

**City of Bristol
Bristol, Connecticut**

2025 ANNUAL REPORT

**General Permit for the Discharge of Stormwater from
Small Municipal Separate Storm Sewer Systems**

**DEEP Permit No.: GSM000042
February 2026**



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Introduction

The following the City of Bristol's 2025 Annual Report, prepared in accordance with the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm-sewer Systems, permit number GSM000042. In accordance with General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (effective July 1, 2017), Section 4(d)(3), this Annual Report was made available for public review 45 days prior to submission to Connecticut Department of Energy and Environmental Protection (CT DEEP) scheduled April 1, 2026. Accordingly, this draft report was posted on the City of Bristol's website on February 14, 2026 for public on-line access and as a hard-copy accessible at the City Hall Public Works Division Office, Ground Floor, 111 North Main St., Bristol, CT 06010. Following submission of the Annual Report to CT DEEP, a copy of the final report will be made available for public inspection during regular business hours.

The annual reporting requirements are stipulated in Section 6 (j)(2) of the General Permit. By April 1 of the second year following the effective date of permit and annually thereafter by April 1, the permittee shall submit an Annual Report for the preceding calendar year electronically to the Department. The DEEP MS4 stormwater webpage (www.ct.gov/deep/municipal/stormwater) will provide guidance for the Annual Report submittal. The Annual Report must be in Microsoft Word ©, Adobe Acrobat © or other format acceptable to the Commissioner. The report shall include:

- (A) A municipal plan review fee of \$187.50 (submitted separately);
- (B) A written discussion of the status of compliance with the general permit, but not limiting to (*Note: Italicized text provides reference for the reporting location within this report*):
 - (i) A listing and brief description (including, where appropriate, the address or latitude and longitude) of all BMPs within each Minimum Control Measure (*See Summary of Minimum Control Measures section of this report*);
 - (ii) Any reporting requirements enumerated in the controls section 6(a) and its subsections (*Refer to Summary of Minimum Control Measures and appendix sections of this report*);
 - (iii) An implementation schedule for each BMP and an indication of whether or not the BMP or any portion of the BMP was scheduled to be implemented during the year covered by the Annual Report (*Refer to Summary of Minimum Control Measures section of this report*);
 - (iv) The status of implementation for each BMP scheduled to be completed or partially implemented during the year covered by the Annual Report, including an assessment of the appropriateness of the BMP and progress made toward achieving the implementation dates and measurable goals of the BMP (*Refer to Summary of Minimum Control Measures section of this report*);
 - (v) For any portion of a BMP implementation scheduled for the year covered by the Annual Report that was not completed as scheduled, a discussion of the circumstances and reasons for non-implementation, a modified implementation schedule, and if necessary, a modified or alternate BMP to replace the BMP not implemented including the rationale for such modification or alternate BMP (*See Summary of Minimum Control Measures section of this report*);

- (vi) An overall status of each of the six categories of the Minimum Control Measures and a discussion of the effectiveness of each category in achieving its goals (*Refer to Summary of Minimum Control Measures section of this report*);
 - (vii) A discussion of any changes to the personnel responsible for the Plan or BMP implementation (*Personnel changes of those responsible for BMP implementation are discussed in the Summary of Minimum Control Measures section of the report*);
 - (viii) A description of any new BMP added to the Plan during the year, including a description of the BMP, the reason or rationale for adding the BMP, the timeline for implementation, the party responsible for implementation and the measurable goal for the BMP and where appropriate, the location for each BMP, including the address and latitude and longitude (*See Summary of Minimum Control Measures section of this report for BMPs and schedule*);
 - (ix) A discussion of the progress and status of the MS4's IDDE program (see General Permit (GP) Section 6(a)(3)) including outfall screening, mapping, drainage area evaluation and prioritization, illicit discharge tracking activities, IDDE field monitoring results, number and type of illicit discharges detected, and number of illicit discharges eliminated (*See Summary of Minimum Control Measures section and appendices of this report*);
 - (x) A discussion of the measures included in the Plan for the control of discharges to impaired waters (see GP Section 6(k)) including a list of BMPs in the Minimum Control Measures that are targeted for such discharges, progress in implementing these measures, any evaluation of the effectiveness of these measures in meeting the goals of the Plan's Impaired Waters program, and any new or modified BMPs to be added to the Plan to improve its effectiveness (*See Monitoring and appendix sections of this report*);
 - (xi) A discussion of the MS4's stormwater monitoring program describing the status of monitoring for the year of the report, and the overall status of the monitoring program. A summary of the findings, any significant observations regarding the results, any modifications of the Plan as a result of the monitoring results (*See Monitoring and appendix sections of this report*);
 - (xii) A discussion of any planned BMP implementation in the coming year, including a discussion of any new or modified BMPs planned for future implementation (*See Summary of Minimum Control Measures section*).
- (C) All monitoring data collected and analyzed pursuant to Section 6(i) (*See Monitoring and appendix sections of this report*);
- (D) All other information collected and analyzed, including data collected under the Illicit Discharge Detection Protocol (General Permit Appendix B), during the reporting period (*See Monitoring and appendix sections of this report*).

MS4 General Permit
City of Bristol 2024 Annual Report
Permit Number GSM000042
January 1, 2025 – December 31, 2025

Primary MS4 Contact: Raymond Rogozinski, Director of Public Work, RaymondRogozinski@bristolct.gov

This report documents City of Bristol's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2025, to December 31, 2025.

Part I: Summary of Minimum Control Measure Activities

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

1.1

BMP Summary

BMP	Activities in current reporting period	Sources Used (if applicable)	Method of Distribution	Audience (and number of people reached)	Measurable Goal	Department / Person Responsible	Additional details
1-1 Implement public education and outreach	Update the Department of Public Works (DPW) Engineering MS4 information page; Municipal Separate Storm Sewer System (MS4) Bristol, CT - Official Website (bristolct.gov)	Not Applicable	Online Public Access	City of Bristol Residents	At least once per year, update the public works community page to include additional links with information on impacts of stormwater discharges to reduce pollutants in stormwater runoff.	DPW – Engineering Division	In 2025 City Bristol Public Works Department made updates to education programs including both printed and electronic information for the community. Educational topics included: Illegal pumping into storm drain awareness and reporting; preventing litter, pet wastes, leaves and debris from entering street gutters and storm drains to protect downstream lakes, streams, rivers and wetlands; proper lawn and garden chemical applications; proper disposal of used oil, antifreeze, paints and other household chemicals; proper automotive clean-up of spilled brake fluid, oil, grease and antifreeze preventing discharge to storm drains. Residential soil and sediment erosion control practices include planting ground cover and stabilizing erosion-prone areas. Septic system maintenance best practices include five-year inspections and pump-outs. Purchase of household detergents and cleaners that are low in phosphorous to reduce the amount of nutrients discharged into our

							lakes, streams and coastal waters. Create and plant rain gardens, bioswales or just plant pollinators at drainage borders to help filter and remove pollutants.
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Additional details 1-1, continued.

- The City website [Bristol, CT - Official Website | Official Website \(civicplus.com\)](#) provides overall City department information, contact information, and departmental webpage links, links to the Facebook page for the Mayor, Public Works, Parks & Recreation, and other City departments.
- The Public Works office, 111 North Main Street, Bristol, CT 06010 provides printed information on MS4, construction BMPs, solid waste and recycling disposal guidelines, pet waste, invasive species, and information on the CT Construction Stormwater General Permit requirements. Online information for the Public Works department is provided at [Public Works | Bristol, CT - Official Website \(civicplus.com\)](#).
- Bristol Water and Sewer Department webpage [Water & Sewer Department | Bristol, CT - Official Website \(civicplus.com\)](#) provides information on water quality topics, including education, conservation, and water quality. The water education page is located at [Education | Bristol, CT - Official Website \(civicplus.com\)](#) and includes kid-friendly activities, teach packs for environmental education, and links to local, state, and federal topics.

1-2 Address education/ outreach for pollutants of concern		Not Applicable	In-person and virtual learning programs and activities.	City of Bristol residents.	Coordinate with Watershed Associations for community programs and education workshops (cross-posting and hosting).	DPW Engineering	
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Additional Details 1-2

The City of Bristol Parks and Recreation Department conducted numerous activities in association with Youth and Community Services supporting the educational aspects of the City's MS4 program. Activities completed are included in Appendix E and including the community on the following stormwater management topics:

- Educated why using 20 additional garbage cans throughout the park system, including high bacteria loading sites at Rockwell Park, Birge Pond, and Memorial Boulevard, to reduce littering into stormwater systems.
- Educated the benefits of employing a "low mow zone" park space to reduce underutilized turf grass. These acres are mowed once a year and enhanced with native wildflower and grass species in order to improve water quality and retention, provide habitat for native species, and reduce greenhouse gas emissions.
- Maintained community awareness of purpose of "No Geese" feeding signs at Memorial Boulevard and Pine Lake Parks. Educated the impacts of feeding geese which results in geese residing in lakes for long periods of time, over-populating and depositing high volumes feces in lakes causing eutrophic conditions and discharging high-levels of phosphorous and E Coli into stormwater systems.
- Educated community volunteers impacts of invasive plant species. Volunteers mechanically removed a half-acre of bittersweet from Kern Park, maintaining the health of the woodlands at Kern Park, ensuring the native trees are able to continue to bio-infiltrate stormwater runoff.
- Continued community awareness and reinforcement of the Kern Park habitat educational signs. The signs effectively educate to the public the benefits healthy wetland ecosystems, pollinator habitats and native tree species can have on stormwater systems.
- Continued community awareness of Page Park Pond water management program preventing flooding by lowering pond levels prior to storm events.
- Parks staff worked with CTDEEP to address an oil spill into a catch basin from an unknown source that entered Memorial Boulevard waterways and pond. An environmental company was hired to mitigate the release and restore the pond.

- Continued education of the importance of maintaining tree plantings at Memorial Boulevard. In total, 25 trees were planted to enhance the riparian buffer between the Pequabuck River and runoff from surrounding hills and waterways.

The majority (approximately 84%) of Bristol's watershed areas discharge to the Pequabuck River (or its tributaries), which continues to drain east through the City to the Farmington River. The active Watershed Associations are the Pequabuck River Watershed Association, working for "Collaborating and Advocating for a Healthy Pequabuck River" and Farmington River Watershed Association (FRWA) "Dedicated to preserving, protecting, and restoring the Farmington River and its watershed." ELCCT operates the Indian Rock Nature Preserve and the Harry C. Barnes Memorial Nature Center in Bristol, offering diverse, hands-on field and classroom programs to inspire appreciation and learning in students. The City of Bristol continues to participate independently and in association with these organizations through community activities and cross posting of information for public education areas of contamination in Pine Lake vicinity, including wetland restoration. Throughout 2025, the City of Bristol maintained posted signage along the Pequabuck River titled "Let's Clean Up Our Act", detailing best management practices for protecting the waters of the Pequabuck River.

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

- Continue and expand environmental and recycling education programs at Bristol public schools.
- Continue to provide educational outreach activities through the Youth and Community Services program.
- Continue to collaborate with the FRWA and PRWA to provide educational events for high school students, children, and adult residents of Bristol.

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

2.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Location Posted	Additional details
2-1 Final Stormwater Management Plan publicly available	Ongoing	Make Stormwater Management Plan (SMP) available for public review and comment at least ninety (90) days prior to the effective date of this general permit.	Publish a public notice on City's Public Works website with contact information for public input and information on the SMP.	DPW Engineering		Bristol Public Works office at 111 North Main Street, Bristol, CT 06010 City-of-Bristol-SMP-GMS000042-3-27-2017 (civicplus.com)	
2-2 Comply with public notice requirements for Annual Reports (annually by 2/15)	Ongoing	Complete annual report using an expanded template to provide regulatory explanation of reporting requirements.	Publish a public notice on City's Public Works website with contact information for public input and information on annual report.	DPW Engineering	Annual Report completed January 2025	Bristol Public Works office at 111 North Main Street, Bristol, CT 06010 Municipal-Separate Storm Sewer System (MS4) Bristol, CT - Official Website (bristolct.gov)	In accordance with the MS4 general permit requirements, at least 45 days prior to April 1, 2025, and continuing annually until the permit expiration, the City of Bristol (Public Works Department-Engineering Division) will publish a public notice on its website. This notice will provide a contact name, phone number,

							address, and email to whom the public can send comments. Additionally, the City's SMP and the Annual Reports will be publicly accessible on the website and in the Bristol Public Works office at 111 North Main Street, Bristol, CT 06010. The public notice will allow for a 30-day comment period, at a minimum. Comments on the Annual Report may be made to the City of Bristol and are not submitted to CT DEEP; a copy of the final report shall be made available for public inspection during regular business hours.
2-3 Establish stormwater committee	Completed	Committee established September 2025 (Memorialized in Public Works Memorandum, Append B)	Provide forum to coordinate SWMP implementation across depts. and commissions	Inland Wetlands / P. Vance	Summer 2018		Reason for addition: the Committee will represent town departments & commissions with stake in stormwater mgmt.

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

- Continue public outreach/workshop(s) for LID, fertilizer/pesticides/herbicides/lawn care/rain gardens/rain barrel/native plants/invasive species management. Collaborate with PRWS, FRWA, and Interdepartmental Municipal offices on Watershed Based Plan.
- Continue the program assisting homeowners and businesses in reporting and removing large amounts of debris or sediments for the river Residential Waterway Maintenance.
- Continue recycling and disposal notifications and special events.
- Continue PRWA public involvement/participation including watershed-based plan outreach, rain garden planting, BMP workshops, RBV training/sampling participation (see previous section on Public Education/Outreach), river clean-up.
- Quarterly MS4 Program Steering Committee Status Report public meetings.

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

3.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
3-1 Develop written IDDE program (Completed and ongoing))	Completed	In response to US EPA outfall sampling, the City of Bristol supplemented the IDDE Program with a Sampling Findings Illicit Discharge Inspection Plan dated August 22, 2025	Develop written plan for IDDE program	DPW – Engineering Division	IDDE Program initiated December 19, 2017, ongoing and supplemented with EPA Sampling Findings Illicit Discharge Inspection Plan.	Continue to train and implement the City's IDDE Program. Implemented the August 22, 2025 Illicit Discharge Inspection Plan including collecting confirmatory outfall samples, inspecting manholes, inspecting potential illicit discharge sources and assessing background conditions. The City identified an illicit sanitary connection at 335 Stafford Avenue. The City mandated an immediate disconnect and conducted comprehensive investigation.

3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas (completed and continually updated)	Completed for City based on existing mapping references.	Calculated and mapped DCIA >11%, populated dry screening sampling data (see Appendix C for DCIA with Dry Screening Sampling Locations Map).	Continued development of base maps and outfalls.	DPW – Engineering Division	Completed with initial data – ongoing updates.	Basin outfalls maps completed.
3-3 Implement citizen reporting program (Ongoing)	Completed/ongoing	No change	Review and update website annually	DPW – Engineering Division	Completed, with updates as needed.	Direct reporting link added in 2018, website made more user friendly in 2020 and updated at least annually. The website for reporting IDDE is [City of Bristol CT] Report an Issue (seamlessdocs.com) .
3-4 Establish legal authority to prohibit illicit discharges (Completed)	Completed	Illicit discharge ordinance voted in by Board of Public Works December 18, 2026.	Legal authority is established to prohibit illicit discharges in Section 22- Water	DPW – Engineering Division	Completed, with updates as needed. City establishing fines and penalty ordinance.	Enforce ordinances as voted in by Board of Public Works on December 18, 2026. Copy of Department of Public Works memorandum documenting the proposed illicit discharge ordinance is provided in Appendix C.
3-5 Develop record keeping system for IDDE tracking	Completed	No change	IDDE reports are currently investigated, recorded, and reported.	DPW – Engineering Division	The 2025 reports are provided in this Annual Report in Appendix C.	May be updated for GIS recording as program develops.
3-6 Address IDDE in areas with pollutants of concern	Partially completed	Outfall inspections continue	Complete initial illicit discharge assessment and initial priority ranking (see also BMP 3-7).	DPW – Engineering Division	July 30, 2020	In 2025, continued IDDE screening and sampling outfalls and catch basins. Respond to detections, identify illicit discharge source(s) and eliminate source(s). IDDE screening, sampling and elimination documentation is provided in Appendix C.
3-7 Incorporate written procedure for screening and sampling of outfalls & MS4 interconnections/	Complete and ongoing	Dry weather outfall screening records continue, and locations have been mapped into GIS	Formalize written catchment investigation/manhole inspection/outfall screening procedure	DPW – Engineering Division	Completed, with updates as needed.	Sampling locations are updated in GIS.

catchment investigation procedure			for IDDE program (use BMP 5-4 for implementation)			
3-8 Sanitary Sewer Overflow (SSO) Inventory	Completed, with annual updates	Updated for 2023	Incorporate all known SSOs into the MS4 for past 5 years into Excel database.	Water Pollution Control; Engineering Division	The 2025 report is provided in Appendix C.	
3-9 Develop Illicit Discharge Prevention Procedures	Completed, with ongoing updates	See Appendix C for reporting.	Incorporate updates into IDDE plan (BMP 3-1) and public education program (BMP 1-2).	DPW	Completed, with updates as needed.	
3-10 Perform IDDE Staff Training	In progress, with annual updates					

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

Continue with inspections, sampling, coordination, and training (per permit IDDE sampling requirement includes in priority areas (urbanized areas overlapped by impaired waters or DCIA >11%)) for initial baseline screening and dry or wet weather screening as needed based on results of catchment investigations. IDDE activities may include additional dry weather outfall screening, including visual documentation and laboratory sampling, and/or wet weather sampling, as funding permits.

3.3 Provide a record of all citizen reports of suspected illicit discharges and other illicit discharges occurring during the reporting period and SSOs occurring July 2023 through end of reporting period using the following table. Illicit discharges are any unpermitted discharge to waters of the state that do not consist entirely of stormwater or uncontaminated groundwater except those discharges identified in Section 3(a)(2) of the MS4 general permit when such non-stormwater discharges are not significant contributors of pollution to a discharge from an identified MS4.

Location (Lat long/ street crossing /address and receiving water)	Date and duration of occurrence	Discharge to MS4 or surface water	Estimated volume discharged	Known or suspected cause / Responsible party	Corrective measures planned and completed (include dates)	Sampling data (if applicable)
See Appendix C for SSO records.	August 1, 2025	Jewel 1	Unknown	RV sanitary connect to stormwater sewer	United States Environmental Protection Agency (USEPA) submitted a MS4 Sampling Report dated July 22, 2025 to the City of Bristol on July 28, 2025. A USEPA investigation team conducted unannounced sampling at City outfalls including sampling an outfall adjacent to Jewel Street on May 28, 2025. This sample revealed elevated concentrations of E. coli and pharmaceuticals and personal care products (PPCPs). Immediately upon the City's receipt of USEPA's report, the City engaged BL companies to review and support taking immediate investigative action. City of Bristol's Sanitation Department engineers performed an illicit discharge reconnaissance of the area on August 1, 2025. Reconnaissance findings identified an illegal RV sanitary connection into a storm sewer at 335 Stafford Avenue. The City made immediate contact with the party responsible and ordered an immediate storm sewer disconnect. The City conducted post-disconnection outfall sampling which revealed a decrease in illicit discharge constituents of concern.	
See Appendix C for Inspection and IDDE Investigation plan.						

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

Method used to track illicit discharge reports	Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known	Dept. / Person responsible
Bristol's Environmental Protection Tech (EPT) and Environmental Engineer receive complaints from referred calls or on-site forms. Generally, the EPT	From Public Health Department Chief Sanitarian records, none for 2025.			

<p>responds to the complaint and addresses the action in a monthly report, which is reviewed by the Environmental Engineer, City Engineer, and Inland Wetland Commission. If a warning letter is issued, the EPT may include a “Summary of Urban Stormwater Pollutants” table from the 2004 CT Stormwater Quality Manual to educate homeowners on water quality issues. Compliance fines may also be issued.</p>				
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3.5 Briefly describe the method and effectiveness of said method used to track illicit discharge reports.

Bristol’s Environmental Protection Tech (EPT) and Environmental Engineer receive complaints from referred calls or on-site forms. Generally, the EPT responds to the complaint and addresses the action in a monthly report, which is reviewed by the Environmental Engineer, City Engineer, and Inland Wetland Commission. If a warning letter is issued, the EPT may include a “Summary of Urban Stormwater Pollutants” table from the 2004 Connecticut Stormwater Quality Manual to educate homeowners on water quality issues. Compliance fines may also be issued.

3.6 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	See Maps
Estimated or actual number of interconnections	See Maps
Outfall mapping complete	100%
Interconnection mapping complete	100%
System-wide mapping complete (detailed MS4 infrastructure)	100%
Outfall assessment and priority ranking	52 Outfalls assessed to date. See Appendix C for maps and priority ranking.

Dry weather screening of all High and Low priority outfalls complete	66 outfalls assessed to date. See Appendix E for maps.
Catchment investigations complete	2 locations identified to date for follow-up.
Estimated percentage of MS4 catchment area investigated	Investigations are in response to IDDE reports. See Appendix C for 2024 Smoke Testing Summary.

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

Annual training is provided for DPW staff – 2025 training guides are provided in Appendix C. Specific monitoring equipment and sampling procedure training events occurred in June and December 2025. Equipment and outfall sampling training event documentation is provided in Appendix C.

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

4.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit (Due 7/1/20)	Completed		Review and revise, where necessary, land use regulations to comply with MS4 mandates.	Land Use and Engineering	Ongoing	Below

Additional details: Construction sites are regulated by the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (Construction General Permit), a permit issued under the authority of Section 22a-430b of the Connecticut General Statutes. The Construction General Permit (effective date October 1, 2019) authorizes the discharge of stormwater and dewatering wastewater for surface waters from construction activities on a site (as defined by the permit) with a total land disturbance of one or more acres of land area on a site, regardless of project planning. The Construction General Permit defines requirements for registration. It allows “small construction” projects, i.e. construction projects with a total land disturbance of between one and five acres, to adhere to the erosion and sediment control land use regulations of the municipality in which the construction activity is conducted, as well as the Guidelines and Stormwater Quality Manual. According to the Construction General Permit, no registration or plan review shall be required for “small construction” activities provided a land-use commission of the municipality (i.e. Planning, Inland Wetland, Conservation) reviews and issues a written approval of the proposed erosion and sediment control measures, pursuant to the requirements of Section 22a-329 of the Connecticut General Statutes. In the absence of such municipal commission approval, registration with CT DEEP is required.

Section IX-A of the City of Bristol’s Zoning Regulations, Soil Erosion, and Sediment Control Regulations, identifies the basic requirements for the regulations as “No development of the disturbed area of which is cumulatively more than one-half acre in area shall be undertaken in any zoning district unless certification therefore in compliance with the provision of this Section has first been obtained from the Commission or its designated agent”.

The land use regulations review and, if necessary, revision to establish the legal authority to control stormwater runoff from construction sites, as required by the MS4 Permit may include:

- *Developers, construction site operators, or contractors maintain consistency with the 2002 Guidelines for Soil Erosion and Sedimentation Control, as amended, the Connecticut Stormwater Quality Manual, and all stormwater discharge permits by the CT DEEP within the municipal or institutional boundary pursuant to CGS 22a-430 and 22a-430b: [currently required by Land Use development review]*

<ul style="list-style-type: none"> • <i>The implementation of additional measures to protect/improve water quality (in addition to the above requirements) as deemed necessary; [Water quality requirements in accordance with the 2004 CT Stormwater Quality Manual is currently implemented]</i> • <i>Authorization to carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance with municipal regulations, ordinances, or programs or institutional requirements related to the management of Bristol’s MS4. Inspections shall be conducted, where allowed, to inventory the number of privately-owned retention ponds, detention basins, and other stormwater basins that discharge to or receive drainage from the permittee’s MS4.</i> • <i>The owner of a site seeking development approval from Bristol shall provide and comply with a long-term maintenance plan and schedule to ensure the performance and pollutant removal efficiency of privately owned retention ponds, detention basins, and other stormwater basins that discharge to or receive discharge from Bristol’s MS4 including short-term inspection and long-term maintenance measures to be implemented by the private owner; [currently implemented]</i> • <i>Bristol will control, through interagency or inter-jurisdictional agreements, the contribution of pollutants between the permittee’s MS4 and MS4s owned or operated by others.</i> 						
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval (Ongoing)	Complete/Ongoing	Subdivision and site plan reviews for erosion control and stormwater management are conducted in accordance with the MS4 and local criteria.	Land Use reviews include State MS4 criteria for stormwater controls during construction and post-development.	Land Use/Engineering	Completed	The City’s Land Use Division reviews permitting or approval of land disturbance projects.
4-3 Review site plans for stormwater quality concerns (Ongoing)	Ongoing	Subdivision and site plan reviews for erosion control and stormwater management are conducted in accordance with MS4 and local criteria.	Land Use reviews include State MS4 criteria for stormwater controls during post-construction and post-development.	Land Use/Engineering	Completed	The City of Bristol conducts site plan reviews that incorporate the consideration of stormwater controls or management practices to prevent or minimize construction impacts on the MS4’s water quality.
4-4 Conduct site inspections (Ongoing)	Ongoing	See Appendix D for 2025 annual inspection summary report.	Continue site inspection program, including coordination with BMP 3-10 and BMP 6-4.	EPT and other DPW inspectors	Ongoing	The City of Bristol performs construction site inspections and, where necessary, initiates enforcement actions to ensure the adequacy of the installation, maintenance, operation, and repair of all construction and post-construction runoff control measures relate to the City’s MS4 system.

4-5 Implement procedure to allow public comment on site development (Ongoing)	Complete	Procedure is in place.			Completed	See Additional Details BMP 4-5 below.
Additional details BMP 4-5: Land development is regulated under the City of Bristol’s Code of Ordinances, which is publicly available on the City’s website and in the City Clerk’s office. The City’s website provides information on the City Government Boards, Committees, meeting schedules, agendas, and minutes relating to site development projects. Meetings are held in public hearing format, with opportunity for public comments on site development projects. Public comment opportunity is currently implemented in the development review process with the use of public hearings for applications and proposed ordinance changes. The review Boards and Commissions are made of City of Bristol citizens, elected or appointed by an elected Mayor.						
4-6 Implement procedure to notify developers about DEEP construction stormwater permit (Ongoing)	Complete/ongoing	The City Engineering Department continues to provide flyers to contractors and residences through the Building Department permit process and Public Works offices. A copy of the flyer is provided in Appendix D.			Completed	See Additional Details BMP 4-6 below.
Additional Details BMP 4-6: The City of Bristol formalized and makes available a notification to developers and contractors of their potential obligation to obtain authorization under CT DEEP’s General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities (Construction General Permit) if their project disturbs greater than one acre of land and results in a point source discharge to Connecticut surface waters directly or through the MS4, including the requirement to provide a copy of the Stormwater Pollution Control Plan be made available on request.						

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

Continue to implement educational, inspection, and enforcement actions.

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

5.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning (Due 7/1/22)	Completed/ongoing	In 2019, the Zoning Regulations were amended to update and add a new Stormwater Management section for consideration of LID.	Update LID and runoff reduction site planning and development standards (Zoning Commission 7-10-2019).	DPW/Land Use/Engineering	Completed/ongoing	See Additional Details BMP 5-1 below.
<p>Additional Details BMP 5-1: The MS4 General Permit requires the establishment of legal authority by ordinance, bylaw, regulation, standard condition of approval, or other means to require, to the maximum extent practicable (MEP), that developers and contractors seeking the City's approval consider the use of low impact development (LID) and runoff reduction site planning and development practices that meet or exceed those LID and runoff reduction practices in the CT Stormwater Quality Manual prior to other stormwater management practices allowed in the land use regulations, guidance, or construction project requirements. This legal authority shall include the following standards:</p> <ul style="list-style-type: none"> • For redevelopment of sites that are currently developed with DCIA of 40% or more, the project must retain the water quality volume for the site, or; • For new development and redevelopment of sites with less than 40% of DCIA, retain the water quality volume for the site, or; • If those retention standards cannot be met, the developer will be required to provide a report indicating why the standard could not be met and a mitigation project on another property or pay a fee to fund a DCIA retrofit. • In developing this legal authority, the following watershed protection elements to manage the impacts of stormwater on receiving waters shall be considered: <ul style="list-style-type: none"> ○ Preserve, protect, create, and restore ecologically sensitive areas that provide water quality benefits and serve critical watershed functions. These areas may include, but are not limited to, riparian corridors, headwaters, floodplains, and wetlands. ○ Implement stormwater management practices that prevent or reduce thermal impacts to streams, including vegetated buffers along waterways, and disconnecting discharges to surface waters from impervious surfaces such as parking lots. ○ Seek to avoid or prevent hydromodification of streams and other water bodies caused by development, including roads, highways, and bridges. ○ Implement standards to protect trees, and other vegetation with important evapotranspirative qualities. ○ Implement policies to protect native soils, prevent topsoil stripping, and prevent compaction of soils. ○ Coordinate with state or local health officials to ensure no interference with the performance of on-site septic systems. ○ Limit turf areas. 						
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Due 7/1/22)	Completed	None, except as noted in Additional Details column.	Adds reference for Stormwater Management (Section IX-G) and updates Soil and Erosion Control	DPW/Land Use/Engineering	Adopted by Zoning Commission 8-5-2019)	Memorandum summary (April 1, 2019) is available and was provided in 2019 MS4 Annual Report, Appendix F.

			references to zoning regulations.			
5-3 Identify retention and detention ponds in priority areas (Due 7/1/20)	Completed	None	Identify retention and detention ponds in priority areas; add to GIS mapping database.	DPW/Land Use/Engineering	Completed and ongoing	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures (Ongoing)	Completed for City's Stormwater Trust ponds.	GIS map of existing Stormwater Trust ponds completed in 2018; maintenance and inspection of City's Stormwater Trust ponds are completed semi-annually. See Appendix B.	Establish GIS database for ponds and structures. Establish and implement a plan for ongoing inspection and maintenance.	DPW Facilities Maintenance/Engineering	Completed and ongoing	Long term maintenance plans are currently being established for the City of Bristol stormwater trust ponds and associated stormwater structures. The systems are maintained, inspected, and reported on at least semi-annually by City staff and the Stormwater Trust committee inspects the systems annually. The City's Stormwater Trust program is a 2014 New England STORMY award-winning program for Best Stormwater Funding Idea.
5-5 DCIA mapping (Due 7/1/20)	Completed	State IA layer added to GIS and the estimated DCIA calculated using Sutherland equation.	Complete DCIA for each MS4 outfall (See also BMP 3-2).	DPW/Engineering/EPT/GIS	Completed	DCIA are established for each basin. See Appendix C for Areas with DCIA >11% Map and basin maps. Maps were updated to

						include the 2022 Stormwater Impaired Waters layer.
5-6 Address post-construction issues in areas with pollutants of concern	In progress	Establish and implement Stormwater Retrofit Plan (See BMP 6-8).	Establish and implement Stormwater Retrofit Plan (See BMP 6-8).	DPW/Land Use/Engineering	In progress	See also BMP 6-8. It is anticipated that as work implementation is completed, the City will continue to address permit requirements concerning post-construction issues of Pollutants of Concern.

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

Continue to develop LID practices, GIS stormwater database, and Stormwater Retrofit Plan in accordance with permit schedule requirements.

5.3 Post-Construction Stormwater Management reporting metrics

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/post-construction.htm>. Scroll down to the DCIA section.

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	See Appendix E – 1979.4 acres estimated (Sutherland)
DCIA disconnected (redevelopment plus retrofits)	Completed or in progress – approximately 37 acres
Retrofit projects completed	17 (completed or in progress)
DCIA disconnected	Approximately 37 acres (in progress- see listing in Appendix E)
Estimated cost of retrofits	Not tabulated
Detention or retention ponds identified	Primarily infiltration systems

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

Bristol's estimated directly connected impervious area was calculated with the CT DEEP/NEMO GIS impervious cover data (excluding DOT areas) and using the Sutherland equation, as presented in the NEMO November 4, 2019, webinar. The overall City map, calculations, tracking worksheet, and basin maps are provided in Appendix E.

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

6.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
6-1 Develop/implement formal employee training program (Ongoing)	In progress and ongoing	See Appendix E for training program details	Continue to expand its MS4 training program for City employees to increase awareness of water quality issues.	DPW	In progress and ongoing	Training records are provided in Appendix E
6-2 Implement MS4 property and operations maintenance (Ongoing)	Ongoing	Coordinate initial BMP guidance and tracking documents for annual report (See BMPs 6-9, 6-10, and 6-11)	Coordinate initial BMP guidance and tracking documents for annual report (See BMPs 6-9, 6-10, and 6-11)	DPW -Engineering Division	Complete and ongoing	Records are provided in Appendix B.
6-3 Implement coordination with interconnected MS4s	Annually	Mapping Completed	Establish interconnection locations and appropriate contacts. Coordinate MS4 strategies in communication(s).	DPW – Engineering Division	May 2018	Continue to improve maps when new information is available. In addition, starting in 2025 <i>the City is participating in the development of nine-element watershed-based plan for the Mad River that will eventually be approved by EPA. The plan will identify methods to reduce nonpoint source pollution that does not originate from municipal stormwater system outfalls. However, through the strategies identified, co-benefits related municipal stormwater systems will likely be identified. For example:</i>

						<ul style="list-style-type: none"> • <i>Street sweeping strategies could reduce nonpoint source pollution while also reducing sedimentation in stormwater catch basins</i> • <i>A project that reduces nonpoint source pollution from a large Town-owned property could likewise allow for disconnection of drainage areas from municipal stormwater systems.</i>
6-4 Develop/implement program to control other sources of pollutants to the MS4	Ongoing	Ongoing	Coordinate BMPs and outreach to Public Works (fertilizers/pesticides applications and use, material storage, pet waste, waterfowl management, mowing, clipping disposal, alternative landscapes, pollution prevention, leaf and trash management)	DPW – Engineering Division	Ongoing	Continue education and coordination efforts in 2025.
6-5 Evaluate additional measures for discharges to impaired waters*	Ongoing	Pequabuck River Watershed Based Plan has been completed (September 2019) which has had numerous 2025 public informational meetings.	Using BMP 3-2 progress, coordinate BMPs, with BMP 1-2, 6-1, 6-2, 6-4, 6-7 through 6-11.	Watershed communities/DPW – Engineering Division	Ongoing	Pequabuck River Watershed Plan link added to Public Works website. Watershed Management Plans and Documents (ct.gov)
6-6 Track projects that disconnect Direct Connected Impervious Area (Ongoing)	Completed and ongoing	See Appendix F for worksheet and 2025 status – Acquired 10.6 acres of property slated for development and incorporated the land into a protected open space park. This land acquisition	Using database for BMP 5-4, establish procedure to document DCIA removal projects	DPW – Engineering	In progress	See BMP 6-6 for additional details below.

		preserved a wetland and a CT designated core forest in its current state.	and assign tracking responsibilities.			
<p>BMP 6-6 additional details: The MS4 permit requires annual tracking of the total acreage of Directly Connected Impervious Area (DCIA) that is disconnected from the MS4 as a result of redevelopment or retrofit projects within the City. For each retrofit/redevelopment project, Bristol documents the amount of existing DCIA that is disconnected. The total amount of disconnected DCIA is reported in the Annual Report. Starting on July 1, 2021, a 1% reduction of its total DCIA acreage per year to the maximum extent possible is the MS4 permit goal. Bristol will continue to provide updates on this goal in its annual report, documenting and incorporating all DCIA disconnections which occurred in the City since July 1, 2021, towards meeting this goal.</p>						
6-7 Implement infrastructure repair/rehab program (Due 7/1/21)	Ongoing	Coordinating with BMP 5-3 database and plan, prioritizing and track MS4 infrastructure maintenance. This has included collaboration and implementation of BMPs by Public Works and Parks, Recreation, Youth and Community Bristol Departments.	Continue the program to identify MS4 structures to repair, rehabilitate, or upgrade to reduce or eliminate the discharge of pollutants into water bodies.	DPW – Engineering	Ongoing	<p>In 2025, City of Bristol’s Parks, Recreation, Youth and Community Services Department (PRYC Department) increased the storm water storage capacity at Page Park Pond by over 145,000 ft³ to improve storm water management and prevent flooding. Continuing from 2024, the City’s PRYC Department is monitoring and mitigating flood events at Page Park Pond by lowering the pond level prior to storm events, reducing the number of flooding events from nine in 2023, one in 2024 and none in 2025.</p> <p>In addition, the City has partnered with the Environmental Learning Centers of Connecticut and have removed invasive species from Roberts Property in order to restore the habitat of the endangered grasshopper sparrow.</p>

<p>6-8 Develop/implement plan to identify/prioritize retrofit projects (Due 7/1/20)</p>	<p>In progress</p>	<p>In 2025, City of Bristol’s Parks, Recreation, Youth and Community Services Department installed over 2,400 linear feet of bio-infiltration swales in Page Park to reduce storm water runoff. The Department also installed a sub-grade water detention system at Page Park consisting of 8 MC-7200 chambers and 6 isolator rows to improve storm water management. Placed the watercourse in Page Park in a conservation easement to preserve the water and the surrounding land areas in its hydrologic condition and prevent active recreation, future construction and development.</p> <p>In 2024, retrofit of Centre Square property and Memorial Boulevard School and Veterans Memorial Park properties was completed. Section 319 grant at Edgewood School funded and began in 2022 – survey field work is completed, and drawings are being prepared. The Pine Lake wetland remediation project, restoring 6 acres of impacted wetlands, was completed by Superior. Pine Lake sediment chamber project also completed to replaced failing sand filter.</p>	<p>Using BMPs 3-2, 5-4, 5-5, monitoring, and/or other resources, identify retrofit projects. Develop initial priority implementation framework with the goal of 1% DCIA removal in each of 4th, 5th and 6th years (2025-2028).</p>	<p>DPW – Engineering</p>	<p>In progress</p>	<p>Implement retrofit projects to disconnect 3% of DCIA.</p>
<p>6-9 Implement retrofit projects to disconnect 2% of DCIA (Due 7/1/22)</p>	<p>In progress</p>	<p>Retrofit of Centre Square property and Memorial Boulevard School and Veterans Memorial Park properties continue. Section 319 grant at Edgewood School funded and began in 2022 – survey field</p>	<p>Using BMPs 3-2, 5-4, 5-5, monitoring, and/or other resources, identify retrofit projects. Develop initial priority</p>	<p>DPW – Engineering</p>	<p>In progress</p>	<p>Implement retrofit projects to disconnect 3% DCIA.</p>

		work is completed, and drawings are being prepared. The Pine Lake wetland remediation project, restoring 6 acres of impacted wetlands, was completed by Superior. Pine Lake sediment chamber project also completed to replaced failing sand filter.	implementation framework with the goal of 3% DCIA removal.			
6-10 Develop/implement street sweeping program (Ongoing)	Ongoing	Ongoing	Continue to compile BMP and annual tracking documents.	DPW – Engineering		Records in Appendix F.
6-11 Develop/implement catch basin cleaning program (Ongoing)	Ongoing	Ongoing	Coordinate BMPs, procedures, and annual tracking documents.	DPW – Engineering		
6-12 Develop/implement snow management practices (Due 7/1/18)						

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

Continue and expand implementation, education, and recording of BMP activities.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	See Appendix F and Section 6-1.
Street sweeping	See Appendix F.
Curb miles swept	See Appendix F.
Volume (or mass) of material collected	See Appendix F.
Catch basin cleaning	
Total catch basins in priority areas (value will be less than or equal to total catch basins town or institution-wide)	See Appendix F for locations (number not tabulated).
Total catch basins town- (or institution-) wide	See Appendix F for locations (number not tabulated).
Catch basins inspected	See Appendix F for locations (number not tabulated).
Catch basins cleaned	See Appendix F for locations (number not tabulated).

Volume (or mass) of material removed from all catch basins	See Appendix F for locations (number not tabulated).
Volume removed from catch basins to impaired waters (if known)	See Appendix F for locations (number not tabulated).
Snow management	
Type(s) of deicing material used	Blizzard Wizard Salt, Liquid Magnesium Pro melt M1000.
Total amount of each deicing material applied	
Type(s) of deicing equipment used	Pickup and Dump trucks.
Lane-miles treated (A lane-mile is a mile of roadway in a single driving lane)	225 Miles.
Snow disposal location	Depot Square (across from City Hall).
Staff training provided on application methods & equipment	Not available.
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	<ul style="list-style-type: none"> - In 2025 Bristol Parks, Recreation, Youth and Community Services Maintained 3.3 acres of park space as a ‘Low Mow Zone’ as part of a program to reduce underutilized turf grass. These acres are mowed once a year and enhanced with native wildflower and grass species in order to improve water quality and retention, provide habitat for native species, and reduce greenhouse gas emission from mowing. In 2024 they reduced the number of turf ball fields that are fertilized. Currently, Casey Field and Muzzy Field, an enclosed stadium facility, receive fertilizer applications. See Appendix F for report.
Reduction in application of	Not tabulated.

fertilizers (since start of permit)	
Reduction in turf area (since start of permit)	Not tabulated.
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	<ul style="list-style-type: none"> - In 2025 twenty additional dog waste stations throughout the park system, including high bacteria loading sites at Rockwell Park, Roberts Property, and Memorial Boulevard, to reduce littering. - In 2024: the following parks were improved with 19 additional pet waste stations with educational signage in 2023: Page, Seymour, Hoppers, Memorial Boulevard, Pine Lake, Peck, Rockwell, and Kern.
Cost of mitigation actions/retrofits	Not tabulated.

6.4 Catch basin cleaning program

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

The catch basin cleaning program has been implemented since 2004. Catch basin cleaning was conducted January through December 2025 (Appendix F) and is planned to continue in 2026.

6.5 Retrofit program

Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project. (Due 7/1/20)

A drainage improvement project was conducted on approximately 6.23 acres of land at Edgewood School. The project included the construction of a bioretention basin to capture and filter pollutants before entering the nearby Coppermine Brook.

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection annually in future years. (Due 7/1/22)

Implement 319 Grant for Edgewood and incorporate into City of Bristol Parks and Recreation proposed projects. City parking structure includes some infiltration and increased pervious surfaces for project to be constructed this year. City Hall renovations include pervious and water quality measures.

Part II: Impaired waters investigation and monitoring

1. Impaired waters investigation and monitoring program

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

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
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.

Sampling plan summary:

Sampling to date included dry weather sampling and inspections of 66 culvert outfalls in the Pequabuck River impaired waters section of the City, which included the area east of Middle Street to the confluence with the Coppermine Brook, and continuing east to approximately the City boundary line with Plainville. This area east of the Pequabuck River-02 has been identified per the 2018 CT DEEP's Stormwater Impaired Rivers as Priority Impaired with bacteria, phosphorus, and other pollutants of concern. Culverts were visually inspected for dry weather flow which included a photographic record and collection of field parameters such as pH and temperature. Samples were collected for analysis of ammonia, chlorine, e. Coli, and conductivity. DPW inspected all outfalls (State, City and private) along the Pequabuck River in 2024 and recorded the approximate location, type of outfall, piping size, and whether flow was observed. Flow was observed at 12 outfall locations. In 2025, the City sampled 31 outfalls including 13 confirmatory samples collected as a response to a EPA sampling event. E Coli was detected exceeding standards at >1,200 mg/L in 12 of the outfalls sampled which required follow-up investigation and re-sampling. Re-sampling 5 of these outfalls in December 2025 revealed E coli counts to be well below standards indicating that the elevated detections were attributed to either up-stream source(s) or bottom stream sediment in the sample jars. USEPA conducted sampling in July 2025 and identified 5 suspect illicit discharges due to the presence of illicit discharge indicator parameters. Follow-up investigation conducted by the City identified one illegal connection of a RV sanitary discharge line to a stormwater main. The City mandated the RV owner disconnect the illegal sanitary connection immediately. The City performed confirmatory site inspections. The City prepared and implemented a comprehensive EPA Sampling Response Plan including reconnaissance of upstream and downstream suspect illicit discharge sources, opening manholes and inspecting for evidence of pollution and collecting confirmatory samples. The EPA Sampling Plan methods and findings were presented to EPA in September 2025. The findings revealed the disconnection of the illegal sanitary connection significantly decreased illicit discharge parameter detections in the Jewel 1 outfall. Other confirmatory samples revealed the continued presence of illicit discharge parameters requiring continued investigation and sampling in 2026. The Stormwater Management Plan will be revised targeting these outfalls with sampling to be conducted April 2026.

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

2.1 Screening data

Complete the table below to report data for any wet weather sampling completed for MS4 outfalls that discharge directly to a stormwater impaired waterbody during the reporting period. For details on this requirement, visit

www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

Outfall ID	Latitude / Longitude	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required? *
4886	41°40'23.28"N 72°57'11.97"W	8/21/2025	Phosphorus	0.082 mg/L	Pace Analytical Services	No
			E. Coli	>2,400 MPN/100 mL		Yes
5318	41°40'11.76"N 72°56'12.60"W	8/21/2025	Phosphorus	0.10 mg/L	Pace Analytical Services	No
			E. Coli	>2,400 MPN/100 mL		Yes
7718	41°40'25.24"N 72°54'55.30"W	8/21/2025	Phosphorus	0.082 mg/L	Pace Analytical Services	No
			E. Coli	>2,400 MPN/100 mL		Yes
7690	41°40'22.79"N 72°54'01.21"W	8/21/2025	Phosphorus	0.073 mg/L	Pace Analytical Services	No
			E. Coli	>2,400 MPN/100 mL		Yes
7643	41°40'25.19"N 72°54'46.58"W	8/21/2025	Phosphorus	0.084 mg/L	Pace Analytical Services	No
			E. Coli	2,400 MPN/100 mL		Yes
11431	41°40'36.49"N 72°54'27.67"W	8/21/2025	Phosphorus	0.075 mg/L	Pace Analytical Services	No
			E. Coli	>2,400 MPN/100 mL		Yes
9605	41°40'52.48"N 72°54'35.42"W	8/21/2025	Phosphorus	0.081 mg/L	Pace Analytical Services	No
			E. Coli	>2,400 MPN/100 mL		Yes
11434	41°40'28.88"N 72°54'26.17"W	8/21/2025	Phosphorus	0.068 mg/L	Pace Analytical Services	No
			E. Coli	>2,400 MPN/100 mL		Yes
11461		9/25/2025	Phosphorus	ND	Pace Analytical Services	No
			E. Coli	490 MPN/100 mL		Yes
5312		9/25/2025	Phosphorus	0.15 mg/L	Pace Analytical Services	No
			E. Coli	>2,419.6 MPN/100 mL		Yes
5328		9/25/2025	Phosphorus	0.095 mg/L	Pace Analytical Services	No
			E. Coli	>2,419.6 MPN/100 mL		Yes
7393		9/25/2025	Phosphorus	0.051 mg/L	Pace Analytical Services	No
			E. Coli	1100 MPN/100 mL		Yes
7761		9/25/2025	Phosphorus	0.079 mg/L	Pace Analytical Services	No
			E. Coli	>2,419.6 MPN/100 mL		Yes
1629		9/25/2025	Phosphorus	0.094 mg/L	Pace Analytical Services	No
			E. Coli	>2,419.6 MPN/100 mL		Yes
4886		12/19/2025	Coliform	>2419.6 MPN/100 mL	Pace Analytical Services	Yes
			Phosphorus	0.20 mg/L		No
			E. Coli	1600 MPN/100 mL		Yes

5318	12/19/2025	Coliform	>2419.6 MPN/100 mL	Pace Analytical Services	Yes
		Phosphorus	0.21 mg/L		No
		E. Coli	270 MPN/100 mL		Yes
7718	12/19/2025	Coliform	>2419.6 MPN/100 mL	Pace Analytical Services	Yes
		Phosphorus	0.14 mg/L		No
		E. Coli	1700 MPN/100 mL		Yes
7643	12/19/2025	Coliform	>2419.6 MPN/100 mL	Pace Analytical Services	Yes
		Phosphorus	0.21 mg/L		No
		E. Coli	190 MPN/100 mL		No
5241	12/19/2025	Coliform	>2419.6 MPN/100 mL	Pace Analytical Services	Yes
		Phosphorus	0.089 mg/L		No
		E. Coli	260 MPN/100 mL		Yes

Each Annual Report will add on to the previous year’s data showing a cumulative list of sampling data. **You may also attach an excel spreadsheet with the same data rather than copying it into this table.** If you do attach a spreadsheet, please write “See Attachment” below.

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

Pollutant of concern	Pollutant threshold
Nitrogen	Total N > 2.5 mg/l
Phosphorus	Total P > 0.3 mg/l
Bacteria (fresh waterbody)	<ul style="list-style-type: none"> E. coli > 235 col/100ml for swimming areas or 410 col/100ml for all others Total Coliform > 500 col/100ml
Bacteria (salt waterbody)	<ul style="list-style-type: none"> Fecal Coliform > 31 col/100ml for Class SA and > 260 col/100ml for Class SB Enterococci > 104 col/100ml for swimming areas or 500 col/100 for all others
Other pollutants of concern	Sample turbidity is 5 NTU > in-stream sample

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

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall ID	Status of drainage area investigation	Control measure to address impairment
See Appendix E	Follow- up investigations were completed	

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

Once outfall sampling has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 1, 2026. Please note the City of Bristol screened all outfalls associated with impaired waters back on 2023. Re-screen was initiated in 2025 and included screening and sampling 18 outfalls during wet weather conditions. The City will screen and sample

the remaining 50% of the outfalls by July 2026. The following is a current target list of priority outfalls that will be continually monitored.

Outfall	Latitude / Longitude	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)
4886		By July 2026			
5318		By July 2026			
7718		By July 2026			
7643		By July 2026			
5241		By July 2026			
11434		By July 2026			

Please note the target outfalls revealed elevated levels of E Coli in 2025. As the City of Bristol screens and samples additional outfall during wet weather events the target list of outfalls may change.

Part III: Additional IDDE Program Data

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

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

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank
List pending investigation planned in 2026.		

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

This screening is the baseline IDDE dry weather screening. For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the blue column of the Monitoring comparison chart and the IDDE baseline monitoring flowchart.

Provide sample data for outfalls where flow is observed, during dry weather, of outfalls and interconnections categorized as high or low priority in priority areas. Do not include problems or excluded catchments. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write "See Attachment" below.

Please note US EPA conducted dry weather outfall sampling in May 2025. The City of Bristol evaluated USEPA's findings, prepared a comprehensive response plan and implemented the plan by September 2025. Plan implementation consisted of re-sampling outfalls, as appropriate to confirm detections, opening and inspecting catch basins and manhole and conducting upstream reconnaissance to identify potential illicit discharge sources. The following table summarizes dry weather outfall sample results.

Outfall / Interconnection ID	Latitude / Longitude	Screening / sample date	Cotinine	Acetaminophen	Paraxanthine	Atenolol	Caffeine	Metopropol	Diphenhydramine	Carbamazepine	E. coli or enterococcus (ETCS)
Terry 1		5/28/2025	1.7 ng/L	ND	ND	ND	ND	ND	ND	ND	ETCS 10 MPN/100 mL E. coli 20 MPN/100mL

Npark1		5/28/25	ND	ND	3.2 ng/L	ND	ND	ND	ND	ND	ETCS 20 MPN/100 mL E. coli <10 MPN/100mL
4886 (Gaylord1)		5/28/25	1.3 ng/L	ND	ND	ND	12	ND	ND	ND	ETCS 40 MPN/100 mL E. coli 20 MPN/100mL
Gridley 1		5/28/25	ND	ND	ND	ND	ND	ND	ND	ND	ETCS 20 MPN/100 mL E. coli <10 MPN/100mL
Park 1		5/28/25	0.63 ng/L	ND	3.5 ng/L	ND	8.3 ng/L	ND	ND	0.94 ng/L	ETCS 130 MPN/100 mL E. coli <10 MPN/100mL
Greene 1R		5/28/25	ND	ND	ND	ND	ND	ND	ND	0.48	ETCS 74 MPN/100 mL E. coli 10 MPN/100mL
Green1L		5/28/25	0.98 ng/L	ND	2.4 ng/L	ND	5.6 Ng/L	ND	ND	ND	ETCS 85 MPN/100 mL E. coli <10 MPN/100mL
Jewel1		5/28/25	16 ng/L	32 ng/L	73 ng/L	ND	1400 ng/L	4.2 ng/L	0.59 ng/L	ND	ETCS 63 MPN/100 mL E. coli 1100 MPN/100mL
Mechanic 1		5/28/25	1.7 ng/L	ND	5.5 ng/L	ND	14 ng/L	ND	ND	0.40	ETCS 1200 MPN/100 mL E. coli 720 MPN/100mL
Blakeslee L		5/28/25	1.4 ng/L	ND	ND	ND	4.0 ng/L	ND	ND	ND	ETCS 52 MPN/100 mL E. coli 10 MPN/100mL
Blakeslee R		5/28/25	2.2 ng/L	ND	2.7 ng/L	ND	6.6 ng/L	ND	ND	0.40 ng/L	ETCS 85 MPN/100 mL E. coli <10 MPN/100mL

Mellen 1		5/28/25	1.8 ng/L	82 ng/L	7.2 ng/L	ND	6.2 ng/L	ND	ND	ND	ETCS 85 MPN/100 mL E. coli 260 MPN/100mL
West 1		5/28/25	3.2 ng/L	11 ng/L	29 ng/L	ND	120 ng/L	5.1 ng/L	2.4 ng/L	1.1 ng/L	ETCS 75 MPN/100 mL E. coli 280 MPN/100mL

2.2 Wet weather sample and inspection data

This sampling data is the baseline wet weather priority catchment investigation sampling. For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

Provide baseline sample data for outfalls and key junction manholes of any catchment area (all high priority, low priority, and problem outfalls within the priority area) with at least one System Vulnerability Factor. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

Outfall / Interconnection ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern
2380 (Jewel 1) interconnection with a RV sanitary connection	72.902.639/41.686.097	5/28/25					E. coli 1,100 MPN/100ML			

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

For details on this requirement, visit www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

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
2380 (Jewel 1)	Tributary to	<p>USEPA submitted a MS4 Sampling Report dated July 22, 2025 to the City of Bristol on July 28, 2025. A USEPA investigation team conducted unannounced sampling at City outfalls including sampling an outfall adjacent to Jewel Street on May 28, 2025. This sample revealed elevated concentrations of E. coli and pharmaceuticals and personal care products (PPCPs). Immediately upon the City's receipt of USEPA's report, the City engaged BL companies to review and support taking immediate investigative action. City of Bristol's Sanitation Department engineers performed an illicit discharge reconnaissance of the area on August 1, 2025. Reconnaissance findings identified an illegal RV sanitary connection into a storm sewer at 335 Stafford Avenue. The City made immediate contact with the party responsible and ordered an immediate storm sewer disconnect. During the week of August 11, 2025 a City of Bristol sampling technician visually verified the sanitary line was disconnected. To confirm the disconnect eliminated continued illicit sanitary discharge the following was performed by City of Bristol staff.</p> <ol style="list-style-type: none"> 1. Photo documented the RV sanitary pipe disconnect location. 2. Collect a confirmatory Jewel 1 outfall sample.
5478 (Blakeslee L and R)		<p>On August 6, 2025 a City official inspected the outfall sample location and areas upstream and found no evidence of wastewater. Blakeslee Left and Blakeslee Right samples collected downstream of two culvert outlets that convey stormwater from road catch basin and stream channel flow under Blakeslee Road. City of Bristol performed the following:</p> <ol style="list-style-type: none"> 1. Collected confirmatory samples. 2. Opened and inspected stormwater catch basin for evidence of sanitary influence. 3. Opened closest upgradient sanitary manhole and inspect for evidence of leaks to groundwater or connection to stormwater/stream culvert. 4. Assessed the need to collect upgradient sample to evaluate background conditions or other source(s).
11427 (Mech 1)	Coppermine Brook	<p>August 6, 2025 City of Bristol official inspected USEPA's sample location and upstream areas. No signs of wastewater were observed such as odors, sheens, discoloration, paper remnants and deposits with the exception of a discoloration of the surface water at Mechanic 1 sample location (76 Mechanics Street). The water in the stream appeared to be greyish-brown/tan. A City official walked the stream bank upstream to assess the extent of the discoloration and to identify a source. The discoloration extended upstream to 10 Carpenter Avenue at the stream bank where a pile of yard spoils were</p>

		<p>observed. The yard soils consisted mostly of grass clippings which appeared to have been piled along the stream bank for many years. It appeared the discoloration was coming from the spoils pile; it's possible the color was coming from the storm line from King Street. The spoils pile and storm line are very close in proximity. The Coppermine Brook flows north to south under the Carpenter Avenue bridge, the north side (upstream) was normal, the south side was not. Important to note, weather was very dry with no rainfall yet recorded in August. Mr. Hennessey did not see any active water flowing from the storm line entering the brook from the 36" line off King Street. City of Bristol performed the following:</p> <ol style="list-style-type: none"> 1. Collected upstream of Mechanic Street culvert (runs under road). Collect a confirmatory stream sample at EPA sampling point. 2. Walked stream bank upstream and identify discharge inlets and other illicit discharge sources. 3. Assessed need to sample discharge inlets.
4886 (Gaylord)		<p>EPA collected a discharge sample of the Gaylord 1 outlet drain (1.5 feet diameter). On August 6, 2025 a City of Bristol official inspected the outlet sample location and areas upstream and found no evidence of wastewater. City of Bristol performed the following:</p> <ol style="list-style-type: none"> 1. Collected a confirmatory discharge sample. 2. Opened closest stormwater manhole and inspect for sanitary system influence (flowing water during dry period), sewer odors. 3. Assessed the need to collect stormwater manhole water sample and analyze for full general permit illicit discharge indicator parameters. <p>The sample results confirmed a illicit discharge indicator parameter source did not exist down flow (house to the east) or up-flow at upgradient stormwater inlets. The detections were attributed to upstream background concentrations.</p>
5318 (Melen)		<p>EPA collected downstream sample from a 15 foot culvert that runs under Memorial Blvd. On August 6, 2025 a City official inspected the outfall sample location and areas upstream and found no evidence of wastewater. City of Bristol Performed the following:</p> <ol style="list-style-type: none"> 1. Collected a confirmatory sample. 2. Opened stormwater manhole on Memorial Blvd median where a sanitary line converges. Inspect for evidence of sanitary influence flowing water during dry period, sewer odors. 3. Assessed the need to sample stormwater sewer for full general permit illicit discharge indicator. <p>The stormwater manhole inspection rule-out a sanitary sewer as a source. The sample confirmed the illicit discharge indicator detections were indicative of a background condition.</p>

6047 (West 1)		<p>EPA collected a stream sample at the mouth of rectangular culvert (5'X 10'). Upstream a 6-inch clay pipe was observed connected to an adjacent parking lot. On August 6, 2025 a City official inspected the outfall sample location and areas upstream and found no evidence of wastewater. The City inspected the commercial building and stream during the week of August 11, 2025 and confirmed floor drains and bathroom fixture are present in the adjacent building. In addition, the City of Bristol performed the following:</p> <ol style="list-style-type: none"> 1. Collected a confirmatory sample. 2. Gained access and further inspect adjacent commercial building for sanitary connects. 3. Assessed the need to sample stormwater outlet at front of commercial building and test for full general permit illicit discharge indicator parameters. <p>Building inspection identified a former potential sanitary connection (floor drain) to the storm sewer. The building is abandoned, source not active.</p>
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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

This screening is the dry weather priority catchment investigation screening. Provide sample data, both baseline and follow-up, for key junction manholes of any catchment area begin investigated for an illicit discharge and do not have any SVFs present. Follow-up investigations must take place

within one year and again within five years. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

Key Junction Manhole ID	Latitude / Longitude	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants
OF2380 - CB2392	72.903.488/ 41.686.371	8/11/25	None observed	NS	NS	NS
OF11428-CB 3063	72.911.561/ 41.677.293	8/11/25	None observed	NS	NS	NS
OF5478-CB5479	72.930.797/ 41.674.126	8/11/25	None observed	NS	NS	NS
OF4886-CB4887	72.9533.23/ 41.673.399	8/11/25	None observed	NS	NS	NS
OF4886-MH4889	72.952.94/4 1.673.133	8/11/25	None observed	NS	NS	NS
OF6047-CB6053	72.948.42/4 1.668.19	8/11/25	None observed	NS	NS	NS
OF6047-MH6051	72.948.365/ 41.668.231	8/11/25	None observed	NS	NS	NS
OF5391-CB5321	72.936.926/ 41.669.61	8/11/25	None observed	NS	NS	NS

NS-Not sampled. Outfall, catch basin and manholes inspected to confirm flow direction, relative volume of discharge and evidence of illicit discharge.

3.3 Wet weather follow-up investigation outfall sampling data

This sampling is the follow-up investigations for the wet weather priority catchment investigation. Provide follow-up sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor. Follow-up investigations must take place within one year and again within five years. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

Outfall ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Surfactants
N/A for 2024					

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
Jewel 1	Sanitary connection	RV sanitary discharge pipe was connected to adjacent stormwater main	Sampling, field reconnaissance	August 1, 2025	August 2, 2025	Mitigation mandating sanitary line be disconnected immediately with enforcement warning.	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
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