

MS4 General Permit
City of New Britain, 2018 Annual Report
Existing MS4 Permittee
Permit Number GSM 000064
[January 1, 2018 – December 31, 2018]

This report documents the City of New Britain's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2018 to December 31, 2018.

Part I: Summary of Minimum Control Measure Activities

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

1.1 BMP Summary

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|--|-----------------------|---|--|---------------------------------|-------------|---|---|
| 1-1 Implement public education and outreach | In progress / Ongoing | The City provided a section on "Stormwater Management in Connecticut" on measures to take to help reduce pollution and improve water quality in its annual Water Quality Report. The City also updated its website to provide additional information related to Stormwater Pollutants of Concern, along with general pollutant reduction practices for residents. | Develop and implement public education program | DPW | Jul 1, 2018 | Jul 1, 2018 | Public education and outreach program is ongoing. |
| 1-2 Address education/ outreach for pollutants of concern* | In progress / Ongoing | The City provided a section on "Stormwater Management in Connecticut" on measures to take to help reduce pollution and improve water quality in its annual Water Quality Report | Identify pollutants and incorporate into BMP 1-1 | DPW | Jul 1, 2018 | Jul 1, 2018 | Public education and outreach program is ongoing. |

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

Continue to expand the public education program with additional website information. Explore the feasibility of doing a direct mailing flyer with water bills once per year. Continue outreach program as detailed under Minimum Measure 2, including public speaking engagements.

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. |
|---|--|---|---|--|
| Publish section on "Stormwater Management in Connecticut" on measures to take to help reduce pollution and improve water quality in its annual Water Quality Report. This is mailed annually to all people on City water. | Residents and businesses (approx. 70,000) | Proper car care, material storage and disposal, fertilizer usage, pet waste collection, car washing, septic system maintenance, illicit discharges, disconnected impervious area, water conservation. | Phosphorus, nitrogen, bacteria | DPW |
| Host a 2-hour joint Water Summit with a focus on water and sewer-related subjects targeting applicable City staff. A tour of the treatment plant was conducted after presentations concluded. | City staff and departments (approx. 50) | Topics included water quality treatment and overview, illicit discharge detection and elimination, field investigations, and MS4 permit compliance | N/A | DPW |
| Provided school tours of the treatment plant. 3 tours were given this year. | Students (approx. 75) | Topics included illicit discharges and other stormwater-related topics. | N/A | DPW |

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

2.1 BMP Summary

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|---|--------------------|--|--|---------------------------------|--------------|---|---|
| 2-1 Comply with public notice requirements for the Stormwater Management Plan | Complete | New Britain published the public notice online on April 1, 2018 during a previous reporting period and the plan is still available for download. | Publish SMP and issue public notice requesting comments | DPW | Apr 3, 2018 | Apr 1, 2017 | The SMP remains available online, along with additional information on the MS4 permit. To date, no comments have been received. |
| 2-2 Comply with public notice requirements for Annual Reports | Complete / Ongoing | New Britain published the annual report online on February 15, 2018. | Publish annual reports and issue public notice requesting comments | DPW | Feb 15, 2018 | Feb 15, 2018 | The annual report is available online for public comment. |

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

Continue to make the Stormwater Management Plan and Annual Report available online and for public comment. Continue to host periodic public outreach and participation events as time and schedule allows. Engagements are expected to include periodic public speaking engagements with a combination of topics that include stormwater, drinking water, and sewer, as well as the targeted education events outlined under Minimum Measure 1.

2.3 Public Involvement/Participation reporting metrics

| Metrics | Implemented | Date | Posted |
|--|-------------|--------------|---|
| Availability of the Stormwater Management Plan announced to public | Yes | Apr 1, 2017 | http://www.newbritainct.gov/services/public_works/programs_n_services/storm_water_management.htm |
| Availability of Annual Report announced to public | Yes | Feb 15, 2019 | http://www.newbritainct.gov/civicax/filebank/blobdload.aspx?BlobID=25609 |

3. Illicit Discharge Detection and Elimination (Section 6(a)(3) and Appendix B / page 22)

3.1 BMP Summary

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|--|--------------------|--|---|--|-------------|---|--|
| 3-1 Develop written IDDE program | Complete / Ongoing | The City completed the written IDDE program in full compliance with permit requirements during a previous reporting period in 2017. | Develop and implement IDDE program | DPW | Jul 1, 2018 | Apr 1, 2017 | Compliance with the written program is ongoing. |
| 3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas | Complete / Ongoing | New Britain mapped all known and accessible outfalls throughout the city in 2016 and early 2017 during a previous reporting period. Additional information, including manholes and pipe connectivity, were also included. | Complete and update mapping | DPW, Engineering | Jul 1, 2019 | Apr 1, 2017 | As more outfalls are located, they are added to the City's GIS database. By early 2020, the City will add catch basins to the map to delineate catchment areas draining to each outfall. |
| 3-3 Implement citizen reporting program | Complete / Ongoing | The City established a utility called SeeClickFix that allows users from a website or mobile device to report an illicit discharge. New Britain also publishes a phone number in the annual Water Quality Report for citizens to report illegal activities. | Develop program and investigate citizen reports | DPW | Jul 1, 2017 | Jul 1, 2017 | Tracking of citizen complaints is ongoing. During 2018, the City received 1 complaint, which was related to sanitary sewer. |
| 3-4 Establish legal authority to prohibit illicit discharges | Complete / Ongoing | New Britain reviewed its IDDE bylaws during a previous reporting period and has determined that it has legal authority as required under the Permit. | Establish and enforce legal authority | DPW; Engineering, Licenses, Permits & Inspection | Jul 1, 2018 | Jul 1, 2018 | Illicit discharge enforcement is ongoing. |
| 3-5 Develop record keeping system for IDDE tracking | Complete / Ongoing | The City developed an IDDE tracking database as part of its written IDDE program, completed in early 2017 during a previous reporting period. During 2018, the City removed one illicit discharge identified on Kent Road identified during catchment investigations. See Part II and Part III at the end of this report for more information. | Develop and implement IDDE tracking system | DPW | Jul 1, 2017 | Jul 1, 2017 | Tracking of illicit discharges is ongoing. |

3.1 BMP Summary (continued)

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|--|-----------------------|---|---|---------------------------------|---------------|---|---|
| 3-6 Address IDDE in areas with pollutants of concern | In progress / Ongoing | New Britain is actively investigating illicit discharges through its program of dry and wet weather sampling. | Review impaired water guidance and track progress of BMPs for impaired waters | DPW | Not specified | Ongoing | As part of an agreement with CT DEEP, the City has a 3-year plan in place to investigate areas with indications of illicit discharges. These investigations are ongoing. The City recently performed work in areas N1 and C9. |
| 3-7 Outfall and interconnection dry weather screening and sampling | Complete | The City investigated all known and accessible outfalls to collect samples and perform other screening activities in 2016 during dry weather. No additional dry weather screening was performed during 2018 due to general wet weather and high groundwater levels, particularly during the fall. | Develop and implement screening procedures | DPW | Varies | Apr 1, 2017 | As part of an agreement with CT DEEP, the City has a 3-year plan in place to investigate areas with indications of illicit discharges. These investigations are ongoing. The City is also completing select wet weather sampling as funding allows. |
| 3-8 Sanitary Sewer Overflows (SSOs) Inventory | Complete / Ongoing | New Britain created an SSO inventory of all known overflows dating back to 2012 as part of its SMP. Information was updated to reflect events of the past year. | Create SSO inventory and report new SSOs | DPW | Oct 29, 2017 | Apr 1, 2017 | SSO inventory update and investigations are ongoing. |

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

The City will work towards expanding its SeeClickFix utility to provide more information to users in order to make illicit discharge reporting easier, pending available budget and staff time. Anticipated improvements include better drop-down menus and information on various types of illicit discharges.

As part of an agreement with CT DEEP, the City has a 3-year plan in place to investigate areas with indications of illicit discharges. These investigations are ongoing. The City also plans to continue select wet weather sampling as funding allows.

Many other items are ongoing, such as illicit discharge investigations, bylaw enforcement, infrastructure mapping, SSO and IDDE inventorying and tracking, etc.

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

| Date of Report | Location / suspected source | Response taken |
|----------------|-----------------------------|-----------------------------|
| 1 | 815 Shuttle Meadow Avenue | Repair failed septic system |

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) |
|--|---------------------------------|-----------------------------------|-----------------------------|--|---|-------------------------------|
| See attached table | | | | | | |

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 uses an Illicit Discharge Tracking Form as part of its IDDE Plan, completed in 2017. This form in part documents the location, cause, description of the event, and corrective actions taken. Information is recorded in an electronic database that in part tracks illicit discharge reports, locations, and response efforts. New Britain updates the database as reports come in and follow-up actions are performed. This information is the responsibility of the Deputy Director of Public Works, Utility Division and Superintendent of Water and Sewer.

