

**MS4 General Permit**  
**Town of Simsbury 2019 Annual Report**  
**Existing MS4 Permittee**  
**Permit Number GSM 000071**  
**[January 1, 2019 – December 31, 2019]**

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

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

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

**1.1 BMP Summary**

<b>BMP</b>	<b>Status</b>	<b>Activities in current reporting period</b> (if needed, more space available after this table)	<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	Completed	Update Town's website with links to resources related to stormwater topics.	Provide access to stormwater literature.	Engineering / J. Shea	Ongoing	3/30/2017	
1-2 Address education/ outreach for pollutants of concern*	Completed	Pollutant: Bacteria Add pet waste management information/link to the Town website.	Provide information related to bacteria on the Town's website.	Engineering / J. Shea	Ongoing	Plan to implement during 2020	
<b>Additional BMP:</b> 1-3 Hazardous Waste Collection	Completed	In partnership with Farmington, Canton, Granby, and Avon, Hazardous Waste Collection days were provided.	Educate and provide hazardous waste collections	DPW / T.Roy	Ongoing	2019	Also Extended public education program to schools

Extra space for describing above BMP activities, if needed:

BMP	

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

Continue Hazards Waste Collection days with neighboring towns.  
Update/add links to informational websites and videos that relate to bacteria impairments.

### 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.
<i>RiverSmart Display at Burgers on the Bridge</i>	Fundraiser for the Old Drake Hill Flower Bridge	<i>Landscaping, runoff reduction, water/waste, etc.</i>	N/A	<i>Farmington River Watershed Association</i>
<i>"My Healthy Stream" – Handbook</i>	<i>General Public</i>	<i>Water cycle, stream health, urban watersheds, etc.</i>	<i>Direct discharge from impervious surfaces. Oil, herbicide, pesticides, etc.</i>	<i>Handbook provided by the Farmington River Association and made available by the Planning Department</i>

<b>Stream testing lesson/activity – 7th Grade Science</b>	50+/- Students	Trained students on the water cycle, stream habitats, environmental conditions that support biodiversity, water quality, stream health, water testing, etc. Testing covers turbidity, dissolved oxygen, pH, temperature, nitrates, and fecal coliform.	N/A	Henry James Middle School 7th grade science class
<b>Link to related stormwater websites (DEEP, NEMO, etc.)</b>	N/A	State regulations, Stormwater, MS4, BMPs, etc.	Bacteria, etc.	Engineering

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

### 2.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
2-1 Final Stormwater Management Plan publically available	Complete	Public Notice posted via Town Website	Provide notice and access to Annual Report	Engineering/ J. Shea	Ongoing	March 30, 2017	
2-2 Comply with public notice requirements for Annual Reports	Complete	Public Notice posted via Town Website	Provide notice and access to Annual Report	Engineering/ J. Shea	Feb 15, 2019	Feb 15, 2019	
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Extra space for describing above BMP activities, if needed:

BMP	

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

Review additional education materials for Town website.

### 2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
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Availability of the Stormwater Management Plan to public	Y	Mar. 30, 2017	<a href="https://www.simsbury-ct.gov/sites/simsburyct/files/uploads/swmpln_simsbury-rev0.pdf">https://www.simsbury-ct.gov/sites/simsburyct/files/uploads/swmpln_simsbury-rev0.pdf</a>
Availability of Annual Report announced to public	Y	Feb. 14, 2019	<a href="https://www.simsbury-ct.gov/home/news/town-of-simsbury-2018-annual-stormwater-report-available">https://www.simsbury-ct.gov/home/news/town-of-simsbury-2018-annual-stormwater-report-available</a>

### 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 a written IDDE program using the CT IDDE program template	Develop written plan of IDDE program	Engineering / J. Shea	Jul 1, 2018	June 27, 2018	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete	Town continues a QA/QC process of reviewing GIS system and editing as necessary.	All outfalls mapped	Engineering / J. Shea	Jul 1, 2019	Fall 2017	Mapping and data will be continually maintained as outfalls are tested/repared/etc.
3-3 Implement citizen reporting program	Complete	Maintained reporting via DPW phone and Town website.	Providing reporting mechanism and log.	Public Works/ Tom Roy	Jul. 1, 2017	Completed under previous permit	Citizens may report illicit discharges as they would report other concerns to DPW
3-4 Establish legal authority to prohibit illicit discharges	Complete	Town wrote and adopted a Stormwater Connection Ordinance	Adopt Ordinance	Engineering/ J. Shea	Jul 1, 2018	June 11, 2018	Five (5) members of Town Staff are designated as authorized enforcement officers.

