### 2023 ANNUAL REPORT

## General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4)

### Registration No. GSM000114

for

City of Derby, CT 1 Elizabeth Street Derby, Connecticut



Prepared By:



41 Sequin Drive Glastonbury, CT 06033 T: 860.633.8770 bartonandloguidice.com



Connecticut Department of Energy & Environmental Protection Bureau of Materials Management & Compliance Assurance Water Permitting & Enforcement Division

# **MS4 Annual Report**

## **Transmittal Form**

### For the General Permit to Discharge Stormwater from Small Municipal Separate Storm Sewer Systems (MS4)

Print or type unless otherwise noted. Please submit this completed transmittal form, fee, and the MS4 Annual Report as indicated at the end of this form.

App #:_			
Doc #:_			
Check #	<b>±</b> •		
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	<b>.</b>		
	-rogram:	Stormwater Permits	

**CPPU USE ONLY** 

### Part I: Annual Report General Information

1. 2.	Reporting Period (Calendar Year): <u>2023</u> Provide the registration number for the existing general permit registration: <u>GSM000114</u>							
3.	Registrant Type (check one): Fees							
	state institution/agency	\$375.00 [713]						
	federal institution/agency	\$375.00 [713]						
	Municipality	\$187.50 [713]						
4.	4. Municipality name or Municipality name where institution is located: <u><b>City of Derby</b></u>							
	annual report will not be processed without the fee. ock or money order to the Department of Energy and	. The fee shall be non-refundable and shall be paid by I Environmental Protection (DEEP) or by such other						

Part II: Registrant Information

method as the commissioner may allow.

1	Registrant (Name of Municipality or State or Federal Institut	ion/Agency). City of Derby
	Mailing Address: 1 Elizabeth Street	
	City/Town: Derby	State: CT Zip Code: 06418
	Business Phone: (203) 736-1450	ext.:
	Contact Person: Linda Fusco	Phone: (203) 736-1496 ext.
	*E-mail: Ifusco@derbyct.gov	
	*By providing this e-mail address you are agreeing to receive offic address, concerning the subject registration. Please remember to receive e-mails from "ct.gov" addresses. Also, please notify DEEF	check your security settings to be sure you can

## Part II: Registrant Information (continued)

2.	Billing contact, if different than the registrant.		
	Name:		
	Mailing Address:		
	City/Town:	State:	Zip Code:
	Business Phone:	ext.:	
	Contact Person:	Phone:	ext.
	E-mail:		
3.	Primary contact for departmental correspondence and i	nquiries, if diffe	erent than the registrant.
	Name:		
	Mailing Address:		
	City/Town:	State:	Zip Code:
	Business Phone:	ext.:	
	Contact Person:	Phone:	ext.
	*E-mail:		
	*By providing this e-mail address you are agreeing to receive offic address, concerning the subject registration. Please remember to receive e-mails from "ct.gov" addresses. Also, please notify DEEF	check your secur	ity settings to be sure you can
4.	Engineer(s) or other consultant(s) employed or retained	I to assist in pro	eparing the annual report.
	Check here if additional sheets are necessary, and lab	el and attach the	em to this sheet.
	Name: Barton & Loguidice, LLC		
	Mailing Address: 41 Sequin Drive		
	City/Town: Glastonbury	State: CT	Zip Code: 06033
	Business Phone: (860) 633-8770	ext.:	
	Contact Person: T.J. Therriault	Phone: (860)	633-8770 ext.
	E-mail: tjt@bartonandloguidice.com		
	Service Provided: stormwater management consultant; c	compile report	
5.	Check here if there are adjacent towns or other entities Management Plan is coordinated for a portion of the sul towns or entities:		

### Part III: Registrant Certification

The registrant *and* the individual(s) responsible for actually preparing the annual report must sign this part. [If the registrant is the preparer, please mark N/A in the spaces provided for the preparer.]

1		
attachments thereto, and	ned and am familiar with the information sub I I certify that based on reasonable investiga or obtaining the information, the submitted in dge and belief.	tion, including my inquiry of the
I certify that this annual r commissioner without alt	eport transmittal is on complete and accurat eration of the text.	e forms as prescribed by the
I certify that the following	public notice requirements have been met.	
Annual Report Availal pursuant to Section 4(d comment a draft copy of permittee and are not s undertaken by the perm public inspection and c available, at a minimum or institution office, a lo	bility: At least forty-five (45) days prior to submi )(3) of the MS4 General Permit, each permittee of the complete Annual Report. Comments on the ubmitted to DEEP. Reasonable efforts to inform nittee. Such draft copies shall be made available opying, consistent with the federal and state Free a, at one of the following locations: the permittee cal library or other central publicly available loca y of the final report shall be made available for p	shall make available for public review and e Annual Report may be made to the the public of this document shall be electronically on the permittee's website for edom of Information Acts, and shall be made 's main office or other designated municipal tion. Following submission of the Annual
accordance with section	statement in the submitted information may 22a-6 of the General Statutes, pursuant to s ny other applicable statute.	be punishable as a criminal offense, in ection 53a-157b of the General Statutes,
I also certify that the sign complies with section 22a	ature of the registrant, or a duly authorized r a-430-3(b)(2)(B) of the Regulations of Conne	representative, being submitted herewith ecticut State Agencies.
Signature of Chief Electe Officer	d official or Principal Executive	03/28/24 Date
Linda Fusco		Chief of Staff
Printed Name of Chief El	ected official or Principal Executive Officer	Title (if applicable)
T.S. Therre Signature of Preparer (if e		3/29/2024 Date
T.J. Therriault - Barton		Senier Ducingt Manager
Printed Name of Prepare		Senior Project Manager Title (if applicable)
Note: Please submit 1)	this completed Transmittal Form and the Fee t	0:
	CENTRAL PERMIT PROCESSING UNIT DEPARTMENT OF ENERGY AND ENVIRONM 79 ELM STREET HARTFORD, CT 06106-5127	
2)	a copy of this completed Transmittal Form a following email address: DEEP.Stormwater	and the Annual Report electronically to the Staff@ct gov.

Refer to <u>www.ct.gov/deep/municipalstormwater</u> for information on Annual Report Templates or other additional information concerning the MS4 General Permit.

In the event that electronic submission is not available or possible, please contact the Stormwater Section at 860-424-3025.

### MS4 General Permit City of Derby 2023 Annual Report Existing MS4 Permittee Permit Number GSM000114 January 1, 2023 – December 31, 2023 Primary MS4 Contact: Michael Piscioneri; Director of Public Works; (203) 736-1468; Derbypw@derbyct.gov

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) during the Reporting Period from January 1, 2023 to December 31, 2023.

#### **Executive Summary**

Submission of this report by the City of Derby maintains compliance with the reporting requirements and registration (no. GSM000114) under the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4), submitted to the State of Connecticut Department of Energy and Environmental Protection ('CT DEEP') Commissioner for activities located within the City of Derby. The City of Derby certifies by this report that the terms and conditions of the General Permit are being met to the maximum extent practicable (MEP).

Starting in 2017, the City of Derby contracted with a consulting firm, Barton & Loguidice, LLC (B&L), who has completed much of the dry weather screening and sampling of the City's existing and newly identified outfalls (146 municipally-owned). Through the efforts of B&L, the City continues working toward the completion of all dry weather outfall Illicit Discharge Detection and Elimination (IDDE) screening and sampling, and wet weather impaired outfall sampling efforts for all of the municipally-owned outfalls identified in the City to the MEP.

From 2021 through 2023, with assistance from B&L, the City completed a significant amount of updates to their MS4 system mapping. The main focus for the updates during this period were to verify municipal outfalls, catch basins, manholes, drainage lines, and interconnections, as well as, update mapping that was noted as incorrect during field inspections, and map drop-down catch basins (catch basins that discharge directly into a waterway with no other piping connected to the system).

