#### 2019 ANNUAL REPORT

### GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

for

#### **CITY OF DERBY**



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# MS4 General Permit City of Derby 2019 Annual Report Existing MS4 Permittee Permit Number GSM000114 January 1, 2019 – December 31, 2019

This report documents the City of Derby'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

ВМР	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Due	Date completed/ projected	Additional details
1-1 Implement	Complete	A link was created for access	Link to educational	Public Works	On-	Mar 27,	
public education		to the City's Stormwater	resources on City		going	2018	
and outreach		Management program.	website. Develop and			On-going	
		Links were added to the	Distribute Material to				
		Stormwater website that	Public Annually.				
		discuss Stormwater and					
		Water Quality; Pet Waste;					
		Impervious Cover;					
		Fertilizers, Pesticides &					
		Herbicides; and, Illicit					
		Discharges					

ВМР	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Due	Date completed/ projected	Additional details
1-2 Address education/ outreach for pollutants of	Complete	A weblink for "Help Keep Our Waterways Clean" and additional links regarding	Develop and Distribute Information on Bacteria Pollution	Public Works	On- going	Mar 27, 2018 On-going	
concern*		bacteria were added to the Stormwater website.					

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

- Create general stormwater informational fliers to be mailed with sewer bills
- Create pet waste fliers to be distributed with animal licenses
- Coordinate efforts with local schools for presentation on stormwater management
- Provide printed materials and display them in public locations, including City Hall and the public library

#### 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
Stormwater Management website was created	General Public	Stormwater runoff	All	Public Works
Link "Help Keep Our Waterways Clean" added to website	General Public	General stormwater management topics	All	Public Works
Link for information on Household Hazardous Waste was added to the Public Works webpage	General Public	HHW Disposal	All	Public Works
Links were added to the Stormwater Management website that discuss the following areas: Stormwater and Water Quality; Pet Waste; Impervious Cover; Fertilizers, Pesticides & Herbicides; Illicit Discharges; and, Bacteria	General Public	General stormwater management topics	All	Public Works

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

#### 2.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Due	Date completed / projected	Additional details
2-1 Continue availability of Stormwater Management Plan to the public	Complete	The SMP is accessible on the City's Stormwater Management website.	Provide public access to the Stormwater Management Plan.	Public Works	On-going	April 2017 On-going	
2-2 Comply with public notice requirements for Annual Reports	Complete	Notice of the draft Annual Report was posted in the Connecticut Post. The draft Annual Report was also accessible in City Hall, the library and uploaded to the City's Stormwater Management website.	Notify public of published Annual Report and document comments received.	Public Works	Notice: 1/31/20 Report Available: 2/15/20	Notice Posted: 1/31/20 Report Posted: 2/18/20 On-going	

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

• Continue to provide notice of updated SMPs and draft Annual Reports in the Connecticut Post, City Hall, the public library and the Stormwater Management website.

#### 2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	April 2017	Connecticut Post, City Hall, the library and http://www.derbyct.gov/Stormwater-Management
Availability of Annual Report announced to public	Yes	Jan 31, 2020	Connecticut Post, City Hall, the library and http://www.derbyct.gov/Stormwater-Management

#### **3.** ILLICIT DISCHARGE DETECTION AND ELIMINATION (Section 6(a)(3) and Appendix B / page 22)

#### 3.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Due	Date completed/ projected	Additional details
3-1 Develop written IDDE program	In Progress	The City is in the progress of reviewing the current draft of the IDDE Program.	Develop Written Plan	Public Works	Jul 1, 2018	Jul 1, 2020	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Substanti ally Complete	Extensive efforts were conducted in 2019 to locate and identify new outfalls	Update Existing Outfall Map	Public Works	Jul 1, 2019	Jul 1, 2020 On-going	
3-3 Implement citizen reporting program	Complete	Email address and telephone number have been added to the Public Works website for issuing complaints.	Develop Program	Public Works	Jul 1, 2017	May 1, 2019	
3-4 Establish legal authority to prohibit illicit discharges	Complete	An Illicit Discharge and Connection Stormwater Ordinance was passed and adopted on 5/10/2018.	Update City Ordinance	Zoning Department	Jul 1, 2018	May 10, 2018	
3-5 Develop record keeping system for IDDE tracking	In Progress	The City is working on compiling a tracking system and data base for IDDE.	Develop SOP	Public Works	Jul 1, 2017	Jul 1, 2020	
3-6 Address IDDE in areas with pollutants of concern	In Progress	Continued dry weather screening outfalls throughout the City of the worst outfalls identified. Identified several outfalls that will require further investigation.	Identify IDDEs	Public Works	Jun 2020	On-going	
3-7 Map MS4 System in Priority Areas	In Progress	Continued mapping outfalls and starting mapping catch	Map Priority Areas	Public Works	Jun 2022	On-going	

BMP	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Due	Date completed/ projected	Additional details
		basins, manholes and piping in priority areas.					

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

- Finalize written IDDE Program
- Post IDDE Program to the Stormwater Management webpage and include link in next year's Annual Report
- Continue updating the MS4 outfall and system mapping
- Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process
- Investigate illicit discharges in areas with pollutants of concern

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

Date of Report	Location / suspected source	Response taken
No reports in 2019		

## 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)
119 Pleasant View, Derby	3/6/2013 3 hours	Unknown	Unknown	Lateral from Bradley School clogged invert with rags	Manhole installed on the sewer main where lateral connects	
1 New Haven Avenue, Derby	1/14/2014 4 hours	Housatonic River	450,000 gallons	Pipe blocked by material entering pipe upstream when auger went through pipe / Contractor failed to call Call-Before-You-Dig	Spray down affected area	
184 Derby Avenue, Derby	8/12/2015 2.5 hours	N/A	Unknown	Roots in Main (origin unknown)	Homeowner cleaned up Area was added to the Root Control Program	
1 Caroline Street, Derby	10/22/2015 0 hours	Grass Area	10-20 gallons	Sludge well was overfilled by operator	Shoveled back into pit Operator training and open discussion	
9 Bluff Street at Colony Road, Derby	12/26/2015	Road / catch basin	50-100 gallons	Sewer main line clogged by roots	Used high pressure water spray to clean roadway Replaced sanitary sewer on street	

