

Town of Old Saybrook, Connecticut

2020 Annual Report

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

Permit Number GSM000078

MS4 General Permit Town of Old Saybrook 2020 Annual Report Existing MS4 Permittee Permit Number GSM 000078 January 01, 2020 - December 31, 2020

This report documents the efforts of the Town of Old Saybrook to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 01, 2020 to December 31, 2020.

Patrick Hegge replaced Gillian Carroll as Environmental Planner in June 2019.

Christina Costa, CZEO replaced Christine Nelson, AICP as Interim Town Planner in September 2020.

Part I: Summary of Minimum Control Measure Activities

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

1.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Responsible Person and Department	Due	Date completed or projected completion date	Additional details
1-1 Implement public education	In Place	The Town of Old Saybrook website has the following resources contained in the Town Initiatives tab on the town website main page at:	Met	Carl Fortuna, Jr., First Selectman, Board of	July 01, 2018	Prior to July 01, 2017 and Continuing	Additional materials will be added when
and outreach	and <u>http://www.oldsaybrookct.org/Pages/index/</u> outreach	http://www.oldsaybrookct.org/Pages/index/ Things the Town's Doing - Stormwater Plans & Reports		Selectmen			developed
		2017 Stormwater Management Plan 2019, 2018, 2017, 2016 and 2015 MS4 Annual Reports Low Impact Development					

		Interactive Stormwater Outfall Map Things You Can Do - Resources Backyard Water Resources Guide Pet Waste, Water Quality & Your Health Build a Rain Garden Use a Rain Barrel Don't Dump Anything into Catch Basins					
1-2 Address education/ outreach for pollutants of concern*	In Place	The Town of Old Saybrook website has the following resources contained in the Town Initiatives tab on the town website main page at: <u>http://www.oldsaybrookct.org/Pages/index/</u> Things You Can Do - Resources Backyard Water Resources Guide Pet Waste, Water Quality & Your Health Don't Dump Anything into Catch Basins	Met	Carl Fortuna, Jr., First Selectman, Board of Selectmen	July 01, 2017	Prior to July 01, 2017 and Continuing	Additional materials will be added when developed
1-3 WPCA Public Education and Outreach	In Place	The Town of Old Saybrook website has the following resources contained in the <i>Townwide Initiatives</i> tab at the bottom of the WPCA page at: <u>http://www.oldsaybrookct.org/Pages/OldSaybrookCTWPCA/</u> The Rain Garden: A Runoff Solution Lawn Reduction Suggestions Posted 09/04/14 What is a Rain Garden? Posted 12/06/13 Long Island Sound: Impact of Septic Systems on Environment Posted 07/12/12	Met	Old Saybrook WPCA	July 01, 2017	Prior to July 01, 2017 and Continuing	
1-4 Public Education and Outreach		Articles and images regarding the following were published in the Old Saybrook Events magazine: 2016 - Quarter 4 New Stormwater Actions are in the Pipeline 2017 - Quarter 1	Met	Christine Nelson, Town Planner, Land Use Department	July 01, 2017	Prior to July 01, 2017 and Continuing	

		1		1	1	
	 2018 - Quarter 4 Pet Waste, Water Quality & Your Health: <i>Why You Should Give a Bark</i> Old Saybrook Honored for Sustainable CT Certification 2019 - Quarter 1 WPCA Update 1,100 septic system in the Wastewater Management District (WWMD) were CT Public Health Code compliant. 66 non-compliant septic systems remain to be upgraded. Grass Clippings: Mulch, Compost & Fertilizer 2019 - Quarter 2 Ensuring Beachgoers have Safe Water Quality WPCA Update Postcard mailers reminding residents to pump out their septic tanks every 5 years. Conservation Commission Plastic Film Recycling Information. 2019 - Quarter 3 The Benefits of a Rain Garden 					
1-5 Public Education and Outreach	The following are posted on the town website: Non-Point Source Pollution is caused by Stormwater Runoff, Impervious surface, Atmospheric Deposition, Marinas & Recreational Boating, and Septic Systems. Definition by LISS [Long Island Sound Study] Nutrient Pollution What is Stormwater Pollution? Residential Runoff - Pipeline Magazine Article What can I do for my Beach?: EPA Why is idling harmful?: CT DEEP Septic Systems and Their Impact by LISS Residential Runoff Solutions: Suggestions for Managing Your Property and Reducing Runoff In Your Own Backyard - Soundkeeper Turfgrass Madness Reducing the Lawn Asking More of the Landscape Rain Garden Manual	Met	Robbie Marshall, Old Saybrook WPCA Coordinator	October 01, 2018	Continuing	

Nitrogen & Pollution Reduction Projects & Studies: Ongoing Studies and Municipal Solutions		
What is Pervious Surface? - EPA		
Bioswales: Designing for the Future - New Haven		
Nitrogen Removing Biofilters by SUNY Stony Brook		
CT DEEP 2nd Generation Nitrogen Study		
Emerging Contaminants: Yale		
OWTS Nitrogen Study: CT DEEP		

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

Additional Public Education and Outreach activities will be added to the town website and will be incorporated into the Old Saybrook Events magazine publication to educate residents on MS4 stormwater.

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.

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

2.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Responsible Person and Department	Due	Date completed or projected completion date	Additional details
2-1 Comply with public notice requiremen ts for the Stormwater Manageme nt Plan	Completed	2017 - A copy of the Draft 2017 Stormwater Management Plan (SMP) was added to The Town of Old Saybrook website as a resource contained in the <i>Town</i> <i>Initiatives</i> tab on the town website main page at: http://www.oldsaybrookct.org/Pages/OldSaybrookCTLandUseD ept/MS4	Complied with requirements	Carl Fortuna, Jr., First Selectman, Board of Selectmen	April 03, 2017	The 2017 SMP was available to the public on April 12, 2017.	No public comments were received by the Office of the First Selectman
2-2 Comply with public notice requiremen ts for Annual Reports	th public for public review and comment on the Town Initiatives tice tab on the town website main page at: quiremen http://www.oldsaybrookct.org/Pages/OldSaybrookCTLandUseD nual ept/MS4		Substantially Complied with Requirements	Carl Fortuna, Jr., First Selectman, Board of Selectmen	February 15, 2018	February 20, 2018	No public comments were received by the Office of the First Selectman
	Completed	The Draft 2018 MS4 Annual Report was made available for public review and comment on the Town Initiatives tab on the town website main page at: http://www.oldsaybrookct.org/Pages/OldSaybrookCTLandUseD ept/MS4 The Draft 2018 MS4 Annual Report was also made available for public review and comment at the Office of the First Selectman	Substantially Complied with Requirements	Carl Fortuna, Jr., First Selectman, Board of Selectmen	February 15, 2019	March 07, 2019	No public comments were received by the Office of the First Selectman
	Completed	The Draft 2019 MS4 Annual Report was made available for public review and comment on the Town Initiatives tab on the town website main page at:	Substantially Complied with Requirements	Carl Fortuna, Jr., First Selectman,	February 15, 2020	March 12, 2020	No public comments were received by

		http://www.oldsaybrookct.org/Pages/OldSaybrookCTLandUseD ept/MS4 The Draft 2019 MS4 Annual Report was also made available for public review and comment at the Office of the First Selectman		Board of Selectmen			the Office of the First Selectman
	Completed	The Draft 2020 MS4 Annual Report was made available for public review and comment on the Town Initiatives tab on the town website main page at: http://www.oldsaybrookct.org/Pages/OldSaybrookCTLandUseD ept/MS4 The Draft 2020 MS4 Annual Report was also made available for public review and comment at the Office of the First Selectman	Substantially Complied with Requirements	Carl Fortuna, Jr., First Selectman, Board of Selectmen	February 15, 2021	March 09, 2021	
2-3 Community Volunteer Clean Up	Completed	2017 - The general public participates in annual Town Beach, Town Park and Town Hall clean-ups of man- made debris. 40 cubic yard roll-off containers (dumpsters) are provided by the Department of Public Works.	Public Involvement	Larry Bonin, Director, Department of Public Works	Not Applicable	Fall 2017	
	Completed	2017 - The Kiwanis Club conducts an annual clean-up of the Causeway over South Cove to remove man-made debris. 40 cubic yard roll-off containers (dumpsters) are provided by the Department of Public Works.	Public Involvement	Larry Bonin, Director, Department of Public Works	Not Applicable	Fall 2017	
	Completed	2018 - The general public participates in annual Town Beach, Town Park and Town Hall clean-ups of man- made debris. 40 cubic yard roll-off containers (dumpsters) are provided by the Department of Public Works.	Public Involvement	Larry Bonin, Director, Department of Public Works	Not Applicabe	Spring 2018	
	Completed	2018 - The Kiwanis Club conducts an annual clean-up of the Causeway over South Cove to remove man-made debris. 40 cubic yard roll-off containers (dumpsters) are provided by the Department of Public Works.	Public Involvement	Larry Bonin, Director, Department of Public Works/	Not Applicable	Fall 2018	
	Completed	2019 - The general public participates in annual Town Beach, Town Park and Town Hall clean-ups of man- made debris. 40 cubic yard roll-off containers (dumpsters) are provided by the Department of Public Works.	Public Involvement	Larry Bonin, Director, Department of Public Works	Not Applicable	Spring 2019	
	Completed	2019 - The Kiwanis Club conducts an annual clean-up of the Causeway over South Cove to remove man-made debris. 40 cubic yard roll-off containers (dumpsters) are provided by the Department of Public Works.	Public Involvement	Larry Bonin, Director, Department of Public Works/	Not Applicable	Fall 2019	

2-4 Student Participatio n	In Process	2019 through 2020p - An Old Saybrook High School Student began work on evaluating Directly Connected Impervious Area (DCIA) disconnection on the Elementary School, Middle School and High School properties as part of the University of Connecticut Natural Resources and the Environment Conservation Ambassador Program (CAP) poster presentation.	Student Participation in DCIA Issues	Christine Nelson, AICP, Town Planner, Land Use Department.	Not Applicable	March 2020 CCNR Conference	To be provided upon completion.
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2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

No Cleanups were conducted in 2020 due to the COVID-19 pandemic.

It is anticipated that Causeway, Town Beach, Town Park and Town Hall property Cleanups will be conducted in 2021 if the COVID-19 pandemic allows.

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
2017 - Availability of the 2017 Stormwater Management Plan to the general public to meet FOIA requirements	Yes	04/03/2017	Town Website
2018 - Availability of 2017 Annual Report to the general public to meet FOIA requirements	Yes	02/20/2018	Town Website and Office of the First Selectman
2019 - Availability of 2018 Annual Report to the general public to meet FOIA requirements	Yes	03/07/2019	Town Website and Office of the First Selectman
2020 - Availability of 2019 Annual Report to the general public to meet FOIA requirements	Yes	03/12/2020	Town Website and Office of the First Selectman
2021 - Availability of 2020 Annual Report on the town website was announced to the general public to meet FOIA requirements	Yes	02/05/2021	Town Website and Office of the First Selectman

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

3.1 BMP Summary

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

The written IDDE Program will be developed in 2020. The written IDDE Program will be posted on the town stormwater webpage at http://www.oldsaybrookct.org/Pages/OldSaybrookCT_LandUseDept/MS4.

The MS4 Annual Reports will update the written IDDE program as needed throughout the permit term.

The Office of the First Selectman will maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process

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

Date of Report	Location / suspected source	Response taken
2017 through 2020	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.

The Town of Old Saybrook does not have sanitary sewer systems.

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)

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

To be developed and implemented in 2020.

The Town of Old Saybrook has implemented a Decentralized Wastewater Management District encompassing 15 focus areas of approximately 2,000 properties. The adoption of the WWMD Ordinance and Upgrade Standards was the result of an effort to develop the Legal Documents and a Facilities Plan, hold Public Informational Sessions, and educated town residents about the WWMD Program.

Location and nature of structure with failing Actions taken to respond to and address the Impacted waterbody or watershed, if known septic systems failures 2011 Bids for provision of CT Public Health Code complying septic systems for residential structures was put out to bid and constructed for the following area: 5000-02-1 Saybrook Acres-Bid Package 1 (SA-1) The WPCA continued mailing of guarterly postcard reminders to residents to pump out their septic tanks every five years per Ordinance #75 2012 Bids for provision of CT Public Health Code complying septic systems for residential structures was put out to bid and constructed for the following areas: 5000-02-1 Saybrook Acres - Bid Package 2 (SA-2) 5000-02-1 Saybrook Acres - Bid Package 3 (SA-3) 5000-02-1 Saybrook Acres - Bid Package 4 (SA-4) 5000-02-1 Oyster River East - Bid Package 1 (OR-1) 5000-04-1 & 4000-00-6+R50, Respectively Thompson & Savbrook Point - Bid Package 1 (TH-1 & SP-1) The WPCA continued mailing of guarterly postcard reminders to residents to pump out their septic tanks every five years per Ordinance #75 2013 Bids for provision of CT Public Health Code complying septic systems for residential structures was put out to bid and constructed for the

5000-02-1

5000-02-1

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

following areas:

Cornfield Park - Bid Package 1 (CPK-1)

	Cornfield Park - Bid Package 2 (CPK-2) Cornfield Park - Bid Package 3 (CPK-3) Oyster River East - Bid Package 1 (OR-2) Oyster River East - Bid Package 1 (OR-3) The WPCA continued mailing of quarterly postcard reminders to residents to pump out their septic	5000-02-1 5000-02-1 5000-02-1
2014 As of November 01, 2014, a total of 314 conventional Subsurface Sewage Disposal System were upgraded to be Public Health Code compliant	 tanks every five years per Ordinance #75 Bids for provision of CT Public Health Code complying septic systems for residential structures was put out to bid and constructed for the following areas: Fenwood - Bid Package 1 (FW-1) Fenwood - Bid Package 1 (FW-2) The WPCA continued mailing of quarterly postcard reminders to residents to pump out their septic tanks every five years per Ordinance #75 	4000-00-6+R50 & 5000-01-1 4000-00-6+R50 & 5000-01-1
2015 200± conventional Subsurface Sewage Disposal System upgrades were scheduled in 2015.	Bids for provision of CT Public Health Code complying septic systems for residential structures was put out to bid and constructed for the following areas: Ingham Hill & Meadowood - Bid Package No. 1 (IH-MW-1) Maple Avenue North - Bid Package 1 (MAN-1) Maple Avenue North - Bid Package 3 (MAN-3) Maple Avenue North - Bid Package 2 (MAN-2) The WPCA continued mailing of quarterly postcard reminders to residents to pump out their septic tanks every five years per Ordinance #75	5000-02-1 & 4000-00-6+R50 5000-02-1 & 4000-00-6+R50 5000-02-1 & 4000-00-6+R50
2016 130± conventional Subsurface Sewage Disposal System upgrades were scheduled in 2016	Bids for provision of CT Public Health Code complying septic systems for residential structures was put out to bid and constructed for the following areas: Maple Avenue North - Bid Package 4 (MAN-4) Maple Avenue North - Bid Package 5 (MAN-5) Cornfield Point - Bid Package 1 (CPT-1) The WPCA continued mailing of quarterly postcard reminders to residents to pump out their septic tanks every five years per Ordinance #75	5000-02-1 & 4000-00-6+R50 5000-02-1 & 4000-00-6+R50 5000-02-1
2017	Bids for provision of CT Public Health Code complying septic systems for residential structures	

As of late 2017, a total of 950+ conventional Subsurface Sewage Disposal System were upgraded to be Public Health Code compliant.	 was put out to bid and constructed for the following areas: Cornfield Point - Bid Package 2 (CPT-2) Cornfield Point - Bid Package 3 (CPT-3) Cornfield Point - Bid Package 4 (CPT-4) Cornfield Point - Bid Package 5 (CPT-5) Cornfield Point - Bid Package 6 (CPT-6) The WPCA continued mailing of quarterly postcard reminders to residents to pump out their septic tanks every five years per Ordinance #75 	5000-02-1 5000-02-1 5000-02-1 5000-02-1 5000-02-1
2018 As of late 2018, a total of 1,050± conventional Subsurface Sewage Disposal System were upgraded to be Public Health Code compliant.	 Bids for provision of CT Public Health Code complying septic systems for residential structures was put out to bid and constructed for the following areas: Cornfield Point - Bid Package 7 (CPT-7) Cornfield Point - Bid Package 8 (CPT-8) The WPCA continued mailing of quarterly postcard reminders to residents to pump out their septic tanks every five years per Ordinance #75 	5000-02-1 5000-02-1
2019 As of January 2019, a total of 1,100± conventional Subsurface Sewage Disposal System were upgraded to be Public Health Code compliant.	The WPCA continued mailing of quarterly postcard reminders to residents to pump out their septic tanks every five years per Ordinance #75	
2020 The following subsurface sewage disposal system repairs were conducted: 9 Waterbury Avenue 13 Woodland Drive 16 Wild Apple 12 Old Post Road 4 Captains Lane 8 Meadow Road 14 Dogwood Lane 89 & 93 Nehantic Trail 5 Rockridge Drive 881 Middlesex Turnpike 96 Nehantic Trail 469 Main Street 100 Sequassen Avenue 50 Cypress Road	Septic Tank and Leaching System Repairs Septic Tank Repair Septic Tank and Leaching System Repairs Septic Tank Repair	

42 Vincent Avenue	Leaching System Repair	
2 Trolley Crossing	Septic Tank and Leaching System Repairs	
6 London Court	Septic Tank and Leaching System Repairs	
13 Sunset Road	Septic Tank and Leaching System Repairs	
6 Arrowhead Lane	Leaching System Repair	
10 Woodpond	Leaching System Repair	
1 Anchorage Lane	Septic Tank Repair	
27 Sunset Avenue	Septic Tank and Leaching System Repairs	
455 Boston Post Road	Septic Tank and Leaching System Repairs	
475 Main Street	Leaching System Repair	
84 Ayers Point Road	Septic Tank Repair	
32 Fenbrook Road	Distribution-Box Repair	
120 Sea Lane	Septic Tank and Leaching System Repairs	
32 Sea Lane	Septic Tank and Leaching System Repairs	
5 Tudor Court East	Septic Tank and Leaching System Repairs	
46 Knollwood Drive	Leaching System Repair	
88-1 Boston Post Road	Septic Tank and Leaching System Repairs	
15 Beach View	Leaching System Repair	
57 Coulter Street	Septic Tank Repair	
35 Sunset Avenue	Septic Tank and Distribution-Box Repairs	
5 Cedar Lane	Leaching System Repair	
247 Elm Street	Septic Tank and Leaching System Repairs	
9 Briarwood Drive	Septic Tank and Leaching System Repairs	
93 Old Post Road	Leaching System Repair	
43 Fenwood Grove Road	Septic Tank and Leaching System Repairs	
9 Willard Avenue Extension	Septic Tank and Leaching System Repairs	
33 Cromwell Place	Distribution-Box and Pipe Repairs	
15 Denmore Lane	Septic Tank Repair	
10 Great Hammock Road	Septic Tank and Leaching System Repairs	
38 Cedarwood Lane	Septic Tank Repair	
482 Main Street	Septic Tank and Leaching System Repairs	
21 Cricket Court	Septic Tank and Leaching System Repairs	
12 Sea Crest Road	Septic Tank Repair	
39 Maple Avenue	Pipe Repair	
26 Beaver Dam Trail	Septic Tank and Leaching System Repairs	
92 Ayers Point Road	Septic Tank and Leaching System Repairs	
,	Leaching System Repair	
1550 Boston Post Road		
2 Davies Circle	Septic Tank and Leaching System Repairs	
87 Church Street	Septic Tank and Leaching System Repairs	
33 Saltaire Drive	Septic Tank and Leaching System Repairs	
247 Main Street	Pipe Repair	
424 Main Street	Leaching System Repair	
40 Sea Lane	Leaching System Repair	
500 Main Street	Pipe Repair	
4 London Court	Septic Tank Repair	
41 Coulter Street	Septic Tank Repair	

36 Pennywise Lane	Septic Tank and Leaching System Repairs	
9 Osprey Road	Septic Tank and Leaching System Repairs	
3 Nutmeg Circle	Septic Tank and Leaching System Repairs	

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	223
Estimated or actual number of interconnections	TBD
Outfall mapping complete	95
Interconnection mapping complete	0%
System-wide mapping complete (detailed MS4 infrastructure)	70%
Outfall assessment and priority ranking	0%
Dry weather screening of all High and Low priority outfalls complete	 2017 through 2019 - 0% It was anticipated to conduct dry weather screening during the Fall of 2018, 2018 and 2019. However, unseasonably high precipitation precluded dry weather screening. 2020 - 0% It is anticipated that dry weather screening will be conducted in the late Spring and early Summer of 2021.
Catchment investigations complete	0%
Estimated percentage of MS4 catchment area investigated	0%

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

The Department of Public Works will be provided with a copy of the publication entitled *Illicit Discharge Detection and Elimination Manual, A Handbook for Municipalities,* Published January 2003 by the New England Interstate Water Pollution Control Commission.

It is anticipated that an illicit discharge education presentation will be provided to DPW employees with the presentation prepared by Nathan L. Jacobson & Associates, Inc.

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

4.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Responsible Person and Department	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	Completed	The required elements of Minimum Control Measure No. 4 - Construction Site Runoff Control was incorporated into the town land use regulations.	Compliance	Christine Nelson, Town Planner , Land Use Department Land Use Commissions Land Use Town Attorney	July 01, 2019	Completed	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Ongoing	Nathan L. Jacobson & Associates, Inc., Town Engineer prepares land use review letters for most applications for the Inland Wetlands Commission, Planning Commission	Interdepartmental Coordination	Land Use Department	July 01, 2017	Completed and ongoing	

		and Zoning Commission.					
4-3 Review site plans for stormwater quality concerns	Ongoing	Nathan L. Jacobson & Associates, Inc., Town Engineer encourages the use of LID and Stormwater BMPs practices as contained in the 2004 Connecticut Stormwater Quality Manual and new stormwater management technologies as they are developed.	Compliance	Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2017	Completed and ongoing	
4-4 Conduct site inspections	Ongoing	The town conducts construction site inspections for proper implementation and maintenance of soil erosion and sediment control measures.	Compliance with Approved Plans	Christina M. Costa, CZEO, Enforcement Officer, Environmental Planner and Enforcement Officer, Land Use Office, Tom Makowicki, Building Official, Land Use Office and Larry Bonin, Department of Public Works Director	July 01, 2017	Completed and Ongoing	
4-5 Implement procedure to allow public comment on site development	Ongoing	The land use application process allows for public comment on land use applications which are submitted to the Inland	Compliance	Land Use Department and Land Use Commissions	July 01, 2017	Completed and ongoing	

		Wetlands Agency, Planning Commission, Zoning Commission during the Public Hearing Process when applicable.					
4-6 Implement procedure to notify developers about the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (CT DEEP Construction Stormwater General Permit)	Ongoing	Since the inception of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities Nathan L. Jacobson & Associates, Inc., Town Engineer has made developer's engineers aware of the need to register for the Construction Stormwater General Permit in engineering review letters which are typically prepared as part of the land use application process.	Awareness of the need to register for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities	Land Use Department Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2017	Completed and ongoing	

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

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

5.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Responsible Person and Department	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 Place	The land use regulations were revised to incorporate the Minimum Control Measure No. 5 - Post Construction Runoff Control.	Compliance	Christina M. Costa, CZEO and Interim Town Planner, Land Use Department, Land Use Commissions and Land Use Town Attorney	July 01, 2021	Anticipate completing by July 01, 2021`	It is anticipated that UConn CLEAR and/or a Regional Planning Agency will provide a Post-construction Stormwater Management template for use by all MS4 Towns.
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	In Place	The town encourages the use of LID and Stormwater BMPs practices as contained in the 2004 Connecticut Stormwater Quality Manual and new stormwater	Compliance	Land Use Department Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2019	July 01, 2017 Completed and ongoing.	

		management technologies as they are developed.					
5-3 Identify retention and detention ponds in priority areas	Partially Developed	Retention Ponds, Detention Ponds and Hydrodynamic Separators will be inventoried. A GIS Map Layer will be created after the inventory.	The stormwater management basin inventory is largely completed and will be updated.	Larry Bonin, Director, Department of Public Works and Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2019	2020	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	To Be Developed and Implemented	After the Retention Ponds, Detention Ponds and Hydrodynamic Separators have been inventoried a Long-Term Operation and Maintenance Plan will be implemented.	Under Development	Larry Bonin, Director, Department of Public Works and Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2019	2020	
5-5 DCIA mapping	Starting	Begin the process of DCIA Mapping from base mapping prepared by UConn CLEAR.	The DCIA to MS4 stormwater outfalls discharging to waters identified as impaired in the 2016 Integrated Water Quality Report and in watersheds with a DCIA of greater than 11 percent will be completed in 2018.	Nathan L. Jacobson & Associates, Inc., Town Engineer	July 01, 2020	Prior to July 01, 2020	

5-6 Address post- construction issues in areas with pollutants of concern	To Be Addressed	Based on a review of sampling conducted from 2004 to 2016, the town will encourage utilization of new stormwater management technologies to reduce bacteria loading to the Connecticut River and LIS as they are developed.	Stormwater outfalls discharging to waters identified as impaired in the 2016 Integrated Water Quality Report will be subject to enhanced water quality treatment.	Land Use Department Nathan L. Jacobson & Associates, Inc., Town Engineer	Not specified	To be developed and implemented as stormwater quality treatment methods for bacteria emerge.	

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

Procedures outlined in the Post-Construction Stormwater Management Facility Operation & Maintenance Plan Manual, implemented in 2020 will continue to be implemented in 2021.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	69.75 Acres
DCIA disconnected (redevelopment plus retrofits)	2012 to 2016 - To Be Determined 2017 0.670 Acre - Road Reconstruction 0.490 Acre - Municipal Redevelopment 2018 - 1.349 Acres - Private Redevelopment 2019 - 0 Acre 2020 - 0 Acre Total - 2.509 Acres
Retrofits completed	2012 to 2016 2017 through 2020 - 0 Total - To Be Determined
Retrofit DCIA disconnected	2012 to 2016 - To Be Determined 2017 through 2020 - 0 Acre

	Total - 0 Acre
Estimated cost of retrofits	2012 to 2016 - To Be Determined 2017 through 2020 - \$0 Total - \$0
Detention or retention ponds identified	0 this year /0 total

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

Based on information contained in the Factsheet: *Town of Old Saybrook Water Quality and Stormwater Summary,* prepared by the CT DEEP, 2,743.16 acres of the town has an impervious area exceeding 12% which is approximately 27.34% of the town. 576.59 acres have an impervious cover of ranging from 12% to 25%, 1,070.94 acres have an impervious cover ranging from 26% to 50%, 770.86 acres have an impervious cover ranging from 51% to 75% and 324.77 acres have an impervious cover ranging from 76% to 100%.

Based on information contained in the MS4 mapping tab of Connecticut Environmental Conditions Online the impervious surface area consists of 338.67 acres of buildings, 393.58 acres of roads and 639.34 acres of other impervious surfaces for a total impervious surface area of 1,371.59 acres.

