

**MS4 General Permit**  
**Town of Windsor 2018 Annual Report**  
**Existing MS4 Permittee**  
**Permit Number GSM 000066**  
**[January 1, 2018 – December 31, 2018]**

---

This report documents the Town of Windsor CT 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**

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
1-1 Implement public education and outreach	Complete	Update the Towns website with information on stormwater topics	Access to stormwater literature	Engineering	Ongoing		
1-1 Implement public education and outreach	Complete	Farmington River Watershed Association clean up	Cleaned debris from Deckers Brook @ the CT River	Wetlands/ T. Hazel	Ongoing		
1-2 Address education/ outreach for pollutants of concern*	Completed	Earth Day public outreach at Northwest Park	Provided information on Wetlands preservation	Wetlands/ T. Hazel	Ongoing		

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

Continue to update the Town website with educational material  
 Continue to replace catch basin tops  
 Continue to participate in community events  
 Continue to post educational articles in the Town publication "There's a lot to do in Windsor"

**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>
Continued to post informational material on the Town website	Citizens of Windsor	Pet waste Waterfowl	Bacteria Nitrogen	Engineering
Continued to post informational material on the Town website	Citizens of Windsor	Fertilizer	Nitrogen	Engineering
Earth Day	Citizens of Windsor	General Pollutants	General	Wetlands/Northwest Park

## 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 Continue availability of Final Stormwater Management Plan to the public	Complete	Electronic copy available on the Towns website. Hard copies available at the Engineering Department front desk in Town Hall.	Continuing to make plan accessible to citizens	Engineering Department/J. English	Ongoing	4/3/2017	
2-2 Comply with public notice requirements for Annual Reports	Complete	Legal notice published. Electronic copy posted on the Towns website. Hard copies available at the Engineering Department front desk in Town Hall	Make report available to public for comment	Engineering Department/ J. English	Feb 15, 2019		
2-3 Establish stormwater committee	Complete	Identified committee members from the Windsor Engineering, Health, Planning, Landfill, Public Works, and Building Departments for the Stormwater Committee	Provide forum to coordinate SWMP implementation across depts. and commissions	Stormwater Committee	-	Summer 2018	Reason for addition: Committee will represent town departments & commissions with stake in stormwater mgmt.

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

Continue to update Town website with educational material.  
 Continue to replace catch basin tops labeled "Drains to Waterway"  
 Continue to participate in community events  
 Continue to post educational articles in th Towns publication "Thers a lot to do in Windsor"  
 Hold quarterly stormwater committee meetings to review SMP implementation progress.

### 2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan to public	Yes	4/3/2017	Engineering Dept./ Town Website
Availability of Annual Report announced to public	Yes	2/1/2019	Engineering Dept./ 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 / Person Responsible	Due	Date completed or projected completion date	Additional details
3-1 Develop written IDDE program	Complete	Town completed written IDDE program using the CT IDDE program template	Developed written plan of IDDE program	Engineering/J. English	Jul 1, 2018		
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	In Progress	Priority areas have been identified and outfalls on the Towns GIS map have been updated with attributes to discern priority	Locate and prioritize outfalls in areas of concern	Engineering/ J. English	Jul 1, 2019	Anticipate completing by the deadline of July 1, 2019	
3-3 Implement citizen reporting program	Complete	See-Click-Fix is the Towns online reporting software	Continue utilizing citizen reporting program	Engineering	Jul 1, 2017	6/1/2017	
3-4 Establish legal authority to prohibit illicit discharges	Complete	As per written IDDE	Identified legal authority in written IDDE program	Engineering	Jul 1, 2018		
3-5 Develop record keeping system for IDDE tracking	Complete	Continue updating spreadsheet as needed		Engineering/J. English	Jul 1, 2017	9/13/2017	

3-6 Address IDDE in areas with pollutants of concern					Not specified		
3-7 Consolidate IDDE tracking spreadsheets	Complete	Compile all the IDDE tracking requirements into one spreadsheet		Engineering/J. English	-	1/22/2018	Reason for addition: Make it easier to track all IDDE activities

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

The written program will be posted to the Dept of Public works webpage and a link listed in next year's Annual Report; will 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

