

Municipality/Organization: TOWN OF GEORGETOWN, MA

EPA NPDES Permit Number: MAR041191

MADEP Transmittal Number: W-035530

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

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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: *C. Dan Ruffolo FOR P. TRAPANI B.O.S.*

Printed Name: Philip Trapani

Title: Chairman, Georgetown Board of Selectmen

Date: January 24, 2011

## Part II. Community Self-Assessment

The Town of Georgetown, MA, assisted by the Merrimack Valley Planning Commission, has completed the required self-assessment for the reporting period of April 1, 2008 – March 31, 2009 and has determined that our municipality is in compliance with the Small MS4 General Permit conditions.

### Narrative of Permit Year 6 Stormwater Management Activities and Accomplishments

During Permit Year 6, the Town of Georgetown initiated or completed a wide variety of minimum control measures aimed at reducing stormwater runoff generation and pollution, improving local receiving water quality, and educating municipal personnel and the general public about stormwater best management practices (BMPs). Important milestones included the following:

- Contracted inspection, maintenance, and cleaning of approximately 510 municipal catch basins and drain manholes, and the removal of accumulated sediment and debris from clogged storm drain outlets. Special attention was given to the storm drainage systems around the periphery of Rock and Pentucket Ponds, located to the west and north of downtown Georgetown, where sediment tends to accumulate more quickly from the tightly-clustered residences situated on small lots;
- Website posting and hardcopy distribution of public education materials on nonpoint source pollution and residential best management practices, including but not limited to: proper septic system use and maintenance, yard waste management, pet waste management, safe household hazardous waste use and disposal, and impervious surface area minimization;
- Installation of approximately 75 permanent metallic storm drain markers (“NO DUMPING – DRAINS TO RIVER/POND”) at selected high-risk storm drain inlets in more densely-developed neighborhoods;
- Implementation of municipal facilities and operations BMPs, including: storing of road salt and sand under cover; storing of oil and other chemicals under cover and in spill-proof containers; equipping sanding and salting trucks with ground control devices to limit materials use; and conducting annual litter and debris cleanup along all town roads;
- Issuance of Conservation Commission “Orders of Conditions” to ensure strict developer compliance with Georgetown’s local wetlands protection bylaw and regulations;
- Enforcement of Planning Board subdivision rules & regulations regarding construction and post-construction stormwater runoff and erosion control;
- Granting of property tax abatements under the Chapter 61 Program to promote the continued preservation of 14 key open space parcels (totaling 414 acres) for purposes of agriculture, horticulture, silviculture, and public recreation. Keeping these lands open and undeveloped helps Georgetown to achieve our stormwater management goals by maximizing rainfall infiltration and minimizing stormwater runoff. This, in turn, promotes replenishment of the town drinking water supply and maintenance of base flow in the Parker River and its tributaries, which are “stressed” waterways during low flow periods;
- Town expenditure of Community Preservation Act funds to acquire and permanently protect key open space for conservation and recreation purposes. During Permit Year 6, the following two parcels were accorded permanent protection from development:

<u>Parcel Map-Lot #</u>	<u>Date of Purchase</u>	<u>Area Preserved</u>
16-11F	7/5/2008	4.51 ac
16-12	9/30/2008	10.0 ac

- Upgrading of 39 deficient septic systems under the supervision of the Board of Health to bring the systems into compliance with state Title 5 Regulations. Five of the system upgrades were located near sensitive surface waters, including Rock and Pentucket Ponds which receive heavy primary contact use (swimming, water-skiing) during summer months;
- Board of Health distribution of septic system maintenance brochures to licensed septic contractors and homeowners, detailing the “Do’s” and “Don’ts” for keeping septic systems in good working order to protect public health and the environment; Board of Health sponsorship of annual Household Hazardous Waste Collection Day on 4/13/09. The licensed waste contractor collected approximately 3,190 gallons of HHW (oil based paints, paint thinners, cleaning products, etc.) from 217 households. In addition, CRTs were collected by the contractor Box Q.
- Participation in the Greenscape Alliance/North Shore “*Greenscapes 2008 Program*”, in partnership with the Ipswich River Watershed Association, Eight Towns and The Bay, and MVPC. Through this partnership, Georgetown distributed over 3,000 copies of an instructional reference guide to all Georgetown households. This guide offers homeowners a wealth of timely information and tips on environmentally-sound landscaping practices (such as rain gardens, permeable pavement, and native species plantings) that collectively curtail outdoor water use, reduce impervious surface cover, maximize on-site infiltration, and minimize NPS pollution.