Through the field investigation process, some new outfalls in the MS4 system that were previously mapped were identified as incorrect and needed to be updated based on actual field conditions. Large incomplete areas of the City's MS4 system mapping were able to be resolved, missing structures added, and piping corrected to match the true conditions. B&L's efforts assisted in reducing the burden on the City for mapping locations that could be resolved in the field allowing the City to focus on other aspects of the MS4 permit. By performing this action, in 2023 B&L was able to map eight additional new outfalls, 55 new catch basins, 58 new manholes and approximately 27 miles of drainage piping.

#### **Outfall Monitoring Status**

During the reporting period (January 1 through December 31, 2023), dry and wet weather screening and sampling efforts were reduced due to focused efforts on updating the MS4 system mapping.

To date, 119 outfalls were dry weather screened and 29 samples were collected. Dry weather screening and sampling data identified the presence of one suspected illicit discharge requiring an investigation, which was added to the list of High Priority Outfalls for further investigations.

In 2023, due to limited qualifying rain events and significant efforts being spent on mapping updates, no additional wet weather sampling were completed. To date, 24 of 77 outfalls discharging to impaired waters have been sampled during wet weather events and, 11 of those outfalls were identified with suspected illicit discharges and were ranked at the top of the high priority category for further investigations. Additionally, 25 wet weather samples were collected to date at outfalls that are not discharging to impaired waters. Of these samples collected, two were identified for further investigations with suspected illicit discharges and were ranked at the top of the high priority category.

As a result of the recent mapping update efforts, there were many outfalls that were previously screened and sampled during wet and dry weather events which were removed from the list or reclassified because they were either found to be structures other than outfalls, they were confirmed as not existing, or the waters they were discharging to either changed classifications or their impairments were updated.

With assistance from B&L, the City has initiated investigations on seven catchment areas and have collected samples at 29 key system junctions within these catchment areas that were ranked at the top of the high priority category. Because of the complexity of the City's MS4 system and the need to further update the system mapping, the City has not been able to complete any of the investigations that have been started.

The City of Derby will continue to conduct dry weather and wet weather outfall screening and sampling efforts and catchment investigations throughout the next reporting period (January 1 through December 31, 2024). This effort will be conducted simultaneously with the City's MS4 system mapping updates to the maximum extent practicable.

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

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

#### 1.1 BMP Summary

ВМР	Activities in current reporting period	Sources Used (if applicable)	Method of Distribution	Audience (and number of people reached)	Measurable goal	Department/ Person Responsible	Additional details
1-1 Implement public education and outreach	A link was created for access to the City's Stormwater Management program. Links were added to the Stormwater website that discuss Stormwater and Water Quality; Pet Waste; Impervious Cover; Fertilizers, Pesticides & Herbicides; Illicit Discharges; and Bacteria.	CT DEEP, River Smart, UConn NEMO, NH DES, Clemons Coop Ext, Minnesota PCA,	Town Webpage: www.derbyct.gov/ stormwater-management	General Public	Link to educational resources on City website. Develop and Distribute Material to Public Annually.	Public Works	
1-2 Address education/ outreach for pollutants of concern*	A weblink for "Help Keep Our Waterways Clean" and additional links regarding bacteria were added to the Stormwater website (see BMP 1-1).	CT DEEP (Under "Additional Recourses")	Town Webpage: www.derbyct.gov/help- keep-our-waterways- clean	General Public	Develop and Distribute Information on Bacteria Pollution	Public Works	

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

• Continue to provide current, relevant educational materials on the City's stormwater webpage.

### 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	Date completed/ projected	Location Posted	Additional details
2-1 Final Stormwater	Complete	The SMP is accessible on the	Provide public	Public Works	April 2017	Connecticut Post, City Hall,	
Management Plan		City's Stormwater	access to the		On-going	the library and	
publicly available		Management website.	Stormwater			http://www.derbyct.gov/Stor	
			Management Plan.			mwater-Management	

ВМР	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Date completed/ projected	Location Posted	Additional details
2-2 Comply with public notice requirements for Annual Reports (annually by 2/15)	Complete	Notice of the draft Annual Report was posted in the Connecticut Post. The draft Annual Report was 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	2022 Notice Posted: 1/31/2023 2022 Report Posted: 2/15/23 through 3/28/23 On-going	Connecticut Post, City Hall, the library and <u>http://www.derbyct.gov/Stor</u> <u>mwater-Management</u>	The notice for the draft 2023 report was posted in the CT Post on 1/31/24 and the 2023 report was available on the website from 2/15/24 through 3/28/24

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.

### **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	Date completed/pr ojected	Additional details
3-1 Develop written IDDE program (Due 7/1/19)	In Progress	The City has a draft plan in place and anticipates reviewing and finalizing the IDDE Plan in 2024.	Develop Written Plan	Public Works	Jul 1, 2024	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas (Due 7/1/20)	Substantially Complete	Extensive efforts were conducted from 2019-2023 to locate and identify new outfalls that were not previously mapped and update the system mapping.	Update Existing Outfall Map	Public Works	Dec 31, 2021 On-going	In 2024, the City will continue to update its system mapping, as necessary.
3-3 Implement citizen reporting program (On-going)	Complete	Email address and telephone number have been added to the Public Works website for issuing complaints.	Develop Program	Public Works	May 1, 2019	
3-4 Establish legal authority to prohibit illicit discharges (Due 7/1/19)	Complete	An Illicit Discharge and Connection Stormwater Ordinance was passed and adopted on 5/10/2018.	Update City Ordinance	Zoning Department	May 10, 2018	

вмр	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Date completed/pr ojected	Additional details
3-5 Develop record keeping system for IDDE tracking (Due 7/1/17)	Complete	The City uses excel and access spreadsheets, along with GIS, for IDDE tracking.	Develop SOP	Public Works	Jul 1, 2017 On-going	
3-6 Address IDDE in areas with pollutants of concern	In Progress	Throughout the term of the permit, the City continued screening and sampling the municipal outfalls. Several outfalls were identified that will require further investigation. Two IDDE investigations for outfalls discharge to impaired waters have been initiated. It is anticipated that these investigations will continue to be investigate in 2024 to the maximum extent practicable.	Identify IDDEs	Public Works	On-going	
3-7 Map MS4 System in Priority Areas	In Progress	From 2021 through 2023, the City continued its significant effort to map all of its outfalls, catch basins, manholes and piping in priority areas.	Map Priority Areas	Public Works	On-going	In 2024, the City will continue to update its system mapping, as necessary.

#### **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
- Continue to maintain master IDDE records tracking
- Investigate illicit discharges in areas with pollutants of concern

3.3 Provide a record of all citizen reports of suspected illicit discharges and other illicit discharges occurring during the reporting period and

**SSOs occurring July 2017 through end of reporting period using the following table.** Illicit discharges are any unpermitted discharge to waters of the state that do not consist entirely of stormwater or uncontaminated groundwater except those discharges identified in Section 3(a)(2) of the MS4 general permit when such non-stormwater discharges are not significant contributors of pollution to a discharge from an identified MS4.

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)
No citizen reports of susp	ected illicit discho	arges were recorded in	<u>2023.</u>			
No illicit discharges were	reported in 2023	<u>.</u>				
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)
SSOs that occurred July 2	017 through end	o <u>f 2023:</u>				
287 Sentinel Hill Rd, Derby	8/5/2017 0 hrs	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	N/A
1 Caroline Street, Derby	10/24/17 9 hrs	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	N/A
Burtville Ave, Derby / 41.31, -72.87	11/15/17 24 hrs	Housatonic River	1,001 - 5,000 gallons	Broken pipe Cause unknown	Area hosed down and disinfected Pipe repaired	N/A
Roosevelt Drive	2/7/19 1 hrs	Housatonic River	10-20 gal	Power failure at pump station. Contractor issues.	Area cleaned & contractor issues resolved 2/7/2019	N/A
222 Derby Ave unit 304	7/18/19 3 hrs	No	51-500 gal	Contractor excavating	Private property 7/18/2019	N/A
Ferrara CT/Indian Ave	9/8/19 3 hrs	No	1-50 gal	Sewer line blockage	Sewer line Jetted and cleaned 9/8/2019	N/A
North Ave/ RT 34	10/1/19 4 hrs	Housatonic River	5,000-20,000 gal	Pump station/Clogged pumps	Pumps cleaned and cleared, area cleaned 10/1/2019	N/A
Caroline St/WPCA Plant	10/16/19 2 hrs	No	20,000 - 50,000 gal	Excessive flows from severe rain event	Areas cleaned 10/16/2019	N/A
Caroline St/WPCA Plant	10/28/19 1 hrs	No	1-50 gal	Excessive flows from severe rain event	Areas cleaned 10/28/2019	N/A
Caroline St/WPCA Plant	12/14/19 4 hrs	Housatonic River	20,000-50,000 gal	Raw sewage pump discharge line broke	By-pass pumps set up areas cleaned 12/20/2019	N/A

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)
Mt. Pleasant Street	2/2/20 8 Days	Naugatuck River	1-50 gal	Private common lateral	No action was taken by the residents until the city stepped in and hired a contractor to fix the private lateral. Area cleaned 2/10/2020	N/A
Caroline St/WPCA Plant	7/3/20 2 hrs	No	501-1,000 gal	Excessive flows from severe rain event	Areas cleaned 7/3/2020	N/A
Caroline St/WPCA Plant	9/10/20 2 hrs	No	1,000-5,000 gal	Excessive flows from severe rain event	Areas cleaned 9/10/2020	N/A
Emmit Ave/Derby Ave	9/13/20 2 hrs	No	1-50 gal	Sewer line blockage	Sewer line Jetted and cleaned 9/13/2020	N/A
109 Hawkins St/8 <sup>th</sup> St	3/11/21 Unknown	No	1-50 gal	Root intrusion and wipes blockage in private lateral	Homeowner had the sewer lateral cleaned 3/12/2021	N/A
Caroline St/WPCA Plant	7/9/21 6 hrs	Yes, Housatonic River	Undetermined	Excessive flows due to rain event (3"-4" per hour) caused overflow	Areas cleaned 7/9/21	N/A
Caroline St/WPCA Plant	8/23/21 2 hrs	No	1,001-5,000 gal	Excessive flows due to rain event (2"-3" per hour) caused overflow	Areas cleaned 8/23/21	N/A
Caroline St/WPCA Plant	9/2/21 2 hrs	No	5,001-20,000 gal	Excessive flows due to rain event (2"-3" per hour), along with Stevenson dam releasing 2,500 CFS, caused overflow	Areas cleaned 9/2/21	N/A
19 Cherry St	10/10/21 2 hrs	Yes, Housatonic River	1-50 gal	Private sewer lateral leak	Lateral was inspected and determined to be in good condition	N/A
Caroline St/WPCA Plant	1/26/2023 4 hrs	Housatonic River	100,000 - 250,000 gallons	Excessive Flows - Storm Event	Due to the excessive flow coming into the plant our final clarifiers become overloaded causing our s	N/A
Caroline St/WPCA Plant	7/4/2023 3.5 hrs	Housatonic River	75,000 - 100,000	Excessive Flows - Storm Event	Heavy rainfall starting around 5 pm lasting approximately 15 min. Plant inflow receded enough around	N/A
Caroline St/WPCA Plant	11/24/2023 Unknown	No	Not Reported	Other	Not Reported	N/A
Caroline St/WPCA Plant	12/18/2023 Unknown	No	Not Reported	Excessive Flows - Storm Event	Not Reported	N/A
Caroline St/WPCA Plant	12/18/2023 16 hrs	Housatonic river	1.5 million gallons	Excessive Flows - Storm Event	Rain event ended and flow came back down below 10 million gallons per day	N/A

#### 3.4 Provide a summary of actions taken to address septic failures during the Reporting Period using the table below.

Method used to track illicit discharge reports	Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known	Dept. / Person responsible
No septic failures were reported in 2023				

#### 3.5 Briefly describe the method and effectiveness of said method used to track illicit discharge reports.

• The City will continue tracking illicit discharges using an excel table. DPW is responsible for tracking the information.

#### **3.6 IDDE reporting metrics**

Metrics	
Estimated or actual number of MS4 outfalls	146 (decrease from 147 in 2022 due to updated mapping)
Estimated or actual number of interconnections	~40
Outfall mapping complete	~95%
Interconnection mapping complete	~25%
System-wide mapping complete (detailed MS4 infrastructure)	~70%
Outfall assessment and priority ranking	~75%
Dry weather screening of all High and Low priority outfalls complete	119 (increase from 105 in 2022 )
Catchment investigations complete	2 in progress
Estimated percentage of MS4 catchment area investigated	5%

# 3.7 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 9/21/22.

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

#### 4.1 BMP Summary

BMP Status Activities in current reporting period I		Measurable goal	Department/ Person Responsible	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 (Due 7/1/20)	In Progress	The City anticipates making progress towards reviewing their land use regulations in 2024 to identify potential areas for improved compliance with the MS4 General Permit.	Review and update regulations	Zoning Department	Dec 31, 2024	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval (On-going)	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, 2018 On-going	
4-3 Review site plans for stormwater quality concerns (On-going)	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 (On-going)	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 (On-going)	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 On-going	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit (On-going)	In Progress	Currently, the City 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, 2020	In 2024, the City anticipates reviewing current procedures and improve compliance with MS4 general permit

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

- The City will work towards updating the City ordinances to include being able to enforce land use regulations.
- Continue to review all design plans for regulation consistency.
- Continue the site inspection and checklist program.
- Continue to follow all State public notice and hearing requirements and follow up on all comments and complaints received.
- Add Construction Stormwater GP requirements to the stormwater website.

### 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	Date completed/ projected	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning (Due 7/1/22)	In Progress	The City anticipates making progress towards continuing to review their legal authority and guidelines regarding LID and runoff reduction in site development planning in 2024 to identify potential areas for improved compliance with the MS4 General Permit.	Update City Ordinance	Zoning Department	Dec 31, 2024	
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Due 7/1/22)	In Progress	The City anticipates making progress towards continuing to review their current practices for enforcing LID/runoff reduction requirements for development and redevelopment projects in 2024 to identify potential areas for improved compliance with the MS4 General Permit.	Document Facilities Specified	City Engineer	Dec 31, 2024	
5-3 Identify retention and detention ponds in priority areas (Due 7/1/20)	In Progress	Through the MS4 system mapping updates efforts from 2019-2023, City and its consultant identified 7 ponds and 5 additional treatment structures to date.	Inventory City Facilities	Public Works/ City Engineer	Jul 1, 2020 On-going	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures (On- going)	In Progress	The City is in the process of drafting a plan for long-term maintenance plan for stormwater basins and treatment structures.	Development Maintenance Plan	Public Works/ City Engineer	Jul 1, 2024	

вмр	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Date completed/ projected	Additional details
5-5 DCIA mapping (Due 7/1/20)	Substantially Completed	The DCIA for the priority areas have been calculated using the available impervious cover layers.	Calculate DCIA	Public Works	Feb 18, 2020 On-going	The DCIA mapping will be updated, as necessary, to include retrofit, development and development projects.
5-6 Address post-construction issues in areas with pollutants of concern	To be started	None	Document issues identified and addressed	City Engineer	On-going	

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

- Complete review of 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.
- Finalize and start implementing a long-term maintenance plan for ponds and structures including inspecting municipal ponds/structures annually and removing sediment in excess of 50% design capacity.
- Continue updating the DCIA mapping, as necessary.

#### 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	7 ponds & 5 additional treatment structures	# 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, Barton & Loguidice used the process found on the CT NEMO website. CT NEMO developed 5 formulas to calculate the DCIA and Impervious Cover (IC) independently for each basin in the City using the percent DCIA for the basin with the state DCIA removed from the equation. Barton & Loguidice took 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 was added together to create the baseline for the DCIA and IC for the City.

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

#### 6.1 BMP Summary

вмр			Measurable goal	Department / Person Responsible	Date completed/ projected	Additional details	
6-1 Develop/implement formal employee training program (On-going)	Complete	Completed annual training with Public Works on 9/21/22. Public Works & Water Pollution Control Staff also receive annual SWPPP training, which covers some areas of the MS4.	Track employee participation	Public Works	On-going	Additional training for other City staff will be conducted in the future.	
6-2 Implement MS4 property and operations maintenance (On-going)	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 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 and system mapping, the City identified several interconnections with the neighboring towns/cities.	Identify interconnections	Public Works	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. Progress has been made towards preparing brochures notifying industrial facilities of their requirements to register under the Industrial Stormwater GP.	Identify Sources	Public Works			
6-5 Evaluate additional measures for discharges to impaired waters*	In Progress	Through the IDDE investigation process, the City and its consultant are in the process of identifying potential pollutant sources that may be discharging to impaired waters.	Identify potential project locations	Public Works			
6-6 Track projects that disconnect DCIA (On-going)	In Progress	The City has set up a table for tracking disconnected DCIA. It is anticipated that the City will continue to complete some progress towards this requirement in 2024.	Develop tracking procedure and data base	City Engineer	On-going		

BMP Status		Activities in current reporting period	Measurable goal	Department / Person Responsible	Date completed/ projected	Additional details	
6-7 Implement infrastructure repair/rehab program (Due 7/1/21)	In Progress	<ul> <li>Through the outfall screening process, the City has identified several outfalls requiring maintenance. The City is addressing these issues to the maximum extent practicable.</li> <li>In 2022, the City completed replacements and/or repairs that were required to 5 catch basins and 7 manhole covers.</li> </ul>	Document existing repair projects	Public Works	Jul 1, 2021 On-going	The Town will review current practices and look for areas for optimization.	
6-8 Develop/implement plan to identify/ prioritize retrofit projects (Due 7/1/20)	In Progress	It is the City's intention to perform efforts towards completing this requirement in 2024.	Identify potential retrofit projects	Public Works	Dec 31, 2024		
6-9 Implement retrofit projects to disconnect 2% of DCIA (Due 7/1/22)	In Progress	In 2024, the City is intending to work with its consultant to identify and prioritize potential projects for the Retrofit Program to the maximum extent practicable.	Implement retrofit projects	City Engineer	Dec 31, 2024		
6-10 Develop/ implement street sweeping program (On-going)	Complete/ Ongoing	City streets are swept annually, concentrating on high priority areas.	Document materials removed annually	Public Works	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 (On-going)	Complete/ Ongoing	Several catch basins were inspected and cleaned out in 2023 as part of continued road repair activities.	Document materials removed annually	Public Works	Jul 1, 2020 On-going	The City is reviewing current practices and looking for areas for optimization.	
6-12 Develop/ implement snow management practices (Due 7/1/18)	Complete/ On-going	Streets & municipal lots were plowed as necessary. Roads were treated salt (no sand), as necessary.	Develop written SOP	Public Works	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.
- 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 – 9/21/22
Street sweeping	
Curb miles swept	~15 miles
Volume (or mass) of material collected	~100 cy
Catch basin cleaning	
Total catch basins in priority areas	2,088
Total catch basins in MS4	2,088
Catch basins inspected	130
Catch basins cleaned	15
Volume (or mass) of material removed from all catch basins	~50 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	~50 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)	UKN
Reduction in turf area (since start of permit)	UKN
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	UKN

#### 6.4 Catch basin cleaning program

#### Provide any updates or modifications to your catch basin cleaning program.

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. (Due 7/1/20)

Due to restrictions, the City was unable to complete any progress towards this requirement in 2023. It is the City's intention to perform efforts towards completing this requirement in 2024. In 2024, the City anticipates 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 annually in future years. (Due 7/1/22) In 2024, 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: <u>http://s.uconn.edu/ctms4map</u>.

Nitrogen/ Phosphorus 🛛 Bacteria 🖾 Mercury 🗌 Other Pollutant of Concern 🖾

#### 1.2 Describe program status.

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

- 1. Due to focused efforts on system mapping updates, no wet weather samples were collected from outfalls discharging to impaired waters in 2023. To date, the City has collected samples from 24 of 77 outfalls that discharge to impaired waters.
- 2. Ten of the impaired outfalls sampled so far had elevated levels of bacteria present. Four of the outfalls sampled had elevated levels of turbidity discharging from the outfall when compared to the receiving waterbody turbidity level.
- 3. The City has ranked the outfalls with elevated sampling results and started conducting further investigations, as necessary, to attempt to eliminate the source of pollutants discharging to the impaired waters.

The City will continue to attempt to collect wet weather samples from the impaired outfalls until all known locations are sampled. Once the remaining impaired wet weather samples are collected, efforts will be focused on the 6 annual priority wet weather samples and the wet weather investigation samples. Coordination with qualifying rain events will continue to be conducted for future monitoring events. Weather conditions and efforts being focused in other areas during 2023 did not allow the City to gain progress towards the wet weather sampling requirements; however, other local efforts resulted in the refinement of the Town's list of outfalls to impaired waters. No additional changes have been made to the Stormwater Management Plan at this time.

### 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.

Outfall ID	Latitude	Longitude	Sampled Date	∆Turbidity (NTU)	E. Coli (100col/L)	Nitrogen	Phosphorous (mg/L)	Lab	Investigation Required
						(mg/L)			-
DSN-009	41.30464202	-73.07258997	4/16/2018	n/a	20	n/a	n/a	Phoenix	No
DSN-010	41.30464202	-73.07258997	4/16/2018	n/a	<10	n/a	n/a	Phoenix	No
DSN-011	41.30464202	-73.07258997	4/16/2018	n/a	10	n/a	n/a	Phoenix	No
DSN-012	41.30464202	-73.07258997	4/16/2018	n/a	10	n/a	n/a	Phoenix	No
DSN-013	41.30464202	-73.07258997	4/16/2018	n/a	10	n/a	n/a	Phoenix	No
DSN-014	41.30464202	-73.07258997	4/16/2018	n/a	10	n/a	n/a	Phoenix	No
DSN-022	41.33063309	-73.07899824	4/16/2018	3.93	1270	n/a	n/a	Phoenix	Yes
DSN-023	41.31472222	-73.08055556	4/16/2018	-0.28	2010	n/a	n/a	Phoenix	Yes
DSN-024	41.31661552	-73.08115311	9/25/2018	11.75	2760	n/a	n/a	Phoenix	Yes
DSN-025	41.31682455	-73.08113357	4/25/2018	7.76	2140	n/a	n/a	Phoenix	Yes
DSN-026	41.31638889	-73.08111111	4/25/2018	3.6	10	n/a	n/a	Phoenix	No
DSN-027	41.31799129	-73.08123813	6/18/2019	9.82	3450	n/a	n/a	Phoenix	Yes
DSN-028	41.32888889	-73.08083333	6/18/2019	1.71	8660	n/a	n/a	Phoenix	Yes
DSN-031	41.31784798	-73.08121879	4/16/2018	-20.15	20	n/a	n/a	Phoenix	No
DSN-034	41.31832547	-73.08133427	4/16/2018	24.67	10	n/a	n/a	Phoenix	Yes
DSN-035	41.32388889	-73.08194444	9/25/2018	2.2	11200	n/a	n/a	Phoenix	Yes
DSN-036	41.32805556	-73.08194444	4/25/2018	0.71	20	n/a	n/a	Phoenix	No
DSN-037	41.31666667	-73.08777778	4/25/2018	n/a	8160	n/a	n/a	Phoenix	Yes
DSN-039	41.31930793	-73.09046972	4/25/2018	n/a	683	n/a	n/a	Phoenix	Yes
DSN-040	41.32263	-73.095231	4/25/2018	n/a	161	n/a	n/a	Phoenix	No
DSN-041	41.32305556	-73.09583333	4/25/2018	n/a	10	n/a	n/a	Phoenix	No
DSN-043	41.32566285	-73.1004598	4/25/2018	n/a	63	n/a	n/a	Phoenix	No
DSN-044	41.32567598	-73.10038302	4/25/2018	n/a	63	n/a	n/a	Phoenix	No
DSN-076	41.32972908	-73.10776581	6/18/2019	n/a	12000	1.79	0.216	Phoenix	Yes
Notes:									