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)
6 Kindle Lane, Derby	7/14/2016 1 hour	N/A	Unknown	Brick from manhole fell into pipe and caused backup	Hosed down area Could not TV inspect due to small invert. Inspected manholes for any additional bricks that might fall out and the manhole brick is securely mortared in. All the manholes on the street are sub-par construction and the inverts too small to fit a camera in. Recommend replacing manholes in the future when main is rehabbed but not practical to replace them now.	
220 Derby Avenue, Derby	7/17/2016 Unknown	Naugatuck River	1,200 gallons	A 4" root plug flowed into our 10" main and created a blockage	Sewer main was jet rodded and root ball has been removed Servepro was contacted to clean the residence The main was checked on 7/15 for an unrelated matter and was flowing normally. There have been no other problems in the area and the cause was from a root ball from a different pipe (most likely a lateral). The pipe is tile and should be replaced as part of a long-term maintenance program but is in no immediate need of replacement. For the short term the area will be added to the Root Control Maintenance program. Sewer line was tv'd on 3/6/2017 there is no apparent problems with sewer line.	

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)
38 Kings Court, Derby	2/22/2017 2 hours	Roadway to Ansonia Reservoir	Unknown	Grease buildup on David Humphreys Rd caused blockage on Kings Court	Hosed down area Area where blockage occurred was from intersection of David Humphreys and Kings Court manhole downstream to next manhole on David Humphreys at SNET pole # 1090, inspection revealed numerous cracks, offset and open joints. Bid is being put together to repair area.	
287 Sentinel Hill Rd, Derby	8/5/2017 0 Hours	N/A	Unknown	Sentinel Hill was jet rodded on 08/04/2017 and caused sewage to come out in basement of 287 Sentinel Hill Rd	Servepro was called in to clean basement 287 Sentinel Hill Rd was added to Maintenance "caution" list to prevent future bypass	
1 Caroline Street, Derby	10/24/17 9 hours	Grassed area at plant	5,001- 20,000 gallons	Flash flooding / WPCA	Hosed down area No action planned as Plant exceeded capacity during storm event	
Burtville Ave, Derby / 41.31, - 72.87 No illicit discharges	11/15/17 24 hours	Housatonic River	1,001 - 5,000 gallons	Broken pipe Cause unknown	Area hosed down and disinfected Pipe repaired	
or SSO occurred 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.
- The City will be implementing a database program for tracking illicit discharges. DPW is responsible for tracking the information.

#### 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
No repairs were reported for 2019		

#### 3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	137
Estimated or actual number of interconnections	~40
Outfall mapping complete	75%
Interconnection mapping complete	25%
System-wide mapping complete (detailed MS4 infrastructure)	25%
Outfall assessment and priority ranking	75%
Dry weather screening of all High and Low priority outfalls complete	68
Catchment investigations complete	2 in progress
Estimated percentage of MS4 catchment area investigated	5%

- 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).
- An MS4 and IDDE training program was developed and implemented for presentation to all City personnel that may come into contact with stormwater or that may review applications and plans that impact stormwater quality. This training is conducted on an annual basis, or as needed when new employees are added. The last training program was conducted at the Public Works Department on 3/27/19.

#### **4. CONSTRUCTION SITE RUNOFF CONTROL** (Section 6(a)(4) / page 25)

#### 4.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Due	Date completed/ projected	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	In Progress	Reviewing current City Ordinances.	Review and update regulations	Zoning Department	Jul 1, 2019	Dec 31, 2020	Will update ordinances to improve for compliance with MS4 general permit
4-2 Develop/ Implement plan for interdepartmental coordination in site plan review and approval	Complete	The City has an established plan for site review and approval and depending on the proposed project, the following boards and commissions review the development plans: Planning and Zoning Commission, Inland Wetlands  Commission and the Board of Alderman.	Document Current Procedure	City Engineer	Jul 1, 2017	Jul 1, 2018 On-going	

ВМР	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Due	Date completed/ projected	Additional details
4-3 Review site plans for stormwater quality concerns	Complete	The City conducted the necessary site plan reviews during the reporting period.	Document Plans Reviewed	City Engineer	Jul 1, 2017	On-going	
4-4 Conduct site inspections	Complete	The City conducted the necessary site inspections during the reporting period.	Document Inspections Performed	City Engineer	Jul 1, 2017	On-going	
4-5 Implement procedure to allow public comment on site development	Complete	Public comment is allowed during public hearings that accompany the multiple boards and commissions review/approval of development plans. These hearings are publicly noticed. The public can also utilize the City's Citizen Resource Center for submitting comments.	Document Public Comments	Zoning Department	Jul 1, 2017	Jul 1, 2017	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	In Progress	Currently, the Town verbally notifies developers and contractors of their potential obligations to the Construction Stormwater Permit.	Add standard note on all qualifying plans	City Engineer	Jul 1, 2017	Jul 1, 2020	Will review current procedures and improve for compliance with MS4 general permit

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

- Begin the process of getting approval for updating the City ordinances to include the ability to enforce land use regulations.
- Continue to follow all State public notice and hearing requirements and follow up on all comments and complaints received.
- Add a standard note to all qualifying plans and to the City's website to notifying applications of the requirements pertaining to the Construction Stormwater General Permit.

#### **5. POST-CONSTRUCTION STORMWATER MANAGEMENT** (Section 6(a)(5) / page 27)

#### 5.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed/ projected	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	To be started	None	Update City Ordinance	Zoning Department	Jul 1, 2021	Jul 1, 2021	
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	In Progress	The City is currently reviewing its regulations	Document Facilities Specified	City Engineer	Jul 1, 2019	Dec 31, 2020	
5-3 Identify retention and detention ponds in priority areas	In Progress	No ponds that are the responsibility of the City have been identified at this time.	Inventory City Facilities	Public Works/ City Engineer	Jul 1, 2019	Jul 1, 2020	

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed/ projected	Additional details
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	To be evaluated/ prepared	The City is reviewing its current practices and will update them to comply with the MS4 General Permit	Development Maintenance Plan	Public Works/ City Engineer	Jul 1, 2019	Jul 1, 2020	
5-5 DCIA mapping	In Progress	The City is using the impervious cover layer available to begin to calculate the DCIA.	Calculate DCIA	Public Works	Jul 1, 2020	Jul 1, 2020	
5-6 Address post- construction issues in areas with pollutants of concern	To be started	None	Document issues identified and addressed	City Engineer	Not specified	On-going	

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

- Review current regulations including site planning requirements, zoning regulations, street design regulations and infrastructure specifications to identify/ reduce/ eliminate existing regulatory barriers to implementation of LID and runoff reduction practices.
- Identify and map City retention and detention ponds in priority areas.
- Inspect ponds/structures annually. Remove sediment in excess of 50% design capacity.
- Finalize and start implementing a long-term maintenance plan for ponds and structures.