### Summary of Prior Year Milestones (Permit Years 1-5)

As described in a previous (Permit Year 1) annual report, Georgetown’s permit eligibility with regard to “listed species” and “critical habitat” criteria was pending at the time of our Notice of Intent (NOI) submission in 2003. According to a review and analysis by the environmental program staff of the Merrimack Valley Planning Commission (MVPC), our MS4 discharges were determined to not pose a threat to the continued existence of any species protected under the Endangered Species Act. Final written confirmation of this determination by the U.S. Fish & Wildlife Service/New England Ecological Services Field Office (Concord, NH) was received by Georgetown subsequent to the submittal of our Permit Year 1 Annual Report and was forwarded under separate cover to both EPA and the MA DEP/Division of Watershed Management in May 2004.

During Permit Year 2, the Town of Georgetown initiated or completed a variety of minimum control measures aimed at preventing pollution, reducing storm water runoff generation, and improving receiving water quality. Major milestones included the adoption of an illicit discharge detection and elimination regulation, sponsorship of a community-wide household hazardous waste collection event, training of local personnel on low impact development (LID) techniques and municipal “good housekeeping” practices, institution of a digital (*Access-based*) Title 5 septic data management system, completion of an updated townwide open space plan in compliance with MA Department of Conservation and Recreation guidelines, acquisition and preservation of a key 46-acre wellhead protection area property (“Hampshire Woods”), and establishment of a public-private “stream team” partnership to plan and promote semi-annual riparian corridor cleanups as stream conditions warrant.

During Permit Year 3, important milestones included the contracted inspection and maintenance of municipal catch basins, priority outfall pipe inspections (by MVPC) for illicit dry weather flows, a community-sponsored household hazardous waste collection day, a second (expanded) training workshop on LID techniques and municipal operations best management practices for town personnel, the purchase of 1000 metallic storm drain markers (“*No Dumping – Drains To River/Pond*”) for student and general public education, acquisition of a 27-acre watershed parcel to protect the Parker River and town aquifer, and implementation of Open Space Residential Design (OSRD) zoning to help achieve balanced residential growth and open space preservation. [In 2005, the use of OSRD preserved 50% (80 acres) of three properties located upgradient from Rock Pond. These three properties would have been more extensively cleared and developed, with greater impervious surface coverage, under conventional subdivision design.]

During **Permit Year 4**, major milestones included the contracted inspection and maintenance of municipal catch basins; removal of sediment and debris from problem storm drain outlets; sponsorship of a community-wide household hazardous waste collection day; participation in a regional low impact development (LID) workshop hosted by MVP, CZM, and EPA; website posting and hardcopy distribution of homeowner education materials on lawn & garden care, household waste, and septic system best management practices; acquisition of the Bailey Lane Conservation Area, a 22-acre parcel of mixed forest and wetland that will be preserved in perpetuity by the Georgetown Conservation Commission for conservation and passive recreation; and partnership in the new *Greenscapes North Shore* initiative, a multi-organizational/multi-community public campaign to educate homeowners about stormwater runoff and NPS pollution reduction through the use of vegetated swales, rain gardens, rain barrels, and other landscape enhancement practices. As part of this effort, the Georgetown Highway Department's Stormwater Management Program, assisted by MVP and the Eight Towns & The Bay organization, funded the production and direct mailing of over 3,000 "2007 Greenscape Reference Guides" to all residential households in the Town of Georgetown.

During **Permit Year 5**, important milestones included the contracted inspection and maintenance of municipal catch basins; removal of sediment and debris from clogged storm drain outlets; website posting and hardcopy distribution of educational materials on residential best management practices, including but not limited to: proper lawn & garden care, household hazardous waste reduction and disposal, septic system maintenance, and impervious surfaces minimization; installation of permanent metallic storm drain markers ("*No Dumping - Drains To River/Pond*") at selected high risk storm drain inlets in densely-developed Rock Pond and Pentucket Pond neighborhoods and Downtown's "urbanized area"; development and presentation of Highway stormwater facilities (catch basins, drain manholes, outfall pipes) in Georgetown's "urbanized area"; issuance of Conservation Commission "Orders of Department training manual on municipal pollution prevention & good housekeeping practices; enforcement of Conservation Commission "Orders of Conditions" to ensure strict developer compliance with Georgetown's local wetlands protection bylaw and regulations; enforcement of Planning Board subdivision rules and regulations regarding construction and post-construction runoff and erosion control; acquisition and permanent preservation of a 7.8-acre open space parcel (Map 9A/Lot8F) adjoining Camp Denison Conservation Area; continued partnership in the *Greenscapes North Shore Program*, a multi-organizational, multi-community public campaign to educate property owners about stormwater runoff and NPS pollution control using practical, low-cost BMPs, such as vegetated swales, rain gardens, rain barrels, permeable pavement, and other landscaping techniques. As part of this effort, the Georgetown Highway Department's Stormwater Management Program, assisted by MVP and the Eight Towns & The Bay organization, again funded the production and distribution of over 3,000 "2008 *Greenscape Reference Guides*" to all residential households in Georgetown. The *Greenscape Guides* are scheduled to be mailed in May 2008.

#### **Summary of Year 6 Minimum Control Measures**

A matrix summarizing Georgetown's **Permit Year 6** activities and accomplishments for each of the following six minimum control measures is presented in Part III of this Annual Report:

- Public education and outreach
- Public involvement and participation
- Illicit discharge detection and elimination
- Construction site storm water runoff control
- Post-construction storm water management in new development and redevelopment
- Pollution prevention and good housekeeping in municipal operations

## Part III. Summary of Year 6 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 6 (Reliance on non-municipal partners indicated, if any)	Goal(s) – Permit Year 7
1.1	Stormwater Forums	Highway Dept./ Peter Durkee & MVPC/Alan Macintosh	Forum participation	Georgetown personnel and MVPC environmental staff, serving as stormwater consultants to the town, participated in several public forums sponsored by MVPC, Eight Towns and The Bay, and the Great Marsh Coalition to educate local public officials and staff about stormwater runoff impacts and municipal best management practices (BMPs), as well as low impact development techniques.	Assisted by MVPC, town personnel to continue to participate in stormwater education and training forums to remain informed on relevant Phase II issues and opportunities.
Revised					
1.2	Stormwater Management Website	Highway Dept./ Peter Durkee & MVPC/Alan Macintosh	User-friendly website with down-loadable educational fact sheets on residential BMPs	The Georgetown Highway Department, assisted by MVPC and Virtual Town Hall, Inc., maintained a user-friendly website containing a series of down-loadable residential BMP fact sheets (customized to Georgetown residents) on impervious surface area reduction, low impact development (LID) techniques, and fertilizer, yard waste, pet waste, HHW, used motor oil, and septic system management.	The Highway Dept. to continue to maintain the local stormwater management website with additional or updated down-loadable public education fact sheets and brochures on stormwater best management practices.
Revised					
1.3	Septic System Management	Health Board/ Deborah Rogers & MVPC/Alan Macintosh	Septic system maintenance flyer for public dissemination	The Georgetown Board of Health, assisted by MVPC, distributed additional copies of a septic system maintenance brochure (customized to Georgetown residents) detailing the "Do's" and "Don'ts" for keeping septic systems in good working order to protect public health and the environment.	The Board of Health to continue distribution of septic system maintenance brochures to licensed septic contractors and septic system owners.
Revised					
1.4	Household Hazardous Waste (HHW) Management	Health Board/ Deborah Rogers	Digital Title 5 data management system for improved records management and enforcement	The Board of Health continued to implement a Microsoft Access-based septic information management system, designed by MVPC and linked to GIS, that increases the capacity and efficiency of local health personnel to record, retrieve, query, analyze, and update key local septic system data.	Also, health board personnel to continue inputting on-site system file records into the Board's digital database to expedite and enhance Title 5 compliance.
Revised					
1.4	Household Hazardous Waste (HHW) Management	Health Board/ Deborah Rogers	Newspaper notice, HHW collection event, recorded volumes of residential HHW and CRTs safely disposed of	The Georgetown Board of Health contracted with Clean Harbors, Inc., to hold a Household Hazardous Waste Collection Day on April 13, 2009. Open to all town residents as well as neighboring communities (by fee), the event resulted in the safe removal of nearly 3,200 gallons of hazardous household products such as oil based paints and paint thinners, as well as used computer and TV monitors.	Funding permitting, the Board of Health to sponsor another annual HHW collection event
Revised					

1.5	Storm Drain Stenciling or Marking	Highway Dept./ Peter Durkee, MVPC/Alan Macintosh	Educate school students and residents about stormwater runoff pollution and BMP's; storm drain stenciling/markings;	The Highway Dept. installed approximately 75 metallic markers, purchased from Almetek Industries, Inc., with the messages, "No Dumping - Drains to River" and "No Dumping - Drains to Pond". The markers were installed at prominent locations in densely-developed commercial and residential neighborhoods, with a focus on the Town Center and neighborhoods surrounding Rock and Penucket Ponds. Additional markers will be installed during the coming year and beyond.	Highway Dept. to install additional metallic markers at strategic catch basin and drain inlet locations.
Revised					

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) - Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Goal(s) - Permit Year 7
2.1	Inter-departmental Stormwater Mgmt. Committee	Highway Dept./ Peter Durkee, Board of Selectmen/ Stephen Delaney, MVPC/Alan Macintosh	Appoint committee to assist Highway Dept. with development & implementation of municipal Storm Water Management Program (SWMP)	The Highway Surveyor, Town Administrator, Town Planner, Health Agent, other town personnel, and MVPC environmental staff continued to confer on the development and implementation of the town's Stormwater Management Program and other Phase II-related matters.	Members of the Stormwater Management Committee to continue to confer with MVPC environmental planners and other interested parties to solicit input, chart progress, and facilitate implementation of SWMP actions.
Revised					
2.2	Municipal Board Meetings	Highway Dept./ Peter Durkee, MVPC/Alan Macintosh	Confer with appropriate town boards and staff for input on municipal SWMP development.	The Highway Surveyor, assisted by MVPC consulted with various town board members and staff (Selectmen, Planning, Health, Conservation) for information and advice on the continued development and implementation of the SWMP.	See BMP #2.1 above
Revised					
2.3	Stormwater Mgmt. Website	Highway Dept./ Peter Durkee, MVPC/Alan Macintosh	See BMP #1.2 above	See BMP #1.2 above	See BMP #1.2 above
Revised					

2.4	"Traveling" Stormwater Kiosk	Highway Dept./ Peter Durkee MVP/Alan Macintosh	Traveling stormwater exhibit placed in prominent public places: town hall, library, public schools	The Georgetown Highway Dept., assisted by MVPC and Eight Towns & The Bay (8T&B), collected and developed additional stormwater pollution and BMP education materials as handouts and for future display on a kiosk to be rotated among prominent public facilities in Georgetown. During Permit Year 6, additional materials were prepared, including text and color graphics on various greenscaping and low impact development (LID) practices.	Funding and staffing permitting, and with assistance from MVPC, assemble an educational display for presentation on rotating basis in key public places.
Revised	Due to cost of and focus on "Greenscapes North Shore" campaign, kiosk purchase and display deferred to later date				

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) - Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Goal(s) - Permit Year 7
3.1	Locate/Map Storm Drain Outfalls	Highway Dept./ Peter Durkee, MVP/Alan Macintosh	Create GIS (Arcview) inventory and map of municipal storm drain outfalls	The Highway Dept., assisted by MVPC environmental and GIS staff, conducted additional field investigations and completed additional facilities mapping (via GPS). An estimated 100% of Georgetown's Urbanized Area (UA) outfalls have now been inventoried and mapped.	Assisted by MVPC, the Highway Dept. to maintain (and update as necessary) the GIS-based inventory & map of the town's Urbanized Area outfall pipes.
Revised					
3.2	Locate/Map Storm Drain Catch Basins & Manholes	Highway Dept./ Peter Durkee, MVP/Alan Macintosh	Create GIS (Arcview) inventory and map of municipal catch basins and drain manholes	The Highway Dept., assisted by MVPC, conducted additional field investigations and completed additional mapping (via GPS). An estimated 100% of Georgetown's UA catch basins and drain manholes have been inventoried and mapped.	Assisted by MVPC, the Highway Dept. to maintain (and update as necessary) the GIS-based inventory & map of the town's Urbanized Area catch basins and drain manholes.
Revised					
3.3	Develop, Adopt, and Implement Illicit Discharge By-law/Regulation	Board of Health/Deb Rogers, Highway Dept./ Peter Durkee, MVP/Alan Macintosh	Press release, public hearing, town by-law/regulation adoption	In March 2005, the Board of Health adopted an Illicit Discharge Detection and Elimination (IDDE) regulation ("Regulation Prohibiting Illicit Connections and Discharges to the Municipal Separate Storm Sewer System") The regulation is administered by the Board of Health with MS4 field information and support to be provided by the Georgetown Highway Department.	With information from the town's catch basin maintenance contractor and the Georgetown Highway Dept., the Board of Health to implement the IDDE regulation as resources permit.
Revised					

3.4	Track Illicit Connections	Highway Dept./ Peter Durkee, Health Dept./Deb Rogers, MVPC/Alan Macintosh	Develop inspection protocol; train inspectors; detect & document dry weather flows, flow sources, illicit pipe connections	No action.	MVPC to provide the Highway Dept. and Board of Health personnel with additional instruction on the identification of potential MS4 illicit connections and discharges.
Revised	Due to staffing and budget limitations, this task deferred to later date				
3.5	Remove Illicit Connections	Health Dept./ Deb Rogers	Elimination of non-municipal, non-stormwater discharges to the MS4	No action.	
Revised	Due to staffing and budget limitations, this task deferred to later date				

#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Goal(s) – Permit Year 7
4.1	Construction Site Runoff Control Bylaw/Regulation	Planning Board/Sara Buck, Highway Dept./ Peter Durkee, MVPC/Alan Macintosh	Public notice, public hearing, town adoption and implementation of construction site runoff control bylaw/regulation	The Planning Board, Conservation Commission, and code enforcement officer continued to regulate and monitor construction site sediment and runoff through implementation of the town's Subdivision Regulations and Erosion Control Bylaw.  [The Subdivision Regulations of the Code of Georgetown require construction site sediment and runoff control measures that are aimed at maximizing on-site storm water retention and minimizing soil erosion and sedimentation. Additional sediment controls are required under the Erosion Control Bylaw (Chapter 57)].	The Planning Board, Conservation Commission, and code enforcement officer to continue to regulate and monitor construction site sediment and runoff through implementation of the town's Subdivision Regulations and Erosion Control Bylaw.
Revised					
4.2	Slope Development Regulation	Planning Board/Sara Buck, Highway Dept./Peter Durkee, MVPC/Alan Macintosh	Public notice, public hearing, Planning Board adoption of slope development regulation as part of Subdivision Rules and Regulations	Assisted by MVPC, the town prepared an initial draft slope development regulation aimed at maximizing the retention of steep hill slopes in an undisturbed state and minimizing water quality impacts due to slope grading and soil erosion. Further review/revision of this regulation is required before its adoption.	Planning Board action is still pending on the proposed steep slope development regulation.
Revised	Due to staffing limitations, Planning Board action on draft steep slope regulation deferred to later date.				



4.3	Open Space Residential Development Bylaw	Planning Board/Sara Buck, MassAudubon/Kathy Leaby, MVPC/Alan Macintosh	Public notice, public hearing, town adoption of open space residential development (OSRD) bylaw	Assisted by Mass Audubon and MVPC, the town adopted an OSRD bylaw in 2004, patterned after the "Green Neighborhoods" model bylaw. The bylaw is aimed at maximizing prime open space retention (50% of lot area) and minimizing impervious surface cover/runoff through the use of creative "clustering" techniques. In 2008, the Planning Board continued to promote OSRD as the preferred development option as site conditions warrant.	Where deemed appropriate, the Planning Board and Conservation Commission to continue to encourage the use of Open Space Residential Development (OSRD) as the preferred development option over conventional subdivision development.
Revised					
4.4	Subdivision/Site Plan Review	Planning Board/Sara Buck	Ongoing administration of subdivision & site plan review process	The Planning Board continued to perform subdivision & site plan reviews in consultation with other town boards and departments in order to ensure project compliance with applicable development regulations and standards.	Ongoing
Revised					
4.5	Local Wetlands Regulation	Conservation Commission/Steven Przyjemski	Ongoing administration of local wetlands protection regulations, including issuance of Orders of Conditions to minimize/mitigate stormwater impacts on sensitive wetland resource areas	The Conservation Commission continued to aggressively administer the municipal wetlands bylaw and regulations in order to protect the town's wetland and water resources from adverse development impacts.	Ongoing
4.6	Open Space Preservation		Acquisition and preservation of key watershed parcels	Two private parcels totaling 14.51 acres were acquired by the town for conservation and recreation purposes.	Funding permitting, town to continue to acquire and protect key open space properties as opportunities arise

### 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 6 (Reliance on non-municipal partners indicated, if any)	Goal(s) – Permit Year 7
5.1	Post-construction Runoff Control Regulation	Planning Board/Sara Buck, Highway Dept/Peter Durkee, MVPC/Alan Macintosh	Public notice, public hearing, Planning Board adoption and implementation of post-construction runoff control regulation.	No action. (See "Revised" BMP description below)	Staffing permitting, Planning Board to draft a comprehensive town-wide stormwater management bylaw to cover all aspects of development-related

Revised	Rather than a separate regulation to address post-construction runoff control, the town has decided to draft and adopt a comprehensive stormwater management bylaw	Planning Board/w/ input from other town depts. And MVP	Public notice, public hearing, Town Meeting adoption and Planning Board implementation of comprehensive stormwater management bylaw	
5.2	BMP Operation & Maintenance Procedures	Highway Dept/Peter Durkee, MVP/Alan Macintosh	Written procedures & personnel training manual to ensure long term operation & maintenance of stormwater BMPs.	MVPC provided the Highway Dept. with a handbook on basic operation and maintenance procedures for the municipal storm drainage system.
Revised	Personnel/training deferred to later date			
5.3	BMP Evaluation Procedures	Highway Dept/ Peter Durkee, MVP/Alan Macintosh	Written procedures & personnel training manual to evaluate and refine BMPs for purposes of ensuring long term stormwater BMP effectiveness in minimizing water quality and habitat impacts.	No action  See BMP #5.2 above
Revised	Procedures/training manual deferred to later date			

### 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 6 (Reliance on non-municipal partners indicated, if any)	Goal(s) – Permit Year 7
6.1	Semi-annual Catch Basin Inspections & Cleanings	Highway Dept/ Peter Durkee	Improve quality of storm drain discharges by maximizing catch basin sump capacity and minimizing sediment & debris buildup	The Highway Department conducted spring and fall catch basin inspections and contracted catch basin cleanings as needed in order to maintain the hydraulic and sediment removal efficiencies of the municipal storm drainage system. In all, an estimated 510 catch basins were cleaned. Problem basins were attended to more frequently as needed.	The Highway Dept., through a private contractor, to continue to conduct spring and fall catch basin inspections and cleanings as needed.
Revised					
6.2	Annual Outfall Pipe Inspections & Cleanings	Highway Dept/ Peter Durkee	Maintain capacity and operating efficiency of municipal outfalls	The Highway Department inspected the municipal storm drain outfalls and removed accumulated sediment & brush as needed to maintain unobstructed flows and prevent ponding and erosion.	The Highway Dept. to continue to conduct annual outfall pipe inspections and cleanings as needed.

Revised					
6.3	Public Works BMP Training	Highway Dept/ Peter Durkee, MVPC/Alan Macintosh	Training session and materials for town highway & municipal maintenance crews, as well as planning, health, and conservation staff.	Assisted by MVPC, the town held an interdepartmental instructional meeting (w/ powerpoint presentation and accompanying handout materials) on municipal and residential low impact development (LID) techniques and municipal maintenance operations. Special attention was given to municipal pollution prevention and drainage system maintenance, with emphasis on the impacts of municipal practices on local hydrologic and water quality conditions.	
Revised					
6.4	Highway Dept. sponsorship of town-wide "Greenscapes" campaign	Highway Dept/ Peter Durkee, MVPC/Alan Macintosh, 8T&B organization/ Peter Phippen	Mailing of 3,000+ copies of "Greenscapes Guide" to Georgetown households in time for spring & summer landscaping/gardening seasons	The Highway Dept., in partnership with the Ipswich River Watershed Assoc., Eight Towns & The Bay, and MVPC, facilitated and funded the production and distribution of over 3,000 copies of the instructional manual "2008 Greenscapes North Shore Reference Guide" to all Georgetown households. This new guide offers homeowners a wealth of timely information and advice on environmentally-sound landscaping practices that reduce impervious surface cover, maximize on-site runoff infiltration, and curtail NPS pollution.	Funding permitting, Town to continue to participate in the various public education and outreach opportunities offered by the Greenscapes Alliance.
Revised	Replaced stream cleanup event due to wider public audience and broader environmental benefits of Greenscapes Program.				

**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) - NOT APPLICABLE**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) - Permit Year 6	Goal(s) - Permit Year 7
Revised					
Revised					
Revised					

## Part IV. Summary of Information Collected and Analyzed



During the summer of 2008, the Georgetown Board of Health collected weekly fecal coliform bacteria samples from the water column at Town Beach (American Legion Park) and at Camp Leslie on Pentucket Pond, an 84-acre recreational impoundment of the Parker River, the major waterway flowing through Georgetown.

On one occasion – July 2, 2008 – the bacteria level at Town Beach was in excess of the state swimming water standard. The fecal coliform count on that date was 326 CFU/100ml, and the Beach was ordered closed by the Georgetown Board of Health.

Suspected bacteria sources to Pentucket Pond include stormwater runoff, domestic pet waste, inadequately treated septic effluent, and wildlife (especially geese and ducks which frequent the pond.)

In addition to informing Board of Health decisions on swimming beach safety and beach closures, the Town's database on fecal coliform bacteria counts serves as a benchmark for evaluating changes in Pentucket Pond water quality over time.