3-5 Develop record keeping system for IDDE tracking	<i>Ongoing</i>	<i>Town continues to maintain a list of reports that include IDDE.</i>	<i>Maintain list.</i>	<i>Public Works</i>	Jul 1, 2017	<i>Completed under previous permit.</i>	<i>Town Staff have determined that current system is sufficient due to the limited number of illicit discharges reported.</i>
3-6 Address IDDE in areas with pollutants of concern	<i>In Progress</i>	<i>Wet weather testing at 23 outfalls occurred during 2019.</i>	<i>Wet weather testing and additional investigation as necessary.</i>	<i>Engineering/J. Shea</i>	Not specified	<i>Ongoing</i>	<i>All twenty three (23) tests were positive for bacteria. Additional testing is planned for 2020 at other outfalls for comparison.</i>

**Extra space for describing above BMP activities, if needed:**

<b>BMP</b>	

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

*Continue wet weather testing at outfalls discharging to impaired waters.  
Begin dry weather outfall screening/testing.*

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

Date of Report	Location / suspected source	Response taken
6/15/2018	1310 Hopmeadow Street/cleaning of cooking equipment into storm drain	Letter sent to owner regarding the report and to offer review of the stormwater ordinance prohibiting such activities. Follow-up by Main Street Partnership as well.
On-going	Review DEEP Spill Notifications for significant spills	Review type & size and location of spills for potential followup outfall testing.

**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.**

<b>Location</b> (Lat long/ street crossing /address and receiving water)	<b>Date and duration of occurrence</b>	<b>Discharge to MS4 or surface water</b>	<b>Estimated volume discharged</b>	<b>Known or suspected cause / Responsible party</b>	<b>Corrective measures planned and completed (include dates)</b>	<b>Sampling data (if applicable)</b>
3 Tunxis Road	08/28/2012	Unnamed Brooke/ Farmington River	Unknown	Heavy flow bypassed		
17 Firetown Road	04/05/2013	Hop Brook/ Farmington River	<50 Gal.	Private Lateral		
4 Middle Lane	04/27/2014	Stebbins Brook/ Farmington River	<50 Gal.	Private System		
3 Tunxis Road	06/19/2014	Unnamed Brook/ Farmington River	Unknown	Cracked AC Force Main	Repaired by Simsbury WPCA	
4 Middle Lane	09/25/2014	Stebbins Brook/ Farmington River	<50 Gal.	Private System		
536 Hopmeadow Street	11/10/2014	Stebbins Brook/ Farmington River	Unknown	Private System		
536 Hopmeadow Street	08/22/2014	Stebbins Brook/ Farmington River	<50 Gal.	Private System		
536 Hopmeadow Street	11/13/2015	Stebbins Brook/ Farmington River	Unknown	Private System		

536 Hopmeadow Street	06/07/2017	Stebbins Brook/ Farmington River	Unknown	Private System		
50 Longview Drive	04/01/2018		51-500 Gal.	Broken Force Main at Pump Station	Repairs by Simsbury WPCA	

**NOTE: There were no sanitary sewer overflow in 2019.**

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

At this time residents are directed to report illicit discharges to the Department of Public Works. Investigations are performed by DPW Staff. Engineering support provided to the Department of Public Works for any illicit discharges that are difficult to find the source of discharge.

**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
Farmington Valley Health District received and maintains records of septic failures along with actions taken. All sanitary sewer connections and system extensions are managed by the Simsbury Water Pollution Control Authority (WPCA). The sanitary sewer system has been expanded as required with a focus on areas of known septic failures. The Town will begin to formally coordinate with WPCA regarding records of septic failures.		

**3.7 IDDE reporting metrics**

Metrics	
Estimated or actual number of MS4 outfalls	300 (est.)



Estimated or actual number of interconnections	20 (est.)
Outfall mapping complete	95%
Interconnection mapping complete	40%
System-wide mapping complete (detailed MS4 infrastructure)	95%
Outfall assessment and priority ranking	50%
Dry weather screening of all High and Low priority outfalls complete	None.
Catchment investigations complete	None.
Estimated percentage of MS4 catchment area investigated	None.

**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).**

Best Management Practice training is provided to all DPW Staff when new procedures are appropriate as determined by the Director of Public Works. BMP training includes IDDE identification. Training conducted in June 2018 by Tighe&Bond to review MS4 related topics including IDDE. Refresher training will be scheduled during 2020.

## **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	Planning is in the process of updating regulations.	Revise land-use regulations	Planning	Jul 1, 2019	Anticipated completion in 2020	Regulations will be updated to reference the 2004 Stormwater Quality Manual for WQV, GWR, and Peak Rates. Additional language to be added in regards to DCIA and infiltration of the WQV where feasible.
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Complete	<i>None.</i>		<i>Planning</i>	Jul 1, 2017	<i>Completed under previous permit</i>	<i>Applications are received by the Planning Dept. and circulated to appropriate departments.</i>
4-3 Review site plans for stormwater quality concerns	Complete	<i>8 land development applications were reviewed during the 2019 calendar year.</i>	<i>Issue review comments and review revised plans for compliance.</i>	<i>Engineering/ J. Shea</i>	Jul 1, 2017	<i>Completed under previous permit</i>	
4-4 Conduct site inspections	Ongoing	<i>Active sites are monitored throughout the year by the Planning Department.</i>	Document inspections and actions.	<i>Planning/ M. Glidden</i>	Jul 1, 2017	<i>Completed under previous permit</i>	<i>Third-Party E&amp;S Inspection Reports for developments with greater than 5 acres of disturbance are provided to the Town for information and review.</i>
4-5 Implement procedure to allow public comment on site development	Complete	<i>Planning, Zoning, and Conservation Commission meetings allow public comment on all applications</i>	<i>Provide opportunity for public comment</i>	<i>Planning</i>	Jul 1, 2017	<i>Completed under previous permit</i>	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Complete	<i>Continued notification to developers via staff comments</i>	<i>Include comment to applicants</i>	<i>Planning / Engineering</i>	Jul 1, 2017	<i>Completed under previous permit</i>	

Extra space for describing above BMP activities, if needed:

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

*None.*

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

**5.1 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>
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	Complete	Revisions to regulations are underway to update references and requirements.	Update regulations	Planning	Jul 1, 2021	07/30/2020	Update to LID and runoff reduction requirements is part of the current re-write of Town regulations.
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Complete	None	Reference LID Guidelines in review comments	Planning	Jul1, 2019	2011	See above
5-3 Identify retention and detention ponds in priority areas	In Progress	List of surface detention facilities and most drywells completed. Additional investigation and record review continues.	List of Town owned detention basins created.	Engineering / Public Works	Jul 1, 2019	07/01/19	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Complete	DPW inspection facilities annually and performs maintenance as necessary	Annually inspect and maintain facilities.	Public Works	Jul 1, 2019	Completed under previous permit and ongoing.	

5-5 DCIA mapping	<i>In Progress</i>	<i>Review available data and develop workflow with GIS provider</i>	<i>Include DCIA data in GIS system</i>	<i>Engineering / J. Shea</i>	Jul 1, 2020	2020	
5-6 Address post-construction issues in areas with pollutants of concern	<i>In Progress</i>	<i>In these areas, if erosion or sedimentation problems are found during the annual inspections conducted under a long-term maintenance plan, Simsbury will prioritize these areas for DCIA retrofit projects.</i>		<i>Engineering / Public Works</i>	Not specified		

**Extra space for describing above BMP activities, if needed:**

BMP	

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

*Continued monitoring, cleaning, and repairs of settling/stilling basins, catch basins, outfalls, and swales.*

## 5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	2,500 acres (est.)

DCIA disconnected (redevelopment plus retrofits)	TBD
Retrofits completed	TBD
DCIA disconnected	% this year / % total since 2012
Estimated cost of retrofits	\$
Detention or retention ponds identified	24/24

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

Baseline DCIA was calculated utilizing the DEEP formula table to estimate DCIA based on land-use. The Town first utilized the sub-basin data available through DEEP to determine sub-basins with greater than 11% impervious surfaces. The list was further refined by comparing land-use type based on current Zoning to determine the connectivity level of the sub-basin. The appropriate formula provided an estimated DCIA for all sub-basins with greater than 11% impervious coverage.

## 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	On-going / Completed	Tighe&Bond provided staff and supervisor training for all DPW, Parks, WPCA, Planning and Engineering staff related to MS4 and Industrial Permit requirements.  Other seminars and webinars were attended by Staff.	Staff continues yearly education/training	Engineering / Public Works / Planning	Jul.1 2017	Staff and Supervisor Training by Tighe&Bond 10/9/2018 MS4 and Industrial Permit Requirements  J. Shea Engineering 04/27/2018 East Lyme Stormwater BMP and MS4 Workshop 05/23/2018 Challenges and Practical Solutions to MS4s 10/09/2018 In-house training by Tighe&Bond 10/19/2018 CT MS4 Mapping Workshop	
6-2 Implement MS4 property and operations maintenance	On-going / Completed	<i>Parks Department revised the carry-in/carry-out policy from 2017 in response to the deposition of trash at key parks. Most parks remain carry-in/carry-out.</i>  <i>Carbtrol closed loop wash station system was installed in the Spring for the cleaning of golf course mowing equipment.</i>		<i>Parks / Public Works</i>	Jul 1, 2018		<i>Municipally-owned or operated properties, parks and other facilities will be maintained so as to minimize the discharge of pollutants to the MS4</i>
6-3 Implement coordination with interconnected MS4s	In Progress	<i>Mapping of interconnections continue. Coordination began in 2019.</i>	<i>Update GIS system with interconnect locations</i>	<i>Engineering / J. Shea</i>	Not specified		

6-4 Develop/implement program to control other sources of pollutants to the MS4	<i>Not Started</i>			<i>Engineering / J. Shea</i>	Not specified		
6-5 Evaluate additional measures for discharges to impaired waters*	<i>In Progress</i>	<i>In response to wet- and dry-weather outfall testing, Simsbury will implement additional measures such as retrofit or source management to correct the problem at municipally-owned or operated facilities.</i>	<i>Pending further investigations.</i>	<i>Engineering / J. Shea</i>	Not specified		
6-6 Track projects that disconnect DCIA	<i>In Progress</i>	<i>Tracking of projects and look-back to 2012 continues.</i>	Provide data in Annual Report once complete.	<i>Engineering / J. Shea</i>	Jul 1, 2017		<i>The Town intend to prioritize based on sub-basins with an estimated DCIA &gt;11% .</i>
6-7 Implement infrastructure repair/rehab program	<i>In Progress</i>	<i>Ongoing replacement and/or repair of drainage infrastructure continued.</i>		<i>Public Works / T.Roy</i>	Jul 1, 2021		<i>Repairs included: 234 Catch basins</i>
6-8 Develop/implement plan to identify/prioritize retrofit projects	<i>Not Started</i>				Jul 1, 2020		
6-9 Implement retrofit projects to disconnect 2% of DCIA	<i>On Going</i>	<i>New drywells and infiltration systems were installed as part of DPW's maintenance and improvement program for the MS4.</i>	<i>Track project and DCIA impacts.</i>	<i>Public Works / T.Roy</i>	Jul 1, 2022		
6-10 Develop/implement street sweeping program	<i>Complete</i>	<i>Public Works sweeps all roads following the winter season.</i>	<i>Track lane miles swept.</i>	<i>Public Works / T.Roy</i>	Jul 1, 2017	<i>Completed under previous permit.</i>	<i>326 lane miles.</i>

6-11 Develop/implement catch basin cleaning program	<i>Complete</i>	<i>Public Works utilizes a third-party vendor to clean 20% of catch basins each year.</i>	<i>Track number of catch basins and locations.</i>	<i>Public Works / T.Roy</i>	Jul 1, 2020	Completed under previous permit.	
6-12 Develop/implement snow management practices	<i>Complete</i>	<i>Snow management per the Simsbury MS4 Plan continues.</i>	<i>Track material usage. Update plan as needed.</i>	<i>Public Works / T.Roy</i>	Jul 1, 2018	<i>Completed under previous permit.</i>	

**Extra space for describing above BMP activities, if needed:**

<b>BMP</b>	

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

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

Metrics	
Employee training provided for key staff	Staff and Supervisor Training by Tighe&Bond 10/9/2018 MS4 and Industrial Permit Requirements



	Engineering 04/27/2018 East Lyme Stormwater BMP and MS4 Workshop 05/23/2018 Challenges and Practical Solutions to MS4s 10/09/2018 In-house training by Tighe&Bond 10/19/2018 CT MS4 Mapping Workshop
Street sweeping	
Curb miles swept	328 curb miles
Volume (or mass) of material collected	869 CY
Catch basin cleaning	
Total catch basins in priority areas	unknown
Total catch basins in MS4	5,200 (est.)
Catch basins inspected	NA
Catch basins cleaned	1020
Volume (or mass) of material removed from all catch basins	510 CY
Volume removed from catch basins to impaired waters (if known)	Unknown
Snow management	
Type(s) of deicing material used	Clearlane Sale/Magnesium Chloride
Total amount of each deicing material applied	2,813 Tons (Salt) 14,300 Gal. MgCl2
Type(s) of deicing equipment used	All-season truck body, direct application MgCl2 to Salt
Lane-miles treated	328 lane miles
Snow disposal location	Parking Lot @ Iron Horse Blvd
Staff training provided on application methods & equipment	Yes
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	None
Reduction in turf area (since start of permit)	None
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	\$

#### 6.4 Catch basin cleaning program

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

Town is currently operating on a 4-5 year cycle for cleaning catch basins. Excessive deposition of sediment in structures has not been an issue since the Town ceased the use of sand to treat roadways in the winter.

#### 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.**

The Town and the Board of Education continues to utilize drywells where appropriate to address drainage issues throughout the roadway network and at town-owned facilities. Documentation and tracking has improved in response to the MS4 program. While prioritization will be based on safety in regards to flooding or poorly drained areas, the Town intends to begin including prioritization based on estimated DCIA of watersheds as well as watersheds that drain to impaired waters.

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

Major town projects consider retrofits to disconnect the DCIA as opportunities are available. Projects selected for implementation include the following: 1. Installation of stormwater infiltration system to disconnect existing and proposed roof areas as part of the Henry James Memorial School Phase 3 Renovations project. 2. Installation of stormwater infiltration system and other low impact development techniques as part of the parking lot reconstruction and safety improvements at Town Hall facility. These project will disconnect significant portions of existing pavement from the storm drainage system.

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

Land development applications and redevelopment projects will be reviewed to identify opportunities to disconnect directly connected areas from the storm drainage system. In addition, public projects including roadway improvement projects will consider opportunities for disconnecting pavement areas where soils a topography are favorable for infiltration or other low impact development techniques.

## 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 x ☒ 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 Simsbury began wet weather testing in 2018. Ten (10) outfalls were monitored for Bacteria during two eligible storm events in 2018. Twenty three (23) additional outfalls were monitored in 2019 for Bacteria. The first two (2) years of wet weather testing was intended to achieve a well represented sample of the drainage systems discharging from the two (2) impaired streams in the Town of Simsbury.

All outfalls monitored in 2019 tested positive for bacteria.

No changes to the Stormwater Management Plan are planned until more data is gathered.

### 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	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	E. Coli (col/100ml)	Total Coliforms (col/100ml)	Name of Laboratory (if used)	Follow-up required? *
Owen's Brook K	6/25/2019	Bacteria	98	>24,200	Phoenix	No
Owen's Brook L	6/25/2019	Bacteria	571	>24,200	Phoenix	Yes
Owen's Brook M	6/25/2019	Bacteria	98	>24,200	Phoenix	No
Owen's Brook N	6/25/2019	Bacteria	3,080	>24,200	Phoenix	Yes
Owen's Brook O	6/25/2019	Bacteria	1,580	>24,200	Phoenix	Yes
Owen's Brook P	6/25/2019	Bacteria	10	>24,200	Phoenix	No
Owen's Brook Q	6/25/2019	Bacteria	4,110	>24,200	Phoenix	Yes
Owen's Brook R	6/25/2019	Bacteria	3,650	>24,200	Phoenix	Yes

Hop Brook S	6/25/2019	Bacteria	144	>24,200	Phoenix	No
Hop Brook T	6/25/2019	Bacteria	408	>24,200	Phoenix	No
Hop Brook U	6/25/2019	Bacteria	723	>24,200	Phoenix	Yes
Hop Brook V	6/25/2019	Bacteria	364	>24,200	Phoenix	No
Hop Brook W	6/25/2019	Bacteria	816	>24,200	Phoenix	Yes
Hop Brook X	6/25/2019	Bacteria	10	>24,200	Phoenix	No
Hop Brook Y	6/25/2019	Bacteria	6,870	>24,200	Phoenix	Yes
Hop Brook AA	6/25/2019	Bacteria	189	>24,200	Phoenix	No
Hop Brook BB	6/25/2019	Bacteria	63	>24,200	Phoenix	No
Hop Brook CC	6/25/2019	Bacteria	7,700	>24,200	Phoenix	Yes
Hop Brook DD	6/25/2019	Bacteria	4,350	>24,200	Phoenix	Yes
Hop Brook EE	6/25/2019	Bacteria	464	>24,200	Phoenix	Yes
Hop Brook FF	6/25/2019	Bacteria	1,480	>24,200	Phoenix	Yes
Hop Brook GG	6/25/2019	Bacteria	3,650	>24,200	Phoenix	Yes
Hop Brook HH	6/25/2019	Bacteria	1,310	>24,200	Phoenix	Yes

## 2.2 Credit for screening data collected under 2004 permit

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

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

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

Pollutant of concern	Pollutant threshold
Nitrogen	Total N > 2.5 mg/l
Phosphorus	Total P > 0.3 mg/l
Bacteria (fresh waterbody)	<ul style="list-style-type: none"> <li>E. coli &gt; 235 col/100ml for swimming areas or 410 col/100ml for all others</li> </ul>

	<ul style="list-style-type: none"> <li>• Total Coliform &gt; 500 col/100ml</li> </ul>
Bacteria (salt waterbody)	<ul style="list-style-type: none"> <li>• Fecal Coliform &gt; 31 col/100ml for Class SA and &gt; 260 col/100ml for Class SB</li> <li>• Enterococci &gt; 104 col/100ml for swimming areas or 500 col/100 for all others</li> </ul>
Other pollutants of concern	Sample turbidity is 5 NTU > in-stream sample

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

Provide the following information for outfalls exceeding the pollutant threshold.

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

### 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)
Owen's Brook B	9/18/18	Bacteria	24,200 col/100 ml	Phoenix
Owen's Brook D	9/18/18	Bacteria	24,200 col/100 ml	Phoenix
Hop Brook G	9/18/18	Bacteria	13,000 col/100 ml	Phoenix
Hop Brook CC	6/25/19	Bacteria	7,700 col/100 ml	Phoenix
Owen's Brook F	9/18/18	Bacteria	6,870 col/100 ml	Phoenix
Hop Brook Y	6/25/19	Bacteria	6,870 col/100 ml	Phoenix

## Part III: Additional IDDE Program Data

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

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

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank*	1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank*	1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank*
4318-06-1	High Priority	21	4300-00-5+R17	High Priority	10	4312-00-2-L2	Low Priority	6
4318-00-3-R2	High Priority	21	4300-00-5+R18	High Priority	10	4317-00-2-L1	Low Priority	6
4318-04-1	High Priority	18	4300-00-5+R19	High Priority	10	4317-00-2-R1	Low Priority	6
4318-02-1-L1	High Priority	18	4300-00-5+R8	High Priority	10	4300-00-5+R11	Low Priority	4
4318-03-2-R1	High Priority	18	4300-00-5+R9	High Priority	10	4300-40-1	Low Priority	4
4318-04-1-L1	High Priority	18	4300-36-1*	High Priority	10	4317-00-1	Low Priority	4
4300-32-1	High Priority	16	4300-38-1	High Priority	10	4309-02-1		0
4300-00-5+R12	High Priority	14	4300-42-1	High Priority	10	4309-03-1		0
4300-00-5+R20	High Priority	14	4300-43-1	High Priority	10	4319-10-1		0
4300-33-1	High Priority	14	4300-44-1-L1	High Priority	10	4319-11-1		0
4300-34-1	High Priority	14	4318-01-1	Low Priority	8	4300-00-5+R21		0
4300-37-1	High Priority	14	4318-02-1	Low Priority	8	4300-00-5+R22		0
4300-44-1	High Priority	14	4318-03-1	Low Priority	8	4300-00-5+R7		0
4318-05-1	Low Priority	11	4300-39-2-R1	Low Priority	8	4300-35-1		0
4300-39-1	Low Priority	11	4318-00-1	Low Priority	8	4300-41-1		0
4300-00-5+R10	High Priority	10	4318-00-1-L1	Low Priority	8	4300-47-1		0
4300-00-5+R13	High Priority	10	4318-00-2-R1	Low Priority	8	4319-10-2-L1		0
4300-00-5+R14	High Priority	10	4318-00-2-R2	Low Priority	8	4404-04-1-L2		0
4300-00-5+R15	High Priority	10	4318-00-3-R1	Low Priority	8	4404-05-1-L1		0
4300-00-5+R16	High Priority	10	4317-01-1	Low Priority	6	4404-05-1-L2		0