#### Wet Weather Impaired Outfall Sampling Results

Notes:

n/a - Not Applicable

Twomile Brook was not impaired prior to the 2018 Integrated Water Quality Report (IWQR), which is now impaired for "other"

#### 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	Results	Name of Laboratory (if	Follow-up required?
	uute	concern)		used)	
N/A			-	-	

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

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall	Status of drainage area investigation	Control measure implementation to address impairment
DSN-021	Investigation initiated in the drainage area, see Part III, Section 3.2 for key manhole/catch basin	
	screening/sampling data. Additional MS4 system mapping being completed for this drainage area in	
	conjunction with sampling.	
DSN-070	Investigation initiated in the drainage area, see Part III, Section 3.2 for key manhole/catch basin	
	screening/sampling data. Additional MS4 system mapping being completed for this drainage area in	
	conjunction with sampling.	

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

Outfall	Latitude	Longitude	Sample Date	Parameter(s)	Results	Name of Laboratory (if		
						used)		
From 2021 through 2023, the City focused efforts on updating system mapping. In 2024, the City will continue to attempt to collect wet weather samples from the impaired								
outfalls until all known locations are sampled. Once the remaining impaired wet weather samples are collected, efforts will be focused on the 6 annual priority wet weather								
samples.								

### 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.

Outfall ID	Latitude	Longitude	Sampled Date	Temp (oC)	Conductivity (uohms)	Salinity (g/kg)	Ammonia (mg/L)	Chlorine (mg/L)	MBAs (mg/L)	E. Coli (100col/L)	Lab	Investigation Required
DSN-006	41.31237499	-73.05859102	8/14/17	21.17	826	0.41	0.25	0.07	0	206	Phoenix	No
DSN-047	41.31239402	-73.05857903	6/13/18	17.76	1293	0.65	0.25	0.06	0.25	<10	Phoenix	No
DSN-067	41.31061869	-73.07102476	8/17/17	22.44	258	0.12	0.25	0.11	0.25	1660	Phoenix	No
DSN-073	41.31804789	-73.04941471	3/10/21	6.7	276	0.134	0	0	0.09	<10	Phoenix	No
DSN-078	41.33060059	-73.1019416	11/1/17	12.65	455	0.22	0.25	0	0.25	52	Phoenix	No
DSN-144	41.3404961	-73.11015421	3/16/21	7.9	267	0.129	0	0.18	0.04	<10	Phoenix	No
DSN-145	41.33782931	-73.11168308	3/16/21	7.8	179	0.0859	0	0	0.04	<10	Phoenix	No
DSN-146	41.34340059	-73.11244034	3/17/21	5.7	120	0.058	0	0.01	0.07	10	Phoenix	No
DSN-156	41.31377972	-73.07014529	3/23/21	19.5	251	0.103	0	0.02	0.07	31	Phoenix	No
DSN-157	41.31323024	-73.06968514	3/30/21	10.9	258	0.123	0	0	0.07	<10	Phoenix	No
DSN-159	41.32154305	-73.06680721	4/6/21	12	220	0.104	0	0.01	0.14	31	Phoenix	No
DSN-160	41.32461142	-73.06444739	4/6/21	15.2	274	0.13	0	0.01	0.11	1440	Phoenix	No
DSN-162	41.32108726	-73.05466435	4/7/21	15.2	260	0.124	0	0.13	0.11	3870	Phoenix	No
DSN-164	41.32148162	-73.05596469	6/2/23	19.7	264	0.126	0	0.05	0.06	<10	Phoenix	No
DSN-050	41.31675249	-73.05546141	6/2/23	23.7	30.3	0.143	0	0	0.04	<10	Phoenix	No

#### Table 2.1.a – Non-Impaired Waterbody Outfalls

#### Table 2.1b – Impaired Waterbody Outfalls

Outfall ID	Latitude	Longitude	Sampled Date	ΔTurbidity (NTU )	E. Coli (100col/L)	Nitrogen (mg/L)	Phosphorous (mg/L)	Lab	Investigation Required
									•
DSN-040	41.32263	-73.095231	8/14/2017	n/a	161	n/a	n/a	Phoenix	No
DSN-045 *	41.32785908	-73.10433884	8/14/2017	n/a	262			Phoenix	No
DSN-070	41.30683003	-73.07550796	8/17/2017	n/a	31	n/a	n/a	Phoenix	No
DSN-009	41.30464202	-73.07258997	8/22/2017	n/a	<10	n/a	n/a	Phoenix	No
DSN-010	41.30464202	-73.07258997	8/22/2017	n/a	20	n/a	n/a	Phoenix	No
DSN-021 *	41.31333333	-73.07888889	8/22/2017	6.1		n/a	n/a	Phoenix	No
DSN-044 *	41.32567598	-73.10038302	8/22/2017	n/a	31			Phoenix	No
DSN-112*	41.32485798	-73.08094554	11/22/2019		73	n/a	n/a	Phoenix	No
DSN-140	41.31948099	-73.09039628	2/19/2020	n/a	>24200	n/a	n/a	Phoenix	Yes
DSN-071	41.30487041	-73.06546757	3/10/2021	-0.15	<10	n/a	n/a	Phoenix	No
DSN-076	41.32972908	-73.10776581	3/10/2021	n/a	183	0.23	0.019	Phoenix	No
DSN-091	41.30368654	-73.06613004	3/10/2021	0.49	<10	n/a	n/a	Phoenix	No
DSN-092	41.30365561	-73.06613694	3/10/2021	-14.96	<10	n/a	n/a	Phoenix	No
DSN-101	41.31163887	-73.07782361	6/6/2023	n/a	<10	n/a	n/a	Phoenix	No
<u>Notes:</u> n/a - Not Appl	licable								

Data collected based upon the 2016 Integr Data collected based upon the 2018 IWQR

Data collected based upon the 2020 IWQR

Twomile Brook was not impaired prior to the 2018 Integrated Water Quality Report (IWQR), which is now impaired for "other"

\* - These outfalls have impairment parameters that were missed during initial sampling event, which will need resampling

#### 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.

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.

#### Sampled Salinity Chlorine E. Coli Investigation Temp Conductivity Ammonia MBAs Outfall ID Latitude Longitude Date (oC) (uohms) (mg/L) (mg/L) (100col/L) Lab Required (g/kg) (mg/L) DSN-001 41.32090896 -73.04705448 9/25/18 17.32 117 0.1 0.5 0.13 1 >24200 Phoenix Yes DSN-003 41.31740741 -73.0542078 6/13/19 19.3 44.7 0.0204 0.25 0.05 0.25 14100 Phoenix No DSN-004 41.31739968 -73.05419223 6/13/19 20.8 22.8 0.0104 0.25 0.06 0.5 836 Phoenix No DSN-005 41.31419202 -73.05501496 6/13/19 23.7 21.5 0.0098 0.25 0.04 0.5 2720 Phoenix No

