

MS4 General Permit
University of Connecticut 2022 Annual Report
Avery Point Campus, Groton
Permit Number: GSM 201703408
January 1, 2022 – December 31, 2022

This report documents the University of Connecticut’s (UConn) efforts at the Avery Point campus to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2022 to December 31, 2022.

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	On – going	UConn Environmental Programs’ website (https://ehs.uconn.edu/environmental-programs-home/) includes a stormwater page with references to EPA and DEEP educational information. UConn installed low impact development (LID) signage with information and links to dedicated web pages for each type of LID practice. UConn also provided stormwater MS4 training for UConn staff.	Educate staff and personnel on common stormwater topics	Environmental Health and Safety (EHS) Enviro-team	July 1, 2019	July 2019	Training of UConn staff and personnel is done on an annual basis.
1-2 Address education/ outreach for pollutants of concern*	Same as above						

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

UConn will continue to keep the stormwater website updated with relevant information and provide annual stormwater training to staff.

1.3 Details of activities implemented to educate the community on stormwater

Program Element/Activity	Audience (and number of people reached)	Topic(s) covered	Pollutant of Concern addressed (if applicable)	Responsible dept. or partner org.
Stormwater Introduction Training	Staff/Faculty from the following departments: Facilities and Building Services, Marine Science Department, and Dining Services	General stormwater general permit information	n/a	EHS

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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		Posted to the EHS stormwater website	EHS	Apr 3, 2017	April 2017	
2-2 Comply with public notice requirements for Annual Reports	Complete		Posted to the EHS stormwater website	EHS	Feb 15 annually	February 2019, 2020, 2021, 2022	

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

n/a

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	April 3, 2017	Environmental Health & Safety Environmental Programs https://ehs.uconn.edu/environmental-programs-home/
Availability of Annual Report announced to public	Yes	February 15, 2022	https://ehs.uconn.edu/environmental-programs-home/

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	UConn EHS-Enviro staff have developed a written IDDE program (posted to EHS-Enviro team stormwater website).	Written IDDE plan	OEP/NEMO/CLEAR	Jul 1, 2019	January 2020	Available on the EHS/Environmental website: https://ehs.uconn.edu/environmental-programs-home/
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete	Develop a list and map of stormwater outfalls for priority areas on campus.	Develop a list and map	OEP/NEMO/CLEAR	Jul 1, 2020	February 2020	
3-3 Implement citizen reporting program	Complete	Contact information for citizen reporting can be found on the OEP stormwater website.	EHS-Enviro Stormwater website	OEP/NEMO/CLEAR	Jul 1, 2017	July 2017	Available on the EHS/Environmental website: https://ehs.uconn.edu/environmental-programs-home/
3-4 Establish legal authority to prohibit illicit discharges	N/A	N/A	N/A	N/A	Jul 1, 2019	N/A	
3-5 Develop record keeping system for IDDE tracking	Complete	IDDE tracking will be recorded as the program develops in a spreadsheet or form	Spreadsheet or form	EHS-Enviro/NEMO/CLEAR	Jul 1, 2017	July 2017	
3-6 Address IDDE in areas with pollutants of concern	Complete	UConn developed a written IDDE plan in 2019.	Written IDDE plan	EHS-Enviro/NEMO/CLEAR	Not specified		

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

UConn will continue to develop the list of maps for MS4 stormwater outfalls and implement the IDDE (illicit discharge) program.

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

Date of Report	Location / suspected source	Response taken
Not applicable.		

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)
Not applicable.						

3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.

Any IDDE reports and responses to those reports will be tracked by EHS and/or NEMO/CLEAR. Contact information for reporting illicit discharges can be found on the EHS Enviro programs website.

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
Not applicable.		

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	5
Estimated or actual number of interconnections	0
Outfall mapping complete	100 %
Interconnection mapping complete	100 (%)
System-wide mapping complete (detailed MS4 infrastructure)	100 (%)
Outfall assessment and priority ranking	100 (%)
Dry weather screening of all High and Low priority outfalls complete	5
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	100%

MS4 infrastructure map is in paper format. Outfall map is available here: <https://www.google.com/maps/d/u/1/edit?mid=1CCWzpTzTsEp56-d19pDTFIAIAL5cw22J&usp=sharing>

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).

EHS-Enviro with assistance from NEMO/CLEAR will be responsible for IDDE tasks. Any relevant information regarding IDDE will be provided during annual stormwater training to additional UConn staff/personnel.

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	Complete	Included in the University Contractor EHS Manual, University Division One Contract and University Design Standard document.	Included in University documents that are required for each construction project.	University Planning, Design & Construction (UPDC)/ Environmental Health & Safety (EHS)/ OEP	Jul 1, 2020	February 2017; September 2016	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Complete	Included in the University Contractor EHS Manual, University Division One Contract and University Design Standard document.	Included in University documents that are required for each construction project.	University Planning, Design & Construction (UPDC)/ Environmental Health & Safety (EHS)	Jul 1, 2017	February 2017; September 2016	
4-3 Review site plans for stormwater quality concerns	Complete	Included in the University Contractor EHS Manual, University Division One Contract and University Design Standard document.	Included in University documents that are required for each construction project.	University Planning, Design & Construction (UPDC)/ Environmental Health & Safety (EHS)	Jul 1, 2017	February 2017; September 2016	
4-4 Conduct site inspections	Complete	Included in the University Contractor EHS Manual, University Division One Contract and University Design Standard document.	Included in University documents that are required for each construction project.	UConn personnel and/or designee	Jul 1, 2017	February 2017; September 2016	
4-5 Implement procedure to allow public comment on site development	Complete	EHS Enviro programs stormwater website page with contact information for the public to comment on site development.	Website	OEP	Jul 1, 2017	July 2017	

4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Complete	Included in the University Contractor EHS Manual, University Division One Contract and University Design Standard document.	Included in University documents.	University Planning, Design & Construction (UPDC)/ Environmental Health & Safety (EHS)	Jul 1, 2017	February 2017; September 2016	
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4.2 Describe any Construction Site Runoff Control activities planned for the next year, if applicable.

UConn will continue to implement procedures noted above related to the construction site runoff on a project-by-project basis.

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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	Complete	Included in the University LEED Gold Policy, TMDL and the DEEP/UConn MOU	Included in University documents.	OEP/UPDC/FOBS/NEMO/CLEAR	Jul 1, 2022	June 2016; December 2014	
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Complete	Included in the University LEED Gold Policy, TMDL and the DEEP/UConn MOU	Included in University documents.	EHS-Enviro/UPDC/FOBS/NEMO/CLEAR	Jul 1, 2022	June 2016; December 2014	
5-3 Identify retention and detention ponds in priority areas	Complete				Jul 1, 2020	February 2020	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	n/a				Jul 1, 2020	n/a	<i>There are no stormwater basins/dams on campus, so this does not apply</i>
5-5 DCIA mapping	Complete				July 2020	July 2018	
5-6 Address post-construction issues in areas with pollutants of concern					Not specified		

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

UConn will continue the DCIA mapping with assistance from NEMO/CLEAR.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	9.8 acres
DCIA disconnected (redevelopment plus retrofits)	0 acres this year / 0.9-acre total
Retrofits completed	2
DCIA disconnected	0% this year / 9.2% total since 2012
Estimated cost of retrofits	\$ not available
Detention or retention ponds identified	None

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

Total IC was calculated from the 2012 statewide data from UConn CLEAR. *Note: the boundary of campus was used as the basis for this calculation, as the coastal basins are not appropriate for this location.* The total campus area was estimated to be 41.6 acres, and total IC was 17.8 acres. The Sutherland equations were used ("Sorta connected" equation), and DCIA was estimated to be 23.6%, or 9.8 acres.

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	Initial general awareness stormwater training conducted this year.	Initial training	EHS-Environ, FOBS	July 1, 2019	July 2019	
6-2 Implement MS4 property and operations maintenance	In progress			EHS/FOBS/NEMO/CLEAR	July 1, 2018	Anticipate completing by July 2021.	<p><i>Parks and open space:</i> Integrated pest management (IPM) approach is used for management of all turf on campus.</p> <p><i>Pet waste management:</i> Pet walking is not widely practiced on the UConn campus.</p> <p><i>Waterfowl management:</i> No actions have been taken to deter Canada geese on campus.</p> <p><i>Buildings and facilities:</i> Storage of petroleum and other products is covered as part of annual facilities staff training.</p> <p><i>Vehicles and equipment:</i> Storage of vehicles with leaks and washing of vehicles: Campus wide we prohibit vehicle washing per our Stormwater Plan. Motor Pool addresses leaking vehicles that are owned by the University and repair as necessary and/or vehicles/equipment is serviced by an outside contractor.</p>

							<i>Leaf management:</i> This is handled by an outside contractor.
6-3 Implement coordination with interconnected MS4s	Complete		Not applicable	EHS	Not specified	July 2017	
6-4 Develop/implement program to control other sources of pollutants to the MS4	Not applicable			EHS/FOBS/NEMO/CLEAR	Not specified		Given the nature of the campus and the MS4 system, it is not expected that there will be any other significant sources of pollutants to the MS4
6-5 Evaluate additional measures for discharges to impaired waters*	Not Started			EHS/FOBS/NEMO/CLEAR	Not specified		
6-6 Track projects that disconnect DCIA	Complete	NEMO/CLEAR has tracked projects that disconnect DCIA	Spreadsheet	NEMO/CLEAR	Jul 1, 2017	July 2017	
6-7 Implement infrastructure repair/rehab program	Complete			EHS/FOBS/UPDC/NEMO/CLEAR	July 1, 2021	July 2021	Damaged catch basins and/or stormwater pipes are inspected and repaired on an as-needed basis, when a request is received through the AIM workflow system.
6-8 Develop/implement plan to identify/prioritize retrofit projects	Complete			EHS/FOBS/NEMO/CLEAR	July 1, 2020	See section 6.5	

6-9 Implement retrofit projects to disconnect 2% of DCIA	Complete	NEMO/CLEAR will assist with tracking projects that disconnect DCIA	Spreadsheet	NEMO/CLEAR	Jul 1, 2020	Goal exceeded	
6-10 Develop/implement street sweeping program	Complete	UConn has a contractor sweep the campus, as needed.	Contract	EHS/FOBS/NEMO/CLEAR	Jul 1, 2018	July 2018.	
6-11 Develop/implement catch basin cleaning program	Complete	UConn has a contractor clean out every catch basin on campus annually.	Contract	EHS/FOBS/NEMO/CLEAR	Jul 1, 2020	July 2018	
6-12 Develop/implement snow management practices	Complete	UConn has a contractor for snow management practices	Contract	EHS/FOBS/NEMO/CLEAR	Jul 1, 2018	July 2018	

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

We will continue to sweep streets and clean out catch basins annually (contracted out).

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	None
Street sweeping	
Curb miles swept	Appx 6 miles
Volume (or mass) of material collected	unknown lbs or tons/negligible (no sand used in winter)
Catch basin cleaning	
Total catch basins in priority areas	65
Total catch basins in MS4	65
Catch basins inspected	0
Catch basins cleaned	0 (100% were inspected and none needed to be cleaned)
Volume (or mass) of material removed from all catch basins	
Volume removed from catch basins to impaired waters (if known)	0
Snow management	
Type(s) of deicing material used	Sodium chloride/Calcium chloride/lignin (organic tree extract)
Total amount of each deicing material applied	Appx 35 tons
Type(s) of deicing equipment used	Snow plows
Lane-miles treated	Entire campus include parking lots, sidewalks and streets.
Snow disposal location	None
Staff training provided on application methods & equipment	Not applicable.
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	(none applied) lbs or %
Reduction in turf area (since start of permit)	0 acres
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	\$ n/a

6.4 Catch basin cleaning program

Briefly describe the method used to optimize your catch basin inspection and cleaning schedule.
 The UConn Avery Point campus has a contractor that cleans out all catch basins on campus as needed, typically conducted annually.

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.

Although the IC disconnection goal has been exceeded for this campus, as development or redevelopment occurs on campus, we will continue to explore opportunities to disconnect additional impervious areas and install green stormwater practices during redevelopment. When funding allows, we will actively seek out areas to retrofit with green stormwater practices.

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

We will continue to explore retrofit opportunities through the remainder of this permit term.

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

None 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>.

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.

Sampling of all outfalls was conducted in October 2020 and 2021. Several high bacteria counts were noted in 2021. The cause for these high bacteria counts is not clear. Additional water quality analyses were performed (e.g. ammonia-nitrogen, nitrate-nitrogen, chlorine, surfactants). Concentrations of all parameters were either non-detect or below MS4 thresholds, indicating that illicit sewer discharges were NOT causing the high bacteria concentrations. Additional sampling will be performed in spring 2022 to determine if any catchment investigation needs to be performed.

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.

****NOTE: For nitrogen, ammonia-nitrogen concentrations were reported. For 2022, samples will be analyzed for ammonia-nitrogen and nitrate-nitrogen results, which will be added together to approximate total nitrogen.**

Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?
OAP1-S	10/29/20	Nitrogen, bacteria	nd, >2420 MPN/100mL	UConn Water Quality lab (all)	No
OAP1-N	10/29/20	Nitrogen, bacteria	nd, >2420 MPN/100mL		No
OAP-2	10/29/20	Nitrogen, bacteria	nd, >2420 MPN/100mL		No
OAP-4	10/29/20	Nitrogen, bacteria	nd, 20 MPN/100mL		No
OAP-5	10/29/20	Nitrogen, bacteria	nd, 69 MPN/100mL		No
OAP-6	10/29/20	Nitrogen, bacteria	nd, 27 MPN/100mL		No

Although no follow-up is required as nitrogen concentrations were below detection, the high bacteria concentrations at several of the sampling sites will be further investigated in spring 2022.

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

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall	Status of drainage area investigation	Control measure implementation to address impairment
n/a		

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

Once outfall screening has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 1, 2021.

****NOTE: For nitrogen, ammonia-nitrogen concentrations were reported. For 2022, samples will be analyzed for ammonia-nitrogen and nitrate-nitrogen results, which will be added together to approximate total nitrogen.**

Outfall	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)
OAP1-S	9/24/21	Nitrogen, bacteria	nd, >2420 MPN/100mL	UConn Water Quality Lab (all)
OAP1-N	9/24/21	Nitrogen, bacteria	nd, >2420 MPN/100mL	
OAP-4	9/24/21	Nitrogen, bacteria	nd, 43 MPN/100mL	
OAP-5	9/24/21	Nitrogen, bacteria	nd, 1414 MPN/100mL	
OAP-6	9/24/21	Nitrogen, bacteria	nd, 150 MPN/100mL	
OAP-7	9/24/21	Nitrogen, bacteria	nd, >2420 MPN/100mL	
OAP-8	9/24/21	Nitrogen, bacteria	nd, 2420	
OAP-1-S	11/16/22	Nitrogen, bacteria	1.0 mg/L, 687 MPN/100mL	
OAP-1-E	11/16/22	Nitrogen, bacteria	5 mg/L, 921 MPN/100mL	
OAP-2	11/16/22	Nitrogen, bacteria	nd, 921 MPN/100mL	
OAP-5	11/16/22	Nitrogen, bacteria	1.0 mg/L, 33 MPN/100mL	
OAP-6	11/16/22	Nitrogen, bacteria	nd, 6 MPN/100mL	

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
n/a		

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.

The outfalls on campus have been investigated and no dry weather flows have been identified.

NOTE- due to equipment malfunction, field temperature measurements were not collected for the Oct. 2020 sampling date.

Nd=non-detect

*this sample was influenced by tidal flow and was brackish water

Outfall ID	Sample date	Ammonia (mg/L)	Chlorine (mg/L)	Conductivity (uS/cm)	Salinity (ppt)	E. coli, enterococcus (MPN/100mL)	Surfactant (mg/L)	Water Temp	Pollutant of concern	If required, follow-up actions taken
OAP1-S	10/29/20	Nd	Nd	23.8	Nd	>2420	Nd	-	Nitrogen and phosphorus	None required for N, however additional sampling for P will be conducted in spring 2022
OAP1-N	10/29/20	Nd	Nd	18.6	Nd	>2420	Nd	-	Nitrogen and phosphorus	None required for N, however additional sampling for P will be conducted in spring 2022
OAP-2	10/29/20	Nd	Nd	46.7	Nd	>2420	Nd	-	Bacteria	None required
OAP-4	10/29/20	Nd	Nd	*>20,000	*>10	20	Nd	-	Bacteria	None required
OAP-5	10/29/20	Nd	Nd	15.6	Nd	69	Nd	-	Bacteria	None required

OAP-6	10/29/20	Nd	Nd	135.6	0.1	27	Nd	-	Nitrogen, bacteria	None required
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The cause of the high bacteria count for outfall OAP-2 is not clear. One possible cause could be that there were drought conditions for much of the summer and fall 2020, and bacteria could have multiplied in the stormwater system (this has been documented in previous research), to be flushed out with precipitation events later in the fall. Additionally, there is a sizeable Canada goose population that frequents the campus. Since bacteria is a pollutant of concern for this waterbody, additional sampling (and catchment investigation if necessary) will be conducted in spring 2021.

2.2 Wet weather sample and inspection data

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

Outfall / Interconnection ID	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern
n/a									

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

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

Key Junction Manhole ID	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants

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

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

Part IV: Certification

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

Chief Elected Official or Principal Executive Officer	Document Prepared by
Print name: Teresa M. Dominguez	Print name: Michael Dietz
Signature / Date:	Signature / Date: 3-24-23 

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