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

Metrics		
Baseline (2012) Directly Connected Impervious Area (DCIA)	252	acres
DCIA disconnected (redevelopment plus retrofits)	Unknown	acres this year / acres total
Retrofits completed	Unknown	#
DCIA disconnected	TBD	% this year / % total since 2012
Estimated cost of retrofits	Unknown	\$
Detention or retention ponds identified	Unknown	# this year /# total

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

• To calculate the baseline DCIA for the City of Derby, Anchor Engineering will use the process found on the CT NEMO website. CT NEMO developed 5 formulas to calculate the DICA and Impervious Cover (IC) based independently for each basin in Derby using the percent DCIA for the basin with the state DCIA removed from the equation. Anchor will take the formulas and created a bell curve to input the calculated percent of DCIA for each basin and calculate the total DCIA and IC amounts for the City. Each basin value will be added together to create the baseline for the DCIA and IC for the City of Derby.

#### **6.** Pollution Prevention/Good Housekeeping (Section 6(a)(6) / page 31)

#### 6.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed/ projected	Additional details
6-1 Continue formal employee training program	On-Going	Completed annual training with Public Works on 3/27/19.	Track employee participation	Public Works	On- going	Mar 27, 2019 On-going	Additional training for other City staff will be conducted in the future.

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed/ projected	Additional details
6-2 Implement MS4 property and operations maintenance	Complete	Salt piles are stored under cover and on impervious surfaces. City industrial stormwater discharges are monitored. Vehicle maintenance is performed undercover. Completed annual leaf collection program.	Develop written SOP's for operations	Public Works, Parks & Rec, Building Dept.	Jul 1, 2018	Jul 1, 2018 On-going	The City is reviewing current practices and looking for areas for optimization.
6-3 Implement coordination with interconnected MS4s	In Progress	Through the outfall identification process, the City has identified several interconnections with the neighboring towns/cities.	Identify interconnections	Public Works	Not specified	On-going	
6-4 Develop/ implement program to control other sources of pollutants to the MS4	In Progress	The City has obtained a list of all industrial facilities not currently registered under the DEEP's Industrial Stormwater General Permit and is planning on sending out notices.	Identify Sources	Public Works	Not specified		
6-5 Evaluate additional measures for discharges to impaired waters*	To be Started	None	Identify potential project locations	Public Works	Not specified		
6-6 Track projects that disconnect DCIA	In Progress	The City created a table for tracking disconnected DCIA. In 2020, the City will be working with its consultant to track disconnected DCIAs.	Develop tracking procedure and data base	City Engineer	Jul 1, 2017	Dec 31, 2020 On-going	

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed/ projected	Additional details
6-7 Implement infrastructure repair/rehab program	To be Started	None	Document existing repair projects	Public Works	Jul 1, 2021	Jul 1, 2021	
6-8 Develop/ implement plan to identify/prioritize retrofit projects	In Progress	In 2020, the City will be working with its consultant to identify and prioritize potential projects for the Retrofit Program to the maximum extent practicable.	Identify potential retrofit projects	Public Works	Jul 1, 2020	Dec 31, 2020	
6-9 Implement retrofit projects to disconnect 2% of DCIA	In Progress	In 2020, the City will be working with its consultant to identify and prioritize potential projects for the Retrofit Program to the maximum extent practicable.	Implement retrofit projects	City Engineer	Jul 1, 2022	Jul 1, 2022	
6-10 Develop/ implement street sweeping program	Complete	City streets are swept annually, concentrating on high priority areas.	Document materials removed annually	Public Works	Jul 1, 2017	Jul 1, 2017 On-going	The City is reviewing current practices and looking for areas for optimization.
6-11 Develop/ implement catch basin cleaning program	In Progress	Several catch basins were inspected and cleaned out in 2019 as part of road repair activities.	Document materials removed annually	Public Works	Jul 1, 2020	Jul 1, 2020 On-going	The City is reviewing current practices and looking for areas for optimization.

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed/ projected	Additional details
6-12 Develop/ implement snow management practices	Complete	Streets & municipal lots were plowed as necessary. Roads were treated salt (no sand), as necessary.	Develop written SOP	Public Works	Jul 1, 2018	Jul 1, 2018 On-going	The City is reviewing current practices and looking for areas for optimization.

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

- Continue to conduct annual MS4 training programs.
- Review current MS4 property and operations maintenance practices and look for areas for optimization.
- Develop tracking procedure and data base and track projects that disconnect DCIA.
- Review current practices street sweeping practices and look for areas for optimization.
- Review current snow management practices and look for areas for optimization.
- Identify areas where pet waste receptacles maybe installed.
- Review current leaf management practices and look for areas for optimization.

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

Metrics	
Employee training provided for key staff	Yes
Street sweeping	
Curb miles swept	90 miles
Volume (or mass) of material collected	600 cy
Catch basin cleaning	
Total catch basins in priority areas	TBD
Total catch basins in MS4	TBD
Catch basins inspected	80
Catch basins cleaned	80
Volume (or mass) of material removed from all catch basins	120 cy
Volume removed from catch basins to impaired waters (if known)	UNK
Snow management	
Type(s) of deicing material used	Salt
Total amount of each deicing material applied	65 tons
Type(s) of deicing equipment used	Trucks
Lane-miles treated	90 miles
Snow disposal location	N/A
Staff training provided on application methods & equipment	Yes – as
	necessary
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)	N/A
Lands with high potential to contribute bacteria (dog parks, parks with open	
water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	N/A

#### 6.4 Catch basin cleaning program

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

Catch basins will all be inspected, cleaned out and the sumps will be measured. A second round of inspections and cleaning will be conducted and the amount of material removed will be recorded. A list will be generated and the catch basins with the most material present will be put on a more frequent cleaning schedule to ensure that the 50% design capacity for the sump is not exceeded.

#### 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.

In 2020, the City will be working with its consultant to identify and prioritize potential projects for the Retrofit Program to the maximum extent practicable.

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

In 2020, the City will be working with its consultant to identify and prioritize potential projects for the Retrofit Program to the maximum extent practicable.

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

In 2020, the City will be working with its consultant to identify and prioritize potential projects for the Retrofit Program to the maximum extent practicable.

#### 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: <a href="http://s.uconn.edu/ctms4map">http://s.uconn.edu/ctms4map</a>.

Nitrogen/ Phosphorus 🛛	Bacteria 🔀	Mercury 🗌	Other Pollutant of Concern	$\boxtimes$
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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 City has collected samples from 24 of 34 outfalls that discharge to impaired waters. 19 of the 24 outfalls sampled so far had elevated levels of bacteria present. One of the outfalls sampled had an elevated level of turbidity discharging from the outfall when compared to the receiving waterbody turbidity level. The City is in the process of ranking the outfalls with elevated sampling results and will be conducting further investigations, as necessary, to attempt to eliminate the source of pollutants discharging to the impaired waters.

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

#### 2.1 Screening data collected under 2017 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.

#### Wet Weather Impaired Outfall Sampling Results

Outfall ID	Sample Date	E. Coli (100col/L)	Fecal Coliforms (100col/L)	Enterococcus (100col/L)	Nitrogen (mg/L)	Phosphorous (mg/L)	Lab	Investigation Required
DSN-009	4/16/18		30	189			Phoenix	NO
DSN-010	4/16/18		85	4,350			Phoenix	YES
DSN-011	4/16/18		10	1090			Phoenix	YES
DSN-012	4/16/18		10	703			Phoenix	YES
DSN-013	4/16/18		10	771			Phoenix	YES
DSN-014	4/16/18		41	496			Phoenix	NO
DSN-022	4/16/18	1270					Phoenix	YES
DSN-023	4/16/18	2010					Phoenix	YES
DSN-024	6/18/19	2760					Phoenix	YES
DSN-027	6/18/19	3450					Phoenix	YES
DSN-028	6/18/19	8660					Phoenix	YES
DSN-031	4/16/18	20					Phoenix	YES
DSN-032	6/18/19	14100					Phoenix	YES
DSN-034	4/16/18	10					Phoenix	YES
DSN-035	9/25/18	11200					Phoenix	YES
DSN-036	4/25/18	20					Phoenix	YES
DSN-037	4/25/18		6490	2050			Phoenix	YES
DSN-039	4/25/18		359	624			Phoenix	YES
DSN-040	4/25/18		285	613			Phoenix	YES
DSN-041	4/25/18		<10	<10			Phoenix	NO

Outfall ID	Sample Date	E. Coli (100col/L)	Fecal Coliforms (100col/L)	Enterococcus (100col/L)	Nitrogen (mg/L)	Phosphorous (mg/L)	Lab	Investigation Required
DSN-043	4/25/18		121	355			Phoenix	NO
DSN-044	4/25/18		132	355			Phoenix	NO
DSN-070	4/16/19		473	1,730	1.35	0.238	Phoenix	YES
DSN-076	6/18/19				1.79	0.216	Phoenix	NO

Per a Request for Information from the EPA, the City of Derby is also required to conduct wet weather sampling at outfalls that are not discharging to impaired waters, which did not have discharges during dry weather screening. The sampling results for these outfalls are provided below.

#### Wet Weather Non-Impaired Outfall Sampling Results

Outfall ID	Sample Date	Ammonia (mg/L)	Chlorine (mg/L)	Conductivity (uohms)	Salinity (g/kg)	Temp (oC)	MBAs (mg/L)	E. Coli (100 col/L)	Lab	Investigation Required
DSN-001	9/25/18	0.5	0.13	117	0.1	17.32	1	>24200	Phoenix	YES
DSN-002A	9/25/18	1	0.02	26	0.01	17.92	0.5	2140	Phoenix	YES
DSN-003	6/13/19	0.25	0.05	44.7	0.0204	19.3	0.25	14100	Phoenix	NO
DSN-004	6/13/19	0.25	0.06	22.8	0.0104	20.8	0.5	836	Phoenix	NO
DSN-005	6/13/19	0.25	0.04	21.5	0.0098	23.7	0.5	2720	Phoenix	NO
DSN-007	6/13/19	0.25	0	16	0.01	17.2	0.25	4110	Phoenix	NO
DSN-015	6/13/19	0	0	13	0.01	17.33	0.25	1440	Phoenix	NO
DSN-016	6/13/19	0.25	0.02	165	0.09	18.13	0.25	10	Phoenix	NO
DSN-017	6/13/19	0.25	0.05	141	0.08	17.78	0.25	31	Phoenix	NO
DSN-019	6/13/19	0.25	0.03	28	0.01	17.12	0.5	1850	Phoenix	NO
DSN-046	6/13/19	0	0.01	8	0	17.43	0.25	1110	Phoenix	NO
DSN-051	9/25/18	0.25	0.07	15	8.91	16.68	0.25	5170	Phoenix	NO
DSN-055	9/25/18	0.25	0	93	0.05	17.33	1	>24200	Phoenix	NO
DSN-057	6/13/19	0	0	43	0.02	16.92	0.25	6870	Phoenix	NO
DSN-058	6/13/19	0.25	0	21	0.01	17.1	0.25	1310	Phoenix	NO
DSN-059	6/13/19	0.25	0.03	38	0.02	16.98	0.25	169	Phoenix	NO
DSN-060	6/13/19	0.25	0.03	19.5	0.0029	19.3	0.25	4610	Phoenix	NO

Outfall ID	Sample Date	Ammonia (mg/L)	Chlorine (mg/L)	Conductivity (uohms)	Salinity (g/kg)	Temp (oC)	MBAs (mg/L)	E. Coli (100 col/L)	Lab	Investigation Required
DSN-065	6/13/19	0.25	0.01	16.5	0.0075	19.8	0.5	712	Phoenix	NO
DSN-066	6/13/19	0.25	0.05	25	0.0114	18.7	0.5	9210	Phoenix	NO
DSN-068	6/13/19	0	0.02	13	0.01	17.44	0.5	563	Phoenix	NO
DSN-069	6/13/19	0	0.02	26	0.01	17.54	0.25	24200	Phoenix	NO
DSN-071	6/13/19	0.25	0	272	0.15	17.2	0.25	231	Phoenix	NO
DSN-073	9/25/18	0	0.01	24	0.01	17.3	0.25	7700	Phoenix	NO
DSN-074	6/13/19	0.25	0	11	0	17.48	0	256	Phoenix	NO
DSN-075	6/13/19	0.25	0.02	63	0.03	17.59	0.5	14100	Phoenix	NO
DSN-077	6/13/19	0.25	0	111	0.06	17.67	0.25	20	Phoenix	NO
DSN-079	6/13/19	0.25	0	35	0.02	17.44	0.25	17300	Phoenix	NO
DSN-080	6/13/19	0.25	0.06	42	0.02	17.54	0.25	19900	Phoenix	NO

#### 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?

#### **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
	To be initiated during 2020	•

#### **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)
			To be initiated during 2020	

#### 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).

#### See attachment provided with this report

#### 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.

#### Non-Impaired Outfalls

Outfall ID	Sample Date	Ammonia (mg/L)	Chlorine (mg/L)	Conductivity (uohms)	Salinity (g/kg)	Temp (°C)	MBAs (mg/L)	E. Coli (100 col/L)	Lab	Investigation Required
DSN-006	8/14/17	0.25	0.07	826	0.41	21.17	0	206	Phoenix	NO
DSN-047	6/13/18	0.25	0.06	1293	0.65	17.76	0.25	n/a	Phoenix	NO
DSN-050	8/16/17	0.25	0.01	241	0.11	24.01	0	291	Phoenix	NO
DSN-056	8/17/17	0	0.03	213	0.12	16.64	0.25	10	Phoenix	NO
DSN-067	8/17/17	0.25	0.11	258	0.12	22.44	0.25	1660	Phoenix	NO
DSN-072	8/17/17	0	0.31	378	0.18	23.84	0.5	9800	Phoenix	NO
DSN-078	11/1/17	0.25	0	455	0.22	12.65	0.25	52	Phoenix	NO

#### Impaired Outfalls

Outfall ID	Sample Date	E. Coli (100 col/L)	Fecal Coliform (100 col/L)	Enterococcus (100 col/L)	Nitrogen (mg/L)	Phosphorous (mg/L)	Lab	Investigation Required
DSN-009	8/22/17		<10	20			Phoenix	NO
DSN-010	8/22/17		20	20			Phoenix	NO
DSN-020L	11/1/17		<10	<10			Phoenix	NO

Outfall ID	Sample Date	E. Coli (100 col/L)	Fecal Coliform (100 col/L)	Enterococcus (100 col/L)	Nitrogen (mg/L)	Phosphorous (mg/L)	Lab	Investigation Required
DSN-020R	11/1/17		31	114			Phoenix	NO
DSN-021	8/22/17		>2000	>24200			Phoenix	YES
DSN-040	8/14/17	161					Phoenix	YES
DSN-044	8/22/17		70	20			Phoenix	NO
DSN-045	8/14/17	262					Phoenix	YES
DSN-070	8/17/17	31			1.35	0.238	Phoenix	YES
DSN-112	11/22/19	73					Phoenix	YES

#### 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
To be initiated during 2020									

#### **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.

Outfall ID	Receiving Water	System Vulnerability Factors
DSN-001	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-002A	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-021	CT6000-00_01, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-027	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-001	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-002A	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-021	CT6000-00_01, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-027	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-001	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-002A	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-003	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-004	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-005	Twomile Brook	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-007	Ansonia Reservior	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-015	Ansonia Reservior	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-019	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-022	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-023	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-024	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-025	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-027	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-028	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-035	CT6900-00_01, Naugatuck River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-037	CT6000-00_02, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old

Outfall ID	Receiving Water	System Vulnerability Factors
DSN-039	CT6000-00_02, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-046	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-055	Unnamed Waterbodies	
DSN-057	Unnamed Waterbodies	
DSN-058	Unnamed Waterbodies	
DSN-060	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-067	Unnamed Waterbodies	
DSN-068	Unnamed Waterbodies	
DSN-069	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-072	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-073	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-075	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-076	CT6000-00-5+L4_01, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-079	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-080	Unnamed Waterbodies	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-010	CT6000-00_01, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-011	CT6000-00_01, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-012	CT6000-00_01, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-013	CT6000-00_01, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-021	CT6000-00_01, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-037	CT6000-00_02, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-039	CT6000-00_02, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-040	CT6000-00_02, Housatonic River	Sanitary and Storm Drain Infrastructure >40 years Old

#### 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 that 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 that poor owner maintenance).

#### 3.2 Key junction dry weather screening and sampling data

Outfall ID	Key Junction ID	Sample Date	Ammonia	Chlorine	Surfactants	E. Coli	Entero- coccus	Fecal Coliform
DSN-070	P-In/CB-3	8/2/2019				160	148	158
DSN-021	P-MH-100/MH-104	8/2/2019	0.25	0.08	0	>24200		
DSN-021	P-CB-119/CB-111	10/4/2019				175		
DSN-021	P-MH-119B/CB-119	11/7/2019				171		
DSN-021	P-CB-934/MH-933B	11/7/2019				20		
DSN-021	P-MH-104/CB-104A	8/2/2019	0.25	0.08	0	906	6130	1110
DSN-021	P-CB-110A/MH-100	8/2/2019	0.25	0.08	0	>24200		
DSN-021	P-MH-100/MH-100A	8/2/2019	0.25	0.08	0			
DSN-021	P-MH-930A/MH-115A	11/7/2019				813		
DSN-021	P-IN/MH-119A	10/4/2019				173		
DSN-021	P-MH-941A/MH-938A	11/7/2019				<10		
DSN-021	P-MH-938A/MH-935A	11/7/2019				<10		
DSN-021	P-MH-955A/MH-933A	11/7/2019				<10		
DSN-021	P-MH-933A/MH-933B	11/7/2019				<10		
DSN-021	P-MH-933A/MH-931A	11/7/2019				20		
DSN-021	P-MH-931A/MH-930A	11/7/2019				246		
DSN-072	P-CB-150/CB-153	11/7/2019				<10		
DSN-072	P-CB-155/CB-157	11/7/2019				<10		
DSN-072	P-CB-157/CB-988	11/7/2019				31		
DSN-072	P-CB-989/CB-987	11/7/2019				10		
DSN-072	P-CB-987/CB-988	11/7/2019				10		
DSN-072	P-CB-989A/CB-989	11/7/2019				<10		
DSN-072	P-IN/CB-989	11/7/2019				20		
DSN-072	P-CB-150A/CB-150	11/7/2019				<10		
DSN-103E	P-CB-93A/DSN-103E	8/6/2019	0.25	0.06	0.25			
DSN-103W	P-CB-93A/DSN-103W	8/6/2019	0.25	0.17	0.25			
DSN-106	P-IN/DSN-106	8/6/2019	0.25	0.04	0.25			
UNKNOWN	P-IN/CB-99	9/17/2019				<10		
UNKNOWN	P-CB-99/CB-100	9/17/2019				305		

#### 3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants

#### 3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure

Discharge location	Source location	Discharge description	Method of discovery	Date of discovery	Date of elimination	Mitigation or enforcement action	Estimated volume of flow removed

#### Part IV: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Chief Elected Official or Principal Executive Officer	Document Prepared by					
Print name: Andrew Baklik, Chief of Staff City of Derby	Print name: T.J. Therriault, EIT, CDT Anchor Engineering Services, Inc.					
Signature/Date: 4/2/2020	Signature / Date: T.J. Therreaul 4/1/2020					

Catchment ID	Receiving Water	Dry Weather Sampling Results Indicate Likely Illicit Discharge? <sup>1</sup>	Wet Weather Sampling Results indicated Likely Illicit Discharge? <sup>1a</sup>	Discharging to Area of Concern to Public Health? <sup>2</sup>	Frequency of Past Discharge Complaints	Receiving Water Quality 3	Density of Generating Sites <sup>4</sup>	Age of Development/ Infrastructure <sup>5</sup>	Historic Combined Sewers or Septic? <sup>6</sup>	Aging Septic? <sup>7</sup>	Culverted Streams? 8	Additional Characteristics		
	Information Source	Catchment Inspections and Sample Results	Catchment Inspections and Sample Results	GIS Maps	Municipal Staff	Impaired Waters List	Land Use/GIS Maps, Aerial Photography	Land Use Information, Visual Observation	Municipal Staff, GIS Maps	Land Use, Municipal Staff	GIS and Stormwater system Maps	Other	Score	Priority Ranking
	Scoring Criteria (Yes = Problem)		using an extrapolated d on the results	Yes = 3 No = 0	Frequent = 3 Occasional = 2 None = 0	Poor = 3 Fair = 2 Good = 0	High = 3 Medium = 2 Low = 1	High = 3 Medium = 2 Low = 1	Yes = 3 No = 0	Yes = 3 No = 0	Yes = 3 No = 0	TBD		
DSN-001 DSN-002 DSN-002A	Unnamed Waterbodies Twomile Brook CT6900-00_01, Naugatuck River	N/A N/A	14 7	0 0 0		0 0 0	3 2 3	3 2 3			0		20 4 13	
DSN-003 DSN-004	Unnamed Waterbodies Unnamed Waterbodies	N/A N/A	14 11	0		0	1	3			0		18 15	
DSN-005 DSN-006	Twomile Brook Twomile Brook	N/A 6	13	0		0	3	3 1			0		19 10	
DSN-007 DSN-008 DSN-009	Ansonia Reservoir Ansonia Reservoir CT6000-00_01, Housatonic River	N/A 5	10	3 3		0 0 2	1 1 3	3 3			0 0 3		17 7 16	
DSN-010 DSN-011	CT6000-00_01, Housatonic River CT6000-00_01, Housatonic River	5 N/A	1	0		2 2	3	3			3		16 12	
DSN-012 DSN-013	CT6000-00_01, Housatonic River CT6000-00_01, Housatonic River	N/A N/A	1	0		2 2	3	3			3		12 12	
DSN-014 DSN-015 DSN-016	CT6000-00_01, Housatonic River  Ansonia Reservoir  Unnamed Waterbodies	N/A N/A N/A	3 9 6	0 3 0		0 0	3 2 3	3 3			3 0 0		14 17 12	
DSN-017 DSN-018	Unnamed Waterbodies Unnamed Waterbodies	N/A	3	0		0	3	3			0		9	
DSN-18A DSN-019	Ansonia Reservoir Unnamed Waterbodies	N/A	12	0		0	3	3			0		18	
DSN-019A DSN-021 DSN-022	Ansonia Reservoir CT6000-00_01, Housatonic River CT6900-00_01, Naugatuck River	51 N/A	9	0 0 0		0 2 3	3 3	3 3			0 0 0		4 59 18	2
DSN-023 DSN-024	CT6900-00_01, Naugatuck River CT6900-00_01, Naugatuck River	N/A N/A	5 12	0 3		3	3	3			0		14 24	
DSN-025 DSN-026	CT6900-00_01, Naugatuck River CT6900-00_01, Naugatuck River	N/A N/A N/A	10 1 61	3 3		3	3	3			0		22 13	1
DSN-027 DSN-028 DSN-029	CT6900-00_01, Naugatuck River CT6900-00_01, Naugatuck River CT6900-00_01, Naugatuck River	N/A N/A	13	3 3 3		3 3 3	3 3 3	3 3 3			0 0 0		73 25 12	1
DSN-030 DSN-031	CT6900-00_01, Naugatuck River CT6900-00_01, Naugatuck River	N/A	2	3		3	3	3			0		12 14	
DSN-032 DSN-033 DSN-034	CT6900-00_01, Naugatuck River CT6900-00_01, Naugatuck River CT6900-00_01, Naugatuck River	N/A N/A	22	3 0 3		3 0 3	3 3 3	3 3			0 0 0		34 6 13	
DSN-034 DSN-035 DSN-036	C16900-00_01, Naugatuck River CT6900-00_01, Naugatuck River CT6900-00_01, Naugatuck River	N/A N/A N/A	1 15 8	0 0		3 3	3 3	3 3			0 0		13 24 17	
DSN-037 DSN-038	CT6000-00_02, Housatonic River Unnamed Waterbodies	N/A	16	3 0		2	3	3			0		<b>27</b> 6	
DSN-039 DSN-040 DSN-041	CT6000-00_02, Housatonic River CT6000-00_02, Housatonic River CT6000-00_02, Housatonic River	N/A 7	5	3 0 0		2 2 2	3 3 3	3 3 3			0 0 0		16 15 8	
DSN-042 DSN-043	CT6000-00_02, Housatonic River CT6000-00_02, Housatonic River		0	0		2 2	3	3 2			0		8	
DSN-044 DSN-045	CT6000-00_02, Housatonic River CT6000-00-5+L4_01, Housatonic River	5		0 3		2	3	2 2			0		12 16	
DSN-046 DSN-047 DSN-048	Unnamed Waterbodies Twomile Brook Unnamed Waterbodies	N/A 1	10	0 0 0		0 0	1 1 2	3 1 2			0 0 0		14 3 4	
DSN-049 DSN-050	Twomile Brook Unnamed Waterbodies			0		0	3	3 2			0		6	
DSN-051 DSN-054	Unnamed Waterbodies Unnamed Waterbodies	N/A	5	0		0	1 2	3			0		8 5	
DSN-055 DSN-056 DSN-057	Unnamed Waterbodies Unnamed Waterbodies Unnamed Waterbodies	3 N/A	19 11	0 0 0		0 0	1 1 2	2 2 2			0 0 0		<b>22</b> 6	
DSN-058 DSN-059	Unnamed Waterbodies Unnamed Waterbodies	N/A N/A	9 8	0 0		0	2 2	2 2			0		13 12	
DSN-060 DSN-061 DSN-062	Unnamed Waterbodies Twomile Brook Twomile Brook	N/A	11	0 0 0		0 0 0	1 1	3 3 3			0 0 0		15 4 4	
DSN-063 DSN-064	Twomile Brook Twomile Brook	N/A	8	0		0	1 1	3			0		12 4	
DSN-065 DSN-066	Twomile Brook Twomile Brook	N/A N/A	11 15	0		0	1 1	3			0		15 19	
DSN-067 DSN-068 DSN-069	Unnamed Waterbodies Unnamed Waterbodies Unnamed Waterbodies	N/A N/A N/A	10 11 16	0 0 0		0 0	3 2 2	2 2 3			0 0 0		15 15 21	
DSN-070 DSN-071	CT6000-00_02, Housatonic River Twomile Brook	5	0	0		2 0	3	3 2			0		13 5	
DSN-072 DSN-073 DSN-074	Unnamed Waterbodies Unnamed Waterbodies Unnamed Waterbodies	16 N/A N/A	5 7	0 0 0		0 0	3 3 2	3 3 1			0 0 0		22 11 10	
DSN-075 DSN-076	Unnamed Waterbodies CT6000-00-5+L4_01, Housatonic River	N/A N/A	16 13	0		0	3	3			0		22	
DSN-077 DSN-078	Pink House Cove Brook Unnamed Waterbodies	N/A 2	7	0		0	3 3	3			0		11 8	
DSN-079 DSN-080 DSN-082	Unnamed Waterbodies Unnamed Waterbodies CT6900-00_01, Naugatuck River	N/A N/A N/A	13 15 4	0 0 0		0 0 3	3 3 3	3 3 3			0 0 0		19 <b>21</b> 13	
DSN-083 DSN-084	Unnamed Waterbodies Unnamed Waterbodies	- 475	,	0		0	3	3 2			0		6 5	
DSN-085 DSN-086 DSN-087	Unnamed Waterbodies Unnamed Waterbodies Unnamed Waterbodies			0 0 0		0 0 0	3 3 3	2 2 2			0 0 0		5 5 5	
DSN-087 DSN-088 DSN-089	Unnamed Waterbodies Twomile Brook Twomile Brook			0 0		0 0	3 3	2 2 2			0 0		5	
DSN-090 DSN-091	Unnamed Waterbodies Twomile Brook			0		0	1 1	2 2			0		3	
DSN-092 DSN-094 DSN-095	Twomile Brook CT6000-00-5+L4_01, Housatonic River CT6000-00-5+L4_01, Housatonic River			0 0 0		3	1 1 1	3 3			0 0 0		3 7 7	
DSN-096 DSN-097	CT6000-00-5+L4_01, Housatonic River CT6000-00-5+L4_01, Housatonic River			0		3	1 2	3			0		7 8	
DSN-098 DSN-099	CT6000-00-5+L4_01, Housatonic River CT6900-00_01, Naugatuck River			0		3	2 2	3			0		8	
DSN-100 DSN-101 DSN-102	CT6000-00-5+L4_01, Housatonic River CT6000-00-5+L4_01, Housatonic River CT6000-00-5+L4_01, Housatonic River			0 0 0		2 2 2	2 1 2	3 3 2			0 0 0		7 6 6	
DSN-103E DSN-103W	Unnamed Waterbodies Unnamed Waterbodies			0		0	1 1	3			0		4	
DSN-104 DSN-105	Unnamed Waterbodies Unnamed Waterbodies			0		0	1 1	2 2			0		3	
DSN-106 DSN-107 DSN-108	Unnamed Waterbodies Unnamed Waterbodies Unnamed Waterbodies			0 0 0		0 0	1 1 1	2 2 2			0 0 0		3 3	
DSN-109 DSN-110	Unnamed Waterbodies CT6900-00_01, Naugatuck River			0		0	1 1	2 3			0		3 7	
DSN-111 DSN-112	CT6900-00_01, Naugatuck River CT6900-00_01, Naugatuck River	8		0		3	1 2	3			0		7	
DSN-113 DSN-114 DSN-115	CT6900-00_01, Naugatuck River CT6900-00_01, Naugatuck River CT6000-00_02, Housatonic River			0 0 0		3 0	2 1 2	3 3 3			0 0 0		8 7 5	
DSN-116 DSN-117	CT6000-00_02, Housatonic River CT6000-00_02, Housatonic River			0		0	2 2	3			0		5 5	
DSN-118 DSN-119	CT6000-00_02, Housatonic River CT6000-00_02, Housatonic River			0		0	2 2	3 3			0		5 5	
DSN-120 DSN-121 DSN-122	CT6000-00_02, Housatonic River CT6000-00_02, Housatonic River CT6000-00_02, Housatonic River			0 0 0		0 0	2 2 2	3 3 3			0 0 0		5 5	
D31V-12Z	0.10000 00_02, 1 lodsatolite River	1				v	-	,	<u>I</u>		U	<u>I</u>	7	

