MS4 General Permit **(DRAFT)**
Town of Montville 2019 Annual Report
Existing MS4 Permittee
Permit Number GSM 00067
[January 1, 2019 – December 31, 2019]

This report documents Montville's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2019 to December 31, 2019.

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 (if needed, more space available after this table)	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
1-1 Implement public education and outreach	*Ongoing*	*None*	*Maintain Website*	*Don Bourdeau*	Ongoing	*April 1 2020*	
1-2 Address education/ outreach for pollutants of concern*	*Ongoing*	*None*	*Maintain Website*	*Don Bourdeau*	Ongoing	*April 1 2020*	

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

None Planned

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.
None Planned				

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 Final Stormwater Management Plan publically available	*On-going*	*None*	*SWMP Posted on town website*	*Don Bourdeau*	Ongoing	*April 1 2020*	
2-2 Comply with public notice requirements for Annual Reports	*On-going*	*None*	*Annual Report Posted*	*Don Bourdeau*	Feb 15, 2019	*Not Completed*	

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

None Planned

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan to public			
Availability of Annual Report announced to public			

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*	*Town has completed written IDDE program using the CT IDDE program template*	*Develop written plan of IDDE program*	*CLA Engineers*	Jul 1, 2018	*Jul 1 2018*	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	*Complete*	*Completed mapping and data collection in Priority Areas*	*GIS Layer and Apreadsheet of MS4 Outfalls in Priority Areas*	*CLA Engineers*	Jul 1, 2019	*September 2019*	
3-3 Implement citizen reporting program	*In Progress*	*None*	*Establish Citizens's Reporting Program through the Town's website*	*Don Bourdeau*	Ongoing	*April 1 2020*	
3-4 Establish legal authority to prohibit illicit discharges	*Complete*	*None*		*Don Bourdeau*	Jul 1, 2018		
3-5 Develop record keeping system for IDDE tracking	*Complete*	*Established Interactive GIS Layer*	*Interactive GIS Layer*	*CLA Engineers*	Jul 1, 2017	*July 2019*	
3-6 Address IDDE in areas with pollutants of concern	*Not Commenced*	*None*	*Investigate and begin addressing IDDE in areas with pollutants of concern*	*Don Bourdeau*	*Not specified*	*To be Determined*	

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

The written program will be posted to the Dept of Public works webpage and a link listed in next year's Annual Report. Update the written IDDE program as needed throughout the permit term. Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process. Begin dry and wet weather Catchment Investigation Procedure

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

Date of Report	**Location / suspected source**	**Response taken**

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)

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

The illicit discharges are tracked on the infrastructure GIS layer maintained by the town's engineering consultant CLA Engineers Inc.

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
None this period		

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	*425 (Mapped)*
Estimated or actual number of interconnections	*0*
Outfall mapping complete	*100%*
Interconnection mapping complete	*100%*
System-wide mapping complete (detailed MS4 infrastructure)	*100% (Priority Area)*
Outfall assessment and priority ranking	*100%*
Dry weather screening of all High and Low priority outfalls complete	*100%*
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).

The training program is currently provided annually by CLA Engineers for all DPW field staff. This coming year will focus on the results of the sampling and monitoring and the strategies and practices that will be employed to perform catchment investigation and IDDE illumination.

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*	*Review of template/draft regs*	*Publish and Implement regs*	*Don Bourdeau and planning staff*	Jul 1, 2019	*July , 2019*	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	*Done under 2004 permit*	*The town planning IW and PW staff currently perform*	*Maintain paper files recording actions*	*Don Bourdeau and planning staff*	Ongoing	*Ongoing*	
4-3 Review site plans for stormwater quality concerns	*Done under 2004 permit*	*The town planning IW and PW staff currently perform*	*Maintain paper files recording actions*	*Don Bourdeau and planning staff*	Ongoing	*Ongoing*	
4-4 Conduct site inspections	*Done under 2004 permit*	*The town planning IW and PW staff currently perform*	*Maintain paper files recording actions*	*Don Bourdeau and planning staff*	Ongoing	*Ongoing*	
4-5 Implement procedure to allow public comment on site development	*Done under 2004 permit*	*The town regulations currently allow*	*Maintain paper files recording actions*	*Don Bourdeau and planning staff*	Ongoing	*Ongoing*	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	*Done under 2004 permit*	*The town planning IW and PW staff currently perform*	*Maintain paper files recording actions*	*Don Bourdeau and planning staff*	Ongoing	*Ongoing*	

