

# **Town of Bolton, Connecticut**

**2017** Annual Report

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

**Permit Number GSM000104** 

# MS4 General Permit Town of Bolton 2017 Annual Report Existing MS4 Permittee Permit Number GSM 000104 January 1, 2017 - December 31, 2017

This report documents the Town of Bolton's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 01, 2017 to December 31, 2017.

## Part I: Summary of Minimum Control Measure Activities

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

ВМР	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 and Outreach	To be Developed in early 2018	None in 2017 Before July 01, 2018 Seven Clean Waters Starting in Your Home and Yard Fact Sheets prepared by a collaborative effort between the Connecticut Sea Grant Extension Program and the University of Connecticut Cooperative Extension System NEMO Program will be made available to the public on the town	Improving	Board of Selectmen/ Joyce M. Stille, Administrative Officer	July 01, 2018	Before July 01, 2018	

1.2 Describe any Public Educat	tion and Outreach activities plani	ned for the next year, if applical	ble.	

## 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.

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

## 2.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
2-1 Comply with public notice requirements for the Stormwater Management Plan	Completed	A hard copy of the Draft 2017 Stormwater Management Plan (SMP) was made available to the public for review and comment on the town website at: http://bolton.govoffice.com/	Complied with requirements	Board of Selectmen/ Joyce M. Stille, Administrative Officer	April 03, 2017	The 2017 SMP was available to the public on April 20, 2017.	No public comments were received by the Office of the First Selectwoman
2-2 Comply with public notice requirements for Annual Reports	Will be completed	The Draft 2017 MS4 Annual Report will be made available for public review and comment on the town website at: http://bolton.govoffice.com/	Will comply with Requirements	Board of Selectmen/ Joyce M. Stille, Administrative Officer	Feb 15, 2018	The 2017 MS4 Annual Report will be made available to the public for review and comment.	

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

The Salmon River Watershed Partnership was formed in 2007 and has been conducting public outreach and participation activities which included a Town Planners Workshop in May 2017.

## 2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	03/28/2017	Town Website
Availability of Annual Report announced to public	Yes	02/15/2018	Town Website

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

ВМР	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	In Progress	A written IDDE program using the IDDE program template available from the CT DEEP is being developed.	Develop written plan of IDDE program	Board of Selectmen/ Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2018	Anticipate completing by the deadline of July 01, 2018.	The Highway Department will be the listed contact.
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	In Progress	MS4 stormwater outfall mapping was conducted in August 2007. The stormwater outfall mapping was compiled on a ESRI GIS layer. The MS4 stormwater outfall mapping will be updated to include impaired waters as contained in the State of Connecticut, Department of Energy and Environmental Protection 2016 Integrated Water Quality Report. The stormwater outfalls in the impaired waters will be identified. The MS4 stormwater outfall mapping will be completed town wide in 2018.	Development of an ESRI GIS map layer with MS4 stormwater outfalls.	Board of Selectmen/ Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2019	Anticipate completing by the deadline of July 01, 2019.	
3-3 Implement citizen reporting program	In Progress	A program to allow the general public to report suspected illicit discharges is in the process of being set up.			July 01, 2017	Anticipate completing by July 01, 2018.	The Highway Department will be the listed contact.

3-4 Establish legal authority to prohibit illicit discharges	In Progress	An Illicit Discharge Detection and Elimination Ordinance and Citation Hearing Procedure was provided to Joyce M. Stille, Administrative Officer. It is anticipated that the IDDE Ordinance and Citation Hearing Procedure will be enacted at a Town Meeting in early 2018.	Enact IDDE Ordinance and Citation Hearing Procedure	Board of Selectmen/ Joyce M. Stille, Administrative Officer	July 01, 2018	Prior to July 01, 2018	
3-5 Develop record keeping system for IDDE tracking	To Be Developed			Board of Selectmen/ Joyce M. Stille, Administrative Officer	July 01, 2018		
3-6 Address IDDE in areas with pollutants of concern	To Be Developed			Board of Selectmen/ Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2018		

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

The written IDDE Program will be posted on the town website and a link listed in each Annual Report. The town will update the written IDDE program as needed throughout the permit term.

The Highway department will maintain the 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

.4 Provide a record o	_	-	ring the repor	ting period and SS	Os occurring Ju	ıly 2012 through end of reporting p	period using th
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 mea dates)	sures planned and completed (include	Sampling data (if applicable)
5 Briefly describe the	e method used t	o track illicit disc	harge reports,	responses to those	reports, and w	ho was responsible for tracking this	information.
6 Provide a summa	ry of actions tal	ken to address so	eptic failures (	using the table bel	ow.		
Location and nature of systems	structure with fail	ling septic A	ctions taken to r	espond to and addre	ss the failures	Impacted waterbody or watershed, if	known

## 3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	130

Estimated or actual number of interconnections	2 Estimated
Outfall mapping complete	100%
Interconnection mapping complete	90%
System-wide mapping complete (detailed MS4 infrastructure)	40%
Outfall assessment and priority ranking	0%
Dry weather screening of all High and Low priority outfalls complete	0%
Catchment investigations complete	0%
Estimated percentage of MS4 catchment area investigated	90%

# 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).

The Highway Department will be provided with a copy of the publication entitled *Illicit Discharge Detection and Elimination Manual, A Handbook for Municipalities*, Published January 2003 by the New England Interstate Water Pollution Control Commission.

The Highway Department will be provided with a copy of the publication entitled *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments, and Technical Appendices* Published October 2004 by the Center for Watershed Protection and Robert Pitt of the University of Alabama.

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

ВМР	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	To be Initiated in 2018	Not Applicable	Not Applicable	Land Use Department/ Patrice Carson, AICP, Director of Community Development	July 01, 2019		
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Ongoing	Nathan L. Jacobson & Associates, Inc., Town Engineer, prepares land use review letters for most applications for the Inland Wetlands Commission, Planning Commission and Zoning Commission.	Interdepartmental Coordination	Land Use Department/ Patrice Carson, AICP, Director of Community Development	July 01, 2017	Ongoing	
4-3 Review site plans for stormwater quality concerns	Ongoing	Nathan L. Jacobson & Associates, Inc., Town Engineer, encourages the use of LID BMPs as contained in the 2004 Connecticut Stormwater Quality Manual.	Compliance	Town Engineer/ Joseph M. Dillon, P.E., Nathan L. Jacobson & Associates, Inc.	July 01, 2017	Ongoing	
4-4 Conduct site inspections	Ongoing	The town conducts construction site inspections for proper implementation and maintenance of soil erosion and sediment control measures.	Compliance with Approved Plans	Town Engineer/ Joseph M. Dillon, P.E., Nathan L. Jacobson & Associates, Inc.	July 01, 2017	Ongoing	
4-5 Implement procedure to allow public comment on site development	Ongoing	The land use application process allows for public comment on land use applications which are submitted to the Inland Wetlands Agency and		Land Use Department/ Patrice Carson, AICP, Director of Community Development	July 01, 2017	Ongoing	

Ong	Public Hearing Process when applicable.  oing Since the inception of the MS4 program Nathan L. Jacobson & Associates, Inc., Town Engineer, has made	Awareness of the need to register for the General permit for the Discharge of	Town Engineer/ Joseph M. Dillon, P.E., Nathan L. Jacobson & Associates, Inc.	July 01, 2017	Ongoing	
4-6 Implement procedure to notify developers about the CT DEEP Construction Stormwater General Permit	developer's engineers aware of the need to register for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities in engineering review letters which are typically prepared as part of the land use application process.	Stormwater and Dewatering Wastewaters from Construction Activities				

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

# **5. Stormwater Management** (Section 6(a)(5) / page 27)

ВМР	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 reduction in site development planning	Under Development	The land use regulations will be revised to incorporate the requirements contained in Minimum Control Measure No. 4 - Construction Site Runoff Control and Minimum Control Measure No. 5 - Post-Construction Runoff Control.	The requirements contained in Minimum Control Measure No. 4 - Construction Site Runoff Control and Minimum Control Measure No. 5 - Post-Construction Runoff Control will be forwarded to the First Selectwoman.	Land Use Department/ Patrice Carson, AICP, Director of Community Development	July 01, 2021		
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects				Town Engineer/ Joseph M. Dillon, P.E., Nathan L. Jacobson & Associates, Inc.	July 01, 2019		
5-3 Identify retention and detention ponds in priority areas		Retention Ponds, Detention Ponds and Hydrodynamic Separators will be inventoried. A GIS Map Layer will be created after the inventory. Part of the		Highway Department/ Lance Dimock, Road Foreman and Town Engineer/ Joseph M. Dillon, P.E., Nathan L.	July 01, 2019		

		inventory process will be facility maintenance requirements.		Jacobson & Associates, Inc.		
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures		After the Retention Ponds, Detention Ponds and Hydrodynamic Separators have been inventoried a long term Operation and Maintenance Plan will be implemented.		Highway Department/ Lance Dimock, Road Foreman	July 01, 2019	
5-5 DCIA mapping	Starting	Begin the process of DCIA Mapping from base mapping prepared by UConn CLEAR.	The DCIA to MS4 stormwater outfalls discharging to waters identified as impaired in the 2016 Integrated Water Quality Report and in watersheds with a DCIA of greater than 11 percent will start in 2018.	Board of Selectmen/ Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2020	
5-6 Address post-construction issues in areas with pollutants of concern			Stormwater outfalls discharging to waters identified as impaired in the 2016 Integrated Water Quality Report and in watersheds with a DCIA of greater than 11	Board of Selectmen/ Nathan L. Jacobson & Associates, Inc., Town Engineer	Not specified	

percent will be subject to	
enhanced water quality	
treatment.	

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

#### **5.3 Post-Construction Stormwater Management reporting metrics**

Metrics						
Baseline (2012) Directly Connected Impervious Area (DCIA)	Acreage to be determined in 2018					
DCIA disconnected (redevelopment plus retrofits)	0 acres this year / 0 acres since 2012					
Retrofits completed	0					
DCIA disconnected	0% this year / 0% total since 2012					
Estimated cost of retrofits	\$0					
Detention or retention ponds identified	0 this year / 0 total					

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

The DCIA Mapping will be conducted on accordance with the methodologies presented in the October 25, 2017 UConn CLEAR Webinar entitled *CT MS4 Mapping Details, Clarifications and Tools* utilizing DCIA base mapping prepared by UConn CLEAR.

Impaired waters were determined from the report entitled 2016 Integrated Water Quality Report, dated April 2017, prepared by the State of Connecticut Department of Energy and Environmental protection.

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

ВМР	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				Highway Department / Lance Dimock, Road Foreman and Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2017	July 01, 2017	
6-2 Implement MS4 property and operations maintenance	Ongoing		Continuing	Highway Department / Lance Dimock, Road Foreman	July 01, 2018	July 01, 2017	
6-3 Implement coordination with interconnected MS4s	Ongoing	The Town of Bolton continued to coordinate MS4 responsibilities with the Town of Haddam, the Town of Killingworth and the Town of Deep River	Continuing	Highway Department/ Lance Dimock, Road Foreman	July 01, 2017	July 01, 2017	
6-4 Develop/implement program to control other sources of pollutants to the MS4	To be Developed			Town Engineer/ Joseph M. Dillon, P.E., Nathan L. Jacobson & Associates, Inc.	July 01, 2017		
6-5 Evaluate additional measures for discharges to impaired waters*	To be Developed			Town Engineer/ Joseph M. Dillon, P.E., Nathan L. Jacobson & Associates, Inc.	July 01, 2017		

6-6 Track projects that disconnect DCIA	To be Developed		Board of Selectmen/ Nathan L. Jacobson & Associates, Inc., Town Engineer	Jul 1, 2017		
6-7 Implement infrastructure repair/rehab program	To be Developed		Highway Department/ Lance Dimock, Supervisor and Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2021		
6-8 Develop/implement plan to identify/prioritize retrofit projects	To be Developed		Highway Department/ Lance Dimock, Supervisor and Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2020		
6-9 Implement retrofit projects to disconnect 2% of DCIA	To be Developed		Highway Department/ Lance Dimock, Supervisor	July 01, 2022		
6-10 Develop/implement street sweeping program	Ongoing	The Town of Bolton currently implements a road sweeping program whereby all town roads are swept at one time per year.	Highway Department/ Lance Dimock, Supervisor	July 01, 2017		
6-11 Develop/implement catch basin cleaning program	Ongoing	The Town of Bolton currently implements a catch basin cleaning program whereby all catch basins are cleaned in alternate years and catch basins with high sediment loads or catch basins which discharge to	Highway Department/ Lance Dimock, Supervisor	July 01, 2020		

	sensitive waters are cleaned every year		
6-12 Develop/implement snow management practices		Highway Department/ Lance Dimocl Supervisor	

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

# 6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	To be initiated in 2018
Street sweeping	
Lane miles swept	86.70
Volume (or mass) of material collected	2017 Undetermined Will be Measured in 2018
Catch basin cleaning	
Total catch basins in priority areas	To be Determined
Total catch basins in MS4	800-850
Catch basins inspected	800-850
Catch basins cleaned	400-450
Volume (or mass) of material removed from all catch basins	Undetermined Will be Measured ir 2018
Volume removed from catch basins to impaired waters (if known)	2017 Undetermined Will be Measured in 2018
Snow management	

Type(s) of deicing material used	Deicing Mix 1 Part Sand to 1 Part NaCl Salt
Total amount of each deicing material applied	1,120 Tons Sand 800 Tons NaCl
Type(s) of deicing equipment used	Four Large Snow Plows/Spreaders. The spreaders are manually controlled at an estimated application rate of 200 pounds per lane (curb) mil
Lane-miles treated	86.7
Snow disposal location	Herrick Park parking lot when needed
Staff training provided on application methods & equipment	No
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	0 %
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	\$0

#### 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]

It is estimated that there are approximately 800-850 catch basins in the Town of Bolton. 400-450 catch basins were cleaned in 2017. Currently no optimization methods are required.

#### 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.]

Storm Drainage Retrofit prioritization will be given to stormwater outfalls that are known to result in soil erosion and sedimentation. Prioritization will be given to the outfalls within the impaired water drainage basins with particular emphasis placed on stormwater outfalls which are located on fine grained glacial till soils. The retrofit program will be prioritized based on setback distance from watercourse and/or waterbodies.

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.]

Based on information contained in the Factsheet: *Town of Bolton Water Quality and Stormwater Summary,* prepared by the CT DEEP, 675.70 acres of the town has an impervious area exceeding 11% which is approximately 7.16% of the town. 232.83 acres have an impervious cover of ranging from 12% to 25%, 344.14 acres have an impervious cover ranging from 26% to 50%, 77.24 acres have an impervious cover ranging from 51% to 75% and 21.49 acres have an impervious cover ranging from 76% to 100%.

The DCIA for the town will be computed using methods contained in the paper entitled Estimating Change in Impervious Area (IA) and Directly Connected Impervious Area (DCIA) for Massachusetts Small MS4 Permit.

Land use files will be reviewed to determine disconnection of DCIA since July 01, 2012 for utilization in reaching the CT DEEP goal of 2% disconnection of DCIA by June 30, 2022.

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.]

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

# 1. Impaired waters investigation and monitoring program

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

# 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?

#### 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?
C-1	12/01/06	E. coli (colonies/100 ml) Total Coliform	50 >2,000	Phoenix Environmental	

C-1	08/21/07	E. coli (colonies/100 ml)	300	Phoenix	
		Total Coliform	7,500	Environmental	
C-1	09/11/07	E. coli (colonies/100 ml)	380	Phoenix	
		Total Coliform	>2,000	Environmental	
C-1	01/11/08	E. coli (colonies/100 ml)	<20	Phoenix	
		Total Coliform	100	Environmental	
C-1	06/04/08	E. coli (colonies/100 ml)	170	Phoenix	
		Total Coliform	>2,000	Environmental	
C-1	06/09/09	E. coli (colonies/100 ml)	2,250	Phoenix	
		Total Coliform	>24,200	Environmental	
C-1	05/12/10	E. coli (colonies/100 ml)	<10	Phoenix	
		Total Coliform	1,530	Environmental	
C-1	09/23/11	E. coli (colonies/100 ml)	310	Phoenix	
		Total Coliform	>24,200	Environmental	
C-1	10/19/12	E. coli (colonies/100 ml)	130	Phoenix	
		Total Coliform	>24,200	Environmental	
C-1	11/01/13	E. coli (colonies/100 ml)	1,790	Phoenix	
		Total Coliform	>24,200	Environmental	
C-1	10/16/14	E. coli (colonies/100 ml)	770	Phoenix	
		Total Coliform	>24,200	Environmental	
C-1	08/11/15	E. coli (colonies/100 ml)	80	Phoenix	
		Total Coliform	>24,200	Environmental	
C-1	11/15/16	E. coli (colonies/100 ml)	41	Phoenix	
		Total Coliform	>24,200	Environmental	

# 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 01, 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

# 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

#### 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

#### 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

#### 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: Joyce M. Stille, Administrative Officer	Print Name: Wade M. Thomas
Signature / Date: March 31, 2018	Signature / Date: March 31, 2018