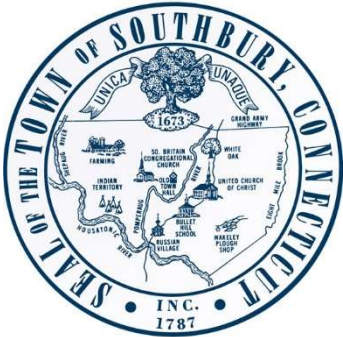


2022 Annual Report – MS4 General Permit

Town of Southbury
Southbury, Connecticut

February 2023



Prepared by:



146 Hartford Road
Manchester, CT 06040

MS4 General Permit
Town of Southbury 2021 Annual Report
Existing MS4 Permittee
Permit Number GSM 00028
January 1, 2022 – December 31, 2022

This report documents the Town of Southbury’s 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 (See Below and PRWC Outreach Log CY 2020)

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	Ongoing	Attendance at Farmers’ Markets	Raise Public Awareness	Land Use Office	2/15/19	Ongoing	Approximately 2,250 attendees at the Farmers’ Market.
1-2 Address education/ outreach for pollutants of concern*	Ongoing	Storm Drain Markers (PRWC)	Raise Public Awareness	Land Use Office / Department of Public Works	2/15/19	Ongoing	11 new drains for a total of approximately 1,500.

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

Continued coordination with the Pomperaug River Watershed Coalition.
 Earth Day Celebration Spring 2023
 Energy Fair Spring 2023
 Green Expo Spring 2023

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.
See item 2.2 – Public Involvement	See PRWC Report Attached (Appendix A)	Varied topics, see Appendix A		Land Use Department in partnership with the PRWC
Town of Southbury’s Webpage has links addressing BMP for stormwater	Home owners (approx. 150)	Protecting the watershed, stormwater management		IT Department Post Document on webiste
Reviewing plans for development to ensure their compliance with LID and 2004 CT Stormwater Manual	Developers (approx. 20)	Impervious surfaces, BMP’s for site control	Sediment Load	Land Use Department
Aquifer Protection Area Letter	150 Property owners within the APA regulated area	Aquifer protection regulated activites		Land Use Department
Hazardous Waste Drop-off March 17, July 24, September 25, 2021 April 16, July 16, September 24, 2022	75 residents	HHW events give residents the opportunity to properly dispose of hazardous materials that are commonly used in the home including paint, pesticides, household cleaners, poisons, and chemicals, helping to keep potentially hazardous waste out of local landfills and sewers, providing extra protection for wetlands and waterways.		Public Works in partnership with NVCOG

2. Public Involvement/Participation (See Below and PRWC Outreach Log CY 2020)

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 Continue availability of Final Stormwater Management Plan to the public	Ongoing	Posting to website	Posted at southbury-ct.org	Land Use Dept.	4/3/2017	8/1/2021	
2-2 Comply with public notice requirements for Annual Reports	Ongoing	See report	See final report	Land Use Dept.	2/15/2022	5/1/2022	Available on web www.southbury-ct.org

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

Hold periodic sub-committee meetings to discuss status of stormwater progress. Continue outreach with PRWC; stress BMP's whenever possible.

2.3 Public Involvement/Participation reporting metrics

Metrics	Date	Posted
Availability of the Stormwater Management Plan to public	3/31/2017	www.southbury-ct.org
Availability of Annual Report announced to public	5/1/2022	www.southbury-ct.org & First Selectman's Office

3. Illicit Discharge Detection and Elimination

3.1 BMP Summary

<i>BMP</i>	<i>Status</i>	<i>Activities in current reporting period</i>	<i>Measurable goal</i>	<i>Department / Person Responsible</i>	<i>Due</i>	<i>Date completed or projected completion date</i>	<i>Additional details</i>
3-1 Develop written IDDE program	Completed	IDDE plan for the town was developed in 2020.	Continue to implement the IDDE plan	Public Works / Land Use Dept.	Jul 1, 2018	Feb. 2020	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	In progress	Attribute table added to GIS database detailing location of outfalls as a separate layer. GIS data continues to be updated as Dry Weather Screening is performed.	Completed list of outfalls on the GIS database , allowing for tracking	Public Works	Jul 1, 2019	June 30, 2019	>95% outfalls and catch basins have been added as a layer to the Town's GIS. There is additional info available in GIS about each catch basin, for example maintenance and cleaning dates.
3-3 Implement citizen reporting program	Completed	Delegation of tasks to town staff from the online reporting system by the Public Works department.	Closed records on the IWORQ Database.	Public Works	Jul 1, 2017	Feb. 2017	
3-4 Establish legal authority to prohibit illicit discharges	In progress	Town Ordinance regarding Aquifer Protection Agency updated. The members of the Inland Wetlands Commission will now serve as the agents for the APA.	Amend the ordinance to adopt an enforcement arm of the WPCA	Soil and Erosion Control Officer/ In-Land Wetlands	Jul 1, 2018	Anticipated completion date December 31, 2022	In 2022 the Agency is expected to adopt the DEEP model regulations and regain compliance.
3-5 Develop record keeping system for IDDE tracking	Complete	Work orders tracked in the IWORQ system.	Maintained recorded	Public Works Tracks in IWORQ for the Legal Authority	Jul 1, 2017	Feb. 2017	
3-6 Address IDDE in areas with pollutants of concern	Ongoing	No areas of concern have been identified as needing follow-up.	Maintained record	Soil and Erosion Control Officer/ In-Land Wetlands	Not specified	Ongoing	

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

Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process.
 Hazardous waste collection days to reduce illegal discharge into watershed.
 Continue use of IWORQ Work Order tracking system to track reports made by concerned citizens.

3.3 List of citizen reports of suspected illicit discharges received during this reporting period (through I-Works).

Date of Report	Location / suspected source	Response taken
None reported		

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)
455 Community House Rd	Nov 24, 2020	Culvert to Ditch	None Found	UNK	Field Visit to Research – Nothing Found	NA
84 Hollow Swamp Rd	Jan 2, 2019	Water from Neighbor	None Found	UNK	Investigate and Found not to be an Illicit Discharge	NA

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

Citizens are able to complete a Citizen Request Work Order online on the Town’s website or call the Public Works Office, as well as through the complaint section of the Land Use website to report their concerns. Public Works coordinates with the Soil and Erosion Control Officer/ Inland Wetlands Officer. A spreadsheet of the report log is maintained on the IWORQ database. Environmental related complaints are tracked in Municipality permitting system software with description, observations and resolutions notes.

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
None reported.		

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	806
Estimated or actual number of interconnections	450
Outfall mapping complete	90 %
Interconnection mapping complete	90 %
System-wide mapping complete (detailed MS4 infrastructure)	90 %
Outfall assessment and priority ranking	10%
Dry weather screening of all High and Low priority outfalls complete	10%
Catchment investigations complete	10%
Estimated percentage of MS4 catchment area investigated	10%

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).

Public Works staff completed UCONN T2 center trainings in 2021 including:
Public Works Academy Program
Vac Haul training for catch basin cleaning (5 employees)
Green Snow Pro (2 employees)
Salt Calibration training

4. Construction Site Runoff Control

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	IWWC Regulation update complete January 2020. Sediment and Erosion Control Ordinance is established.	Confirm that ordinance does not need to be changed to update BMP manual reference.	Land Use Department	July 1, 2019	Inland Wetlands Commission approved Regulation update in January 2020.	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Ongoing	All applications funneled by online permitting system through Building Department to ensure all necessary approvals are received.	Check off list in the online permitting program	Land Use Department	July 1, 2017	Ongoing standard operating procedure.	
4-3 Review site plans for stormwater quality concerns	Ongoing	56 site plans were reviewed for compliance.	All site plans are reviewed for compliance with a variety of regulations, including stormwater quality.	Land Use Department	July 1, 2017	Ongoing standard operating procedure.	BMP manual guidelines for the State of Connecticut are available as are optional pre-application meetings for all applicants.
4-4 Conduct site inspections	Ongoing	Site inspections were conducted with all major construction projects.	The Zoning and Wetlands Enforcement Officer maintains records of new constructions and problem areas that require site visits.	Land Use Department	July 1, 2017	Ongoing standard operating procedure.	Sediment and Erosion Control bonds are required for all projects.

BMP (Continued from above)	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
4-5 Implement procedure to allow public comment on site development	Ongoing	Strategic Task Force commission was established with an avenue for public survey to receive general comments.	Zoning Enforcement Officer Database of Complaints.	Land Use Department	July 1, 2017	Ongoing standard operating procedure.	Avenues for public comment on development projects are continuously being assessed and updated as needed.
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Ongoing	All pertinent regulatory material is reviewed to determine additional requirements prior to issuance of permit.	Permit language	Land Use Department	July 1, 2017	Ongoing standard operating procedure.	

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

Continue the following practices:

- Utilize IWORQ system for citizen feedback and reporting of land disturbance activities and illicit discharge.
- Site plan reviews
- Site inspections
- Continue interdepartmental cooperation in plan reviews and permit approvals
- Require consistency with 2002 Guidelines for Soil Erosion and Sediment Control and the 2004 Stormwater Quality Manual.

5. Post-construction Stormwater Management

5.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	In progress	LID practices were recommended to be incorporated into the zoning regulation rewrite in progress.	Planning requirements in the Zoning Regulation.	Land Use Department	Jul 1, 2021	Anticipated completion Date July 1, 2023	Requests contractors to explore alternate designs to incorporate LID designs. Encourages roof leader drains discharging to infiltrators for new construction single family dwellings.
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	In progress	LID practices were recommended to be incorporated into the zoning regulation rewrite in progress.	Verifiable during site plan review.	Land Use Department	Jul 1, 2019	Anticipated completion Date July 1, 2023	Confirmation by inspection or signed affidavit by contractor before Certificate of Zoning Compliance is issued on new projects.
5-3 Identify retention and detention ponds in priority areas	Complete	All town-maintained basins identified and mapped. Land Use follows up with private basin owners.	Create maps and associated status spreadsheet.	Public Works Department	Jul 1, 2019	Anticipated completion Date 12/31/2022	List of town owned Detention basins updated and sent to Public Works Department by the Inland Wetlands Department.
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Complete	Catch basins are digitized on a GIS map viewer. Detention basin maintenance schedule has been created.	Service log for detention basins.	Public Works	Jul 1, 2019	July 2019	Spreadsheet of detention basin maintenance created and updated regularly.
5-5 DCIA mapping	Complete	The Town contracted with a consultant to perform DCIA baseline calculation.	Excel Spreadsheet Calculated percentage	Land use Department	Jul 1, 2020	Completed 7/14/2022	

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-6 Address post-construction issues in areas with pollutants of concern continued	Ongoing	Identify erosion and sediment problems in impaired waters through complaint system. Develop and implement solutions to the problems as funding is available, or use legal authority to hold property owners accountable.	Town staff to correct issues on Town-owned property to the extent practicable and incorporated into list of planning projects. Privately-owned land typically issued wetlands violation notice.	Public: Land Use Department Private: Engineering firm	Not specified	Ongoing standard operating procedure.	Update annual report with identification of problem areas, the cost of the retrofit, and the anticipated pollutant reduction.
5-7 Turf Reduction and vegetative buffers	Complete	The Town's Wetland Regulations require applicants to preserve as much of the natural buffer as possible.	Review needed for requirements for turf reduction.	Land Use Department	Not specified	Ongoing standard operating procedure	
5-8 Standards to protect trees	Ongoing	The Town's streetscape plan requires trees along developed areas. These trees are maintained by an arborist throughout the year, including trimming and pruning.	Maintain the Town's streetscape and status as a "Tree City".	Land Use Department / Public Works Department	Not specified	Ongoing standard operating procedure	The landscaping plan is not only aesthetically pleasing, it is also important for evapotranspiration.
5-9 Coordinate with local Health Department	Ongoing	The local Health Department is included in application reviews.	Continue to coordinate with the Health Department.	Land Use Department / Building Department	Not specified	Ongoing standard operating procedure	

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

Continue to encourage and enforce LID site development practices.
Continue requirements for access easement in subdivisions.
Continue to address post-construction sediment and erosion control issues as they occur.
Continue to encourage preservation and enhancement of natural buffers.
Continue to require consistency with the 2004 Stormwater Quality Manual.
Continue interdepartment coordination in application reviews.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	593.6 acres
DCIA disconnected (redevelopment plus retrofits)	TBD
Retrofits completed	0
DCIA disconnected	0 % this year / 0 % total since 2012
Estimated cost of retrofits	Not yet determined
Detention or retention ponds identified	33

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

The town contracted with a consultant to calculate DCIA baseline. DCIA was estimated from high-resolution impervious cover (excluding state roads) and land use/cover data available from UConn NEMO and empirical equations (Sutherland Equations) relating DCIA and Total Impervious Area (TIA). The DCIA estimates were developed at the CTDEEP Local Basin scale.

6. Pollution Prevention/Good Housekeeping

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	Ongoing	Public Works staff completed UCONN T2 center trainings in 2022 including: Public Works Academy Program, Vac Haul training for catch basin cleaning, and Salt Calibration training.	Attendance Records	Public Works	Jul 1, 2017	Ongoing Standard Operating Procedure	
6-2 Implement MS4 property and operations maintenance	Ongoing	Funding allocated to Public Works for drainage maintenance and repair including detention basins, catch basins and culverts.	Report form director	Public Works Director	Jul 1, 2018	Ongoing standard operating procedure	
6-3 Implement coordination with interconnected MS4s	Ongoing	The Town continues to work with CT Water to inspect and rehabilitate manholes to reduce I&I. The Town continues to coordinate with DOT for the state-owned storm system, including crossings and culverts.	Meeting with Connecticut Water, sewage division scheduled and minutes recorded.	Public Works Director	Not specified	Ongoing	

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-4 Develop/implement program to control other sources of pollutants to the MS4	In progress	Create a list of facilities in town not required to register under the Industrial Stormwater Permit, and review screening and monitoring results for compliance.	Review stormwater general permit registrant list and identify potential contributing facilities not on the list.	Public Works Department / Engineering firm	Not specified	Anticipated completion date December 31, 2023	Compare locations of locations identified and monitor results to determine if further investigation is needed.
6-5 Evaluate additional measures for discharges to impaired waters	See BPM 6-10 - 6-13						
6-6 Track projects that disconnect DCIA	In progress	Review of previous projects within Town dating back to July of 2012 did not identify any significant disconnect projects in the past five (5) years.	Create a spreadsheet to track disconnected DCIA acreage.	Land Use Department / Public Works Department	Jul 1, 2017	Anticipated completion date December 31, 2023	
6-7 Implement infrastructure repair/rehab program	Ongoing	Drainage system maintenance and repair continues, including detention basins, and pipe inspections performed with a new camera.	Spreadsheet and repair schedule	Public Works Department	Jul 1, 2021	Ongoing	

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-8 Develop/implement plan to identify/prioritize retrofit projects	In progress	The Town has contracted with a consultant to develop the DCIA Plan. In 2022, a review of Town-owned properties for potential DCIA reduction retrofit sites was performed.	Identify required repairs based on data from previous permit. Make repairs as funding becomes available.	Public Works Department	Jul 1, 2020	Anticipated completion date Dec 31, 2023	
6-9 Implement retrofit projects to disconnect 2% of DCIA	Ongoing	The Town has contracted with a consultant to review Town-owned properties for potential DCIA reduction retrofit sites.	Disconnect 2% of the Town's DCIA	Public Works Department	Jul 1, 2022	Anticipated completion date Dec 31, 2024	
6-10 Develop/implement street sweeping program	Ongoing	The Town sweeps all its streets twice a year, and additional areas on an as-needed basis.	Spreadsheet	Public Works Department	Jul 1, 2017	Ongoing standard operating procedure	
6-11 Develop/implement catch basin cleaning program	Ongoing	The Town vacuums 10% of its catch basin a year. A new vac truck was purchased to expedite this process.	Spreadsheet	Public Works Department	Jul 1, 2020	Ongoing standard operating procedure	Catch basins to be numbered and organized for more accurate tonnage numbers.
6-12 Develop/implement snow management practices	Ongoing	The Town trains Public Works staff on Salt Calibration to reduce waste and unnecessary salting.	Management manual	Public Works Department	Jul 1, 2018	Ongoing standard operating procedure	
6-13 Map and inventory highly erosive areas in Town Right of Way (ROW)	Ongoing	Eroding areas in ROW are reported by Town staff and added to list of projects.	Identify areas contributing large volumes of sediment to Town waterbodies.	Public Works Department		Ongoing standard operating procedure	

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

Annual recycling days sponsored by the Town Public Works Department will be held in the spring and fall of 2023
 Mattress return, hazard household waste return, and battery return days at the Town’s transfer station to be scheduled.
 Continue employee training programs.
 Continue street sweeping programs.
 Continue catch basin maintenance and inspections.
 Annual Commissioner training programs on Land Use

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	Yes
Street sweeping	
Curb miles swept	240 miles
Volume (or mass) of material collected	160 CY
Catch basin cleaning	
Total catch basins in priority areas	Unknown
Total catch basins in MS4	6391
Catch basins inspected	418
Catch basins cleaned	398
Volume (or mass) of material removed from all catch basins	277 CY
Volume removed from catch basins to impaired waters (if known)	Not known
Snow management	
Type(s) of deicing material used	Treated Rock Salt
Total amount of each deicing material applied	2,636 Tons
Type(s) of deicing equipment used	Salt Spreaders
Road miles treated	126 miles
Snow disposal location	PW laydown Yard
Staff training provided on application methods & equipment	Yes
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	0 lbs.
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	\$-0

6.4 Catch basin cleaning program

Provide any updates or modifications to your catch basin cleaning program

Streets are assigned to inspection teams by the Highway Foreman. Crews utilize an industrial vacuum truck to travel the assignment length to inspect and inventory catch basins. If the free board within the catch basin is filled, the grate is pulled and the silts and sands are vacuumed out. Chronic silt migration resulting from gravel driveways is addressed by requiring the resident to address the issue creating the problem. Material that is vacuumed out of the catch basin is taken to the Public Works yard.

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.

The retrofit identification and prioritization process consists of a desktop screening evaluation to identify potential retrofit sites followed by field evaluations to confirm feasibility of retrofits, develop retrofit concepts, and prioritize retrofit projects. The initial desktop analysis is used to determine which sites to further evaluate prioritized sites with the following criteria:

1. Municipally-owned properties
2. Greater than 1 acre of impervious area or greater than 30% of impervious area (using high-resolution impervious cover and land use/cover data available from UConn NEMO)
3. Moderately well drained to excessively well drained soils (using USDA/NRCS 2007 Soil Drainage Class data)
4. Mostly or entirely outside of the 100 year flood zone (using FEMA Flood Zone data)

Once site visits are completed, preliminary stormwater retrofit concepts will be identified and evaluated for budgetary cost and approximate amount of DCIA that would be disconnected.

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

The retrofit plan will identify retrofit sites and projects. The plan will outline a recommended list of prioritized retrofit projects to achieve the 1% DCIA disconnection goal annually and in future years, to the Maximum Extent Practicable.

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

The retrofit plan will identify retrofit sites and projects. The plan will outline a recommended list of prioritized retrofit projects to achieve the 1% DCIA disconnection goal annually and in future years, to the Maximum Extent Practicable.

Part II: Impaired waters investigation and monitoring

1. Impaired waters investigation and monitoring program

1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution. This data is available on the MS4 map viewer: <http://s.uconn.edu/ctms4map>.

Nitrogen/ Phosphorus Bacteria Mercury Other Pollutant of Concern

1.2 Describe program status.

<p>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.</p> <p>The Town has contracted with a consultant to begin outfall monitoring.</p>

2. Screening data for outfalls to impaired waterbodies (Fuss and O’Neill Reports)

2.1 Screening data

Complete the table below for any outfalls screened during the reporting period. Each Annual Report will add on to the previous year’s screening data showing a cumulative list of outfall screening data.

Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?
The Town has contracted with a consultant to begin outfall monitoring.					

2.2 Credit for screening data collected under 2004 permit

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

Outfall	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?
None reported.					

3. Follow-up investigations (Fuss and O’Neill Reports)

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall	Status of drainage area investigation	Control measure implementation to address impairment
Nothing to report.		

4. Prioritized outfall monitoring (Fuss and O’Neill Reports)

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, 2020.

Outfall	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)
Not yet determined				

Part III: Additional IDDE Program Data

1. Assessment and Priority Ranking of Catchments data

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
CT6800-00_01	B	1
CT-6800-00_03	B	2

2. Outfall and Interconnection Screening and Sampling data (Fuss and O’Neill Reports)

2.1 Dry weather screening and sampling data from outfalls and interconnections

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies.

Outfall / Interconnection ID	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken
See attached table of monitoring results										

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
None to report for 2022									

3. Catchment Investigation data

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
None to report for 2022		

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
None to report for 2022					

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants
None to report for 2022				

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
None to report for 2022							

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: Jeff Manville, First Selectman	Print name: Lindsay Silcox, EIT Fuss & O'Neill
Signature / Date:	Signature / Date:

Attachment 1
Dry Weather Outfall Monitoring Results

Dry Weather Screening - Follow-up Needed
2016 Connecticut Municipal Separate Storm Sewer System (MS4) Permit
Southbury, Connecticut
May 20, 2022

	<u>Outfall ID</u>	<u>Followup Visit Needed</u>	<u>Status</u>	<u>Flow Present</u>	<u>Evidence of Illicit Discharge</u>	<u>Access Notes</u>	<u>Condition</u>	<u>Shape</u>	<u>Material</u>	<u>Outer Diameter (in)</u>	<u>Inner Diameter (in)</u>	<u>Inspector</u>	<u>Inspection Date</u>
1	OF023	Yes	Located - direct access	Yes			Good	Rounded	Corrugated Metal Pipe	48	48	SH	12/15/2021
2	OF038	Yes	Located - direct access	Yes			Good	Rounded	HDPE (Plastic)	30	30	SH	12/15/2021
3	OF044	Yes	Located - direct access	Yes			Fair	Rounded	Concrete	26	24	SH	12/15/2021
4	OF097	Yes	Located - direct access	Yes			Good	Rounded	HDPE (Plastic)	22	20	RT	12/15/2021
5	OF141	Yes	Located - direct access	Yes			Good	Rounded	Corrugated Metal Pipe	16	16	SH	12/15/2021
6	OF166	Yes	Located - direct access	Yes			Good	Rounded	HDPE (Plastic)	24	22	BS	3/29/2022
7	OF174	Yes	Located - direct access	Yes			Crumbling	Rounded	Corrugated Metal Pipe	16	16	SH	12/15/2021
8	OF176	Yes	Located - direct access	Yes			Good	Rounded	Concrete	36	34	MG	12/15/2021
9	OF182	Yes	Located - direct access	Yes	Foam, Surfactant		Fair	Rounded	Corrugated Metal Pipe	40	40	SH	12/15/2021
10	OF188	Yes	Located - direct access	Yes			Fair	Rounded	Ductile Iron	15	14	BS	3/29/2022
11	OF195	Yes	Located - direct access	Yes			Good	Rounded	Corrugated Metal Pipe	18	18	MG	12/15/2021
12	OF197	Yes	Located - direct access	Yes			Good	Rounded	Ductile Iron	30	28	BS	3/29/2022
13	OF203	Yes	Located - direct access	Yes			Good	Rounded	Ductile Iron	28	27	BS	3/29/2022
14	OF205	Yes	Located - direct access	Yes			Good	Rounded	Ductile Iron	12	11	BS	3/29/2022
15	OF218	Yes	Located - direct access	Yes			Good	Rounded	Corrugated Metal Pipe	36	36	MG	12/15/2021
16	OF223	Yes	Located - direct access	Yes			Good	Rounded	Ductile Iron	12	11	BS	3/29/2022
17	OF228	Yes	Located - direct access	Yes	Sewage		Good	Rounded	Concrete	20	20	MG	12/15/2021
18	OF233	Yes	Located - direct access	Yes			Good	Rounded	Ductile Iron	15	13	BS	3/29/2022
19	OF234	Yes	Located - direct access	Yes			Good	Rounded	Ductile Iron	28	27	BS	3/29/2022
20	OF254	Yes	Located - direct access	Yes	Algae, Foam		Good	Rounded	Corrugated Metal Pipe	16	16	MG	12/15/2021
21	OF255	Yes	Located - direct access	Yes	Algae		Good	Rounded	Corrugated Metal Pipe	20	20	MG	12/15/2021
22	OF263	Yes	Located - direct access	Yes	Foam, Algae		Good	Rounded	Corrugated Metal Pipe	24	24	MG	12/15/2021
23	OF306	Yes	Located - direct access	Yes			Good	Rounded	HDPE (Plastic)	16	16	MG	12/15/2021
24	OF309	Yes	Located - direct access	Yes			Good	Rounded	HDPE (Plastic)	16	16	MG	12/15/2021
25	OF395	Yes	Located - direct access	Yes			Good	Square	Concrete	60	60	MG	12/15/2021
26	OF060	Yes	Located - Unable to access	Yes			Fair	Rounded	HDPE (Plastic)	24	24	SH	12/15/2021
27	OF144	Yes	Located - Unable to access	Yes		Steep slope	Good	Rounded	HDPE (Plastic)	0	0	SH	12/15/2021
28	OF214	Yes	Located - Unable to access	Yes		Steep slope	Good	Rounded	HDPE (Plastic)	15	13	BS	3/29/2022
29	OF025	Yes	Unable to locate	Yes		Thick vegetation	Unknown	Rounded	Corrugated Metal Pipe	16	16	SH	12/15/2021
30	OF173	Yes	Unable to locate	Yes		Thick vegetation	Unknown	Rounded	Corrugated Metal Pipe	16	16	BS	3/29/2022
31	OF201	Yes	Unable to locate	Yes		Steep slope	Unknown	Rounded	Ductile Iron	12	11	BS	3/29/2022
32	OF378	Yes	Unable to locate	Yes			Unknown	Rounded	Concrete	20	18	MG	12/15/2021

Dry Weather Screening - No Follow-up Needed
 2016 Connecticut Municipal Separate Storm Sewer System (MS4) Permit
 Southbury, Connecticut
 May 20, 2022

	<u>Outfall ID</u>	<u>Follow-up Visit Needed</u>	<u>Status</u>	<u>Flow Present</u>	<u>Visual/Olfactory Evidence of Illicit Discharge</u>	<u>Notes</u>	<u>Condition</u>	<u>Shape</u>	<u>Material</u>	<u>Outer Diameter (in)</u>	<u>Inner Diameter (in)</u>	<u>Inspector</u>	<u>Inspection Date</u>
1	OF004	No	Sampled	Yes			Good	Rounded	Concrete	18	16	RT	12/15/2021
2	OF005	No	Sampled	Yes			Good	Rounded	Concrete	19	19	RT	12/15/2021
3	OF006	No	Sampled	Yes	Foam		Good	Rounded	Concrete	20	15	RT	12/15/2021
4	OF042	No	Sampled	Yes			Good	Rounded	Corrugated Metal Pipe	28	18	RT	12/15/2021
5	OF010	No	Sampled	Yes	Oily Sheen		Fair	Rounded	Corrugated Metal Pipe	20	18	RT	12/15/2021
6	OF028	No	Sampled	Yes	Algae, Oily Sheen		Fair	Rounded	HDPE (Plastic)	28	24	RT	12/15/2021
7	OF051	No	Sampled	Yes			Fair	Rounded	HDPE (Plastic)	22	18	RT	12/15/2021
8	OF012	No	Sampled	Yes			Poor	Rounded	Corrugated Metal Pipe	16	16	RT	12/15/2021
9	OF014	No	Sampled	Yes			Poor	Rounded	HDPE (Plastic)	32	29	RT	12/15/2021
10	OF001	No	Located - direct access				Good	Rounded	Concrete	20	18	SH	12/15/2021
11	OF003	No	Located - direct access				Good	Rounded	HDPE (Plastic)	24	24	SH	12/15/2021
12	OF007	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	16	16	RT	12/15/2021
13	OF009	No	Located - direct access				Good	Rounded	HDPE (Plastic)	12	12	SH	12/15/2021
14	OF011	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	16	16	RT	12/15/2021
15	OF013	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	16	16	RT	12/15/2021
16	OF016	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	14	14	SH	12/15/2021
17	OF024	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	18	18	SH	12/15/2021
18	OF032	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	30	30	SH	12/15/2021
19	OF033	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	26	24	RT	12/15/2021
20	OF041	No	Located - direct access				Good	Rounded	Concrete	22	18	RT	12/15/2021
21	OF050	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	20	18	RT	12/15/2021
22	OF074	No	Located - direct access				Good	Rounded	Concrete	20	16	RT	12/15/2021
23	OF093	No	Located - direct access				Good	Rounded	HDPE (Plastic)	18	16	RT	12/15/2021
24	OF110	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	18	18	SH	12/15/2021
25	OF114	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	18	18	SH	12/15/2021
26	OF115	No	Located - direct access				Good	Rounded	Concrete	20	18	SH	12/15/2021
27	OF148	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	20	20	SH	12/15/2021
28	OF160	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	12	12	SH	12/15/2021
29	OF190	No	Located - direct access				Good	Rounded	Concrete	32	28	MG	12/15/2021
30	OF192	No	Located - direct access				Good	Rounded	HDPE (Plastic)	24	22	BS	3/29/2022
31	OF200	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	36	30	MG	12/15/2021
32	OF209	No	Located - direct access				Good	Rounded	Ductile Iron	15	14	BS	3/29/2022
33	OF258	No	Located - direct access				Good	Rounded	Corrugated Metal Pipe	16	16	MG	12/15/2021
34	OF295	No	Located - direct access				Good	Rounded	HDPE (Plastic)	18	18	MG	12/15/2021
35	OF300	No	Located - direct access				Good	Rounded	HDPE (Plastic)	18	18	MG	12/15/2021
36	OF394	No	Located - direct access				Good	Rounded	Concrete	18	12	MG	12/15/2021
37	OF002	No	Located - direct access				Fair	Rounded	Concrete	22	18	RT	12/15/2021
38	OF018	No	Located - direct access				Fair	Rounded	Corrugated Metal Pipe	14	14	SH	12/15/2021
39	OF065	No	Located - direct access				Fair	Rounded	Concrete	20	16	RT	12/15/2021
40	OF068	No	Located - direct access				Fair	Rounded	Corrugated Metal Pipe	12	12	SH	12/15/2021
41	OF094	No	Located - direct access				Fair	Rounded	HDPE (Plastic)	18	16	RT	12/15/2021
42	OF117	No	Located - direct access				Fair	Rounded	Concrete	20	18	SH	12/15/2021
43	OF008	No	Located - direct access				Poor	Rounded	Corrugated Metal Pipe	12	12	RT	12/15/2021
44	OF036	No	Located - direct access				Poor	Rounded	Corrugated Metal Pipe	15	15	RT	12/15/2021
45	OF071	No	Located - direct access				Poor	Rounded	HDPE (Plastic)	18	16	RT	12/15/2021
46	OF191	No	Located - direct access				Poor	Rounded	Ductile Iron	12	12	MG	12/15/2021
47	OF311	No	Located - direct access				Poor	Rounded	HDPE (Plastic)	12	12	MG	12/15/2021
48	OF373	No	Located - direct access				Poor	Rounded	Concrete	36	36	MG	12/15/2021
49	OF019	No	Located - unable to access				Poor	Rounded	Concrete			SH	12/15/2021
50	OF175	No	Located - direct access				Crumbling	Rounded	Corrugated Metal Pipe	16	16	SH	12/15/2021
51	OF231	No	Located - direct access				Crumbling	Rounded	Corrugated Metal Pipe	12	12	MG	12/15/2021
52	OF161	No	Located - unable to access				Good	Rounded	Corrugated Metal Pipe	12	12	SH	12/15/2021
53	OF026	No	Unable to locate				Good	Rounded	Corrugated Metal Pipe	18	18	SH	12/15/2021
54	OF027	No	Unable to locate				Good	Rounded	HDPE (Plastic)	28	24	SH	12/15/2021
55	OF121	No	Unable to locate				Good	Rounded	Concrete	20	18	SH	12/15/2021
56	OF220	No	Unable to locate			Outfall does not exist						MG	12/15/2021
57	OF250	No	Unable to locate			Outfall does not exist						MG	12/15/2021

Dry Weather Sampling Results
 2016 Connecticut Municipal Separate Storm Sewer System (MS4) Permit
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 May 20, 2022

Outfall ID	Parameters Exceeding Illicit Discharge Screening Threshold Values	Illicit Discharge Screening Parameters				Pollutant of Concern Parameters								Field Screening Parameters			Sample Location	Flow Description	Estimated Flow Depth (in)	Date of Previous Rainfall	Previous Rainfall Amount (in)	Sampler	Sample Date
		E. coli (MPN/100 ml)	Chlorine (mg/L)	Surfactants/MBAS (mg/L)	Ammonia (mg/L)	Total Nitrogen (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	TKN (mg/L)	Total Phosphorus (mg/L)	Outfall Turbidity (NTU)	Upstream Turbidity (NTU)	Total Coliform (MPN/100 ml)	pH	Specific Conductivity (µS/cm)	Salinity (g/kg)							
1 OF042	E. Coli	723	BRL	0.13	BRL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7.92	0.316	0.24	Outfall	High	4	3/27/2022	0.14	RT	3/31/2022
2 OF051	Chlorine	10	0.3	0.15	BRL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7.22	0.690	0.52	Outfall	Trickle	0.5	3/27/2022	0.14	RT	3/31/2022
3 OF005	Chlorine	BRL	0.5	BRL	BRL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7.04	130.1	0.06	Outfall	Moderate	0.1	3/27/2022	0.14	MG	3/31/2022
4 OF010	Chlorine	BRL	0.4	BRL	BRL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6.49	249.9	0.12	Outfall	Moderate	0.5	3/27/2022	0.14	MG	3/31/2022
5 OF014	Chlorine	BRL	0.3	BRL	BRL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7.41	0.210	0.15	Outfall	Moderate	3	3/27/2022	0.14	RT	3/31/2022
6 OF006		10	BRL	0.09	BRL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7.34	107.7	0.05	Catch Basin	Moderate	0.2	3/27/2022	0.14	MG	3/31/2022
7 OF012		BRL	BRL	0.20	BRL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7.34	745.8	0.36	Catch Basin	Trickle	0.1	3/27/2022	0.14	MG	3/31/2022
8 OF028		BRL	BRL	0.07	BRL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7.15	0.133	0.1	Outfall	Trickle	1	3/27/2022	0.14	RT	3/31/2022
9 OF004		BRL	BRL	BRL	BRL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6.68	146.6	0.07	Outfall	Moderate	0.2	3/27/2022	0.14	MG	3/31/2022

BRL: Below Recordable Limit
 n/a: Parameter not analyzed

Recordable Limits:

E. Coli: 10 MPN/100 mL
 Surfactants (MBAS): 0.05 mg/L
 Ammonia: 1 mg/L
 Chlorine: 0.1 mg/L
 Nitrate: 0.1 mg/L
 Nitrite: 0.01 mg/L
 TKN: 0.1 mg/L
 TP: 0.01 mg/L
 Turbidity: 0.01 NTU
 Total Coliform: 10 MPN/100 mL

Threshold Values:

E.Coli: >235 col/100 mL for swimming areas and >410 col/100 mL for all others
 Surfactants/MBAS: >0.25 mg/L
 Ammonia 0.5 mg/L
 Chlorine: Any detectable amount
 Total Nitrogen: >2.5 mg/L
 Total Phosphorus: >0.3 mg/L
 Turbidity: >5 NTU
 Total Coliform: >500 col/100 mL