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

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	*In progress*	*Regulations under development*	*Written legal authority in place.*	*Don Bourdeau and planning staff*	Jul 1, 2021	*Jul 1, 2021*	
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	*In progress*	*Regulations under development*	*Written regulations in place*	*Don Bourdeau and planning staff*	Ongoing beginning Jul 1, 2019	*Jul 1, 2019*	
5-3 Identify retention and detention ponds in priority areas	*In progress*	*Town wide identification under way*	*GIS layer completed*	*Don Bourdeau and planning staff*	Jul 1, 2019	*Jul 1, 2020*	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	*In progress*	*BMPS being developed*	*Plans and BMPS on file*	*Don Bourdeau and planning staff*	Ongoing beginning Jul 1, 2019	*Jul 1, 2020*	
5-5 DCIA mapping	*In progress*	*Draft GIS maps begun*	*GIS layer complete*	*Don Bourdeau and planning staff*	Jul 1, 2020	*Jul 1, 2020*	
5-6 Address post-construction issues in areas with pollutants of concern	*Not begun*		*Record of issues addressed*	*Don Bourdeau*	Not specified		

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

CLA Engineers is planning to create a GIS layer of storm water basins and ponds in 2020.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	*1,137 Acres*
DCIA disconnected (redevelopment plus retrofits)	*To be Determined*
Retrofits completed	*1*
DCIA disconnected	*To be Determined*
Estimated cost of retrofits	*$*
Detention or retention ponds identified	*(TBD) # this year /# total*

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

The baseline DCIA for each watershed has been determined using the Sutherland Equations as presented in the Small MS4 Permit Technical Support Document, Revised April 2014 (Original Document, April 2011).

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	Done	Annual Training Provided	Annual training for staff	CLA/Don Bourdeau	Ongoing	Ongoing	
6-2 Implement MS4 property and operations maintenance	In process	Execute Existing SWPPS for town properties	Document execution	Don Bourdeau	Ongoing beginning Jul 1, 2018	Ongoing	
6-3 Implement coordination with interconnected MS4s	None identified	Continue to work to identify	Document to file as needed	Don Bourdeau	Not specified	Ongoing	
6-4 Develop/implement program to control other sources of pollutants to the MS4	Not begun			Don Bourdeau	Not specified	Ongoing	
6-5 Evaluate additional measures for discharges to impaired waters*	Not begun			Don Bourdeau	Not specified	Ongoing	
6-6 Track projects that disconnect DCIA	Not begun			Don Bourdeau	Ongoing	Ongoing	*Will Track via GIS*
6-7 Implement infrastructure repair/rehab program	Not begun			Don Bourdeau	Jul 1, 2021	Jul 1, 2021	
6-8 Develop/implement plan to identify/prioritize retrofit projects	*Not begun*			*Don Bourdeau*	Jul 1, 2020	*Jul 1, 2020*	
6-9 Implement retrofit projects to disconnect 2% of DCIA	*Not begun*			*Don Bourdeau*	Jul 1, 2022	*Jul 1, 2022*	
6-10 Develop/implement street sweeping program	*Done*	*Annual sweeping*	*Document to file*	*Don Bourdeau*	Ongoing beginning Jul 1, 2017	*Jul 1, 2017*	
6-11 Develop/implement catch basin cleaning program	*In progress*	*Cleaned 40-50% of basins, GPS location and volumes*	*GIS layer developed*	*Don Bourdeau*	Ongoing beginning Jul 1, 2020	*Jul 1, 2020*	
6-12 Develop/implement snow management practices	*In progress*			*Don Bourdeau*	Ongoing beginning Jul 1, 2018	*Jul 1, 2018*	

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

Ongoing street sweeping and catch basin clean out and location. DPW staff will be trained and SWPPS followed at town sites.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	(y/n) / date(s)
Street sweeping	
Curb miles swept	miles
Volume (or mass) of material collected	lbs or tons
Catch basin cleaning	
Total catch basins in priority areas	#
Total catch basins in MS4	2,553 (Mapped)
Catch basins inspected	2,553
Catch basins cleaned	
Volume (or mass) of material removed from all catch basins	Unknown
Volume removed from catch basins to impaired waters (if known)	Unknown
Snow management	
Type(s) of deicing material used	Treated Salt/Sand & Salt
Total amount of each deicing material applied	lbs or tons
Type(s) of deicing equipment used	
Lane-miles treated	miles
Snow disposal location	
Staff training provided on application methods & equipment	(y/n) / dates(s)
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	lbs or %
Reduction in turf area (since start of permit)	acres
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	$

6.4 Catch basin cleaning program

Provide any updates or modifications to your catch basin cleaning program
Mapping currently being produced to show catch basins in Priority Areas

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.
Estimated disconnected areas presently being assessed.

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years.
Not yet available.

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years.
Not yet available.

Part II: Impaired waters investigation and monitoring

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.
Field investigations identified 12 outfalls directly connected to impaired waters in Montville. Between August and October 2019, these outfalls were sampled during wet weather conditions.

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

2.1 Screening data

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? ***
106	10/09/19	Bacteria Other Pollutant	**E-Coli = 1,140** **Total Coliforms = <24,200** **Turbidity Difference = 8 NTU**	Phoenix	Yes
108	10/09/19	Bacteria Other Pollutant	**E-Coli = 2,850** **Total Coliforms = <24,200** **Turbidity Difference = 180 NTU**	Phoenix	Yes
117	10/09/19	Bacteria Other Pollutant	**E-Coli = 1,140** **Total Coliforms = <24,200** Turbidity Difference = CND NTU	Phoenix	Yes
118	8/13/19	Bacteria Other Pollutant	**E-Coli = <24,200** **Total Coliforms = <24,200** Turbidity Difference = -7 NTU	Phoenix	Yes
153	10/09/19	Bacteria Other Pollutant	**E-Coli = 2,480** **Total Coliforms = <24,200** **Turbidity Difference = 26 NTU**	Phoenix	Yes

180		Bacteria Nitrogen Phosphorus Other Pollutant	COULD NOT FIND	Phoenix	
181	8/13/19	Bacteria Nitrogen Phosphorus Other Pollutant	Fecal Coliform = 52 **Enterococcus = 4,350** 1.0 mg/l 0.177 mg/l Turbidity Difference = -9 NTU	Phoenix	Yes
182	8/13/19	Bacteria Nitrogen Phosphorus Other Pollutant	**Fecal Coliform = >24,200** **Enterococcus = 2,490** 0.72 mg/l 0.177 mg/l Turbidity Difference = -10 NTU	Phoenix	Yes
233	8/13/19	Bacteria Nitrogen Phosphorus Other Pollutant	**Fecal Coliform = 602** Enterococcus = 272 1.7 mg/l 0.136 mg/l Turbidity Difference = 4 NTU	Phoenix	Yes
330	10/09/19	Bacteria Other Pollutant	**E-Coli = 19,900** **Total Coliforms = <24,200** **Turbidity Difference = 34 NTU**	Phoenix	Yes
331	10/09/19	Bacteria Other Pollutant	E-Coli = 173 **Total Coliforms = <24,200** **Turbidity Difference = 61 NTU**	Phoenix	Yes
421	8/13/19	Bacteria Other Pollutant	**E-Coli = 1,380** **Total Coliforms = <24,200** Turbidity Difference = 0 NTU	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? ***

*Follow-up investigation required (last column) if the following pollutant thresholds are exceeded:

Pollutant of concern	**Pollutant threshold**
Nitrogen	Total N > 2.5 mg/l
Phosphorus	Total P > 0.3 mg/l
Bacteria (fresh waterbody)	• E. coli > 235 col/100ml for swimming areas or 410 col/100ml for all others • Total Coliform > 500 col/100ml
Bacteria (salt waterbody)	• Fecal Coliform > 31 col/100ml for Class SA and > 260 col/100ml for Class SB

	• Enterococci > 104 col/100ml for swimming areas or 500 col/100 for all others
Other pollutants of concern	Sample turbidity is 5 NTU > in-stream sample

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
106	*Not Commenced*	*Not Determined*
108	*Not Commenced*	*Not Determined*
117	*Not Commenced*	*Not Determined*
118	*Not Commenced*	*Not Determined*
153	*Not Commenced*	*Not Determined*
180	*Not Commenced*	*Not Determined*
181	*Not Commenced*	*Not Determined*
182	*Not Commenced*	*Not Determined*
233	*Not Commenced*	*Not Determined*
330	*Not Commenced*	*Not Determined*
331	*Not Commenced*	*Not Determined*
421	*Not Commenced*	*Not Determined*

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)
118	8/13/19	Bacteria Other Pollutant	**E-Coli = <24,200** **Total Coliforms = <24,200** Turbidity Difference = -7 NTU	Phoenix Labs
330	10/09/19	Bacteria Other Pollutant	**E-Coli = 19,900** **Total Coliforms = <24,200** **Turbidity Difference = 34 NTU**	Phoenix Labs
108	10/09/19	Bacteria Other Pollutant	**E-Coli = 2,850** **Total Coliforms = <24,200** **Turbidity Difference = 180 NTU**	Phoenix Labs
331	10/09/19	Bacteria Other Pollutant	E-Coli = 173 **Total Coliforms = <24,200** **Turbidity Difference = 61 NTU**	Phoenix Labs
153	10/09/19	Bacteria Other Pollutant	**E-Coli = 2,480** **Total Coliforms = <24,200** **Turbidity Difference = 26 NTU**	Phoenix Labs
106	10/09/19	Bacteria Other Pollutant	**E-Coli = 1,140** **Total Coliforms = <24,200** **Turbidity Difference = 8 NTU**	Phoenix Labs

Part III: Additional IDDE Program Data

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).

Outfall ID	Waterbody	DEEP Basin	Category	Ranking
4	Oxoboxo Lake	CT3004-00_02	Low Priority	No Information on Screening Factors Available to Perform Ranking
48	Latimer Brook	CT2202-00_02	Low Priority	No Information on Screening Factors Available to Perform Ranking
114	Shantok Brook	CT-E1_016-SB	Low Priority	No Information on Screening Factors Available to Perform Ranking
122	Stony Brook	CT3005-01_01	Low Priority	No Information on Screening Factors Available to Perform Ranking
125	Trading Cove Brook	CT3001-00_01	Low Priority	No Information on Screening Factors Available to Perform Ranking
148	Fox Brook	CT3004-00_02	Low Priority	No Information on Screening Factors Available to Perform Ranking
164	Hunts Brook	CT3006-00_03	Low Priority	No Information on Screening Factors Available to Perform Ranking
174	Oxoboxo Brook	CT3004-00_01	Low Priority	No Information on Screening Factors Available to Perform Ranking
176	Fox Brook	CT3004-00_02	Low Priority	No Information on Screening Factors Available to Perform Ranking
177	Oxoboxo Lake	CT3004-00_02	Low Priority	No Information on Screening Factors Available to Perform Ranking
182	Thames River (Middle)	CT-E1_015-SB	Low Priority	No Information on Screening Factors Available to Perform Ranking
192	Sandy Brook	CT3006-00_03	Low Priority	No Information on Screening Factors Available to Perform Ranking
198	Oxoboxo Brook	CT3004-00_01	Low Priority	No Information on Screening Factors Available to Perform Ranking
215	Shantok Brook	CT-E1_016-SB	Low Priority	No Information on Screening Factors Available to Perform Ranking
220	Shantok Brook	CT-E1_016-SB	Low Priority	No Information on Screening Factors Available to Perform Ranking
228	Shantok Brook	CT-E1_016-SB	Low Priority	No Information on Screening Factors Available to Perform Ranking
243	Oxoboxo Lake	CT3004-00_02	Low Priority	No Information on Screening Factors Available to Perform Ranking
245	Oxoboxo Brook	CT3004-00_02	Low Priority	No Information on Screening Factors Available to Perform Ranking
247	Fox Brook	CT3004-00_02	Low Priority	No Information on Screening Factors Available to Perform Ranking
254	Bogue Brook Reservoir	CT2202-00_02	Low Priority	No Information on Screening Factors Available to Perform Ranking
255	Bogue Brook Reservoir	CT2202-00_02	Low Priority	No Information on Screening Factors Available to Perform Ranking
279	Shantok Brook	CT-E1_016-SB	Low Priority	No Information on Screening Factors Available to Perform Ranking
283	Shantok Brook	CT-E1_016-SB	Low Priority	No Information on Screening Factors Available to Perform Ranking
285	Shantok Brook	CT-E1_016-SB	Low Priority	No Information on Screening Factors Available to Perform Ranking
331	Oxoboxo Brook	CT3004-00_01	Low Priority	No Information on Screening Factors Available to Perform Ranking
378	Oxoboxo Brook	CT3004-00_01	Low Priority	No Information on Screening Factors Available to Perform Ranking
380	Oxoboxo Brook	CT3004-00_01	Low Priority	No Information on Screening Factors Available to Perform Ranking
397	Oxoboxo Brook	CT3006-00_03	Low Priority	No Information on Screening Factors Available to Perform Ranking

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 ID	Date Sampled	Ammonia mg/L	Chlorine mg/L	Conductivity umhos/cm	Salinity (PPT)	E. Coli (col/100ml)	Enterococcus (col/100ml)	Surfactants (MBAS mg/L)	Sample Temp (F)	Pollutants of Concern	Nitrogen (mg/l)	Phosphorus (mg/l)	Turbidity Diff	If Required, Follow-up Actions Taken
114	7_16_2019	0.05	0.019	205	<0.5	10		<0.05	65.3	No				None at this time
228	7_16_2019	0.05	0.03	375	<0.5	10		<0.05	68	No				None at this time
125	7_16_2019	0.05	0.019	83	<0.5	10		<0.05	63.1	No				None at this time
192	7_16_2019	0.05	0.019	166	<0.5	10		<0.05	66.3	No				None at this time
198	9_30_2019	0.05	0.019	119	<0.5	85		<0.05	59	No				None at this time
279	7_16_2019	0.25	0.03	391	<0.5	253		<0.05	64.9	No				None at this time
380	7_17_2019	0.05	0.019	665	<0.5	10		<0.05	59.1	No				None at this time
4	8_9_2019	0.05	0.019	311	<0.5	86		<0.05	67.1	No				None at this time
48	8_9_2019	0.05	0.019	177	<0.5	20		<0.05	64.2	No				None at this time
122	7_16_2019	0.05	0.019	345	<0.5	31		<0.05	64.2	No				None at this time
148	8_12_2015	0.05	0.019	177	< 0.5	63		<0.05	65.6	No				None at this time
164	9_30_2019	0.35	0.019	234	<0.5	958		<0.05	62.6	No				None at this time
174	7_17_2019	0.05	0.019	710	<0.5	10		<0.05	73.5	No				None at this time
176	8_9_2019	0.05	0.019	315	<0.5	10		<0.05	66.9	No				None at this time
177	8_9_2019	0.05	0.019	361	<0.5	602		<0.05	68	No				None at this time
182	8_12_2019	0.05	0.019	508	< 0.5		31	<0.05	65.4	Yes	4.25	0.022		None at this time
215	7_17_2019	0.05	0.019	206	<0.5	31		<0.05	69.9	No				None at this time
220	7_16_2019	0.06	0.13	469	<0.5	20		<0.05	67.1	No				None at this time
243	8_9_2019	0.05	0.019	292	<0.5	10		<0.05	63.1	No				None at this time
245	8_9_2019	0.05	0.019	657	<0.5	1450		<0.05	66.7	No				None at this time
247	8_9_2019	0.05	0.019	362	<0.5	31		<0.05	66	No				None at this time
254	9_30_2019	0.05	0.019	67	<0.5	31		<0.05	62.7	No				None at this time
255	8_9_2019	0.05	0.019	368	<0.5	189		<0.05	68.9	No				None at this time
283	7_17_2019	0.05	0.03	274	<0.5	272		<0.05	64.5	No				None at this time

285	7_16_2019	0.05	0.019	96	<0.5	20		<0.05	63.3	No			None at this time
331	8_9_2019	0.08	0.05	67	<0.5	199		<0.05	76.6	Yes	0.28	0.019	None at this time
378	9_17_19	0.08	0.019	237	<0.5	8160		<0.05	60.8	No			None at this time
397	7_16_2019	0.05	0.03	218	<0.5	20		<0.05	64.5	No			None at this time

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:	Print name:
Signature / Date:	Signature / Date: