

Municipality/Organization: TOWN OF GEORGETOWN, MA

EPA NPDES Permit Number: MAR041191

MADEP Transmittal Number: W-035530

Annual Report Number

& Reporting Period: No. 8 April 1, 2010 – March 31, 2011

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Nicholas Cracknell


Title: Town Planner

Telephone #: 978-352-5713

Email: ncracknell@georgetownma.gov

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: Philip Trapani

Title: Chairman, Georgetown Board of Selectmen

Date: May 1, 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, 2010 – March 31, 2011** and has determined that our municipality is in compliance with the Small MS4 General Permit conditions.

Narrative of Permit Year 8 Stormwater Management Activities and Accomplishments

During **Permit Year 8**, 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). Major milestones included the following:

- Expansion of the Town of Georgetown Stormwater Management Committee into a multi-departmental, multi-disciplinary committee comprised of the following standing members: Town Administrator, Town Planner, Highway Supervisor, Conservation Agent, Health Agent, and Water Superintendent. Advising and assisting the Stormwater Committee on an ongoing basis are planning and technical staff from the Merrimack Valley Planning Commission (MVPC), the Parker River Clean Water Association (PRCWA), and the Eight Towns & The Bay coalition (8T&B) of the Massachusetts Bays National Estuary Program. During Permit Year 8, the Committee and its advisors began meeting on a more regular (monthly) basis to enhance the Town's stormwater management capabilities and plan and prepare for the next NPDES Phase II General Permit issuance;
- Implementation of municipal facilities best management practices (BMPs), including: storing of road salt and sand under cover on an impervious surface; storing of oil and other automotive fluids in spill-proof containers and out of the elements; equipping sanding and salting trucks with ground control devices to regulate sand and salt applications; and conducting annual litter and debris cleanup along all town roads and rights-of-way;
- Inspection, maintenance, and cleaning of approximately 1,012 municipal catch basins and drain manholes, and the removal of accumulated sediment and debris from obstructed storm drain outlets. Special attention was given to the storm drainage systems in the downtown area and around the periphery of Rock and Pentucket Ponds. (The neighborhoods surrounding the two ponds contain tightly-clustered home sites where sediment, leaves, and lawn clippings tend to accumulate more quickly);
- Installation of additional permanent metallic storm drain markers (“NO DUMPING – DRAINS TO RIVER/POND”) at strategic storm drain inlet locations in more densely-developed residential neighborhoods;
- Continued town website posting and hardcopy distribution of public education materials on nonpoint source pollution prevention 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 reduction;
- Issuance of Conservation Commission “Orders of Conditions” (OOCs) as needed to ensure strict developer and homeowner compliance with Georgetown's local wetlands protection bylaw and regulations. During the current reporting period, conservation OOCs were issued for construction of a new house at 77A Thurlow Street, 5 new houses at 100 & 102 Pond Street, and a new house at 10 Pine Plain Road (Caribou Court). In addition, 14 conservation OOCs were issued for smaller construction projects involving septic systems, decks, and site/tree work;
- Promotion/pursuit of selected land acquisitions via donation or purchase to preserve open space and natural hydrologic conditions. Past year activities included acceptance of deeded acreage off of Caribou Court (Map 2/Lot A2) and off of Phillips Avenue (Parcel A). Additional acquisitions currently being explored include 34 acres of open space abutting the Crane Pond Wildlife Management Area (using CPA monies) and a 1-acre parcel off of Harris Way (donation);
- Continued enforcement of Planning Board subdivision rules & regulations, site plan review, and erosion control bylaw regarding construction and

post-construction stormwater runoff and soil erosion control. During Permit Year 8, the Planning Board and Town Planner, in consultation with the Stormwater Management Committee, drafted amendments to broaden and strengthen the regulations and to incorporate low impact development (LID) requirements where appropriate. These revised stormwater regulations are expected to be adopted at the Annual Town Meeting in May 2011. During the current reporting year, the Town boards and commissions reviewed, permitted, and monitored the following four residential development projects:

Project	Location	Acreage	Lots/Units	Development Type
Pondview Estates	100 Pond Street	7.3	7	Conventional Definitive Subdivision
Spofford Street	28 Spofford Street	80	14	Preliminary OSRD Subdivision
Caribou Court	10 Pine Plain Road	3.5	1	Definitive Subdivision - Court
77 Thurlow Street	Thurlow Street	3.5	2	ANR and Definitive Subdivision - Court

