

ANNUAL REPORT MS4

TOWN OF WALLINGFORD
JANUARY – DECEMBER 2023

PREPARED BY:

Atlas 290 Roberts Street-Suite 301 East Hartford, Connecticut 06108



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2023 MS4 ANNUAL REPORT

Town of Wallingford, Connecticut

MS4 General Permit Town of Wallingford 2023 Annual Report Permit Number GSM 00050 January 1, 2023 – December 31, 2023

Primary MS4 Contact: Robert Baltramaitis, Director of Public Works, wallingfordtownengineer@gmail.com

This report documents the Town of Wallingford's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2023 to December 31, 2023.

Part I: Summary of Minimum Control Measure Activities

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

ВМР	Activities in current reporting period	Sources Used (if applicable)	Method of Distribution	Audience (and number of people reached)	Measurable Goal	Department / Person Responsible	Additional details
1-1 Implement public education and outreach	The Town utilizes its website to post links related to the Stormwater Management Plan, as well as other links relating to polluted runoff, rain barrel utilization, and vegetated riparian buffers. Additionally, a "Stormwater and You"	Stormwater and You	Website	~1,000	Provide public access to stormwater literature.	Department of Public Works, Engineering, Wetlands, Planning & Zoning	
	bulletin board was posted in the Town Hall, which has posted informative information on urban runoff, watersheds, and other applicable information.						
1-2 Address education/ outreach for pollutants of concern	The Town has posted a brochure on the Stormwater management page relating to pet waste management. This brochure details the importance of cleaning up after a pet as well as waterfowl pollutants.	Pet Care Fact Sheet	Website	~1,000	Educate and provide pet waste management to the public.	Water Pollution Control Authority	

	Stormwater brochures were distributed in October of 2023 at "Celebrate Wallingford".						
Additional BMP: 1-3 Hazardous Waste Collection	The Town of Wallingford provides hazardous waste collection in association with the Regional Water Authority in New Haven. Wallingford residents can dispose of their hazardous wastes at this location Saturday Mornings from mid-May to the end of October.	Waste Disposal Center for Wallingford Residents	Website.	~1,000	Educate and provide hazardous waste collections.	Town Planning Committee	

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

At the time of this report, the Town of Wallingford has not provided this information.



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

2.1 BMP Summary

ВМР	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Location Posted	Addition al details
2-1 Final Stormwater Management Plan publicly available	Completed	The Stormwater Management Plan is currently located on the Town's "Stormwater and You" page.	Provide notice and access to the Stormwater Management Plan	Engineering	April 1, 2017	Stormwater Management Plan	
2-2 Comply with public notice requirements for Annual Reports (annually by 2/15)	Completed Annually	The public notice is posted via the Town website on an annual basis for public review and comments.	Provide notice and access to the Annual Report	Law Department, Engineering, and Department of Public Works	Annually-by Feb. 15 th	Annual Report	
Additional BMP: 2-3 Hazardous Waste Collection	Completed Annually	The Town of Wallingford provides hazardous waste collection in association with the Regional Water Authority in New Haven. Wallingford residents can dispose of their hazardous wastes at this location Saturday Mornings from mid-May to the end of October.	Provide Hazardous Waste Collections or access to collections	Regional Water Authority	Annually-mid-May though the end of October	Waste Disposal Center for Wallingford Residents	
Additional BMP: 2-4 Composting	Completed Annually	The Town of Wallingford provides disposal for leaves and other organic debris for Town residents at the local compost center.	Provide disposal for organic debris.	Compost Center	Yearly	<u>Compost</u> <u>Center</u>	

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

- 1. Annual posting of the MS4 Annual Report
- 2. Brochures to be distributed during the 2024 Celebrate Wallingford Event
- 3. Bulletin board and brochures/hand outs on the table outside of the Engineering Department

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

ВМР	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
3-1 Develop written IDDE program (Due 7/1/19)	Completed	The Town finalized an IDDE program in September of 2019.	Develop written plan of IDDE program	Law Department, Department of Public Works, Engineering	September 2019	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas (Due 7/1/20)	Completed	The Town developed a list and maps of all MS4 stormwater outfalls in priority areas through CAD technology. With assistance from Atlas, the Town has since mapped all MS4 stormwater outfalls through a GIS technology, and continues a QA/QC process of reviewing the GIS system, and editing as necessary.	Map all outfalls.			
3-3 Implement citizen reporting program (Ongoing)	Completed	The Town has implemented an illicit discharge reporting form, which is available on the Town website. Citizen reporting is maintained through the Engineering Department.	Provide a reporting mechanism and log.	Engineering Department	April 1, 2017.	Citizen Reporting Form
3-4 Establish legal authority to prohibit illicit discharges (Due 7/1/19)	Completed	The Town wrote and adopted a Stormwater Connection Ordinance, which was adopted in 2018.	Adopt ordinance	Law Department, Engineering	March 14, 2018	Ordinance No. 621
3-5 Develop record keeping system for IDDE tracking (Due 7/1/17)	Completed		Maintain list.	Engineering Department	April 1, 2017	
3-6 Address IDDE in areas with pollutants of concern	Ongoing	Dry weather screening was conducted at 590 outfalls in 2023. Wet weather screening was conducted at eleven (11) priority outfalls. Catchment Rankings have been completed. SSOs are under investigation.	Wet weather testing and additional investigation as necessary.	Engineering Department	Ongoing-Started in 2018	

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

- 1. Continue Wet Weather sampling at priority outfalls discharging to impaired waters.
- 2. Continue follow-up dry-weather screening/testing.
- 3. Respond to any illicit discharge complaints
- 4. Continue SSO investigations
- 3.3 Provide a record of all citizen reports of suspected illicit discharges and other illicit discharges occurring during the reporting period and SSOs occurring July 2017 through end of reporting period using the following table. Illicit discharges are any unpermitted discharge to waters of the state that do not consist entirely of stormwater or uncontaminated groundwater except those discharges identified in Section 3(a)(2) of the MS4 general permit when such non-stormwater discharges are not significant contributors of pollution to a discharge from an identified MS4.

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)
				2018		
48 Nicholas Road	7/13/2018	Catch Basin on Nicholas Road	Unknown	A resident utilizing an RV was found to have been dumping the RV waste tank into the storm drain.	DEEP was contacted, as well as the Town. The resident was instructed that further dumping would result in fines. The resident was also provided a list of authorized RV waste dumping sites.	None.
				2019		
11 Old Gate Road.	9/2/2019	Catch basin on Old Gate Road	Unknown	A septic system pipe was found to have been illegally connected to the MS4 system, and was discharging to the storm drain.	The homeowner was instructed to and completed a capping of a 4" diameter PVC pipe that had been found discharging sanitary sewage into the Town's catch basin.	None.
				2020		'
1605 Durham Road	4/24/2020	Asmund Brook	Unknown	A retention pond utilized by a facility for washing quarried stone was found to have insufficient runoff controls. This in turn caused runoff to enter into the Asmund Brook, causing a distinct green discoloration of the water.	Based on the location of the discharge (Wallingford and Durham), this illicit discharge falls under the jurisdiction of Durham, and is currently under investigation.	Elevated concentrations of chromium, copper, nickel, zinc, and total suspended solids were found.
Unknown	6/1/2020			Residential property-potential septic failure.	The Town completed an investigation, and determined that the discharge was groundwater from a nearby sump pump. No further action necessary.	None.
				2022		

2 Doherty Drive	11/22/2022	Potential groundwater discharge to Muddy River.	Unknown	Residential property-Septic repair	Unknown repair type completed.	None.
59 Shetland Drive	11/10/2022	Potential groundwater discharge to Muddy River.	Unknown	Residential property-Septic repair	Unknown repair type completed.	None.
28 Morgan Road	11/22/2022	Potential groundwater discharge to Muddy River.	Unknown	Residential property- replacement of 1,250-gallon septic tank.	1,250-gallon septic tank replaced.	None.
1460 Durham Road	9/12/2022	Potential groundwater discharge to Spring Brook.	Unknown	Residential property-Septic repair	Unknown repair type completed.	None.
960 Old Rockhill Road	10/17/2022	Potential groundwater discharge to unnamed pond east of site.	Unknown	Residential property-Septic repair	Unknown repair type completed.	None.
				2023		
69 South Turnpike Road	7/28/2023	Discharge to MS4 System	Unknown	Powerwashing at the residence produced yellow tinted wastewater, which entered a catch basin.	CT DEEP was called.	None.

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

Method used to track illicit discharge reports	Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known	Dept. / Person responsible
	202	2		
Permitting, citizen	2 Doherty Drive	Unknown repair type	Potential groundwater	Wallingford Health
reporting	Unknown nature of structure with failing septic systems.	completed.	discharge to Muddy River.	Department
Permitting, citizen	59 Shetland Drive	Unknown repair type	Potential groundwater	Wallingford Health
reporting	Unknown nature of structure with failing septic systems.	completed.	discharge to Muddy River.	Department
Permitting, citizen	28 Morgan Road	1,250-gallon septic tank	Potential groundwater	Wallingford Health
reporting	Unknown nature of structure with failing septic systems.	replaced.	discharge to Muddy River.	Department

Permitting, citizen reporting	1460 Durham Road Unknown nature of structure with failir	Unknown rep	known repair type Potential gro npleted. discharge to			Wallingford Health Department	
Permitting, citizen reporting	960 Old Rockhill Road	, , , , ,			Potential groundw	Potential groundwater discharge to unnamed pond	
		202	:3				
	66 North Airline Road – Unknown nature of failing septic system	Complete system	replacement	Unknown		Wallingford	d Health Department
	23 Wayne Road – Unknown nature of failing septic system	Complete system replacement		Unknown		Wallingford Health Departme	
	91 Cedar Lane – Unknown nature of failing septic system	Complete system replacement		Unknown		Wallingford Health Department	
Wallingford Hoolth Donortmon	1489 Durham Road – Unknown nature of failing septic system	Complete system replacement		Unknown		Wallingford	d Health Department
Wallingford Health Departme	955 Durham Road – Unknown nature of failing septic system	Complete system	replacement	Unknown		Wallingford	d Health Department
	26 New England Drive – Unknown nature of failing septic system	Complete system	replacement	replacement Unknown		Wallingford Health Departme	
	188 Williams Road – Unknown nature of failing septic system	Complete system	replacement Unknown			Wallingford	d Health Department
	11 Dogwood Lane – Unknown nature of failing septic system	Complete system	replacement	Unknown		Wallingford	d Health Department

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

Residents of the Town can report illicit discharges to the Engineering Department through an online reporting form, which is available at https://www.wallingford.ct.us/government/departments/public-works/stormwater-and-you/. The Town then conducts follow-up investigations of reported IDDEs, and implements and/or enforces the discharge elimination.

Septic failures are reported by property owners to the Wallingford Health Department. The property owner is then directed to hire an engineer and/or contractor, depending on failure reason. The Wallingford Health Department oversees the installation of any new systems.

