

**DRAFT FOR PUBLIC REVIEW**

**MS4 General Permit  
Town of Madison 2018 Annual Report  
Existing MS4 Permittee  
Permit Number GSM 000051  
January 1, 2018 – December 31, 2018**

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

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

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

**1.1 BMP Summary**

<b>BMP</b>	<b>Status</b>	<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>	<b>Additional details</b>
1-1 Implement public education and outreach	Complete	<ul style="list-style-type: none"><li>• Town DPW website includes stormwater management background information, general permit descriptions and informational resources</li><li>• The informational resources include links to: EPA NPDES Stormwater Program, CTDEEP Stormwater Management Program, CTDEEP Watershed Management Program, Center for Watershed Protection and the Local Government Environmental Assistance Network</li><li>• Held “Madison Green Up Clean Up Day” on April 21, 2018 to raise environmental awareness</li></ul>	Educate the public & raise environmental awareness	Public Works Rob Russo, P.E.	Jul 1, 2018	January 1, 2018	

1-2 Address education/ outreach for pollutants of concern	Complete	<ul style="list-style-type: none"> <li>• CTDEEP Water Quality/ Stormwater summary factsheet available on the Town's DPW website</li> <li>• Animal Waste &amp; Water Quality literature focusing on bacterial contamination located within Town Hall</li> <li>• Homeowner's Guide to Septic Systems &amp; Wells which includes information on stormwater and water quality is located on the Town's Health Department website</li> </ul>	Raise awareness for pollutants of concern	Public Works Rob Russo, P.E.	Jul 1, 2018	July 1, 2018	
1-3 Integrate storm water management, pollution prevention & water quality into school curriculum	Complete	<ul style="list-style-type: none"> <li>• DPW coordinated and met with Board of Education science teachers consistently throughout the year to implement stormwater, pollution prevention &amp; water quality education into the science curriculum.</li> <li>• On October 26<sup>th</sup>, all Madison Middle School 7<sup>th</sup> graders took a field trip to Bauer Farm to attend a lecture on stormwater runoff, water quality, illicit discharges and information on the State's General Permit. The lecture was given by Robert Russo from the DPW throughout the morning to each class. After the lecture, students walked around the ponds at the farm asking questions, recording observations for their lab assignment and obtaining water samples. This assignment as part of the science unit proved to be a valuable hands on educational opportunity as well as the beginning of a strong partnership between the Board of Education science teachers and the Department of Public Works.</li> </ul>	Educate students on common stormwater, pollution prevention & water quality topics	Public Works Rob Russo, P.E.	-	Ongoing Annually	In addition to the middle school, stormwater, pollution prevention & water quality education will be incorporated in the high school during the Spring of 2019. It is anticipated the HS students will use water chemistry kits to perform IDDE sampling to be submitted in the 2019 Annual Report.

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

Madison Green Up Clean Up Day 2019

Provide additional information on water quality and pollutants at the Town Hall and on the Town website

Perform an educational lecture and Q&A session to Madison Public Schools 7<sup>th</sup> Graders on stormwater runoff, pollution, water quality & illicit discharges

Implement & coordinate IDDE education and sampling into the water chemistry unit at Daniel Hand High School

**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>Madison Public Schools - 7<sup>th</sup> Grade Educational Lecture and Q&amp;A Session</i>	Teachers & Students (Approx. 250)	Stormwater Runoff, Pollution, Water Quality & Illicit Discharges	Bacteria – Pet Waste	Public Works & Board of Education
<i>Madison Public Schools – High School Educational Lecture and Sampling (Planned)</i>	Teachers & Students	Stormwater Runoff, Pollution, Water Quality & Illicit Discharges	N/A	Public Works & Board of Education

## 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	<ul style="list-style-type: none"> <li>The Stormwater Management Plan was made available on the Town of Madison's Public Works website</li> </ul>	Provide public notice and access to the Town's Stormwater Management Plan	Public Works Rob Russo, P.E.	Apr 3, 2017	April 3, 2017	
2-2 Comply with public notice requirements for Annual Reports	Complete	<ul style="list-style-type: none"> <li>The 2016, 2017 &amp; 2018 Annual Reports have been made available to the public on the Town of Madison's Public Works website</li> </ul>	Provide public notice and access to the Town's Annual Reports	Public Works Rob Russo, P.E.	Feb 15, 2019	February 15, 2019	

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

N/A
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### 2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	April 3, 2017	Town of Madison's Public Works Website
Availability of Annual Report announced to public	Yes	February 15, 2019	Town of Madison's Public Works Website

### 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	<ul style="list-style-type: none"> <li>The IDDE program has been completed and is available on the Town's DPW website</li> </ul>	Develop written plan of IDDE program	Public Works Rob Russo, P.E.	Jul 1, 2018	July 1, 2018	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	In Progress	<ul style="list-style-type: none"> <li>The Town's consultant has mapped the majority of the Town's storm drainage system including outfalls, catch basins and other structures.</li> <li>A continuation of this mapping will occur in the next fiscal year to fill the gaps in data in conjunction with the outfall screenings</li> </ul>	Map all Townwide Stormwater Outfalls	Public Works Rob Russo, P.E.	Jul 1, 2019	Anticipated for July 1, 2020	
3-3 Implement citizen reporting program	Complete	<ul style="list-style-type: none"> <li>The Town of Madison's Public Works website encourages citizens to report illicit discharges through a "Report a Concern" function</li> </ul>	Promote citizen reporting of illicit discharges into the Town's storm drainage systems	Public Works Rob Russo, P.E.	Jul 1, 2017	July 1, 2017	
3-4 Establish legal authority to prohibit illicit discharges	Complete	<ul style="list-style-type: none"> <li>The Town has implemented an Illicit Discharge Detection and Elimination Stormwater Ordinance into the Town of Madison Code of Ordinances. Per the ordinance the DPW will be responsible for investigating, monitoring and prohibiting illicit discharges.</li> </ul>	Create a legal authority consisting of an individual or individuals who will investigate, monitor & eliminate reported illicit discharges	Public Works Rob Russo, P.E.	Jul 1, 2018	August 17, 2018	

3-5 Develop record keeping system for IDDE tracking	Complete	<ul style="list-style-type: none"> <li>The Town of Madison's Public Works Department has implemented Cartegraph Operational &amp; Asset Management software to record stormwater related issues and track illicit discharges</li> </ul>	Create & maintain a current and reliable system for recording stormwater issues and tracking illicit discharges	Public Works Beth Anne Twohill	Jul 1, 2017	July 1, 2017	
3-6 Address IDDE in areas with pollutants of concern	Not Started	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>					

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

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| <ul style="list-style-type: none"> <li>Utilize the IDDE program to begin baseline and catchment area sampling (dry and wet).</li> <li>Utilize the recently adopted stormwater ordinance to investigate, monitor and eliminate discovered illicit discharges.</li> <li>Close out gaps in Town wide MS4 GIS stormwater data.</li> <li>Continue IDDE outfall screenings in MS4 priority area</li> <li>Citizen illicit discharge concerns will be recorded and tracked by the Department of Public Works in the Cartegraph software.</li> </ul> |
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**3.3 List of citizen reports of suspected illicit discharges received during this reporting period.**

Date of Report	Location / suspected source	Response taken
12-13-2018	Kelsey Springs Drive Basement sump pump	The discharge entering the Town catch basin from a property on Kelsey Springs Drive was investigated by the Department of Public Works and the Health Department. The discharge was found to be pumped ground water; the water was clear with no odor.

**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. The Town of Madison has no SSOs**

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)
N/A						
N/A						

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

Illicit Discharge reports as well as other stormwater related issues/concerns are received by the Department of Public Works and input into Cartegraph Operational & Asset Management software. The information is stored in a database which is graphically linked to Town wide GIS mapping. The DPW administrative assistant has the ability generate a work request from the database and distribute to the appropriate DPW personnel.

**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
Approximately 102 Town-wide septic repair permits issued 30% of septic repair permits due to septic failures	Property owners issued order letter with specific time frame (if necessary) to have system designed by a professional engineer or licensed septic contractor and installed immediately.	No evidence of contaminated drinking water or groundwater

### 3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	346 estimated
Estimated or actual number of interconnections	In Progress – researching, identifying and mapping
Outfall mapping complete	85%
Interconnection mapping complete	In Progress – researching, identifying and mapping
System-wide mapping complete (detailed MS4 infrastructure)	85%
Outfall assessment and priority ranking	25%
Dry weather screening of all High and Low priority outfalls complete	Planned for 19/20 Fiscal Year
Catchment investigations complete	25%
Estimated percentage of MS4 catchment area investigated	25%

### 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 Illicit Discharge Detection and Elimination (IDDE) Program has been made available to the public via the Town website as well as all internal Town employees. A hard copy of the program is kept at the Town garage for Department of Public Works employees to reference.

No formal IDDE training has been implemented at this time.



## 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	<ul style="list-style-type: none"> <li>The Public Works and Land Use Departments are in the process of revising the Town's stormwater regulations in accordance with MS4 general permit requirements and creating a construction site legal authority.</li> </ul>	Update stormwater regulations and implement construction site legal authority	Land Use Dave Anderson  Public Works Rob Russo, P.E.	Jul 1, 2019	Anticipated for July 1, 2019	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Complete	<ul style="list-style-type: none"> <li>The Town of Madison's Public Works, Land Use, Building &amp; Health Departments coordinate and review site plans for approval</li> <li>Monthly meetings to further coordination efforts are currently being planned</li> </ul>	Maximize interdepartmental coordination on site plan reviews through communication	Public Works Rob Russo, P.E.	Jul 1, 2017	July 1, 2017	
4-3 Review site plans for stormwater quality concerns	Complete	<ul style="list-style-type: none"> <li>The Town of Madison's Public Works, Land Use, Building &amp; Health Departments perform site plan reviews to identify activities that disturb land surface and detect potential causes of pollution to stormwater runoff</li> </ul>	Identify stormwater quality concerns during site plan review process	Land Use Dave Anderson  Public Works Rob Russo, P.E.	Jul 1, 2017	July 1, 2017	
4-4 Conduct site inspections	Complete	<ul style="list-style-type: none"> <li>Site Developments are inspected by the building official, zoning enforcement officer &amp; inland wetlands officer during construction</li> </ul>	Identify stormwater drainage issues with the site development	Building Department Vinny Garafalo	Jul 1, 2017	July 1, 2017	

4-5 Implement procedure to allow public comment on site development	Complete	<ul style="list-style-type: none"> <li>The public has the ability to comment on site development at Town Meetings</li> <li>The Town of Madison's website includes a reporting function to receive public comments</li> </ul>	Allow public comment on site developments through public meetings and the Town of Madison's website	Public Works Rob Russo, P.E.	Jul 1, 2017	July 1, 2017	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Complete	<ul style="list-style-type: none"> <li>Developers are notified of the DEEP construction stormwater permit under Section 18 of the Town of Madison's Site Plan Review Application</li> </ul>	Notify developers of the DEEP construction stormwater permit	Land Use Dave Anderson	Jul 1, 2017	July 1, 2017	

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

Update the Town of Madison's stormwater regulations to meet the requirements of the MS4 general permit  
Implement Construction Site Legal Authority

## 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	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>			Jul 1, 2021		
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Not Started	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>			Jul 1, 2019		
5-3 Identify retention and detention ponds in priority areas	Not Started	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>			Jul 1, 2019		
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Not Started	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>			Jul 1, 2019		
5-5 DCIA mapping	In Progress	<ul style="list-style-type: none"> <li>The Town of Madison is in the process of analyzing DCIA from the mapping provided by UCONN Clear</li> </ul>	Identify DCIA's within the MS4 general permit priority area	Public Works Rob Russo, P.E.	Jul 1, 2020	Anticipated for July 1, 2020	
5-6 Address post-construction issues in areas with pollutants of concern	Not Started	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>			Not specified		

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

N/A

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

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	N/A
DCIA disconnected (redevelopment plus retrofits)	N/A
Retrofits completed	N/A
DCIA disconnected	N/A
Estimated cost of retrofits	N/A
Detention or retention ponds identified	N/A

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

N/A

## 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	<ul style="list-style-type: none"> <li>Stormwater Pollution Prevention Yearly Training for the Town's Department of Public Works was conducted by Ted Stevens, PE LEP of Stevens Engineering &amp; Environmental Services, LLC on December 17, 2018</li> <li>Training included the importance of stormwater management, pollution prevention and good housekeeping practices</li> </ul>	Educate & train Town personnel on stormwater management and pollution prevention	Public Works Rob Russo, P.E.	Jul 1, 2017	Ongoing	
6-2 Implement MS4 property and operations maintenance	Complete	<ul style="list-style-type: none"> <li>Under the general permit associated with industrial activity, the Town's Bulky Waste &amp; Garage properties are currently being maintained. In accordance with the permit, stormwater samples are being obtained, analyzed and submitted to CTDEEP by Stevens Engineering and Environmental Services, LLC.</li> <li>Additional Town impervious areas such as the school properties were swept during low traffic volumes. Catch Basin cleanings for these properties were also completed.</li> </ul>	Maintain all Town owned properties in accordance with the MS4 General Permit	Public Works Rob Russo, P.E.	Jul 1, 2018	Ongoing	

6-3 Implement coordination with interconnected MS4s	In Progress	<ul style="list-style-type: none"> <li>The Town of Madison is in the process of contacting neighboring Town's (Guilford, Clinton) to coordinate interconnected MS4's</li> <li>The Town is also in the process of researching and identifying interconnections with State systems.</li> </ul>	Coordinate interconnected MS4's	Public Works Rob Russo, P.E.	Not specified	Anticipated for July 1, 2020	
6-4 Develop/implement program to control other sources of pollutants to the MS4	Not Started	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>			Not specified		
6-5 Evaluate additional measures for discharges to impaired waters*	Not Started	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>			Not specified		
6-6 Track projects that disconnect DCIA	Complete	<ul style="list-style-type: none"> <li>The Town of Madison is currently tracking projects that disconnect DCIA via an internal database.</li> </ul>	Track & monitor projects that disconnect DCIA	Public Works Rob Russo, P.E.	Jul 1, 2017	Ongoing	
6-7 Implement infrastructure repair/rehab program	Not Started	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>			Jul 1, 2021		
6-8 Develop/implement plan to identify/prioritize retrofit projects	Not Started	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>			Jul 1, 2020		
6-9 Implement retrofit projects to disconnect 2% of DCIA	Not Started	<ul style="list-style-type: none"> <li>No activities to declare during current reporting period</li> </ul>			Jul 1, 2022		

6-10 Develop/implement street sweeping program	Complete	<ul style="list-style-type: none"> <li>The Town of Madison's annual street sweeping program was completed this reporting period by the Department of Public Works, supplemented by the contractor Tri State Industrial Maintenance, LLC.</li> <li>Approximately 125 miles of Town roads were swept as part of the annual program.</li> <li>Town impervious parking areas such as the school properties were also included in the program.</li> </ul>	Continue annual street sweeping program to mitigate sediment & debris on Town roads and properties	Public Works John Iennaco, P.E.	Jul 1, 2017	Ongoing	
6-11 Develop/implement catch basin cleaning program	Complete	<ul style="list-style-type: none"> <li>The Town of Madison's annual catch basin cleaning program was completed this reporting period by Tri State Industrial Maintenance, LLC.</li> <li>525 catch basins were cleaned during this reporting period.</li> </ul>	Continue catch basin cleaning program to remove sediment & debris from basins and improve stormwater quality	Public Works John Iennaco, P.E.	Jul 1, 2020	Ongoing	
6-12 Develop/implement snow management practices	Complete	<ul style="list-style-type: none"> <li>Road salt was utilized to treat Town roads during storm events as opposed to a sand mixture; preventing sediment accumulation in catch basins</li> <li>To mitigate wetland impacts, adjacent snow banks/piles were transported to Town properties</li> </ul>	Develop/Implement additional snow management practices to mitigate the effect on water quality	Public Works John Iennaco, P.E.	Jul 1, 2018	Ongoing	

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

Additional Stormwater Pollution Prevention Training for Department of Public Works Personnel

Additional maintenance on Town owned MS4 properties

MS4 interconnection coordination with neighboring Towns and the State

Continue tracking projects that disconnect DCIA

Continue Street Sweeping and Catch Basin Cleaning Programs

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

<b>Metrics</b>	
Employee training provided for key staff	Yes 12-17-2018
<b>Street sweeping</b>	
Curb miles swept	250 miles
Volume (or mass) of material collected	N/A
<b>Catch basin cleaning</b>	
Total catch basins in priority areas	2,154
Total catch basins in MS4	2,643
Catch basins inspected	525
Catch basins cleaned	525
Volume (or mass) of material removed from all catch basins	451 C.Y.
Volume removed from catch basins to impaired waters (if known)	N/A
<b>Snow management</b>	
Type(s) of deicing material used	Road Salt
Total amount of each deicing material applied	1,450 tons
Type(s) of deicing equipment used	6 wheel dump trucks w/ computerized salt spreading equipment
Lane-miles treated	250 miles
Snow disposal location	Exchange Field
Staff training provided on application methods & equipment	Yes for New Hires
<b>Municipal turf management program actions (for permittee properties in basins with N/P impairments)</b>	
Reduction in application of fertilizers (since start of permit)	N/A
Reduction in turf area (since start of permit)	N/A
<b>Lands with high potential to contribute bacteria (dog parks, parks with open water, &amp; sites with failing septic systems)</b>	
Cost of mitigation actions/retrofits	N/A



#### 6.4 Catch basin cleaning program

**Briefly describe the method used to optimize your catch basin inspection and cleaning schedule.**

The Town of Madison Department of Public Works personnel performed visual inspections of catch basins throughout Town to determine which areas were most in need of cleaning. These observations in conjunction with residents work requests provide direction on which quadrant of Town will be cleaned in a given year. The remaining quadrants of Town will be targeted in subsequent years.

#### 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. [**

**N/A**

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

**N/A**

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

**N/A**

**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.**

The Town of Madison has recently spoken with a consultant to address the impaired waters investigation and monitoring program. It is anticipated monitoring will begin during the Spring of 2019 with a summary of results and notable findings being available for the 2019 Annual Report. As part of this annual report the Town has submitted sampling data collected under the 2004 MS4 general permit in lieu of monitoring results under the modified 2017 MS4 general permit.

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

**2.1 Screening data - Anticipated for 2019 Annual Report**

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

Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?

## 2.2 Credit for screening data collected under 2004 permit

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

Outfall	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?
68 Neck Road	11/15/16	Bacteria - E. coli	>24196 MPN/100ml	CET, Inc.	Yes
68 Neck Road	12/17/15	Bacteria - E. coli	2419 MPN/100ml	CET, Inc.	Yes
68 Neck Road	10/19/12	Bacteria - E. coli	1203.3 MPN/100ml	ECL, Inc.	Yes
68 Neck Road	11/16/11	Bacteria - E. coli	488.4 MPN/100ml	ECL, Inc.	Yes
55 Mungertown Road	12/15/16	Bacteria - E. coli	7701 MPN/100ml	CET, Inc.	Yes
55 Mungertown Road	12/17/15	Bacteria - E. coli	579.4 MPN/100ml	CET, Inc.	Yes
55 Mungertown Road	10/19/12	Bacteria - E. coli	165.8 MPN/100ml	ECL, Inc.	Yes
55 Mungertown Road	11/16/11	Bacteria - E. coli	449.5 MPN/100ml	ECL, Inc.	Yes
203 Curry Cross Road	11/15/16	Bacteria - E. coli	>24196 MPN/100ml	CET, Inc.	Yes
203 Curry Cross Road	12/17/15	Bacteria - E. coli	193.5 MPN/100ml	CET, Inc.	Yes
203 Curry Cross Road	10/19/12	Bacteria - E. coli	139.6 MPN/100ml	ECL, Inc.	Yes
203 Curry Cross Road	11/16/11	Bacteria - E. coli	151.5 MPN/100ml	ECL, Inc.	Yes
203 Curry Cross Road	9/11/09	Bacteria - E. coli	161.6 MPN/100ml	ECL, Inc.	Yes
60 Webster Point Road	11/15/16	Bacteria - E. coli	1414 MPN/100ml	CET, Inc.	Yes
60 Webster Point Road	12/17/15	Bacteria - E. coli	435.2 MPN/100ml	CET, Inc.	Yes
60 Webster Point Road	10/19/12	Bacteria - E. coli	980.4 MPN/100ml	ECL, Inc.	Yes
60 Webster Point Road	11/16/11	Bacteria - E. coli	435.2 MPN/100ml	ECL, Inc.	Yes

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

Provide the following information for outfalls exceeding the pollutant threshold.

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

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

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

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

**Part III: Additional IDDE Program Data – Anticipated for 2019 Annual Report**

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

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

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank

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

**2.1 Dry weather screening and sampling data from outfalls and interconnections**

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

Outfall / Interconnection ID	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken

## 2.2 Wet weather sample and inspection data

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

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

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

### 3.1 System Vulnerability Factor Summary

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

Outfall ID	Receiving Water	System Vulnerability Factors

Where SVFs are:

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

11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather 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
Print name:	Print name:
Signature / Date:	Signature / Date: