2020 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
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Derby, Connecticut

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MS4 General Permit
City of Derby 2020 Annual Report
Existing MS4 Permittee
Permit Number GSM000114
January 1, 2020 – December 31, 2020
Primary MS4 Contact: Edward Armeno; 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) from January 1, 2020 to December 31, 2020.

Part I: Summary of Minimum Control Measure Activities

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

1.1 BMP Summary

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

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.

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

BMP	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

BMP	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	Due to the recent COVID-19 pandemic, the City was not able to make progress towards finalizing the IDDE Plan. The City has a draft plan in place and anticipates reviewing and finalizing the IDDE Plan in 2021.	Develop Written Plan	Public Works	Jul 1, 2018	Dec 31, 2021	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Substantially Complete	Extensive efforts were conducted in 2019 and 2020 to locate and identify new outfalls that were not previously mapped.	Update Existing Outfall Map	Public Works	Jul 1, 2019	Dec 31, 2021 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	Complete	The City uses excel and access spreadsheets, along with GIS, for IDDE tracking.	Develop SOP	Public Works	Jul 1, 2017	Jul 1, 2017 On-going	
3-6 Address IDDE in areas with pollutants of concern	In Progress	The City continued dry weather screening outfalls throughout the City of the worst outfalls identified. Several outfalls were identified that will require further investigation.	Identify IDDEs	Public Works	Jun 2020	On-going	

BMP	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Due	Date completed/projected	Additional details
3-7 Map MS4 System in Priority Areas	In Progress	The City continued significant effort in mapping outfalls, catch basins, manholes and piping in priority areas.	Map Priority Areas	Public Works	Jun 2022	On-going	

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 tracking spreadsheet
- 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 were recorded in 2020		

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	N/A
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	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)
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	N/A
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	N/A
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	N/A
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.	N/A
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.	N/A
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.	N/A
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	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)
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	N/A
Burtville Ave, Derby / 41.31, -72.87	11/15/17 24 hours	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 1hr	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 3hr	No	51-500 gal	Contractor excavating	Private property 7/18/2019	N/A
Ferrara CT/Indian Ave	9/8/19 3hr	No	1-50 gal	Sewer line blockage	Sewer line Jetted and cleaned 9/8/2019	N/A
North Ave/ RT 34	10/1/19 4hr	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 2hr	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 1hr	No	1-50 gal	Excessive flows from severe rain event	Areas cleaned 10/28/2019	N/A
Caroline St/Wpca Plant	12/14/19 4hr	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
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 2hr	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 2hr	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 2hr	No	1-50 gal	Sewer line blockage	Sewer line Jetted and cleaned 9/13/2020	N/A

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 continue tracking illicit discharges using an excel table. 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 2020		

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	140
Estimated or actual number of interconnections	~40
Outfall mapping complete	85%
Interconnection mapping complete	25%
System-wide mapping complete (detailed MS4 infrastructure)	25%
Outfall assessment and priority ranking	96%
Dry weather screening of all High and Low priority outfalls complete	138
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. Due to the COVID-19 pandemic, a training event was not completed in 2020. Annual training is anticipated to be conducted in 2021.

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

4.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Due	Date completed/ 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	The City is in the process of reviewing current City regulations and ordinances in compliance with the MS4 General Permit.	Review and update regulations	Zoning Department	Jul 1, 2019	Dec 31, 2021	The City will continue to update ordinances/ regulations to improve compliance with MS4 General Permit.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	
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	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	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 On-going	

BMP	Status	Activities in current reporting period	Measurable goal	Department/ Person Responsible	Due	Date completed/ projected	Additional details
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	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, 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.

- 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

BMP	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, 2021	

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed/ projected	Additional details
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	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	To be evaluated/ prepared	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, 2019	Jul 1, 2020	
5-5 DCIA mapping	Substantially Completed	The DCIA for the priority areas have been calculated using the available impervious cover layers.	Calculate DCIA	Public Works	Jul 1, 2020	Feb 18, 2020	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	Not specified	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.
- 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.
- 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	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, 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

BMP	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	Due to the COVID-19 pandemic, a training event was not completed in 2020. Annual training is anticipated to be conducted in 2021.	Track employee participation	Public Works	On-going	On-going	Additional training for other City staff will be conducted in the future.
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.

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed/ projected	Additional details
6-3 Implement coordination with interconnected MS4s	In Progress	Through the outfall identification process and system mapping, the City continues to 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		The City plans on notifying industrial facilities of their requirements to register under the Industrial Stormwater GP.
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.	Develop tracking procedure and data base	City Engineer	Jul 1, 2017	Dec 31, 2021 On-going	In 2021, the City will be working with its consultant to track disconnected DCIAs.
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	Due to the COVID pandemic restrictions in 2020, the City was unable to complete any progress towards this requirement. If restrictions allow, it is the City's intention to perform efforts towards completing this requirement in 2021.	Identify potential retrofit projects	Public Works	Jul 1, 2020	Dec 31, 2021	In 2021, the City will be working with its consultant to identify and prioritize potential projects for the Retrofit Program to the maximum extent practicable.
6-9 Implement retrofit projects to disconnect 2% of DCIA	In Progress	In 2021, 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	

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed/ projected	Additional details
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 2020 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.
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	Due to the COVID-19 pandemic, a training event was not completed in 2020. Annual training is anticipated to be conducted in 2021.
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.
Due to the COVID pandemic restrictions in 2020, the City was unable to complete any progress towards this requirement. If restrictions allow, it is the City's intention to perform efforts towards completing this requirement in 2021. In 2021, 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 in future years.
In 2021, 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 2021, 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: http://s.uconn.edu/ctms4map.

Nitrogen/ Phosphorus ☒ Bacteria ☒ Mercury ☐ Other Pollutant of Concern ☒

1.2 Describe program status.

Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.
The City has collected samples from 29 outfalls that discharge to impaired waters. 13 of the outfalls sampled so far had elevated levels of bacteria present. 4 of the outfalls sampled had elevated levels of turbidity discharging from the outfall when compared to the receiving waterbody turbidity level. 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.

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	Latitude	Longitude	Sampled Date	ΔTurbidity NTU	E. Coli (100col/L)	Nitrogen (mg/L)	Phosphorous (mg/L)	Lab	Investigation Required
DSN-009	41.30464202	-73.07259	4/16/18	N/A	20	N/A	N/A	Phoenix	No
DSN-010	41.30464202	-73.07259	4/16/18	N/A	10	N/A	N/A	Phoenix	No
DSN-011	41.30464202	-73.07259	4/16/18	N/A	10	N/A	N/A	Phoenix	No
DSN-012	41.30464202	-73.07259	4/16/18	N/A	10	N/A	N/A	Phoenix	No
DSN-013	41.30464202	-73.07259	4/16/18	N/A	10	N/A	N/A	Phoenix	No
DSN-014	41.30464202	-73.07259	4/16/18	N/A	10	N/A	N/A	Phoenix	No
DSN-022	41.33063309	-73.0789982	4/16/18	3.93	1270	N/A	N/A	Phoenix	Yes

Outfall ID	Latitude	Longitude	Sampled Date	ΔTurbidity NTU	E. Coli (100col/L)	Nitrogen (mg/L)	Phosphorous (mg/L)	Lab	Investigation Required
DSN-023	41.31472222	-73.0805556	4/16/18	-0.28	2010	N/A	N/A	Phoenix	Yes
DSN-024	41.31661552	-73.0811531	9/25/18	11.75	2760	N/A	N/A	Phoenix	Yes
DSN-025	41.31681736	-73.0811299	4/25/18	7.76	2140	N/A	N/A	Phoenix	Yes
DSN-026	41.31638889	-73.0811111	4/25/18	3.6	10	N/A	N/A	Phoenix	No
DSN-027	41.31799129	-73.0812381	6/18/19	9.82	3450	N/A	N/A	Phoenix	Yes
DSN-028	41.32888889	-73.0808333	6/18/19	1.71	8660	N/A	N/A	Phoenix	Yes
DSN-031	41.3178418	-73.0812182	4/16/18	-20.15	20	N/A	N/A	Phoenix	No
DSN-034	41.31832547	-73.08133427	4/16/18	24.67	10	N/A	N/A	Phoenix	Yes
DSN-035	41.32388889	-73.0819444	9/25/18	2.2	11200	N/A	N/A	Phoenix	Yes
DSN-036	41.32805556	-73.0819444	4/25/18	0.71	20	N/A	N/A	Phoenix	No
DSN-037	41.31666667	-73.0877778	4/25/18	N/A	8160	N/A	N/A	Phoenix	Yes
DSN-039	41.31930793	-73.0904697	4/25/18	N/A	683	N/A	N/A	Phoenix	Yes
DSN-040	41.32263	-73.095231	4/25/18	N/A	161	N/A	N/A	Phoenix	No
DSN-041	41.32305556	-73.0958333	4/25/18	N/A	10	N/A	N/A	Phoenix	No
DSN-043	41.325649	-73.100455	4/25/18	N/A	63	N/A	N/A	Phoenix	No
DSN-044	41.32567598	-73.100383	4/25/18	N/A	63	N/A	N/A	Phoenix	No
DSN-060	41.31312766	-73.0564258	6/13/19	N/A	4610	N/A	N/A	Phoenix	Yes
DSN-063	41.31304404	-73.056493	6/13/19	N/A	75	N/A	N/A	Phoenix	No
DSN-065	41.3127415	-73.0575903	6/13/19	N/A	712	N/A	N/A	Phoenix	Yes
DSN-066	41.31285516	-73.0572504	6/13/19	N/A	9210	N/A	N/A	Phoenix	Yes
DSN-071	41.3048815	-73.0654685	6/13/19	N/A	231	N/A	N/A	Phoenix	No
DSN-076	41.32972908	-73.1077658	6/18/19	N/A	12000	1.79	0.216	Phoenix	Yes

2.2 Credit for screening data collected under 2004 permit

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

Outfall	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?
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.	
DSN-072	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-103E	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-103W	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-106	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)
					To be initiated during 2021	

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	Latitude	Longitude	Sample 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-056	41.32188996	-73.05615197	8/17/17	16.64	213	0.12	0	0.03	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	41.318007	-73.049241	8/14/17	21.17	826	0.41	0.25	0.07	0	206	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	41.33782931	-73.11168308	3/16/21	7.9	267	0.129	0	0.18	0.04	10	Phoenix	NO
DSN-145	41.3404961	-73.11015421	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	41.31378	-73.070145	3/23/21	19.5	251	0.103	0	0.02	0.07	31	Phoenix	NO
DSN-157	41.31323	-73.069685	3/30/21	10.9	258	0.123	0	0	0.07	10	Phoenix	NO
DSN-159	41.321543	-73.066807	4/6/21	12	220	0.104	0	0.01	0.14	31	Phoenix	NO
DSN-160	41.324611	-73.064447	4/6/21	15.2	274	0.13	0	0.01	0.11	1440	Phoenix	NO
DSN-162	41.321087	-73.054664	4/7/21	15.2	260	0.124	0	0.13	0.11	3870	Phoenix	NO

Impaired Outfalls

Outfall ID	Latitude	Longitude	Sampled Date	ΔTurbidity NTU	E. Coli (100col/L)	Lab	Investigation Required
DSN-009	41.304642	-73.07259	8/22/17	n/a	<10	Phoenix	No
DSN-010	41.30464202	-73.07259	8/22/17	n/a	20	Phoenix	No
DSN-040	41.32263	-73.095231	8/14/17	n/a	161	Phoenix	No
DSN-044	41.325676	-73.100383	8/22/17	n/a	31	Phoenix	No

Outfall ID	Latitude	Longitude	Sampled Date	ΔTurbidity NTU	E. Coli (100col/L)	Lab	Investigation Required
DSN-045	41.32785908	-73.10433884	8/14/17	n/a	262	Phoenix	No
DSN-070	41.30683003	-73.07550796	8/17/17	n/a	31	Phoenix	No
DSN-071	41.304882	-73.065469	3/10/21	n/a	<10	Phoenix	No
DSN-076	41.329729	-73.107766	3/10/21	n/a	183	Phoenix	No
DSN-091	41.30368654	-73.06613004	3/10/21	-0.49	<10	Phoenix	No
DSN-092	41.30365561	-73.06613694	3/10/21	14.96	<10	Phoenix	Yes
DSN-112	41.32485798	-73.080946	11/22/19	1.04	73	Phoenix	No
DSN-140	41.31948099	-73.09039628	2/19/20	-39.94	>24200	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.

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	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-001	41.32082202	-73.047184	9/25/18	17.32	117	0.1	0.5	0.13	1	24200	Phoenix	Yes
DSN-002A	41.31285622	-73.04815455	9/25/18	17.92	26	0.01	1	0.02	0.5	2140	Phoenix	Yes
DSN-003	41.31722222	-73.05416667	6/13/19	19.3	44.7	0.0204	0.25	0.05	0.25	14100	Phoenix	No
DSN-004	41.31722222	-73.05416667	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
DSN-007	41.318591	-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	41.31946171	-73.07470352	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	41.32128202	-73.05622598	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-073	41.31800696	-73.04924101	9/25/18	17.3	24	0.01	0	0.01	0.25	7700	Phoenix	No
DSN-075	41.33952	-73.11187	6/13/19	17.59	63	0.03	0.25	0.02	0.5	14100	Phoenix	No

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-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

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

Outfall ID	Receiving Water	System Vulnerability Factors
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
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
See Part III, Section 2.2				

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, a Barton & Loguidice company**
Signature/Date: **7/1/2021**	Signature / Date: **7/1/2021**
Email: **abaklik@derbyct.gov**	Email: **tjt@bartonandloguidice.com**

Catchment ID	Receiving Water	Dry Weather Sampling Results Indicate Likely Illicit Discharge? [1]	Wet Weather Sampling Results indicated Likely Illicit Discharge? [1a]	Discharging to Area of Concern to Public Health? [2]	Frequency of Past Discharge Complaints	Receiving Water Quality [3]	Density of Generating Sites [4]	Age of Development/ Infrastructure [5]	Historic Combined Sewers or Septic? [6]	Aging Septic? [7]	Culverted Streams? [8]	Additional Characteristics	Sampling Score	Score	Priority Ranking	Priority Ranking Number
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				
Scoring Criteria (Yes = Problem)		Score is determined using an extrapolated formula based 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	Unnamed Waterbodies		15	0		0	3	3			0		15	21	High	4
DSN-002	Twomile Brook			0		0	2	2			0		0	4	Low	105
DSN-002A	CT6900-00_01, Naugatuck River		7	0		0	3	3			0		7	13	High	19
DSN-003	Unnamed Waterbodies		8	0		0	1	3			0		8	12	Low	28
DSN-004	Unnamed Waterbodies		4	0		0	1	3			0		4	8	Low	51
DSN-005	Twomile Brook		6	0		0	3	3			0		6	12	Low	29
DSN-006	Twomile Brook	1		0		0	3	1			0		1	5	Low	91
DSN-007	Ansonia Reservoir		4	3		0	1	3			0		4	11	Low	35
DSN-008	Ansonia Reservoir			3		0	1	3			0		0	7	Low	63
DSN-009	CT6000-00_01, Housatonic River	2	2	0		2	3	3			3		4	15	High	12
DSN-010	CT6000-00_01, Housatonic River	1	1	0		2	3	3			3		2	13	High	20
DSN-011	CT6000-00_01, Housatonic River		2	0		2	3	3			3		2	13	High	21
DSN-012	CT6000-00_01, Housatonic River		2	0		2	3	3			3		2	13	High	22
DSN-013	CT6000-00_01, Housatonic River		2	0		2	3	3			3		2	13	High	23
DSN-014	CT6000-00_01, Housatonic River		3	0		2	3	3			3		3	14	High	18
DSN-015	Ansonia Reservoir		3	3		0	2	3			0		3	11	Low	36
DSN-018	Unnamed Waterbodies			0		0	3	3			0		0	6	Low	79
DSN-019	Unnamed Waterbodies		5	0		0	3	3			0		5	11	Low	37
DSN-021	CT6000-00_01, Housatonic River		166	0		2	3	3			0		166	174	High	1
DSN-022	CT6900-00_01, Naugatuck River		2	0		3	3	3			0		2	11	High	38
DSN-023	CT6900-00_01, Naugatuck River		3	0		3	3	3			0		3	12	High	30
DSN-024	CT6900-00_01, Naugatuck River		5	3		3	3	3			0		5	17	High	6
DSN-025	CT6900-00_01, Naugatuck River		5	3		3	3	3			0		5	17	High	7
DSN-026	CT6900-00_01, Naugatuck River		1	3		3	3	3			0		1	13	High	24
DSN-027	CT6900-00_01, Naugatuck River		5	3		3	3	3			0		5	17	High	8
DSN-028	CT6900-00_01, Naugatuck River		7	3		3	3	3			0		7	19	High	5
DSN-028A	Naugatuck River			0		3	3	3			0		0	9	Low	43
DSN-029	CT6900-00_01, Naugatuck River			3		3	3	3			0		0	12	Low	31
DSN-030	CT6900-00_01, Naugatuck River			3		3	3	3			0		0	12	Low	32
DSN-031	CT6900-00_01, Naugatuck River		1	3		3	3	3			0		1	13	High	25
DSN-032	Naugatuck River			0		3	3	3			0		0	9	High	44
DSN-034	CT6900-00_01, Naugatuck River		1	3		3	3	3			0		1	13	High	26
DSN-035	CT6900-00_01, Naugatuck River		8	0		3	3	3			0		8	17	High	9
DSN-036	CT6900-00_01, Naugatuck River		6	0		3	3	3			0		6	15	High	13
DSN-037	CT6000-00_02, Housatonic River		16	3		2	3	3			0		16	27	High	3
DSN-039	CT6000-00_02, Housatonic River		5	3		2	3	3			0		5	16	High	11
DSN-040	CT6000-00_02, Housatonic River	1	1	0		2	3	3			0		2	10	High	41
DSN-041	CT6000-00_02, Housatonic River		1	0		2	3	3			0		1	9	High	45
DSN-042	CT6000-00_02, Housatonic River			0		2	3	3			0		0	8	Low	52
DSN-043	CT6000-00_02, Housatonic River		1	0		2	3	2			0		1	8	High	53
DSN-044	CT6000-00_02, Housatonic River	1	1	0		2	3	2			0		2	9	High	46
DSN-045	CT6000-00-5+L4_01, Housatonic River	1		3		3	3	2			0		1	12	High	33
DSN-046	Unnamed Waterbodies		3	0		0	1	3			0		3	7	Low	64
DSN-047	Twomile Brook	2		0		0	1	1			0		2	4	Low	106
DSN-048	Unnamed Waterbodies			0		0	2	2			0		0	4	Low	107
DSN-049	Twomile Brook			0		0	1	2			0		0	3	Low	128
DSN-050	Unnamed Waterbodies			0		0	1	3			0		0	4	Low	108
DSN-051	Unnamed Waterbodies		6	0		0	1	2			0		6	9	Low	47
DSN-054	Unnamed Waterbodies			0		0	2	3			0		0	5	Low	92
DSN-055	Unnamed Waterbodies		12	0		0	1	2			0		12	15	Low	14
DSN-056	Unnamed Waterbodies	2		0		0	1	2			0		2	5	Low	93
DSN-057	Unnamed Waterbodies		5	0		0	2	2			0		5	9	Low	48
DSN-058	Unnamed Waterbodies		3	0		0	2	2			0		3	7	Low	65
DSN-059	Unnamed Waterbodies		2	0		0	2	2			0		2	6	Low	80
DSN-060	Unnamed Waterbodies		5	0		0	1	3			0		5	9	Low	49
DSN-061	Twomile Brook			0		0	1	3			0		0	4	Low	109
DSN-062	Twomile Brook			0		0	1	3			0		0	4	Low	110
DSN-063	Twomile Brook		2	0		0	1	3			0		2	6	Low	81
DSN-064	Twomile Brook			0		0	1	3			0		0	4	Low	111
DSN-065	Twomile Brook		3	0		0	1	3			0		3	7	Low	66
DSN-066	Twomile Brook		8	0		0	1	3			0		8	12	Low	34
DSN-067	Unnamed Waterbodies	4		0		0	3	2			0		4	9	Low	50
DSN-068	Unnamed Waterbodies		4	0		0	2	2			0		4	8	Low	54
DSN-069	Unnamed Waterbodies		10	0		0	2	3			0		10	15	Low	15
DSN-070	CT6000-00_02, Housatonic River	3		0		2	3	3			0		3	11	High	39
DSN-071	Twomile Brook		1	0		0	3	2			0		1	6	Low	82
DSN-073	Unnamed Waterbodies		5	0		0	3	3			0		5	11	Low	40
DSN-075	Unnamed Waterbodies		9	0		0	3	3			0		9	15	Low	16
DSN-076	CT6000-00-5+L4_01, Housatonic River		8	0		3	3	3			0		8	17	High	10
DSN-077	Pink House Cove Brook		1	0		0	3	1			0		1	5	Low	94
DSN-078	Unnamed Waterbodies	1		0		0	3	3			0		1	7	Low	67
DSN-079	Unnamed Waterbodies		7	0		0	3	3			0		7	13	Low	27
DSN-080	Unnamed Waterbodies		9	0		0	3	3			0		9	15	Low	17
DSN-083	Unnamed Waterbodies			0		0	3	3			0		0	6	Low	83
DSN-089	Twomile Brook			0		0	3	2			0		0	5	Low	95
DSN-091	Twomile Brook			0		0	1	2			0		0	3	Low	129
DSN-092	Twomile Brook			0		0	1	2			0		0	3	Low	130
DSN-094	CT6000-00-5+L4_01, Housatonic River			0		3	1	3			0		0	7	Low	68
DSN-095	CT6000-00-5+L4_01, Housatonic River			0		3	1	3			0		0	7	Low	69
DSN-096	CT6000-00-5+L4_01, Housatonic River			0		3	1	3			0		0	7	Low	70
DSN-097	CT6000-00-5+L4_01, Housatonic River			0		3	2	3			0		0	8	Low	55
DSN-098	CT6000-00-5+L4_01, Housatonic River			0		3	2	3			0		0	8	Low	56
DSN-099	CT6900-00_01, Naugatuck River			0		3	2	3			0		0	8	Low	57
DSN-100	CT6000-00-5+L4_01, Housatonic River			0		2	2	3			0		0	7	Low	71
DSN-101	CT6000-00-5+L4_01, Housatonic River			0		2	1	3			0		0	6	Low	84
DSN-102	CT6000-00-5+L4_01, Housatonic River			0		2	2	2			0		0	6	Low	85
DSN-109	Unnamed Waterbodies			0		0	1	2			0		0	3	Low	131
DSN-110	CT6900-00_01, Naugatuck River			0		3	1	3			0		0	7	Low	72
DSN-111	CT6900-00_01, Naugatuck River			0		3	1	3			0		0	7	Low	73
DSN-112	CT6900-00_01, Naugatuck River	2		0		3	2	3			0		2	10	Low	42
DSN-113	CT6900-00_01, Naugatuck River			0		3	2	3			0		0	8	Low	58
DSN-114	CT6900-00_01, Naugatuck River			0		3	1	3			0		0	7	Low	74
DSN-115	CT6000-00_02, Housatonic River			0		0	2	3			0		0	5	Low	96
DSN-118	CT6000-00_02, Housatonic River			0		0	2	3			0		0	5	Low	97
DSN-119	CT6000-00_02, Housatonic River			0		0	2	3			0		0	5	Low	98
DSN-120	CT6000-00_02, Housatonic River			0		0	2	3			0		0	5	Low	99
DSN-121	CT6000-00_02, Housatonic River			0		0	2	3			0		0	5	Low	100
DSN-122	CT6000-00_02, Housatonic River			0		0	2	3			0		0	5	Low	101
DSN-123	CT6000-00_02, Housatonic River			0		0	2	3			0		0	5	Low	102
DSN-124	CT6000-00_02, Housatonic River			0		2	2	3			0		0	7	Low	75
DSN-125	CT6000-00_02, Housatonic River			0		2	2	3			0		0	7	Low	76
DSN-126	CT6000-00_02, Housatonic River			0		2	2	3			0		0	7	Low	77
DSN-127	CT6000-00_02, Housatonic River			0		2	1	3			0		0	6	Low	86
DSN-128	CT6000-00_02, Housatonic River			0		2	3	3			0		0	8	Low	59
DSN-129	CT6000-00_02, Housatonic River			0		2	3	3			0		0	8	Low	60
DSN-130	CT6000-00_02, Housatonic River			0		0	3	3			0		0	6	Low	87
DSN-131													0	0	Low	132
DSN-132	CT6900-00_01, Naugatuck River			0		3	1	3			0		0	7	Low	78
DSN-133	Unnamed Waterbodies			0		0	1	3			0		0	4	Low	112
DSN-134	Unnamed Waterbodies			0		0	1	3			0		0	4	Low	113
DSN-135	Unnamed Waterbodies			0		0	1	3			0		0	4	Low	114
DSN-136	Unnamed Waterbodies			0		0	1	3			0		0	4	Low	115
DSN-137	Unnamed Waterbodies			0		0	1	3			0		0	4	Low	116
DSN-138	CT6000-00-5+L4_01, Housatonic River			0		3	2	3			0		0	8	Low	61
DSN-140	CT6000-00_02, Housatonic River	22		0		2	1	3			0		22	28	High	2
DSN-141	CT6000-00_02, Housatonic River			0		2	1	3			0		0	6	Low	88
DSN-142	Unnamed Waterbodies			0		0	1	3			0		0	4	Low	117
DSN-143	Unnamed Waterbodies												0	0	Low	133
DSN-144	Unnamed Waterbodies	2		0		0	3	3			0		2	8	Low	62
DSN-145	Unnamed Waterbodies			0		0	3	3			0		0	6	Low	89
DSN-146				0		0	3	1			0		0	4	Low	118
DSN-147				0		0	3	1			0		0	4	Low	119
DSN-148				0		0	3	3			0		0	6	Low	90
DSN-149				0		0	3	1			0		0	4	Low	120
DSN-150				0		0	3	1			0		0	4	Low	121
DSN-151				0		0	3	1			0		0	4	Low	122
DSN-152				0		0	3	1			0		0	4	Low	123
DSN-154				0		0	3	1			0		0	4	Low	124

Catchment ID	Receiving Water	Dry Weather Sampling Results Indicate Likely Illicit Discharge? [1]	Wet Weather Sampling Results indicated Likely Illicit Discharge? [1a]	Discharging to Area of Concern to Public Health? [2]	Frequency of Past Discharge Complaints	Receiving Water Quality [3]	Density of Generating Sites [4]	Age of Development/ Infrastructure [5]	Historic Combined Sewers or Septic? [6]	Aging Septic? [7]	Culverted Streams? [8]	Additional Characteristics	Sampling Score	Score	Priority Ranking	Priority Ranking Number
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				
Scoring Criteria (Yes = Problem)		Score is determined using an extrapolated formula based 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-155				0		0	3	1			0		0	4	Low	125
DSN-156				0		0	3	2			0		0	5	Low	103
DSN-157				0		0	3	2			0		0	5	Low	104
DSN-18A	Ansonia Reservoir			0		0	1	3			0		0	4	Low	126
DSN-19A	Ansonia Reservoir			0		0	1	3			0		0	4	Low	127

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

[1] Previous dry weather screening results indicate likely sewer input if any of the following are true:
Olfactory or visual evidence of sewage,
Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and bacteria levels greater than the water quality criteria applicable to the receiving water, or
Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and detectable levels of chlorine

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

[2] Catchments that discharge to or in the vicinity of any of the following areas: public beaches, recreational areas, drinking water supplies, or shellfish beds

[3] 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.)

[5] 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

[6] 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.

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

[8] Any river or stream that is culverted for distance greater than a simple roadway crossing.