- In the Pondview Estates project, low impact drainage systems were required, including infiltration systems, water quality swales, and porous pavement. The project also included land donation to the abutting state forest;
- Continued granting of property tax abatements under the Chapter 61 Program to promote the preservation of 14 key open space parcels (totaling 414 acres) for purposes of agriculture, horticulture, silviculture, and passive public recreation. Keeping these lands open and undeveloped helps Georgetown to achieve our stormwater management goals by minimizing impervious surface areas, maximizing rainfall infiltration, and minimizing stormwater runoff. This, in turn, enhances groundwater recharge to the town's drinking water supply wells, as well as maintenance of base flow in the Parker River and its tributaries, which are "stressed" waterways during low flow periods;
- Upgrading of 26 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 water resources such as the Parker River and Rock and Pentucket Ponds;
- Continued 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. The same color brochure is available on the BOH website for public viewing and printing;
- Board of Health sponsorship of annual Household Hazardous Waste Collection Day on April 10, 2010 at the Penn Brook School. The licensed waste contractor (Clean Harbors, Inc.) collected 1,600 gallons of HHW (oil based paints, paint thinners, pesticides, cleaning products, etc.) from approximately 150 households. In addition, over 200 CRTs were collected for removal by the contractor Box Q.
- Water Department adoption of revised rules and regulations that prohibit the application of lawn chemicals on all Water Dept. lands and encourage water conservation by town residents, businesses, and institutions;
- Continued Town participation in the regional 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 instructional flyers to all Georgetown households. The flyers contained tips on water conservation and environmentally-sound landscaping practices (e.g., rain gardens, permeable pavement, reduced fertilizer use, native plant species) to help residents curtail their outdoor water use, reduce impervious surface cover, maximize on-site infiltration, and minimize nonpoint source pollution.

- Continued municipal employee education and training on stormwater management regulations and best management practices, as well as on creative land development and land preservation techniques, including participation in MVPC-sponsored regional stormwater management seminar (Northern Essex Community College, Haverhill, MA, November 17, 2010), Congress for New Urbanism (New Haven, CT, March 2011), American Planning Association Conference (Boston, MA, April 2011). Stormwater Committee members also completed the organizing and planning for several stormwater training workshops to be co-sponsored by Georgetown in the late spring of 2011 in partnership with several neighboring communities, the Parker River Clean Water Association, and a technical consultant.

Summary of Prior Year Milestones (Permit Years 1-7)

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 MVPC, 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 MVPC 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 area; inventorying and mapping of remaining municipal stormwater facilities (catch basins, drain manholes, outfall pipes) in Georgetown's "urbanized area"; development and presentation of Highway Department training manual on municipal pollution prevention & good housekeeping practices; issuance of Conservation Commission "Orders of Conditions" to ensure strict developer compliance with Georgetown's local wetlands protection bylaw and regulation; 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 MVPC and the Eight Towns & The Bay organization, again helped to fund the production of over 3,000 copies of the "*2008 Greenscape Reference Guide*" for distribution to all residential households in Georgetown. The *Greenscape Guides* are scheduled to be mailed in May 2008.

During **Permit Year 6**, noteworthy milestones included the following: inspection, maintenance, and cleaning of over 500 municipal catch basins, drain manholes, outfalls; website posting and dissemination of public education materials on NPS pollution and residential best management practices, including but not limited to: proper septic system use and maintenance, yard waste management, and safe household hazardous waste use and disposal; installation of approximately 75 permanent metallic storm drain markers ("*NO DUMPING - DRAINS TO RIVER/POND*") at various storm drain inlet locations; implementation of municipal operations BMPs relating to: sand and road salt storage and application, safe storage of oil and other automotive fluids, and removal of accumulated litter and debris along all town roads; issuance of Conservation Commission "Orders of Conditions" to ensure compliance with town wetlands protection bylaw and regulations; enforcement of subdivision rules & regulations regarding construction and post-construction stormwater runoff and erosion control; granting of Chapter 61 property tax abatements to 14 properties (totaling 414 acres) to promote their continued use for agriculture, horticulture, and other non-development purposes; expenditure of Community Preservation Act funds to purchase two private open space parcels (totaling 14.51 acres) for conservation and recreation; upgrading of 39 deficient septic systems to State Title 5 Regulation standards; sponsorship of annual Household Hazardous Waste Collection Day (3,190 gallons safely collected and removed); dissemination of "*2008 Greenscape Reference Guide*" to over 3,000 Georgetown households.

