MS4 General Permit Town of Burlington 2022 Annual Report Permit Number GSM000049

January 1, 2022 – December 31, 2022

Primary MS4 Contact: Scott Tharau, Director of Public Works

This report documents Town efforts 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)

ВМР	Activities in current reporting period	Sources Used (if applicable)	Method of Distribution	Audience (and number of people reached)	Measurable Goal	Department / Person Responsible	Additional details
1-1 Implement public education and outreach	Made a variety of pamphlets to the public at town hall covering a range of Stormwater Topics Provided several clickable links on the Land use Departments web page covering storm water topics	Various web links	Town hall information kiosks & Town of Burlington website	Unknown Accessible to all	Increase public awareness and knowledge	Land Use / ZEO	This is an interoffice function with help from the Asst. Town Clerk
1-2 Address education/ outreach for pollutants of concern	Obtaining pamphlets covering pollutant of concern information	Web Links/Pamphlets	Town Hall information kiosks & Town website	Unknown Accessible to all	Provide e. coli specific information	Land Use / ZEO	This is an interoffice function with help from the Asst. Town Clerk.

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

The plan is to continue to expand upon work started. Due to COVID the Town has seen less visitors to Town Hall. Plan to learn more from CT DEEP and the NEMO website about any additional information about public education and recourses and implement them where appropriate. A new website will be implemented on the Public Works page with access from other department, commissions and/or board pages to ensure easy access by website visitors.

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

ВМР	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	In progress	Fact gathering and meetings with town hall staff and consultant	Final report posted to the Town Website	Land Use & Town Clerk/ZEO & Asst. Town Clerk	April 30, 2023	Town website as part of Public Works MS4 pages, specifically the Public Participation/Involvement page	Need report from consultant
2-2 Comply with public notice requirements for Annual Reports (annually by 2/15)	In Progress	Developed language to be posted via Banner Notice on the Town home page by 1/31/23; Draft report being created by consultant for review internally; Posting by 2/15/23 deadline on Town Website	Launching of the Banner Notice announcing Draft Report coming and the Posting of the Draft Annual Report for public inspection/input and, ultimately, the final posting.	Land Use & Town Clerk/ZEO, Asst. Town Clerk and consultant	1/31/23 for notice of draft report; 2/15/23 for publishing of Draft Report and March 15/23 posting of Final Report.	Town website on homepage (banner notice) and on Public Works Public Participation/Inv olvement page.	
Example additional BMP: 2-3 Present to BOS/PW/P&Z Commission	In progress	In progress	Provide forum to coordinate SWMP implementation across depts. and commissions	First Selectman/PW/ ZEO	2023		
2-4 Held a household hazardous waste day in 2022	Every other year	Recycle Center is available to all residents	Bi-Annually	Public Works		Town web site	118 residents came to the HHW day
2-5 Day of Caring sponsored by United Way - river clean up	Annual Event	Farmington River Cleanup Event	Annually	Volunteer / PW	N/A	May each year	Lewis S Mills / Town Hall Employees
2-6 Coliform Bacterial Monitoring	Annual	Coliform Bacterial Monitoring	Research	Farmington River Valley Ass.	2022	frwa.org	Partner with Ct DEEP

2-7 Education	7-19-22	River to Sea Program	Education	Farmington River Valley Ass.	7-19-22	Burlington Public Library	12 people Attended the event
2-8 Hosted a Table at the Business expo at the Towns annual Tavern Day Event	9-19-22	Hosted a Table at the Business expo at the Towns annual Tavern Day Event	Outreach	Farmington River Valley Ass.	9-19-22	Day of Event has handouts	More than 1100 people attend that day
2-9 River Clean up Event	9-24-22	34 th Annual Farmington River Clean Up	Stewardship	Farmington Valley Resident Volunteers	9-24-22	Farmington River Valley Assoc. web site	100 people attended
2-10 Riffle Bioassessment by Volunteers (RBV)	10-6-22	RBV	Research	LSM / PRWA	10-6-22	Farmington River Valley Assoc. web site	18 people attended
2-11 Watershed Connections Presents	10-13-22	Watershed Connections Presents	Education	Burlington Public Library	10-13-22	Library website / Towns website / Farmington River Valley website	10 people attended
2-12 Riffle Bioassessment by Volunteers (RBV)	11-2-22	RBV	Research	Lewis Mills High School Students	11-2-22	LSM High School	18 Students
2-13 Wild and Scenic Film Festival	11-18-22	Wild and Scenic Film Festival	Outreach	Farmington Valley Residents	11-18-22	Farmington River Valley Assoc. web site	300 est. people attended Festival
2-14 Winter Salt Watch	2022 Winter	Winter salt Watch	Research		Winter 2022	Waterreporter.o rg	Farmington River Valley Assoc. web site

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

Participate in Regional Household Hazard Waste collection events annually, Sponsor one every other year in Town.