3.6 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	1,113

Estimated or actual number of interconnections	37
Outfall mapping complete	95% (ongoing updates throughout permit lifetime.
Interconnection mapping complete	80% (Mapping of the CTDOT interconnections and several other surrounding towns has been completed Interconnection screenings are still under investigation.
System-wide mapping complete (detailed MS4 infrastructure)	95% (Ongoing updates throughout permit lifetime).
Outfall assessment and priority ranking	100% (The majority of outfalls to impaired waterbodies have been inspected and sampled. Six (6) priority outfalls have been chosen. Priority rankings have also been mapped, and may change throughout the permit lifetime based on future data.
Dry weather screening of all High and Low priority outfalls complete	85% (The majority of dry weather screening at outfalls in high priority outfalls and discharging to impaired waterbodies have been investigated. Outfalls throughout the entirety of the Town are continually being investigated.
Catchment investigations complete	1%. All catchments (utilizing basins for assessment purposes), have been ranked and prioritized. Due to the lengthy time needed to investigate all septic repairs and/or failures, refer to Attachment IV for the completed Catchment Investigations.
Estimated percentage of MS4 catchment area investigated	1%

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

Training on IDDE complaints is ongoing.

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

ВМР	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit (Due 7/1/20)	Completed.	The Town has revised specific zoning and wetlands regulations to meet the needs for stormwater management as it pertains to construction. Specifically, the Zoning Map was modified for northeast Wallingford to allow the Town to have better control over what uses are permitted within the Watershed Protection District Overlay. §4.9 Industrial Expansion (IX) District and §4.10 Watershed Interchange (WI) District were updated to promote natural and native landscaping rather than regularly mowed and fertilized lawns. §4.13 Watershed Protection District (WPD) Overlay was updated to require a higher level of stormwater runoff quality per the Water Division standards. Landscaping requirements for parking lots were also added to optimize natural infiltration of stormwater, such as depressed islands for rain gardens. The use of sodium chloride for ice control was prohibited and	Revise land- use regulations	Planning and Zoning, Wetlands.	July 1, 2017.	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval (Ongoing)	Completed	storage container requirements were updated to avoid illicit discharge occurrences. The Town Engineer reviews proposed soil erosion and sediment control measures to ensure compliance with the CTDEEP 2002 Guidelines for Soil Erosion and Sediment Control. Third party peer reviews are occasionally utilized. Typically, the Planning and Zoning and the Environmental Planner will hold bonds for most	Utilize interdepartm ental coordination in site plan review and approval, as it	Planning and Zoning, Wetlands, Town Engineer	June 30, 2018- ongoing throughout permit lifetime.	
4-3 Review site plans for stormwater quality concerns (Ongoing)	Completed	Planning & Zoning or Inland Wetland and Watercourse Commission Applications. Site plans are reviewed for compliance with the contractor's Stormwater Management Plan.	pertains to the MS4 permit. Review revised plans for MS4 compliance,	Planning and Zoning, Wetlands.	July 1, 2017- ongoing throughout permit lifetime.	Projects that fall under the Planning and Zoning department are

			and issue review comments.			reviewed for compliance with the CTDOT drainage manual.
4-4 Conduct site inspections (Ongoing)	Completed (ongoing)	The Planning and Zoning staff and/or the Environmental Planner conduct inspections, typically once soil erosion measures are installed, as well as periodically throughout construction. Another site (4A Research Parkway) failed to notify the Planning and Zoning Department prior to the start of construction. Furthermore, this site was identified with poor soil erosion control measures, following filed complaint. The Town Planner is working with this location to bring the site into compliance.	Document inspections and actions.	Planning and Zoning, Environment al Planner	Ongoing throughout permit lifetime.	
4-5 Implement procedure to allow public comment on site development (Ongoing)	Completed	Site inspections are completed on an as-needed basis.	Provide an opportunity for public comment/inv olvement.	Planning and Zoning, Wetlands	July 1, 2017-ongoing throughout permit lifetime.	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit (Ongoing)	Completed	Brochures and flyers are posted throughout applicable departments pertaining to the DEEP construction stormwater permit.	Include comments to applications.	Planning and Zoning, Wetlands	July 1, 2017-ongoing throughout permit lifetime.	The Town is looking to add this requirement to future applications for the Planning and Zoning department, as well as the wetlands department.
Additional BMP: 4-7 Require Waste Control on-site	Completed	On-site waste control is required throughout the entirety of the Town of Wallingford, regardless of new development and/or construction. Ordinance No. 190 makes provision for the safe and sanitary disposal of all solid wastes, which are generated within the Town boundaries.	Notify developers about DEEP permitting obligations.	Department of Public Works	Adopted in January of 2007-ongoing throughout permit lifetime.	

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

At the time of this report, the Town of Wallingford has not provided this information.



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

ВМР	Status (Complete, Ongoing, In Progress, or	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything	Additional details

	Not started)				that is 'in progress')	
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning (Due 7/1/22)	Ongoing	Currently, regulations exist and are utilized for the enforcement of runoff reduction. The Town is looking to strengthen these regulations.	Adopt BMPs for any activity, operation, or facility which may cause or contribute to the pollution or contamination of stormwater, the storm drain system, or waters of the U.S.	Planning and Zoning, Wetlands.	July 1, 2020- ongoing	Zoning regulations were updated with Section 4.12 Stormwater Management.
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Due 7/1/22)	Completed	A Stormwater Maintenance Plan is required for any area that is equal to or greater than 1 acre of disturbance.	Enforce regulations and guidelines of LID and runoff reductions.	Planning and Zoning	July 1, 2019- ongoing throughout permit lifetime.	
5-3 Identify retention and detention ponds in priority areas (Due 7/1/20)	Completed	All detention, retention, and sediment basins have been identified for the Town. Inspections are completed annually and cleaned where basins are found to have 50% of sediment in excess.	Compile a list and complete mapping of Town-owned detention basins.	Engineering	July 1, 2019- ongoing throughout permit lifetime.	
5-4 Implement long- term maintenance plan for stormwater basins and treatment structures (Ongoing)	Completed	The Department of Public Works and Engineering department coordinate inspections of basins on an annual basis, and facilitate maintenance on an as-needed basis.	Annually inspect and maintain facilities.	Engineering, Department of Public Works.	July 1, 2019- ongoing throughout permit lifetime.	
5-5 DCIA mapping (Due 7/1/20)	Completed	The Town's DCIA was calculated with assistance from Nathan L Jacobson & Associates. Atlas has mapped all DCIA areas through a GIS system.	Provide an understanding of the Town's overall DCIA to the MS4 infrastructure.	Engineering, Nathan L. Jacobson & Associates, Atlas.	June 2019	

5-6 Address post- construction issues in areas with pollutants of concern	Completed	In post-construction areas, if erosion or high accumulation of sedimentation are found during the annual inspections conducted under the long-term maintenance plan, the Town will prioritize these areas for DCIA retrofit projects.	Address post- construction areas where erosion or high accumulation of sedimentation	Engineering	July 1, 2020- ongoing throughout permit lifetime.	
			sedimentation are found			
			during annual			
			inspections.			

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

- 1. The Town will continue to monitor, clean, and repair settling/silting basins, catch basins, outfalls, swales, etc.
- 2. Develop process for annual inspections of Post-Construction Stormwater Management activities

5.3 Post-Construction Stormwater Management reporting metrics

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

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	573.76 acres
DCIA disconnected (redevelopment plus retrofits)	TBD
Retrofit projects completed	At the time of this report, the Town has not provided this information.
DCIA disconnected	TBD
Estimated cost of retrofits	\$TBD
Detention or retention ponds identified	17 total

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

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 delineate and determine 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).

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

ВМР	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
6-1 Develop/implement formal employee training program (Ongoing)	Completed Annually	All Department of Public Works personnel are trained with proper stormwater management procedures and spill control.	Eliminate non- stormwater discharges into the storm sewers.	Department of Public Works	Ongoing throughout permit lifetime	Annual training was not completed in 2023.
6-2 Implement MS4 property and operations maintenance (Ongoing)	Completed	The Town utilizes a Spill Response Team through the local fire department. An SPCC plan is also implemented at the DPW facility.	Eliminates/minimizes spills and/or pollutant releases to the environment and navigable waterways.	Department of Public Works, Local Fire Department	December 31, 2019-ongoing throughout permit lifetime	
6-3 Implement coordination with interconnected MS4s	Completed	Coordination of the MS4 interconnection mapping began in 2019. CTDOT interconnections have been mapped, and coordination between the Town and surrounding areas is ongoing.	Update the GIS system with interconnected locations.	Engineering, Department of Public Works	December 31, 2018-ongoing throughout permit lifetime.	
6-4 Develop/implement program to control other sources of pollutants to the MS4		A Spill Response Team has been developed in the Town utilizing the local fire department.	Reduce other possible pollutants to the MS4.	Department of Public Works, Local Fire Department	Ongoing throughout permit lifetime.	
6-5 Evaluate additional measures for discharges to impaired waters*	Ongoing	Wet weather sampling events have been conducted, and priority outfalls were identified throughout the Town. Dry weather inspections are continuing to be conducted for the entirety of the Town. As catchments are investigated, the Town will coordinate with Atlas on future measures pertaining to the reduction of bacterial discharge to impaired waters.	Pending further investigations create a program or plan of action to reduce bacterial discharge to impaired waters.	Engineering,	Ongoing-started in 2021.	

6-6 Track projects that disconnect DCIA (Ongoing)	Ongoing	A Stormwater Retrofit Program has been drafted, and will be utilized as a method of tracking future DCIA disconnects.	Track DCIA disconnects.	Engineering	Ongoing-drafted in 2021
6-7 Implement infrastructure repair/rehab program (Due 7/1/21)	Ongoing	The Town currently assesses and maintains stormwater structures throughout the Town. The Town implements repairs or rehabilitation on an as-needed basis.	Reduce/eliminate causes or contributions of pollution or contamination of stormwater, the storm drain system, or waters of the U.S.	Department of Public Works, Engineering	Ongoing throughout permit lifetime.
6-8 Develop/implement plan to identify/prioritize retrofit projects (Due 7/1/20)	Ongoing	A Stormwater Retrofit Program has been drafted. Prioritized areas and/or sites were identified based off DCIA calculations, impaired waterbodies, current stormwater infrastructure, and the MEP of the Town.	Develop retrofit projects.	Planning and Zoning, Engineering	Ongoing-started in 2021
6-9 Implement retrofit projects to disconnect 2% of DCIA (Due 7/1/22)	Ongoing	As Retrofit Projects are identified, the Town will utilize the Impervious Cover Tracking Sheet to track and work towards disconnecting 2% of DCIA, or the MEP of the Town.	Track and reduce DCIA impacts.	Planning and Zoning, Engineering	Ongoing-started in 2021
6-10 Develop/implement street sweeping program (Ongoing)	Completed annually	All streets are swept at least once a year to remove sand and/or other debris.	Track swept lane miles.	Department of Public Works.	Completed Annually.
6-11 Develop/implement catch basin cleaning program (Ongoing)	Completed	The Town inspects approximately 1,000 catch basins a year. If a catch basin is found to have a sediment load of 50% or greater, then the sediment is removed.	Track material usage, and update plan as needed.	Department of Public Works.	Completed Annually.
6-12 Develop/implement snow management practices (Due 7/1/18)	Completed	Snow management is implemented on an annual basis. Department of Public Works staff are aware of risks associated with snow distribution as well as the potential effects of runoff. Generally, excess snow is staged at	Track material usage, and update plan as needed.	Department of Public Works	Completed Annually.

		the property in which it is managed, and/or on the sides of roadways. Excess snow is transported and disposed of at the Town's Pent Road facility.				
Additional BMP: 6-13 New Road Construction Projects	Completed	The Town has implemented the use of sheet flow drainage in an effort to eliminate or reduce the use of catch basins. This sheet flow drainage will be utilized as a BMP when road re-paving is underway.	Reduce pollutants to the MS4, specifically sediment overload.	Department of Public Works	As needed	Reason for addition: Reduce sedimentation of waterways

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

- 1. The Town will continue to conduct annual stormwater compliance training
- 2. Assess and implement repairs/rehabilitation as needed at MS4 basins.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

At the time of this report, the Town of Wallingford has not provided this information.

Metrics	
Employee training provided for key staff	At the time of this report, the Town of Wallingford has not responded to requests for training.
Street sweeping	
Curb miles swept	
Volume (or mass) of material collected	
Catch basin cleaning	
Total catch basins in priority areas (value will be less than or equal to total catch basins town or institution-wide)	
Total catch basins town- (or institution-) wide	
Catch basins inspected	
Catch basins cleaned	
Volume (or mass) of material removed from all catch basins	
Volume removed from catch basins to impaired waters (if known)	
Snow management	<u> </u>
Type(s) of deicing material used	
Total amount of each deicing material applied	

Type(s) of deicing equipment used	
Lane-miles treated (A lane-mile is a mile of roadway in a single driving lane)	
Snow disposal location	
Staff training provided on application methods & equipment	
Municipal turf management program actions (for permittee properties in basins with I	N/P impairments)
Reduction in application of fertilizers (since start of permit)	Service provided by vendor per specifications
Reduction in turf area (since start of permit)	Service provided by vendor per specifications
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites wi	ith failing septic systems)
Cost of mitigation actions/retrofits	\$TBD

6.4 Catch basin cleaning program

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

Approximately 1,000 catch basins are inspected by the Department of Public Works on an annual basis. Catch basins that are found with over a 50% sediment load are cleaned. Catch basins in priority areas as well as catch basins with known historical issues are focused on. A limited amount of staff and equipment perform this task.

6.5 Retrofit program

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

The Stormwater Retrofit Program was drafted by the Town and Atlas in 2021. The Program was designed to provide guidance on implementing LID, runoff reduction measures, or other means to disconnect or improve stormwater quality. To meet the 2% MEP disconnection goal, DCIA calculations, Urbanized areas, Impaired Waterbodies, and Catchment Rankings were utilized in identifying and prioritizing areas and/or projects to be selected for retrofits.

DCIA by Catchment was identified utilizing the following formulas:

High Connectivity

DCIA%=0.4*(IA %)^1.2

Directly Connected Area= (DCIA)(IC Acres)

Average Connectivity

DCIA%=0.1*(IA%)^1.5

Directly Connected Area = (DCIA)(IC Acres)

Partial Connectivity

DCIA%=0.04*(IA%)^1.7

Directly Connected Area = (DCIA)(IC Acres)

Slight Connectivity

DCIA%=0.01*(IA%)^2.0

Directly Connected Area = (DCIA)(IC Acres)

The Average Connectivity calculation was utilized in assessing the Town's DCIA connectivity, based on the majority of land use defined as agricultural and/or rural, minor residential communities, and minor-to-moderate commercial or industrialized areas. Based on the Average Connectivity calculations for each catchment, no catchments were identified with a connectivity of 11% or greater.

Catchments were then prioritized utilizing the total urbanized area per catchment. Atlas was provided with a shapefile of the 2010 Urbanized Areas for the Town from the 2010 Census or Urban Classifications, which was imported into ArcGIS for calculation purposes. Utilizing the Overlay-Intersect Tool, Atlas was able to extract the total Urbanized Area acreage per catchment, and then calculate the Urbanized area percentage per catchment utilizing the following formula:

Urbanized Area (Ac.)/Basin Total Acreage*100

Based on these calculations, 72 catchments were identified with Urbanized Areas.

20 catchments containing impaired waterbodies were identified for the Town.

Catchment Priority Rankings were conducted for all Sub-Basins in the Town. Multiple factors were taken into consideration when scoring each catchment, including but not limited to DCIA calculations, previous screening results, age of development/structures, density of generating sites, nearby sewer repairs, urbanized areas, and impaired waterbodies. 66 catchments were identified as Problem or High Priority.

Specific criteria was utilizing in defining priority areas for the implementation of non-municipal retrofit projects. The criteria utilized in defining priority areas of non-municipal retrofit projects included High or Problem catchment priority rankings, catchments containing an impaired waterbody, and catchments identified with an urbanized area. Utilizing ArcGIS, Atlas extracted catchments where two (2) or more of the aforementioned criteria were found. Community outreach or project redevelopment is encouraged in these defined catchments.

Municipal-owned retrofit projects were identified for several schools, and other municipal-owned sites such as the Fire Department, Town Hall, etc. These locations were selected based on location and plausibility of future disconnects. Refer to the Stormwater Retrofit Program, supplied in the 2021 annual report, for further information on these projects.

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

The Stormwater Retrofit Program, included in the Town of Wallingford's 2021 MS4 Annual Report, is designed to comply with Section (6) (B) (ii) of the CTDEEP 2017-2022 MS4 Permit. The Town of Wallingford will work towards disconnecting existing DCIA. The initial focus of the Stormwater Retrofit Program will first be applied to Town-owned properties, parks, and other facilities, followed by a focus of non-municipal facilities, parks, communities, or other redevelopments. Progress towards the DCIA disconnects will be tracked and continuously updated, with a goal to disconnect one percent (1%) of DCIA or to the MEP each year following the fifth year of the MS4 permit.

Furthermore, the Planning and Zoning Department has initiated the requirement of all Planning and Zoning applicants to submit their DCIA reduction calculations with their applications in 2022. Several proposed projects will be reducing DCIA; however, construction for these sites have not yet been completed.

Part II: Impaired waters investigation and monitoring

1. Impaired waters investigation and monitoring program

For details on this requirement, visit https://nemo.uconn.edu/2020/02/26/monitoring-requirement-for-bacteria-impaired-uwaters/. Refer to the yellow column of the Monitoring comparison chart and the impaired waters monitoring flowchart.

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

Nitrogen/ Phosphorus 🛛	Bacteria 🖂	Mercury	Other Pollutant of Concern	X
Microgery i nospilorus		Wiercury	Other Foliatant of Concern E	\sim

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.

The Town of Wallingford, has completed all dry weather inspections and wet weather sampling at outfalls to impaired waterbodies. Dry weather screening of 590 outfalls throughout the Town were completed in 2023. These screenings documented the condition of the outfalls, erosion control, material, subtype, and diameter of the outfalls. The condition and erosion control of these outfalls and/or surrounding areas were ranked with the following descriptors; Excellent, Good, Fair, and Poor. Outfalls found with poor to fair conditions and/erosion controls were recommended for repair or implementation of additional erosion controls. Refer to **Attachment II** for the documented dry weather screenings.

To date, 112 outfalls discharging to impaired waterbodies have been investigated, 88 of which have been sampled during wet weather events, including eleven (11) priority outfalls on an annual basis. Dry weather inspections throughout the entirety of the Town will continue into the following year, to be conducted again in the spring. Further investigations into SSOs is necessary to make determinations on whether the bacterial impairments are the results of IDDE or natural background conditions for outfalls to impaired waterbodies. Changes to the Stormwater Management Plan are not recommended at this time.

Stormwater discharge analytical results are indicative of elevated bacterial concentrations. Outfalls that discharge to impaired waterbodies with "other pollutant of concern" have indicated generally low turbidity, with the exception of select outfalls to Wharton's Brook. Additional sampling and dry-weather screening for remaining outfalls continues. Refer to **Attachment I** for wet weather sampling analytical data conducted in 2023.

Catchment investigation was conducted in the Town of Wallingford to determine the source of elevated bacteria levels found during sampling events. For more information on these investigations, refer to **Attachment V**.

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

2.1 Screening data

Complete the table below to report data for any wet weather sampling completed for MS4 outfalls that discharge directly to a stormwater-impaired waterbody during the reporting period. For details on this requirement, visit https://nemo.uconn.edu/2020/02/26/monitoring-requirement-for-bacteria-impaired-waters/. Refer to the yellow column of the Monitoring comparison chart and the impaired waters monitoring flowchart.

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

Outfall ID	Latitude / Longitude	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required? *
LH-2	41.435775/ -72.824375	6/10/2019	Other	Turbidity: <5 NTU	N/A	None.
LH-3	41.434435/ -72.824212	6/10/2019	Other	Turbidity 19.32 NTU	N/A	Yes
LH-6	41.43099/ - 72.820112	6/10/2019	Other	Turbidity 10.67 NTU	N/A	Yes
LH-7	41.430894/ -72.819874	6/10/2019	Other	Turbidity: 9.67 NTU	N/A	Yes
LH-8	41.431369/ -72.817063	6/10/2019	Other	Turbidity: 23.99 NTU	N/A	Yes
LH-9	41.433966/ -72.813953	6/10/2019	Other	Turbidity: 7.32 NTU	N/A	Yes
MR-2	41.406323/ -72.803502	6/10/2019	Other	Turbidity: 0.16 NTU	N/A	No
MR-3	41.406275/ -72.803362	6/10/2019	Other	Turbidity: 0.01 NTU	N/A	No
WB-48	41.432293/ -72.832283	6/10/2019	Other	Turbidity: 0.48 NTU	N/A	No
WB-28	41.450357/ -72.814351	6/10/2019	Other	Turbidity: 5.86 NTU	N/A	Yes

WB-29	41.450074/ -72.81412	6/10/2019	Other	Turbidity: 47.02 NTU	N/A	Yes
WB-30	41.449968/ -72.813939	6/10/2019	Other	Turbidity: 45.02 NTU	N/A	Yes
WB-31		6/10/2019	Other	Turbidity: 16.3 NTU	N/A	Yes
WB-33	41.448559/ -72.815494	6/10/2019	Other	Turbidity: 11.6 NTU	N/A	Yes
QR-11	41.462104/ -72.826282	6/10/2019	Other	Turbidity: 17.59 NTU	N/A	Yes
QR-12	41.459841/ -72.827471	6/10/2019	Other	Turbidity: 6.62 NTU	N/A	Yes
WB-11	41.463681/ -72.795415	6/25/2019	Other	Turbidity: 3.6 NTU	N/A	No
WB-17	41.460981/ -72.797429	6/25/2019	Other	Turbidity 3.1 NTU	N/A	No
WB-18	41.460693/ -72.797471	6/25/2019	Other	Turbidity: 6.8 NTU	N/A	Yes
WB-20	41.459926/ -72.797676	6/25/2019	Other	Turbidity: 6.1 NTU	N/A	Yes
WB-21	41.458646/ -72.798128	6/25/2019	Other	Turbidity: 10.6 NTU	N/A	Yes
WB-22	41.45617/ - 72.803508	6/25/2019	Other	Turbidity: 17.4 NTU	N/A	Yes
WB-23	41.456125/ -72.803435	6/25/2019	Other	Turbidity: 44.1 NTU	N/A	Yes
WB-34	41.448097/ -72.81762	6/25/2019	Other	Turbidity: 61.5 NTU	N/A	Yes
WB-35		6/25/2019	Other	Turbidity: 107.4 NTU	N/A	Yes
QR-13	41.458836/ -72.835459	6/25/2019	Other	Turbidity: 16.2 NTU	N/A	Yes
QR-15	41.458434/ -72.835647	6/25/2019	Other	Turbidity: 14.6 NTU	N/A	Yes
QR-16	41.458395/ -72.835737	6/25/2019	Other	Turbidity: 14.8 NTU	N/A	Yes
QR-17	41.458125/ -72.836198	6/25/2019	Other	Turbidity: 46.8 NTU	N/A	Yes
QR-23	41.432676/ -72.85064	6/25/2019	Other	Turbidity: 44.1 NTU	N/A	Yes
LH-12	41.435807/ -72.808388	6/25/2019	Other	Turbidity: 26.9 NTU	N/A	Yes
				2020		
WB-1	41.482996/ -72.782988	3/13/2020	Other	Turbidity: 19.48 NTU	N/A	Yes

WB-2	41.479369/ -72.785385	3/13/2020	Other	Turbidity: 13.35 NTU	N/A	Yes
WB-3	41.477169/ -72.785469	3/13/2020	Other	Turbidity: 10.67 NTU	N/A	Yes
WB-4	41.475873/ -72.78748	3/13/2020	Other	Turbidity: 8.67 NTU	N/A	Yes
WB-5	41.472614/ -72.793405	3/13/2020	Other	Turbidity: 12.56 NTU	N/A	Yes
WB-6	41.470504/ -72.794556	3/13/2020	Other	Turbidity: 8.83 NTU	N/A	Yes
WB-7	41.470374/ -72.794619	3/13/2020	Other	Turbidity: 8.83 NTU	N/A	Yes
WB-8	41.469592/ -72.795031	3/13/2020	Other	Turbidity: 9.29 NTU	N/A	Yes
WB-12	41.463192/ -72.795656	3/13/2020	Other	Turbidity: 160.9 NTU	N/A	Yes
WB-13	41.46227/ - 72.796111	3/13/2020	Other	Turbidity: 17.24 NTU	N/A	Yes
WB-14	41.463438/ -72.796459	3/13/2020	Other	Turbidity: 12.06 NTU	N/A	Yes
WB-16	41.461334/ -72.79699	3/13/2020	Other	Turbidity: 24.19 NTU	N/A	Yes
WB-18	41.460693/ -72.797471	3/13/2020	Other	Turbidity: 31.11 NTU	N/A	Yes
WB-20	41.459926/ -72.797676	3/13/2020	Other	Turbidity: 1.61 NTU	N/A	No
WB-21	41.458646/ -72.798128	3/13/2020	Other	Turbidity: 2.19 NTU	N/A	No
WB-22	41.45617/ - 72.803508	3/13/2020	Other	Turbidity: 19.91 NTU	N/A	Yes
WB-23	41.456125/ -72.803435	3/13/2020	Other	Turbidity: 18.63 NTU	N/A	Yes
WB-24	41.453328/ -72.804466	3/13/2020	Other	Turbidity: 11.18 NTU	N/A	Yes
WB-25	41.451907/ -72.813452	3/13/2020	Other	Turbidity: 25.61 NTU	N/A	Yes
WB-26	41.451921/ -72.813353	3/13/2020	Other	Turbidity: 10.61 NTU	N/A	Yes
WB-27	41.45189/ - 72.813288	3/13/2020	Other	Turbidity: 90.81 NTU	N/A	Yes
WB-28	41.450357/ -72.814351	3/13/2020	Other	Turbidity: 11.24 NTU	N/A	Yes
WB-29	41.450074/ -72.81412	3/13/2020	Other	Turbidity: 38.57 NTU	N/A	Yes

WB-30	41.449968/ -72.813939	3/13/2020	Other	Turbidity: 9.16 NTU	N/A	Yes
WB-31		3/13/2020	Other	Turbidity: 25.50 NTU	N/A	Yes
WB-32	41.449435/ -72.815047	3/13/2020	Other	Turbidity: 22.46 NTU	N/A	Yes
WB-33	41.438152/ -72.824277	3/13/2020	Other	Turbidity: 20.65 NTU	N/A	Yes
WB-34	41.448097/ -72.81762	3/13/2020	Other	Turbidity: 20.72 NTU	N/A	Yes
WB-35		3/13/2020	Other	Turbidity: 20.68 NTU	N/A	Yes
WB-36	41.446483/ -72.819608	3/13/2020	Other	Turbidity: 20.44 NTU	N/A	Yes
WB-37	41.444777/ -72.818079	3/13/2020	Other	Turbidity: 10.12 NTU	N/A	Yes
WB-38	41.44401/ - 72.82061	3/13/2020	Other	Turbidity: 15.64 NTU	N/A	Yes
WB-39	41.443093/ -72.818226	3/13/2020	Other	Turbidity: 12.63 NTU	N/A	Yes
WB-41	41.442284/ -72.819275	3/13/2020	Other	Turbidity: 15.96 NTU	N/A	Yes
WB-24	41.453328/ -72.804466	4/21/2020	Other	Turbidity: <5 NTU	N/A	No
WB-25	41.451907/ -72.813452		Other	Outfall destroyed. No samples collected.	N/A	
WB-26	41.451921/ -72.813353	4/21/2020	Other	Turbidity: >5 NTU	N/A	Yes
WB-27	41.45189/ - 72.813288	4/21/2020	Other	Turbidity: >5 NTU	N/A	Yes
QR-1	41.503345/ -72.824605	4/21/2020	Other	Turbidity: >5 NTU	N/A	Yes
QR-3	41.499705/ -72.818617	4/21/2020	Other	Turbidity: >5 NTU	N/A	Yes
QR-5	41.487679/ -72.818601	4/21/2020	Other	Turbidity: >5 NTU	N/A	Yes
QR-7	41.487413/ -72.820477	4/24/2020	Other	Turbidity: <5 NTU	N/A	No
WB-12	41.463192/ -72.795656	4/24/2020	Other	Turbidity: 29.32 NTU	N/A	Yes
WB-13	41.46227/ - 72.796111	4/24/2020	Other	Turbidity: 9.55 NTU	N/A	Yes
WB-32	41.449435/ -72.815047	4/24/2020	Other	Turbidity: 7.89 NTU	N/A	Yes
WB-36	41.446483/ -72.819608	4/24/2020	Other	Turbidity: 8.75 NTU	N/A	Yes

WB-41	41.442284/ -72.819275	4/24/2020	Other	Turbidity: 2.39 NTU	N/A	No
WB-45	41.436769/ -72.831613	4/24/2020	Other	Turbidity: 4.16 NTU	N/A	No
MR-1	41.405734/ -72.804528	04/30/2020	Bacteria, Other	E.coli: 5,790 Total Coliform: >24,200	Phoenix Environmental	Yes
MR-2	41.406323/ -72.803502	9/10/2020	Bacteria, Other	E. coli: 3,870 Total Coliform: >24,200	Phoenix Environmental	Yes
QR-6	41.487533/ -72.820636	04/24/2020	Bacteria, Other	E.coli: 4,610 Total Coliform: >24,200	Phoenix Environmental	Yes
QR-8	41.485489/ -72.822444	04/24/2020	Bacteria, Other	E.coli: 631 Total Coliform: >24,200	Phoenix Environmental	Yes
QR-9	41.46664/ - 72.823797	04/30/2020, 9/10/2020	Bacteria, Other	E.coli: 8,160 Total Coliform: >24,200	Phoenix Environmental	Yes
QR-10	41.46408/ - 72.824739	9/10/2020	Bacteria, Other	E.coli: >24,200 Total Coliform: >24,200	Phoenix Environmental	Yes
QR-11	41.462104/ -72.826282	9/10/2020	Bacteria, Other	E. coli: >24,200 Total Coliform: >24,200	Phoenix Environmental	Yes
QR-17	41.458125/ -72.836198	04/13/2020	Bacteria, Other	E.coli: 3,450 Total Coliform: >24,200	Phoenix Environmental	Yes
AB-1	41.424694/ -72.825552	9/10/2020	Bacteria	E. coli: 24,200 Total Coliform: >24,200	Phoenix Environmental	Yes
AB-2	41.424813/ -72.823668	9/10/2020	Bacteria	E. coli: 3,870 Total Coliform: >24,200	Phoenix Environmental	Yes
AB-3	41.428012/ -72.813003	9/10/2020	Bacteria	E. coli: 880 Total Coliform: >24,200	Phoenix Environmental	Yes
AB-4	41.428283/ -72.811922	9/10/2020	Bacteria	E. coli: 195 Total Coliform: >24,200	Phoenix Environmental	Yes
				2021		
OF-247	41.49404/ - 72.809227	9/1/2021	Bacteria, Other	E. coli: 97 Total Coliform: >24,200 Turbidity: 11.81 NTU	Phoenix Environmental	Yes
OF-54	41.499899/ -72.818361	9/1/2021	Bacteria, Other	E. coli: 6,870 Total Coliform: >24,200 Phosphorus: 0.207 mg/L	Phoenix Environmental	Yes
OF-269	41.504222/ -72.820081	9/1/2021	Bacteria, Other	E. coli: 6,870 Total Coliform: >24,200 Turbidity: 159.8 NTU	Phoenix Environmental	Yes
OF-270	41.506531/ -72.818521	9/1/2021	Bacteria, Other	E. coli: 19,900 Total Coliform: >24,200 Turbidity: 41.69 NTU	Phoenix Environmental	Yes
QR-6	41.487533/ -72.820636	9/1/2021	Bacteria, Other	E. coli: >24,200 Total Coliform: >24,200 Phosphorus: 0.171 mg/L	Phoenix Environmental	Yes

41.485489/ -72.822444	9/1/2021	Bacteria, Other	E. coli: >24,200 Total Coliform: >24,200	Phoenix Environmental	Yes
			Phosphorus: 0.236 mg/L		
41.46664/ -	9/1/2021	Bacteria, Other	E. coli: 2,910	Phoenix	Yes
72.823797			Total Coliform: >24,200	Environmental	
			Phosphorus: 0.182 mg/L		
41.46408/ -	9/1/2021	Bacteria, Other	E. coli: 816	Phoenix	Yes
72.824739			Total Coliform: >24,200	Environmental	
			Phosphorus: 0.063 mg/L		
41.462104/	9/1/2021	Bacteria, Other	E. coli: >24,200	Phoenix	Yes
-72.826282			Total Coliform: >24,200	Environmental	
			Phosphorus: 0.458 mg/L		
41.424694/	9/1/2021	Bacteria	E. coli: 670	Phoenix	Yes
-72.825552			Total Coliform: >24,200	Environmental	
41.424813/	9/1/2021	Bacteria	E. coli: 20	Phoenix	Yes
-72.823668			Total Coliform: >24,200	Environmental	
41.428012/	9/1/2021	Bacteria	E. coli: 3,130	Phoenix	Yes
-72.813003			Total Coliform: >24,200	Environmental	
41.428283/	9/1/2021	Bacteria	E. coli: 1,270	Phoenix	Yes
-72.811922			Total Coliform: >24,200	Environmental	
41.405734/	9/1/2021	Bacteria		Phoenix	Yes
				Environmental	
41.406323/	9/1/2021	Bacteria	E. coli: 3,870	Phoenix	Yes
'	-			Environmental	
			2022		
41.487533/	6/27/2022	Bacteria, Other	E. coli: 3,650 MPN/100 mls	Phoenix	Yes
			Total Coliform: >24.200 MPN/100 mls	Environmental	
41.485489/	6/27/2022	Bacteria, Other	. 5.	Phoenix	Yes
	3, 2., 7.2.2.				
			,		
41.46664/ -	6/27/2022	Bacteria. Other		Phoenix	Yes
	0,2.,2022	Dadeeria, Daile			
121022					
41.46408/ -	6/27/2022	Bacteria. Other		Phoenix	Yes
	3,2.,2022	Sactoria, Other	•		
72.021733			, .	Ziivii Oiiiii eiitai	
41.462104/	6/27/2022	Bacteria Other		Phoenix	Yes
'	3,2.,,2022	Successa, Other			
, 2.020202			, .		
41 424694/	6/27/2022	Bacteria		Phoenix	Yes
	5,2,,2022	Ducteria			103
41.424813/	6/27/2022	Bacteria	E. coli: 4,610 MPN/100 mls	Phoenix	Yes
	-72.822444 41.46664/ - 72.823797 41.46408/ - 72.824739 41.462104/ - -72.826282 41.424694/ - -72.825552 41.424813/ - -72.823668 41.428012/ - -72.813003 41.428283/ - -72.811922 41.405734/ - -72.804528	-72.822444 41.46664/- 72.823797 41.46408/- 72.824739 41.462104/ -72.826282 41.424694/ -72.825552 41.424813/ -72.823668 41.428012/ -72.813003 41.428283/ -72.811922 41.405734/ -72.804528 41.406323/ -72.830502 41.487533/ -72.820636 41.485489/ -72.822444 41.46664/- 72.823797 41.46408/- 72.824739 41.462104/ -72.826282 41.424694/ 6/27/2022 41.424694/ 6/27/2022	-72.822444 9/1/2021 Bacteria, Other 41.46664/- 72.823797 9/1/2021 Bacteria, Other 41.46408/- 72.824739 9/1/2021 Bacteria, Other 41.422694/ -72.826282 9/1/2021 Bacteria 41.424694/ -72.825552 9/1/2021 Bacteria 41.428813/ -72.823668 9/1/2021 Bacteria 41.428012/ -72.813003 9/1/2021 Bacteria 41.428283/ -72.811922 9/1/2021 Bacteria 41.405734/ -72.804528 9/1/2021 Bacteria 41.487533/ -72.803502 9/1/2021 Bacteria, Other 41.487533/ -72.820636 6/27/2022 Bacteria, Other 41.48664/ - 72.822444 6/27/2022 Bacteria, Other 41.46664/ - 72.8224739 6/27/2022 Bacteria, Other 41.462104/ -72.826282 6/27/2022 Bacteria, Other 41.462104/ -72.826282 6/27/2022 Bacteria, Other	Total Coliform: >24,200 Phosphorus: 0.236 mg/L	Total Coliform: >24,200

AB-3	41.428012/	6/27/2022	Bacteria	E. coli: 2,610 MPN/100 mls	Phoenix	Yes
	-72.813003			Total Coliform: >24,200 MPN/100 mls	Environmental	
AB-4	41.428283/	6/27/2022	Bacteria	E. coli: 908 MPN/100 mls	Phoenix	Yes
	-72.811922			Total Coliform: >24,200 MPN/100 mls	Environmental	
MR-1	41.405734/	6/27/2022	Bacteria	E. coli: 2,910 MPN/100 mls	Phoenix	Yes
	-72.804528			Total Coliform: >24,200 MPN/100 mls	Environmental	
MR-2	41.406323/	6/27/2022	Bacteria	E. coli: 2,600 MPN/100 mls	Phoenix	Yes
	-72.803502			Total Coliform: >24,200 MPN/100 mls	Environmental	
				2023		
QR-6	41.487533/	8/25/2023	Bacteria, Other	E. coli: >24,200 MPN/100 mls	Phoenix	Yes
	-72.820636			Total Coliform: >24,200 MPN/100 mls	Environmental	
				Phosphorus: 1.53 mg/L		
QR-8	41.485489/	8/25/2023	Bacteria, Other	E. coli: 414 MPN/100 mls	Phoenix	Yes
	-72.822444		,	Total Coliform: >24,200 MPN/100 mls	Environmental	
				Phosphorus: 0.185 mg/L		
QR-10	41.46664/ -	8/25/2023	Bacteria, Other	E. coli: 364 MPN/100 mls	Phoenix	Yes
	72.823797			Total Coliform: >24,200 MPN/100 mls	Environmental	
				Phosphorus: 1.38 mg/L		
QR-11	41.46408/ -	8/25/2023	Bacteria, Other	E. coli: 0.098 MPN/100 mls	Phoenix	Yes
	72.824739			Total Coliform: >24,200 MPN/100 mls	Environmental	
				Phosphorus: 0.097 mg/L		
QR-17	41.462104/	8/25/2023	Bacteria, Other	E. coli: >24,200 MPN/100 mls	Phoenix	Yes
	-72.826282			Total Coliform: >24,200 MPN/100 mls	Environmental	
				Phosphorus: 0.376 mg/L		
AB-1	41.424694/	8/25/2023	Bacteria	E. coli: >24,200 MPN/100 mls	Phoenix	Yes
	-72.825552			Total Coliform: >24,200 MPN/100 mls	Environmental	
AB-2	41.424813/	8/25/2023	Bacteria	E. coli: 959 MPN/100 mls	Phoenix	Yes
	-72.823668			Total Coliform: >24,200 MPN/100 mls	Environmental	
AB-3	41.428012/	8/25/2023	Bacteria	E. coli: >24,200 MPN/100 mls	Phoenix	Yes
	-72.813003			Total Coliform: >24,200 MPN/100 mls	Environmental	
AB-4	41.428283/	8/25/2023	Bacteria	E. coli: 4,880 MPN/100 mls	Phoenix	Yes
	-72.811922			Total Coliform: >24,200 MPN/100 mls	Environmental	
MR-1	41.405734/	8/25/2023	Bacteria	E. coli: 6,130 MPN/100 mls	Phoenix	Yes
	-72.804528			Total Coliform: >24,200 MPN/100 mls	Environmental	
MR-2	41.406323/	8/25/2023	Bacteria	E. coli: 1,470 MPN/100 mls	Phoenix	Yes
	-72.803502			Total Coliform: >24,200 MPN/100 mls	Environmental	

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

Pollutant of concern	Pollutant threshold
Nitrogen	Total N > 2.5 mg/l
Phosphorus	Total P > 0.3 mg/l

Bacteria (fresh waterbody)	 E. coli > 235 col/100ml for swimming areas or 410 col/100ml for all others Total Coliform > 500 col/100ml
Bacteria (salt waterbody)	 Fecal Coliform > 31 col/100ml for Class SA and > 260 col/100ml for Class SB Enterococci > 104 col/100ml for swimming areas or 500 col/100 for all others
Other pollutants of concern	Sample turbidity is 5 NTU > in-stream sample

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

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall ID	Status of drainage area investigation	Control measure to address impairment
See above-	Investigations are being conducted on the surrounding drainage	Potential measures that may be used in
listed	areas, with a focus on surrounding runoff from agricultural land,	addressing bacterial impairments include aquatic
outfalls.	septic repairs, and septic failures.	vegetative buffers, control runoff measures
		implemented. Discussions are underway within
		the Town on how to address potential septic
		failures or repairs at privately owned properties.

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

Once outfall sampling has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 1, 2021. You may also attach an excel spreadsheet with the same data rather than copying it to this table. If you do attach a spreadsheet, please write "See Attachment" below.

Outfall	Latitude / Longitude	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)
				2020	
QR-6	41.487533/ -72.820636	04/24/2020	Bacteria, Other	E.coli: 4,610 Total Coliform: >24,200	Phoenix Environmental
QR-8	41.485489/ -72.822444	04/24/2020	Bacteria, Other	E.coli: 631 Total Coliform: >24,200	Phoenix Environmental
QR-10	41.46664/ -72.823797	04/30/2020, 9/10/2020	Bacteria, Other	E.coli: 8,160 Total Coliform: >24,200	Phoenix Environmental
QR-11	41.46408/ -72.824739	9/10/2020	Bacteria, Other	E.coli: >24,200 Total Coliform: >24,200	Phoenix Environmental
QR-17	41.462104/ -72.826282	9/10/2020	Bacteria, Other	E. coli: >24,200 Total Coliform: >24,200	Phoenix Environmental
AB-1	41.424694/ -72.825552	9/10/2020	Bacteria	E. coli: 24,200 Total Coliform: >24,200	Phoenix Environmental

AB-2	41.424813/ -72.823668	9/10/2020	Bacteria	E. coli: 3,870 Total Coliform: >24,200	Phoenix Environmental
AB-3	41.428012/	9/10/2020	Bacteria	E. coli: 880	Phoenix Environmental
	-72.813003			Total Coliform: >24,200	
AB-4	41.428283/	9/10/2020	Bacteria	E. coli: 195	Phoenix Environmental
	-72.811922			Total Coliform: >24,200	
MR-1	41.405734/	04/30/2020	Bacteria, Other	E.coli: 5,790	Phoenix Environmental
	-72.804528			Total Coliform: >24,200	
MR-2	41.406323/	9/10/2020	Bacteria, Other	E. coli: 3,870	Phoenix Environmental
	-72.803502			Total Coliform: >24,200	
				2021	
QR-6	41.487533/	9/1/2021	Bacteria, Other	E. coli: >24,200	Phoenix Environmental
	-72.820636			Total Coliform: >24,200	
				Phosphorus: 0.171 mg/L	
QR-8	41.485489/	9/1/2021	Bacteria, Other	E. coli: >24,200	Phoenix Environmental
	-72.822444			Total Coliform: >24,200	
				Phosphorus: 0.236 mg/L	
QR-10	41.46664/	9/1/2021	Bacteria, Other	E. coli: 2,910	Phoenix Environmental
	-72.823797			Total Coliform: >24,200	
				Phosphorus: 0.182 mg/L	
QR-11	41.46408/	9/1/2021	Bacteria, Other	E. coli: 816	Phoenix Environmental
	-72.824739			Total Coliform: >24,200	
				Phosphorus: 0.063 mg/L	
QR-17	41.462104/	9/1/2021	Bacteria, Other	E. coli: >24,200	Phoenix Environmental
	-72.826282			Total Coliform: >24,200	
				Phosphorus: 0.458 mg/L	
AB-1	41.424694/	9/1/2021	Bacteria	E. coli: 670	Phoenix Environmental
	-72.825552			Total Coliform: >24,200	
AB-2	41.424813/	9/1/2021	Bacteria	E. coli: 20	Phoenix Environmental
	-72.823668			Total Coliform: >24,200	
AB-3	41.428012/	9/1/2021	Bacteria	E. coli: 3,130	Phoenix Environmental
	-72.813003			Total Coliform: >24,200	
AB-4	41.428283/	9/1/2021	Bacteria	E. coli: 1,270	Phoenix Environmental
	-72.811922			Total Coliform: >24,200	
MR-1	41.405734/	9/1/2021	Bacteria	E. coli: 11,200	Phoenix Environmental
	-72.804528			Total Coliform: >24,200	
MR-2	41.406323/	9/1/2021	Bacteria	E. coli: 3,870	Phoenix Environmental
	-72.803502			Total Coliform: >24,200	
QR-6	41.487533/	9/1/2021	Bacteria, Other	E. coli: 3,650 MPN/100 mls	Phoenix Environmental
	-72.820636			Total Coliform: >24,200 MPN/100 mls	
				Phosphorus: 0.120 mg/L	
QR-8	41.485489/	9/1/2021	Bacteria, Other	E. coli: 13,000 MPN/100 mls	Phoenix Environmental
	-72.822444			Total Coliform: >24,200 MPN/100 mls	
				Phosphorus: 0.308 mg/L	

QR-10	41.46664/ -72.823797	9/1/2021	Bacteria, Other	E. coli: >24,200 MPN/100 mls Total Coliform: >24,200 MPN/100 mls Phosphorus: 0.231 mg/L	Phoenix Environmental
QR-11	41.46408/ -72.824739	9/1/2021	Bacteria, Other	E. coli: 1,150 MPN/100 mls Total Coliform: >24,200 MPN/100 mls Phosphorus: 0.100 mg/L	Phoenix Environmental
QR-17	41.462104/ -72.826282	9/1/2021	Bacteria, Other	E. coli: >24,200 MPN/100 mls Total Coliform: >24,200 MPN/100 mls Phosphorus: 0.400 mg/L	Phoenix Environmental
AB-1	41.424694/ -72.825552	9/1/2021	Bacteria	E. coli: 1,530 MPN/100 mls Total Coliform: >24,200 MPN/100 mls	Phoenix Environmental
AB-2	41.424813/ -72.823668	9/1/2021	Bacteria	E. coli: 2,610 MPN/100 mls Total Coliform: >24,200 MPN/100 mls	Phoenix Environmental
AB-3	41.428012/ -72.813003	9/1/2021	Bacteria	E. coli: 2,610 MPN/100 mls Total Coliform: >24,200 MPN/100 mls	Phoenix Environmental
AB-4	41.428283/ -72.811922	9/1/2021	Bacteria	E. coli: 908 MPN/100 mls Total Coliform: >24,200 MPN/100 mls	Phoenix Environmental
MR-1	41.405734/ -72.804528	9/1/2021	Bacteria	E. coli: 2,910 MPN/100 mls Total Coliform: >24,200 MPN/100 mls	Phoenix Environmental
MR-2	41.406323/ -72.803502	9/1/2021	Bacteria	E. coli: 2,600 MPN/100 mls Total Coliform: >24,200 MPN/100 mls	Phoenix Environmental
				2022	
QR-6	41.487533/ -72.820636	6/27/2022	Bacteria, Other	E. coli: 3,650 MPN/100 mls Total Coliform: >24,200 MPN/100 mls Phosphorus: 0.120 mg/L	Phoenix Environmental
QR-8	41.485489/ -72.822444	6/27/2022	Bacteria, Other	E. coli: 13,000 MPN/100 mls Total Coliform: >24,200 MPN/100 mls Phosphorus: 0.308 mg/L	Phoenix Environmental
QR-10	41.46664/ -72.823797	6/27/2022	Bacteria, Other	E. coli: >24,200 MPN/100 mls Total Coliform: >24,200 MPN/100 mls Phosphorus: 0.231 mg/L	Phoenix Environmental
QR-11	41.46408/ -72.824739	6/27/2022	Bacteria, Other	E. coli: 1,150 MPN/100 mls Total Coliform: >24,200 MPN/100 mls Phosphorus: 0.100 mg/L	Phoenix Environmental
QR-17	41.462104/ -72.826282	6/27/2022	Bacteria, Other	E. coli: >24,200 MPN/100 mls Total Coliform: >24,200 MPN/100 mls Phosphorus: 0.400 mg/L	Phoenix Environmental
AB-1	41.424694/ -72.825552	6/27/2022	Bacteria	E. coli: 1,530 MPN/100 mls Total Coliform: >24,200 MPN/100 mls	Phoenix Environmental
AB-2	41.424813/ -72.823668	6/27/2022	Bacteria	E. coli: 4,610 MPN/100 mls Total Coliform: >24,200 MPN/100 mls	Phoenix Environmental
AB-3	41.428012/ -72.813003	6/27/2022	Bacteria	E. coli: 2,610 MPN/100 mls Total Coliform: >24,200 MPN/100 mls	Phoenix Environmental

AB-4	41.428283/	6/27/2022	Bacteria	E. coli: 908 MPN/100 mls	Phoenix Environmental
	-72.811922			Total Coliform: >24,200 MPN/100 mls	
MR-1	41.405734/	6/27/2022	Bacteria	E. coli: 2,910 MPN/100 mls	Phoenix Environmental
	-72.804528			Total Coliform: >24,200 MPN/100 mls	
MR-2	41.406323/	6/27/2022	Bacteria	E. coli: 2,600 MPN/100 mls	Phoenix Environmental
	-72.803502			Total Coliform: >24,200 MPN/100 mls	
				2023	
QR-6	41.487533/	8/25/2023	Bacteria, Other	E. coli: >24,200 MPN/100 mls	Phoenix Environmental
	-72.820636			Total Coliform: >24,200 MPN/100 mls	
				Phosphorus: 1.53 mg/L	
QR-8	41.485489/	8/25/2023	Bacteria, Other	E. coli: 414 MPN/100 mls	Phoenix Environmental
	-72.822444			Total Coliform: >24,200 MPN/100 mls	
				Phosphorus: 0.185 mg/L	
QR-10	41.46664/	8/25/2023	Bacteria, Other	E. coli: 364 MPN/100 mls	Phoenix Environmental
	-72.823797			Total Coliform: >24,200 MPN/100 mls	
				Phosphorus: 1.38 mg/L	
QR-11	41.46408/	8/25/2023	Bacteria, Other	E. coli: 0.098 MPN/100 mls	Phoenix Environmental
	-72.824739			Total Coliform: >24,200 MPN/100 mls	
				Phosphorus: 0.097 mg/L	
QR-17	41.462104/	8/25/2023	Bacteria, Other	E. coli: >24,200 MPN/100 mls	Phoenix Environmental
	-72.826282			Total Coliform: >24,200 MPN/100 mls	
				Phosphorus: 0.376 mg/L	
AB-1	41.424694/	8/25/2023	Bacteria	E. coli: >24,200 MPN/100 mls	Phoenix Environmental
	-72.825552			Total Coliform: >24,200 MPN/100 mls	
AB-2	41.424813/	8/25/2023	Bacteria	E. coli: 959 MPN/100 mls	Phoenix Environmental
	-72.823668			Total Coliform: >24,200 MPN/100 mls	
AB-3	41.428012/	8/25/2023	Bacteria	E. coli: >24,200 MPN/100 mls	Phoenix Environmental
	-72.813003			Total Coliform: >24,200 MPN/100 mls	
AB-4	41.428283/	8/25/2023	Bacteria	E. coli: 4,880 MPN/100 mls	Phoenix Environmental
	-72.811922			Total Coliform: >24,200 MPN/100 mls	
MR-1	41.405734/	8/25/2023	Bacteria	E. coli: 6,130 MPN/100 mls	Phoenix Environmental
	-72.804528			Total Coliform: >24,200 MPN/100 mls	
MR-2	41.406323/	8/25/2023	Bacteria	E. coli: 1,470 MPN/100 mls	Phoenix Environmental
	-72.803502			Total Coliform: >24,200 MPN/100 mls	

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
4606-00-1	Low Priority	2
4606-01-1	Low Priority	2
4606-02-1	Low Priority	2
4607-10-1-L1	Low Priority	2
5112-00-2-L1	Problem	7
5112-02-1	Problem	6
5112-02-1-D1	Low Priority	3
5112-02-1-L1	Low Priority	2
5112-03-1	Problem	6
5200-00-4-L3	High Priority	11
5200-00-4-R10	High Priority	13
5200-00-4-R11	Problem	9
5200-00-4-R12	High Priority	11
5200-00-4-R7	High Priority	15
5200-00-4-R8	High Priority	13
5200-10-1	High Priority	11
5200-10-2-R1	High Priority	13

5200-11-1	High Priority	11
5200-12-1	High Priority	12
5200-12-1-L1	High Priority	12
5200-13-1	High Priority	16
5200-14-1	Low Priority	4
5200-14-1-L1	Problem	9
5200-15-1	Problem	9
5200-16-1	Low Priority	2
5200-17-1	Low Priority	4
5200-19-1-L1	Low Priority	5
5204-00-2-L1	Low Priority	5
5204-01-1	Low Priority	3
5204-02-1	Low Priority	5
5206-01-1-L1	Low Priority	4
5206-02-1-L1	High Priority	10
5207-00-1	High Priority	13
5207-00-1-L1	Low Priority	4
5207-00-1-L2	High Priority	12
5207-00-2-R1	High Priority	13
5207-00-2-R2	High Priority	12
5207-01-1	High Priority	13
5207-02-1	Problem	6

	5207-02-1-L1	High Priority	13
	5208-00-1	Problem	7
	5208-00-1-L1	Problem	10
	5208-00-2-R1	Problem	7
	5208-00-3-L2	Low Priority	5
	5208-00-3-L3	High Priority	10
	5208-00-3-R1	Problem	9
	5208-00-3-R2	High Priority	10
	5208-00-3-R3	High Priority	10
	5208-00-3-R4	Problem	6
	5208-00-3-R5	Problem	6
	5208-01-1	Problem	8
	5208-02-1	Low Priority	3
	5208-02-1-L1	Problem	6
	5208-02-2-R1	Problem	8
	5208-03-1	Problem	7
	5208-04-1	Low Priority	5
	5208-04-1-L1	Low Priority	3
	5208-05-1	Low Priority	3
	5208-05-1-L1	Low Priority	4
	5208-06-1	Problem	8
	5208-07-1	Low Priority	5
ľ			

5208-08-1	Problem	8
5208-09-1	Low Priority	3
5302-02-1	Problem	8
5302-04-1-L1	High Priority	11

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

For details on this requirement, visit https://nemo.uconn.edu/2020/02/26/monitoring-requirement-for-bacteria-impaired-waters/. Refer to the blue column of the Monitoring comparison chart and the IDDE baseline-monitoring flowchart.

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies. You may also attach an excel spreadsheet with the same data rather than copying it to this table. If you do attach a spreadsheet, please write "See Attachment" below.

Outfall / Interconnection ID	Latitude / Longitude	Screening / sample date	Ammoni a (mg/L)	Chlorine (mg/L)	Conductivity (umhos/cm)	Salinity (ppt)	E. coli or enterococcus (MPN/100mL)	Sur fac tan ts	Water Temp	Pollutant of concern	If required, follow-up actions taken
OF-608	41.494657 / 72.763946	3/30/2023	0.38	<0.02	113	16.1	E. Coli >24,200 T. Coli >24,200	-	-	Bacteria, salinity	
OF-903	41.494657 / -72. 395638	3/30/2023	0.65	<0.02	21	<0.5	E. Coli <10 T. Coli 934	-	-	Bacteria, ammonia	
OF-558	41.439199 / -72.803805	4/7/2023	0.34	<0.02	889	0.5	E. Coli <10 T. Coli 1,590	-	-	Bacteria, salinity	
OF-901	41.482082 / -72.800605	4/11/2023	0.10	<0.02	687	<0.5	E. Coli <10 T. Coli 86	-	-	None	
OF-899	41.482564 / -72.801299	4/11/2023	0.07	<0.02	761	<0.5	E. Coli <10 T. Coli 108	-	-	None	
OF-591	41.485653 / -72.746381	4/12/2023	0.05	<0.02	442	<0.5	E. Coli <10 T. Coli 557	-	-	None	
OF-302	41.467787 / -72.863557	6/9/2023	0.09	0.05	634	<0.5	E. Coli 108 T. Coli > 24,200	-	-	Bacteria	
OF-504	41.485176 / -72.810379	6/12/2023	<0.05	<0.02	1,060	0.5	E. Coli 488 T. Coli 17,300	-	-	Bacteria	
OF-395	41.466263 / -72.838041	6/12/2023	0.09	<0.02	456	<0.5	E. Coli 41 T. Coli 487	-	-	None	
OF-363	41.445119 / -72.850881	9/6/2023	<0.05	1.14	265	<0.5	E. Coli <10 T. Coli 10	-	-	Chlorine	

2.2 Wet weather sample and inspection data

For details on this requirement, visit https://nemo.uconn.edu/2020/02/26/monitoring-requirement-for-bacteria-impaired-waters/. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

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

Outfall / Interconnection ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern		
'	System Vulnerability Factors are currently under investigation, and will be added to the next annual report. Refer to Section 1: Catchment Investigation Data, 3.1 System Vulnerability Factor Summary for more information.											

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

For details on this requirement, https://nemo.uconn.edu/2020/02/26/monitoring-requirement-for-bacteria-impaired-waters/. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart. **Appendix III** contains assessment data and observations collected during catchment investigation activities.

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
OF-8	Quinnipiac River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
OF-283	Broad Brook	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
OF-284	Broad Brook	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
OF-297	Mill River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
OF-299	Mill River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
OF-300	Mill River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
OF-569	Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
OF-570	Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
OF-571	Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
OF-572	Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
OF-573	Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.

Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Sawmill Brook	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
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Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
Muddy River	This outfall was found within 500 ft. of a residential septic failure, and as such, is considered to contribute SVF #12.
	Muddy River Muddy River Sawmill Brook Muddy River

The Town of Wallingford's sanitary sewer is currently managed by the Town of Wallingford's Water Pollution Control Authority (WPCA). The storm sewer and sanitary sewer have historically been separate, and remain so in the present day. Therefore, SVFs 4, 5, 6, 7, 8, and 9 are not applicable to the Town. Other SVFs are currently under investigation, and will be updated in the next annual report. These investigations include coordination between the Wallingford WPCF and the Town of Wallingford Health Department.

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

You may also attach an excel spreadsheet with the same data rather than copying it to this table. If you do attach a spreadsheet, please write "See Attachment" below.

Key Junction Manhole ID	Latitude / Longitude	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants
IC-19 (CTDOT interconnection, within 500 ft. of septic failure)	41.47071684/ -72.75116873	6/27/2021	Good condition, no discharge.	N/A	N/A	N/A
IC-31 (Cheshire interconnection, downgradient of septic failure)	41.46522191/ -72.87481588	5/17/2021	Moderate amount of sediment in catch basin, no discharge.	N/A	N/A	N/A

The identification of key junction manholes that may narrow the location of suspected illicit discharges or SSOs to an isolated pipe segment between two manholes, or key junction manholes that may be located or show evidence of illicit discharges or SSOs that may not be evident at the outfall under all circumstances, or to confirm or identify potential system vulnerability factors is underway. Once identified, these key junction manholes will be inspected during dry weather events for evidence of illicit discharges or SSOs.

3.3 Wet weather investigation outfall sampling data

You may also attach an excel spreadsheet with the same data rather than copying it to this table. If you do attach a spreadsheet, please write "See Attachment" below.

Outfall ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Surfactants
_	ntification of key junctions	_			

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

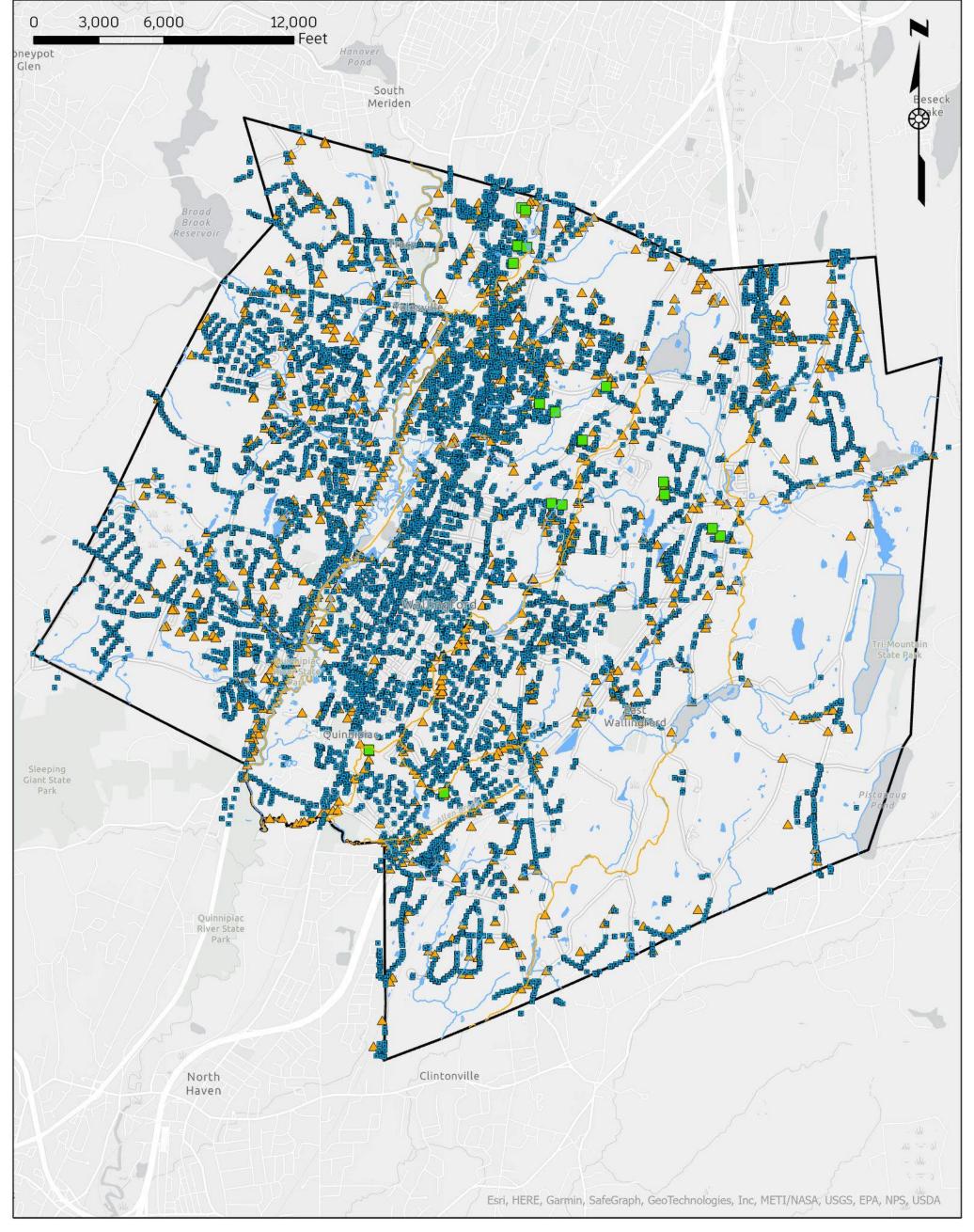
Discharge location	Source location	Discharge description	Method of discovery	Date of discovery	Date of elimination	Mitigation or enforcement action	Estimated volume of flow removed
QR-11	Senior	Murky, iridescent	Dry Weather	5-17-2019	N/A	N/A	N/A
	Center		Screening				
OF-64		Clear, no odor, slight trickle	Dry Weather Screening	10-20- 2021	N/A	None.	N/A

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:	Print name: Ron Severson, Senior Compliance Manager, Atlas
Signature / Date:	Signature / Date:
Email:	Email: Ron.Severson@oneatlas.com

