

MS4 General Permit  
Town of Montville 2020 Annual Report  
Existing MS4 Permittee  
Permit Number GSM 00067  
[January 1, 2020 – December 31, 2020]

Primary MS4 Contact: Mr. Donald Bourdeau, DPW Director, (860) 848-7473 email: DBourdeau@montville-ct.org

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, 2020 to December 31, 2020.

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

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

**1.1 BMP Summary**

<b>BMP</b>	<b>Status</b> (Complete, Ongoing, In Progress, or Not started)	<b>Activities in current reporting period</b>	<b>Measurable goal</b>	<b>Department / Person Responsible</b>	<b>Due</b>	<b>Date completed or projected completion date</b> (include the start date for anything that is ‘in progress’)	<b>Additional details</b>
1-1 Implement public education and outreach	<i>Ongoing</i>	Maintain town website with information on program and informational links	<i>Maintain Website</i>	CLA/DPW Director	Jul 1, 2018	<i>April 1 2020</i>	
1-2 Address education/ outreach for pollutants of concern*	<i>Ongoing</i>	Maintain town website with information on program and informational links appropriate to pollutants of concern	<i>Maintain Website</i>	CLA/DPW Director	Jul 1, 2018	<i>April 1 2020</i>	

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

Public Education and Outreach will continue to be offered via the Town's website.

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

<b>Program Element/Activity</b>	<b>Audience (and number of people reached)</b>	<b>Topic(s) covered</b>	<b>Pollutant of Concern addressed (if applicable)</b>	<b>Responsible dept. or partner org.</b>
<i>None at this time</i>				

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

### 2.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
2-1 Final Stormwater Management Plan publically available	Complete	Storm water Management Plan posted on website and filed with CTDEEP	SWMP Posted on town website	CLA Engineers/DPW Director	Apr 1, 2020	April 1, 2020	Ongoing postings on website
2-2 Comply with public notice requirements for Annual Reports			Annual Report Posted	DPW Director	Feb 15, 2020		

### 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	N	Jan 31, 2020	
Availability of Annual Report announced to public	N	Feb 15, 2020	

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

#### 3.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date (include the start date for anything that is 'in progress')	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	Complete		Establish Citizens' Reporting Program through the Town's website	DPW Director	Jul 1, 2017	April 1 2020	<a href="https://www.townofmontville.org/department-services/public-works/stormwater-pollution-prevention/">https://www.townofmontville.org/department-services/public-works/stormwater-pollution-prevention/</a>
3-4 Establish legal authority to prohibit illicit discharges	In Progress	None	Revised ordinance drafted from template	DPW/Planning	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	All outfalls with dry weather flow sampled (2019)	None	Investigate and begin addressing IDDE in areas with pollutants of concern	DPW Director/CLA Engineers	Not specified	Ongoing through term of Permit	

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

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
<i>None this period</i>		

**3.7 IDDE reporting metrics**

Metrics	
Estimated or actual number of MS4 outfalls	<i>425 (Mapped)</i>
Estimated or actual number of interconnections	<i>6 (Estimated)</i>
Outfall mapping complete	<i>95%</i>
Interconnection mapping complete	<i>90%</i>
System-wide mapping complete (detailed MS4 infrastructure)	<i>100% (Priority Area)</i>
Outfall assessment and priority ranking	<i>100%</i>
Dry weather screening of all High and Low priority outfalls complete	<i>100%</i>
Catchment investigations complete	<i>0</i>
Estimated percentage of MS4 catchment area investigated	<i>0%</i>

**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 (2020 not performed).

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

##### 4.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	Complete	None	Publish and Implement regs	DPW Director and planning staff	Jul 1, 2019	May 2020	Zoning Regulations
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	DPW Director and planning staff	Jul 1, 2017	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	DPW Director and planning staff	Jul 1, 2017	Ongoing	
4-4 Conduct site inspections	Done under 2004 permit	The town planning IW and PW staff currently perform	Maintain paper files recording actions	DPW Director and planning staff	Jul 1, 2017	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	DPW Director and planning staff	Jul 1, 2017	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	DPW Director and planning staff	Jul 1, 2017	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 (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	<i>In progress</i>	<i>Regulations under development</i>	<i>Written legal authority in place.</i>	<i>DPW Director and planning staff</i>	Jul 1, 2021	<i>Jul 1, 2021</i>	
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	<i>In progress</i>	<i>Regulations under development</i>	<i>Written regulations in place</i>	<i>DPW Director and planning staff</i>	Jul 1, 2019	<i>Jul 1, 2019</i>	
5-3 Identify retention and detention ponds in priority areas	<i>In progress</i>	<i>Town wide identification under way</i>	<i>GIS layer completed</i>	CLA/DPW Director	Jul 1, 2019	<i>Jul 1, 2021</i>	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	<i>In progress</i>	<i>BMPS being developed</i>	<i>Plans and BMPS on file</i>	CLA/DPW Director	Jul 1, 2019	<i>Jul 1, 2021</i>	
5-5 DCIA mapping	<i>In progress</i>	<i>Baseline DCIA GIS Map completed</i>	<i>GIS layer complete</i>	CLA/DPW Director	Jul 1, 2020	<i>Jul 1, 2020</i>	



5-6 Address post-construction issues in areas with pollutants of concern	<i>Not begun</i>		<i>Record of issues addressed</i>	CLA/DPW Director	Not specified		
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**5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.**

- Implement long-term maintenance plan for stormwater basins and treatment structures
- Address post-construction issues in areas with pollutants of concern
- Complete DCIA Addition/Subtraction Metrics

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

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

**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 (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
6-1 Develop/implement formal employee training program	Done	Training Provided	Annual training for staff	CLA/DPW Director	Jul 1, 2017	9 <sup>th</sup> and 10 <sup>th</sup> September 2020	
6-2 Implement MS4 property and operations maintenance	In process	Execute Existing SWPPS for town properties	Document Execution	DPW Director	Jul 1, 2018	Ongoing	
6-3 Implement coordination with interconnected MS4s	None identified	Continue to work to identify	Document to file as needed	CLA/DPW Director	Not specified	Ongoing	
6-4 Develop/implement program to control other sources of pollutants to the MS4	Not begun			CLA/DPW Director	Not specified	Ongoing	
6-5 Evaluate additional measures for discharges to impaired waters*	Not begun			CLA/DPW Director	Not specified	Ongoing	
6-6 Track projects that disconnect DCIA	Not begun			CLA/DPW Director	Jul 1, 2017	Ongoing	<i>Will Track via GIS</i>
6-7 Implement infrastructure repair/rehab program	Not begun			DPW Director	Jul 1, 2021	Jul 1, 2021	
6-8 Develop/implement plan to identify/prioritize retrofit projects	<i>Not begun</i>			<i>DPW Director</i>	Jul 1, 2020	<i>Jul 1, 2020</i>	
6-9 Implement retrofit projects to disconnect 2% of DCIA	<i>Not begun</i>			<i>DPW Director</i>	Jul 1, 2022	<i>Jul 1, 2022</i>	
6-10 Develop/implement street sweeping program	<i>Complete</i>	<i>Annual sweeping</i>	<i>Document to file</i>	<i>DPW Director</i>	Jul 1, 2017	<i>Jul 1, 2017</i>	
6-11 Develop/implement catch basin cleaning program	<i>Complete</i>	<i>Cleaned 40-50% of basins, GPS location and volumes</i>	<i>GIS layer developed</i>	<i>DPW Director</i>	Jul 1, 2020	<i>Jul 1, 2020</i>	

6-12 Develop/implement snow management practices	Complete			DPW Director	Jul 1, 2018	Jul 1, 2018	
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**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.
- Ensure DPW staff continue to be trained and SWPPS followed at town sites.
- Develop/implement plan to identify/prioritize retrofit projects

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

Metrics	
Employee training provided for key staff	Yes
Street sweeping	
Curb miles swept	miles
Volume (or mass) of material collected	lbs or tons
Catch basin cleaning	
Total catch basins in priority areas	2,030 (Mapped)
Total catch basins in MS4	2,553 (Mapped)
Catch basins inspected	2,553
Catch basins cleaned	1,400 (Est)
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**

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#### 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.**

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**Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years.**

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**Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years.**

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## 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. Follow up monitoring of the 6 worst outfalls contributing to pollution was performed in November 2020. Catchment investigation will commence in 2021.

### 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.

## Screening Data for Outfalls to Impaired Waterbodies

### 2019 Sampling Results (100% of Outfalls Discharging to Impaired Waters)

Outfall ID	Date Sampled	Flow	Pollutants of Concern Required	Water Class	Fecal Coliform (<260 col/100mls)	Enterococcus (<500 col/100mls)	E Coli (<410 col/mls)	Total Coliforms (<500 col/100mls)	Chlorine (<0.02 mg/l)	Conductivity (umhos cm)	Surfactants (<0.25 mg/l)	Ammonia (<0.5 mg/l)	Nitrogen (<2.5 mg/l)	Salinity (PPT)	Phosphorus (<0.3 mg/l)	Turbidity Diff (<5 NTU)	Catchment Ranking
108	10/9/2019	Moderate	Yes	B			2850	24200	0.019	46	0.09	0.15		< 0.5		179.73	1
181	8/13/2019	Moderate	Yes	SB	52	4350			0.019	35	0.39	0.39	1.00	<0.5	0.177	-9.45	2
330	10/9/2019	Moderate	Yes	B			19900	24200	0.019	45	0.05	0.07		<0.5		34.43	3
153	10/9/2019	Heavy	Yes	B			2480	24200	0.019	36	0.05	0.06		< 0.5		26.09	4
182	8/13/2019	Moderate	Yes	SB	24200	2490			0.019	164	0.17	0.13	0.72	<0.5	0.086	-10.17	5
233	8/13/2019	Moderate	Yes	SB	602	272			0.019	19	0.34	0.42	1.70	<0.5	0.136	4.2	6
106	10/9/2019	Trickling	Yes	B	N/A		1140	24200	0.019	20	0.07	0.13		< 0.5		7.58	7
421	8/13/2019	Moderate	Yes	B			1380	24200	0.02	16	0.32	0.18		<0.5		0.1	8
117	10/9/2019		Yes	B			1440	24200	0.02	32	0.06	0.06		< 0.5			9
118	8/13/2019	Moderate	Yes	B			24200	24200	0.03	22	0.25	0.24		< 0.5		-6.78	10
331	10/9/2019	Moderate	Yes	B			173	24200	0.019	11	0.05	0.12		<0.5		60.93	11

Highlighted cells indicate results exceeding pollutant thresholds (See below for Pollutant thresholds).

Pollutant of concern	Pollutant threshold
Nitrogen	Total N > 2.5 mg/l
Phosphorus	Total P > 0.3 mg/l
Bacteria (fresh waterbody)	<ul style="list-style-type: none"> <li>E. coli &gt; 235 col/100ml for swimming areas or 410 col/100ml for all others</li> <li>Total Coliform &gt; 500 col/100ml</li> </ul>
Bacteria (salt waterbody)	<ul style="list-style-type: none"> <li>Fecal Coliform &gt; 31 col/100ml for Class SA and &gt; 260 col/100ml for Class SB</li> <li>Enterococci &gt; 104 col/100ml for swimming areas or 500 col/100 for all others</li> </ul>
Other pollutants of concern	Sample turbidity is 5 NTU > in-stream sample

## 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)	<ul style="list-style-type: none"> <li>E. coli &gt; 235 col/100ml for swimming areas or 410 col/100ml for all others</li> <li>Total Coliform &gt; 500 col/100ml</li> </ul>
Bacteria (salt waterbody)	<ul style="list-style-type: none"> <li>Fecal Coliform &gt; 31 col/100ml for Class SA and &gt; 260 col/100ml for Class SB</li> <li>Enterococci &gt; 104 col/100ml for swimming areas or 500 col/100 for all others</li> </ul>
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	<i>Not Commenced</i>	<i>Not Determined</i>
108	<i>Not Commenced</i>	<i>Not Determined</i>
117	<i>Not Commenced</i>	<i>Not Determined</i>
118	<i>Not Commenced</i>	<i>Not Determined</i>
153	<i>Not Commenced</i>	<i>Not Determined</i>
180	<i>Not Commenced</i>	<i>Not Determined</i>
181	<i>Not Commenced</i>	<i>Not Determined</i>
182	<i>Not Commenced</i>	<i>Not Determined</i>
233	<i>Not Commenced</i>	<i>Not Determined</i>
330	<i>Not Commenced</i>	<i>Not Determined</i>
331	<i>Not Commenced</i>	<i>Not Determined</i>
421	<i>Not Commenced</i>	<i>Not Determined</i>

Shaded Outfalls identified as being six worst polluters

#### 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.

##### 2019 Sampling Results

Outfall ID	Date Sampled	Flow	Pollutants of Concern Required	Water Classification	Fecal Coliform (<260 col/100mls)	Enterococcus (<500 col/100mls)	E Coli (<410 col/mls)	Turbidity Difference (<5 NTU)
108	10/9/2019	Moderate	Yes	B			2850	179.73
181	8/13/2019	Moderate	Yes	SB	52	4350		-9.45
330	10/9/2019	Moderate	Yes	B			19900	34.43
153	10/9/2019	Heavy	Yes	B			2480	26.09
182	8/13/2019	Moderate	Yes	SB	24200	2490		-10.17
233	8/13/2019	Moderate	Yes	SB	602	272		4.2

##### 2020 Sampling Results

Outfall ID	Date Sampled	Flow	Temp.	Water Classification	Fecal Coliform (<260 col/100mls)	Enterococcus (<500 col/100mls)	E Coli (<410 col/mls)	Turbidity Difference (<5 NTU)
108	11/30/2020	Heavy	55.2	B			384	140
118	11/30/2020	Moderate	55.9	B			1110	
153	11/30/2020	Heavy	61.5	B			31	29
182	11/30/2020	Heavy	54.6	SB	13000	9210		
330	11/30/2020	Heavy	58.1	B			63	16
181	11/30/2020	Moderate	59.0	SB		5480		



## 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	Flow	Pollutants of Concern Required	Water Class	Enterococci (<500 col/100ml)	E Coli (<410 mg/l)	Total Coliforms (< 500 col/ml)	Chlorine (<0.02 mg/l)	Conductivity (umhos cm)	Surfactants (<0.25 mg/l)	Ammonia (<0.5 mg/l)	Nitrogen (<2.5 mg/l)	Salinity (PPT)	Phosphorus (<0.3 mg/l)	Turbidity Diff Recorded	Catchment Priority
4	8/9/2019	Trickling	No	A		86	13000	0.019	311	0.05	0.05		<0.5			High Priority
48	8/9/2019	Trickling	No	A		20	24200	0.019	177	0.05	0.05		<0.5			High Priority
114	7/16/2019	Heavy	No	A		10	24200	0.019	205	0.05	0.05		<0.5			High Priority
122	7/16/2019	Trickling	No	A		31	24200	0.019	345	0.05	0.05		<0.5			High Priority
125	7/16/2019	Moderate	No	A		10	24200	0.019	83	0.05	0.05		<0.5			High Priority
148	8/12/2015	Trickling	No	A		63	15500	0.019	177	0.05	0.05		< 0.5			High Priority
164	9/30/2019	Trickling	No	AA		958	24200	0.019	234	0.61	0.35		<0.5			High Priority
174	7/17/2019	Trickling	No	B		10	24200	0.019	710	0.05	0.05		<0.5			High Priority
176	8/9/2019	Trickling	No	A		10	17300	0.019	315	0.05	0.05		<0.5			High Priority
177	8/9/2019	Trickling	No	A		602	19900	0.019	361	0.05	0.05		<0.5			High Priority
182	8/12/2019	Trickling	Yes	SB	31			0.019	508	0.05	0.05	4.25	< 0.5	0.022	Not Tested	High Priority
192	7/16/2019	Moderate	No	A		10	5170	0.019	166	0.05	0.05		<0.5			High Priority
198	9/30/2019	Moderate	No	B		85	4610	0.019	119	0.2	0.05		<0.5			High Priority
215	7/17/2019	Trickling	No	A		31	19900	0.019	206	0.05	0.05		<0.5			High Priority
220	7/16/2019	Trickling	No	A		20	19900	0.13	469	0.08	0.06		<0.5			High Priority
228	7/16/2019	Heavy	No	A		10	3260	0.03	375	0.05	0.05		<0.5			High Priority
243	8/9/2019	Trickling	No	A		10	13000	0.019	292	0.05	0.05		<0.5			High Priority
245	8/9/2019	Trickling	No	A		1450	24200	0.019	657	0.05	0.05		<0.5			High Priority
247	8/9/2019	Trickling	No	A		31	9800	0.019	362	0.05	0.05		<0.5			High Priority
254	9/30/2019	Trickling	No	AA		31	24200	0.019	67	0.05	0.05		<0.5			High Priority
255	8/9/2019	Trickling	No	AA		189	24200	0.019	368	0.05	0.05		<0.5			High Priority
279	7/16/2019	Moderate	No	A		253	24200	0.03	391	0.05	0.25		<0.5			High Priority
283	7/17/2019	Trickling	No	A		272	17300	0.03	274	0.05	0.05		<0.5			High Priority
285	7/16/2019	Trickling	No	A		20	8660	0.019	96	0.05	0.05		<0.5			High Priority
331	8/9/2019	Trickling	Yes	B		199	24200	0.05	67	0.05	0.08	0.28	<0.5	0.019	Not Tested	High Priority
378	9/17/2019	Trickling		A		8160	24200	0.019	237	0.05	0.08		<0.5			High Priority
380	7/17/2019	Moderate	No	B		10	345	0.019	665	0.05	0.05		<0.5			High Priority
397	7/16/2019	Trickling	No	A		20	5480	0.03	218	0.05	0.05		<0.5			High Priority

Highlighted cells indicate results exceeding pollutant thresholds (See below for Pollutant thresholds).

Pollutant of concern	Pollutant threshold
Nitrogen	Total N > 2.5 mg/l
Phosphorus	Total P > 0.3 mg/l
Bacteria (fresh waterbody)	<ul style="list-style-type: none"> <li>E. coli &gt; 235 col/100ml for swimming areas or 410 col/100ml for all others</li> <li>Total Coliform &gt; 500 col/100ml</li> </ul>
Bacteria (salt waterbody)	<ul style="list-style-type: none"> <li>Fecal Coliform &gt; 31 col/100ml for Class SA and &gt; 260 col/100ml for Class SB</li> <li>Enterococci &gt; 104 col/100ml for swimming areas or 500 col/100 for all others</li> </ul>
Other pollutants of concern	Sample turbidity is 5 NTU > in-stream sample

## 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 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

### 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 CLA Engineers, Inc.
Print name: Mayor Ronald K. McDaniel	Print name: Darren Hayward, P.E.
Signature / Date:	Signature / Date:  03/23/21