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

ВМР	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 (Due 7/1/19)	In progress	Town is in process of completing written IDDE program using the CT IDDE program template	Develop written plan of IDDE program	PW/Engineer/ZEO	Anticipate completing by the deadline of July 1, 2023.	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas (Due 7/1/20)	In Progress Looking at Vendors to complete this	Town will have this Done this fiscal year	Develop maps	PW/ZEO/Consultant and could be New England GEO (GIS) contact for overlay creation.	Complete 23-24	Will post on towns website when completed
3-3 Implement citizen reporting program (Ongoing)	In progress	Plan implementation will start has the maps are completed	Receive Citizens complaints	PW / ZEO/Asst. Town Clerk	Town Residents will have dedicated reporting form on the Illicit Discharge Detection and Elimination Public Work page on towns website	No verbal or written complaints received 2022; Will be able to do online early 1Q23
3-4 Establish legal authority to prohibit illicit discharges (Due 7/1/19)	Not started	Town will begin work on ordinance for implantation on or before 7-1-23, or as fast as feasible due to statutory requirements for notice and holding meeting of Town electors.	Establish legal authority	BOS/engineering	Town will have special meeting to adopt new ordinance	Town will post when ordinance is adopted
3-5 Develop record keeping system for IDDE tracking (Due 7/1/17)	In Progress	Spreadsheets will be developed when first IDDE is reported	Create Spread sheet	PW	TBD	PW will keep logs with issue and resolution available for inspection upon request.
3-6 Address IDDE in areas with pollutants of concern	Not started	PW/Engineering works continues IDDE sampling	Not started	PW/Engineering	Will start 2023	

3-7 Detailed MS4 infrastructure mapping	Not started	MS4 mapping will be done in 2023	Not started	PW / Engineer	2023	Town will make available on website and keep detailed records
3-8 Complete List and maps of all outfalls will be completed 2023 throughout the Town	Not Started	Vendor will Be hired to complete the mapping of the MS4 system	Develop a Map and list	Engineering / PW / Vendor	Will complete in 2023	All out falls will be on Towns website and will update as needed

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

The written program will be posted to the Dept of Public Works webpage and a link listed in next year's Annual Report; will update the written IDDE program as needed throughout the permit term.

Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process IDDE Sampling will continue as weather 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 2017 through end of reporting period using the following table. Illicit discharges are any unpermitted discharge to waters of the state that do not consist entirely of stormwater or uncontaminated groundwater except those discharges identified in Section 3(a)(2) of the MS4 general permit when such non-stormwater discharges are not significant contributors of pollution to a discharge from an identified MS4.

Date and	Discharge to	Estimated	Known or	Corrective measures planned and completed (include	Sampling data
duration of	MS4 or	volume	suspected cause	dates)	(if applicable)
occurrence	surface water	discharged	/ Responsible		
			party		
				Only small area of Town sewered, which	
				•	
		duration of MS4 or	duration of MS4 or volume	duration of MS4 or volume suspected cause occurrence surface water discharged / Responsible	duration of MS4 or volume suspected cause occurrence surface water discharged / Responsible dates)

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
The Health Department/ sanitarian tracks septic	None Reported	NA	NA	Health Dept.

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

The Town has received no complaints this year (2)	022)	١
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3.6 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	30
Estimated or actual number of interconnections	2
Outfall mapping complete	0
Interconnection mapping complete	0
System-wide mapping complete (detailed MS4 infrastructure)	0
Outfall assessment and priority ranking	0
Dry weather screening of all High and Low priority outfalls complete	0
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	0

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).

The Town will continue to train staff on IDDE with MS4 and industrial stormwater permit training sessions on annual basis.

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

ВМР	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)	On going	ZEO/PW/Engineer have met to discuss permit requirements. P&Z Commission initiated a subcommittee with ZEO to develop acceptable regulation language and checklists	Upgrade regulations	P&Z Commission/ZEO/ Engineer	April 13, 2023	This has been ongoing practice in Town.
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval (Ongoing)	Ongoing	Zeo forwards plans and applications to various department heads for review	Review applications	ZEO/PW/Engineer/Building Official	This is Town's Standard Operating Procedure	This has been ongoing practice in Town
4-3 Review site plans for stormwater quality concerns (Ongoing)	Ongoing	Site plan applications are reviewed by ZEO / PW / Engineer	Review all new/revision applications	ZEO/Engineering	This is Towns procedure	This has been ongoing practice in Town
4-4 Conduct site inspections (Ongoing)	Ongoing	Conduct multiple inspections at regular intervals ZEO/PW/Engineer	Inspect all activities multiple times	ZEO/Engineer/PW	This is towns procedure	This has been ongoing practice in Town
4-5 Implement procedure to allow public comment on site development (Ongoing)	Ongoing	Allow public comment on site development projects	Public comment is allowed at all P&Z and Wetland Meetings	P&Z Commission/ZEO/Engineer	This is Towns procedure	Public comment is on every P&Z and Wetland agenda. Public hearings also allow for application specific comment

	Ongoing	Notify developers of DEEP	Dedicated	ZEO/Asst. Town Clerk	Implementation is	The user will have to
		permit requirements	webpage will		planned on or	check they have read
4. C. Implement			show before		before February 8,	and understand this
4-6 Implement			any Land Use		2023.	Notice before
procedure to notify			Permit can be			proceeding.
developers about DEEP construction stormwater			pulled online			
			(Zoning, Special			
permit (Ongoing)			Permit,			
			Subdivision,			
			etc.).			

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

Integrate stormwater compliance checklist into review process once completed. Continue to follow present SOP.

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

ВМР	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)	Not Started	There is a plan underway to update zoning regulations and create new CT General Construction permit page requiring user acknowledging read and understood what is required (all Land Use permits online will have this page display before a permit can be pulled).	Update zoning regulations and Town website.	P&Z Commission/ZEO/Asst. Town Clerk	April 13, 2023	

5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Due 7/1/22)	In Progress	Site inspection SOP required no water run-off pre- or post-construction when doing Zoning or Building Official site inspections.	Continue to inspect sites and keep track of said inspections use MS4 suggested forms	ZEO/Building Official	November 8, 2022	This is ongoing, but new forms to be created to complement new website information.
5-3 Identify retention and detention ponds in priority areas (Due 7/1/20)	On going	PW has a list of above ground and underground structures. This list is for entire Town	Inspect/maintain All retention/detention ponds	PW	On going	This will be updated as new development occurs.
5-4 Implement long- term maintenance plan for stormwater basins and treatment structures (Ongoing)	In Progress	A list on spread sheet for above and belowground structures was created	Maintain annually	PW	On going	The Town will clean all retention ponds annually as weather permits all were done in 2022
5-5 DCIA mapping (Due 7/1/20)	Not started		Map DCIA	Engineer / vendor	2023	Update as development occurs
5-6 Address post- construction issues in areas with pollutants of concern	Not started	No post-construction issues in 2022 in areas with pollutants of concern	Address as identified	ZEO/PW/Consultant	On going	

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

Prioritize treatment ponds; Hire vendor to maintain highest priority retention ponds.	

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)	185 acres

DCIA disconnected (redevelopment plus retrofits)	0 acres this year / 0 acres total
Retrofit projects completed	0
DCIA disconnected	0% this year / 0% total since 2012
Estimated cost of retrofits	\$0
Detention or retention ponds identified	All/all

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

Use CLEAR IC% data and modified Sutherland equations.

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

ВМР	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)	Not Started	Will train employees this year 2023	Train annually	PW	2023	The Town will train employees
6-2 Implement MS4 property and operations maintenance (Ongoing)	On going	A binder with all maintenance activities in detention structures is available		PW	2022	
6-3 Implement coordination with interconnected MS4s	Not started	Consult with DOT drainage engineer in regards to their interconnections		PW / engineer		Not Started
6-4 Develop/implement program to control other sources of pollutants to the MS4	Not Started					
6-5 Evaluate additional measures for discharges to impaired waters*	Not Started				2023	
6-6 Track projects that disconnect DCIA (Ongoing)	Not Started	DCIA updates need to be identified	Maintain list and track progress	PW / Engineer	Not Started	

6-7 Implement infrastructure repair/rehab program (Due 7/1/21)	In Progress	Repair sewage line on Stafford Road Aug.2022	Reduce Water infiltration on sanitary sewer line	WPCA	8-1-22	
6-8 Develop/implement plan to identify/prioritize retrofit projects (Due 7/1/20)	In Progress	Plan is to implement retrofits into capital projects	Disconnect Impervious surfaces	PW / Engineer		
6-9 Implement retrofit projects to disconnect 2% of DCIA (Due 7/1/22)	In Progress	Will take a look back at Towns projects,	Disconnect Impervious surfaces	PW/Engineer	2023	Identify targets this year, budget retrofit work for future years
6-10 Develop/implement street sweeping program (Ongoing)	Complete	The Town sweeps in May annually,85 miles are swept.	Swept Annually	PW	Usually, May	The Town utilizes their own sweeper
6-11 Develop/implement catch basin cleaning program (Ongoing)	Complete	The Town cleans at least a third of basins annually on a rotating basis, and keeps track of the spots that need more attention	650 estimated` cleaned annually	PW	Unknown	The Town has done this since 2004
6-12 Develop/implement snow management practices (Due 7/1/18)	Completed	The Town uses a treated salt to maintain roads in the winter.	The Town Trains Staff and tracks the amount applied yearly	PW	Unknown	Snow relocation not required – rural town with onsite storage locations

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

The Town will continue to implement SOP activities, street sweeping, catch basin cleaning and storm water treatment infrastructure maintenance.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	Annually
Street sweeping	
Curb miles swept	90 miles
Volume (or mass) of material collected	100-125 yards Mostly Leaves
Catch basin cleaning	
Total catch basins in priority areas (value will be less than or equal to total catch basins town or institution-wide)	650 est.
Total catch basins town-wide	1957
Catch basins inspected	750 est.
Catch basins cleaned	650 est.
Volume (or mass) of material removed from all catch basins	30 yards
Volume removed from catch basins to impaired waters (if known)	unknown
Snow management	
Type(s) of deicing material used	Treated salt
Total amount of each deicing material applied	1500 tons treated salt
Type(s) of deicing equipment used	Trucks Sanders
Lane-miles treated (A lane-mile is a mile of roadway in a single driving lane)	92
Snow disposal location	none
Staff training provided on application methods & equipment	ongoing
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	No reduction
Reduction in turf area (since start of permit)	No reduction
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	No reduction
Cost of mitigation actions/retrofits	n/a

6.4 Catch basin cleaning program

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

The Town owns its own catch basin cleaning truck and will clean basins that are know to fill up fast on a regular basis, we sweep all roads once a year and most of the sweepings is vegetative debris. The Town also has a good resurfacing program so we get into 75 to 80 basins a year that are rebuilt and cleaned.

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)

The Town did a large road reconstruction project on Lyons road in 2022 and was able to disconnect a basin to an underground system.

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)

We will be looking at the town hall parking lot in the next couple years to install a rain garden.

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 the MS4 map viewer: http://s.uconn.edu	· . ·) in your municipality or i	nstitution. This da	ta is available	e on
Nitrogen/ Phosphorus Concern	Bacteria 🛚	Mercury	Other	Pollutant	of
1.2 Describe program status					
Discuss 1) the status of monitoring work co Stormwater Management Plan based on m	•	of the results and any notal	ole findings, and 3) a	ny changes to	the
Work to identify outfalls to be done 2	023, sampling will fol	llow identification in pric	ority areas		

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.

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.

Outfall ID	Latitude / Longitude	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required? *
None to date						

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)	 E. coli > 235 col/100ml for swimming areas or 410 col/100ml for all others Total Coliform > 500 col/100ml 			
Bacteria (salt waterbody)	 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
Not done		

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, 2021. **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	Latitude / Longitude	Sample	Parameter(s)	Results	Name of Laboratory (if used)
	Longitude	Date			

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
none		

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 problem 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.

Outfall / Interconnection ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken
None to date											

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

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

Where SVFs are:

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

3.2 Key junction 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

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

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."

3-15-23

Chief Elected Official or Principal Executive Officer

Print name: Douglas Thompson

Document Prepared by

Print name: Stephen R. McDonnell, P.E.

Signature / Date:

Email: Thompson.d@burlingtonct.us

Signature / Date:

Email: smcdonnell@wmcengineers.com

3/31/23