Municipality/Organization: **City of Gloucester**

EPA NPDES Permit Number: **MA041192**

MaDEP Transmittal Number: **W-035854**

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

NPDES PII Small MS4 General Permit
Annual Report

Part I. General Information

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Printed Name: John Bell

Title: Mayor

Date: 1 July 2005

Received 8/23/05

Part II. Self-Assessment

The City's aggressive commitment to its Phase II Storm Water Management Plan took shape in the second year of its NPDES permit. The technical advisory group (TAG), a collective gathering of municipal departments, addressed the city's need for enhancing stormwater management through public outreach and education, changes to city ordinance, encouraging low impact development strategies (LIDs), seeking grant sources for pollution identification and enforcement.

A strong financial commitment to the plan in year one, allowed for outsourced inspections of over 130 stormwater outfalls. The outfalls were photographed and recorded by GPS for a data layer in the citywide GIS. The stormwater was inspected for color, odor, noted dry/wet weather flow, estimated volume and sampled for water quality. As we begin our third year, a major undertaking is underway in developing a drainage systems map. As part of the $150,000 project, all paper record drainage plans were converted to a digital format. The second phase of this systems map is to conduct field inspections to determine drainage structure: size, material of construction, direction of flow, and age. The identification of the drainage basin area (watershed) will also be assigned to each drainage structure. A hydrolic model will be developed to assist in identifying and solving flood prone areas.

In addition to the drainage systems plan, we are currently involved in a grant written through CZM, and awarded to the City to assess the watershed to Good Harbor Beach. The project is primarily looking at bacterial contamination from stormwater outfalls, sewer lines, septic systems, and other sources. The results of the study will be added to the GIS and will be replicated in other watersheds to bathing beaches. A major task will be to involve the public in pollution prevention practices. This grant is being coordinated by the Gloucester Health Department and BETA Engineering.

With approximately 102 inches of snow fall this winter, cleanup presented a challenge to Public Works. With two street sweepers working up to 7 days per week, the majority of winter road sand has been cleaned from city streets. The Director of Public Works has committed to a bi-weekly street sweeping of the urban areas of Gloucester. Catch basin cleaning will follow the removal of all winter sand. As part of a much larger CSO remediation project, the City is identifying major illicit connections within its urban areas along the main interceptor sewer. During this inspection, the interceptor is being cleaned of all debris.

The City continues to encourage hazardous waste collection days and waste oil drop off. The Community Development Department has developed storm water fact sheets for pre and post construction as well as basic residential development. The Engineering Department sent flyers to all of their licensed drainlayers, demonstrating best management practices for construction sites, large and small.

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) – (Reliance on non-municipal partners indicated, if any)	Planned Activities –
	Classroom education on Storm Water	Outreach by Engineering/ ConCom	Teachers instruct classes and present material gathered in year one,	Outreach to the schools has been slower than anticipated, but the high school is currently working with a habitat restoration project and monitoring water quality	Year 3 of the permit will see much more involvement with the school department. A meeting with the Clean City Commission in June will highlight activities for Fall '05
	Flyer and brochure distribution	Engineering	Supply DPW, City Hall and Public Library with flyers and fact sheets.	Storm water related literature is posted by Engineering, Public Health, Community Development and the public library.	To continue with up dated information.
	Hazardous waste management	DPW	Bi-annual hazardous waste collection	A bi-annual, well advertised, hazardous waste collection at the Public Works garage.	A bi-annual, well advertised, hazardous waste collection at the Public Works garage.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – (Reliance on non-municipal partners indicated, if any)	Planned Activities –
	Adopt-A- Stream Program	ConCom/ Community Development	Establish Adopt-a-stream program	A series of non-municipal partners, city departments and volunteers are working to develop an official program. A series of stream cleanups have occurred this spring.	The projects will continue into the up coming years and the public/ private partnerships will continue to grow.
	Pond and Stream Cleanup and Monitoring	Community Development. Engineering	Organize stream clean up events	Extensive interest in cleaning and protecting receiving bodies from storm water.	Establish a schedule for clean up events for 2005-2006
	Stencil Storm Drains	DPW	Stencil 30 storm drains per year Maintain records of stenciled areas in Gloucester	Areas of priority have been established, but lack of funding for stencils and appropriate paint has prevented this from happening during year two.	A renewed public interest may give this life as we head to year 3. We will continue to identify priority areas of drainage, and push for funding for stencils and paint.
	Storm Water Steering Committee	Engineering	Quarterly meetings and during most TAG meetings.	An ad hoc committee has been established and is currently developing new policies and meeting regularly	Continue the work started in year two.

	Volunteer Monitoring	varies	Establish volunteer groups	Generally, the different remediation or clean up projects have follow up monitoring.	Further develop model to which volunteers can contribute to BMP monitoring.
	Pet Waste Collection	Health Dept. Animal Control	Continued enforcement of ordinances	Waste bags are provided at parks and known areas of dog walking. Budgetary restraints have lead to an unfunded program.	Search for funding and continue the service of providing clean up bags.

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**
	Inspect City Discharges	DPW/ Engineering/ Plumbing Inspector/ ConCom	Locate and inspect all municipal discharges	All city offices associated with discharge to storm systems are actively investigating illicit discharges. Much of the MS4's in the city center have been video inspected and cleaned.	Continue with year two activity and begin making repairs.
	Structure Mapping Development	Engineering	Locate and inspect all municipal catch basins, manholes and discharges	A $150,000 GIS data and mapping program is well underway. Many structures and discharges have been captured by GPS and mapped.	Year three will see continued efforts to locate and map the infrastructure. Development of the GIS will begin this year.

	Septic System Controls	Health Dept.	Continue septic system monitoring inspections Continue noncompliance enforcement activities	The Waste Water Management Plan continues to monitor septic systems in known priority drainage areas. Continue to educate residents about septic system maintenance	Continue monitoring under the WWMP.

	Non-storm water discharge Education	Engineering	Distribute flyers, posters and other materials for non-storm water discharge)	A series of informational posters have been placed where the public and construction professionals can see them	Continue with year 2 activities
	Non-storm water discharge Education	Engineering/ Plumbing Inspector/ ConCom	Enforce penalties for illegal dumping	Although fines have not been established, enforcement continues with education and mitigation.	As a city-wide storm water ordinance is further developed, fines will be incorporated into the ordinance.

4. Construction Site Storm Water Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – (Reliance on non-municipal partners indicated, if any)	Planned Activities –
	Ordinances Review and Update	Steering committee/ Engineering	Develop storm drain connection ordinance.	Steering committee is in the process of developing a city-wide storm water manual.	Finalize storm water manual.

	Construction Review	Engineering	Weekly reviews of construction activities	Not only are construction sites reviewed, but also Engineering reviews nearly 100 individual building sites annually for compliance with ordinances.	Continue the review of all ongoing and anticipated construction sites.
	Construction site storm water runoff control	Engineering	Develop/ Implement standard construction details and policies	Provide all contractors with educational and regulatory information to assists them in better management practices	Continue the outreach to contractors.

5. Post-Construction Storm Water Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) (Reliance on non-municipal partners indicated, if any)	Planned Activities –
	BMP Inspection and Maintenance	Planning Dept./ ConCom/ Health Dept/ DPW	Inspect all city BMPs once per year	Many of the structures have been inspected and a full-time mason is on the DPW payrole to make the needed repairs	As long as funding holds out, repairs will be made as soon as problems are recognized and as the drain systems map is developed a schedule of repair or replacement will be implemented.
	BMP Inspection and Maintenance	DPW/ Engineering/ Plumbing Inspector/ ConCom	Implement changes to BMPs based on inspection results	Similar to the above goal, as the BMPs are inspected, all necessary actions will be taken to implement change	Follow up the inspection with the necessary action

	Ordinance for Post Construction Runoff	Engineering	Develop storm drain connection regulations	Engineering has been successful in controlling the connections to storm drains. Only allowed in certain situations and in controlled environments	This will continue to evolve in the following years

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – (Reliance on non-municipal partners indicated, if any)	Planned Activities –
	Catch Basin Cleaning Program	DPW	Develop catch basin cleaning program Collect data	Basin cleaning continues by vacuum truck and a second truck has been purchased	As the GIS becomes available for use, a database of catch basin cleaning information will be entered and monitored for long term cleaning schedules
	Street Cleaning	DPW	Sweep streets once per year	Winter sand has been removed and bi-weekly sweeping of the urban areas is scheduled.	Continue with street cleaning practices.
	Pipe Cleaning	DPW/ Engineering	Clean drainage systems	Much of the city center has been cleaned of debris and sand build up.	Identify areas needed for cleaning.

	New Pipe and Structure Installation	DPW/ Engineering	Replace 475 feet of drainage pipe per year Replace 10 catch basins each year	Similar to the previous year, budget restraints have prevented the improvement of drains to the extent anticipated under the management plan.	We are hopeful the new fiscal year will bring money needed for the improvements.
	Investigate Municipal BMP's	DPW/ Engineering	Inspect three structural BMPs per year	All BMP's are under investigation for integrity and functionality.	This process will continue to evolve over the up coming three years.