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

Outfall ID	Latitude	Longitude	Sampled Date	Temp (oC)	Conductivity (uohms)	Salinity (g/kg)	Ammonia (mg/L)	Chlorine (mg/L)	MBAs (mg/L)	E. Coli (100col/L)	Lab	Investigation Required
DSN-007	41.31859138	-73.07128022	6/13/19	17.2	16	0.01	0.25	0	0.25	4110	Phoenix	No
DSN-015	41.32597896	-73.07382812	6/13/19	17.33	13	0.01	0	0	0.25	1440	Phoenix	No
DSN-019	41.31946791	-73.07470531	6/13/19	17.12	28	0.01	0.25	0.03	0.5	1850	Phoenix	No
DSN-046	41.30480999	-73.07167802	6/13/19	17.43	8	0	0	0.01	0.25	1110	Phoenix	No
DSN-051	41.32163966	-73.04912189	9/25/18	16.68	15	8.91	0.25	0.07	0.25	5170	Phoenix	No
DSN-055	41.31572197	-73.04623098	9/25/18	17.33	93	0.05	0.25	0	1	>24200	Phoenix	No
DSN-057	41.32126834	-73.05614541	6/13/19	16.92	43	0.02	0	0	0.25	6870	Phoenix	No
DSN-058	41.32053374	-73.05568003	6/13/19	17.1	21	0.01	0.25	0	0.25	1310	Phoenix	No
DSN-059	41.32204	-73.055942	6/13/19	16.98	38	0.02	0.25	0.03	0.25	169	Phoenix	No
DSN-068	41.31383101	-73.06421	6/13/19	17.44	13	0.01	0	0.02	0.5	563	Phoenix	No
DSN-069	41.31153303	-73.06816097	6/13/19	17.54	26	0.01	0	0.02	0.25	24200	Phoenix	No
DSN-002A *	41.31285622	-73.04815455	9/25/18	17.92	26	0.01	1	0.02	0.5	2140	Phoenix	Yes
DSN-060*	41.31312766	-73.05642576	6/13/19	19.3	19.5	0.0029	0.25	0.03	0.25	4610	Phoenix	No
DSN-063*	41.31304404	-73.05649303	6/13/19	19.8	16.5	0.0075	0.25	0.04	0.25	75	Phoenix	No
DSN-065*	41.3127415	-73.05759033	6/13/19	19.2	268	0.0122	0.25	0.01	0.5	712	Phoenix	No
DSN-066*	41.31285516	-73.05725041	6/13/19	18.7	25	0.0114	0.25	0.05	0.5	9210	Phoenix	No
DSN-071*	41.30487041	-73.06546757	6/13/19	17.2	272	0.15	0.25	0	0.25	231	Phoenix	No
DSN-073	41.31804789	-73.04941471	9/25/18	17.3	24	0.01	0	0.01	0.25	7700	Phoenix	No
DSN-077	41.34248497	-73.11479302	6/13/19	17.67	111	0.06	0.25	0	0.25	20	Phoenix	No
DSN-079	41.33330896	-73.10798901	6/13/19	17.44	35	0.02	0.25	0	0.25	17300	Phoenix	No
DSN-080	41.33339232	-73.10804102	6/13/19	17.54	42	0.02	0.25	0.06	0.25	19900	Phoenix	No
<u>Note:</u> * = Twomile E	Brook was not im	paired prior to th	ne 2018 Inte	grated W	/ater Quality Re	port (IWQF	R), which is no	ow impaired	l for "other'			

### **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

Outfall ID	Receiving Water	System Vulnerability Factors
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 Reservoir	Sanitary and Storm Drain Infrastructure >40 years Old
DSN-015	Ansonia Reservoir	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
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

Outfall ID	Receiving Water	System Vulnerability Factors
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		

Outfall ID	Key Junction ID	Sample Date	Ammonia	Chlorine	Surfactants	E. Coli	Entero- coccus	Fecal Coliform
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	
See Part III, Section 2.2					

Discharge Location	Source Location	Discharge description	Method of discovery	Date of discovery	Date of elimination	Mitigation or enforcement action	Estimated volume of flow removed
DSN-021	TBD	Investigation initiated in the drainage area, see Part III, Section 3.2 for key manhole/catch basin screening/sampling data. Additional MS4 system mapping being completed for this drainage area in conjunction with sampling.	Outfall sampling	8/22/17	TBD	TBD	TBD
DSN-070	TBD	Investigation initiated in the drainage area, see Part III, Section 3.2 for key manhole/catch basin screening/sampling data. Additional MS4 system mapping being completed for this drainage area in conjunction with sampling.	Outfall sampling	8/17/17	TBD	TBD	TBD
DSN-072	TBD	Investigation initiated in the drainage area, see Part III, Section 3.2 for key manhole/catch basin screening/sampling data. Additional MS4 system mapping being completed for this drainage area in conjunction with sampling.	Outfall sampling	8/17/17	TBD	Outfall identified as an outlet after further mapping updates were completed. Investigation will continue, as necessary.	TBD
DSN-103E	TBD	Investigation initiated in the drainage area, see Part III, Section 3.2 for key manhole/catch basin screening/sampling data. Additional MS4 system mapping being completed for this drainage area in conjunction with sampling.	Outfall sampling	3/10/21	TBD	Outfall identified as an outlet after further mapping updates were completed. Investigation will continue, as necessary.	TBD
DSN-103W	TBD	Investigation initiated in the drainage area, see Part III, Section 3.2 for key manhole/catch basin screening/sampling data. Additional MS4 system mapping being completed for this drainage area in conjunction with sampling.	Outfall sampling	3/10/21	TBD	Outfall identified as an outlet after further mapping updates were completed. Investigation will continue, as necessary.	TBD
DSN-106	TBD	Investigation initiated in the drainage area, see Part III, Section 3.2 for key manhole/catch basin screening/sampling data. Additional MS4 system mapping being completed for this drainage area in conjunction with sampling.	Outfall sampling	3/11/21	TBD	Outfall identified as an outlet after further mapping updates were completed. Investigation will continue, as necessary.	TBD

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

### **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: Linda Fusco, Chief of Staff City of Derby	Print name: T.J. Therriault Barton & Loguidice, LLC							
Signature/Date:	Signature / Date:							
Lindo freno	T.J. Thereault 3/29/2024							
Email: Ifusco@derbyct.gov	Email: tit@bartonandloguidice.com							

City of Derby 2023 Annual Report Permit Number GSM000114 Page 25 of 25 Barton & Loguidice, LLC

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? <sup>8</sup>	Additional Characteristics	Score	
	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	Sampling Score	
	Scoring Criteria (Yes = Problem)	extrapolated for	mined using an mula based on the sults	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-140	CT6000-00 02, Housatonic River	22		0		2	1	3			0		22	4
DSN-037	CT6000-00_02, Housatonic River	22	16	3		2	3	3			0		16	+
DSN-037	CT6000-00 01, Housatonic River		16	0		2	3	3			0		16	+
DSN-001	Unnamed Waterbodies		15	0		0	3	3			0		15	+
DSN-001 DSN-028	CT6900-00_01, Naugatuck River		7	3		3	3	3			0		7	+
DSN-028	CT6900-00_01, Naugatuck River		5	3		3	3	3			0		5	-
	CT6900-00_01, Naugatuck River		5	3		3	3	3			0		5	-
DSN-025	CT6900-00_01, Naugatuck River		5	3		3	3	3			0		5	-
DSN-027			8								0			+
DSN-035	CT6900-00_01, Naugatuck River		8	0		3	3	3					8	+
DSN-076	CT6000-00-5+L4_01, Housatonic River			0		3	3	3			0		8	+
DSN-039	CT6000-00_02, Housatonic River	2	5	3		2	3	3			0		5	4
DSN-009	CT6000-00_01, Housatonic River	2	2	0		2	3	3			3		4	_
DSN-036	CT6900-00_01, Naugatuck River		6	0		3	3	3			0		6	4
DSN-055	Unnamed Waterbodies		12	0		0	1	2			0		12	-
DSN-069	Unnamed Waterbodies		10	0		0	2	3			0		10	4
DSN-080	Unnamed Waterbodies		9	0		0	3	3			0		9	+
DSN-014	CT6000-00_01, Housatonic River		3	0		2	3	3			3		3	+
DSN-002A	CT6900-00_01, Naugatuck River		7	0		0	3	3			0		7	+
DSN-010	CT6000-00_01, Housatonic River	1	1	0		2	3	3			3		2	-
DSN-011	CT6000-00_01, Housatonic River		2	0		2	3	3			3		2	+
DSN-012	CT6000-00_01, Housatonic River		2	0		2	3	3			3		2	4
DSN-013	CT6000-00_01, Housatonic River		2	0		2	3	3			3		2	+
DSN-026	CT6900-00_01, Naugatuck River		1	3		3	3	3			0		1	4
DSN-031	CT6900-00_01, Naugatuck River		1	3		3	3	3			0		1	+
DSN-034	CT6900-00_01, Naugatuck River		1	3		3	3	3			0		1	4
DSN-079	Unnamed Waterbodies		7	0		0	3	3			0		7	+
DSN-003	Unnamed Waterbodies		8	0		0	1	3			0		8	4
DSN-005	Twomile Brook		6	0		0	3	3			0		6	+
DSN-023	CT6900-00_01, Naugatuck River		3	0		3	3	3			0		3	4
DSN-029	CT6900-00_01, Naugatuck River		1	3	1	3	3	3			0		0	- 14

CT6900-00\_01, Naugatuck River CT6000-00-5+L4\_01, Housatonic Riv

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Ansonia Reservoir

Ansonia Reservoir

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CT6000-00 02, Housatonic River

Unnamed Waterbodies

Twomile Brook

Unnamed Waterbodies

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D59-47         Twomle Brock         2         4         Low         105           D59-48         Unaned Waterbodies         0         0         0         1         3         0         0         4         Low         105           D59-486         Unaned Waterbodies         0         0         1         3         0         0         4         Low         107           D59-468         Unaned Waterbodies         0         0         1         3         0         0         4         Low         108           D59-064         Twomile Brock         0         0         1         3         0         0         4         Low         109           D59-064         Twomile Brock         0         0         1         3         0         0         4         Low         113           D9134         Unaneed Waterbodies         0         0         1         3         0         0         4         Low         113           D91434         Unaneed Waterbodies         0         0         1         3         0         0         4         Low         113           D9149         Unaneed Waterbodies         0 <td< td=""><td>DSN-157</td><td></td><td></td><td>0</td><td>0</td><td>3</td><td>2</td><td></td><td>0</td><td>0</td><td>5</td><td>Low</td><td>103</td></td<>	DSN-157			0	0	3	2		0	0	5	Low	103
D50-681         Unname Waterbodies         0         0         1         3         0         0         4         Low         105           D50-603         Twonile Brook         0         0         0         1         3         0         0         0         4         Low         103           D50-603         Twonile Brook         0         0         0         1         3         0         0         4         Low         103           D50-604         Twonile Brook         0         0         0         1         3         0         0         4         Low         113           D50-131         Unname Waterbodies         0         0         1         3         0         0         4         Low         113           D50+135         Unname Waterbodies         0         0         1         3         0         0         4         Low         114           D50+137         Unname Waterbodies         0         0         1         3         0         0         4         Low         115           D50+142         Uname Waterbodies         0         0         1         3         0         0         4 </td <td>DSN-002</td> <td>Twomile Brook</td> <td></td> <td>0</td> <td>0</td> <td>2</td> <td>2</td> <td></td> <td>0</td> <td>0</td> <td>4</td> <td>Low</td> <td>104</td>	DSN-002	Twomile Brook		0	0	2	2		0	0	4	Low	104
D9h-90         Unnamed Waterbodies         0         0         0         1         3         0         0         4         Low         107           D9h-961         Twomile Brock         0         0         0         1         3         0         0         4         Low         108           D9h-964         Twomile Brock         0         0         0         1         3         0         0         4         Low         109           D9h-944         Twomile Brock         0         0         0         1         3         0         0         4         Low         111           D9h-134         Unnamed Waterbodies         0         0         0         1         3         0         0         4         Low         112           D9h-135         Unnamed Waterbodies         0         0         1         3         0         0         4         Low         113           D9h-145         Unnamed Waterbodies         0         0         0         1         3         0         0         4         Low         114           D9h-146         Unnamed Waterbodies         0         0         0         3 <t< td=""><td>DSN-047</td><td>Twomile Brook</td><td>2</td><td>0</td><td>0</td><td>1</td><td>1</td><td></td><td>0</td><td>2</td><td>4</td><td>Low</td><td>105</td></t<>	DSN-047	Twomile Brook	2	0	0	1	1		0	2	4	Low	105
D59-60:         Twomle Brook         M	DSN-048	Unnamed Waterbodies		0	0	2	2		0	0	4	Low	106
D9h6d2         Twomile Brock         O         O         1         3         O         0         4         Low         109           D9h6d4         Twomile Brock         O         O         1         3         O         0         4         Low         100           D9h143         Unnamed Watehodes         O         O         1         3         O         0         4         Low         111           D9h143         Unnamed Watehodes         O         O         1         3         O         0         4         Low         111           D9h136         Unnamed Watehodes         O         O         1         3         O         O         4         Low         113           D9h136         Unnamed Watehodes         O         O         1         3         O         O         4         Low         113           D9h146         Unnamed Watehodes         O         O         1         3         O         O         4         Low         113           D9h146         Unnamed Watehodes         O         O         3         1         O         O         4         Low         113           D9h146<	DSN-050	Unnamed Waterbodies	0	0	0	1	3		0	0	4	Low	
D9x04d         Twomile Brock         Image         Image <thimage< th=""></thimage<>	DSN-061	Twomile Brook		0	0	1	3		0	0	4	Low	108
D9x133         Unamed Waterbodies         Image Waterbodies         Ima	DSN-062	Twomile Brook		0	0	1	3		0	0	4	Low	109
Dbil3         Unamed Waterhodies         Imaged Waterhodies </td <td>DSN-064</td> <td>Twomile Brook</td> <td></td> <td>0</td> <td>0</td> <td>1</td> <td>3</td> <td></td> <td>0</td> <td>0</td> <td>4</td> <td>Low</td> <td>110</td>	DSN-064	Twomile Brook		0	0	1	3		0	0	4	Low	110
D9N-13         Unamed Watehodies         Image Matehodies	DSN-133	Unnamed Waterbodies		0	0	1	3		0	0	4	Low	111
DSN:136         Unnamed Waterbodies         0         0         1         3         0         0         4         low         114           DSN:147         Unnamed Waterbodies         0         0         1         3         0         0         4         low         115           DSN:147         Unnamed Waterbodies         0         0         1         3         0         0         4         low         116           DSN:147         0         0         0         3         1         0         0         4         low         117           DSN:147         0         0         0         3         1         0         0         4         low         118           DSN:147         0         0         0         3         1         0         0         4         low         112           DSN:15         0         0         0         3         11         0         0         4         low         122           DSN:15         0         0         0         3         1         0         0         4         low         122           DSN:14         Ansonia Reseroir         0	DSN-134	Unnamed Waterbodies		0	0	1	3		0	0	4	Low	112
DSN 137         Unnamed Waterbodies         Image: Constraint of the second seco	DSN-135	Unnamed Waterbodies		0	0	1	3		0	0	4	Low	113
DSN-142         Unnamed Waterhodies         Image of the second se	DSN-136	Unnamed Waterbodies		0	0	1	3		0	0	4	Low	114
DSN:146         Image: constraint of the second	DSN-137	Unnamed Waterbodies		0	0	1	3		0	0	4	Low	115
DSN-147         Image: Constraint of the constraint	DSN-142	Unnamed Waterbodies		0	0	1	3		0	0	4	Low	116
DSN:49         Image: state of the sta	DSN-146			0	0	3	1		0	0	4	Low	117
DSN-150         DN         DN <t< td=""><td>DSN-147</td><td></td><td></td><td>0</td><td>0</td><td>3</td><td>1</td><td></td><td>0</td><td>0</td><td>4</td><td>Low</td><td>118</td></t<>	DSN-147			0	0	3	1		0	0	4	Low	118
DSN-151         Image: state	DSN-149			0	0	3	1		0	0	4	Low	119
DSN-152         Common Participant	DSN-150			0	0	3	1		0	0	4	Low	120
DSN-154         O         O         3         1         O         0         4         Low         123           DSN-155         O         O         0         3         1         O         0         4         Low         123           DSN-13A         Ansonia Reservoir         O         0         3         1         O         0         4         Low         124           DSN-13A         Ansonia Reservoir         O         0         1         3         0         0         0         4         Low         124           DSN-13A         Ansonia Reservoir         O         0         1         3         O         0         0         4         Low         125           DSN-94         Twomile Brook         O         O         0         1         2         O         0         3         Low         127           DSN-092         Twomile Brook         O         O         0         1         2         O         0         3         Low         128           DSN-092         Twomile Brook         O         O         1         2         O         0         0         3         Low	DSN-151			0	0	3	1		0	0	4	Low	
DSN-155         Constraint Reservoir         Constrateant Reservoir         Constraint Reservoir	DSN-152			0	0	3	1		0	0	4	Low	122
DSN-18A         Ansonia Reservoir         Image: constraint of the servoir         Image: conservoir         Image: constraint of the ser	DSN-154			0	0	3	1		0	0	4	Low	
DSN-19A         Ansonia Reservoir         Image: constraint of the servoir         0         0         1         3         Image: constraint of the servoir         10         126           DSN-049         Twomile Brook         Image: constraint of the servoir         0         0         1         2         0         0         0         3         Low         127           DSN-091         Twomile Brook         Image: constraint of the servoir         0         0         1         2         0         0         3         Low         127           DSN-091         Twomile Brook         Image: constraint of the servoir         0         0         1         2         0         0         0         3         Low         128           DSN-091         Unnamed Waterbodies         0         0         0         1         2         0         0         0         33         Low         130           DSN-164         1         1         0         0         0         1         2         0         0         0         10         131           DSN-154         Unnamed Waterbodies         0         0         0         0         0         0         10w         133	DSN-155			0	0	3	1		0	0	4	Low	
DSN-049         Twomile Brook         Image: Constraint of the constraint of th	DSN-18A	Ansonia Reservoir		0	0	1	3		0	0	4	Low	125
DSN-091         Twomile Brook         O         O         O         1         2         O         O         3         Low         128           DSN-092         Twomile Brook         O         O         O         1         2         O         O         3         Low         129           DSN-092         Twomile Brook         O         O         O         1         2         O         O         0         3         Low         130           DSN-109         Unnamed Waterbodies         1         O         O         1         2         O         O         0         3         Low         130           DSN-149         Unnamed Waterbodies         1         O         O         O         O         O         O         O         0         0         0         131           DSN-154         Unnamed Waterbodies         C         C         C         C         C         O         O         Low         132           DSN-158         C         C         C         C         C         C         C         O         O         Low         133           DSN-160         C         C         C         <	DSN-19A			0	0	1	3		0	 0	4	Low	
DSN-092         Twomile Brook         0         0         0         1         2         0         0         3         Low         129           DSN-109         Unnamed Waterbodies         0         0         0         1         2         0         0         0         33         Low         130           DSN-164         1         1         0         0         0         1         2         0         0         0         33         Low         130           DSN-164         1         0         0         0         0         0         0         1         1         Low         131           DSN-138         Unnamed Waterbodies         0         0         0         0         0         10         132           DSN-159         0         0         0         0         0         0         0         10w         133           DSN-159         0         0         0         0         0         0         0         0         10w         134           DSN-160         0         0         0         0         0         0         10w         135           DSN-161         0	DSN-049	Twomile Brook		0	0	1	2		0	0	3	Low	
DSN-109         Unnamed Waterbodies         1         0         1         2         0         0         3         Low         130           DSN-164         1         1         Low         131           DSN-164         Unnamed Waterbodies         1         1         Low         131           DSN-134         Unnamed Waterbodies         0         0         0         0         0         1         1         Low         131           DSN-135         Unnamed Waterbodies         0         0         0         0         0         0         131           DSN-159         0         0         0         0         0         0         0         0         0         0         0         133           DSN-159         0         0         0         0         0         0         0         0         0         0         133           DSN-159         0         0         0         0         0         0         0         0         0         0         0         0         0         133           DSN-160         0         0         0         0         0         0         0         0	DSN-091	Twomile Brook		0	0	1	2		0	0	3	Low	
DSN-164         Image: Mark and Ma	DSN-092			-	0	1			0	0	3	Low	
DSN-143         Unnamed Waterbodies         Image: Constraint of the symbolic constrated constraint of the symbolic	DSN-109	Unnamed Waterbodies		0	0	1	2		0	 0	3		
DSN-158         Image: Constraint of the system of the	DSN-164		1							1	1	Low	-
DSN-159         O         O         O         Low         134           DSN-160         O         O         O         Low         135           DSN-161         O         O         O         Low         135           DSN-161         O         O         O         Low         136           DSN-162         O         O         O         Low         137           DSN-163         O         O         O         Low         137	DSN-143	Unnamed Waterbodies								 0	0	Low	
DSN-160         O         O         Low         135           DSN-161         O         O         O         Low         136           DSN-161         O         O         O         Low         136           DSN-162         O         O         O         Low         137           DSN-163         O         O         Low         137	DSN-158									0	0	Low	
DSN-161         Image: Constraint of the system	DSN-159									 0	0	Low	
DSN-162         O         O         Low         137           DSN-163         O         O         O         Low         138	DSN-160									0	0	Low	
DSN-163	DSN-161									 0	0	Low	
										0	0	Low	
DSN-165 0 0 Low 139	DSN-163									 0	0	Low	
	DSN-165									0	0	Low	139

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	Information, Visual	Municipal Staff, GIS Maps		GIS and Stormwater system Maps	Other	Sampling	Scor	Ranking	Ranking Number
	Scoring Criteria		mined using an	Yes = 3	Frequent = 3	Poor = 3	High = 3	High = 3	Yes = 3	Yes = 3	Yes = 3					
	(Yes = Problem)		mula based on the	No = 0 C	Occasional = 2	P Fair = 2	Medium = 2	Medium = 2	No = 0	No = 0	No = 0	TBD				1
	()	res	sults		None = 0	Good = 0	Low = 1	Low = 1								
DSN-166													0	0	Low	140
DSN-167													0	0	Low	141
DSN-168													0	0	Low	142
DSN-169													0	0	Low	143
DSN-170													0	0	Low	144
DSN-171													0	0	Low	145
DSN-172													0	0	Low	146
DSN-173													0	0	Low	147

#### Impaired Outfalls

Scoring Criteria: If there's no waterbody feature identified the receiving body source will be the name of the subregional basin the outfall resides in

<sup>1</sup> Previous dry weather screening results indicate likely sewer input if any of the following are true:

Olfactory or visual evidence of sewage,

Ammonia 2.0.5 mg/L, surfactants 2.0.25 mg/L, and bacteria levels greater than the water quality criteria applicable to the receiving water, or Ammonia 2.0.5 mg/L, surfactants 2.0.25 mg/L, and detectable levels of chlorine

<sup>14</sup> Previous wet weather screening results indicate impacts to inducine
 <sup>15</sup> Previous wet weather screening results indicate impacts to impaired waters including:
 <sup>16</sup> Total Nitrogen >2.5 mg/L, Total Phosphorous >0.3 mg/L,
 <sup>16</sup> Coll >235col/100 ml for swimming areas and >410 col/100 ml for all others or,
 <sup>16</sup> Total Coliform >500 col/100 ml, or Fecal coliform >31 col/100ml for Class SA and >260 Col/100ml for Class SB, or
 <sup>16</sup> 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.
 <sup>9</sup> 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
 <sup>6</sup> Fair - Water quality limited waterbodies that receive a discharge from the MS4 (Category 5 Waters)
 <sup>6</sup> Good = No water quality impairments

<sup>4</sup> 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. <sup>7</sup> 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.

