MS4 General Permit
Town of Stratford 2018 Annual Report
Existing MS4 Permittee
Permit Number GSM 000105
January 1, 2018 – December 31, 2018

This report documents Town of Stratford's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2018 to December 31, 2018.

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
1-1 Implement public education program	*Complete and ongoing*	*-1/17/2018: Video posted to Town's Conservation Commission Facebook page on the importance of not releasing balloons to the environment. Alternatives to balloons were presented -4/17/2018: Lorax activity books on preventing pollution and curbing energy use was placed in Town Hall for residents to take. The books were also distributed to children attending the Town's annual Greensweep/Housatonic River Cleanup event.*	• Update stormwater management website and social media platforms with pertinent articles and links • Public educated on the importance of pollution prevention through print media and through participation in	Conservation (Tina Senft-Batoh)	Jul 1, 2019, and continue until permit expires	*See dates corresponding to each event or activity*	*-See attached article on foregoing use of disposable plastic straws*

		-4/22/2018: A group of Town Residents joined Sacred Heart University in planting Spartina patens at Stratford Point restoration area and were educated on the importance of having natural buffers to accommodate rising seas and increased stormwater runoff. *-6/7/2018: Prepared an article encouraging town residents to join the Skip the Straw movement. The article included links to a plastic pollution reduction toolkit and other means of reducing reliance on plastic products. The article was posted on the Town homepage, stormwater management website, and Conservation Commission Facebook page.* *-9/22/2018: Forest to Shore day. Attendees were provided tours of natural resources at Stratford Point marsh restoration area, Short Beach (horseshoe crab demonstration and beach walk), and Roosevelt Forest. The public was educated at each location about the importance of curbing pollution which can end up in the MS4 system and ultimately in Long Island Sound*	various events				
1.1a Distribute educational materials to developers	*Complete and on-going*	*Update Notice to contractors on MS4 requirements relating to construction.*	• Number of contractors receiving notice when applying for license or permit. • 29 Engineering licenses issued since April 2018.	Conservation (Tina Senft-Batoh) Engineering (John Casey) Zoning (Jay Habansky)	Jul 1, 2019, and continue until permit expires	*Dec 31, 2018*	*Continue to distribute with permit applications in Building, Engineering and Planning and Zoning, now included in e-permit system.*

1.1b Establish a program for stormwater education in schools	*On-going*	*Student field trips to Great Meadows Marsh*	• Conduct outreach activities to schools throughout the town discussing impacts of stormwater discharges on local waterbodies	Conservation (Tina Senft-Batoh)	September 1, 2019	*Spring 2017, Spring 2018*	*Members of the Town's Conservation Commission continued to hold in-class discussions and field trips.*
1.1c Develop a program for employee training	*Complete and ongoing*	*Training for fall of this reporting period pushed to winter of 2019*	• NA for this reporting period	Conservation (Tina Senft-Batoh)	Jul 1, 2019, and continue until permit expires	*2019*	*Consultant hired for training in 2019*
1-2 Address education/ outreach for pollutants of concern*					Jul 1, 2019		
1-3 Provide outreach for new ordinances	*On-going*	*Provide guidance and explanation of ordinances and regulations as needed*	Drafted direct mail letter to businesses regarding IDDE ordinance.	Conservation (Tina Senft-Batoh)	2018	*Dec 2018 Draft complete*	*See attached draft*

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

Dissemination of educational information on the Town's stormwater management website, and directly to contractors/permit applicants, will continue. Employee training by the Town's stormwater management consultant will continue to take place annually or biannually as funds allow. The Conservation Department will publish articles on the town website, social media platforms, and newspapers that address different facets of stormwater management, including ways in which residents can help reduce pollutants of concern (i.e. nutrients and bacteria).

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.
Notice on MS4 requirements relating to construction updated and distributed with Engineering license applications and permit applications for Inland Wetland, Planning & Zoning, Engineering and Building.	*Contractors and Developers.* *29 issued to licensees.*	*Construction Activities*		*Engineering, Building , P&Z, Conservation*
Classroom and field trips discussions conducted by Volunteers regarding the Great Meadows	*Students- 4th grade*	*How pollution in and around the marsh,*		*Conservation*

Marsh (an important estuary in Long Island Sound that is part of the federal Stewart B McKinney Wildlife Refuge)		*and along Town watercourses, can effect the health of the marsh.*		

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
2-1 Continue availability of Final Stormwater Management Plan	Complete		Plan available on Town website, engineering office, conservation office.	Engineering (John Casey)	Jul 1, 2019, and continue until permit expires	On-going	
2-1b Comply with public notice requirements for Annual Reports	*Complete*	*Draft 2017 Report was displayed on Town Website and at the Town Clerk and Public Library for inspection and comment*	Publication of notice	Engineering (John Casey)	Feb 1, 2018	Feb 1, 2018	*See attached webpage screenshot*
2.2 Project Greensweep	*Complete*	*Annual Greensweep/Housatonic River Cleanup event held*	-Number of volunteers *200 participants* -Total tonnage of material collected *~10 tons*	Conservation/DPW (Tina Senft-Batoh)	Spring 2018	*April 21, 2018*	*See Attached flyer Participants picked up garbage from local parks, beaches, open spaces, and watercourses.*
2.2b Regular Cleanups at Parks by Conservation Commission	*On-going*		-Number of events -Total number of participants	Conservation/DPW (Tina Senft-Batoh)	September 2017	Feb 2017 and Apr 2017	*No activity 2018*
2.2b Hold a "Household Hazardous Waste Day" Event	*Complete and ongoing biennially*		-Number of vehicles processed	Conservation/DPW (Tina Senft-Batoh	October 2017	Nov 4, 2017	*Biennial Household Hazardous Waste Collection will be conducted in 2019*
2-3 Establish stormwater committee	*Complete*		*Provide forum to coordinate SWMP implementation across depts. and commissions*	Conservation (Tina Senft-Batoh), Engineering (John Casey)	-	*Nov 1, 2017*	
2-4 Establish volunteer tree planting program	*Complete*		*Number of Trees purchased by public 1*	Conservation (Tina Senft-Batoh), Engineering (John Casey)	-	*Oct 2017*	*No activity 2018*

2-5 Participation in Save the Sound's unified Water Study. The Study is assessing the quality of embayments in Long Island Sound.	*Complete and ongoing*	*Completed sampling trips in the Housatonic River off of Stratford for the 2018 sampling season (May 2018-October 2018).*	*Completion of 11 planned sampling trips at 5 stations. Provied data to Save the Sound for their water quality reporting*	Conservation (Tina Senft-Batoh), Engineering (John Casey)	-	*May – Oct 2018*	*Participation in this program will continue provided funding and equipment is once again made available.*

2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

Hold quarterly stormwater committee meetings to review SMP implementation progress. Town staff members will advise public committees/commission at their monthly meetings.
Annual Greensweep/Housatonic River Cleanup event will be held Spring 2019
Biennial Household Hazardous Waste Collection will be conducted in 2019
Participation in Save the Sound's unified Water Study will continue in 2019

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of Annual Report announced to public	Yes	*Feb 13, 2019*	*http://www.townofstratford.com/qcontent/NewsFeed.aspx?FeedID=2372*
Greensweep: # of volunteers attending, Total tonnage of material collected	Yes	*April 21, 2018*	*Over 200 participants collected ~10 tons of material from local parks, beaches, open spaces, and watercourses.*
Public Commission cleanup efforts: -Number of events, Total number of participants, tonnage collected	No		
Household Hazardous Waste Day- # of vehicles processed	No		
Staff committee established as Conservation- Tina Batoh, Planning and Zoning- Jay Habansky, Town Planner- Susmitha Attota, Highway- Tom Albert, Engineering- John Casey. Meeting quarterly to review plan implementation.	Yes	On-going 2018	*Reports to Commissions included in minutes posted monthly with Town Clerk and Town Website.*
The Town's Conservation Department and volunteers from Conservation Commission participated in a regional effort to assess the quality of embayments in Long Island Sound. Participants are coordinated through Save the Sound and include volunteers along the CT coastline and north shore of Long Island Sound. The Stratford group was funded though the HarborWatch and the Long Island	Yes	*May 2018-Oct 2018*	*The data was provided to Save the Sound for inclusion in their study.*

Sound Funders Collaborative to assess 5 stations in the Housatonic river for temperature, salinity, depth, dissolved oxygen, turbidity, and chlorophyll a. Twice-monthly samplings were conducted between May and October of 2018.			

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
3-1 Develop written IDDE program	Complete	Development of written IDDE program using the CT IDDE program template in draft form.	Written plan of IDDE program in place	Conservation (Tina Senft-Batoh) Engineering (John Casey) WPCA (Thomas Hyde) Highways (Thomas Albert)	Jul 1, 2019	Anticipate completing by the deadline of July 1, 2019.	Town Consultant (HRP) completed IDDE program materials
3-2 Update maps of all MS4 stormwater outfalls throughout municipality	In progress	Town is in process of updating map layers as additional information is received	Updated of GIS map layers	Engineering (John Casey)	Jul 1, 2020	*Dec 2019*	*Staff reductions will mean outside consulting may be necessary*
3-3 Implement citizen reporting program	Complete	The Town consultant as part of the IDDE program specified the citizen reporting system.	Completion of SOP for program	Conservation (Tina Senft-Batoh) IT Department (David Wright)	Jul 1, 2018	10-30-18.	Citizens may submit a comment, service request, or complaint by email, phone or on-line by clicking on the "Submit Service Request" link found on the Town of Stratford Home Page: http://www.townofstratford.com
3-4 Establish legal authority to prohibit illicit discharges			Establishment of authority upon approval of ordinance by Town Council	Mayor (Laura Hoydick)	Jul 1, 2018	*Completed November 13, 2018*	
3-5 Develop record keeping system for IDDE tracking			Development of system/database	IT Department (David Wright)	Jul 1, 2017		

3-6 Address IDDE in areas with pollutants of concern			•No. of reported and investigated IDDE in areas with pollutants of concern	Public Works (Maurice McCarthy) Blight (Richard Fredette)	July 1, 2019 and through life of permit		

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

3.2 Consultant will be engaged to perform another map update in 2019
3.3 Bruce Brook cleanup effort and IDDE investigation conducted by Harborview in coordination with the City of Bridgeport will continue.
IDDE training will be provided to town staff as part of IDDE reporting program.

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

Date of Report	**Location / suspected source**	**Response taken**
3/16/2018	*435 Seabreeze Drive-, storm outfall potential oil and debris*	*Upon inspection, no oil sheen was observed, but litter was observed. The Town is working on a plan to remove accumulated sediment, invasive vegetation from outfall.*
4/10/2018	*115 Gem Street & Emerald Place- debris in stream*	*Upon inspection, any work that may have taken place appeared to be inimical and amounted to yard maintenance.*
4/27/2018	*145 Dewey Street, structure fire*	*1-2 gallons of motor oil was discharged in to catch basin. The Fire Department was on scene and protected the catch basin from any additional infiltration. No further action was required.*

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)

Bruce Brook in vicinity of Stonybrook Rd/Broadbridge Ave	unknown	Bruce Brook	unknown	Unknown	Source under investigation	Yes

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

VueWorks work order system is used by Highway and Conservation departments to track, investigation and follow up of IDDE detection.

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
2626 Huntington Road	new system installed	N/A
65 Patricia Lane	new tank installed	N/A

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	*#330*
Estimated or actual number of interconnections	*#N/A*
Outfall mapping complete	*90%*
Interconnection mapping complete	*0%*
System-wide mapping complete (detailed MS4 infrastructure)	*70%*
Outfall assessment and priority ranking	*1%*

Dry weather screening of all High and Low priority outfalls complete	*#0*
Catchment investigations complete	*#1*
Estimated percentage of MS4 catchment area investigated	*0%*

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 originally scheduled for fall of 2018 will be pushed to January 2019 and in January each following year

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
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	In progress	Land use boards now require letter from licensed engineer to ensure MS4 compliance	Making appropriate changes and updates to land use regulations	CAO (Chris Tymniak)	Jul 1, 2019	*Letter Completed July 1, 2017 – regulations to continue going forward.*	
4-2 Develop/Implement model for interdepartmental coordination in site plan review and approval	In progress	*All land use applications are sent to various departments for staff comments prior to hearings*	interdepartmental coordination in site plan review *82 applications referred for review 2018.*	Zoning (Jay Habansky)	Jul 1, 2018	*Continuation of existing practice therefore completed July 1, 2017*	
4-3 Review site plans for stormwater quality concerns	On-Going	*All land use applications are sent to Engineer for staff comments prior to hearings.*	Completion of reviews. *82 applications referred for review 2018*	Zoning (Jay Habansky) Engineering (John Casey) Conservation (Tina Senft-Batoh)	July 1, 2017 and continue through life of permit	*Continuation of existing practice therefore completed July 1, 2017*	

4-4 Conduct site inspections to ensure compliance with MS4, stormwater management plan, and sediment and erosion control requirements	On-Going	Site inspections for site development in compliance with the permit continue	Conduct inspections *17 compliance inspections by ZEO for 2018. Inspection log attached.*	Zoning (Jay Habansky) Conservation (Tina Senft-Batoh)	July 1, 2017 and continue through life of permit	*Continuation of existing practice therefore completed July 1, 2017*	*Inspection process developed by ZEO. (Inspection list attached)*
4-5 Maintain current opportunities for allowing public comment on site development	On-Going	public hearings and public forums held for site development proposals with significant impacts continue	Conduct public hearings and public forums on site development proposals	Mayor (Laura Hoydick)	July 1, 2017 and continue through life of permit	*Continuation of existing practice therefore completed July 1, 2017*	*Public comment is always offered at every public hearing for site plan review*
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	*Complete*	developers provided necessary information in permit application packages for site development	Continue to provide developers with necessary information in permit application package	Zoning (Jay Habansky) Buildings (Brian Donovan) Engineering (John Casey) Conservation (Tina Senft-Batoh	July 1, 2017 and continue through life of permit	N/A	*See Attached*
4-7 Develop stormwater compliance checklist	*In progress*	*Developed draft checklist to provide developers on stormwater mgmt compliance requirements*	*Standardize plan review*	Zoning (Jay Habansky)	-Dec 2018	*Compliance checklist under development*	*See attached first draft checklist*

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

See attached Inspection Log.

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
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff			Incorporation of LID in to land use regulatory	Town Attorney (Chris Hodgson)	Jul 1, 2019		

reduction in site development planning			framework				
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	On-Going	Plans reviewed and developments inspected to ensure Town goals for LID/runoff mitigation are achieved	Inspect developments for LID/runoff compliance	Engineering (John Casey) Zoning (Jay Habansky Conservation (Tina Senft-Batoh))	Jul 1, 2019 and continue through life of permit	N/A	
5-3a Update Identify retention and detention ponds in priority areas	Complete	Update list of water quality chambers and detention basins publicly maintained for DPW.		Engineering (John Casey)	Dec, 2018	Nov, 2018	*See attached*
5-3b Implement long-term maintenance plan for stormwater basins and treatment structures			Creation of maintenance plan document	Highways (Thomas Albert	Jul 1, 2019		
5-4 DCIA mapping	In progress		2018:coordinate effort with MetroCOG 2019: compile data 2020: complete mapping	Engineering (John Casey)	Jul 1, 2020		
5-5 Address post-construction issues in areas with pollutants of concern	On-Going	Regulations and reporting procedures in place to ensure initial and long-term compliance		Zoning (Jay Habansky) Conservation (Tina Senft-Batoh)	Not specified		
5-6 Open space grant	*In progress*		*Acreage of property purchased*	Planning/Zoning (Jay Habansky) Conservation (Tina Senft-Batoh)	-	*Jul 1 2019*	*Town in negotiation w/ property owner at James Farm Road and Beaver Dam Road after being awarded $264K Open Space Grant*

5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.

5-1, 2 Establish and/or update legal authority, guidelines and regulations regarding LID and runoff reduction in development
5-3b Implement long-term maintenance plan for stormwater basins and treatment structures
5.4 2019: engage consultant to compile data & 2020: complete mapping
5.6 Complete previously initiated Open space acquisition
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5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	acres
DCIA disconnected (redevelopment plus retrofits)	acres this year / acres total
Retrofits completed	*3 locations- - see DCIA log attached*
DCIA disconnected Retrofits	0.45 acres this year
Estimated cost of retrofits	$35,000
Detention or retention ponds identified	# 1 this year /#9 total

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

5.6 Open space grant has been awarded to Town in amount of $240K and will be secured and property acquisition procedures will begin.

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
6-1 Develop/implement formal employee training program	*Ongoing*	*Stormwater management training held in Public Works Department N/A*	Training conducted *N/A*	Conservation (Tina Senft-Batoh)	Jul 1, 2019	*February 2019*	*Town will contract with consultant to hold employee training in 2019. Last training was conducted in April of 2017. Training every two years should be sufficient to ensure that staff is knowledgeable in pollution prevention and good housekeeping.*
6-2 Implement MS4 property and operations maintenance	Complete and Ongoing	*A. -Reduced Fertilizer use at town facilities B. -Parks Department continues to pick up bagged leaves and grass clippings from residences. C. -Leaf and grass clippings from municipal properties are mulched on-site by the Parks Department D.- The Parks Department uses eco friendly ice melt town wide*	Change to Eco friendly "Safe n' Sure" ice melt in use at all town facilities.	Public Works (Maurice McCarthy)	Jul 1, 2018 and continue through life of permit	Jul 1, 2018 and Ongoing	A. Fertilizer was only used at a few sports complexes and Town Hall. No fertilizer is being used on school grounds. B. The material is taken to the transfer station where it is hauled by an outside contractor.
6-3 Implement coordination with interconnected MS4s	*On-going*	*Work with City of Bridgeport on Bruce Brook cleanup* *Housatonic River Cleanup joint effort with Milford and Shelton*	Meeting with operators of interconnected MS4s and coordinating efforts to achieve BMPs	Conservation (Tina Senft-Batoh) Engineering (John Casey) Zoning (Jay Habansky)	July 1, 2021	*Dec 2018 and Ongoing*	*The Conservation Superintendent met with representatives of Harbor Watch to conduct sampling of a storm sewer catch basin on August 22, 2018. The catch basin is in an area of Broadbridge Avenue that outlets to Bruce*

							Brook. Previous sampling indicated extremely high concentrations of E. coli from the catch basin. The sampling from August 22, 2018 and a subsequent sampling in August indicated persistently high bacterial concentrations. The Town will continue to work with Harbor Watch to track down the source of pollution.
6-4 Develop/implement program to control other sources of pollutants to the MS4			Develop/implement program	Public Works (Maurice McCarthy)	July 1, 2021		
6-5 Evaluate additional measures for discharges to impaired waters*			Report on additional measure being undertaken	Public Works (Maurice McCarthy) Zoning (Jay Habansky)	July 1, 2019		
6-6 Track projects that disconnect DCIA	Ongoing	*Refined spreadsheet to track developments that disconnect impervious areas*	Continuously maintained spreadsheet of disconnect projects	Zoning (Jay Habansky) Engineering (John Casey)	July 1, 2017	On-going	*See attached in progress*
6-7 Implement infrastructure repair/rehab program	In Progress		Update/implement program	Highways (Thomas Albert) Engineering (John Casey)	Jul 1, 2020		
6-8a Develop plan to identify/prioritize retrofit projects			2020: Develop retrofit plan	Engineering (John Casey) Conservation (Tina Senft-Batoh)	Jul 1, 2020		

6-8b Implement retrofit projects to disconnect 2% of DCIA			2022: Implement retrofit projects	Engineering (John Casey) Conservation (Tina Senft-Batoh)	Jul 1, 2022		
6-9 Assess/modify street sweeping program	*Complete and Ongoing*	*Map to track streets swept on a daily basis*	Modify program to comply with MS4 General Permit	Highways (Thomas Albert)	Jul 1, 2018	*11/2018 & ongoing/ Yearly*	*All streets are swept once in town. Main roads are done once and again on a as needed basis*
6-10 Assess/modify catch basin cleaning program	*Complete and Ongoing*	*Developed Standard Operating Procedure for cleaning CB's and critical stream locations.*	Inspect all town catch basins by 2020	Highways (Thomas Albert)	Jul 1, 2020	*Sept 2018 SOP's instituted*	*See attached SOP for CB and stream cleaning*
6-12 Assess/modify snow management practices			Modify program to comply with MS4 General Permit	Highways (Thomas Albert)	Jul 1, 2019		
6-13 Identify highly erosive areas in town ROW	*Not started*	*Collect information on eroding areas in ROW from highway maintenance personnel over course of normal operations*	*ID areas contributing large volume of sediment to town waterbodies*	*Highways (Thomas Albert) Conservation (Tina Senft-Batoh)*	-	*Jul 1, 2020*	*Reason for addition: Reduce sedimentation of waterways near town ROWs*

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

Conservation Dept will coordinate with City of Shelton on Cemetery Brook / Cranberry Pond coliform investigation.

Continue to work with Harbor Watch, Soundkeeper, and City of Bridgeport to reduce pollution of Bruce Brook.

Training scheduled for Town Staff for first quarter 2019

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	*Will arrange for 2019*

Street sweeping	
Curb miles swept	*500 est miles*
Volume (or mass) of material collected	*~300* tons
Catch basin cleaning	
Total catch basins in priority areas	*#5500*
Total catch basins in MS4	*#5500*
Catch basins inspected	*#600*
Catch basins cleaned	*#600*
Volume (or mass) of material removed from all catch basins	*100 tons*
Volume removed from catch basins to impaired waters (if known)	*Not tracked separate*
Snow management	
Type(s) of deicing material used	*Straight salt*
Total amount of each deicing material applied	*2500 tons*
Type(s) of deicing equipment used	*spreaders*
Lane-miles treated	*400 miles per storm*
Snow disposal location	*N/A*
Staff training provided on application methods & equipment	*Yes: on the job training for new employees*
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	*Restricted fertilizer use to Town Hall and a few municipal sports complexes*
Reduction in turf area (since start of permit)	*0 acres*
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
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]

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 2018 report. Section to be completed for the 2019 Annual Report]
Small road drainage retrofits completed including Housatonic Ave, Horace St, Andrew St. This included installation of a deep sump Catchbasin with hooded outlet, discharging to a subsurface infiltration system.

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 2018 report. Section to 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 2018 report. Section to be completed for the 2019 Annual Report.]

Part II: Impaired waters investigation and monitoring [This section required beginning with 2018 Annual Report]

1. Impaired waters investigation and monitoring program

1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution. This data is available on the MS4 map viewer: http://s.uconn.edu/ctms4map.

Nitrogen/ Phosphorus ☒ Bacteria ☒ Mercury ☐ Other Pollutant of Concern ☒

1.2 Describe program status.

Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.
Monitoring intentioned to be conducted in the fall of 2018 will be conducted in the first quarter of 2019. An additional round of monitoring will be conducted in the summer of 2019.

2. Screening data for outfalls to impaired waterbodies (Section 6(i)(1) / page 41)

2.1 Screening data collected under 2017 permit

Complete the table below for any outfalls screened during the reporting period. Each Annual Report will add on to the previous year's screening data showing a cumulative list of outfall screening data.

Outfall ID	**Sample date**	**Parameter** (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	**Results**	**Name of Laboratory (if used)**	**Follow-up required?**
BRB-OF-0043CB	4-12-18	Bacteria	- *E. coli* 4200 *CFU/100ml*		*Yes*
BRB-OF-0043CB	5-22-18	Bacteria	- *E. coli* 7800 *CFU/100ml*		*Yes*
BRB-OF-0043CB	6-25-18	Bacteria	- *E. coli* 3200 *CFU/100ml*		*Yes*
BRB-OF-0043CB	7-16-18	Bacteria	- *E. coli* - *CFU/100ml*		*Yes*
BRB-OF-0043CB	8-22-18	Bacteria	- *E. coli* 8400 *CFU/100ml*		*Yes*
BRB-OF-0043CB	8-29-18	Bacteria	- *E. coli* 33000 *CFU/100ml*		*Yes*

BRB-OF-0037	8-22-18	Bacteria	*- E. coli* 280 *CFU/100ml*		*Yes*
BRB-OF-0040CB	8-22-18	-	*- E. coli* stagnant *CFU/100ml*		*Yes*
Old Spring Rd	8-22-18	Bacteria	*- E. coli* 2000 *CFU/100ml*		*Yes*
BRB-OF-0016	8-22-18	-	*- E. coli* Dry *CFU/100ml*		*Yes*
Bunnell Ave	8-22-18	Bacteria	*- E. coli* 900 *CFU/100ml*		*Yes*

2.2 Credit for screening data collected under 2004 permit

If any outfalls to impaired waters were sampled under the 2004 MS4 permit, that data can count towards the monitoring requirements under the modified 2017 MS4 permit. Complete the table below to record sampling data for any outfalls to impaired waters under the 2004 MS4 permit.

Outfall	**Sample date**	**Parameter** (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	**Results**	**Name of Laboratory (if used)**	**Follow-up required?**
Park/Maple	*10-4-10*	*Nitrogen*	*TN -0.68 mg/l*	*EM*	*No*
		Phosphorus	*TP- 0.27 mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 2500 *CFU/100ml*	*EML*	*No*
Monroe	*10-4-10*	*Nitrogen*	*TN -0.97 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.63mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 240 *CFU/100ml*	*EML*	*No*
Linden	*10-4-10*	*Nitrogen*	*TN -0.81 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.18mg/*	*EML*	*No*
		Bacteria	*E. coli* 500 *CFU/100ml*	*EML*	*No*
Ryders	*10-4-10*	*Nitrogen*	*TN -1.42 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.43mg*	*EML*	*No*
		Bacteria	*E. coli* 180 *CFU/100ml*	*EML*	*No*
Garfield	*10-4-10*	*Nitrogen*	*TN -2.01 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.39mg*	*EML*	*No*
		Bacteria	*E. coli* 950 *CFU/100ml*	*EML*	*No*
Sunset	*10-4-10*	*Nitrogen*	*TN -0.31 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.17mg*	*EML*	*No*
		Bacteria	*E. coli* 1000 *CFU/100ml*	*EML*	*No*
Park/Maple	*10-19-11*	*Nitrogen*	*TN -0.94 mg/l*	*EM*	*No*
		Phosphorus	*TP- ND mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 14500 *CFU/100ml*	*EML*	*No*
Monroe	*10-19-11*	*Nitrogen*	*TN -1.36 mg/l*	*EML*	*No*
		Phosphorus	*TP- NDmg/l*	*EML*	*No*
		Bacteria	*- E. coli* 5600 *CFU/100ml*	*EML*	*No*

Linden	*10-19-11*	*Nitrogen*	*TN -1.02 mg/l*	*EML*	*No*
		Phosphorus	*TP- NDmg/*	*EML*	*No*
		Bacteria	*E. coli* 76 *CFU/100ml*	*EML*	*No*
Ryders	*10-19-11*	*Nitrogen*	*TN -2.14 mg/*	*EML*	*No*
		Phosphorus	*TP- NDmg*	*EML*	*No*
		Bacteria	*E. coli* 250 *CFU/100ml*	*EML*	*No*
Garfield	*10-19-11*	*Nitrogen*	*TN -2.12 mg/*	*EML*	*No*
		Phosphorus	*TP- NDmg*	*EML*	*No*
		Bacteria	*E. coli* 566 *CFU/100ml*	*EML*	*No*
Sunset	*10-19-11*	*Nitrogen*	*TN -0.64 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.17mg*	*EML*	*No*
		Bacteria	*E. coli* 12 *CFU/100ml*	*EML*	*No*
Park/Maple	*4-27-12*	*Nitrogen*	*TN -1.38 mg/l*	*EM*	*No*
		Phosphorus	*TP- 0.16mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 3400 *CFU/100ml*	*EML*	*No*
Monroe	*4-27-12*	*Nitrogen*	*TN -1.2 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.52mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 1600 *CFU/100ml*	*EML*	*No*
Linden	*4-27-12*	*Nitrogen*	*TN 0.94 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.11mg/*	*EML*	*No*
		Bacteria	*E. coli* 88 *CFU/100ml*	*EML*	*No*
Ryders	*4-27-12*	*Nitrogen*	*TN -1.74 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.28mg*	*EML*	*No*
		Bacteria	*E. coli* 160 *CFU/100ml*	*EML*	*No*
Garfield	*4-27-12*	*Nitrogen*	*TN -4.6 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.91mg*	*EML*	*No*
		Bacteria	*E. coli* 8 *CFU/100ml*	*EML*	*No*
Sunset	*4-27-12*	*Nitrogen*	*TN -1.80 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.20mg*	*EML*	*No*
		Bacteria	*E. coli* 460 *CFU/100ml*	*EML*	*No*
Park/Maple	*8-22-13*	*Nitrogen*	*TN -1.90 mg/l*	*EM*	*No*
		Phosphorus	*TP- 0.79mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 1800 *CFU/100ml*	*EML*	*No*
Monroe	*8-22-13*	*Nitrogen*	*TN -5.4 mg/l*	*EML*	*No*
		Phosphorus	*TP- 2.19mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 5200 *CFU/100ml*	*EML*	*No*
Linden	*8-22-13*	*Nitrogen*	*TN 1.72 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.40mg/*	*EML*	*No*
		Bacteria	*E. coli* 240 *CFU/100ml*	*EML*	*No*
Ryders	*8-22-13*	*Nitrogen*	*TN -0.94 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.11mg*	*EML*	*No*

		Bacteria	*E. coli* 900 *CFU/100ml*	*EML*	*No*
Garfield	*8-22-13*	*Nitrogen*	*TN -0.88 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.19mg*	*EML*	*No*
		Bacteria	*E. coli* 1500 *CFU/100ml*	*EML*	*No*
Sunset	*8-22-13*	*Nitrogen*	*TN -1.32 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.16mg*	*EML*	*No*
		Bacteria	*E. coli* 2400 *CFU/100ml*	*EML*	*No*
Park/Maple	*9-20-14*	*Nitrogen*	*TN -0.74 mg/l*	*EM*	*No*
		Phosphorus	*TP- 0.14mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 984 *CFU/100ml*	*EML*	*No*
Monroe	*9-20-14*	*Nitrogen*	*TN -3.6 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.90mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 426 *CFU/100ml*	*EML*	*No*
Linden	*9-20-14*	*Nitrogen*	*TN 3.0 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.20mg/*	*EML*	*No*
		Bacteria	*E. coli* 1412 *CFU/100ml*	*EML*	*No*
Ryders	*9-20-14*	*Nitrogen*	*TN -28.00 mg/*	*EML*	*No*
		Phosphorus	*TP- 7.15mg*	*EML*	*No*
		Bacteria	*E. coli* 720 *CFU/100ml*	*EML*	*No*
Garfield	*9-20-14*	*Nitrogen*	*TN -1.22 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.20mg*	*EML*	*No*
		Bacteria	*E. coli* 1480 *CFU/100ml*	*EML*	*No*
Sunset	*9-20-14*	*Nitrogen*	*TN -1.16 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.26mg*	*EML*	*No*
		Bacteria	*E. coli* 650 *CFU/100ml*	*EML*	*No*
Park/Maple	*7-31-15*	*Nitrogen*	*TN -1.16 mg/l*	*EM*	*No*
		Phosphorus	*TP- 0.20mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 184 *CFU/100ml*	*EML*	*No*
Monroe	*7-31-15*	*Nitrogen*	*TN -1.72 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.32mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 688 *CFU/100ml*	*EML*	*No*
Linden	*7-31-15*	*Nitrogen*	*TN 2.3 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.22mg/*	*EML*	*No*
		Bacteria	*E. coli* 108 *CFU/100ml*	*EML*	*No*
Ryders	*7-31-15*	*Nitrogen*	*TN -0.76 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.15mg*	*EML*	*No*
		Bacteria	*E. coli* 164 *CFU/100ml*	*EML*	*No*
Garfield	*7-31-15*	*Nitrogen*	*TN -0.74 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.13mg*	*EML*	*No*
		Bacteria	*E. coli* 204 *CFU/100ml*	*EML*	*No*

Sunset	*7-31-15*	*Nitrogen*	*TN -0.6 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.14mg*	*EML*	*No*
		Bacteria	*E. coli* 844 *CFU/100ml*	*EML*	*No*
Park/Maple	*9-1-16*	*Nitrogen*	*TN -1.46 mg/l*	*EM*	*No*
		Phosphorus	*TP- 0.55mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 1486 *CFU/100ml*	*EML*	*No*
Monroe	*9-1-16*	*Nitrogen*	*TN -2.2 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.98mg/l*	*EML*	*No*
		Bacteria	*- E. coli* 1733 *CFU/100ml*	*EML*	*No*
Linden	*9-1-16*	*Nitrogen*	*TN 2.0 mg/l*	*EML*	*No*
		Phosphorus	*TP- 0.30mg/*	*EML*	*No*
		Bacteria	*E. coli* 2420 *CFU/100ml*	*EML*	*No*
Ryders	*9-1-16*	*Nitrogen*	*TN -1.58 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.25mg*	*EML*	*No*
		Bacteria	*E. coli* 866 *CFU/100ml*	*EML*	*No*
Garfield	*9-1-16*	*Nitrogen*	*TN -1.42 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.25mg*	*EML*	*No*
		Bacteria	*E. coli* 1011 *CFU/100ml*	*EML*	*No*
Sunset	*9-1-16*	*Nitrogen*	*TN -0.66 mg/*	*EML*	*No*
		Phosphorus	*TP- 0.19mg*	*EML*	*No*
		Bacteria	*E. coli* 2420 *CFU/100ml*	*EML*	*No*

3. **Follow-up investigations** (Section 6(i)(1)(D) / page 43)

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall	Status of drainage area investigation	Control measure implementation to address impairment

4. **Prioritized outfall monitoring** (Section 6(i)(1)(D) / page 43)

Once outfall screening has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. **Begin monitoring these outfalls on an annual basis by July 1, 2020.**

Outfall	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)

Part III: Additional IDDE Program Data [This section required beginning with 2018 Annual Report]

1. Assessment and Priority Ranking of Catchments data (Appendix B (A)(7)(c) / page 5)

Provide a list of all catchments with ranking results (DEEP basins may be used instead of manual catchment delineations).

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank
7102-00 Bruce Brook	*High Priority*	*1*
6026-03 Longbrook, Ferry Creek	*High Priority*	*2*
6026-03 Cemetery Pond Brook	*High Priority*	3
6025-00 Far Mill River	*Medium Priority*	4
6026-00 Beaver Dam Lake, Cooks Pond, Peck's Mill Pond, Pumpkin Ground Brook	*Low Priority*	5
6000-84 Raven Stream, Motil Pond	*Low Priority*	6
6000-82 Freeman Brook Complex	*Low Priority*	7
6000-00&85 Housatonic River (Upper and Mouth)	*High Priority*	
7101-00 Lewis Gut	*High Priority*	
Long Island Sound	*High Priority*	

2. Outfall and Interconnection Screening and Sampling data (Appendix B (A)(7)(d) / page 7)

2.1 Dry weather screening and sampling data from outfalls and interconnections

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies.

Outfall / Interconnection ID	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken
BRB-OF-0043	*4-12-18*					*E. coli 4200 CFU/100ml*				
OLD Spring Rd	8-22-18					*E. coli 2000 CFU/100ml*				
Bruce Brook downstream Connors Lane	8-22-18					*E. coli 2700 CFU/100ml*				

2.2 Wet weather sample and inspection data

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

Outfall / Interconnection ID	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern

3. **Catchment Investigation data** (Appendix B (A)(7)(e) / page 9)

3.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified. An example is provided below.

Outfall ID	Receiving Water	System Vulnerability Factors
BRB-OF-0043	*Bruce Brook*	*3, 6, 8, 10*

Where SVFs are:

1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
5. Common trench construction serving both storm and sanitary sewer alignments.
6. Crossings of storm and sanitary sewer alignments.
7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
9. Areas formerly served by combined sewer systems.
10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).
12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).

3.2 Key junction manhole dry weather screening and sampling data

Key Junction Manhole ID	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants

3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure

Discharge location	Source location	Discharge description	Method of discovery	Date of discovery	Date of elimination	Mitigation or enforcement action	Estimated volume of flow removed
BRB-OF-0037	*CB*	*E. coli 280 CFU/100ml*	*sampling*	8-22-18		*No follow up needed.*	
OLD Spring Rd	stream	*Elevated E-Coli concentrations 2000*	*sampling*	8-22-18		The town is continuing monitoring until source is identified	
Bruce Brook upstream Connors Lane	stream	*Elevated E-Coli concentrations 1600*	*sampling*	8-22-18		The town is continuing monitoring until source is identified	
Bruce Brook Bunnell Ave	stream	*E. coli 900 CFU/100ml*	*sampling*	8-22-18		*No follow up needed*	
BRB-OF-0016	CB	Dry CB	*sampling*	8-22-18		*No follow up needed*	
BRB-OF-0040	CB	Stagnant CB sump	*sampling*	8-22-18		*No follow up needed*	

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: Laura R. Hoydick	Print name: John R. Casey, P.E.
Signature / Date:	Signature / Date:

STOP SUCKING STRATFORD!

Eliminating use of Disposable Plastic Straws

Every year, an estimated eight million tons of plastic waste enters the world's ocean. In terms of total tonnage, plastic straws contribute only a small percentage to the mass of this plastic waste, but they are, however, extremely numerous. Single-use plastic straws feature among the top ten items collected during coastal cleanups. After being used for an average of only twenty minutes, the straws are littered, left on beaches, blown into the ocean by wind, or enter the sea through storm drains. Once in the ocean, the straws can be directly ingested by animals such as whales, birds, and turtles, or can be broken down in to microplastics (which may then be ingested by animals and accumulate up the food chain, potentially landing on your dinner plate!). With an estimated 71% of seabirds, and 30% of sea turtles being found with plastic in their stomachs, the problem of plastic pollution has become dire. By curbing and hopefully eliminating use of plastic straws, you can take one simple step in mitigating a global crisis. Next time you are offered a plastic straw, skip it! At restaurants, before your server brings water or drinks, request that no straw be provided to you. Opt to drink directly from a glass. If you would like to continue using straws, consider purchasing some reusable stainless steel straws for your home, and encourage your favorite local restaurants to make a switch to paper straws.

Keep in mind, the problem of plastic pollution is much greater than plastic straws. But once you "stop sucking," hopefully you will also be encouraged to reduce your reliance on other plastic items such as food containers, utensils, bottles, and plastic bags.

For more information on how you can do your part to reduce plastic waste, please see the following:

http://www.earthday.org/wp-content/uploads/Earth-Day-Network-Plastic-Pollution-Primer-and-Action-Toolkit-updated-2.20.2018.pdf

https://www.nrdc.org/stories/10-ways-reduce-plastic-pollution

TOWN OF STRATFORD
offering more from forest to shore

CONSERVATION DEPARTMENT
SUPERINTENDENT: CHRISTINA SENFT-BATOH
550 PATTERSON AVENUE, STRATFORD, CT 06614

December 7, 2018

RE: AN ORDINANCE REGARDING ILLICIT DISCHARGE AND CONNECTIONS TO MUNICIPAL STORM SEWER SYSTEM (MS4)
Ordinance (#18-13) Approved by Stratford Town Council on November 13, 2018

Dear Town of Stratford Business Owner:

In order for the Town of Stratford to comply with the General Permit for the Discharge of Stormwater from Municipal Separate Storm Sewer Systems (as issued by the CT Department of Energy and Environmental Protection), Town Council approved passage of Ordinance #18-13 on November 13, 2018. The ordinance, which will be effective as of December 13, 2018, regulates non-stormwater discharges to the storm drainage system and establishes methods for controlling the introduction of pollutants in to the system. The objectives of the ordinance are to 1) prohibit and eliminate illicit connections and discharges to the municipal separate storm sewer system, and 2) establish legal authority to carry out all inspection, surveillance, and monitoring procedures necessary to ensure compliance with the ordinance.

Business owners are responsible for ensuring that sanitary sewers on business premises are not illicitly connected to the Town's storm sewer system. Moreover, business owners must prevent pollutants or waters containing pollutants from entering the storm sewer system to the greatest extent practicable. Such pollutants include, but are not limited to, pesticides, fertilizers, oils, sediment, litter, and debris. Certain discharges, such as from foundation drains, crawl space pumps, landscape irrigation/lawn watering, and non-commercial washing of private vehicles, are exempt from the discharge prohibitions established by the ordinance.

The authorized enforcement agency for the ordinance will be the Town of Stratford Conservation Department within the Department of Public Works. Any business owner found to be in violation of the ordinance may be subject to enforcement action which may involve a notice of violation, an order to eliminate illicit connections or discharges, abatement or remediation of pollution, restoration of affected property, and payment of a fine or penalty.

For your review, Ordinance #18-13 may be found at the following link: https://www.ecode360.com/documents/ST1064/source/LF1057319.pdf#search=ms4. If you have any questions related to the ordinance and its enforcement, please feel free to reach out to the Town of Stratford's Conservation Department (203-385-4006) or Engineering Department (203-385-4013).

Best Regards,

Christina Senft-Batoh

Christina Senft-Batoh
Conservation Superintendent, Town of Stratford

CC: John Casey, Town of Stratford Engineer
Mary Dean, Town of Stratford Director of Economic Development

WORKING TOGETHER FOR A CLEANER GREENER PLACE TO LIVE.

PROJECT Green sweep
It's all about PRIDE!
Rain or Shine

ANNUAL HOUSATONIC RIVER CLEAN-UP
STRATFORD - MILFORD - SHELTON

APRIL 21, 2018

8:00AM TO 2:00 PM

STRATFORD: Birdseye St. Boat Ramp | **SHELTON:** Sunnyside Boat Ramp

Please contact us with questions or to Register your Group
Phone: 203-988-0883 | **Email:** HRCUteam@gmail.com

WE ARE SEEKING VOLUNTEERS.

Any age. Groups and organizations welcome.
Students this is a great way to get your Community Service Hours

- ✔ Volunteers will be provided with a Cleanup Logo T-Shirt
- ✔ Coffee, Refreshments and Lunch provided by our Local Sponsors
- ✔ We will provide garbage bags & work gloves .
- ✔ Help for an hour or two or stay all day .
- ✔ All participants MUST SIGN IN at the Birdseye St. Boat Ramp in Stratford or the Sunnyside Boat Ramp in Shelton.
- ✔ Please dress for the outdoors (water resistant footwear, work gloves, etc.)
- ✔ Got a boat or pick up truck? Bring it!
- ✔ Check us out on Facebook www.facebook.com/Housatonic-River-Clean-Up-Inc

http://www.townofstratford.com/qcontent/NewsFeed.aspx?FeedID=1189

2/1/2018 - Annual Stormwater Permit Report Available February 15th

The Town of Stratford will make a copy of its 2017 Annual Report on Stormwater Permit compliance activities available for public inspection by the end of the day on February 15, 2018. The Annual Report will be available for inspection on the Town Website at www.townofstratford.com/stormwater, the Stratford Public Library, and the Town Clerk's office at Town Hall.

The public is invited to comment on the Report, which may be submitted by email or in writing within 30 days of the posting date. Comments may be addressed to John Casey, Town Engineer by email to jcasey@townofstratford.com, or in writing to 2725 Main Street, Stratford, CT, 06615. If there are any questions, please call the engineering office at 203-385-4013 during office hours.

Zoning Dept - Erosion & Sediment Controls Inspection Log 2018

Date	Hse #	Street	Development Description	Comments	By:	Status
1/10/2018		mayfair place	contractors storage yard/ remoiving soil	tracking pad installed/ looks good no issues	jr	complte
1/25/2018		ward Street	new subdivision	tracking pad installed, and erosion controls	jr	on going
2/5/2018		arcadia street	new subdivision	tracking pads installed, and erosion controls	jr	on going
2/7/2018		honeyspot road	soil removal	tracking pad in / no issues	jr	on going
3/12/2018		ward Street	follow up inspection (subdivision)	looks good no issues	jr	on going
4/5/2018		lordship blvd.	residential apart. Parking lot grading,	no issues	jr	on going
6/5/2018		benton street	soil stock piling/ dust issues/	trcking pad installed water truck used to keep dust down	jr	on going
6/29/2018		ward street	follow up inspection (subdivision)	no issues looks good	jr	on going
8/1/2018		nichols ave.	new home	tracking pad in, controls in, looks good	jr	on going
8/15/2018		king street	new high school	tracking pad in , erosion controls installed looks good	jr	on going
8/15/2018		stratford ave.	new brewery	tracking pads in , silt fences in no issues	jr	on going
8/29/2018		ward Street	subdivision	road in , controls look good	jr.	on going
9/18/2018		967 prospect street	new home issues with run off	owner installed silt fences,	jr	on going
9/25/2018		967 prospect street	looks good	controls working, hydo seeding soon	jr	on going
10/10/2018		967 prospect street	site stabalized, hydo seeded grass coming up	looks good	Jr	closed
11/15/2018		king street	site complete	stable/ all paved looks good landscaping in	jr	closed
12/3/2018		ward Street	follow up inspection (subdivision)	all good/ site stabalized	jr	on going

Memorandum

To: Maurice McCarthy, Director of Public Works
Tom Albert, Highway Superintendent
From: John Casey, Town Engineer
Department: Engineering
Address: 2725 Main Street Stratford, CT
Date: October 31, 2011, revised 2017, REV 1-6-2018, REV 8&12-18
RE: Stormwater maintenance

The following is a list of locations where Town owned stormwater quality chambers and or detention basins which are installed upstream of the discharge of storm sewers. These facilities require regular maintenance for grit and/or oil (inspection, cleaning, material disposal). With the recent personnel turnover and re-organization, I wanted to make sure you are aware of these facilities:

Below grade Stormwater treatment or control structures

Public Works Yard- One storm quality unit located on the north side of the Parks Garage Building. (Oil-Grit separators at old Highway, lower Admin Bldg, and at new truck wash facility discharge to sanitary).

Transfer Station- One is located about 30' east of the hopper building and discharges to the storm sewer. (Another is located east side of the hopper building, at the lower level, taking water from the trench drain and discharges to the sanitary sewer).

Kruger Lane- Underground storage pipe in easement toward Chapel Street.

Reed Street- Underground storage pipe in planting strip from Lindas Run west.

Perry Lane- Grit removal chamber at double CB at end of cul-de-sac.

Grey Fox Road- Underground stormwater storage vault below road.

Huntington Road- Two located on the east side of the road. One is in an easement on the Francini property #3330 Huntington Rd and the other is located south of Beaver Dam Rd prior to discharge to the un-named stream.

Frances Place- (off Judson)- 2 storm chambers on either side of Underground Storage pipes on south side of road.

Highview Dr- Where road was extended to cul-de-sac, grit chamber upstream of detention pipe.

Feeley St- storm galleries installed at new CB's mid way of street and at bottom of hill.

Clinton Ave extension- storm galleries installed under road at new turnaround.

Victoria Soto School- storm galleries installed in parking lot between Soto and Johnson Schools.

Second Hill La School- storm galleries installed in parking lot behind new rear driveway loop.

Horace St- storm galleries installed in planting strip near Wilcoxson Ave.

Franklin Sch- galleries installed behind sidewalk at discharge to CB on Barnum near Soundview.

Stratford High- storm galleries will be installed in parking lot on both east and west side of King St

Nichols School Stormwater control for new parking lot off North Ave.

Horace St - Storm galleries with no outlet on Horace St at intersection with Wilcoxson Ave.

West Ave- Storm quality unit installed west side in easement, behind McDonalds.

Coe Ave- Storm galleries at dead end

Otis St- Oversized pipe for storage on east side near Barnum Ave.

Baldwin Center Parking Lot Storm galleries.

Alice Terrace- hooded outlet CB and two infiltrators with no outlet

Housatonic Ave cul-de-sac- hooded outlet CB and two infiltrators with no outlet

Above grade Detention Basins

Longview Dr- Public easement on private property for drainage- regular maintenance by the property owner.

Perry Lane- Public easement on private property for drainage- regular maintenance by the property owners.

Grace Lane- Public easement on private property for drainage- regular maintenance by the property owner.

James Farm Road- north side at Leo's Lane- Town owned wetland basin.

Longbrook Park Brewster Pond Bio Basin

Weaver Dr- Detention basin on east side of driveway realignment and downhill of re-graded Pirhala Farm parcel.

Ward St- Detention basin on property at new extension- regular maintenance by the property owner

Stratford PD rear parking lot retrofit- Detention basin on north side of parking lot, stone trench on east side along brook

King St- open channel northwest of RR underpass- stone check dams for sediment collection

Public Works parking – open basin on south side and swale on north side of new parking extension

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August 17, 2004, rev March 10, 2008, rev July 1, 2016, rev January 2, 2018

NOTICE TO DEVELOPERS AND CONTRACTORS

As per stormwater permit regulations from the Connecticut Department of Energy and Environmental Protection (DEEP), the Town of Stratford gives notice to developers, contractors, and others involved in construction activities to comply with the various requirements associated with the provisions of the stormwater discharge general permit, commonly known as the MS4 permit. The *new MS4 Stormwater General Permit* took effect July 1, 2017. Developers and Contractors are advised to educate themselves on the new permit requirements. The Town's Stormwater Management Plan prepared in compliance with the Town's 2017 permit can be found at http://www.townofstratford.com/stormwater.

Please take note of the following:

A.) As of March 10, 2003 in order to discharge stormwater from a construction site, all construction projects that disturb 1 acre or more of land must have either:

- an individual stormwater permit from the DEEP, or
- coverage under one of Connecticut's general permits.

Disturbance includes, but is not limited to soil disturbance, clearing, grading, and excavation. Operators of sites disturbing less than one acre are also required to obtain a permit if their activity is part of a "larger common plan of development or sale" with a planned disturbance of one acre or greater. In addition, a development of any size is still required to meet the Town's Directly Connected Impervious Area (DCIA) reduction requirements.

A DEEP individual stormwater permit application form can be obtained from http://www.dep.state.ct.us. For site disturbances between 1-5 acres, the Town's acceptance of an erosion and sedimentation control plan, a plan submitted with an Inland Wetland permit, or other thoroughly reviewed plan, each designed in accordance with the 2004 CT Stormwater Manual, will negate the need for an individual state permit. The applicant, however, is still required to conform with the requirements of the Town's general permit.

B.) Discharges of stormwater from a property may be required to flow through a system designed to retain 1" (one inch) of rainfall.

C.) Construction must conform to the regulations recommended or developed as part of the Town's Stormwater Management Plan or other Town regulations regarding construction and stormwater discharge as may be amended from time to time. These regulations include but are not limited to the following:

- Soil and Erosion Control regulations: contact Zoning Office at 385-4017
- Inland Wetland regulations: contact I-W Office at 385-4006
- and other stormwater related ordinances as they may be amended.

OTHER REQUIREMENTS

Stormwater discharges shall not contain visible floating scum, oil, or other matter (except for naturally occurring substances such as leaves and twigs, provided that no person has placed such substances in or near the discharge).

Stormwater discharge shall not result in pollution due to acute or chronic toxicity to aquatic and marine life, impair the biological integrity of aquatic or marine ecosystems, or result in an unacceptable risk to human health.

January 10, 2019
MS4 Stormwater Permit Compliance Checklist
DRAFT

In compliance with the Town of Stratford's MS4 Stormwater Permit, the Town has goal to reduce ***Directly Connected Impervious Areas*** (DCIA) from the municipal stormwater system. Directly Connected refers to stormwater runoff that goes into the Town storm sewer system and *Impervious Area* refers to any hard surfaces that do not allow for water penetration/infiltration into soils.
*If runoff discharges through a system designed to retain the Water Quality Volume (in most cases 1" of rainfall), then the Impervious Area is NOT directly connected.

Stormwater Permit Compliance Checklist

- ☐ **Does your project incorporate Low Impact Development best practices? If so, please provide a brief summary.**

- ☐ **Did you provide stormwater quality volumes? Please provide your calculation below.**

- ☐ **Have impervious areas increased as a result of your development? If so, please provide the existing and proposed impervious areas in square feet.**

- ☐ **If appropriate, please complete and submit the provided Directly Connected Impervious Area Chart.**

DRAFT

Impervious Cover Tracking Spreadsheet

Town of Stratford

PROJECT INFORMATION						REDEVELOPMENT (4)		Change	NEW DEVELOPMENT (5)		TOTAL CHANGE DCIA		CUMULATIVE TOTALS 12	13	14	15	NOTES & REFERENCES 16	Status	Retrofit
date	hse #	street name	project description	Best Management Practice technique	Total existing IC (ac)	(DCIA) Existing Connected IC (ac)	Total IC added or subtracted (ac)	Connected IC subtracted (ac)	Total IC added (ac)	Connected IC added (ac)	Change in Total IC (ac)	Change in Connected IC (ac)	WATERSHED TOTAL IC (ac)	WATERSHED TOTAL IC (%)	WATERSHED CONNECTED IC (ac)	WATERSHED CONNECTED IC (%)	Notes & References	Proposed or Completed project	
													100.0	**11.7%**	**162.0**	**18.9%**			
1-Oct-17		Washington Parkway	Condo development	pavement reduction	0.23	0.23	(0.02)	(0.02)			(0.02)	(0.02)	99.98	12%	161.98	19%	former roller skating rink	complete	
7-Aug-17	30	Beach Dr	Subdiv Lordship Manor	pavement reduction	0.21	0.21	(0.03)	(0.03)			(0.03)	(0.03)	99.95	12%	161.95	19%	former restauarant & parking	Proposed	
1-Oct-17		Horace St	CB with infiltrators	UG storage				(0.25)			0.00	(0.25)	99.95		161.70		2 CB's added with infiltration- no outlet connection to storm system	complete	Yes
17-Nov-17	40	California St	Tanners Brook	pavement reduction	0.09	0.09	(0.07)	(0.07)			(0.07)	(0.07)	99.88		161.63				
2-Jan-18	300	Benton St	Commercial Addition	pavement reduction							0.00	(0.06)	99.88		161.57		adj lot added and pvmt reduced	Proposed	
1-Jun-18	345	King St	SHS project	UG storage	0.34	0.31			2.64	1.64	2.30	1.33	102.18		162.90		new High School	complete	
1-Jun-18	1103	Essex / Barnum	redevel several lots into one	pavement reduction	0.44	0.44	(0.04)	(0.04)			(0.04)	(0.04)	102.14		162.86		Curran VW	complete	
1-Nov-18		Andrew St	CB with infiltrators	UG storage				(0.12)			0.00	(0.12)	102.14		162.74		1 CB's added with infiltration- no outlet connection to storm system-	complete	Yes
1-Oct-18		Barnum Ave	redevel several lots into one	pavement reduction	0.75	0.75	(0.01)	(0.01)			(0.01)	(0.01)	102.13		162.73		Curran VW former A&P building	complete	
1-Nov-18		Housatonic Ave	CB with infiltrators	UG storage				(0.07)			0.00	(0.07)	102.13		162.66				Yes
1-Nov-18		Lordship Blvd	redevelp commercial property								0.00	0.00	102.13		162.66		Former Ramada Inn	ongoing	
1-Nov-18		Access Rd	commercial driveway	rain garden							0.00	0.00	102.13		162.66			Proposed	
27-Nov-18	45	North Parade	SHS project	UG storage, pavement reduction	4.92	4.92	(0.62)	(3.77)			(0.62)	(4.39)	101.51		158.27			Construction	
											0.00	0.00	101.51		158.27				

Department of Public Works
Highway Division
Standard Operating Procedure

Effective Date **1 July 2018**	**Number** **HWY - 001**	**Revision**
Title **Stratford Storm Drain Maintenance**		
Approved by:	**Re-evaluation Date:**	**No. of Pages:** **Two (2)**

PURPOSE:

To define the parameters for inspection and maintenance for storm drainage systems both enclosed and open channel.

SCOPE:

Check trash racks at the following locations:

King Street overpass

Bruce Brook

Sage Street

Motil Pond

Glendale Road – Upper Pond

Ashcroft by pump station

Check brooks at the following locations:

Quail Street

Old Spring Road

Florence Street

Bowe Avenue-Dead End

North End Park

Check Storm Water pump stations at the following locations:

Platt Street Pump Station

Ferry Creek Pump Station
Hamilton Ave Pump Station

PROCEDURE:

This procedure is provided to define this agency's responsibilities for inspection and maintenance of storm drain facilities. This SOP will be used to manage various program scheduling during and after normal hours.

ADDITIONAL INFORMATION:

1) Required personnel from the Highway Division will be assigned one to two days before a rain event to inspect and clean all trash racks and brooks on the attached list.
2) Required personnel from the Highway Division Line Crew will be assigned to check all catch basin tops in flood prone areas and clear of debris.
3) On a monthly basis personnel from the Highway Division will be assigned to inspect and run the three (3) storm water pump stations.
4) In emergency situations . i.e. during a heavy rain event, a Backhoe with an operator will be assigned to the King Street trash rack to keep debris from building up on it. Also two men from Highway Division will be assigned to the Ferry Creek Pump Station to man the pumps and turn them on if required to prevent Stratford Center from flooding.