Catchment ID	Receiving Water	Dry Weather Sampling Results Indicate Likely Illicit Discharge? <sup>1</sup>	Wet Weather Sampling Results indicated Likely Illicit Discharge? <sup>1a</sup>	Discharging to Area of Concern to Public Health? <sup>2</sup>	Frequency of Past Discharge Complaints	Receiving Water Quality	Density of Generating Sites <sup>4</sup>	Age of Development/ Infrastructure <sup>5</sup>	Historic Combined Sewers or Septic? <sup>6</sup>	Aging Septic? <sup>7</sup>	Culverted Streams? 8	Additional Characteristics		
Information Source		Catchment Inspections and Sample Results	Catchment Inspections and Sample Results	GIS Maps	Municipal Staff	Impaired Waters List	Land Use/GIS Maps, Aerial Photography	Land Use Information, Visual Observation	Municipal Staff, GIS Maps	Land Use, Municipal Staff	GIS and Stormwater system Maps	Other	Score	Priority Ranking
Scoring Criteria (Yes = Problem)			using an extrapolated d on the results	Yes = 3 No = 0	Frequent = 3 Occasional = 2 None = 0	Poor = 3 Fair = 2 Good = 0	High = 3 Medium = 2 Low = 1	High = 3 Medium = 2 Low = 1	Yes = 3 No = 0	Yes = 3 No = 0	Yes = 3 No = 0	TBD		
DSN-123	CT6000-00 02, Housatonic River			0		0	2	3			0		5	
DSN-124	CT6000-00_02, Housatonic River			0		2	2	3			0		7	
DSN-125	CT6000-00_02, Housatonic River			0		2	2	3			0		7	
DSN-126	CT6000-00_02, Housatonic River			0		2	2	3			0		7	
DSN-127	CT6000-00_02, Housatonic River			0		2	1	3			0		6	
DSN-128	CT6000-00_02, Housatonic River			0		2	3	3			0		8	
DSN-129	CT6000-00_02, Housatonic River			0		2	3	3			0		8	
DSN-130	CT6000-00_02, Housatonic River			0		0	3	3			0		6	
DSN132	CT6900-00_01, Naugatuck River			0		3	1	3			0		7	
DSN-133	Unnamed Waterbodies			0		0	1	3			0		4	
DSN-134	Unnamed Waterbodies			0		0	1	3			0		4	
DSN-135	Unnamed Waterbodies			0		0	1	3			0		4	
DSN-136	Unnamed Waterbodies			0		0	1	3			0		4	
DSN-137	Unnamed Waterbodies			0		0	1	3			0		4	
DSN-138	CT6000-00-5+L4_01, Housatonic River			0		3	2	3			0		8	
DSN-140	CT6000-00_02, Housatonic River			0		2	1	3			0		6	
DSN-141	CT6000-00_02, Housatonic River			0		2	1	3			0		6	
DSN-142	Unnamed Waterbodies			0		0	1	2			0		3	

Impaired Outfalls

 $If the re's no \ waterbody \ feature \ identified \ the \ receiving \ body \ source \ will \ be \ the \ name \ of \ the \ subregional \ basin \ the \ outfall \ resides \ in$ 

 $^{\rm 1}$  Previous dry weather screening results indicate likely sewer input if any of the following are true:

Olfactory or visual evidence of sewage, Ammonia  $\geq 0.5$  mg/L, surfactants  $\geq 0.25$  mg/L, and bacteria levels greater than the water quality criteria applicable to the receiving water, or

Ammonia  $\geq 0.5$  mg/L, surfactants  $\geq 0.25$  mg/L, and detectable levels of chlorine

 $^{\mathrm{1a}}$  Previous wet weather screening results indicate impacts to impaired waters including:

Total Nitrogen >2.5 mg/L, Total Phosphorous >0.3 mg/L,
E. Coli >235col/100 ml for swimming areas and >410 col/100 ml for all others or,

 $Total\ Coliform > 500\ col/100\ ml, or\ Fecal\ coliform > 31\ col/100ml\ for\ Class\ SA\ and > 260\ Col/100ml\ for\ Class\ SB, or\ Col/100ml\ for\ Class\$ 

Enterococci > 104 col/100ml for swimming areas and > 500 col/100ml for all others.

<sup>2</sup> Catchments that discharge to or in the vicinity of any of the following areas: public beaches, recreational areas, drinking water supplies, or shellfish beds

<sup>3</sup> Receiving water quality based on latest version of State of Connecticut Integrated Water Quality Report.

Poor = Waters with approved TMDLs (Category 4a Waters) where illicit discharges have the potential to contain the pollutant identified as the cause of the impairment

 $Fair = Water \ quality \ limited \ waterbodies \ that \ receive \ a \ discharge \ from \ the \ MS4 \ (Category \ 5 \ Waters)$ 

Good = No water quality impairments

4 Generating sites are institutional, municipal, commercial, or industrial sites with a potential to contribute to illicit discharges (e.g., car dealers, car washes, gas stations, garden centers, industrial manufacturing, etc.)

<sup>5</sup> Age of development and infrastructure:

High = Industrial areas greater than 40 years old and areas where the sanitary sewer system is more than 40 years old

Medium = Developments 20-40 years old

Low = Developments less than 20 years old

<sup>6</sup> Areas once served by combined sewers and but have been separated, or areas once served by septic systems but have been converted to sanitary sewers.

Aging septic systems are septic systems 30 years or older in residential areas.

<sup>8</sup> Any river or stream that is culverted for distance greater than a simple roadway crossing.