* Rank System		Sub-Basin No.	Sub-Region
Category	Value	4300	Farmington River
Impervious Coverage > 11%	1	4309	Cherry Brook
Est. DCIA > 11%	2	4312	Roaring Brook
Impaired Waters	5	4317	Nod Brook
High Priority	10	4318	Hop Brook
Low Priority	3	4319	West Branch Salmon Brook
		4404	North Branch Park River

## 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	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Water Temp	E. Coli (col/100ml)	Total Coliforms (col/100ml)	Name of Laboratory (if used)	Follow-up required? *
Owen's Brook K	6/25/2019	Bacteria	20.5	98	>24,200	Phoenix	No
Owen's Brook L	6/25/2019	Bacteria	20.4	571	>24,200	Phoenix	Yes

Owen's Brook M	6/25/2019	Bacteria	20.4	98	>24,200	Phoenix	Yes
Owen's Brook N	6/25/2019	Bacteria	19.9	3,080	>24,200	Phoenix	Yes
Owen's Brook O	6/25/2019	Bacteria	20.7	1,580	>24,200	Phoenix	Yes
Owen's Brook P	6/25/2019	Bacteria	20.8	10	>24,200	Phoenix	No
Owen's Brook Q	6/25/2019	Bacteria	20.7	4,110	>24,200	Phoenix	Yes
Owen's Brook R	6/25/2019	Bacteria	18.2	3,650	>24,200	Phoenix	Yes
Owen's Brook S	6/25/2019	Bacteria	17.4	144	>24,200	Phoenix	No
Hop Brook T	6/25/2019	Bacteria	20.9	408	>24,200	Phoenix	No
Hop Brook U	6/25/2019	Bacteria	15.3	723	>24,200	Phoenix	Yes
Hop Brook V	6/25/2019	Bacteria	20.2	364	>24,200	Phoenix	No
Hop Brook W	6/25/2019	Bacteria	22.9	816	>24,200	Phoenix	Yes
Hop Brook X	6/25/2019	Bacteria	17.9	10	>24,200	Phoenix	No
Hop Brook Y	6/25/2019	Bacteria	19.5	6,870	>24,200	Phoenix	Yes
Hop Brook AA	6/25/2019	Bacteria	19.9	189	>24,200	Phoenix	No
Hop Brook BB	6/25/2019	Bacteria	19.1	63	>24,200	Phoenix	No
Hop Brook CC	6/25/2019	Bacteria	19.7	7,700	>24,200	Phoenix	Yes
Hop Brook DD	6/25/2019	Bacteria	20.2	4,350	>24,200	Phoenix	Yes
Hop Brook EE	6/25/2019	Bacteria	21.1	464	>24,200	Phoenix	Yes
Hop Brook FF	6/25/2019	Bacteria	21.4	1,480	>24,200	Phoenix	Yes
Hop Brook GG	6/25/2019	Bacteria	17.7	3,650	>24,200	Phoenix	Yes
Hop Brook HH	6/25/2019	Bacteria	20.8	1,310	>24,200	Phoenix	Yes

### 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	Sample date	Ammonia	Chlorine	Surfactants
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ID				

### 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: Maria E. Capriola Town Manager	Print name: Jerome F. Shea, P.E. Town Engineer
Signature / Date:	Signature / Date: