

GROTON

PUBLIC WORKS

MEMORANDUM

TO: Town of Groton Residents

FROM: Gary Schneider, Director of Public Works



DATE: December 8, 2014

**SUBJECT: 2014 SWMP Annual Report
Stormwater Phase II Compliance by Town of Groton**

As required by the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, the Public Works Department must submit a Stormwater Management Plan (SWMP) Annual Report, summarizing the progress of the Town in 2014 towards full compliance of the permit.

As part of our requirement, a draft copy of this year's SWMP Annual Report is being made available at the Town Hall Annex and the Groton Public Library as well as the Town's website for public review and comment for 30 days, ending on January 7, 2014. Please direct public comments to the Public Works Department at (860) 448-4083 or e-mail them to kdoundoulakis@groton-ct.gov.

When the review period is over, the final 2014 SWMP Annual Report for the Town of Groton will be submitted to the Connecticut Department of Energy & Environmental Protection.

2014 SWMP ANNUAL REPORT
Town of Groton SWMP Update for the Discharge of Stormwater from Small MS4s
December 31, 2014

The Department of Public Works (DPW) has reviewed the Town of Groton's Stormwater Management Plan (SWMP) which was developed to comply with the Connecticut Department of Energy & Environmental Protection (DEEP) General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s). A progress summary towards implementing the best management practices (BMPs) identified in the Town's Part B registration for the General Permit submitted to the DEEP follows below. The BMPs are grouped by the six minimum control measures. BMPs which have an asterisk (*) before them have different numbers in the Stormwater Management Plan and the Part B registration. This is because the SWMP was mostly completed prior to the availability of the Part B registration form. The numbering scheme in the SWMP was not adjusted to match the Part B registration. Both numbering schemes are identified below where different.

Control Measure 1: Public Education and Outreach

The Town has implemented a public education program to distribute educational materials to the community to achieve the goals of this control measure. A public outreach strategy was developed using suggestions from the EPA's MS4 Program Evaluation Guidance. In order to streamline the public education program, the following message was developed: Small preventative measures incorporated into regular everyday activities like lawn and auto care and pet waste disposal can help prevent contaminated pollutants from reaching the waterbodies we use for swimming, fishing and drinking water.

BMP #1-1 Article/brochure about stormwater in an annual mailing

In compliance for 2014

For 2014, the Town decided that instead of an annual mailing, it would embrace social media and periodically posted information concerning Stormwater issues on the Department of Public Works Facebook Page.

BMP #1-2 Stormwater information provided on local cable access

In compliance for 2014

The Non-point Education for Municipal Officials (NEMO) video, "Luck Isn't Enough, the Fight for Clean Water", that covers stormwater management topics pertinent to coastal towns along Long Island Sound was aired once in February, two times in June, once in July, five times in October and five times in November in 2014. The DEEP's public service announcement '*Clean Water Starts With You*' part of the Think Blue Connecticut initiative, was also aired twenty times. These programs ran on GMTV Channel 2 on Comcast Cable of Groton and Thames Valley Communications that cablecast to approximately 40,000 homes

in Groton, Stonington, North Stonington, Ledyard and Voluntown. GMTV is also available through streaming video on the State's website.

BMP #1-3 Stormwater information provided on the Town's website

In compliance for 2014

In accord with Control Measure 3, the DPW developed a stormwater webpage hosted on the Town's website to inform the public about the hazards associated with improper waste disposal and illegal discharges to the MS4. The stormwater webpage went live on October 23, 2006, and included discussion of the Town's stormwater management issues. In 2007, the webpage was updated to include information about catch basin cleaning, the Town's Illicit Discharge Detection and Elimination (IDDE) Program, and how the average resident can prevent stormwater pollution. Information on the IDDE Program was updated in 2010. The webpage is updated annually to inform citizens of the availability of the annual report and correct any outdated information.

BMP #1-4 Educate dog owners about picking up dog waste

In compliance for 2014

The DPW decided upon a brochure supported by the Long Island Sound Study (LISS) entitled "Step by Step, A citizen's guide to curbing polluted runoff" as one of its primary topics is the proper disposal of dog waste. The Town Clerk's Office distributes this brochure with every dog license.

BMP #1-5: Install and maintain no dumping signs at coastal access areas

In compliance for 2014

In accordance with the SWMP, the Town DPW inspects "coastal access point" and "no dumping" signs on a semi-annual basis. Signs were inspected on April 28th and November 21st. No signs needed replacing this year.

BMP #1-6 Annual update of the Stormwater Management Plan to the Town Council

In compliance for 2014

The annual report for 2014 was forwarded to the Town Council in the month of December.

Control Measure 2: Public Participation and Involvement

The public needs to be involved in developing and implementing the SWMP.

***BMP #2-1: Stormwater Committee meetings (BMP 2-3 in Part B registration to DEEP)**

In compliance for 2014

Stormwater Committee Meetings were held on April 15th and October 22nd. At the meeting members discussed the DEEP General Permit Renewal, the status of BMP implementation and the annual report.

BMP #2-2: Comply with state public notification guidelines

In compliance for 2014

The notice for public review of this year's SWMP annual report was posted in the newspaper on December 5th. Copies of the report were made available to the public at the Town Hall Annex located at 134 Groton Long Point Road, Groton, the Groton Public Library located at 52 Newtown Road, Groton, and on-line on the Town's webpage.

***BMP #2-3: Involve the public in developing and implementing the draft SWMP and in reviewing the annual report (BMP 2-1 in Part B registration to DEEP)**

In compliance for 2014

The original SWMP stated that public notices should be posted and a public workshop held during which the number of people in attendance is recorded. A public workshop where five people attended was held on May 17, 2004 to present the draft SWMP and receive comments. Subsequently, since 2005, we now notify the public by public notice, providing a 30-day review in December that copies of the SWMP Annual Report are available at the Town Hall Annex, the Groton Public Library, and on-line for public review and comment. The notice of review is also posted on the Town's Stormwater Webpage and the Town's Facebook page.

BMP #2-4: Sponsor community participation event

In compliance for 2014

The Navy coordinated a streamside cleanup of Fort Hill Brook at Sutton Park on April 25th through the Parks Department. There were about 20 participants.

A Household Hazardous Waste Collection Day took place this year on July 19th where over 315 households from Groton participated. This event helps eliminate illegal dumping of waste that could otherwise pollute stormwater.

Control Measure 3: Illicit Discharge Detection and Elimination

This control measure requires BMPs for developing a map showing the Town's outfalls, developing an ordinance prohibiting non-stormwater discharges, and developing, implementing and enforcing a plan to detect and eliminate illicit and non-stormwater discharges.

***BMP #3-1: Conduct dry weather outfall screening (BMP 3-6 in Part B registration to DEEP)**

In compliance for 2014

The Town conducted dry weather outfall screening in 2005 and 29 outfalls were found to have dry weather flows which were sampled and prioritized based upon their chemical composition. These 29 outfalls were revisited and sampled as part of the Town's Illicit Discharge Detection and Elimination (IDDE) Program (discussed under BMP #3-3).

***BMP #3-2: Map stormwater collection system, outfalls, and receiving waters (BMPs 3-1, 3-2, and 3-3 in Part B registration to DEEP)**

In compliance for 2014

The Town's catch basins, drain manholes, stormwater pipes, and outfalls (with a diameter 12" or greater) have been identified, inspected and placed into the Town's Geographic Information System (GIS). The name and Surface Water Quality Classification of the immediate surface waterbody or wetland to which an outfall discharges and the corresponding watershed was also defined in GIS. If the outfall does not discharge directly to a named waterbody, the name of the nearest named waterbody to which the outfall eventually discharges was used.

BMP #3-3: Develop, implement, and enforce a plan to identify and remove existing illicit discharges to the MS4 (BMP 3-4 in Part B registration to DEEP)

In compliance for 2014

In 2005, the Town located 29 outfalls with dry weather flow that were then sampled and prioritized based upon their chemical composition (BMP #3-1). The DPW contracted with Camp Dresser & McKee Inc. (CDM) to conduct field investigations of the prioritized outfalls and their associated watershed areas, with the purpose of locating and commencing the process of removing illicit connections if there are any as part of the Town's IDDE Program.

Phase I (Determine if Dry Weather Flow is from an Illicit Source) was conducted during periods of dry weather (no rain for 72 hours) during the summer months of 2007. CDM identified 7 outfalls of concern for the Town of Groton. All of these outfalls had dry weather flow that was not easily attributed to a source of no concern.

CDM completed further tracking of these 7 outfalls in the upstream reaches of the drainage system as part of Phase 2 (Track Sources of Illicit Discharges) in September 2008. Phase 2 of the project included the following tasks:

- Field inspections within each drainage system to determine where the dry weather flow enters the system and what parts of the drainage system do not have dry weather flows;
- Sampling and laboratory testing within the drainage systems to better characterize the extents of the constituent of concern and try to isolate where along the drainage system the pollutants enter the system; and
- Television inspection of specific sections of pipes within the drainage systems to identify possible illicit connections or locate where natural sources are entering the drainage system.

The results of the field inspections, dry weather sampling and television inspection showed no illicit connections within the drainage systems analyzed under Phase 2. However, a series of cracks, holes, joint separations, and root penetrations were identified and are the reason for dry weather flows within various drainage systems. In all cases, the elevated constituent concentrations can be attributed to groundwater inflow from pipe and structure defects. One of the pipe segments was determined to be privately owned and not part of the Town system. Replacement of one of the pipe segments was completed this year. The remaining pipe segments will be replaced as part of upcoming drainage improvement projects during the next construction season.

BMP #3-4: Evaluate and change procedures if necessary for inspecting new construction for correct connection to the sanitary sewer

In compliance for 2014

The procedures for inspecting the connection to the sanitary sewer to avoid connections to the stormwater collection system have been reviewed by the Town of Groton Building Official. Under Chapter 15 section 15-123 of the Town of Groton ordinance, the Town Building Official must approve any building's plumbing prior to connection to the public sewer. This office performs inspections of all new connections to the Town's public sewer system. Plumbing connections to the stormwater drainage system is not allowed and a certificate of occupancy will be issued only if the plumbing is correctly connected to the Town's sewer system.

BMP #3-5: Develop an ordinance to prohibit non-stormwater discharges

Partially in compliance for 2014

Public Works is working with the Town Attorney to draft the ordinance.

BMP #3-6: Monitor six representative outfalls. (BMP S-1 in Part B registration to DEEP)

In compliance for 2014

5 samples were collected for sample year 2014 on September 25th. A copy of the Stormwater Monitoring Report is attached as Appendix A. One sample could not be collected during this monitoring event with the others as the outfall was dry. The Outfall was later sampled on November 24th; however, analytical results are not yet available.

Control Measure 4: Construction Site Runoff Control

The Town has developed the following BMPs to reduce pollutants in stormwater runoff from construction activities.

BMP #4-1: Review land use regulations to meet requirements of MS4 permit and E&S Guidelines. Erosion control plan for construction sites 1 acre in area

In compliance for 2014

Amendments to the Town of Groton Zoning Regulations proposed by the Zoning Commission were approved on April 24, 2011. The amendments include refinements to current erosion control requirements, updated stormwater quality and stormwater management standards, and changes to landscaping provisions.

BMP #4-2: Require a waste management plan at construction sites larger than one acre. Add requirement to zoning regulations

In compliance for 2014

This BMP is addressed in the aforementioned amendments to the Town of Groton Zoning Regulations in Section 6.14-2(K).

BMP #4-3: Notify construction site operators of the requirements for registration under "General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities"

In compliance for 2014

The OPDS holds staff review meetings for all large or complicated projects (new roads, physical constraints, or subdivisions with more than two or three lots). During these pre-construction meetings, the status of state permits and findings are reviewed. If five acres or more are disturbed, the OPDS notifies the developer to register for this DEEP general permit. Four pre-construction meetings were held in 2014. OPDS has also added the following notice to the post approval subdivision, site plan and contractor's checklists as well as to the special permit application checklist:

If this project disturbs more than five acres of land, regardless of phasing, the developer or builder must submit a registration for the Connecticut

Department of Energy & Environmental Protection (DEEP) general permit for stormwater discharge. This registration must be submitted at least 30 days prior to the start of construction. More information can be obtained by calling the DEEP at 860.424.3018.

BMP #4-4: Consideration of public input for projects 1 acre or greater

In compliance for 2014

Currently any project requiring approval by the Planning Commission or Inland Wetlands Agency is presented at a public meeting. Projects not presented at a public meeting will be posted to the Town's website. The OPDS has not had any projects that fall into this category in 2014.

BMP #4-5: Inspect erosion and sediment controls

In compliance for 2014

The OPDS staff has been inspecting erosion and sediment controls at construction sites with a wetlands permit or a land use permit. The OPDS developed a formal inspection checklist to address the degree of compliance to the Soil Erosion and Sediment Control Plan for construction sites of one acre or greater and completed forms are filed with the project folder.

Control Measure 5: Post-construction Stormwater Management in New Development and Redevelopment

The Town has amended zoning regulations to require developers to use specific standards in designing and constructing stormwater controls and for developers to address long-term maintenance of structural stormwater controls. This may include a long-term bonding component to ensure compliance.

***BMP #5-1: Develop regulations to apply requirements of the Connecticut Stormwater Quality Manual to the entire Town. Present the regulations to the appropriate land use commission (BMPs 5-2 and 5-3 in Part B registration to DEEP)**

Partially in compliance for 2014

This BMP is addressed in the aforementioned amendments to the Town of Groton Zoning Regulations in Section 6.14-1. Noank (a political subdivision of the Town which has its own Zoning Commission) was provided a draft of the Town's language as well as a letter advising them of this requirement. To date, the Noank Zoning Commission has not adopted these amendments into their zoning regulations. The Town OPDS will be proposing this amendment to the Noank Zoning Commission.

***BMP #5-2: Specify a stormwater BMP manual to be used for consistent design and performance standards (BMP 5-1 in Part B registration to DEEP)**

In compliance for 2014

This BMP is addressed in the aforementioned amendments to the Town of Groton Zoning Regulations in Section 6.14.

***BMP #5-3: Ensure long-term maintenance of private structural BMPs (BMP 5-4 in Part B registration to DEEP)**

In compliance for 2014

This BMP is addressed in the aforementioned amendments to the Town of Groton Zoning Regulations in Section 6.14-2(K)(5).

Control Measure 6: Pollution Prevention/Good Housekeeping for Municipal Operations

The Town has developed and implemented BMPs for good housekeeping practices and pollution prevention at its municipal facilities and for maintenance of its drainage system.

BMP #6-1: Develop training session within the Town

In compliance for 2014

A 30-minute training session has been developed to give to DPW staff during their annual Stormwater Pollution Prevention Plan (SWPPP) training about the location of sensitive receptors and why special protection is needed. Included is a 19 minute video titled *Stormwatch: Municipal Stormwater Pollution Prevention* by Excal Visual which discusses Phase I and Phase II regulations, BMPs, Good Housekeeping and Preventive Maintenance, and spill response. SWPPP training is conducted annually in December.

Golf Course personnel are included with the Fleet Division/Facilities Maintenance training session which includes Spill Prevention Control and Countermeasures (SPCC) and SWPPP training as well as the SWMP training. Parks Maintenance are included with the Roads and Streets Division which mainly focuses on the SWMP BMPs as they work more around the Town than at the facility.

***BMP #6-2: Street sweeping (BMPs 6-2 and 6-3 in Part B registration to DEEP)**

In compliance for 2014

In 2014, 100% of Town owned streets have been swept at least once and 95% of Town owned streets were swept at least twice.

The Roads and Streets Division spent 1,361 hours sweeping streets and approximately 977 cubic yards of residuals were collected between January and November. Records of sweeping schedules and daily volume of residuals

collected are maintained in a Daily Street Sweeping Report Log Book and on an Excel spreadsheet.

In winter 2008-2009, the Town switched to using treated salt for road de-icing instead of the sand/salt mixture that was used in the past. The Town has seen a huge reduction in spring cleanup activities.

***BMP #6-3: Minimize impacts from municipal vehicle washing (BMP 6-6 in Part B registration to DEEP)**

In compliance for 2014

All vehicles are washed inside wash bays where wash water is collected and drained to an oil/water separator and is discharged to the sanitary sewer. Oil/water separators are inspected semi-annually. Oil/water separators at the Town Hall Annex Complex (20-Bay Garage, the Fuel Island, the VMF and the Parks Maintenance Building) were pumped by a licensed hauler on May 20, 2014. The Oil/water separator at the WPCF has been removed as no washing of vehicles takes place at this facility.

***BMP #6-4: Minimize impacts from municipal vehicle maintenance (BMP 6-7 in Part B registration to DEEP)**

In compliance for 2014

As in previous years, all hazardous wastes in 2014 were manifested out. In addition, storage and containment areas at the Town Hall Annex Vehicle Maintenance Facility and Parks Maintenance Facility were inspected quarterly and spill kits inspected monthly.

***BMP #6-5: Catch basin cleaning and storm drain maintenance (BMP 6-4 in Part B registration to DEEP)**

In compliance for 2014

From January to November 2014 (latest data available), the Town spent 360 hours cleaning and inspecting catch basins and 865 hours cleaning and inspecting waterways. Due to capacity limitations of the storage area, the Town selectively cleaned catch basins to ensure the function of the storm drain system. The Town is currently researching a new storage area for catch basin cleanings. Additionally, the Town's switch to using treated salt for road de-icing instead of the sand/salt mixture that was used in the past reduced the amount of sediment that needs to be removed from catch basins.

The Town is continuing to track the catch basins which have been cleaned and the amount of sediment removed and the information is recorded on an Excel spreadsheet.

***BMP #6-6: Storm drain maintenance (BMP 6-5 in Part B registration to DEEP)**

In compliance for 2014

From January to November 2014, the Town logged 2,186 hours for maintenance, repairs, and upgrades to the drainage system.

***BMP #6-7: Public grounds maintenance (BMP 6-8 in Part B registration to DEEP)**

In compliance for 2014

At the Flanders Road Transfer Station the Town does maintenance on the 56 acres of closed landfill. The Town sends soil samples to the State and the results are used to determine the necessary degree of fertilization. This year, as there was sufficient groundcover, no soil samples were collected and no fertilizer was used. If necessary, soil samples will be collected in the spring of 2015 to determine if fertilizer is necessary. Records will be kept of any applications and no herbicides or pesticides are used. The Transfer Station lawns, however, are the responsibility of the Department of Parks and Recreation who likewise only fertilize the grounds. As yet, the closed landfill at Welles Road has not been fertilized since its closure as the organic content has been sufficient to support the grass.

For roadside spraying, the Town uses a contractor and records are kept of the applications of herbicides. The 26 roadside areas which have been identified as having sensitive wetland adjacent were sprayed with an environmental sensitive chemical.

Parks Maintenance from the Department of Parks & Recreation is responsible for public grounds maintenance. The Parks Maintenance Foreman maintains a Connecticut Custom Grounds License that requires him to keep a very regimented parks maintenance program that includes maintaining Ornamental & Turf Pesticide Application Records and submitting a Commercial Applicator Pesticide Use Summary Report to the DEEP. Soils are tested in the late fall and grounds are fertilized accordingly in April. Additionally, athletic fields are fertilized every 8 – 10 weeks as necessary.

***BMP #6-8: Pooper scooper stations and signs (BMP 6-9 in Part B registration to DEEP)**

In compliance for 2014

Dog waste stations are maintained at the following locations:

- Poquonnock Plains Park (2 stations with signs)
- Farquahar Park
- Esker Point Waterfront Park with sign
- Copp Property – Dog Park (3 stations with signs)

The dog waste stations are well utilized and dumpsters are emptied once a week. The Town advertises the locations of its dog waste stations to the public on its website.

***BMP #6-9: Training other municipal operators in good housekeeping (BMP 6-10 in Part B registration to DEEP)**

In compliance for 2014

Per the Annual Report issued in January 2005, this BMP was changed from developing a newsletter which would be periodically distributed to municipal operators in other Departments to a training session. As revised, the DPW was to develop a training session for all operators in municipal Departments, conduct the training and record the number in attendance and the number of municipal Departments represented.

The Stormwater Committee determined that personnel from both Parks Maintenance and the Golf Course would attend the DPW annual SPCC and Stormwater personnel training conducted every December. OPDS and BOE do not have any personnel that require this training. During the December 2013 annual personnel training, a total of 43 employees from two municipal departments participated.

BMP #6-10: Develop procedures with the water companies for hydrant flushing

In compliance for 2014

In 2006, the Town sent letters to the three private/public water companies in Groton (Groton Utilities, Aquarion Water Company, and Noank Water Company) on the subject of hydrant flushing. Per the SWMP, the Town informed the water companies that chlorine should be dissipated and erosion control measures implemented when flushing hydrants. The Town also requested that the water companies give sufficient notification (2 weeks) to the Town so that the appropriate streets can be swept prior to hydrant flushing. The water companies and the Town now coordinate hydrant flushing with street sweeping.

Table 1: Summary of BMPs for Stormwater Management Plan

The attached Table 1 discusses the activities during Year 11 (2014) of the permit and the planned activities in Year 12 (2015).

Changes to SWMP:

Table 1 shows the changes in the implementation schedule. Schedule changes have been made to the following BMPs:

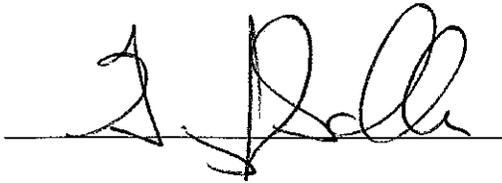
- BMP 2-1: Stormwater Committee Meetings – Other Departments became involved in Year 4 (2007) rather than Year 3 (2006)
- BMP 2-3: Involve the public in developing and implementing the draft Stormwater Management Plan and in reviewing the Annual Report – We are meeting our compliance by notifying the public by public notice, providing a 30-day review in December 2014 when copies of the 2014 SWMP annual report will be made available at the Town Hall Annex and the Groton Public Library as well as the Town's website for public review and comment.
- BMP 3-1: Conduct dry weather outfall screening – Dry weather outfall screening will be conducted again under the new general permit when issued (expected 2015) instead of being conducted again in Year 5 (2008)
- BMP 3-2: Map stormwater collection system, outfalls, and receiving waters – Outfall information in regards to receiving waters and watershed was added to the GIS database in Years 3 (2006) and 4 (2007) rather than Year 2 (2005)
- BMP 3-4: Evaluate and change procedures if necessary for inspecting new construction for correct connection to the sanitary sewer – Completed activity in Year 4 (2007) instead of Year 3 (2006)
- BMP 3-5: Develop an ordinance to prohibit non-stormwater discharges – Ordinance development began in Year 5 (2008) rather than Year 3 (2006) and is expected to be finalized in Year 12 (2015)
- BMP 3-6: Monitor six outfalls per year – Sampling for 2004 was done in Year 2 (2005) rather than Year 1 (2004) and sampling for 2009 was done in January 2010 due to uncooperative weather.
- BMP 4-1: Review existing Town regulation for erosion and sediment control requirements – Regulation was re-evaluated in Year 5 (2008) rather than Year 3 (2006).
- BMP 4-2: Require a waste management plan at construction sites larger than one acre, add requirement to zoning regulations – this requirement was completed in Year 7 (2010) rather than by the end of Year 4 (2007).
- BMP 4-4: Consideration of public input – The development of procedures to handle public input during the planning phase of construction projects that will

require construction site runoff control began in Year 5 (2008) rather than Year 3 (2006).

- BMP 4-5: Inspect erosion and sediment controls – The procedure for conducting inspections of Erosion and Sediment controls was developed in Year 4 (2007) instead of Year 3 (2006).
- BMP 5-1: Apply requirements of Connecticut Stormwater Quality Manual to entire Town – Changed from developing an ordinance to developing land use regulations that applied requirements of Stormwater Quality Manual in Year 6 (2009).
- BMP 5-2: Specify a stormwater manual - A BMP manual to be included in the stormwater ordinance was selected in Year 5 (2008) rather than Year 3 (2006)
- BMP 5-3: Ensure long-term maintenance of private structural BMPs – Provisions for long-term maintenance were included in land use regulations rather than developing an ordinance in Year 7 (2010)
- BMP 6-1: Training - A training session was first developed and conducted in Year 3 (2006) rather than Year 2 (2005)
- BMP 6-3: Minimize impacts from municipal vehicle washing – The washing of vehicles (golf carts and related maintenance equipment) at the Golf Course was achieved in 2010.
- BMP 6-9: Training other municipal operators in good housekeeping – Training for other municipal operators began in December of Year 4 (2007) rather than Year 2 (2005).

Certification to be signed by chief elected officer or principal executive officer of the municipality:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

A handwritten signature in black ink, appearing to read "G. Schneider", is written over a horizontal line.

Gary J. Schneider
Director of Public Works

Date: 12/1/14

**Table 1
Summary of BMPs for Stormwater Management Plan**

DEP BMP ID	BMP ID	BMP	Schedule					Measurable Goal	Progress during Year 11 (2014)	Planned Activities in Year 12 (2015)
			Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008			
Control Measure 1: Public Education										
1-1	1-1	Annual report to DEP Article/brochure about stormwater in an annual mailing	X	X	X	X	X	Submit by Jan. 1, 2015 informational article addressing the concerns of stormwater runoff were periodically placed on the Town's Facebook page.	Submit by Jan. 1, 2016 Articles will be periodically posted on Facebook.	
1-2	1-2	Stormwater information provided on local cable access	X	X	X	X	X	The video "Luck Isn't Enough, the Fight for Clean Water" was aired 14 times in 2014. The DEEPs public service announcement 'Clean Water Starts With You' part of the Think Blue Connecticut initiative, was also aired.	Air same or other programs in 2015.	
1-3	1-3	Stormwater information provided on town website			X		X	The Town updated the stormwater webpage to inform citizens about the availability of the Annual Report.	Review webpage and update if necessary.	
1-4	1-4	Educate dog owners about picking up dog waste		X	X	X	X	Brochure "Long Island Sound Study: Step by Step" which includes a primary section on this topic is distributed with dog licenses.	Same brochure or another will be distributed.	
1-5	1-5	Install and maintain no dumping signs of coastal access areas	--	X	X	X	X	Signs were inspected in April and November 2014 and some maintenance was necessary.	Maintain signs.	
1-6	1-6	Annual update of SWMP to the Town Council	X	X	X	X	X	As an update on the SWMP, the annual report was forwarded to the Town Council in December 2014.	Update Town Council on SWMP programs.	
Control Measure 2: Public Participation										
2-3	2-1	Stormwater Committee Meetings	X				X	Stormwater Committee Meetings were held on April 15, 2014 and October 22, 2014.	Hold 2 Stormwater Committee Meetings.	
2-2	2-2	Comply with state public notification guidelines	--	--	--	--	--	A notice was posted in the newspaper on December 5 th to inform the public of this year's annual report.	Continue to follow public notification guidelines, post notices.	
2-1	2-3	Involve the public in developing and implementing the draft SWMP and Reviewing the Annual Report	X	X	X	X	X	Copies of the 2014 Annual Report were made available in December for public review and comment at the Town Hall Annex and the Groton Public Library as well as the Town's website.	Continue to have copies of the annual report available for public review prior to Town Council update in December.	
2-4	2-4	Sponsor community participation event	X	X	X	X	X	Town held Household Hazardous Waste Collection Day and the Navy organized a streamside cleanup.	Hold two events, record number of participants.	

X = task completed as a one-time or finite event(s) during that year
 -- = work in progress or continuous event

**Table 1
Summary of BMPs for Stormwater Management Plan**

DEP BMP ID	BMP ID	BMP	Schedule					Measurable Goal	Progress during Year 11 (2014)	Planned Activities in Year 12 (2015)
			Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008			
Control Measure 3: Illicit Discharge Detection & Elimination										
3-6	3-1	Conduct dry weather outfall screening	--	X				Completed in 2007		
3-1, 3-2, 3-3	3-2	Map stormwater collection system, outfalls and receiving waters	--	--	--	X		Completed in 2007		
3-4	3-3	Develop, implement and enforce a plan to identify and remove existing illicit discharges to the MS4	--	--	--	--		Completed phase 2 investigation of 7 outfalls of concern that were identified in phase 1 in 2008. No illicit connections were detected.	Repair cracks and leaks in identified pipes.	
3-7	3-4	Evaluate and change procedures if necessary for inspecting new construction for correct connection to the sanitary sewer				X		Completed in 2007		
3-5	3-5	Develop an ordinance to prohibit non-stormwater discharges				--		Public Works is working on draft ordinance with Town attorney.	Finalize ordinance and present to Town Council	
S-1	3-6	Monitor six representative outfalls	X	X	X	X		Outfalls sampled on September 25 and November 24, 2014.	Monitor 6 outfalls	
Control Measure 4: Construction Site Runoff Control										
4-1	4-1	Review land use regulations. Erosion control plan for construction sites 1 acre in area				--		OPDS completed review of land use regulations.		
4-2	4-2	Require a waste management plan at construction sites larger than one acre. Add requirement to zoning regulations				--		Amendments to the Town of Groton Zoning Regulations accepted April 24, 2011		
4-3	4-3	Notify construction site operators of the requirements for registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities	--	--	--	--		Developers were notified of the DEEP general permit during OPDS staff review meetings; as well as on post approval subdivision, site plan and contractor's checklists and the special permit application checklist	Continue notifying developers.	
4-4	4-4	Consideration of public input for projects 1 acre or greater				--		Currently any project requiring approval by the Planning Commission or Inland Wetlands Agency is presented at a public meeting. Projects not presented at a public meeting will be posted to the Town's website.	Continue to post projects not presented at a meeting on Town's website.	
4-5	4-5	Inspect erosion and sediment controls				--		E&S controls are inspected at construction sites with a wetlands permit or a land use permit and a formalized inspection checklist has been developed.	Continue to inspect construction sites and use formal inspection checklist.	

X = task completed as a one-time or finite event(s) during that year
 -- = work in progress or continuous event

**Table 1
Summary of BMPs for Stormwater Management Plan**

DEP BMP ID	BMP ID	BMP	Schedule					Measurable Goal	Progress during Year 11 (2014)	Planned Activities in Year 12 (2015)
			Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008			
Control Measure 5: Post Construction Runoff Control										
5-2 & 5-3	5-1	Develop land use regulations to apply CT Guidelines and CT Stormwater Quality Manual to the entire Town. Present to commission.							Amendments to the Town of Groton Zoning Regulations accepted April 24, 2011	
5-1	5-2	Specify a stormwater BMP manual to be used for consistent design and performance standards							This BMP is addressed in the aforementioned amendments to the Town of Groton Zoning Regulations in Section 6.14.	
5-4	5-3	Ensure long-term maintenance of private structural BMPs							This BMP is addressed in the aforementioned amendments to the Town of Groton Zoning Regulations in Section 6.14-2(K)(5).	
Control Measure 6: Good Housekeeping										
6-1	6-1	Develop training session within the Town			X	X	X		A 30-minute training session is given to DPW staff during their annual SWPPP training in December. Included is a 19-minute video by Excal Visual discussing stormwater management. Invitations are extended to other municipal employees.	Continue to conduct training session.
6-2 & 6-3	6-2	Street sweeping							95% of all streets were swept at least twice in 2014 and 977 cubic yards of residual material were collected.	Continue street sweeping program.
6-6	6-3	Minimize impacts from municipal vehicle washing							Oil/water separators are inspected quarterly. All oil/water separators located at the Town Hall Annex Complex were pumped on May 20, 2014.	Continue inspecting and cleaning oil/water separators.
6-7	6-4	Minimize impacts from municipal vehicle maintenance							Storage and containment areas at the Town Hall Annex Vehicle Maintenance Facility were inspected quarterly and spill kits inspected monthly. All hazardous wastes were manifested out.	Complete waste determinations on waste streams annually or as needed; inspect storage areas quarterly and spill kits monthly.

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Summary of BMPs for Stormwater Management Plan**

DEP BMP ID	BMP ID	BMP	Schedule					Measurable Goal	Progress during Year 11 (2014)	Planned Activities in Year 12 (2015)
			Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008			
Control Measure 6: Good Housekeeping										
6-4	6-5	Catch basin cleaning and storm drain maintenance	--	--	--	--	--	Number of structures cleaned	From January to November 2014 the Town spent 360 hours cleaning and inspecting catch basins and 865 hours inspecting and cleaning waterways.	Continue cleaning catch basins; record number of structures cleaned and amount of material collected.
6-5	6-6	Storm drain maintenance	--	--	--	--	--	Hours spent maintaining, repairing, or replacing storm drainage system	From January to November 2014, the Town logged 2,186 hours for maintenance, repairs, and upgrades to the drainage system.	Continue repairing, retrofitting, or upgrading storm drain system during repaving projects or as needed.
6-8	6-7	Public grounds maintenance	--	X	--	--	--	Amount of herbicides / fertilizers used	The Parks Maintenance Foreman maintains a Connecticut Custom Grounds License. Soils are tested in the late fall and grounds are fertilized accordingly in April. Additionally, athletic fields are fertilized every 8 – 10 weeks as necessary.	Continue to train staff to minimize application of herbicides / pesticides, test soil to determine proper amount of fertilizers, and keep maintenance records for amount of herbicides / fertilizers / pesticides used.
6-9	6-8	Pooper scooper stations and signs	X	X	X	X	X	Number of signs posted, number of stations installed	Due to budget cuts in 2014, one dog waste station was removed. The remaining dog waste stations are well utilized and the dumpsters emptied weekly.	Maintain stations.
6-10	6-9	Training other municipal operators in good housekeeping	--	--	--	X	X	Number of attendance at training day and the number of departments represented	During the 2013 annual December personnel training, a total of 43 employees from two municipal departments participated.	Conduct training for operators in municipal departments; record attendance.
	6-10	Develop procedures with the water companies for hydrant flushing	--	--	X	--	--	Notification procedures discussed. Private water companies informed to dissipate chlorine	The Town has informed the three water companies that chlorine should be dissipated and erosion control measures implemented when flushing hydrants. The Town has also requested that the water companies give sufficient notification (2 weeks) to the Town so that the appropriate streets can be swept prior to hydrant flushing.	Continue to sweep streets prior to hydrant flushing as per notifications.

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