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

Date of Report	Location / suspected source	Response taken
N/A		

**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)
22 Lepage Rd	1/6/2012	N/A	1.0	Jet Truck Hose Cleaning	Lower jet hose line pressure	
8 Maude Circle	1/17/2012	N/A	1.0	Jet Truck Hose Cleaning	Lower jet hose line pressure	
12 Maude Circle	1/17/2012	N/A	1.0	Jet Truck Hose Cleaning	Lower jet hose line pressure	
20 Maude Circle	1/17/2012	N/A	1.0	Jet Truck Hose Cleaning	Lower jet hose line pressure	
67 Giddings Ave.	1/17/2012	N/A	1.0	Jet Truck Hose Cleaning	Lower jet hose line pressure	
560 Windsor Ave.	10/20/2012	N/A	1,000	Debris	Sewer crew used equipment to relieve stoppage	
35 Capen St.	1/22/2013	N/A	25	Debris	Sewer crew used equipment to relieve stoppage	
879 Bloomfield Ave.	3/31/2014	Yes	210	Collapsed Black Pipe	Sewer crew repaired collapsed sewer	
879 Bloomfield Ave.	5/1/2014	No	5	Collapsed Black Pipe	Sewer crew repaired collapsed sewer	
38 Elm St	12/28/2014	No	30	Debris	Sewer crew cleared blockage of the main sewer	
39 Rainbow Creek Dr.	4/26/2015	No	<100	Debris	Sewer crew cleared blockage of the main sewer	
36 Green Manor	10/15/2015	No	15	Debris	Sewer crew cleared blockage of the main sewer	
High Path Rd	10/14/2016	No	1,500	Grease Clog	Main sewer flushed by jet truck and stoppage relieved	
34 Hayden Ave	4/6/2017	No	10	Debris	Main sewer flushed by jet truck and stoppage relieved	
Ridge St Pump Station	1/18/2018	Yes	10,000	Differential Settlement	Forced main breal repaired by sewer crew	
*All SSO information provided by the MDC						

\*No illicit discharge reports to date

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

Citizens may report an illicit discharge through the Towns website via “See-Click-Fix”.  
An IDDE tracking form is available to all trained employees and is to be used in all potential IDDE situations.  
All discharges are then to be reported to the Engineering Department for determining parties responsible and mitigating solutions.  
A list of IDDE occurrences is maintained by the Engineering Department.  
The written IDDE Manual includes more detail.

**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
16 Forest Rd.	Full Repair	None Observed
276 Palisado Ave	Full Repair	None Observed
50 Walnut Rd	Tank Replacement	None Observed
296 Prospect Hill Rd	Full Repair	None Observed
313 Hitching Post	Full Repair	None Observed
155 Mountain Road	Full Repair	None Observed
296 Prospect Hill Rd	Full Repair	None Observed
31 Loren Circle	Full Repair	None Observed
472 Stone Rd	Full Repair	None Observed
1938 Poquonock Ave	Full Repair	None Observed
42 Ravine Rd	Tank replacement	None Observed
830 Center Rd	Full Repair	None Observed
1 Market Circle	Tank replacement	None Observed

### 3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	577
Estimated or actual number of interconnections	unknown
Outfall mapping complete	100%
Interconnection mapping complete	0%
System-wide mapping complete (detailed MS4 infrastructure)	98%
Outfall assessment and priority ranking	95%
Dry weather screening of all High and Low priority outfalls complete	0
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	0

### 3.8 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often is it given (minimum once per year).

Town staff has been educated about the illicit discharge ordinance since it was adopted in 2009. A formal annual training plan is in progress to comply with the written IDDE.

## 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	The Towns Erosion & Sediment Control Ordinance was enacted in 2009. It requires that an application for an Erosion & Sediment Permit be submitted and approved for all land disturbing activities greater than one-half acre in size	Update ordinance to comply with MS4 general permit	Engineering/J. English	Jul 1, 2019		
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Complete/Ongoing	Site plan development applications are reviewed by the Staff Development Team.	Reviewed and/or approved 45 site plan/site plan revision applications	Planning /T. Sealy	Jul 1, 2017		
4-3 Review site plans for stormwater quality concerns	Complete/Ongoing	All site plans are reviewed for stormwater quality concerns. Specifically, the Zoning Regulations require conformance with the Towns Stormwater Management Ordinance. If a Stormwater Management Permit is required, evidence of an approval permit shall be a condition of approval for all zoning approvals required by the proposed development/activity. For sites that do not require a Stormwater Management Permit, Section 3.6.1 of the Zoning regulations outline minimum requirements.	Reviewed and/or approved 45 site plan/ site plan revision applications	Planning/ T. Sealy	Jul 1, 2017		

4-4 Conduct site inspections	Complete/ Ongoing	To obtain inspections, the applicant/permittee is responsible for notifying the Town Engineer at least two working days before the following: start of construction; completion of clearing limit demarcation; installation of sediment and erosion control measures; completion of site clearing; completion of rough grading; completion of final grading; close of construction season; completion of final landscaping; and removal of the sediment and erosion control system. The permittee shall make regular inspections and all inspections shall be documented in writing to the Town Engineer. Staff is also able to enter site and make inspections at any time they deem necessary	Site inspections are conducted throughout the duration of each project	Planning/ T. Hazel	Jul 1, 2017		
4-5 Implement procedure to allow public comment on site development	Complete/ Ongoing	All applications may be reviewed by the public during regular business hours. Applications are also posted on the Planning Department webpage. The public is allowed to comment on the applications during the "Public Comment" portion of the Planning and Zoning Commission meeting. If a site development is associated with special use approval, a public hearing is held during which the public may comment.		Planning/ T. Sealy	Jul 1, 2017		

		The Inland Wetlands and Watercourses Commission may also hold a public hearing on a site development application if there are wetland on the property and it is determined there is a public interest and/or a significant impact on wetlands					
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Complete	Developers are notified about DEEP's construction stormwater permit during the Staff Development Team meeting.	A Site Development Plan Checklist has been developed and implemented	Planning/ T. Sealy	Jul 1, 2017		
4-7 Develop stormwater compliance checklist	Completed	Developed checklist to provide developers on stormwater mgmt compliance requirements	Standardize plan review	Planning / T. Sealy	-	Jul 1, 2018	Reason for addition: Make it easier to ensure compliance with stormwater regulations

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

Integrated stormwater compliance checklist into review process once completed.  
 Continue to review and update ordinances and regulations to comply with the 2016 MS4 General Permit.  
 Continue interdepartmental coordination in board reviews, permitting or approval of land disturbance projects.  
 Continue administration of the Towns Erosion & Sediment Control Ordinance, permit application and requiremnets and site inspections.

## 5. Post-construction Stormwater Management (Section 6(a)(5) / page 27)

### 5.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	In Progress	Town adopted a Stormwater Management Ordinance and published a Town Stormwater Manual to meet post-construction runoff requirements	Ordinance is compliant with 2004 General Permit	Engineering	Jul 1, 2021		
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	In Progress	Developers are required to execute an Inspection & Maintenance Agreement with Windsor Land Records Prior to Commencing work. The I & S Agreement identifies the person(s) responsible and establishes a schedule for routine inspections and maintenance	Edit and confirm the Stormwater Ordinance is compliant with the MS4 General Permit	Engineering	Jul 1, 2019		
5-3 Identify retention and detention ponds in priority areas	In Progress	The Town is currently developing a list of all structural stormwater BMPs (retention/detention ponds, swirl concentrators, oil/grit separators, water quality wetlands or swales, etc.) approved on private and municipal property	List of Town owned detention basins created	Engineering/ J. English	Jul 1, 2019		

5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	In Progress	The Town is creating an inspection and maintenance plan for detention and retention ponds	Create an inspection and maintenance plan	Engineering/ J. English	Jul 1, 2019		
5-5 DCIA mapping	In Progress	Windsor will follow guidance provided by DEEP and UConn CLEAR to calculate the DCIA that contributes stormwater runoff to each of its MS4 outfalls	DCIA coverage map updated as necessary	Engineering/ J. English	Jul 1, 2020		
5-6 Address post-construction issues in areas with pollutants of concern	In Progress	For areas contributing to waters where Nitrogen, Phosphorus or Bacteria is a Stormwater Pollutant of Concern and erosion or sedimentation problems are found during the annual inspections conducted under the long-term maintenance plan, Windsor will prioritize those areas for the DCIA retrofit program under Minimum Control Measure 6		Planning/ T. Hazel	Not specified		
5-7 Investigate alternative retention pond maintenance options	In progress	Identified the possibility of using native vegetation to provide erosion control for retention/detention ponds	ID sustainable means of maintaining town owned detention ponds	Public works	-		Reason for addition: ID sustainable means of maintaining town owned retention/detention ponds

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

Create a plan to maintain the highest priority retention ponds.  
Update Stormwater Ordinance Manual as necessary.  
Continue tracking DCIA reduction.  
Continue to calculate DCIA

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

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	7330.1 acres (Impervious cover)
DCIA disconnected (redevelopment plus retrofits)	
Retrofits completed	
DCIA disconnected	
Estimated cost of retrofits	
Detention or retention ponds identified	33 Town owned

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

The Engineering Department will implement the NEMO suggested DCIA estimate based on development density in each basin. The method is described on the UConn MS4 Stormwater webpage.

## 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					Jul 1, 2017		
6-2 Implement MS4 property and operations maintenance	Complete	Municipally- Owned or operated properties, parks, and other facilities are maintained so as to minimize the discharge of pollutants to the MS4.		Public Works	Jul 1, 2018		
6-3 Implement coordination with interconnected MS4s	In Progress	Windsor will continue to coordinate with operators of interconnected MS4's (Neighboring municipalities, institutions, and DOT) regarding contribution of potential pollutants		Engineering	Not specified		
6-4 Develop/implement program to control other sources of pollutants to the MS4	In Progress	Will continue to control contribution of pollutants to the MS4 from commercial, industrial, municipal, institutional or other facilities, not otherwise authorized by a CTDEEP stormwater permit, through the IDDE and waer quality monitoring program and regulatory mechanisms		Wetlands	Not specified		

6-5 Evaluate additional measures for discharges to impaired waters*		On municipally owned or operated lands with a high potential to contribute bacteria to Mill Brook and the CT River, Windsor will develop, implement, prioritize, and evaluate potential funding sources for a retrofit or source management program to correct the problem(s)		Engineering/ Wetlands	Not specified		
6-6 Track projects that disconnect DCIA	In Progress	Windsor will annually track the total acreage of the DCIA that is disconnected from the MS4 as a result of redevelopment or retrofit projects. Windsors goal is to reduce 1% of its total DCIA acreage per year to the maximum extent possible.	Once the DCIA is established; reductions will be calculated	Planning/ T. Sealy	Jul 1, 2017		
6-7 Implement infrastructure repair/rehab program		Windsor will continue its program to identify MS4 structures to repair, rehabilitate, or upgrade to reduce or eliminate the discharge of pollutants into waterbodies. This program will be responsive to new information on outfalls discharging pollutants, impaired waters, inspections, or observations made under the IDDE section of this plan.		Stormwater Committee	Jul 1, 2021		

6-8 Develop/implement plan to identify/prioritize retrofit projects		Windsor will develop a Retrofit Plan to identify and prioritize potential DCIA disconnection projects. Prioritization will be based on several factors, including whether the project lies within a priority area.		Stormwater Committee	Jul 1, 2020		
6-9 Implement retrofit projects to disconnect 2% of DCIA		Windsor will develop a Retrofit Plan to identify and prioritize potential DCIA disconnection projects. Prioritization will be based on several factors, including whether the project lies within a priority area.		Stormwater Committee	Jul 1, 2022		
6-10 Develop/implement street sweeping program	Complete	Town wide street sweeping conducted every spring.		Public Works/E. Wagner	Jul 1, 2017	7/1/2017	
6-11 Develop/implement catch basin cleaning program	In progress	Windsor will continue to inspect and clean (as necessary) catch basins regularly. Windsor will optimize routine cleaning frequencies for particular structures or catchment areas to maintain acceptable sediment removal efficiencies.	Document inspections. Establish schedule. Clean out any basin over 50% full	Public Works/E. Wagner	Jul 1, 2020	9/13/2017	
6-12 Develop/implement snow management practices	In Progress	Windsor will implement standard operating procedures regarding snow and ice control to minimize the discharge of anti-icing or de-icing chemicals and other pollutants	Provide Training for municipal employees on winter roadway maintenance procedures	Public Works/E. Wagner	Jul 1, 2018		

		(while maintaining public safety)					
6-13 Map & Inventory highly erosive areas in town ROW	Not started	Collect information on eroding areas in ROW from highway maintenance personnel over course of normal operations	ID areas contributing large volume of sediment to town waterbodies	Public Works/E. Wagner	-	Jul 1, 2020	Reason for addition: Reduce sedimentation of waterways near town ROWs

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

Continue pet waste and waterfowl management.  
 Evaluate municipal building and facilities for potential hazards.  
 Continue to monitor vehicles and equipment for leaks.  
 Continue leaf pick up, street sweeping, and catch basin cleaning.  
 Continue to monitor anti-icing/de-icing management.

### 6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	04/02/2018
Street sweeping	
Curb miles swept	149
Volume (or mass) of material collected	400
Catch basin cleaning	
Total catch basins in priority areas	1320
Total catch basins in MS4	4776
Catch basins inspected	1976
Catch basins cleaned	1976
Volume (or mass) of material removed from all catch basins	670.51
Volume removed from catch basins to impaired waters (if known)	unknown
Snow management	
Type(s) of deicing material used	Salt
Total amount of each deicing material applied	1200
Type(s) of deicing equipment used	Truck mounted spreaders, broadcasters, and by hand
Lane-miles treated	149
Snow disposal location	N/A
Staff training provided on application methods & equipment	11/26/2018
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	N/A
Reduction in turf area (since start of permit)	unknown
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	\$2000, Dog waste bags (Not including donations)

#### 6.4 Catch basin cleaning program

**Provide any updates or modifications to your catch basin cleaning program**

Windsor continues to utilize its catch basin inspection and cleaning program that covers all municipally-owned catch basins every three 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. [\[Provide information if available in 2018 report. Section to be completed for the 2019 Annual Report.\]](#)**

Written retrofit program in progress

**Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. [\[Provide information if available in 2018 report. Section to be completed for the 2019 Annual Report.\]](#)**

Written retrofit program in progress

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years. [\[Provide information if available in 2018 report. Section to be completed for the 2019 Annual Report.\]](#)

Written retrofit program in progress

**Part II: Impaired waters investigation and monitoring [This section required beginning with 2018 Annual Report]**

**1. Impaired waters investigation and monitoring program**

1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution. This data is available on the MS4 map viewer: <http://s.uconn.edu/ctms4map>.

Nitrogen/ Phosphorus       Bacteria       Mercury       Other Pollutant of Concern

**1.2 Describe program status.**

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

Conducted wet weather sampling for outfalls to the Mill Brook reviewing results and antipate conducting more wet weather and dry weather screenings/smplng this spring and summer. Antipate investigated SVF this spring and summer.

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

**2.1 Screening data**

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

Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?
472	6/4/18	Bacteria	- E. coli 12,000 mpn/100ml - T Coliform 724200 mpn/100ml	Pheonix Enviromental Labratories, INC.	
473	6/4/18	Bacteria	E. coli 5790 mpn/100ml T Coliform 24200 mpn/100ml	Pheonix Enviromental Labratories, INC	
474	6/4/18	Bacteria	E. coli 12000 mpn/100ml T Coliform 24200 mpn/100ml	Pheonix Enviromental Labratories, INC	
481	6/4/18	Bacteria	E. coli 1920 mpn/100ml	Pheonix Enviromental Labratories, INC	

			T Coliform 24200 mpn/100ml		
479	5/4/18	Bacteria	E. coli 10 mpn/100ml T Coliform 3650 mpn/100ml	Pheonix Enviromental Labratories, INC.	
554	5/4/18	Bacteria	E. coli <10 mpn/100ml T Coliform 784 mpn/100ml	Pheonix Enviromental Labratories, INC.	
498	5/4/18	Bacteria	E. coli <10 mpn/100ml T Coliform 6130 mpn/100ml	Pheonix Enviromental Labratories, INC.	
480	5/4/18	Bacteria	E. coli 203 mpn/100ml T Coliform >24200 mpn/100ml	Pheonix Enviromental Labratories, INC.	
530	5/4/18	Bacteria	E. coli 213 mpn/100ml T Coliform 8660 mpn/100ml	Pheonix Enviromental Labratories, INC.	
488	5/17/18	Bacteria	E. coli 7270 mpn/100ml T Coliform >24200 mpn/100ml	Pheonix Enviromental Labratories, INC.	
515	5/17/18	Bacteria	E. coli 435 mpn/100ml T Coliform >24200 mpn/100ml	Pheonix Enviromental Labratories, INC.	

## 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?
N/A					

## 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
N/A		

#### 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)
N/A				

**Part III: Additional IDDE Program Data [This section required beginning with 2018 Annual Report]**

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

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

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank
4000	High Priority	4
4100	Low Priority	4
4300	High Priority	4
4321	High Priority	4
4400	Low Priority	4
4404	Low Priority	4

**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
N/A										

## 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
N/A									

## 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
N/A		

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
N/A					

### 3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants
N/A				

### 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
N/A							

**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: