

**MS4 General Permit  
Town of Glastonbury, Connecticut 2017 Annual Report  
Existing MS4 Permittee  
Permit Number GSM 000057  
January 1, 2017 – December 31, 2017**

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This report documents the Town of Glastonbury, Connecticut’s efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2017 to December 31, 2017.

**Part I: Summary of Minimum Control Measure Activities**

**1. Public Education and Outreach (Section 6 (a)(1) / page 19)**

**1.1 BMP Summary**

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
<b>1-1 Implement public education and outreach</b>	Ongoing/In Progress	1. Maintenance and Updates to the Stormwater Pollution Prevention page located on the Town of Glastonbury’s Engineering Division web site. 2. “Long Island Sound Study” brochures displayed and available at various departments at Town Hall and Welles Turner Memorial Library.	Compliance with Section 6(a)(1) of the current General Permit	Engineering Division	July 1, 2018	1. Continuously ongoing throughout the duration of the permit. 2. Continuously ongoing throughout the duration of the permit.	1. Web page provides residents/business owners/developers with Stormwater Pollution Awareness and links to various brochures related to contributing bacteria pollutants. <a href="http://www.glastonbury-ct.gov/departments/department-directory-a-k/engineering/stormwater-pollution-prevention-program">http://www.glastonbury-ct.gov/departments/department-directory-a-k/engineering/stormwater-pollution-prevention-program</a>
<b>1-2 Address education/outreach for pollutants of concern*</b>	Currently/In Progress	1. Updates to the Stormwater Pollution Prevention page located on the Town of Glastonbury’s Engineering Division web site to include awareness	Compliance with Section 6(a)(1)(C)(iii) of the current General Permit	Engineering Division	July 1, 2018	1. Continuously ongoing throughout the duration of the permit.	1. Adding web brochures related to septic system maintenance, waterfowl, pet waste management. <a href="http://www.glastonbury-ct.gov/departments/department-directory-a-">http://www.glastonbury-ct.gov/departments/department-directory-a-</a>

		<p>information and web brochures related to bacteria pollution.</p> <p>2. Glastonbury's Health Department has continuously provided information to residents related to septic systems/maintenance located on the web page under Subsurface Sewage/Septic System Basics for Homeowners.</p>					<p><a href="#">k/engineering/stormwater-pollution-prevention-program</a></p> <p>2. <a href="http://www.glastonbury-ct.gov/departments/departments-directory-a-k/health-department/subsurface-sewage/septic-system-basics-for-homeowners">http://www.glastonbury-ct.gov/departments/departments-directory-a-k/health-department/subsurface-sewage/septic-system-basics-for-homeowners</a></p>
<p><b>Additional BMP:</b></p> <p><b>1-3 Public Education and Outreach</b></p>	Ongoing/Yearly	1. Town Staff and Regional Group participation in the Salmon River Watershed Partnership	Non-profit group consisting of 10 towns preserving the integrity of the 96,000 Acre Salmon River Watershed through education and outreach	Community Development and Environmental Department/ Tom Mocko-Environmental Planner	N/A	1. Yearly Membership and town staff representation	<p>1. The Salmon River Watershed Partnership is comprised of 10 towns/representatives that performs clean ups, environmental studies, public education and outreach to local youth groups/school children/residents to preserve the integrity of the watershed. Tom Mocko-Environmental Planner for the Town of Glastonbury services as a longtime member.</p> <p>2. The 2017 Salmon River Watershed Partnership Outreach &amp; Monitoring Activities Related to Stormwater &amp; Water Quality Report is attached in Appendix A.</p>

**1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.**

- 1-1. Continued Maintenance and Updates to the Stormwater Pollution Prevention page located on the Town of Glastonbury's Engineering Division web site and better tracking of the number of brochures distributed at town facilities for incorporation into future annual reports.
- 1-2. Updates to the Stormwater Pollution Prevention page located on the Town of Glastonbury's Engineering Division web site to include awareness information and web brochures related to bacteria pollution. Implementation of the distribution of printed pet waste management brochures in conjunction with dog license renewals and continued Health Department information to homeowners related to septic systems/maintenance in the year 2018.
- 1-3. Continued staff membership and involvement in the Salmon River Watershed Partnership.
- 1-4. Currently investigating additional ways to broaden the awareness to residents/business owners/developers about the significance of stormwater pollution prevention within the priority areas using the Town website and social media accounts.

### 1.3 Details of activities implemented to educate the community on stormwater

Program Element/Activity	Audience (and number of people reached)	Topic(s) covered	Pollutant of Concern addressed (if applicable)	Responsible dept. or partner org.
Stormwater Pollution Prevention page located on the Town of Glastonbury's Engineering Division web site	Residents/Business Owners/Developers	Web page contains stormwater pollution prevention awareness information and web brochures	Phosphorus, Nitrogen, and Bacteria	Engineering Division
"Long Island Sound Study" brochures available at various town departments at Town Hall and Welles Turner Memorial Library	Residents/Business Owners/Developers	Vehicle washing, pet waste, fertilizing, and leaking oil.	Phosphorus, Nitrogen, and Bacteria	Engineering Division, Building Department, Library
Continued staff membership and involvement in the Salmon Brook Watershed Partnership	Students, Watershed Community	Watershed protection, Clean-ups, Student groups/Membership collaborative studies	Watershed Protection	Town of Glastonbury Environmental Planner and the Salmon River Watershed Partnership

## 2. Public Involvement/Participation (Section 6(a)(2) / page 21)

### 2.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
<b>2-1 Comply with public notice requirements for the Stormwater Management Plan</b>	Ongoing	Stormwater Management Plan was issued for review on May 8, 2017	Compliance with Section 4(d)(2) and Section 6(a)(2)(A) of the General Permit	Engineering Division	Apr 3, 2017	May 8, 2017	Stormwater Management Plan was issued for review and posted on the Town of Glastonbury's website
<b>2-2 Comply with public notice requirements for Annual Reports</b>	In Progress	This 2017 Annual Report has been publicly noticed and posted to the website as per current DEEP requirements.	Compliance with Section 4(d)(2) and Section 6(a)(2)(A) of the General Permit	Engineering Division	Feb 15, 2018	January 31, 2018 (notice) February 15, 2018 (plan posted) April 1, 2018 (submit to DEEP)	This 2017 Annual Report was posted on the Town of Glastonbury's website on February 15, 2018.
<b>Additional BMP: 2-3 Public Participation</b>	Ongoing/Yearly	Participation in the Capitol Region East Operating Committee (CREOC) Household Hazardous Waste Collection days located adjacent to the Manchester Landfill on Olcott Street.	Allows residents to properly dispose of Household Hazardous Wastes	Sanitation/Refuse Division	N/A	August 26, 2017 8:00am to 1:00pm  September 30, 2017 8:00am to 1:00pm  October 28, 2017 8:00am to 1:00pm	August 26, 2017-109 Glastonbury residents attended.  September 30, 2017- 131 Glastonbury residents attended.  October 28, 2017- 134 Glastonbury Residents attended.
<b>Additional BMP: 2-4 Public Participation</b>	Ongoing/Yearly	Town Staff and Regional Group participation in the Salmon River Watershed Partnership	Non-profit group consisting of 10 towns preserving the integrity of the 96,000 Acre Salmon River Watershed	Community Development and Environmental Department/ Tom Mocko- Environmental Planner	N/A	Yearly Membership and town staff representation	The Salmon River Watershed Partnership is comprised of 10 towns/representatives that performs clean ups and environmental studies utilizing local youth groups/school children to preserve the integrity of the watershed. Tom Mocko-

							Environmental Planner for the Town of Glastonbury serves as a longtime member.
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**2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.**

- 2-3. Annual participation in the Capitol Region East Operating Committee (CREOC) Household Hazardous Waste Collection days located adjacent to the Manchester Landfill on Olcott Street.
- 2-7. Continued staff membership and participation in the Salmon River Watershed Partnership.

**2.3 Public Involvement/Participation reporting metrics**

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	May 8, 2017	<a href="http://www.glastonbury-ct.gov/departments/engineering/stormwater-management-plan">http://www.glastonbury-ct.gov/departments/engineering/stormwater-management-plan</a>
Availability of this Annual Report announced to public Annual Report published to Town Website	Yes Yes	January 31, 2018 February 15, 2018	<a href="http://www.glastonbury-ct.gov/departments/engineering/stormwater-management-plan">http://www.glastonbury-ct.gov/departments/engineering/stormwater-management-plan</a>
Town Staff and Regional Group participation in the Salmon River Watershed Partnership	Yes	Yearly membership and participation	<a href="http://www.salmonriverct.org/">http://www.salmonriverct.org/</a>

### 3. Illicit Discharge Detection and Elimination (Section 6(a)(3) and Appendix B / page 22)

#### 3.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
<b>3-1 Develop written IDDE program</b>	In progress	Town is in process of completing the written IDDE program	Develop written plan of IDDE program	Engineering Division	July 1, 2018	Anticipate completion by the due date of July 1, 2018.	New IDDE program is being developed using the CT IDDE program template provided by CLEAR
<b>3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas</b>	In Progress	All outfalls in the MS4 have been mapped and can be viewed on the GIS website.	Develop an updated the GIS Datasets and maps of all MS4 stormwater outfalls located within the priority areas.	Engineering Division	July 1, 2019	Anticipate completion by the due date of July 1, 2019.	Currently working with GIS consultant to link watershed / waterbody data, inspection data and photos for display with outfall data in GIS website.
<b>3-3 Implement citizen reporting program</b>	Completed	A citizen reporting process has been established using the Town's Qalert System. A link regarding reporting stormwater pollution is located on the Town of Glastonbury's Engineering Division Stormwater Pollution Prevention web site.	Implement and track citizen reporting of stormwater pollution	Engineering Division	Currently Active	Completed	Currently Active <a href="http://www.glastonbury-ct.gov/departments/department-directory-a-k/engineering/stormwater-pollution-prevention-program">http://www.glastonbury-ct.gov/departments/department-directory-a-k/engineering/stormwater-pollution-prevention-program</a>

<b>3-4 Establish legal authority to prohibit illicit discharges</b>	Completed in 2010	In 2010, the Town of Glastonbury implemented a Town ordinance related to the elimination of illicit discharges.	Establish legal authority to prohibit illicit discharges	Engineering Division	Currently Active	Previously Completed	Illicit Discharge and Connection Stormwater Ordinance is located in Chapter 19, Article III, Sections 19-251 thru 19-275. <a href="http://www.glastonbury-ct.gov/departments/department-directory-l-z/town-clerk/glastonbury-town-charter-code-of-ordinances">http://www.glastonbury-ct.gov/departments/department-directory-l-z/town-clerk/glastonbury-town-charter-code-of-ordinances</a>
<b>3-5 Develop record keeping system for IDDE tracking</b>	In Progress	Town is currently in process of tracking any IDDE's from ongoing investigations	Develop record keeping system for IDDE tracking	Engineering Division	July 1, 2017	Ongoing throughout the permit duration	No IDDE's reported or identified within this reporting year.
<b>3-6 Address IDDE in areas with pollutants of concern</b>	In Progress	No IDDE's reported or identified within this reporting year.	Address IDDE in areas with pollutants of concern	Engineering Division	Not specified	Ongoing throughout the permit duration	No IDDE's reported or identified within this reporting year.

**3.2 Describe any IDDE activities planned for the next year, if applicable.**

The written program will be posted to the Town of Glastonbury's Engineering Division web site page and a link listed in next year's Annual Report; will update the written IDDE program as needed throughout the permit term.

Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process.

**3.3 List of citizen reports of suspected illicit discharges received during this reporting period.**

Date of Report	Location / suspected source	Response taken
No Citizen Reports in 2017	N/A	N/A

**3.4 Provide a record of illicit discharges occurring during the reporting period and SSOs occurring July 2012 through end of reporting period using the following table.**

Location (Lat long/ street crossing /address and receiving water)	Date and duration of occurrence	Discharge to MS4 or surface water	Estimated volume discharged	Known or suspected cause / Responsible party	Corrective measures planned and completed (include dates)	Sampling data (if applicable)
2687 Main Street/Naubuc Avenue Katz Hardware	Originally a connection to a combined sewer system. Disconnected in 1/2015	Illicit Discharge into MS4 storm drainage system.	Unknown	Old combined sewer system connection which was identified by the Public Works Dept and disconnected in 2015	Single bathroom located at 2687 Main Street that was connected to an old combined sewer system located on Naubuc Avenue that remained connected to the storm sewer as part of a sewer separation incorporated in a reconstruction project of Naubuc Avenue in the 1970's. Illicit discharge was identified by the Town of Glastonbury Public Works and disconnected by the property owner in 2015.	None
104 Benton Lane	03/03/2013 12:30 P.M. to 2:15 P.M.	SSO- surcharged manhole	200-300 Gallons	Blockage from rags in pump station wet well. Cleaned ASAP to relieve surcharge	By Pass system which had been installed during pump station upgrade construction activity removed on 3/4/2013.  Cleaned ASAP to relieve Surcharge. Hand spread Limed area around manhole.	None
116 Oak Street	08/23/2013 2:00 P.M. to 5:00 P.M.	SSO to Hubbard Brook	150-250 Gallons	Concrete at the end of lateral connection	Sewer line will require reconstruction.  Sewer lateral will need to be reconstructed.	None
Tall Timbers Road	09/14/2014 No start time to 10:30 A.M.	SSO-Private force main leaking below grade	21,500 Gallons (Est.)	Broken 1 ¼" private force main lateral	Broken pipe repaired by town highway staff.  Pipe repaired and suggested pressure testing of the line by homeowner (Private system).	None
1909 Main Street	08/09/2014 7:00 A.M. to 9:00 A.M.	SSO- surcharged manhole	500 Gallons	Grease blockage in 8" sewer line	Blockage in sewer line relieved by jet truck, upon release completed jetting. Applied bleach to area around manhole and ground.  Added location to Towns routine jetting schedule.	None
2333 Main Street	02/25/2015 11:40 A.M. to 4:30 P.M.	SSO- surcharged manhole in parking lot- Private	Unable to determine	Grease and Root blockage	Property owner arranged with contractor to clear blockage by flushing and root cutting.  Routine flushing and root cutting.	None
2756 Main Street	09/04/2016 12:45 P.M. to 1:40 P.M.	SSO- surcharged manhole- Salmon Brook	5,000 Gallons	Electrical failure at Pump Station	Restored Pump Station Operation quickly.	None



3025 Main Street	08/07/2017 1:00 P.M. to 5:00 P.M.	SSO- surcharged manhole-Pump Station	Unknown	Mechanical equipment failure	Burger King regional manager notified to evaluate and repair the reoccurring problem.  Repairs made to eliminate future overflows.	None
28 Talcott Road	05/04/2017 6:38 P.M. to 7:15 P.M.	SSO- surcharged manhole/sewer main overflowed into catch basin	Unknown	Grease blockage in sewer main	Jetted and flushed sewer main.  Frequent inspection of town sewer main.	None

**Note: Data listed above is derived from copies of a Sewage By-Pass Notification Report as submitted to State of Connecticut DEEP Bureau of Water Management.**

**3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.**

Over the term of the General Permit since its inception in 2004, One (1) report of an illicit connection was logged from our Public Works department. The illicit connection was removed and reconnected to the sanitary sewer system by the property owner in a timely fashion. The Town of Glastonbury Engineering Division is responsible for maintaining a spreadsheet to track illicit detection and connections as part of this permit.

**3.6 Provide a summary of actions taken to address septic failures using the table below.**

Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known
Angus Pond Residential Septic Systems within the drainage basin	Health Department records indicate that 11 repairs and or replacements of existing septic systems were done between 2012 to 2017 within the Angus Pond drainage basin. A total of 53 repairs occurred between 1988 to 2017 with 3 properties having 2 repairs.	Angus Pond DEEP Basin ID: 4009-00-2-L4
Connecticut River Residential Septic Systems within the drainage basin	Health Department records indicate that 12 repairs and or replacement of existing septic systems were done between 2012 to 2017 within the Connecticut River drainage basin. A Total of 45 repairs occurred between 1988 to 2017 with 5 properties having 2 repairs.	Connecticut River DEEP Basin ID: 4009-00-6-R16

### 3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	Approximately <b>976±</b> total outfalls
Estimated or actual number of interconnections	Currently researching, identifying, and mapping
Outfall mapping complete	<b>100%</b> -Catch Basins/Manholes/ Pipes/Outfalls
Interconnection mapping complete	<b>0%</b> - Presently mapping-In progress
System-wide mapping complete (detailed MS4 infrastructure)	<b>20%</b> - Water Quality elements-In Progress <b>100%</b> - Sanitary Sewer System mapping
Outfall assessment and priority ranking	<b>0%</b> - In Progress
Dry weather screening of all High and Low priority outfalls complete	0
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	<b>0%</b>

### 3.8 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often is it given (minimum once per year).

Training for Engineering staff conducting IDDE inspections was conducted on December 4, 2017. Staff reviewed relevant portions of the IDDE Guidance Manual developed by the Center for Watershed Protection dated October 2004.

## 4. Construction Site Runoff Control (Section 6(a)(4) / page 25)

### 4.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
<b>4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit</b>	Completed/Ongoing	All proposed development projects have been reviewed for compliance with regulations noted under "Additional Details" section.	Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit.	Community Development and Environmental Department  Engineering Division  Building Inspection/Zoning Enforcement	July 1, 2019	Continued implementation	Proposed developments are reviewed for conformance with the 2002 Guidelines for Soil Erosion and Sedimentation Control, as amended, the Connecticut Stormwater Quality Manual through the Town's Subdivision/ Resubdivision Regulations, Wetlands Regulations, Building Zone Regulations, and Public Improvement Standards.2002 Guidelines for Soil Erosion and Sedimentation Control, as amended: <a href="http://www.ct.gov/deep/cwp/view.asp?A=2720&amp;Q=325660">http://www.ct.gov/deep/cwp/view.asp?A=2720&amp;Q=325660</a>  Connecticut Stormwater Quality Manual: <a href="http://www.ct.gov/deep/cwp/view.asp?a=2721&amp;q=325704">http://www.ct.gov/deep/cwp/view.asp?a=2721&amp;q=325704</a>  Town of Glastonbury Subdivision/ Resubdivision Regulations: <a href="http://www.glastonbury-ct.gov/departments/department-directory-a-k/community-development-planning-environmental/regulations-applications-forms">http://www.glastonbury-ct.gov/departments/department-directory-a-k/community-development-planning-environmental/regulations-applications-forms</a>  Town of Glastonbury Wetlands Regulations: <a href="http://www.glastonbury-ct.gov/departments/department-directory-a-k/community-development-planning-environmental/regulations-applications-forms">http://www.glastonbury-ct.gov/departments/department-directory-a-k/community-development-planning-environmental/regulations-applications-forms</a>  Town of Glastonbury Building Zone Regulations: <a href="http://www.glastonbury-ct.gov/departments/department-directory-a-k/building-inspection-zoning-enforcement/building-zone-regulations">http://www.glastonbury-ct.gov/departments/department-directory-a-k/building-inspection-zoning-enforcement/building-zone-regulations</a>  Town of Glastonbury Public Improvement Standards: <a href="http://www.glastonbury-ct.gov/departments/department-directory-a-k/engineering/public-improvement-standards">http://www.glastonbury-ct.gov/departments/department-directory-a-k/engineering/public-improvement-standards</a>

<p><b>4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval</b></p>	<p>Completed/Ongoing</p>	<p>All proposed development plans have been reviewed by various departments for conformance to the above referenced regulations.</p>	<p>Develop/Implement plan for interdepartmental coordination in site plan review and approval.</p>	<p>Community Development and Environmental Planning  Engineering Division  Building Inspection/Zoning Enforcement  Health Department  Police Department  Fire Department</p>	<p>July 1, 2017</p>	<p>Continued implementation</p>	<p>All applicants planning a development or redevelopment project attend an “Administrative Review” meeting attended by representatives from all Town departments involved in land use planning and regulation including Engineering, Community Development, Health, Police, and Fire. Applicants are given general feedback relative to stormwater management, water quality treatment requirements, and protection of wetlands at that meeting to help guide initial design decisions.</p> <p>Applicants submit plans to Community Development for an informal review by the Conservation/Wetlands Commission. This submission will include all provisions for stormwater management and water quality treatment, a maintenance plan and schedule for all stormwater infrastructure, a detailed soil erosion and sediment control plan, and a Stormwater Management Report. Engineering and Community Development both review these plans and reports in detail and provide feedback to the applicant prior to formal application to the Conservation/Wetlands Commission. Specific issues related to the project stormwater management are incorporated as conditions of approval into the final wetlands permit.</p> <p>Plot plans for single family homes and commercial developments are reviewed by all of the same departments listed above for consistency with conditions of approval from Inland Wetlands and Town Plan and Zoning approvals, as well as for overall compliance with stormwater management requirements related to construction site run-off as well as long term storm water quality features.</p>
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<p><b>4-3 Review site plans for stormwater quality concerns</b></p>	<p>Completed/Ongoing</p>	<p>All proposed development plans have been reviewed for conformance with stormwater quality best management practices.</p>	<p>Review site plans for stormwater quality concerns.</p>	<p>Engineering Division  Environmental Planning</p>	<p>July 1, 2017</p>	<p>Continued implementation</p>	<p>All of the Town of Glastonbury Departments involved in land development activities conduct detailed site plan reviews that incorporate consideration of stormwater controls or management practices to prevent or minimize impacts to water quality on sites with soil disturbance of one acre or more as part of the regular plan approval process. A plan review checklist has been implemented by the Engineering Division to ensure that all required components are incorporated on the plans.</p>
<p><b>4-4 Conduct site inspections</b></p>	<p>Completed/Ongoing</p>	<p>The Town of Glastonbury Office of Community Development (OCD) has performed construction site inspections and enforcement actions as required to ensure the adequacy of the installation, maintenance, operation, and repair of all soil erosion and sediment control measures during construction.</p>	<p>Conduct site inspections</p>	<p>Community Development and Environmental Planning</p>	<p>July 1, 2017</p>	<p>Continued implementation</p>	<p>The Town of Glastonbury Office of Community Development (OCD) performs construction site inspections and takes enforcement actions as required to ensure the adequacy of the installation, maintenance, operation, and repair of all soil erosion and sediment control measures during construction.</p> <p>Permanent stormwater quality features and treatment measures are inspected by the Design Engineer of record who is required to provide a written certification to the OCD that such measures were installed in a manner consistent with the approved plans and will function as required. A long-term maintenance plan for all stormwater quality features is required to be included on the final approved plans that are filed on the land records to help ensure proper operation and maintenance procedures are being followed and provide a means of enforcement if such features are not being properly maintained. Site inspections for compliance with long-term maintenance of water quality features post-construction are infrequent due to staffing limitations, and are usually triggered based on complaints or flooding.</p>

<p><b>4-5 Implement procedure to allow public comment on site development</b></p>	<p>Completed/Ongoing</p>	<p>Glastonbury has incorporated public input on proposed and ongoing development and land disturbance activities as the questions or requests for information are received and through public hearings required by the approval process for significant land development activities.</p>	<p>Implement procedure to allow public comment on site development</p>	<p>Community Development and Environmental Planning</p>	<p>July 1, 2017</p>	<p>Continued implementation</p>	<p>Glastonbury incorporates public input on proposed and ongoing development and land disturbance activities as the questions or requests for information are received and through public hearings required by the approval process for significant land development activities. Questions are generally received by the Community Development department, who will request assistance from other departments as necessary or perform follow up inspections and inquiries as necessary.</p> <p>The following multi-stepped regulatory approval process also allows for input by interested parties at any of the various public meetings where there is a published agenda made available to the public:  Administrative review meeting with key department staff, informal review with wetlands commission, formal review and action by wetlands commission (with advertised public hearing for significant activities) , plans review subcommittee review meeting with select members of the Town Plan and Zoning Commission, formal action at Town Plan and Zoning Commission meeting (with advertised public hearing for significant activities).</p>
<p><b>4-6 Implement procedure to notify developers about DEEP construction stormwater permit</b></p>	<p>Completed/Ongoing</p>	<p>Notifications to developers have been completed as part of conditions of approval for local regulatory permits.</p>	<p>Implement procedure to notify developers about DEEP construction stormwater permit</p>	<p>Community Development and Environmental Planning  Engineering Division</p>	<p>July 1, 2017</p>	<p>Continued implementation</p>	<p>The Town of Glastonbury currently notifies developers and contractors through a standard condition of approval of their potential obligation to obtain authorization under DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities (construction general permit) if their project disturbs more than 1 acre of land and results in a point source discharge to Connecticut surface waters directly or through the Town of Glastonbury's MS4. The Town of Glastonbury will also require a copy of the Storm Water Pollution Control Plan be made available to the town on request. The standard condition of approval to be used is as follows:  <b>THE APPLICANT IS HEREBY NOTIFIED OF A POTENTIAL OBLIGATION TO OBTAIN AUTHORIZATION UNDER THE DEEP'S GENERAL PERMIT FOR THE DISCHARGE OF</b></p>

							<p><b>STORMWATER AND DEWATERING WASTEWATERS ASSOCIATED WITH CONSTRUCTION ACTIVITIES (“CONSTRUCTION GENERAL PERMIT”)</b> IF THEIR DEVELOPMENT OR REDEVELOPMENT PROJECT DISTURBS ONE OR MORE ACRES OF LAND, EITHER INDIVIDUALLY OR COLLECTIVELY, AS PART OF A LARGER COMMON PLAN, AND RESULTS IN A POINT SOURCE DISCHARGE TO THE SURFACE WATERS OF THE STATE EITHER DIRECTLY OR THROUGH THE TOWN’S DRAINAGE SYSTEM. THE APPLICANT SHALL PROVIDE A COPY OF THE <b>STORM WATER POLLUTION CONTROL PLAN</b> REQUIRED BY THIS CONSTRUCTION GENERAL PERMIT TO THE TOWN UPON REQUEST.</p>
<p><b>Additional BMP:</b></p> <p><b>4-7 Engineering Division plan review stormwater compliance checklist</b></p>	Completed/Ongoing	Previously developed an internal departmental checklist for stormwater compliance requirements	Standardize plan review related to stormwater compliance	Engineering Division	2015	Continued implementation	Standardized internal plan review checklist for all proposed developments which includes stormwater management compliance parameters.

**4.2 Describe any Construction Site Runoff Control activities planned for the next year, if applicable.**

- 4.1. Continued enforcement of land use regulations to meet requirements of MS4 general permit.
- 4.2. Continued interdepartmental coordination for the review and approval of all proposed development plans.
- 4.3. Continued review of all proposed development plans related to stormwater quality concerns.
- 4.4. Continued site inspections.
- 4.5. Continued implementation of the current procedure to allow public comment on site development.
- 4.6. Continued implementation of the current procedure to notify developers about DEEP construction stormwater permit.
- 4.7. Continued use of the internal plan review stormwater compliance checklist.

## 5. Post-construction Stormwater Management (Section 6(a)(5) / page 27)

### 5.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
<b>5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning</b>	In progress	None. The Town will review the need for additional legal authority / regulations that may be required to meet the intent of this permit.	Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	Community Development and Environmental Planning  Engineering Division	July 1, 2021	In progress to meet due date of July 1, 2021.	The Town of Glastonbury current policy requires developers to meet or exceed those LID and runoff reduction practices required under this permit and in accordance with the CT Stormwater Quality Manual, and Glastonbury's land use regulations and as required to treat the water quality volume and/or water quality flow. Additional regulations and or legal authority will be considered to meet the requirements of this permit.  See Town of Glastonbury Stormwater Management Plan Section 5.1 for additional information. <a href="http://www.glastonbury-ct.gov/departments/department-directory-a-k-/engineering/stormwater-management-plan">http://www.glastonbury-ct.gov/departments/department-directory-a-k-/engineering/stormwater-management-plan</a>
<b>5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects</b>	Ongoing/In progress	LID and runoff reduction requirements have been implemented on all approved development projects in Town over the past year.	Enforce LID/runoff reduction requirements for development and redevelopment projects	Community Development and Environmental Planning  Engineering Division	July 1, 2019	In progress to meet due date of July 1, 2019.	Current Town policy requires consideration of LID and runoff reduction measures as well as treatment of the Water Quality Volume for all development and redevelopment projects.



<p><b>5-3 Identify retention and detention ponds in priority areas</b></p>	<p>In progress</p>	<p>All Town owned detention ponds were previously mapped and can be viewed in the Town's GIS system. Additional updates to the stormwater dataset are being developed to allow for a streamlined inspection process.</p>	<p>Identify retention and detention ponds in priority areas</p>	<p>Engineering Division</p>	<p>July 1, 2019</p>	<p>In progress to meet due date of July 1, 2019.</p>	<p><b>11/09/2017-</b> Met with GIS consultant to discuss submittal of a proposal to make modifications/additions to our existing geodatabase related to the MS4 permit.</p> <p><b>1/9/2018-</b>Met with GIS consultant to discuss modifications/additions to our existing geodatabase related to these features.</p>
<p><b>5-4 Implement long-term maintenance plan for stormwater basins and treatment structures</b></p>	<p>In progress</p>	<p>None to date. Inspections will begin in the coming year to determine extent of maintenance work that will be required. The Town of Glastonbury will then implement a long term maintenance plan for all municipally owned stormwater basins and treatment structures.</p>	<p>Implement long-term maintenance plan for stormwater basins and treatment structures</p>	<p>Physical Services/Highway Division  Parks Department  Engineering Division</p>	<p>July 1, 2019</p>	<p>In progress to meet due date of July 1, 2019.</p>	<p>The Town of Glastonbury will develop a maintenance plan for retention / detention ponds and stormwater treatment structures that it owns or over which it holds an easement or other authority and that are located in the town's priority areas to ensure their long-term effectiveness. This plan will require an annual inspection of those retention / detention ponds and stormwater treatment structures and removal of accumulated sediment and pollutants in excess of 50% design capacity.</p>
<p><b>5-5 DCIA mapping</b></p>	<p>In progress</p>	<p>The Town of Glastonbury has begun the process of defining catchment areas for each of the Town's 967 outfalls, beginning in the priority/ urbanized areas. We have our own impervious cover data from 2014 aerial that we will then use to establish an estimate of DCIA for each catchment area.</p>	<p>DCIA mapping</p>	<p>Engineering Division</p>	<p>July 1, 2020</p>	<p>In progress to meet due date of July 1, 2020.</p>	<p>The Town of Glastonbury will follow guidance provided by DEEP and UConn CLEAR to calculate the Directly Connected Impervious Area (DCIA) that contributes stormwater runoff to each of its MS4 outfalls. Progress on this task will be documented in each Annual Report until completion.</p> <p>Currently mapping contributing watersheds to each MS4 outfall located within the priority areas and DCIA areas &gt;11%.</p>

<p><b>5-6 Address post-construction issues in areas with pollutants of concern</b></p>	<p>In progress</p>	<p>No progress to date. This will be looked at once the retrofit program gets underway.</p>	<p>Address post-construction issues in areas with pollutants of concern.</p>	<p>Engineering Division</p>	<p>Not specified</p>	<p>Continuously ongoing throughout the duration of the permit.</p>	<p>For areas contributing to the Connecticut River and Angus Park Pond where bacteria is a Stormwater Pollutant of Concern and erosion or sedimentation problems are found during the annual inspections conducted under the long-term maintenance plan described in BMP 5.2, The Town of Glastonbury will prioritize those areas for the DCIA retrofit program under minimum control measure 6 – Pollution Prevention/Good Housekeeping.</p>
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**5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.**

- 5-1. Continued review of legal authority and/ or other updates to the current regulations and policies to meet or exceed those LID and runoff reduction practices required under this permit and in accordance with the CT Stormwater Quality Manual, Glastonbury’s land use regulations, guidance or construction project requirements.
- 5-2. Continued enforcement of LID/runoff reduction/water quality treatment on all approved development and redevelopment project.
- 5-3. Begin field inspections of all municipality owned retention and detention ponds within the priority areas and throughout the entire town.
- 5-4. Begin Implementation of a long term maintenance plan for all municipally owned stormwater basins and treatment structures.
- 5-5. Continued progress on DCIA mapping.
- 5-6. Continued inspections to address construction issues in areas with pollutants of concern.

### 5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	Acres (unknown at this time)
DCIA disconnected (redevelopment plus retrofits)	acres this year / acres total (unknown at this time)
Retrofits completed	unknown at this time
DCIA disconnected	% this year / % total since 2012 (unknown at this time)
Estimated cost of retrofits	(unknown at this time)
Detention or retention ponds identified	121 ponds

### 5.4 Briefly describe the method to be used to determine baseline DCIA.

The Town of Glastonbury will be following the guidance provided by DEEP and UConn CLEAR to calculate the baseline Directly Connected Impervious Area (DCIA) of the watershed that contributes stormwater runoff to each of its MS4 outfalls.

## 6. Pollution Prevention/Good Housekeeping (Section 6(a)(6) / page 31)

### 6.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
<b>6-1 Develop/implement formal employee training program</b>	Completed/Ongoing	Departments responsible for property maintenance activities conduct training for stormwater pollution prevention on an annual basis.	Develop/implement formal employee training program	Physical Services/Highway Division  Parks Department	July 1, 2017	Continuously ongoing throughout the duration of the permit.	Training materials consist of generalized stormwater pollution prevention video, review of facility specific Stormwater Pollution Prevention Plans, and other department specific training related to specific maintenance activities (salt application, fertilizer application, etc).
<b>6-2 Implement MS4 property and operations maintenance</b>	In progress	Parks Dept. has taken steps to reduce nitrates in fertilizer applications at Town Facilities.	Implement MS4 property and operations maintenance	Physical Services/Highway Division Parks Dept. Sanitation Dept. Facilities Dept.	July 1, 2018	In progress to meet due date of July 1, 2018.	The Town of Glastonbury-owned or -operated properties, parks, and other facilities that are owned, operated, or otherwise the legal responsibility of the Town of Glastonbury will be maintained so as to minimize the discharge of pollutants to its MS4.
<b>6-3 Implement coordination with interconnected MS4s</b>	In progress	The Town of Glastonbury will coordinate with operators of interconnected MS4's.	Implement coordination with interconnected MS4s	Engineering Division	Not specified	In progress	The Town of Glastonbury will coordinate with operators of interconnected MS4s
<b>6-4 Develop/implement program to control other sources of pollutants to the MS4</b>	On going/In progress	Nitrogen loading computations required for applications in the groundwater protection zones.	Develop/implement program to control other sources of pollutants to the MS4	Engineering Division	Not specified	On going/In progress	The Town of Glastonbury has continuously required the submission of Nitrogen loading computations to be submitted for all proposed developments in the

		Other measures will be considered.					groundwater protection overlay zones.
<b>6-5 Evaluate additional measures for discharges to impaired waters*</b>	In progress	Signage is in place at the dog park and other public parks and trails regarding the need to pick up pet waste. Bags are also provided for use by pet owners at these facilities. Other measures will be considered.	Evaluate additional measures for discharges to impaired waters*	Engineering Division	Not specified	In progress	On Glastonbury-owned or -operated lands with a high potential to contribute bacteria (such as dog parks, parks with open water, sites with failing septic systems) to these waters, the Town of Glastonbury will develop, fund, implement, and prioritize a retrofit or source management program to correct the problem(s) within a specific timeframe.
<b>6-6 Track projects that disconnect DCIA</b>	In progress/Ongoing	The Town of Glastonbury is currently tracking the total acreage of Directly Connected Impervious Area (DCIA) that is disconnected from the MS4 as a result of redevelopment or retrofit projects within the town.	Track projects that disconnect DCIA	Engineering Division	July 1, 2017	In progress	The Town of Glastonbury will document the amount of existing DCIA that is disconnected. The total amount of disconnected DCIA will be reported each year in the Annual Report. Starting on July 1, 2021, Glastonbury's goal will be to reduce 1% of its total DCIA acreage per year to the maximum extent possible.
<b>6-7 Implement infrastructure repair/rehab program</b>	In progress	The Town of Glastonbury will continue a program to identify MS4 structures to repair, rehabilitate, or upgrade to reduce or eliminate the discharge of pollutants into water bodies.	Implement infrastructure repair/rehab program	Engineering Division Physical Services/Highway Division	July 1, 2021	In progress to meet due date of July 1, 2021.	This program will be responsive to new information on outfalls discharging pollutants, impaired waters, inspections, or observations made during outfall mapping under the IDDE section of this plan.

<p><b>6-8 Develop/implement plan to identify/prioritize retrofit projects</b></p>	<p>In progress</p>	<p>No progress to date. The Town of Glastonbury will be developing a Retrofit Project Plan to identify and prioritize potential DCIA disconnection projects.</p>	<p>Develop/implement plan to identify/prioritize retrofit projects</p>	<p>Engineering Division  Physical Services/Highway Division</p>	<p>July 1, 2020</p>	<p>In progress to meet due date of July 1, 2020.</p>	<p>Prioritization will be based on several factors, including whether the project lies within one of the MS4 priority areas (urbanized area, DCIA &gt; 11%, discharge to impaired waters). The Town of Glastonbury will include in its annual report for the third year of the permit (2020-2021) its identification and prioritization process, a rationale for the selection of projects to be implemented, and the total acres of DCIA to be disconnected upon implementation.</p>
<p><b>6-9 Implement retrofit projects to disconnect 2% of DCIA</b></p>	<p>In progress</p>	<p>No progress to date.</p>	<p>Implement retrofit projects to disconnect 2% of DCIA</p>	<p>Engineering Division  Physical Services/Highway Division</p>	<p>July 1, 2022</p>	<p>In progress to meet due date of July 1, 2022.</p>	<p>The Town of Glastonbury will be developing a Retrofit Project Plan to disconnect 2% of DCIA.</p>
<p><b>6-10 Develop/implement street sweeping program</b></p>	<p>Ongoing</p>	<p>1,625 curb miles were swept during two complete rounds through town in 2017. Approximately 325 C.Y./88 Tons of material was collected and disposed of.</p>	<p>Develop/implement street sweeping program</p>	<p>Physical Services/Highway Division</p>	<p>July 1, 2017</p>		<p>The Town of Glastonbury is in the process of refining its existing annual street sweeping program to implement better ways of tracking quantities and lane miles swept through the use of GIS software and field tablets.</p>
<p><b>6-11 Develop/implement catch basin cleaning program</b></p>	<p>Ongoing</p>	<p>All catch basins were inspected annually for blocked grates and structural problems. Approximately 380 were cleaned as</p>	<p>Develop/implement catch basin cleaning program</p>	<p>Physical Services/Highway Division</p>	<p>July 1, 2020</p>	<p>In progress to meet due date of July 1, 2020.</p>	<p>Catch basins are routinely inspected when debris is removed from top grates before all significant rain events. Thorough full depth inspections/vacuum cleaning conducted on all</p>

		part of the annual paving program and based on locations where routine sediment building up has been noted.					basins located in annual paving program areas, all repairs/rebuilds noted and completed before paving begins. Basins identified as needing regular maintenance/cleaning are placed on a routine annual or semiannual cleaning. The Town of Glastonbury is in the process of refining its existing annual catch basin cleaning program to implement better ways of tracking the number of catch basins cleaned and quantities of material removed through the use of GIS software and field tablets.
<b>6-12 Develop/implement snow management practices</b>	Ongoing	Approximately 16,745 lane miles were treated with the use of computer controlled spreaders with ground speed control to meter amount of material applied and automatically stops application when truck stops moving.	Develop/implement snow management practices	Physical Services/Highway Division	July 1, 2018	In progress to meet due date of July 1, 2018.	Snow and ice management training implemented for every storm event, management directs employee's when to apply salt for pre-treating and during a winter event. Spreaders are set to apply 350-500 lbs./lane mile. Flat routes set at 350 lbs /lane mile while higher hilly terrain set at 500lbs/lane mile.

**6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.**

- 6-1. Continued refinement and updates to the existing annual formal employee training program for each department for compliance with this permit.
- 6-2. Continued implementation of MS4 property and operations maintenance.
- 6-3. Begin coordination with interconnected MS4s.
- 6-4. Begin development and implementation of a program to control other sources of pollutants to the MS4.
- 6-5. Continue evaluation of additional measures for discharges to impaired waters\*.
- 6-6. Continued tracking of projects that disconnect DCIA.
- 6-7. Begin review of proposed projects for implementation of an infrastructure repair/rehab program.
- 6-8. Begin development of a plan to identify/prioritize retrofit projects.
- 6-9. Begin review of all proposed developments for retrofit projects to disconnect 2% of DCIA.
- 6-10. Work refinement of the existing street sweeping program.
- 6-11. Continued review and refining of the existing catch basin cleaning program.
- 6-12. Continued review and refining of the existing snow management practices.

**6.3 Pollution Prevention/ Good Housekeeping reporting metrics**

<b>Metrics</b>	
Employee training provided for key staff	Yes -9/15/2016 Trained employees on new air type sweeper.
<b>Street sweeping</b>	
Curb miles swept	1,625 miles
Volume (or mass) of material collected	88 Tons/325 C.Y.
<b>Catch basin cleaning</b>	
Total catch basins in priority areas	6,373 ±
Total catch basins in MS4	6,772 ±
Catch basins inspected	6,772±
Catch basins cleaned	380
Volume (or mass) of material removed from all catch basins	77 Tons/285 C.Y.
Volume removed from catch basins to impaired waters (if known)	Unknown
<b>Snow management</b>	
Type(s) of deicing material used	Treated Salt Blend
Total amount of each deicing material applied	3,684 Tons
Type(s) of deicing equipment used	Computerized Spreaders with ground speed control
Lane-miles treated	16,745 miles
Snow disposal location (when required)	Riverfront Park-200 Welles Street



Staff training provided on application methods & equipment	Yes-Implemented for every storm event.
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	N/A
Reduction in turf area (since start of permit)	N/A
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	Glastonbury Riverfront Dog Park-Welles Street
Cost of mitigation actions/retrofits	N/A

#### 6.4 Catch basin cleaning program

**Briefly describe the method used to optimize your catch basin inspection and cleaning schedule. [Complete this section for the 2017 Annual Report only]**

Catch basins are routinely inspected when debris is removed from top grates before all significant rain events. Thorough full depth inspections/vacuum cleaning conducted on all basins located in annual paving program areas, all repairs/rebuilds noted and completed before paving begins. Basins identified as needing regular maintenance/cleaning are placed on a routine annual or semiannual cleaning.

The Town of Glastonbury is in the process of refining its existing annual catch basin cleaning program to implement better ways of tracking the number of catch basins cleaned and quantities of material removed through the use of GIS software and field tablets.

#### 6.5 Retrofit program

**Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]**

This section will be completed for the 2019 Annual Report.

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. [\[Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.\]](#)

This section will be completed for the 2019 Annual Report.

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years. [\[Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.\]](#)

This section will be completed for the 2019 Annual Report.

**Part IV: Certification**

“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.”

Chief Elected Official or Principal Executive Officer	Document Prepared by
Print name: <b>Richard J. Johnson</b> <b>Town Manager</b>	Print name: <b>Daniel A. Pennington, P.E.</b> <b>Town Engineer / Manager of Physical Services</b>
Signature / Date:	Signature / Date:

## **APPENDIX A**

1. 2017 Salmon River Watershed Partnership Outreach & Monitoring Activities Related to Stormwater & Water Quality Annual Report



## 2017- Salmon River Watershed Partnership Outreach & Monitoring Activities Related to Stormwater & Water Quality

(Bolton, Colchester, Columbia, East Haddam, East Hampton,  
Glastonbury, Haddam, Hebron, Lebanon & Marlborough)

Date	Event	Description	Audience and number of individuals reached and/or participated
March 2017	<b>Public Presentation:</b> <i>Amphibians as Eco-Indicators</i>	Presentation by <i>Mystic Aquarium</i> and partnering with the Eightmile River Watershed and The Nature Conservancy. Presentation focused on water quality concerns as it relates to amphibian habitat and health.	70 attendees
March 2017	<b>Annual Newsletter</b>	Annual newsletter covers a variety of SRWP activities and news items related to protecting watershed resources and preserving water quality	Sent for general distribution all 10 watershed towns, distributed to public at outreach events and posted on website
March 2017 and on-going	<b>Biofilter Project to Address Bacteria Impaired Waters and Public Outreach:</b> Gay City State Park, Hebron	Partnership Project at Gay City State Park with UCONN Master Gardeners and DEEP Parks to design and restore vegetation buffer areas as a biofilter and aid for deterring Canada geese and filtering run-off. Project started in spring and includes signage on native plants and purpose of project. Funds have been pledged by Master Gardener program and SRWP for planting and permanent educational signage. Additional grants funds being sought.	3 Master Gardener candidates and 1 mentor, park staff and SRWP staff-temporary outreach signage visible for all park visitors. 100's through summer months
April 2017	<b>Public Event:</b> Earth & Science Day in East Haddam	Booth set-up with display on SRWP activities and sign-up for water quality monitoring – special focus on	General public – 100s

		impacts of water quality to macroinvertebrates as indicators	
April 2017	<b>Public Event:</b> Taste of East Haddam	Booth Set-up with display on SRWP activities and sign-up for water quality monitoring-special focus on impacts of water quality to macroinvertebrates as indicators	General public-100s
May 2017	<b>Town Planners Workshop:</b>	Workshop with town land-use staff to review upcoming projects relating to land-use and water quality preservation	12 attendees
May 2017	<b>Public Event:</b> Marlborough Business Day and Public TV interview	Booth set-up with display on SRWP activities and sign-up for water quality monitoring – special focus on impacts of water quality to macroinvertebrates and updated preserved lands mapping	General public ≈ 200
June 2017	<b>Education Program:</b> East Haddam Middle School-6 <sup>th</sup> graders	Stormwater Run-off Program using Enviroscape Model and Designing a Stormwater Treatment System Activity. Follow-up article in local paper.	85 6 <sup>th</sup> graders
June-September, and on-going, 2017	<b>Field Work and Intern/volunteer training:</b> Partnering with DEEP Water Quality Monitoring and Fisheries Depts	Documenting summer stream temperatures using HOBO loggers. Loggers take hourly readings. Loggers launched in 10 locations in the watershed and summer data was retrieved in Sept and will be added to watershed temperature mapping to compare with land-use	3 college student interns and 2 community volunteers and town land-use staff and boards
June-August, 2017	<b>Field Monitoring and Volunteer Training:</b> Baseline water quality monitoring at 11 stream segments plus a <b>new route</b> adding 8 sites in Lake Pocotopaug Watershed (an impaired waterbody)	SRWP continued a monitoring plan for 11 sites in the watershed and added 8 new sites surrounding Lake Pocotopaug in East Hampton (an impaired waterbody) to establish baseline data and to track future changes. 12 local citizens were trained on hand-held monitoring equipment and took weekly samples for temperature, pH, dissolved oxygen, conductivity, total dissolved solids and salinity. A report with graphing to be generated in early 2018 and forwarded to all 10 watershed towns and shared with DEEP.	12 local citizens + 10 watershed towns
June-August, 2017	<b>Field Assessment and Volunteer Training:</b> 2 Stream Macroinvertebrate Assessments Conducted in summer of	Two summer field assessments for macroinvertebrates were conducted as a seasonal comparison with fall assessments for DEEP. One assessment was conducted as a college intern project and a second as a local Environmental Firm Team Building Program	3 college interns and 10 staff members and family from GZA, Inc.

	2017 as fall comparison studies using CT DEEP protocol.		
August 2017	<b>Public Event:</b> Haddam-Neck Fair	Booth Set-up with display on SRWP activities and sign-up for water quality monitoring-special focus on impacts of water quality to macroinvertebrates	General public-100s+
September	<b>River Clean-up:</b> As part of Source to Sea event, a clean-up on a segment of the Jeremy River was conducted as a community event partnering with CME and UCONN Soil & Water Club and Town of Colchester	Volunteers cleaned-up a half-mile section along the Jeremy River and Airline Trail which also included areas surrounding a commuter lot adjacent to Route 2. Items removed included: *1 mattress box-spring *2 batteries *8 tires *42 single-use plastic bags *201+ plastic water bottles *313 other plastic containers *110 glass bottles *33 nippers *56 aluminum cans *63 styrofoam cups *52 fast food items *8 diapers *1 carpet *5 pharmaceuticals/syringes *9 articles of clothing/shoes *2 pieces of furniture *12 bags of domestic garbage *16 street sweeper bristles	6 staff members of CME Associates, 15 UCONN Soil and Water Club Members and 3 community volunteers and Town of Colchester staff
September-November, 2017	<b>Field Assessment and Volunteer Training:</b> 11 Stream Macroinvertebrate Assessments Conducted in 2017 with volunteers and students using CT DEEP protocol.	Volunteers & students were trained to collect and identify benthic macroinvertebrates as part of CT DEEP protocol for conducting stream assessments to establish whether segments are meeting state water quality goals for aquatic life support. Program is also used as an education component, providing hands on opportunities for students to contribute real data.	Local citizen volunteers and East Hampton HS Environmental Club-45 individuals in total participated
October 2017	<b>Education Programs:</b> Pond Life and Water Quality; RHAM Middle School in	Presentation, field netting, identification and discussion on impacts of water quality on pond-life	90 RHAM Middle School students, teachers and

	Hebron and Marlborough Boy Scouts in Marlborough		parents and 15 Boy Scouts and family.
Year round	<b>Field Monitoring:</b> Conductivity Logger Launching and hourly sampling for conductivity and temperature.	Partnership project with GZA, Inc. Green Team (funding also received by GZA for 3 of the loggers in 2015) and SRWP. Data shared with DEEP and USGS. Sites selected are based on previous elevated conductivity levels which may indicate chloride presence.	6 GZA Green Team members, DEEP Fisheries Staff, with intent to share information with all interested parties.
Year round	<b>SRWP Outreach:</b> SRWP Activities SRWP is funded primarily through 7 of the watershed towns.	SRWP-Watershed Coordinator represents the Partnership on statewide issues related to water quality and non-point source pollution. Information is shared with 10 towns for their dispersal and use. Coordinator also comments as requested on town activities, regulations or planning projects specific to water quality and stormwater	10 watershed towns
Year round	<b>SRWP Outreach:</b> Facebook – Salmon River Watershed Partnership	Information pertaining to watershed monitoring efforts, opportunities to participate and actions local citizens can do to help protect streams	100s
Year round	<b>SRWP Outreach:</b> Website – <a href="http://www.salmonriverct.org">www.salmonriverct.org</a>	Website posts reports on water quality and monitoring and also offers information and links on issues related to Best Management Practices for Homeowners , Animal Owners and Business Owners	100s