

MS4 General Permit
Town of Clinton 2017 Annual Report
Existing MS4 Permittee
Permit Number GSM 000074
January 1, 2017 – December 31, 2017

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

Part I: Summary of Minimum Control Measure Activities

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

1.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
1-1 Implement public education and outreach	On-going	Dedicated portion of Town website to Stormwater.	Update with annual reports, fact sheets	Peter Neff / Department of Public Works	Jul 1, 2018	Jul 1, 2018	
1-2 Address education/ outreach for pollutants of concern*	In Progress	Add link on Stormwater webpage to directing readers to existing fact sheets related to septic systems on Clinton's WPCA webpage.	Publish link on Stormwater page to cross reference information	Peter Neff / Department of Public Works	Jul 1, 2018	Jul 1, 2018	Clinton's bacteria impairment may be related to septic systems as described in the 1997 consent order. Actions taken by Clinton are described on the Clinton WPCA webpage.

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

None planned at this time.

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.
Septic system fact sheet, ordinance, maintenance records posted on WPCA webpage	All residents of Clinton since no public sewer exists.	Septic systems	Bacteria	WPCA

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 Comply with public notice requirements for the Stormwater Management Plan	Complete	Make stormwater management plan available for public comment.	Publish stormwater management plan.	Peter Neff / Department of Public Works	Apr 3, 2017	Apr 3, 2017	Available at Public Works and website.
2-2 Comply with public notice requirements for Annual Reports	Complete	Make annual report available for public comment.	Publish annual report.	Peter Neff / Department of Public Works	Feb 15, 2018	Feb 15, 2018	Available at Public Works and website.

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

None planned at this time.

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	Website June, 2017	Public Works Department and https://clintonct.org/520/General-Permit-Stormwater-Discharge
Availability of Annual Report announced to public	Yes	Website June, 2017	Public Works Department and https://clintonct.org/520/General-Permit-Stormwater-Discharge

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	Incorporated in Appendix B of MS4 Stormwater Management Plan	Develop written plan of IDDE program	Peter Neff / Department of Public Works	Jul 1, 2018	December 2016	Living document. Will revise and supplement as program evolves.
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Mapping Complete Verification In Progress	Clinton hired a GIS consultant to map outfalls. In process of prioritizing and screening outfalls.	Update GIS site as data is field verified.	Peter Neff / Department of Public Works	Jul 1, 2019	Initial outfall mapping complete. Verification and revisions anticipated by July 1, 2019.	List obtainable by query in GIS program. GIS layers include impaired waters, drainage basins, catch basins, pipe, outfalls.
3-3 Implement citizen reporting program	In progress	Add a link to the stormwater section of the website directing citizens to the public	Publish email and phone number of public works	Peter Neff / Department of Public Works	Jul 1, 2017	July 1, 2018	

		works department for reporting of illicit discharges.	on the stormwater page.				
3-4 Establish legal authority to prohibit illicit discharges	Not Started	Create Regulation or ordinance to prohibit illicit discharges and enable Clinton to enforce such rule.	Publish regulation.	Planning and Zoning Commission	Jul 1, 2018	Jul 1, 2018	
3-5 Develop record keeping system for IDDE tracking	Complete	IDDE Investigation / Tracking form located in Appendix B of MS4 Stormwater Management Plan. Records to be maintained as part of the Public Works Department work order system consistent with other citizen complaints.	Maintain records in work order database.	Peter Neff / Department of Public Works	Jul 1, 2017	December 2016	Public Works receives citizen and Town requests for maintenance and complaints. Existing work order system addresses work flow, tracking, and accountability. IDDE fits into this much like any other drainage complaint fielded by this department.
3-6 Address IDDE in areas with pollutants of concern	Not Started	No citizen complaints received to date. Outfall screening data will be used to determine where IDDE is required.	Evaluate screening data. Determine where IDDE is appropriate.	Peter Neff / Department of Public Works	Not specified	On-going	Clinton's MS4 system is characterized by many small (2-4 catch basin) networks immediately discharging to a wetland or watercourse. Subject to field review, few illicit discharges are expected due to the small conveyance system size, use of septic systems, and remote location from potential IDDE sources.

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

Investigate illicit discharges if suspected as a result of outfall screening samples or complaints received by Public Works.

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

Date of Report	Location / suspected source	Response taken
None reported.		

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)
None reported.						

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

No illicit discharges reported.

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
Town-wide concern. Particular focus on older lots of fractional acreage, served by wells which lack suitable reserve area for septic replacement.	<ol style="list-style-type: none"> 1. Septic tank pump out and maintenance ordinance enacted in 2010. Records posted online. 2. Rocky ledge water main project to serve properties within a study area of approximately 120 homes. This will enable homeowners to upgrade septic systems where drinking water well setbacks previously inhibited upgrades. 	Waterbodies contributing to Clinton Harbor.

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	174 actual mapped
Estimated or actual number of interconnections	0 (Estimated)
Outfall mapping complete	70 %
Interconnection mapping complete	0 %
System-wide mapping complete (detailed MS4 infrastructure)	70 % 1,126 Catch Basins 207 pipes Field verification on-going
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	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).

Department of public works is responsible for IDDE tasks. IDDE and all stormwater training is conducted as part of the existing industrial general permit program since it involves the same group of employees.

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	On-going	None.	Revise landuse regulations as needed.	Planning and Zoning office	Jul 1, 2019	Jul 1, 2019	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Completed	Clinton zoning regulations Section 8 "Site Plan Review" defines how all departments and boards with jurisdiction over the review, permitting, and approval of land disturbance and development projects coordinate with one another.	Process codified in Sections 4.13 and 8 of the zoning regulations.	Planning and Zoning office	Jul 1, 2017	Jul 1, 2017	Part of existing Clinton land use permit process.
4-3 Review site plans for stormwater quality concerns	Complete	Clinton zoning regulation Section 32 is the primary regulation enabling local control over construction site stormwater.	Process codified in Section 32 of the zoning regulations	Planning and Zoning office	Jul 1, 2017	Jul 1, 2017	Part of existing Clinton land use permit process.

4-4 Conduct site inspections	Complete	Inspect permittee sites for erosion & sediment control compliance.	Compliance with terms and conditions of approved site plans.	Planning and Zoning office and Town Engineer	Jul 1, 2017	Jul 1, 2017	Part of existing Clinton land use permit process.
4-5 Implement procedure to allow public comment on site development	Complete	Site plans available for public viewing with staff. Opportunity to speak at public hearings, public comment at regular planning & zoning meetings.	Process described in the zoning regulations	Planning and Zoning office	Jul 1, 2017	Jul 1, 2017	Part of existing Clinton land use permit process.
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Complete	Part of technical review of site plan applications.	Where applicable, indicate need to obtain DEEP permit with conditions of approval.	Planning and Zoning office	Jul 1, 2017	Jul 1, 2017	Part of existing Clinton land use permit process.

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

Continue to inspect permittee sites for erosion & sediment control compliance.

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 reduction in site development planning	Not Started	None	Incorporate LID and runoff reduction into land use regulations	Planning and Zoning office	Jul 1, 2021	Jul 1, 2021	

5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Not Started	None	Enforce regulation established in 5-1	Planning and Zoning office	Jul 1, 2019	Jul 1, 2019	
5-3 Identify retention and detention ponds in priority areas	Not Started	None	Add retention & detention ponds to GIS	Peter Neff / Department of Public Works	Jul 1, 2019	Jul 1, 2019	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Not Started	None	Maintain structure identified in 5-3	Peter Neff / Department of Public Works	Jul 1, 2019	Jul 1, 2019	
5-5 DCIA mapping	Not Started	None	Map DCIA using GIS software.	Planning and Zoning office / Department of Public Works	Jul 1, 2020	Jul 1, 2020	
5-6 Address post-construction issues in areas with pollutants of concern	Not Started	None	Review sites post construction	Planning and Zoning office	Not specified	Ongoing	

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

Begin identifying Stormwater detention basins using GIS.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	1,196.63 acres
DCIA disconnected (redevelopment plus retrofits)	0 acres this year / 0 acres total
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.