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 |
|--|--|---|
| 815 Shuttle Meadow Avenue | Repair failed system | Mason Pond Brook watershed, no waterbody impacted |

3.7 IDDE reporting metrics

| Metrics | |
|--|-----------------------------------|
| Estimated or actual number of MS4 outfalls | Approx. 290 (271 located to date) |
| Estimated or actual number of interconnections | # |
| Outfall mapping complete | 95% |
| Interconnection mapping complete | (%) |
| System-wide mapping complete (detailed MS4 infrastructure) | 80% |
| Outfall assessment and priority ranking | 95% |
| Dry weather screening of all High and Low priority outfalls complete | 95% |
| Catchment investigations complete | 0 |
| Estimated percentage of MS4 catchment area investigated | 0% |

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

IDDE training is conducted annually for employees involved in the IDDE program. Training generally includes the following topics: information on how to identify illicit discharges and SSOs; impacts from fats, oils, and greases; pollution in the environment and waterways; and employee roles within the framework of the IDDE program. IDDE training is performed concurrent with Good Housekeeping measures outlined under BMP 6-1.

4. Construction Site Runoff Control (Section 6(a)(4) / page 25)

4.1 BMP Summary

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|--|-----------------------|--|---|---|-------------|---|--|
| 4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit | In progress / Ongoing | The City has continued review of existing regulations to confirm legal authority or areas where modifications are required. | Establish and enforce legal authority | Engineering; Licenses, Permits & Inspection | Jul 1, 2019 | Jul 1, 2019 | Existing regulations were enforced during this reporting period, and will continue to be enforced until updated as required to meet permit requirements. |
| 4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval | Complete | A plan was developed to coordinate between departments on site plan review and approval. | Develop and implement coordination plan | Licenses, Permits & Inspection | Jul 1, 2017 | Jul 1, 2017 | Departments coordinate as needed to complete site plan review as noted under BMP 4-3. |
| 4-3 Review site plans for stormwater quality concerns | Complete / Ongoing | Site plans were reviewed for all development and redevelopment projects with soil disturbance greater than 1 acre. The City conducted 3 site plan reviews for those with soil disturbance greater than 1 acre. | Perform site plan reviews | Engineering; Licenses, Permits & Inspection | Jul 1, 2017 | Jul 1, 2017 | New Britain also provides developers with a checklist as noted under BMP 4-6 that in part addresses stormwater controls to minimize impacts to water quality. |
| 4-4 Conduct site inspections | Complete / Ongoing | Site inspections were performed for all development and redevelopment projects with soil disturbance greater than 1 acre. The City inspected 3 development projects with soil disturbance greater than 1 acre. | Perform site inspections | Licenses, Permits & Inspections | Jul 1, 2017 | Jul 1, 2017 | The Building Inspector conducts formal site inspections that in part address construction and post-construction stormwater control measures such as erosion and sediment controls. Additional informal inspections are conducted during routine site visits. |
| 4-5 Implement procedure to allow public comment on site development | Complete / Ongoing | The City established procedures during a previous reporting period for receipt and consideration of information submitted by the public. | Develop and implement public comment period | Licenses, Permits & Inspections | Jul 1, 2017 | Jul 1, 2017 | Information may be submitted via a web link under the Department of Public Works webpage. See item 4.2 below for additional information. |

4.1 BMP Summary (continued)

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|--|--------------------|--|--|--|-------------|---|---|
| 4-6 Implement procedure to notify developers about DEEP construction stormwater permit | Complete / Ongoing | New Britain developed a checklist during a previous reporting period that is provided to developers, with one item addressing DEEP's construction stormwater permit. | Develop and implement notification procedure | Engineering, Licenses, Permits & Inspections | Jul 1, 2017 | Jul 1, 2017 | All developers are provided the checklist when filing for a permit. |

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

The City will continue to determine required land use regulatory updates that will be required during future permit years.

The City will continue to post a list of Site Plan Applications with soil disturbance greater than 1 acres as received by the Building Department on its dedicated Stormwater Management website, available at http://www.newbritainct.gov/services/public_works/programs_n_services/stormwater_management.htm. Users are instructed to contact the Building Department for information or to comment on any applications as required by BMP 4-5.

Additional items are ongoing, such as site plan review, site inspections, and outreach to developers.

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

5.1 BMP Summary

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|--|-----------------------|---|---|---|---------------|---|--|
| 5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning | In progress / ongoing | Continued to enforce current regulations. | Evaluate and develop guidelines | Engineering; Licenses, Permits & Inspection | Jul 1, 2021 | Jul 1, 2021 | No progress to date on new regulations. Existing regulations were enforced during this reporting period. |
| 5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects | In progress / ongoing | The City began reviewing its existing regulations to determine changes in order to meet permit compliance. | Enforce regulations | Engineering; Licenses, Permits & Inspection | Jul 1, 2019 | Jul 1, 2019 | Existing regulations were enforced during this reporting period. Begin implementation by July 1, 2019. |
| 5-3 Implement long-term maintenance plan for stormwater basins and treatment structures in priority areas | Not started | The City began working towards implementing a long-term maintenance plan for its stormwater treatment BMPs. | Inventory applicable retention and detention ponds and develop and implement long-term maintenance plan | DPW, Engineering | Jul 1, 2019 | Jul 1, 2019 | Begin implementation by July 1, 2019. |
| 5-4 DCIA mapping | In progress / ongoing | The City began to determine the methodology for tracking DCIA as part of ongoing development projects. | Develop and update DCIA mapping and calculation | Engineering | Jul 1, 2020 | Jul 1, 2020 | See item 5.4 below for additional information. |
| 5-5 Address post-construction issues in areas with pollutants of concern | Not started | No progress. | Identify projects in catchments that discharge to impaired waters | Engineering | Not specified | To be determined | No progress to date. |

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

New Britain will complete updates to its LID regulations, retention and detention pond inventory, and developing a long-term maintenance plan for stormwater basins and treatment structures as per the requirements of BMPs 5-2 and 5-3 above.

5.3 Post-Construction Stormwater Management reporting metrics

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

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

Due to historic development throughout the City, New Britain has substantial impervious area. As the City has an extensive GIS database of land use, we intend to track impervious area changes through this system. As development projects are submitted to various departments, the City will require developers to provide an index of both existing impervious area (connected and disconnected) and proposed impervious area (connected and disconnected) for each parcel impacted by development or redevelopment. The definition of DCIA will be consistent with permit requirements and based on retaining a portion of the Water Quality Volume. DCIA is based on an existing baseline map using 2012 data obtained from CT DEEP. This information will be incorporated into the City's GIS system and tracked on an annual basis. As DCIA is tracked during subsequent years, this tracking methodology may be updated based on results of the program.

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

6.1 BMP Summary

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|---|------------------------|---|--|---------------------------------|---------------|---|--|
| 6-1 Develop/implement formal employee training program | Complete / Ongoing | The City continued its training program established under the previous permit. | Perform annual employee training | DPW | Jul 1, 2017 | Jul 1, 2017 | Good housekeeping training is performed concurrently with IDDE training as outlined in Section 3.8. |
| 6-2 Implement MS4 property and operations maintenance | Not started | The City has started to develop and implement an O&M program for municipally-owned property that discharges to the MS4. | Develop and implement maintenance procedures | DPW | Jul 1, 2018 | Jul 1, 2018 | Complete program as allowed within fiscal constraints. |
| 6-3 Implement coordination with interconnected MS4s | Complete / Ongoing | New Britain has reached out to two interconnected MS4s to coordinate on outfall and catchment investigations. | Identify MS4s and attend coordination meetings | DPW | Not specified | Ongoing | Other MS4s contacted include ConnDOT and the Central Connecticut State University. |
| 6-4 Develop/implement program to control other sources of pollutants to the MS4 | In progress | The City is developing a plan based on ongoing water quality testing in conjunction with BMP 6-5. | Develop and implement pollutant source control program | DPW, Engineering | Not specified | Ongoing | As water quality testing is performed during subsequent years, the plan will continue to be refined to prioritize areas for further investigation. |
| 6-5 Evaluate additional measures for discharges to impaired waters* | In progress | The City is developing a plan based on ongoing water quality testing in conjunction with BMP 6-4. | Develop and implement measures for discharges to impaired waters | DPW | Not specified | Ongoing | As water quality testing is performed during subsequent years, the plan will continue to be refined to prioritize areas for further investigation. |
| 6-6 Track projects that disconnect DCIA | Complete / In progress | New Britain has developed a DCIA tracking methodology as outlined in Section 5.4. | Track DCIA percentage | Engineering | Jul 1, 2017 | Jul 1, 2017 | DCIA tracking is ongoing. |
| 6-7 Implement infrastructure repair/rehab program | Not started | No progress. | Evaluate, develop, and implement infrastructure program | DPW | Jul 1, 2021 | Jul 1, 2021 | No progress to date. |

6.1 BMP Summary (continued)

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|---|--------------------|--|--|---------------------------------|---------------------------|---|--|
| 6-8 Develop/implement plan to identify/prioritize retrofit projects | Not started | No progress. | Develop retrofit plan / implement plan to remove 1% of DCIA annually | Engineering | Jul 1, 2020 / Jul 1, 2022 | Jul 1, 2020 / Jul 1, 2022 | No progress to date. |
| 6-9 Develop/implement street sweeping program | Complete / Ongoing | The City continued implementing its street sweeping program developed during a previous reporting period. | Perform annual street sweeping | DPW | Jul 1, 2017 | Jul 1, 2017 | The program generally includes sweeping all streets at least once annually, with heavily trafficked roads swept more often. |
| 6-10 Develop/implement catch basin cleaning program | Complete / Ongoing | The City continued implementing its catch basin cleaning program developed during a previous reporting period. | Develop and implement catch basin cleaning and inspection procedures | DPW | Jul 1, 2020 | Jul 1, 2017 | Catch basin cleaning and other data is documented in an asset management software program. Updates are made continuously based on field information. |
| 6-11 Develop/implement snow management practices | In progress | New Britain has started to document snow management practices. | Develop and implement snow management | DPW | Jul 1, 2018 | Jul 1, 2018 | Complete program as allowed within fiscal constraints. |

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

New Britain will review its existing training program and make changes to address additional permitting requirements pertaining to good housekeeping and IDDE, where applicable.

The catch basin and street sweeping programs will continue to be implemented during the next year, with refinements made as applicable.

Many other items are ongoing, including catch basin cleaning, street sweeping, winter operations, and water quality testing.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Catch basin cleaning program

| Metrics | |
|--|-------------------|
| Employee training provided for key staff | Yes, 11/15/2018 |
| Street sweeping | |
| Curb miles swept | 702 miles |
| Volume (or mass) of material collected | 187 tons |
| Catch basin cleaning | |
| Total catch basins in priority areas | |
| Total catch basins in MS4 | 3,590 |
| Catch basins inspected | 303 |
| Catch basins cleaned | 287 |
| Volume (or mass) of material removed from all catch basins | 13,800 cubic feet |
| Volume removed from catch basins to impaired waters (if known) | unknown |
| Snow management | |
| Type(s) of deicing material used | Treated salt |
| Total amount of each deicing material applied | |
| Type(s) of deicing equipment used | |
| Lane-miles treated | |
| Snow disposal location | |
| Staff training provided on application methods & equipment | Yes, 11/15/2018 |
| Municipal turf management program actions (for permittee properties in basins with N/P impairments) | |
| Reduction in application of fertilizers (since start of permit) | 32% |
| Reduction in turf area (since start of permit) | 11.44 acres |
| Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems) | |
| Cost of mitigation actions/retrofits | \$ |

Briefly describe the method used to optimize your catch basin inspection and cleaning schedule. [Complete this section for the 2017 Annual Report only]

New Britain tracks all catch basin cleaning activities individually by address in an asset management spreadsheet on a continuous basis. Information documented includes the structure location/address, date of cleaning, approximate depth of sediment, water accumulation, and additional comments such as any required follow-up maintenance. This method has allowed the City to prioritize more frequent cleaning activities for basins subject to higher sediment accumulation rates, as well as document year-end results. Additional catch basin repairs or replacements are tracked separately in a similar manner.

Retrofit program

Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]

Not yet available

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]

Not yet available

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]

Not yet available

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.](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 conducted extensive dry weather sampling throughout 2017 on all known and accessible outfalls. Results are provided in Section 2.1 below. Approximately 10% of outfalls could not be located or accessed for a variety of reasons, including being located on private property, within railroad right-of-way, or were otherwise buried. The City is currently working with other property owners to attempt to locate and inspect these outfalls according to the permit schedule. Additionally, the City has performed wet weather sampling as time and budget allows on those outfalls where follow-up is required.

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 | Date | Parameter of Concern | Results | Name of Laboratory | Follow-Up Required? |
|------------|------------|----------------------|---|------------------------------------|---------------------|
| 1 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 2 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3 | 11/2/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3A | 11/2/2016 | Bacteria | E. coli - 1520 MPN/100 ml Phosphorus - 0.45 mg/l | Phoenix Environmental Laboratories | Yes |
| 4 | 11/14/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 5 | 11/2/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 7 | 11/4/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 8 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 9 | 11/4/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 10 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 11 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 12 | 11/1/2016 | Bacteria | E. coli - 450 MPN/100 ml Phosphorus - 0.747 mg/l | Phoenix Environmental Laboratories | Yes |
| 13 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 14 | 10/26/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 16 | 10/26/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |

| Outfall ID | Date | Parameter of Concern | Results | Name of Laboratory | Follow-Up Required? |
|------------|------------|----------------------|---|------------------------------------|---------------------|
| 81 | 11/3/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 82 | 11/3/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 116 | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1077 | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1079 | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1162 | 11/17/2016 | Bacteria | Sewage smell - no sample | Phoenix Environmental Laboratories | Yes |
| 1551 | 11/4/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 1563 | 11/4/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 1564 | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1572 | 11/4/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1596 | 11/1/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 1636 | 10/26/2016 | Bacteria | E. coli - 1330 MPN/100 ml | Phoenix Environmental Laboratories | Yes |
| 1701 | 11/14/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1780 | 10/26/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1787 | 10/26/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1809 | 11/17/2016 | Bacteria | E. coli - >24,200 MPN/100 ml Nitrogen - 2.86 mg/l Phosphorus - 0.703 mg/l | Phoenix Environmental Laboratories | Yes |
| 1868 | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1868A | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1868B | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1992 | 11/14/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 1993 | 11/14/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 1994 | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 2133 | 11/2/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 2149 | 11/3/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 2188 | 10/26/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 2188A | 10/26/2016 | Bacteria | E. coli - 529 MPN/100 ml | Phoenix Environmental Laboratories | Yes |
| 2242 | 11/2/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 2403 | 11/1/2016 | Bacteria | E. coli - 933 MPN/100 ml Nitrogen - 2.62 mg/l | Phoenix Environmental Laboratories | Yes |
| 2467 | 11/17/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 2551 | 11/2/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 2575 | 11/2/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 2578 | 11/2/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 2602 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 2783 | 11/8/2016 | Phosphorus/Nitrogen | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 2852 | 11/7/2016 | Bacteria | E. coli - 1,410 MPN/100 ml Nitrogen - 2.59 mg/l | Phoenix Environmental Laboratories | Yes |
| 2857 | 11/14/2016 | Bacteria | E. coli - >24,200 MPN/100 ml Nitrogen - 25.8 mg/l Phosphorus - 4.09 mg/l | Phoenix Environmental Laboratories | Yes |
| 2868 | 11/3/2016 | Bacteria | E. coli - >24,200 MPN/100 ml Nitrogen - 6.72 mg/l Phosphorus - 0.636 mg/l | Phoenix Environmental Laboratories | Yes |
| 2996 | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3005 | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3006 | 11/9/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3007 | 11/11/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3008 | 11/11/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3009 | 11/11/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 3010 | 11/17/2016 | Bacteria | E. coli - 473 MPN/100 ml | Phoenix Environmental Laboratories | Yes |
| 3038 | 11/14/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |

| Outfall ID | Date | Parameter of Concern | Results | Name of Laboratory | Follow-Up Required? |
|-------------------|-------------|-----------------------------|--|------------------------------------|----------------------------|
| 3104 | - | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3172 | 11/4/2016 | Bacteria | E. coli - >24,200 MPN/100 ml Nitrogen - 6.25 mg/l | Phoenix Environmental Laboratories | Yes |
| 3176 | 11/4/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3182 | 11/11/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3185 | 11/11/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3188 | 11/11/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3190 | 11/17/2016 | Bacteria | Flow insufficient for sampling | Phoenix Environmental Laboratories | Yes |
| 3190A | 11/17/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3192 | 11/14/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3194 | 11/17/2016 | Bacteria | E. coli - 2,610 MPN/100 ml Nitrogen - 3.52 mg/l | Phoenix Environmental Laboratories | Yes |
| 3194A | 11/17/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3200 | 11/11/2016 | Bacteria | Nitrogen - 3.92 mg/l | Phoenix Environmental Laboratories | Yes |
| 3202 | 11/17/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3204 | 11/11/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3206 | 11/11/2016 | Bacteria | E. coli - 11,200 MPN/100 ml | Phoenix Environmental Laboratories | Yes |
| 3208 | 11/14/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 3238 | 11/17/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3240 | 11/1/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 3242 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3242A | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3242B | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3246 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3246A | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3246B | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3246C | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3246D | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 3246E | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5000 | 10/26/2016 | Bacteria | No pollutants of concern | Phoenix Environmental Laboratories | No |
| 5001 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5002 | 10/26/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5003 | 10/26/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5004 | 10/26/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5005 | 11/1/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5006 | 11/17/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5007 | 11/3/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5008 | 11/3/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5011 | 11/3/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5012 | 11/14/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5013 | 11/9/2016 | Bacteria | No sign of dry weather flow but sewage odor present | Phoenix Environmental Laboratories | Yes |
| 5014 | 11/4/2016 | Bacteria | No sign of dry weather flow but sewage odor present | Phoenix Environmental Laboratories | Yes |
| 5025 | 11/17/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |
| 5026 | 11/11/2016 | Bacteria | No sign of dry weather flow | Phoenix Environmental Laboratories | No |

[illegible]

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).

| Outfall ID | Receiving Water | Category (Priority) | Rank |
|------------|-----------------|---------------------|------|
| 1 | Willow Brook | High | 3 |
| 2 | Willow Brook | High | 3 |
| 3 (3A?) | Willow Brook | Excluded | 0 |
| 4 | Willow Brook | High | 9 |
| 5 | Willow Brook | Excluded | 0 |
| 6 | Willow Brook | High | 3 |
| 7 | Willow Brook | High | 3 |
| 8 | Willow Brook | High | 3 |
| 9 | Willow Brook | High | 4 |
| 10 | Willow Brook | High | 3 |
| 11 | Willow Brook | High | 3 |
| 12 | Willow Brook | High | 4 |
| 13 | Willow Brook | High | 3 |
| 14 | Willow Brook | High | 4 |
| 16 | Willow Brook | High | 4 |
| 17 | Willow Brook | Excluded | 0 |
| 18 | Willow Brook | Excluded | 0 |
| 19 | Willow Brook | High | 4 |
| 20 | Willow Brook | High | 3 |
| 21 | Willow Brook | High | 3 |
| 22 | Willow Brook | Problem | 4 |
| 23 | Willow Brook | High | 3 |
| 25 | Willow Brook | High | 3 |
| 26 | Willow Brook | High | 3 |
| 27 | Willow Brook | High | 3 |
| 28 | Willow Brook | High | 3 |

| Outfall ID | Receiving Water | Category (Priority) | Rank |
|------------|-----------------|---------------------|------|
| 29 | Willow Brook | High | 3 |
| 30 | Willow Brook | High | 3 |
| 31 | Bass Brook | High | 2 |
| 32 | Willow Brook | Problem | 7 |
| 33 | Willow Brook | High | 4 |
| 34 | Webster Brook | High | 3 |
| 35 | Webster Brook | High | 3 |
| 36 | Webster Brook | High | 3 |
| 37 | Webster Brook | High | 3 |
| 38 | Webster Brook | High | 5 |
| 39 | Webster Brook | High | 3 |
| 40 | Piper Brook | High | 2 |
| 42 | Piper Brook | High | 2 |
| 43 | Piper Brook | High | 2 |
| 44 | Piper Brook | Problem | 3 |
| 45 | Piper Brook | High | 2 |
| 46 | Piper Brook | Problem | 8 |
| 47 | Piper Brook | High | 2 |
| 48 | Piper Brook | High | 2 |
| 49 | Piper Brook | High | 2 |
| 50 | Webster Brook | High | 3 |
| 51 | Webster Brook | High | 3 |
| 52 | Webster Brook | High | 3 |
| 53 | Webster Brook | High | 3 |
| 54 | Webster Brook | High | 3 |
| 54A | Webster Brook | High | 3 |

| Outfall ID | Receiving Water | Category (Priority) | Rank |
|------------|------------------|---------------------|------|
| 55 | Webster Brook | High | 3 |
| 56 | Webster Brook | High | 3 |
| 57 | Webster Brook | High | 3 |
| 58 | Webster Brook | High | 3 |
| 59 | Bass Brook | High | 2 |
| 60 | Bass Brook | High | 2 |
| 61 | Willow Brook | Excluded | 0 |
| 62 | Willow Brook | Excluded | 0 |
| 63 | Willow Brook | Excluded | 0 |
| 64 | Willow Brook | Excluded | 0 |
| 65 | Willow Brook | Excluded | 0 |
| 66 | Willow Brook | Excluded | 0 |
| 67 | Willow Brook | High | 3 |
| 68 | Willow Brook | High | 4 |
| 69 | Willow Brook | High | 4 |
| 70 | Willow Brook | High | 3 |
| 71 | Willow Brook | High | 3 |
| 72 | Willow Brook | High | 3 |
| 73 | Willow Brook | High | 3 |
| 73A | Willow Brook | High | 3 |
| 74 | Willow Brook | High | 3 |
| 75 | Willow Brook | High | 3 |
| 77 | Quinnipiac River | High | 3 |
| 78 | Webster Brook | High | 3 |
| 79 | Webster Brook | High | 4 |
| 80 | Webster Brook | High | 3 |
| 81 | Webster Brook | High | 3 |
| 82 | Webster Brook | High | 3 |
| 83 | Bass Brook | High | 2 |
| 84 | Bass Brook | High | 2 |
| 85 | Bass Brook | High | 2 |
| 86 | Bass Brook | High | 3 |
| 87 | Bass Brook | High | 3 |
| 88 | Bass Brook | High | 3 |

| Outfall ID | Receiving Water | Category (Priority) | Rank |
|------------|------------------|---------------------|------|
| 89 | Bass Brook | High | 2 |
| 90 | Bass Brook | Problem | 2 |
| 91 | Bass Brook | High | 3 |
| 92 | Bass Brook | Excluded | 0 |
| 93 | Bass Brook | Excluded | 0 |
| 94 | Bass Brook | Excluded | 0 |
| 95 | Bass Brook | High | 2 |
| 96 | Bass Brook | High | 2 |
| 97 | Bass Brook | High | 2 |
| 98 | Bass Brook | High | 2 |
| 99 | Bass Brook | High | 2 |
| 100A | Bass Brook | High | 4 |
| 100B | Bass Brook | High | 3 |
| 100C | Bass Brook | High | 3 |
| 100D | Bass Brook | High | 4 |
| 101 | Bass Brook | High | 2 |
| 102 | Bass Brook | High | 2 |
| 103 | Bass Brook | High | 2 |
| 104 | Bass Brook | High | 2 |
| 105 | Bass Brook | High | 2 |
| 106 | | Excluded | 0 |
| 108 | Bass Brook | High | 2 |
| 109 | Bass Brook | High | 2 |
| 110 | Bass Brook | High | 2 |
| 111 | Bass Brook | High | 2 |
| 112 | Bass Brook | High | 2 |
| 113 | Bass Brook | High | 3 |
| 114 | Quinnipiac River | High | 3 |
| 115 | Bass Brook | High | 2 |
| 116 | Willow Brook | High | 3 |
| 117 | Bass Brook | Excluded | 0 |
| 118 | Bass Brook | Excluded | 0 |
| 119 | Bass Brook | High | 3 |
| 120 | Bass Brook | Excluded | 0 |

| Outfall ID | Receiving Water | Category (Priority) | Rank |
|------------|------------------|---------------------|------|
| 121 | Bass Brook | Excluded | 0 |
| 122 | Bass Brook | High | 2 |
| 123 | Bass Brook | High | 2 |
| 124 | Bass Brook | High | 2 |
| 125 | Bass Brook | High | 2 |
| 126 | Bass Brook | High | 2 |
| 127 | Bass Brook | High | 2 |
| 128 | Bass Brook | High | 2 |
| 234 | Bass Brook | High | 2 |
| 264 | Bass Brook | High | 2 |
| 290 | Bass Brook | High | 3 |
| 293 | Bass Brook | High | 2 |
| 297 | Bass Brook | High | 2 |
| 315 | Bass Brook | High | 1 |
| 338 | Bass Brook | Problem | 6 |
| 437 | Bass Brook | High | 2 |
| 579 | Bass Brook | Low | 0 |
| 734 | Quinnipiac River | High | 3 |
| 742 | Quinnipiac River | High | 3 |
| 743 | Quinnipiac River | High | 4 |
| 753 | Quinnipiac River | High | 3 |
| 962 | Bass Brook | High | 2 |
| 1003 | Webster Brook | High | 3 |
| 1077 | Piper Brook | High | 3 |
| 1079 | Piper Brook | High | 2 |
| 1162 | Piper Brook | Problem | 3 |
| 1177 | Bass Brook | High | 3 |
| 1214 | Bass Brook | High | 2 |
| 1219 | Bass Brook | High | 1 |
| 1223 | Bass Brook | High | 1 |
| 1238 | Bass Brook | Low | 0 |
| 1551 | Willow Brook | High | 3 |
| 1563 | Willow Brook | High | 3 |
| 1564 | Willow Brook | High | 3 |

| Outfall ID | Receiving Water | Category (Priority) | Rank |
|------------|---------------------|---------------------|------|
| 1572 | Willow Brook | High | 3 |
| 1596 | Willow Brook | High | 4 |
| 1636 | Willow Brook | High | 3 |
| 1701 | Willow Brook | High | 3 |
| 1780 | Willow Brook | High | 4 |
| 1787 | Willow Brook | High | 4 |
| 1809 | Willow Brook | Problem | 5 |
| 1868 | Webster Brook | High | 3 |
| 1868A | Webster Brook | High | 3 |
| 1868B | Webster Brook | High | 3 |
| 1983 | Webster Brook | High | 4 |
| 1992 | Webster Brook | High | 2 |
| 1993 | Webster Brook | Problem | 4 |
| 1994 | Webster Brook | High | 4 |
| 2012 | Bass Brook | Problem | 5 |
| 2132 | Willow Brook | Problem | 7 |
| 2133 | Willow Brook | High | 4 |
| 2149 | Webster Brook | High | 4 |
| 2188 | Willow Brook | High | 4 |
| 2188A | Willow Brook | High | 5 |
| 2242 | Willow Brook | High | 3 |
| 2403 | Willow Brook | High | 5 |
| 2467 | Willow Brook | High | 3 |
| 2551 | Webster Brook | High | 4 |
| 2575 | Willow Brook | High | 4 |
| 2578 | Willow Brook | High | 4 |
| 2589 | Willow Brook | High | 3 |
| 2592 | Willow Brook | High | 3 |
| 2602 | Willow Brook | High | 3 |
| 2728 | Piper Brook | High | 2 |
| 2783 | Batterson Park Pond | High | 3 |
| 2786 | Bass Brook | High | 2 |
| 2789 | Bass Brook | High | 2 |
| 2790 | Bass Brook | High | 4 |

| Outfall ID | Receiving Water | Category (Priority) | Rank |
|------------|------------------|---------------------|------|
| 2790A | Bass Brook | High | 4 |
| 2792 | Bass Brook | High | 1 |
| 2793 | Bass Brook | High | 2 |
| 2817 | Bass Brook | High | 2 |
| 2837 | Bass Brook | High | 1 |
| 2852 | Piper Brook | High | 5 |
| 2857 | Piper Brook | Problem | 5 |
| 2859 | Piper Brook | High | 4 |
| 2868 | Piper Brook | Problem | 8 |
| 2989 | Quinnipiac River | High | 7 |
| 2996 | Quinnipiac River | High | 4 |
| 3001 | Bass Brook | Excluded | 0 |
| 3002 | Bass Brook | Excluded | 0 |
| 3003 | Bass Brook | High | 2 |
| 3004 | Bass Brook | High | 2 |
| 3005 | Willow Brook | Excluded | 0 |
| 3006 | Willow Brook | Excluded | 0 |
| 3007 | Willow Brook | High | 3 |
| 3008 | Willow Brook | High | 3 |
| 3009 | Willow Brook | High | 3 |
| 3038 | Piper Brook | High | 2 |
| 3047 | Bass Brook | High | 4 |
| 3052 | Quinnipiac River | High | 3 |
| 3054 | Bass Brook | High | 2 |
| 3076 | Bass Brook | High | 2 |
| 3079 | Bass Brook | High | 1 |
| 3104 | Webster Brook | Problem | 4 |
| 3151 | Bass Brook | High | 1 |
| 3153 | Bass Brook | High | 1 |
| 3156 | Bass Brook | High | 2 |
| 3156A | Bass Brook | High | 2 |
| 3156B | Bass Brook | High | 2 |
| 3158 | Bass Brook | High | 2 |
| 3158A | Bass Brook | High | 2 |

| Outfall ID | Receiving Water | Category (Priority) | Rank |
|------------|------------------|---------------------|------|
| 3160 | Bass Brook | High | 3 |
| 3161 | Bass Brook | Problem | 4 |
| 3164 | Bass Brook | High | 2 |
| 3166 | Bass Brook | High | 2 |
| 3172 | Quinnipiac River | Problem | 4 |
| 3176 | Quinnipiac River | High | 4 |
| 3182 | Willow Brook | High | 3 |
| 3185 | Willow Brook | High | 3 |
| 3186 | Willow Brook | High | 3 |
| 3188 | Willow Brook | High | 3 |
| 3190 | Willow Brook | High | 2 |
| 3190A | Willow Brook | High | 3 |
| 3192 | Willow Brook | High | 1 |
| 3192A | Willow Brook | High | 1 |
| 3194 | Willow Brook | High | 4 |
| 3194A | Willow Brook | High | 3 |
| 3196 | Willow Brook | High | 3 |
| 3196A | Willow Brook | High | 3 |
| 3198 | Willow Brook | High | 3 |
| 3198A | Willow Brook | High | 4 |
| 3200 | Willow Brook | High | 3 |
| 3202 | Willow Brook | High | 3 |
| 3204 | Willow Brook | High | 3 |
| 3206 | Willow Brook | High | 4 |
| 3208 | Willow Brook | High | 3 |
| 3210 | Bass Brook | High | 1 |
| 3212 | Bass Brook | High | 2 |
| 3214 | Bass Brook | High | 2 |
| 3218 | Bass Brook | Low | 0 |
| 3220 | Bass Brook | Problem | 3 |
| 3224 | Bass Brook | High | 2 |
| 3226 | Bass Brook | High | 2 |
| 3228 | Webster Brook | High | 3 |
| 3230 | Webster Brook | High | 3 |

| Outfall ID | Receiving Water | Category (Priority) | Rank |
|------------|-----------------|---------------------|------|
| 3234 | Willow Brook | High | 4 |
| 3236 | Willow Brook | High | 5 |
| 3238 | Willow Brook | High | 4 |
| 3240 | Willow Brook | High | 3 |
| 3242 | Willow Brook | High | 3 |
| 3242A | Willow Brook | High | 3 |
| 3242B | Willow Brook | High | 3 |
| 3244 | Willow Brook | High | 3 |
| 3246 | Willow Brook | High | 1 |
| 3246A | Willow Brook | High | 3 |
| 3246B | Willow Brook | High | 3 |
| 3246C | Willow Brook | High | 3 |
| 3246D | Willow Brook | High | 3 |
| 3246E | Willow Brook | High | 3 |
| 5000 | Willow Brook | High | 3 |
| 5001 | Willow Brook | High | 3 |
| 5002 | Willow Brook | High | 3 |
| 5003 | Willow Brook | High | 3 |
| 5004 | Willow Brook | High | 3 |
| 5005 | Willow Brook | High | 3 |

| Outfall ID | Receiving Water | Category (Priority) | Rank |
|------------|------------------|---------------------|------|
| 5006 | Willow Brook | High | 4 |
| 5007 | Webster Brook | High | 3 |
| 5008 | Webster Brook | High | 4 |
| 5009 | Piper Brook | Problem | 4 |
| 5010 | Piper Brook | High | 2 |
| 5011 | Piper Brook | High | 2 |
| 5012 | Quinnipiac River | High | 3 |
| 5013 | Piper Brook | Problem | 3 |
| 5014 | Piper Brook | Problem | 3 |
| 5016 | Bass Brook | High | 2 |
| 5017 | Bass Brook | High | 2 |
| 5018 | Bass Brook | High | 2 |
| 5019 | Bass Brook | High | 1 |
| 5020 | Bass Brook | High | 1 |
| 5021 | Bass Brook | High | 3 |
| 5022 | Bass Brook | High | 3 |
| 5023 | Bass Brook | High | 3 |
| 5024 | Bass Brook | High | 1 |
| 5025 | Piper Brook | High | 2 |
| 5026 | Willow Brook | High | 3 |
| 10005 | Bass Brook | High | 3 |

Note that in the “Rank” column above, a higher number means an outfall ranks higher within each particular “Category”. The number relates to the quantity of DEEP screening factors applicable to each catchment.

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 | Date | Temperature (deg C) | Conductivity (uS/cm) | Salinity (ppt) | Chlorine (mg/L) | Ammonia (mg/L) | Surfactants (mg/L) | E. Coli (MPN/100 ml) | Pollutant of Concern | If required, follow-up actions taken |
|------------|------------|---------------------|----------------------|----------------|-----------------|----------------|--------------------|----------------------|----------------------|--|
| 3A | 11/2/2016 | 12.5 | 422.4 | 0.3 | 0 | 1 | 0.25 | 1,520 | Bacteria | |
| 4 | 11/14/2016 | 11.2 | 735 | 0.5 | 0 | 0.2 | 0.25 | 10 | Bacteria | |
| 12 | 11/1/2016 | 10.3 | 221.4 | 0.1 | 0.15 | 0.2 | 0.75 | 450 | Bacteria | |
| 19 | 11/17/2016 | 13.8 | 260 | 0.2 | 0 | 0.05 | 0.125 | <10 | Bacteria | No |
| 22 | 10/26/2016 | - | - | - | - | - | - | - | Bacteria | Flow not significant enough to obtain sample but sewage/toilet paper floatables present. Perform additional dry weather screening and sampling in 2019. |
| 27 | 11/4/2016 | 14.6 | 335.2 | 0.2 | 0.05 | 0.1 | 0 | <10 | Bacteria | No |
| 44 | 11/4/2016 | - | - | - | - | - | - | - | Bacteria | Flow inaccessible; could not obtain sample but sewage odor was observed along with brown color. Perform additional dry weather screening and sampling in 2019. |
| 46 | 11/11/2016 | - | - | - | - | - | - | - | Bacteria | Flow inaccessible; could not obtain sample but sewage odor was observed. Perform additional dry weather screening and sampling in 2019. |
| 73 | 10/26/2016 | - | - | - | - | - | - | <10 | Bacteria | No |
| 90 | 11/9/2016 | 14.5 | 372.5 | 0.2 | 0 | 7 | 1 | - | n/a | |
| 91 | 11/14/2016 | 11.3 | 342 | 0.2 | 0 | 0 | 0.125 | - | n/a | |
| 125 | 11/8/2016 | | | | | | | - | n/a | No |
| 338 | 11/14/2016 | 15 | 483 | 0.3 | 0 | 2 | 0.25 | - | n/a | |

| Outfall ID | Date | Temperature (deg C) | Conductivity (uS/cm) | Salinity (ppt) | Chlorine (mg/L) | Ammonia (mg/L) | Surfactants (mg/L) | E. Coli (MPN/100 ml) | Pollutant of Concern | If required, follow-up actions taken |
|------------|------------|---------------------|----------------------|----------------|-----------------|----------------|--------------------|----------------------|----------------------|---|
| 1162 | 11/17/2016 | - | - | - | - | - | - | - | Bacteria | Flow inaccessible; could not obtain sample but sewage odor was observed. Perform additional dry weather screening and sampling in 2019. |
| 1177 | 11/14/2016 | 14.1 | 320 | 0.2 | 0.2 | 0.2 | 0.125 | - | n/a | |
| 1551 | 11/4/2016 | 14.8 | 216.8 | 0.1 | 0.15 | 0 | 0.125 | <10 | Bacteria | No |
| 1563 | 11/4/2016 | - | - | - | - | - | 0 | - | Bacteria | No sample obtained. Perform additional dry weather screening and sampling in 2019 to address pollutant concerns. |
| 1596 | 11/1/2016 | 37.8 | 39.6 | 0 | 0.3 | 0.15 | 2 | <10 | Bacteria | No |
| 1636 | 10/26/2016 | 26.9 | 242.5 | 0.1 | 0 | 0.35 | 0.25 | 1,330 | Bacteria | |
| 1809 | 11/17/2016 | 13.3 | 98.1 | 0.1 | 0 | 2.5 | 1.5 | >24,200 | Bacteria | |
| 1993 | 11/14/2016 | 17.5 | 630 | 0.4 | 0 | 0.05 | 0 | 122 | Bacteria | |
| 2012 | 11/17/2016 | 14 | 370 | 0.2 | 0 | 0 | 0.125 | - | n/a | |
| 2149 | 11/3/2016 | 15.8 | 928 | 0.6 | 0 | 0.15 | 0.25 | 75 | Bacteria | |
| 2242 | 11/2/2016 | 41.5 | 44.1 | 0 | 0.25 | 0 | 0.125 | <10 | Bacteria | No |
| 2403 | 11/1/2016 | 15.4 | 633 | 0.4 | 0.05 | 0 | 0.125 | 933 | Bacteria | |
| 2551 | 11/2/2016 | 15.7 | 357 | 0.2 | 0.1 | 0.1 | 0.125 | 131 | Bacteria | |
| 2789 | 11/7/2016 | 12.1 | 568 | 0.4 | 0 | 0 | 0.125 | - | n/a | |
| 2790 | 11/17/2016 | 11 | 320.5 | 0.2 | 0 | 0.125 | 0.125 | - | n/a | |
| 2852 | 11/7/2016 | 12.1 | 198.9 | 0.1 | 0 | 0 | 0.125 | 1,410 | Bacteria | |
| 2857 | 11/14/2016 | 15.8 | 448 | 0.3 | 0 | 10 | 3 | >24,200 | Bacteria | Collected sample at upstream manhole. Verified this is storm line. 100% positive this has sewage flowing through it |
| 2868 | 11/3/2016 | 17.6 | 361 | 0.2 | 0 | 6.5 | 0.5 | >24,200 | Bacteria | Strong sewer smell |
| 3009 | 11/11/2016 | 13.9 | 166.2 | 0.1 | 0.15 | | 0 | <10 | Bacteria | No |

| Outfall ID | Date | Temperature (deg C) | Conductivity (uS/cm) | Salinity (ppt) | Chlorine (mg/L) | Ammonia (mg/L) | Surfactants (mg/L) | E. Coli (MPN/100 ml) | Pollutant of Concern | If required, follow-up actions taken |
|------------|------------|---------------------|----------------------|----------------|-----------------|----------------|--------------------|----------------------|----------------------|---|
| 3010 | 11/17/2016 | 13.7 | 805 | 0.5 | 0.15 | 0.25 | 0.125 | 473 | Bacteria | |
| 3047 | 11/14/2016 | 14.6 | 695 | 0.4 | 0 | 0 | 0.125 | - | n/a | |
| 3161 | 11/17/2016 | 10.5 | 403 | 0.3 | 0 | 0.1 | 0.125 | - | n/a | |
| 3172 | 11/4/2016 | 13.3 | 523 | 0.3 | 0 | 1 | 0.25 | >24,200 | Bacteria | |
| 3190 | 11/17/2016 | - | - | - | - | - | - | - | Bacteria | No sample obtained. Perform additional dry weather screening and sampling in 2019 to address pollutant concerns. |
| 3194 | 11/17/2016 | 14 | 365.6 | 0.2 | 0.05 | 0.1 | 3 | 2,610 | Bacteria | |
| 3200 | 11/11/2016 | 14.6 | 431.2 | 0.1 | 0 | 0.4 | 0.125 | 135 | Bacteria | |
| 3206 | 11/11/2016 | 11.9 | 314 | 0.2 | 0 | 0 | 0.125 | 11,200 | Bacteria | |
| 3208 | 11/14/2016 | 12.7 | 350 | 0.2 | 0.15 | 0 | 0 | 145 | Bacteria | |
| 3220 | 11/17/2016 | - | - | - | - | - | - | - | n/a | Could not without sandbag |
| 3240 | 11/1/2016 | 9.3 | 133.2 | 0.1 | 0 | 0 | 0.125 | - | Bacteria | No bacteria sample obtained. Perform dry weather screening and sampling in 2019 to address pollutant concerns. |
| 5000 | 10/26/2016 | 21.8 | 126.1 | 0.1 | 0.05 | 0.1 | 0.125 | 10 | Bacteria | |
| 5008 | 11/2/2016 | 57.4 | 134.7 | 0 | 0 | 0.5 | 0.125 | - | Bacteria | No bacteria sample obtained. Perform additional dry weather screening and sampling in 2019 to address pollutant concerns. |
| 5009 | 11/3/2016 | 17.8 | 2750 | 1.7 | 0 | 0.2 | 0.25 | - | n/a | |
| 5016 | 11/7/2016 | 13.4 | 544 | 0.3 | 0.05 | 0.05 | 0.125 | - | n/a | |
| 5020 | 11/8/2016 | 13.3 | 466 | 0.3 | 0 | 0 | 0 | - | n/a | |
| 5022 | 11/17/2016 | 13.9 | 602 | 0.4 | 0 | 0 | 0.125 | - | n/a | |
| 5023 | 11/11/2016 | 15.1 | 478 | 0.3 | 0 | 0.2 | 0.125 | - | n/a | |
| 100A | 11/11/2016 | 13.2 | 900 | 0.6 | 0.05 | 0 | 0.125 | - | n/a | |

| Outfall ID | Date | Temperature (deg C) | Conductivity (uS/cm) | Salinity (ppt) | Chlorine (mg/L) | Ammonia (mg/L) | Surfactants (mg/L) | E. Coli (MPN/100 ml) | Pollutant of Concern | If required, follow-up actions taken |
|------------|------------|---------------------|----------------------|----------------|-----------------|----------------|--------------------|----------------------|----------------------|--|
| 100C | 11/11/2016 | 14.1 | 455 | 0.3 | 0.1 | 0 | 0 | - | n/a | |
| 100D | 11/11/2016 | 12.6 | 410.8 | 0.3 | 0.1 | 0.4 | 0 | - | n/a | |
| 2790a | 11/17/2016 | 9.4 | 312.1 | 0.2 | 0 | 0.2 | 0.125 | - | n/a | |
| 3156B | 11/8/2016 | - | - | - | - | - | - | - | n/a | No sample obtained. Perform dry weather sampling in 2019 to complete investigation. |
| 3161a | 11/17/2016 | 10.5 | 424 | 0.3 | 0 | 0.1 | 0.12 | - | n/a | No bacteria sample obtained but sewage odor was observed. Perform additional dry weather screening and sampling in 2019. |
| 3198A | 10/26/2016 | 14 | 433 | 0.3 | 0.05 | 0.4 | 1.25 | - | n/a | |

2.2 Wet weather sample and inspection data

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

| <i>Outfall / Interconnection ID</i> | <i>Sample date</i> | <i>Ammonia</i> | <i>Chlorine</i> | <i>Conductivity</i> | <i>Salinity</i> | <i>DO</i> | <i>E. coli or Enterococcus</i> |
|---|------------------------|----------------|-----------------|---------------------|-----------------|-----------|------------------------------------|
| Out-2242 | 6/28/18 | 0 | 0 | 179.6 | 0.09 | 7.46 | 8,160 |
| Out-6 | 6/28/18 | 0.25 | 0 | 333 | .16 | 7.15 | >24,200 |
| Out-2403 | 6/28/18 | 0 | 0 | 522 | 0.26 | 6.70 | 7,270 |
| Out-5 | 6/28/18 | 0.25 | 0 | 23.3 | 0.01 | 5.20 | 583 |
| Out-61 | 6/28/18 | .5 | 0 | 373 | 265 | 5.48 | 121 |
| Out-100A | 6/28/18 | 0 | 0 | 138 | 0.06 | 98.2 | 19,900 |
| Out-100B | 6/28/18 | 0 | 0 | 75 | 70 | 99.2 | 17,300 |
| Out-100C | 6/28/18 | 0 | 0 | 83 | 77 | 99.2 | 14,100 |
| Out-100D | 6/28/18 | 0 | 0 | 85 | 79 | 99.2 | 24,200 |
| XXXX | 6/28/18 | 0 | 0 | 189 | 172 | 98.2 | >24,200 |
| Out-1572 | 6/28/18 | 0 | 0 | 162.3 | 0.08 | 5.75 | 17,300 |
| Out-2602 | 6/28/18 | 0 | 0 | 13.8 | 0.01 | 5.16 | 4,350 |
| Out-1564 | 6/28/18 | 0 | 0 | 224 | 0.11 | 4.98 | 3,260 |
| Out-1563 | 6/28/18 | 0 | 0 | 329 | 0.17 | 4.98 | 1,780 |
| Out-27 | 6/28/18 | 0 | 0 | 253 | 0.13 | 5.65 | 934 |
| Out-10 | 6/28/18 | 0.25 | 0 | 207 | 0.05 | 13.08 | 13,000 |
| Out-8 | 6/28/18 | 0 | 0 | 79.5 | 0.04 | 7.68 | 4,880 |

