected and enforced BMP requirements at construction sites.	Inspections and enforcements will continue at all construction sites and any violations reported to the Bd. of Health and/or Bldg. Inspection Dept.
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
5A	Enforce Existing Regulations	Federal, State, and Local Interests	Each agency enforces respective regulations.	As far as could be ascertained, each agency has enforced their own regulations.	Each agency is expected to continue enforcement of their own regulations.
Revised					
5B	Multi-Department Reviews	Planning and Zoning Board	Multi-Department reviews are conducted on all site plan and subdivision projects.	Multi-Department reviews between all affected departments were conducted for all projects.	Multi-departmental reviews will continue to be conducted on all projects.
Revised					
5C	O&M of BMP's	Planning & Zoning Board	O&M requirements stated in Storm Water Management By-Laws.	No further action was needed on this task. O&M requirements have been strictly enforced by the Planning Board and Conservation Commission as required by the Storm Water Management By-laws.	O&M requirements as stated in the Storm Water Management By-laws will continue to be enforced.
Revised					
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
6A	Develop/Implement/Enforce Good Housekeeping	Dept. of Public Works	Train DPW staff on good housekeeping.	At a DPW staff meeting, "After the Storm" was re-shown as a reminder of the importance of good housekeeping regarding storm water management. Staff supervisors were encouraged to stress the benefits of good housekeeping and storm water management to their respective staffs at monthly meetings.	DPW staff supervisors will continually be reminded to enforce good housekeeping efforts to their respective staffs.
Revised					
6B	Good Housekeeping	Dept. of Public Works	Adequate housekeeping implemented by the DPW	Parks and open space maintenance exercised proper disposal of grass and leaves, and use of pesticides. Street sweepings were disposed of properly. Catch basins were routinely cleaned. Strict erosion and sedimentation control measures were exercised during new construction and land disturbances. Fleet maintenance and washing were done in accordance with Wellhead Protection By-Laws. Salt and sand storage facilities were covered adequately. HHW days were held to dispose of hazardous wastes.	Enforcement and implementation of good housekeeping will continue to be practiced by the DPW staff.
Revised					
6C	Scheduling	Dept. of Public Works	Schedules developed for DPW O&M activities	During Permit year 4, the DPW Operations Mgr. computerized all O&M schedules for better tracking, planning and organizing of DPW operations.	DPW O&M schedules will continue to be tracked by computer and proper actions taken as needed.
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Educational materials obtained from the State and EPA together with involving the Natural Resources Trust, Canoe River Aquifer Advisory Committee, and Local interest groups in our Storm Water Management efforts seems to be an effective way of keeping Storm Water Management issues to the forefront.

The completion of our drainage system maps and locating, visiting, and photographing our outfalls is instrumental for archiving and detecting any illicit discharges. In addition, our dry weather sampling program has established baseline water quality for future comparisons which may assist in detecting possible illicit discharges.

Both the Planning Board and Conservation Commission have been requiring BMP's on all projects and together with follow-up inspections for compliance, has been effective in erosion and sediment control at construction sites.

The continued good housekeeping activities at the DPW has done their part in attaining Storm Water Management goals and objectives. DPW good housekeeping was enhanced by the purchase a new catch basin cleaner which because of its efficiency enables the cleaning of all of the town's catch basins in one year rather than normal two year cycle.

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, 2006 through March 31, 2007)

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		
▪ days sponsored **	(#)	
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
Regulatory Mechanism Status (indicate with "**X**")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					
Accompanying Regulation Status (indicate with "**X**")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					

Mapping and Illicit Discharges

	(Preferred Units)	Response
Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	

System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened **	(# or %)	
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	

Construction

	(Preferred Units)	Response
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 (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	

Low-impact development (LID) practices permitted and encouraged	(y/n)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	
Qty of structures cleaned **	(#)	
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	
• Hourly or per basin contract rate **	($/hr or $ per basin)	
• Disposal cost**	($)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	
• % Structures cleaned with vactor **	(%)	

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	
• Disposal cost**	($)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)

▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	