

ENVIRONMENTAL
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2019 ANNUAL REPORT

TOWN OF ELLINGTON
55 MAIN STREET
ELLINGTON, CONNECTICUT

2017 MS4 GENERAL PERMIT
EXISTING PERMITTEE
PERMIT NUMBER GSM000059

FEBRUARY 2020

PREPARED FOR:

TOWN OF ELLINGTON
55 MAIN STREET
ELLINGTON, CONNECTICUT 06029

PREPARED BY:

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INTRODUCTION

This Annual Report has been prepared for the Town of Ellington in compliance with the Connecticut Department of Energy & Environmental Protection (CT DEEP) General Permit for the Discharge of Storm water from Small Municipal Separate Storm Sewer Systems (MS4) (MS4 General Permit), effective July 1, 2017. This report documents the efforts of the Town of Ellington to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) for the period of January 1, 2019 to December 31, 2019.

The 2019 Annual Report for the Town of Ellington is presented on the following pages. As a note, under Status in each BMP Summary table, “In progress” means the BMP has yet to be completed, and “Ongoing” means the BMP has been completed and upkeep/maintenance of it continues.

PART I: SUMMARY OF MINIMUM CONTROL MEASURE ACTIVITIES

1. PUBLIC EDUCATION AND OUTREACH (Section 6 (a)(1) / page 19)

1.1 BMP SUMMARY

BMP	Status	Activities in current reporting period	Measurable goal	Department responsible	Due	Completion date	Additional details
1-1 Implement public education and outreach	Ongoing	Stormwater Management Plan has been posted on Town website and is available in Town Hall Annex, Hall Memorial Library and Public Works Dept. The website has a link to the UConn NEMO program website. Town newsletter includes information regarding Stormwater Management Plan	Ongoing education of Town residents on impacts of polluted stormwater runoff entering various waterways	Public Works & Selectman's Office	July 1, 2019	July 1, 2019	2018 Annual Report posted to Town website. DPW webpage has been updated to include who to contact for more information regarding stormwater management in town. DPW staff reviews stormwater management with high school environmental science students annually in June
1-2 Address education/outreach for pollutants of concern	Ongoing	Same as above	Ongoing education of Town residents on the impacts of pollutants of concerns entering various waterways through stormwater runoff	Public Works & Selectman's Office	July 1, 2019	July 1, 2019	None

1.2 DESCRIBE ANY PUBLIC EDUCATION AND OUTREACH ACTIVITIES PLANNED FOR THE NEXT YEAR, IF APPLICABLE.

Newsletter updates are sent out via local Town quarterly newsletter and posted on Town website to educate residents on the impacts of polluted stormwater runoff entering various waterways in town.

IDDE Program will be posted to website when complete.

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.
Newsletter publications	Town-wide	Inform residents about the impacts of polluted stormwater runoff, including pollutants of concern, entering various waterways	Oils and fertilizers	Public Works
Town website	Town-wide	Inform residents about the impacts of polluted stormwater runoff, including pollutants of concern, entering various waterways	NA	Public Works, Planning Office, Selectman's Office

2. PUBLIC INVOLVEMENT/PARTICIPATION (Section 6(a)(2) / page 21)

2.1 BMP SUMMARY

BMP	Status	Activities in current reporting period	Measurable goal	Department responsible	Due	Completion date	Additional details
2-1 Comply with public notice requirements for the Stormwater Management Plan	Complete	Stormwater Management Plan posted on Town website	Stormwater Management Plan posted on Town website	Public Works & Selectman's Office	April 3, 2017	April 15, 2017	None
2-1 Comply with public notice requirements for Annual Reports	Ongoing	Annual Report has been posted on Town website	Annual Report posted on Town website	Public Works & Selectman's Office	Feb. 15, 2019	February 15, 2019	None

2.2 DESCRIBE ANY PUBLIC INVOLVEMENT/PARTICIPATION ACTIVITIES PLANNED FOR THE NEXT YEAR, IF APPLICABLE.

The Town will publish a public notice on its website regarding the availability of the 2019 Annual Report for review and public comment. The notice will include a contact name, phone number, physical address and email address to whom the public can send comments. The public notice will allow for a 30-day comment period, at a minimum.

2.3 PUBLIC INVOLVEMENT/PARTICIPATION REPORTING METRICS

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	April 15, 2017	Town website
Availability of Annual Report announced to public	Yes	February 15, 2019	Town 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 responsible	Due	Completion date	Additional details
3-1 Develop written IDDE program	In progress	Public Works is in the process of developing a written IDDE program using the CT IDDE program template	Develop a written IDDE program	Public Works	July 1, 2019	In progress	Once complete, program will be posted to Town website with a banner indicating new info added
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete	Locations of outfalls directly discharging into impaired waterways listed and marked by GPS and added to map	Locations of outfalls directly discharging into impaired waterways listed and marked by GPS and added to map	Public Works	July 1, 2019	March 2018	Map of Priority Areas has been developed using NEMO MS4 mapping tool
3-3 Implement citizen reporting program	Ongoing	Public Works responds to citizen reports as received	Public Works will continue to respond to citizen reports	Public Works	July 1, 2017	July 1, 2017	None
3-4 Establish legal authority to prohibit illicit discharges	Complete	Illicit Discharge and Illicit Connection Stormwater Drainage ordinance approved at Town meeting	Draft Town ordinance	Planning	July 1, 2018	December 9, 2019	None
3-5 Develop record keeping system for IDDE tracking	Complete	Public Works tracks citizen calls regarding stormwater management issues or suspected illicit discharges	Public Works will continue to track citizen calls	Public Works	July 1, 2017	July 1, 2017	None
3-6 Address IDDE in areas with pollutants of concern	Ongoing	Public Works investigates, logs and tracks citizen calls regarding suspected illicit discharges with pollutants of concern	Citizen calls and complaints will continue to be investigated, logged and tracked	Public Works	Not specified	Ongoing	None
3-7 Household hazardous waste collection	Ongoing	Drop-off center established and member of Mid-NEROC	Continue to provide drop-off center and remain a member of Mid-NEROC	Public Works	Annually	July 2012	Residents can drop off household hazardous waste within the Mid-NEROC schedule. Electronics drop off is available at Public Works

3.2 DESCRIBE ANY IDDE ACTIVITIES PLANNED FOR THE NEXT YEAR, IF APPLICABLE.

The written program will be posted to the Town website and a link listed in next year’s Annual Report. The written IDDE program will be updated as needed throughout the term of the General Permit. Continue to inspect any citizen reports of stormwater management issues or suspected illicit discharges. Continue to inform residents of the Mid-NEROC (Mid-Northeast Recycling Operating Committee) schedule as well as the hours of the Public Works drop-off center including information on what can and cannot be recycled.

3.3 LIST OF CITIZEN REPORTS OF SUSPECTED ILLICIT DISCHARGES RECEIVED DURING THIS REPORTING PERIOD.

Date of Report	Location / suspected source	Response taken
None		

3.4 PROVIDE A RECORD OF ILLICIT DISCHARGES OCCURRING DURING THE REPORTING PERIOD AND SSOs OCCURRING JULY 2012 THROUGH END OF REPORTING PERIOD USING THE FOLLOWING TABLE.

Location (Lat long/ street crossing /address and receiving water)	Date and duration of occurrence	Discharge to MS4 or surface water	Estimated volume discharged	Known or suspected cause / Responsible party	Corrective measures planned and completed (include dates)	Sampling data (if applicable)
None						

3.5 BRIEFLY DESCRIBE THE METHOD USED TO TRACK ILLICIT DISCHARGE REPORTS, RESPONSES TO THOSE REPORTS AND WHO WAS RESPONSIBLE FOR TRACKING THIS INFORMATION.

If a report or complaint is received, Public Works staff will investigate, log and track any suspected illicit discharge and file the report by address.

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
There was one septic failure in 2019, however, it occurred outside of the impaired watershed area.	The system was abandoned and the home was connected to the municipal sanitary system.	Not applicable

3.7 IDDE REPORTING METRICS

Metrics	
Estimated or actual number of MS4 outfalls	13
Estimated or actual number of interconnections	13
Outfall mapping complete	100%
Interconnection mapping complete	100%
System-wide mapping complete (detailed MS4 infrastructure)	100%
Outfall assessment and priority ranking	100%
Dry weather screening of all High and Low priority outfalls complete	2
Catchment investigations complete	12
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).

Annual IDDE training with key Public Works staff assigned to work with the IDDE program prior to inspecting outfalls. Staff is trained on visually detecting and testing possible illicit discharges.

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 responsible	Due	Completion date	Additional details
4-1 Implement, upgrade and enforce land use regulations or other legal authority to meet requirements of MS4 General Permit	Ongoing	Enforce current Soil Erosion and Sediment Control section within Ellington Zoning Regulations	Continue to enforce current Soil Erosion and Sediment Control section within Ellington Zoning Regulations. Establish and enforce LID and runoff reduction regulations and/or ordinance.	Planning	July 1, 2019	Ongoing	Current Soil Erosion and Sediment Control regulations reference <i>2002 Guidelines for Soils Erosion and Sedimentation Control</i> , as amended.
4-2 Develop/implement plan for interdepartmental coordination in site plan review and approval	Ongoing	All pertinent Town departments reviewed site plans submitted for subdivision, commercial and industrial development, and all Wetland Agency applications	Departments are emailed site plans for subdivision, commercial and industrial development, and all Wetland Agency applications	Planning	July 1, 2017	July 1, 2017	None
4-3 Review site plans for stormwater quality concerns	Ongoing	Planning Department reviews all site plans submitted to comply with Soil Erosion and Sediment Control section within Ellington Zoning Regulations	Developers receive approval for site plan that complies with Soil Erosion and Sediment Control section within Ellington Zoning Regulations	Planning	July 1, 2017	July 1, 2017	Current Soil Erosion and Sediment Control regulations reference <i>2002 Guidelines for Soils Erosion and Sedimentation Control</i> , as amended.
4-4 Conduct site inspections	Ongoing	Planning Department conducts inspections to determine compliance to Soil Erosion and Sediment Control section within Ellington Zoning Regulations	Site inspections completed regularly throughout site development process	Planning	July 1, 2017	July 1, 2017	All construction sites were inspected in 2019; 5 were located within impaired watershed areas. No violations found
4-5 Implement procedure to allow public comment on site development	Ongoing	Public Hearings and public meetings required for site development plan approval by land use commissions	Task Ongoing	Planning	July 1, 2017	July 1, 2017	No public comments were received regarding stormwater or site developments

BMP	Status	Activities in current reporting period	Measurable goal	Department responsible	Due	Completion date	Additional details
4-6 Implement procedure to notify developers about DEEP Construction Stormwater General Permit	Ongoing	Notice included in all approval letters for all development proposals	Notice will continue to be included in all approval letters for all development proposals	Planning	July 1, 2017	March 2019	None

4.2 DESCRIBE ANY CONSTRUCTION SITE RUNOFF CONTROL ACTIVITIES PLANNED FOR THE NEXT YEAR, IF APPLICABLE.

Continue to require developers to comply with Soil Erosion and Sediment Control section within Ellington Zoning Regulations. Inspect control measures regularly to make sure they are functioning correctly and comply with regulation and approval. Establish and enforce LID and runoff reduction regulations and/or ordinance.

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 responsible	Due	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		Regulations and/or ordinance will be established and enforced for LID and runoff reduction requirements	Planning	July 1, 2021	Anticipate completing by the deadline	None
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects.	Ongoing	Enforce Ellington Subdivision Regulations which require runoff reduction	Continue to enforce Ellington Subdivision Regulations which require runoff reduction. Establish and enforce LID and runoff reduction regulations and/or ordinance.	Planning	July 1, 2019	Ongoing	None
5-3 Identify retention and detention ponds in priority areas.	Complete	Identified all detention ponds in priority areas	All detention ponds in priority area are identified	Public Works	July 1, 2019	July 1, 2017	None
5-4 Implement long-term maintenance plan for storm-water basins and treatment structures.	Ongoing	Plan developed to inspect and clean catch basins. Plan developed to clean and mow detention basins annually	Catch basins inspected and cleaned as needed. Detention basins cleaned and mowed.	Public Works	July 1, 2019	July 1, 2017	All 12 drainage basins in town were inspected and maintained in 2019. Approx. 20 drainage swales were cleaned/maintained
5-5 DCIA mapping.	In progress		Calculate the DCIA that contributes to stormwater runoff to each of its MS4 outfalls	Planning	July 1, 2020	In progress	None
5-6 Address post-construction issues in areas with pollutants of concern.	Ongoing		Prioritize any problems found during inspections from long-term maintenance plan within DCIA retrofit program	Public Works & Planning	Not specified	Ongoing	None

5.2 DESCRIBE ANY POST-CONSTRUCTION STORMWATER MANAGEMENT ACTIVITIES PLANNED FOR THE NEXT YEAR, IF APPLICABLE.

Catch basins to be inspected and cleaned as needed. Detention basins cleaned and mowed annually. Continue to enforce Ellington Subdivision Regulations which require runoff reduction. Establish and enforce LID and runoff reduction regulations and/or ordinance.

5.3 POST-CONSTRUCTION STORMWATER MANAGEMENT REPORTING METRICS

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	Unknown # acres
DCIA disconnected (redevelopment plus retrofits)	0 acres this year / unknown # acres total
Retrofits completed	0
DCIA disconnected	0% this year / % total since 2012
Estimated cost of retrofits	\$0
Detention or retention ponds identified	12

5.4 BRIEFLY DESCRIBE THE METHOD TO BE USED TO DETERMINE BASELINE DCIA.

Consultation of MS4 map on UConn NEMO website.

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 responsible	Due	Completion date	Additional details
6-1 Develop/implement formal employee training program.	Ongoing	Annual MS4, IDDE, SWMP and SPCC training	Continue annual MS4, IDDE, SWMP and SPCC training	Public Works	July 1, 2017	July 1, 2017	None
6-2 Implement MS4 property and operations maintenance.	Ongoing	Property and operations maintenance plan has been implemented	Implement property and operations maintenance plan	Public Works	July 1, 2017	July 1, 2017	None
6-3 Implement coordination with interconnected MS4s.	Not Started			Public Works	Not specified		None
6-4 Develop/implement program to control other sources of pollutants to the MS4.	Ongoing	All pertinent Town department reviewed site plans submitted for subdivision, commercial and industrial development, and all Wetland Agency applications	Departments are emailed site plans for subdivision, commercial and industrial development, and all Wetland Agency applications	Public Works & Planning	Not specified	July 1, 2017	None
6-5 Evaluate additional measures for discharges to impaired waters.	Ongoing	Turf management per soil sample results	Continue to manage turf per soil sample results	Public Works	Not specified	July 1, 2017	None
6-6 Track projects that disconnect DCIA.	Not Started			Public Works	July 1, 2017		None
6-7 Implement infrastructure repair/rehab program.	Ongoing	Program developed to repair/rehab infrastructure through five year road overlay program	Infrastructure repaired annually through five year road overlay program	Public Works	July 1, 2021	July 1, 2017	None
6-8 Develop/implement plan to identify/prioritize retrofit projects.	Not Started			Public Works	July 1, 2020	Anticipate completing by the deadline	None

BMP	Status	Activities in current reporting period	Measurable goal	Department responsible	Due	Completion date	Additional details
6-9 Implement retrofit projects to disconnect 2% of DCIA.	Not Started			Public Works	July 1, 2022	Anticipate completing by the deadline	None
6-10 Develop/implement street sweeping program.	Ongoing	Program developed to sweep all roadways and parking areas annually	All roadways and parking areas swept annually	Public Works	July 1, 2017	July 1, 2017	None
6-11 Develop/implement catch basin cleaning program.	Ongoing	Program developed to inspect and repair catch basins as needed in conjunction with five-year road overlay program	Catch basins inspected and repaired in conjunction with five-year road overlay program	Public Works	July 1, 2020	July 1, 2017	None
6-12 Develop/implement snow management practices.	Ongoing	Program developed for snow management	Snow removed and transported to approved location	Public Works	July 1, 2019	July 1, 2017	None

6.2 DESCRIBE ANY POLLUTION PREVENTION/GOOD HOUSEKEEPING ACTIVITIES PLANNED FOR THE NEXT YEAR, IF APPLICABLE.

Annual review of facility compliance plans and adjust and improve as needed. Continue infrastructure repair/rehab program, street sweeping program, catch basin cleaning program and snow management program.

6.3 POLLUTION PREVENTION/ GOOD HOUSEKEEPING REPORTING METRICS

Metrics	
Employee training provided for key staff	Yes / Annually (in spring)
Street sweeping	
Curb miles swept	220 miles
Volume (or mass) of material collected	~1,000 cy
Catch basin cleaning	
Total catch basins in priority areas	
Total catch basins in MS4	
Catch basins inspected	570
Catch basins cleaned	570
Volume (or mass) of material removed from all catch basins	1,100 cy
Volume removed from catch basins to impaired waters (if known)	
Snow management	
Type(s) of deicing material used	Treated salt
Total amount of each deicing material applied	1,500 tons
Type(s) of deicing equipment used	plows
Lane-miles treated	2,200 miles
Snow disposal location	0
Staff training provided on application methods & equipment	Yes / Annually (in November)
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	0%
Reduction in turf area (since start of permit)	0 acres
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	

6.4 CATCH BASIN CLEANING PROGRAM

<p>Briefly describe the method used to optimize your catch basin inspection and cleaning schedule. [Complete this section for the 2017 Annual Report only]</p> <p>Basins cleaned in conjunction with five-year road overlay program; other basins inspected annually.</p>
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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. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]

Information not available.

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

Information not 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. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]

Information not available.

PART II: IMPAIRED WATERS INVESTIGATION AND MONITORING
[This section required beginning with 2019 Annual Report]

1. IMPAIRED WATERS INVESTIGATION AND MONITORING PROGRAM

1.1 INDICATE WHICH STORMWATER POLLUTANT(S) OF CONCERN OCCUR(S) IN YOUR MUNICIPALITY OR INSTITUTION. This data is available on the MS4 map viewer: <http://s.uconn.edu/ctms4map>.

Nitrogen/Phosphorus Bacteria Mercury Other Pollutant of Concern

1.2 DESCRIBE PROGRAM STATUS.

Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.
IDDE Program under development.

2. SCREENING DATA FOR OUTFALLS TO IMPAIRED WATERBODIES (Section 6(i)(1) / page 41)

2.1 SCREENING DATA COLLECTED UNDER 2017 GENERAL PERMIT

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

Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?
None					

2.2 CREDIT FOR SCREENING DATA COLLECTED UNDER 2004 GENERAL PERMIT

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

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

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 [This section required beginning with 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

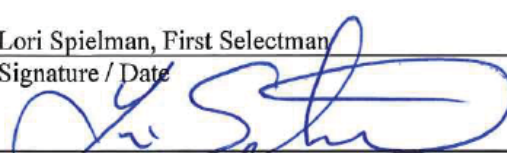
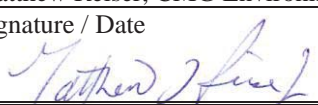
3.3 WET WEATHER INVESTIGATION OUTFALL SAMPLING DATA

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

<p>“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.”</p>	
Chief Elected Official or Principal Executive Officer:	Document Prepared by:
Print name	Print name
Lori Spielman, First Selectman	Matthew Reiser, CMG Environmental, Inc.
Signature / Date	Signature / Date
 3-31-2020	 3/31/20