Reviewed "IC By Town" imported to Clinton GIS from CTECO website. 2012 Baseline breakdown: Buildings = 337.47 acres, Roads = 332.91 acres, Other = 526.25 acres.

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	Complete	Stormwater training	Annual training	Peter Neff / Department of Public Works	Jul 1, 2017	Jul 1, 2017	Training conducted as part of the existing industrial general permit program since it involves the same staff.
6-2 Implement MS4 property and operations maintenance	Complete	Continue cleaning catch basins, sweeping, general housekeeping of town owned facilities.	Maintain Town owned MS4 facilities.	Peter Neff / Department of Public Works	Jul 1, 2018	Jul 1, 2017	List of facilities available on public works webpage.
6-3 Implement coordination with interconnected MS4s	Not Started	Reviewing mapping to determine if any interconnections exist. Possible connections to State system in Route 1.	Coordinate with Interconnected MS4s	Peter Neff / Department of Public Works	Not specified	Jul 1, 2019	
6-4 Develop/implement program to control other sources of pollutants to the MS4	Not Started	None.	To be determined.	Peter Neff / Department of Public Works	Not specified	On-going	
6-5 Evaluate additional measures for discharges to impaired waters*	Not Started	None.	To be determined.	Peter Neff / Department of Public Works	Not specified	On-going	
6-6 Track projects that disconnect DCIA	Not Started	None.	Track area of DCIA removed by site plan review applicants	Planning and Zoning office	Jul 1, 2017	Jul 1, 2018	

6-7 Implement infrastructure repair/rehab program	Not Started	None.	To be determined.	Peter Neff / Department of Public Works	Jul 1, 2021	Jul 1, 2021	
6-8 Develop/implement plan to identify/prioritize retrofit projects	Not Started	None.	To be determined.	Peter Neff / Department of Public Works	Jul 1, 2020	Jul 1, 2020	
6-9 Implement retrofit projects to disconnect 2% of DCIA	Not Started	None.	To be determined.	Peter Neff / Department of Public Works	Jul 1, 2022	Jul 1, 2022	
6-10 Develop/implement street sweeping program	Completed	Sweep streets once per year.	Record tons of sweepings collected.	Peter Neff / Department of Public Works	Jul 1, 2017	Jul 1, 2017	Existing maintenance practice.
6-11 Develop/implement catch basin cleaning program	Completed	Clean catch basins once per year.	Record tons of sediment collected.	Peter Neff / Department of Public Works	Jul 1, 2020	Jul 1, 2020	Existing maintenance practice. May monitor sediment depth with GIS in future.
6-12 Develop/implement snow management practices	Completed	Document snow management practices.	Publish snow management practices.	Peter Neff / Department of Public Works	Jul 1, 2018	Jul 1, 2017	The Town of Clinton snow operation policy is available on the town website for public view.

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

None planned at this time.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	As needed
Street sweeping	
Curb miles swept	78 miles
Volume (or mass) of material collected	200 tons
Catch basin cleaning	
Total catch basins in priority areas	To be determined
Total catch basins in MS4	To be determined
Catch basins inspected	1767
Catch basins cleaned	1767
Volume (or mass) of material removed from all catch basins	560 tons
Volume removed from catch basins to impaired waters (if known)	Unknown
Snow management	
Type(s) of deicing material used	Salt / sand
Total amount of each deicing material applied	480 tons salt 2,400 tons sand
Type(s) of deicing equipment used	spreader
Lane-miles treated	78 miles
Snow disposal location	n/a
Staff training provided on application methods & equipment	As needed
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	0 lbs
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. [\[Complete this section for the 2017 Annual Report only\]](#)

The town continues to clean catch basins on an annual basis. The GIS platform is being considered for use in tracking sediment depth at each location.

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. [\[Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.\]](#)

No retrofits proposed at this time.

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

1% DCIA disconnection plan not implemented at this time.

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

1% DCIA disconnection plan not implemented at this time.

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.

Samples were collected for screening on November 16, 2017 but were outside the laboratory hold time for bacteria analysis so they were not analyzed. These locations were resampled on January 23, 2018 with the results summarized below in Section 2.1. Most locations require follow-up. Collection of additional screening samples is proposed for 2018 to prioritize outfalls.

Screening parameters were planned ahead of the effective date of the 2017 MS4 Permit using the 2012 mapping available at the time. The 2016 mapping is different, and will be reviewed for future screening activities.

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?
108	1/23/18	Bacteria, Saltwater SA	- Enterococci 2060 col/100ml - Fecal Coliform 187 col/100ml	Phoenix	Yes
153	1/23/18	Bacteria, Freshwater	- E. coli 52 col/100ml - T Coliform >24200 col/100ml	Phoenix	Yes
143	1/23/18	Bacteria, Saltwater SA	- Enterococci 1660 col/100ml - Fecal Coliform 41 col/100ml	Phoenix	Yes
82	1/23/18	Bacteria, Saltwater SA	- Enterococci 41 col/100ml	Phoenix	No

			- Fecal Coliform <10 col/100ml			
115	1/23/18	Bacteria, Saltwater SB	- Enterococci 52 col/100ml - Fecal Coliform <10 col/100ml	Phoenix	No	
30	1/23/18	Bacteria, Freshwater	- E. coli 175 col/100ml - T Coliform >24200 col/100ml	Phoenix	Yes	
138	1/23/18	Bacteria, Saltwater SA	- Enterococci 1880 col/100ml - Fecal Coliform 4350 col/100ml	Phoenix	Yes	
148	1/23/18	Bacteria, Saltwater SA	- Enterococci 657 col/100ml - Fecal Coliform 74 col/100ml	Phoenix	Yes	
136	1/23/18	Bacteria, Saltwater SA	- Enterococci 3260 col/100ml - Fecal Coliform 1040 col/100ml	Phoenix	Yes	
147	1/23/18	Bacteria, Saltwater SA	- Enterococci 24200 col/100ml - Fecal Coliform 161 col/100ml	Phoenix	Yes	
149	1/23/18	Bacteria, Saltwater SA	- Enterococci 2140 col/100ml - Fecal Coliform 474 col/100ml	Phoenix	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?

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
	None Investigated to date	

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)
Screening less than 50%, prioritization not complete.				

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
5000-08-1	High Priority	10
5000-09-1	High Priority	11
5000-10-1	High Priority	3
5000-11-1	High Priority	2
5000-12-1	High Priority	1
5103-04-1	Low Priority	16
5103-05-1	Low Priority	17
5104-01-1	Low Priority	18
5104-02-1	Low Priority	6
5000-13-1	Low Priority	11
5103-00-2-L1	Low Priority	19
5103-00-2-L2	Low Priority	7
5103-00-2-L3	Low Priority	20
5103-00-2-R4	Low Priority	5
5103-00-2-R5	Low Priority	10
5103-00-2-R6	Low Priority	9

5103-05-1-L1	Low Priority	8
5104-00-1	Low Priority	15
5104-00-2-L1	High Priority	9
5104-00-2-L2	High Priority	8
5104-00-2-R1	Low Priority	4
5104-00-2-R2	High Priority	4
5106-00-3-R6	Low Priority	12
5106-00-3-R7	Low Priority	13
5106-00-3-R8	Low Priority	1
5106-00-3-R9	High Priority	12
5106-16-1	Low Priority	14
5106-18-1	Low Priority	2
5106-18-1-L1	Low Priority	3
5106-19-1	High Priority	7
5106-20-1	High Priority	5
5106-20-1-L1	High Priority	6

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
None Investigated to date.										

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
None Investigated to date.									

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
None Investigated to date.		

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 than 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 than 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
None Investigated to date.					

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants
None Investigated to date.				

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
None Investigated to date.							

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: Christine Goupil	Print name: Michael Erickson, P.E.
Signature:  Date: 2.15.2018	Signature / Date:  2/12/2018