During **Permit Year 7**, important milestones included the following: inspection, maintenance, and cleaning of 510 municipal catch basins, drain manholes, and outfall pipes; installation of metallic storm drain markers at selected catch basin inlets; ongoing enforcement of the town wetlands bylaw and regulations, subdivision rules & regulations, erosion control bylaw, and site plan review to prevent nonpoint source pollution from construction and post-construction site runoff; granting of Chapter 61 property tax abatements to promote private open space preservation for conservation and passive recreation; upgrading of 33 septic systems in compliance with state Title 5 standards; safe collection and disposal of 1,600 gallons of household hazardous waste; and active participation in the Greenscape Alliance/North Shore's acclaimed multi-media stormwater public education program.

Part III. Summary of Year 8 Minimum Control Measures

The following matrix summarizes Georgetown's key Permit Year 8 activities and accomplishments for each of the following six minimum control measures:

- 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

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Goal(s) – Permit Year 9
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 various 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			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.

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., and Box Q to hold a Household Hazardous Waste Collection Day that resulted in the safe collection and removal of 1,600 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 additional permanent 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 Pentucket 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 8 (Reliance on non-municipal partners indicated, if any)	Goal(s) - Permit Year 9
2.1	Inter-departmental Stormwater Mgmt. Committee	Town Administrator/ Michael Farrell; Town Planner/ Nick Cracknell; assisted by MVPC / Alan Macintosh	Appoint committee to assist Highway Dept. with development & implementation of municipal Storm Water Management Program (SWMP)	The Board of Selectmen established an expanded, inter-departmental municipal Stormwater Management Committee (Town Administrator, Town Planner, Con Com Agent, Health Agent, Highway Supervisor, other town personnel), which continued to meet and deliberate 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 (along 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	Town Planner/ Nick Cracknell; assisted by MVPC/Alan Macintosh	Confer with appropriate town boards and staff for input on municipal SWMP development	The Town Planner, assisted by MVPC, consulted with various town board members and their staff for information and advice on the continued development and implementation of the SWMP.	See BMP #2.1 above
Revised					
2.3	Stormwater Mgmt. Website	Town Planner/ Nick Cracknell; assisted by 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), continued to develop and refine stormwater pollution and BMP education materials for use as handouts and for display on a kiosk to be rotated among prominent public facilities (Town Hall, Library, schools).	Funding and staffing permitting, and with assistance from MVPC, develop a strategy and schedule for disseminating educating flyers and brochures; assemble "walking" kiosk for display at public places frequented by the public		
Revised	Due to cost of and focus on "Greenescapes 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 8 (Reliance on non-municipal partners indicated, if any)	Goal(s) – Permit Year 9
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	Completed	Assisted by MVPC, the Highway Dept. to continue 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	Completed	Assisted by MVPC, the Highway Dept. to continue 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 and Adopt local Illicit Discharge Detection and Elimination (IDDE) Bylaw/Regulation	Board of Health/Deb Rogers, Highway Dept./ Peter Durkee, MVP/Alan Macintosh	Press release, public hearing, town bylaw/regulation adoption	Completed. (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 Revised	Track Illicit Connections Due to staffing and budget limitations, this task deferred to later date	Highway Dept./ Peter Durkee, Health Dept./Deb Rogers, MVP/Alan Macintosh	Develop inspection protocol; train inspectors; detect & document dry weather flows, flow sources, illicit pipe connections	MVP/PC provided Highway Dept. and Board of Health personnel with additional instructional materials developed by the New England Interstate Water Pollution Control Commission (NEIWPCC) for identifying and eliminating illicit non-stormwater connections and discharges to the MS4. Town personnel worked collaboratively with VHB, PRCWA, and neighboring communities to complete the planning and advertizing for an IDDE training workshop to be held in the spring of 2011.	Participate in the multi-community IDDE training workshop In collaboration with MVP/PC environmental planners, conduct additional interdepartmental training on illicit discharges detection, documentation, and elimination. Funding and staffing permitting, begin tracking illicit pipe connections to municipal MS4, with an initial focus on storm drain discharging to Rock and Pentucket Ponds, two heavily used recreational water bodies
3.5 Revised	Remove Illicit Connections Due to staffing and budget limitations, this task deferred to later date	Health Dept./ Deb Rogers	Elimination of non-municipal, non-stormwater discharges to MS4	No action.	

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Goal(s) – Permit Year 9
4.1 Revised	Construction Site Runoff Control Bylaw/Regulation	Planning Board/Nick Cracknell, Highway Dept./ Peter Durkee, MVP/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, Site Plan Review, and Erosion Control Bylaw. The Subdivision Regulations and Erosion Control Bylaw were reviewed, and a new, more comprehensive stormwater management bylaw has been drafted for Town Meeting adoption in May 2011.	The Conservation Commission, Planning Board, and code enforcement officer to implement and monitor construction site sediment and runoff through implementation of the town's Wetlands Bylaw & Regulations, new Stormwater Management Bylaw, Subdivision Rules & Regulations, and Site Plan Review.
4.2	Slope Development Regulation	Planning Board/Nick Cracknell, MVP/Alan Macintosh	Public notice, public hearing, Planning Board adoption of slope development regulation as part of Subdivision Rules and Regulations	No action. (Assisted by MVP/PC, the town previously 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.)	Planning Board action pending on 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/ Nick Cracknell	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 Permit Year 8, 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.	Ongoing
Revised						
4.4	Subdivision/Site Plan Review	Planning Board/ Nick Cracknell	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
Revised						
4.6	Open Space Preservation	Conservation Commission/Steven Przyjemski; CPC	Acquisition and preservation of key watershed parcels	Two small private parcels of approx. 1 acre each were protected by the town for conservation purposes. Two additional parcels totaling approx. 35 acres are being considered for possible future acquisition/preservation.	Funding permitting, town to continue to acquire and protect high priority open space parcels 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 8 (Reliance on non-municipal partners indicated, if any)	Goal(s) – Permit Year 9
5.1	Post-construction Runoff Control Regulation	Planning Board/ Nick Cracknell; with input from other town staff and MVPC/Alan Macintosh	Public notice, public hearing, Planning Board adoption and implementation of post-construction runoff control regulation.	As referenced above, a new comprehensive stormwater management bylaw has been drafted for Town Meeting adoption in May 2011. (See "Revised" BMP description below)	See discussion above.

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 MVPC/ Alan Macintosh	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, MVPC/Alan Macintosh	Written procedures & personnel training manual to ensure long term operation & maintenance of stormwater BMPs.	Highway Dept. familiarization with handbook instructions on basic operation and maintenance procedures for the municipal storm drainage system. Ongoing implementation of best management practices
Revised	Personnel training deferred to later date			
5.3	BMP Evaluation Procedures	Highway Dept/ Peter Durkee, MVPC/ 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 7 (Reliance on non-municipal partners indicated, if any)	Goal(s) – Permit Year 8
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 1,012 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.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	
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.	MVPC provided employee instruction (w/ powerpoint presentation and accompanying handout materials) on municipal and residential low impact development (LID) techniques and municipal maintenance operations BMPs. 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" education materials to Georgetown households in time for spring & summer landscaping and gardening seasons	Funding permitting, Town to continue to participate in the various public education and outreach opportunities offered by the Greenscapes Alliance. Such participation may include the townwide mailing of a new Greenscapes educational flyer, as well as periodic emailings of residential BMP messages.
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 8	Goal(s) – Permit Year 9
Revised					



Part IV. Summary of Information Collected and Analyzed



During the summer of 2010, 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 – August 6, 2010 – the bacteria level at Town Beach was in excess of the state swimming water standard. The fecal coliform count on that date was 261 CFU/100ml, and the Beach was ordered closed by the Georgetown Board of Health.

Similarly, on two occasions – August 5 and 6, 2010 – the bacteria levels at Camp Leslie exceeded the state swimming water standard. The fecal coliform counts on those two dates were 2,400 CFU/100ml and 571 CFU/100ml, respectively, and the swimming area was temporarily closed.

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.