| <i>Outfall / Interconnection ID</i> | <i>Sample date</i> | <i>Total Coliforms</i> | <i>Surfactants</i> | <i>Water Temp</i> | <i>Nitrite</i> | <i>Nitrate</i> | <i>TKN</i> | <i>TN</i> | <i>TP</i> |
|---|------------------------|----------------------------|--------------------|-----------------------|----------------|----------------|------------|-----------|-----------|
| Out-2242 | 6/28/18 | >24,200 | 0 | 22 | 0.012 | 1.17 | 0.53 | 1.71 | 0.144 |
| Out-6 | 6/28/18 | >24,200 | 1 | 21.5 | 0.044 | 0.61 | 1.53 | 2.18 | 0.483 |
| Out-2403 | 6/28/18 | >24,200 | 0 | 21.3 | <0.010 | 1.83 | 0.28 | 2.11 | 0.059 |
| Out-5 | 6/28/18 | >24,200 | .25 | 23.4 | <0.010 | 0.15 | 0.28 | 0.43 | 0.500 |
| Out-61 | 6/28/18 | >24,200 | .75 | 23.7 | 0.101 | 3.61 | 4.54 | 8.25 | 15.1 |
| Out-100A | 6/28/18 | >24,200 | 0 | 22.12 | <0.010 | 0.27 | 0.70 | 0.97 | 0.175 |
| Out-100B | 6/28/18 | >24,200 | 0 | 21.29 | <0.010 | 0.32 | 0.69 | 1.01 | 0.190 |
| Out-100C | 6/28/18 | >24,200 | .25 | 21.35 | <0.010 | 0.36 | 2.06 | 2.42 | 0.184 |
| Out-100D | 6/28/18 | >24,200 | 0 | 21.31 | <0.010 | 0.33 | 0.79 | 1.12 | 0.162 |
| XXXX | 6/28/18 | >24,200 | 0 | 20.49 | 0.035 | 0.41 | 0.85 | 1.30 | 0.115 |
| Out-1572 | 6/28/18 | >24,200 | 0 | 22.1 | 0.024 | 1.91 | 0.70 | 2.63 | 0.143 |
| Out-2602 | 6/28/18 | >24,200 | 0 | 21.4 | <0.010 | 0.08 | 0.45 | 0.53 | 0.120 |
| Out-1564 | 6/28/18 | >24,200 | 0 | 22.1 | 0.016 | 4.27 | 0.91 | 5.20 | 0.095 |
| Out-1563 | 6/28/18 | >24,200 | 0 | 23.0 | 0.011 | 2.94 | 0.86 | 3.81 | 0.069 |
| Out-27 | 6/28/18 | >24,200 | 0 | 20.9 | <0.010 | 0.95 | 0.24 | 1.19 | 0.037 |
| Out-10 | 6/28/18 | >24,200 | 0 | 21.9 | <0.010 | 0.26 | 0.71 | 0.97 | 0.221 |
| Out-8 | 6/28/18 | >24,200 | 0 | 22.8 | <0.010 | 0.18 | 0.34 | 0.52 | 0.089 |

3. Catchment Investigation data (Appendix B (A)(7)(e) / page 9)

3.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified. An example is provided below.

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|-----------------|------------------------------|
| 1 | Willow Brook | 10 |
| 2 | Willow Brook | 10 |
| 3 | Willow Brook | 10 |
| 4 | Willow Brook | 10 |
| 5 | Willow Brook | 10 |
| 6 | Willow Brook | 10 |
| 7 | Willow Brook | 10 |
| 8 | Willow Brook | 10 |
| 9 | Willow Brook | 10 |
| 10 | Willow Brook | 10 |
| 11 | Willow Brook | 10 |
| 12 | Willow Brook | 10 |
| 13 | Willow Brook | 10 |
| 14 | Willow Brook | 10 |
| 16 | Willow Brook | 10 |
| 17 | Willow Brook | 10 |
| 18 | Willow Brook | 10 |
| 19 | Willow Brook | 10 |
| 20 | Willow Brook | 10 |
| 21 | Willow Brook | 10 |
| 22 | Willow Brook | 10 |
| 23 | Willow Brook | 10 |
| 25 | Willow Brook | 10 |
| 26 | Willow Brook | 10 |
| 27 | Willow Brook | 10 |
| 28 | Willow Brook | 10 |
| 29 | Willow Brook | 10 |
| 30 | Willow Brook | 10 |

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|-----------------|------------------------------|
| 31 | Bass Brook | 10 |
| 32 | Willow Brook | 1, 10 |
| 33 | Willow Brook | 10 |
| 34 | Webster Brook | 10 |
| 35 | Webster Brook | 10 |
| 36 | Webster Brook | 10 |
| 37 | Webster Brook | 10 |
| 38 | Webster Brook | 10 |
| 39 | Webster Brook | 10 |
| 40 | Piper Brook | 10 |
| 42 | Piper Brook | 10 |
| 43 | Piper Brook | 10 |
| 44 | Piper Brook | 10 |
| 45 | Piper Brook | 10 |
| 46 | Piper Brook | 1, 2, 10 |
| 47 | Piper Brook | 10 |
| 48 | Piper Brook | 10 |
| 49 | Piper Brook | 10 |
| 50 | Webster Brook | 10 |
| 51 | Webster Brook | 10 |
| 52 | Webster Brook | 10 |
| 53 | Webster Brook | 10 |
| 54 | Webster Brook | 10 |
| 54A | Webster Brook | 10 |
| 55 | Webster Brook | 10 |
| 56 | Webster Brook | 10 |
| 57 | Webster Brook | 10 |
| 58 | Webster Brook | 10 |

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|------------------|------------------------------|
| 59 | Bass Brook | 10 |
| 60 | Bass Brook | 10 |
| 61 | Willow Brook | 10 |
| 62 | Willow Brook | 10 |
| 63 | Willow Brook | 10 |
| 64 | Willow Brook | 10 |
| 65 | Willow Brook | 10 |
| 66 | Willow Brook | 10 |
| 67 | Willow Brook | 10 |
| 68 | Willow Brook | 10 |
| 69 | Willow Brook | 10 |
| 70 | Willow Brook | 10 |
| 71 | Willow Brook | 10 |
| 72 | Willow Brook | 10 |
| 73 | Willow Brook | 10 |
| 73A | Willow Brook | 10 |
| 74 | Willow Brook | 10 |
| 75 | Willow Brook | 10 |
| 77 | Quinnipiac River | 1, 10 |
| 78 | Webster Brook | 10 |
| 79 | Webster Brook | 10 |
| 80 | Webster Brook | 10 |
| 81 | Webster Brook | 10 |
| 82 | Webster Brook | 10 |
| 83 | Bass Brook | 10 |
| 84 | Bass Brook | 10 |
| 85 | Bass Brook | 10 |
| 86 | Bass Brook | 10 |
| 87 | Bass Brook | 10 |
| 88 | Bass Brook | 10 |
| 89 | Bass Brook | 10 |
| 90 | Bass Brook | 10 |
| 91 | Bass Brook | 10 |
| 92 | Bass Brook | 10 |

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|------------------|------------------------------|
| 93 | Bass Brook | 10 |
| 94 | Bass Brook | 10 |
| 95 | Bass Brook | 10 |
| 96 | Bass Brook | 10 |
| 97 | Bass Brook | 10 |
| 98 | Bass Brook | 10 |
| 99 | Bass Brook | 10 |
| 100A | Bass Brook | 10 |
| 100B | Bass Brook | 10 |
| 100C | Bass Brook | 10 |
| 100D | Bass Brook | 10 |
| 101 | Bass Brook | 10 |
| 102 | Bass Brook | 10 |
| 103 | Bass Brook | 10 |
| 104 | Bass Brook | 10 |
| 105 | Bass Brook | 10 |
| 108 | Bass Brook | 10 |
| 109 | Bass Brook | 10 |
| 110 | Bass Brook | 10 |
| 111 | Bass Brook | 10 |
| 112 | Bass Brook | 10 |
| 113 | Bass Brook | 10 |
| 114 | Quinnipiac River | 10 |
| 115 | Bass Brook | 10 |
| 116 | Willow Brook | 10 |
| 117 | Bass Brook | 10 |
| 118 | Bass Brook | 10 |
| 119 | Bass Brook | 10 |
| 120 | Bass Brook | 10 |
| 121 | Bass Brook | 10 |
| 122 | Bass Brook | 10 |
| 123 | Bass Brook | 10 |
| 124 | Bass Brook | 10 |
| 125 | Bass Brook | 10 |

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|------------------|------------------------------|
| 126 | Bass Brook | 10 |
| 127 | Bass Brook | 10 |
| 128 | Bass Brook | 10 |
| 234 | Bass Brook | 10 |
| 264 | Bass Brook | 1, 10 |
| 290 | Bass Brook | 10 |
| 293 | Bass Brook | 10 |
| 297 | Bass Brook | 10 |
| 315 | Bass Brook | 10 |
| 338 | Bass Brook | 1, 2, 10 |
| 437 | Bass Brook | 10 |
| 734 | Quinnipiac River | 10 |
| 742 | Quinnipiac River | 10 |
| 743 | Quinnipiac River | 2, 10 |
| 753 | Quinnipiac River | 10 |
| 962 | Bass Brook | 10 |
| 1003 | Webster Brook | 10 |
| 1077 | Piper Brook | 10 |
| 1079 | Piper Brook | 10 |
| 1162 | Piper Brook | 10 |
| 1177 | Bass Brook | 10 |
| 1214 | Bass Brook | 10 |
| 1219 | Bass Brook | 10 |
| 1223 | Bass Brook | 10 |
| 1551 | Willow Brook | 10 |
| 1563 | Willow Brook | 10 |
| 1564 | Willow Brook | 10 |
| 1572 | Willow Brook | 10 |
| 1596 | Willow Brook | 10 |
| 1701 | Willow Brook | 10 |
| 1780 | Willow Brook | 10 |
| 1787 | Willow Brook | 10 |
| 1809 | Willow Brook | 10 |
| 1868 | Webster Brook | 10 |

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|---------------------|------------------------------|
| 1868A | Webster Brook | 10 |
| 1868B | Webster Brook | 10 |
| 1983 | Webster Brook | 10 |
| 1992 | Webster Brook | 10 |
| 1993 | Webster Brook | 1, 10 |
| 1994 | Webster Brook | 10 |
| 2012 | Bass Brook | 1, 10 |
| 2132 | Willow Brook | 1, 10 |
| 2133 | Willow Brook | 10 |
| 2149 | Webster Brook | 10 |
| 2188 | Willow Brook | 10 |
| 2188A | Willow Brook | 10 |
| 2242 | Willow Brook | 10 |
| 2403 | Willow Brook | 10 |
| 2467 | Willow Brook | 10 |
| 2551 | Webster Brook | 10 |
| 2575 | Willow Brook | 10 |
| 2578 | Willow Brook | 10 |
| 2589 | Willow Brook | 10 |
| 2592 | Willow Brook | 10 |
| 2602 | Willow Brook | 10 |
| 2728 | Piper Brook | 10 |
| 2783 | Batterson Park Pond | 10 |
| 2786 | Bass Brook | 10 |
| 2789 | Bass Brook | 10 |
| 2790 | Bass Brook | 10 |
| 2790A | Bass Brook | 10 |
| 2792 | Bass Brook | 10 |
| 2793 | Bass Brook | 10 |
| 2817 | Bass Brook | 10 |
| 2837 | Bass Brook | 10 |
| 2852 | Piper Brook | 1, 10 |
| 2857 | Piper Brook | 10 |

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|------------------|------------------------------|
| 2859 | Piper Brook | 10 |
| 2868 | Piper Brook | 1, 2, 4, 10 |
| 2989 | Quinnipiac River | 10 |
| 2996 | Quinnipiac River | 2, 10 |
| 3001 | Bass Brook | 10 |
| 3002 | Bass Brook | 10 |
| 3003 | Bass Brook | 10 |
| 3004 | Bass Brook | 10 |
| 3005 | Willow Brook | 10 |
| 3006 | Willow Brook | 10 |
| 3007 | Willow Brook | 10 |
| 3008 | Willow Brook | 10 |
| 3009 | Willow Brook | 10 |
| 3038 | Piper Brook | 10 |
| 3047 | Bass Brook | 10 |
| 3052 | Quinnipiac River | 10 |
| 3054 | Bass Brook | 1, 10 |
| 3076 | Bass Brook | 10 |
| 3079 | Bass Brook | 10 |
| 3104 | Webster Brook | 1, 10 |
| 3151 | Bass Brook | 10 |
| 3153 | Bass Brook | 10 |
| 3156 | Bass Brook | 10 |
| 3156A | Bass Brook | 10 |
| 3156B | Bass Brook | 10 |
| 3158 | Bass Brook | 10 |
| 3158A | Bass Brook | 10 |
| 3160 | Bass Brook | 10 |
| 3161 | Bass Brook | 10 |
| 3164 | Bass Brook | 10 |
| 3166 | Bass Brook | 10 |
| 3172 | Quinnipiac River | 10 |
| 3176 | Quinnipiac River | 1, 10 |
| 3182 | Willow Brook | 10 |

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|-----------------|------------------------------|
| 3185 | Willow Brook | 10 |
| 3186 | Willow Brook | 10 |
| 3188 | Willow Brook | 10 |
| 3190A | Willow Brook | 10 |
| 3194 | Willow Brook | 10 |
| 3194A | Willow Brook | 10 |
| 3196 | Willow Brook | 10 |
| 3196A | Willow Brook | 10 |
| 3198 | Willow Brook | 10 |
| 3198A | Willow Brook | 10 |
| 3200 | Willow Brook | 10 |
| 3202 | Willow Brook | 10 |
| 3204 | Willow Brook | 10 |
| 3206 | Willow Brook | 10 |
| 3208 | Willow Brook | 10 |
| 3210 | Bass Brook | 10 |
| 3212 | Bass Brook | 10 |
| 3214 | Bass Brook | 10 |
| 3220 | Bass Brook | 10 |
| 3224 | Bass Brook | 10 |
| 3226 | Bass Brook | 10 |
| 3228 | Webster Brook | 10 |
| 3230 | Webster Brook | 10 |
| 3234 | Willow Brook | 10 |
| 3236 | Willow Brook | 10 |
| 3238 | Willow Brook | 10 |
| 3240 | Willow Brook | 10 |
| 3242 | Willow Brook | 10 |
| 3242A | Willow Brook | 10 |
| 3242B | Willow Brook | 10 |
| 3244 | Willow Brook | 10 |
| 3246A | Willow Brook | 10 |
| 3246B | Willow Brook | 10 |
| 3246C | Willow Brook | 10 |

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|-----------------|------------------------------|
| 3246D | Willow Brook | 10 |
| 3246E | Willow Brook | 10 |
| 5000 | Willow Brook | 10 |
| 5001 | Willow Brook | 10 |
| 5002 | Willow Brook | 10 |
| 5003 | Willow Brook | 10 |
| 5004 | Willow Brook | 10 |
| 5005 | Willow Brook | 10 |
| 5006 | Willow Brook | 10 |
| 5007 | Webster Brook | 10 |
| 5008 | Webster Brook | 10 |
| 5009 | Piper Brook | 10 |
| 5010 | Piper Brook | 10 |
| 5011 | Piper Brook | 10 |

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|------------------|------------------------------|
| 5012 | Quinnipiac River | 10 |
| 5013 | Piper Brook | 10 |
| 5014 | Piper Brook | 10 |
| 5016 | Bass Brook | 10 |
| 5017 | Bass Brook | 10 |
| 5018 | Bass Brook | 10 |
| 5019 | Bass Brook | 10 |
| 5020 | Bass Brook | 10 |
| 5021 | Bass Brook | 10 |
| 5022 | Bass Brook | 10 |
| 5023 | Bass Brook | 10 |
| 5024 | Bass Brook | 10 |
| 5025 | Piper Brook | 10 |
| 5026 | Willow Brook | 10 |
| 10005 | Bass Brook | 10 |

Where SVFs are:

1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
5. Common trench construction serving both storm and sanitary sewer alignments.
6. Crossings of storm and sanitary sewer alignments.
7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
9. Areas formerly served by combined sewer systems.
10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather than poor owner maintenance).
12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather than poor owner maintenance).

3.2 Key junction manhole dry weather screening and sampling data

N/A, none performed to date.

| <i>Key Junction Manhole ID</i> | <i>Screening / Sample date</i> | <i>Visual/ olfactory evidence of illicit discharge</i> | <i>Ammonia</i> | <i>Chlorine</i> | <i>Surfactants</i> |
|--|------------------------------------|--|----------------|-----------------|--------------------|
| | | | | | |
| | | | | | |

3.3 Wet weather investigation outfall sampling data

| <i>Outfall ID</i> | <i>Sample date</i> | <i>Ammonia</i> | <i>Chlorine</i> | <i>Surfactants</i> |
|-----------------------|--------------------|----------------|-----------------|--------------------|
| | | | | |
| | | | | |

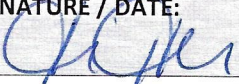
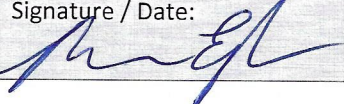
3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure

N/A, the City has not yet started formal catchment investigations, however illicit discharge investigations are ongoing.

| Discharge location | Source location | Discharge description | Method of discovery | Date of discovery | Date of elimination | Mitigation or enforcement action | Estimated volume of flow removed |
|--------------------|-----------------|--|---------------------|-------------------|---------------------|----------------------------------|----------------------------------|
| 80 Kent Road | House | Cross connection between storm and sanitary laterals | Dye testing | 5/9/18 | | Required removal | Unknown |

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: ERIN E. STEWART | Print name: Ramon Espando |
| SIGNATURE / DATE:  4/1/19 | Signature / Date:  4/1/19 |