Based on 2019 revised CT ECO MS4 Mapping, the road impervious area was determined to be 161.03 acres of State roads, Conn DOT Maintenance Facility and State Boat Launch Ramp and 232.55 acres of Town roads. The state road impervious area constituted approximately 40.9% of town-wide road impervious area.

The DCIA Mapping was conducted in substantial accordance with the methodologies presented in the October 25, 2017 UConn CLEAR Webinar entitled *CT MS4 Mapping Details, Clarifications and Tools,* the October 19, 2018 UConn CLEAR Workshop entitled *CT MS4 Mapping Workshop* as well as information contained in the EPA reference entitled *Estimating Change in Impervious Area (IA) and Directly Connected Impervious Area (DCIA) for Massachusetts Small MS4 Permit utilizing Sutherland equations*.

The DCIA computations were prepared utilizing Connecticut Environmental Conditions Online MS4 base mapping prepared by UConn CLEAR.

Impaired waters were determined from the report entitled 2018 Integrated Water Quality Report, dated August 01 2019, prepared by the State of Connecticut Department of Energy and Environmental Protection.

The method to determine the 2012 baseline DCIA was to first compile the CT DEEP drainage basin characteristics in a Microsoft Excel spreadsheet. Information on the Connecticut Environmental Conditions Online MS4 Mapping was used to determine the impervious area breakdown as Buildings, Roads and Other. For CT DEEP drainage basins that fell in two or more municipalities the advanced mapping tab of Connecticut Environmental Conditions Online was used to determine the entire drainage basin characteristics were directly proportional to the applicable town CT DEEP basin area. It was assumed that the entire drainage basin characteristics were directly proportional to the applicable town CT DEEP drainage basin area.

In that ConnDOT has a MS4 Stormwater Program which applies to state owned roads and facilities which the town has no control over, it was decided that the impervious state road area would be determined and deducted from the total impervious road area for each CT DEEP drainage basin as the impervious road areas associated with state highways and facilities constitutes a considerable portion of the total town impervious road area.

The ConnDOT state highway, parking lot and facility impervious road areas were then determined for each CT DEEP drainage basin.

The ConnDOT state highway, parking lot and facility impervious road areas were then deducted from the total town impervious road area to determine a town owned impervious road area for each CT DEEP drainage basin.

Subsequent to the above deduction, the total impervious area in acres and percentage was then recomputed for each CT DEEP drainage basin.

The DCIA formula for each of four development types was then utilized to compute the DCIA. The impervious area in acres was assigned to each of the four Sutherland equations which were modified for the northeastern United State. The Sutherland equation to be utilized was determined using the following methodology:

For impervious percentage less than 6%:

100% of the impervious area was assigned to the slight connectivity Sutherland Equation where $DCIA\% = 0.01^{*}(IA\%)^{2.0}$

For an impervious area between 6% and 12 %:

50% of the area was assigned to the partial connectivity Sutherland Equation where DCIA% = $0.04*(IA\%)^{1.7}$ and 50% was assigned to the average connectivity Sutherland Equation where DCIA% = $0.10*(IA\%)^{1.5}$

For an impervious area between 12% and 18 %:

50% of the area was assigned to the average connectivity Sutherland Equation where $DCIA\% = 0.10^{*}(IA\%)^{1.5}$ and 50% was assigned to the high connectivity Sutherland Equation where $DCIA\% = 0.40^{*}(IA\%)^{1.2}$

For an impervious area of greater than 18 %:

100% of the area was assigned to the high connectivity Sutherland Equation where $DCIA\% = 0.40^{*}(IA\%)^{1.2}$

The DCIA for each CT DEEP drainage basin was then summed to determine the entire town DCIA.

Subsequent to completion of 2012 Baseline DCIA computations, UConn CLEAR Mapping available on Connecticut Environmental Conditions Online (CT ECO) was revised to separate road impervious area into State Road Impervious Area (Acres) and Town Road Impervious Area (Acres).

The original 2012 Baseline DCIA computations were revised utilizing the UConn CLEAR State Road Impervious Area (Acres) and Town Road Impervious Area (Acres). No major 2012 Baseline DCIA computation discrepancies were noted.

Land use files will be reviewed to determine disconnection of DCIA since July 01, 2012 for utilization in reaching the CT DEEP goal of 2% disconnection of DCIA by June 30, 2022.

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

6.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Responsible Person and Department	Due	Date completed or projected completion date	Additional details
6-1 Develop/implement formal employee training program	Ongoing	DPW facility BMPs were presented to the DPW staff.	Continuing	Larry Bonin, Director, Department of Public Works	July 01, 2017	Continuing	
6-2 Implement MS4 property and operations maintenance	Ongoing	The Park & Recreation Department continues to utilize BMPs in MS4 property operations and maintenance.	Continuing	Larry Bonin, Director, Department of Public Works	July 01, 2018	Continuing	
6-3 Implement coordination with interconnected MS4s	Not Applicable	None	Not Applicable	Not Applicable	July 01, 2017	Not Applicable	
6-4 Develop/implement program to control other sources of pollutants to the MS4	To Be Developed	None	Educate the General Public on bacteria impairment of waterbodies by pet waste and waterfowl waste.	Nathan L. Jacobson & Associates, Inc., Town Engineer and Town MS4 Consultant	July 01, 2017	Calendar Year 2021	
6-5 Evaluate additional measures for discharges to impaired waters	To Be Developed	None	Educate the General Public on bacteria impairment of waterbodies by pet waste and waterfowl waste.	Nathan L. Jacobson & Associates, Inc., Town Engineer and Town MS4 Consultant	July 01, 2017	Calendar Year 2021	

6-6 Track projects that disconnect DCIA	Ongoing	Ongoing	Review projects constructed since July 01, 2012 to determine if there was a reduction in DCIA on any of the projects.	Nathan L. Jacobson & Associates, Inc., Town Engineer and Town MS4 Consultant	July 01, 2017	Ongoing	DCIA reductions will be computed as redevelopment projects are constructed.
6-7 Implement infrastructure repair/rehab program	To Be Developed	None	Begin development of the program.	Larry Bonin, Director, Department of Public Works	July 01, 2021	Prior to July 01, 2021	
6-8 Develop/implement plan to identify/prioritize retrofit projects	To Be Developed	None	Retrofit Plan Development	Larry Bonin, Director, Department of Public Works and Nathan L. Jacobson & Associates, Inc.	July 01, 2020	Prior to July 01, 2021	
6-9 Implement retrofit projects to disconnect 2% of DCIA	Completed	None	Review projects constructed since July 01, 2012 to determine if there was a reduction in DCIA on any of the projects.	Nathan L. Jacobson & Associates, Inc.	July 01, 2022	Prior to July 01, 2022	
6-10 Develop/implement street sweeping program	Ongoing	The Town of Old Saybrook currently implements a road sweeping program whereby all town roads are swept at least one time per year.	Compliance	Larry Bonin, Director, Department of Public Works	July 01, 2017	Continuing	

6-11 Develop/implement catch basin cleaning program	Ongoing	The Town of Old Saybrook currently implements a catch basin cleaning program whereby at least 75% of the catch basins are cleaned every year.	Compliance	Larry Bonin, Director, Department of Public Works	July 01, 2020	Continuing	
6-12 Develop/implement snow management practices	Ongoing	Continue the existing program and modify as needed.	Ongoing Review	Larry Bonin, Director, Department of Public Works	July 01, 2018	Continuing	

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

Storm Drainage Retrofit prioritization will be given to stormwater outfalls that are known to result in soil erosion and sedimentation. Prioritization will be given to the outfalls within the impaired water drainage basins with particular emphasis placed on stormwater outfalls which are located on fine grained glacial till soils.

6.3 Pollution Prevention/ Good Housekeeping Reporting Metrics

Metrics	
Employee training provided for key staff	DPW Employees are encouraged to attend classes at the CT Technology Transfer Center or Connecticut Interlocal Risk Management Agency (CIRMA). 2017 - None 2018 - American Public Works Association (APWA) Snow Plowing E Learning. 2019 - None 2020 - No in-person training was available due to the COVID-19 pandemic. In-person training will be pursued when it becomes available.
Street Sweeping	
Lane miles swept	149.88 (74.94 Road Miles)
Volume (or mass) of material collected	2017 - Undetermined 2018 - 450± C.Y.

	2019 - 450± C.Y.
	2020 - 450± C.Y.
Catch Basin Cleaning	
Total catch basins in priority areas	To Be Determined
Total catch basins in MS4	850±
Catch basins inspected	$2017 - 850 \pm$ $2018 - 640 \pm$ $2019 - 640 \pm$ $2020 - 280 \pm$ (Number reduced due to COVID-10 pandemic)
Catch basins cleaned	2017 - $640 \pm$ 2018 - $640 \pm$ 2019 - $640 \pm$ 2020 - $280 \pm$ (Number reduced due to COVID-10 pandemic)
Volume (or mass) of material removed from all catch basins	2017 - Not determined. Will be estimated in 2018. 2018 - 100±C.Y. 2019 - 285±C.Y. 2020 - 50±C.Y.
Volume removed from catch basins to impaired waters (if known)	2017 - Not determined. Will be estimated in 2018. 2018 - 50±C.Y. 2019 - 140±C.Y. 2020 - 25±C.Y.
Snow Management	
Type(s) of deicing material used	Deicing Mix Comprised of 3 Parts Sand to 1 Part Salt
Total amount of each deicing material applied	Winter 2017 to 2018 - $196\pm$ Tons NaCl Salt and $588\pm$ Tons Sand Winter 2018 to 2019 - $120\pm$ Tons NaCl Salt and $330\pm$ C.Y. Sand Winter 2019 to 2020 - $120\pm$ Tons NaCl Salt and $330\pm$ C.Y. Sand Winter 2020 to 2021 - $100\pm$ Tons NaCl Salt and $270\pm$ C.Y. Sand (Estimated)
Type(s) of deicing equipment used	 9 Snow Plows/Spreaders. 4 Snow Plows/Spreaders were purchased new with Ground Speed Controlled Spreaders. The remaining 5 Snow Plows/Spreaders were retrofitted with Ground Speed Controlled Spreaders. The deicing mix is applied at a rate ranging from 150-300 pounds per lane (curb) mile depending on the storm type.
Lane-miles treated	2017 through 2020 - 149.88 (74.94 Road Miles)
Snow disposal location	Along the road shoulders. In extreme snowstorms snow is removed and stockpiled at the Town Hall lawn and the old Police Department parking lot.
Staff training provided on application methods & equipment	Larry Bonin is a 2014 graduate of the CT Technology Transfer Center Connecticut Transportation Leadership Program.

Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	0 Pounds
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

 Briefly describe the method used to optimize your catch basin inspection and cleaning schedule.

 It is estimated that there are approximately 850 catch basins in the Town of Old Saybrook.

 2017 - All catch basins were cleaned with a DPW Employee witnessing all catch basin structure cleaning.

 2018 - Approximately 75% catch basins were cleaned with a DPW Employee witnessing all catch basin structure cleaning.

 2019 - Approximately 75% catch basins were cleaned with a DPW Employee witnessing all catch basin structure cleaning.

 2020 - Approximately 33% catch basins were cleaned with a DPW Employee witnessing all catch basin structure cleaning.

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.

Storm Drainage Retrofit prioritization will be given to stormwater outfalls that are known to result in soil erosion and sedimentation. Prioritization will be given to the outfalls within the impaired water drainage basins with particular emphasis placed on stormwater outfalls which are located on fine grained glacial till soils.

Based on the 2012 Baseline DCIA of 69.75 acres, 1.40 acres of DCIA will need to be disconnected by July 01, 2022 to meet the CT DEEP goal of a 2% disconnection. It is anticipated that the DCIA disconnection goal will be met with a combination of municipal and private commercial redevelopment.

2017 - The Reconstruction of North Main Street project was completed in 2017. The project incorporated stormwater infiltration of the entire pavement area for all design storms up to and including a 25-year design storm. 0.670 Acre of DCIA was disconnected through this reconstruction.

2017 - The Main Street Connector Park construction was completed in 2018. The project consisted of demolition of the police department building and parking lot with conventional catch basin and storm drainage system and construction of a recreational park which incorporated bio-retention and stormwater infiltration. The project incorporated stormwater infiltration of the entire pavement area for up to a 10-year design storm. 0.490 Acre of DCIA was disconnected by this redevelopment.

2018 - Redevelopment of a 3.34 acre commercial property incorporated treatment of the Water Quality Volume (WQV) by new pavement stormwater infiltration in a detention basin and roof area stormwater retention via subsurface infiltration. 1.349 Acres of DCIA was disconnected by this redevelopment.

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

While the goal of a 2% DCIA disconnection was obtained by the end of 2018 the town will continue to work internally and with private property redevelopment to optimize the DCIA disconnection

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

All significant redevelopment projects will be designed to incorporate a reduction in DCIA wherever feasible.

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:

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.

2017 through 2019 - No stormwater sampling to impaired waters was conducted. It was anticipated to conduct dry weather screening and sampling during the Fall of each year. However, unseasonably high precipitation precluded dry weather screening and sampling.

It was anticipated that dry weather screening and sampling will be conducted in the Fall of 2020 however no dry weather screening and sampling was conducted.

It is anticipated that dry weather screening stormwater sampling of at least half of the stormwater outfalls which discharge directly to impaired water (Connecticut River and Long Island Sound) will be completed in the late Spring and early Summer of 2021.

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

2.1 Screening data collected under 2017 permit

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

Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?

2017 through 2019 - No stormwater sampling to impaired waters was conducted. It was anticipated to conduct dry weather screening and sampling during the Fall of each year. However, unseasonably high precipitation precluded dry weather screening and sampling.

2020 - No dry weather screening and sampling was conducted.

It is anticipated that dry weather screening will be conducted in the late Spring and early Summer of 2021.

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 (Colonies/100 ml)	Name of Laboratory (if used)	Follow-up required?
Commercial	06/28/05	Bacteria - E.coli	460	Connecticut Testing Laboratories, Inc.	No
Commercial	05/18/10	Bacteria - E.coli	1000	PH0448	No
Commercial	06/22/11	Bacteria - E. coli	450	PH0448	No
Commercial	11/27/12	Bacteria - E. coli	95	PH0448	No
Commercial	12/23/13	Bacteria - E. coli	Absent	PH0448	No
Commercial	11/17/14	Bacteria - E. coli	10	PH0448	No
Commercial	12/22/15	Bacteria - E. coli	350	PH0448	No
Commercial	11/15/16	Bacteria - E. coli	4	PH0448	No

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

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, 2020.

Outfall	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)

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
5101-00-2-R1 25.11% Impervious	High Priority	1
5000-03-1 22.02% impervious	High Priority	2
5000-02-1 14.50% Impervious	High Priority	3
4000-64-1 13.03% Impervious	High Priority	4
5000-01-1 22.69% Impervious	High Priority	5
5101-00-2-LI 16.16% Impervious	High Priority	6

2. Outfall and Interconnection Screening and Sampling Data (Appendix B (A)(7)(d) / page 7)

2.1 Dry weather screening and sampling data from outfalls and interconnections

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

Outfall / 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

2017 through 2019 - No stormwater sampling to impaired waters was conducted. It was anticipated to conduct dry weather screening and sampling during the Fall of each year. However, unseasonably high precipitation precluded dry weather screening and sampling.

2020 - No dry weather screening and sampling was conducted.

It is anticipated that dry weather screening will be conducted in 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

2018 through 2020 - No wet weather inspections or sampling was conducted.

It is anticipated that wet weather inspections and sampling will be conducted in the late Spring and early Summer of 2021.

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 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

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

2017 through 2019 - No stormwater sampling to impaired waters was conducted. It was anticipated to conduct dry weather screening and sampling during the Fall of each year. However, unseasonably high precipitation precluded dry weather screening and sampling.

2020 - No dry weather screening and sampling was conducted.

It is anticipated that dry weather screening will be conducted in the late Spring and early Summer of 2021.

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants

2018 through 2020 - No wet weather investigations or sampling was conducted.

It is anticipated that wet weather investigations and sampling will be conducted in the late Spring and early Summer of 2021.

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: Carl P. Fortuna, Jr., First Selectman	Print Name: Wade M. Thomas, CPMSM
Signature:	Signature: Wad M. M.
Date:	Date:
April 27, 2021	April 30, 2021