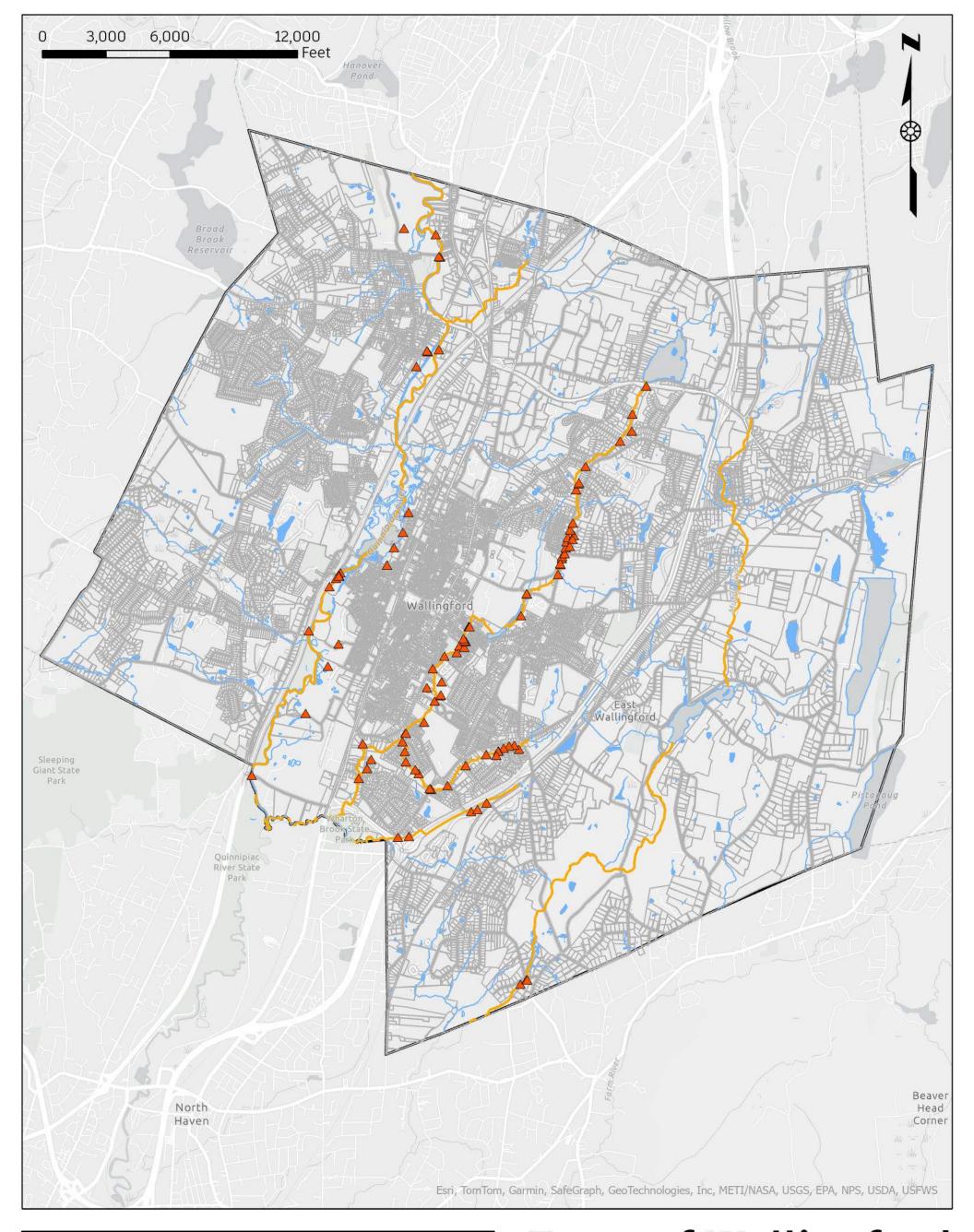
FIGURES

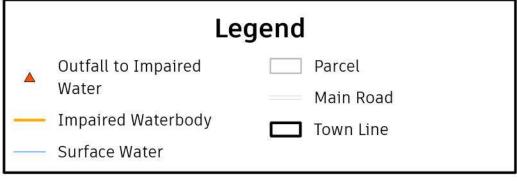




Town of Wallingford 2023 Annual Report MS4 System

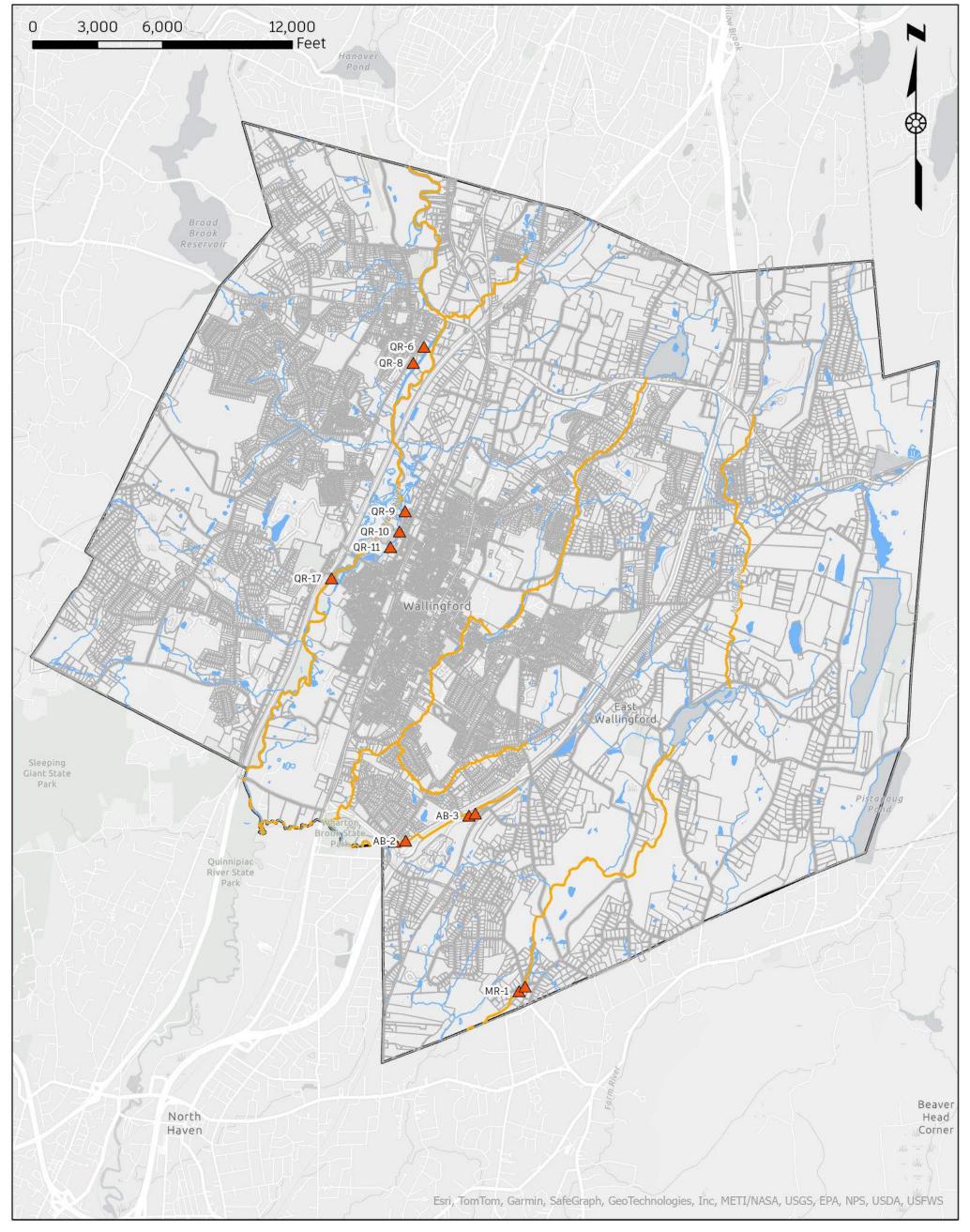






Town of Wallingford 2023 Annual Report Outfalls to Impaired Waters

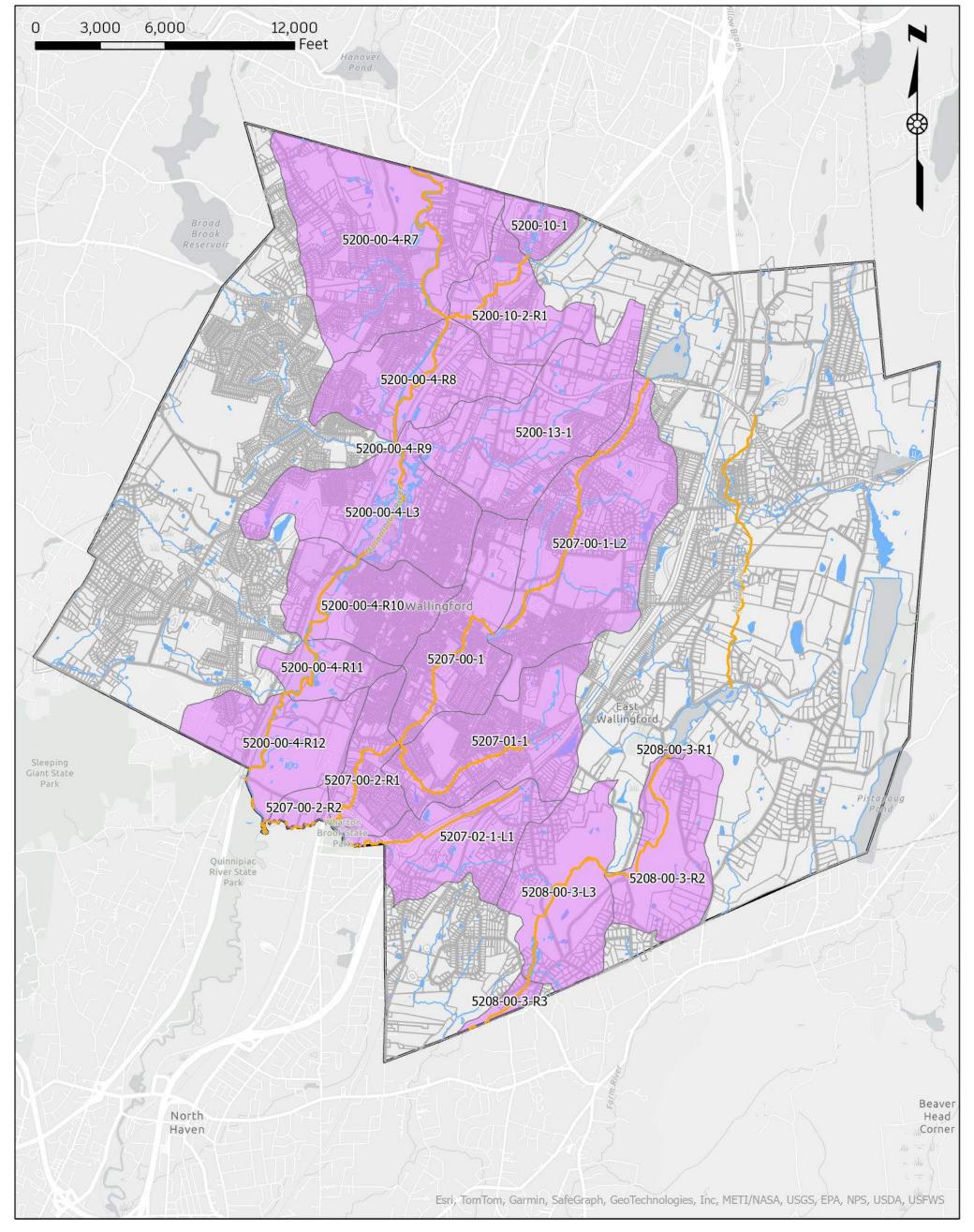






2023 Annual Report Priority Outfalls

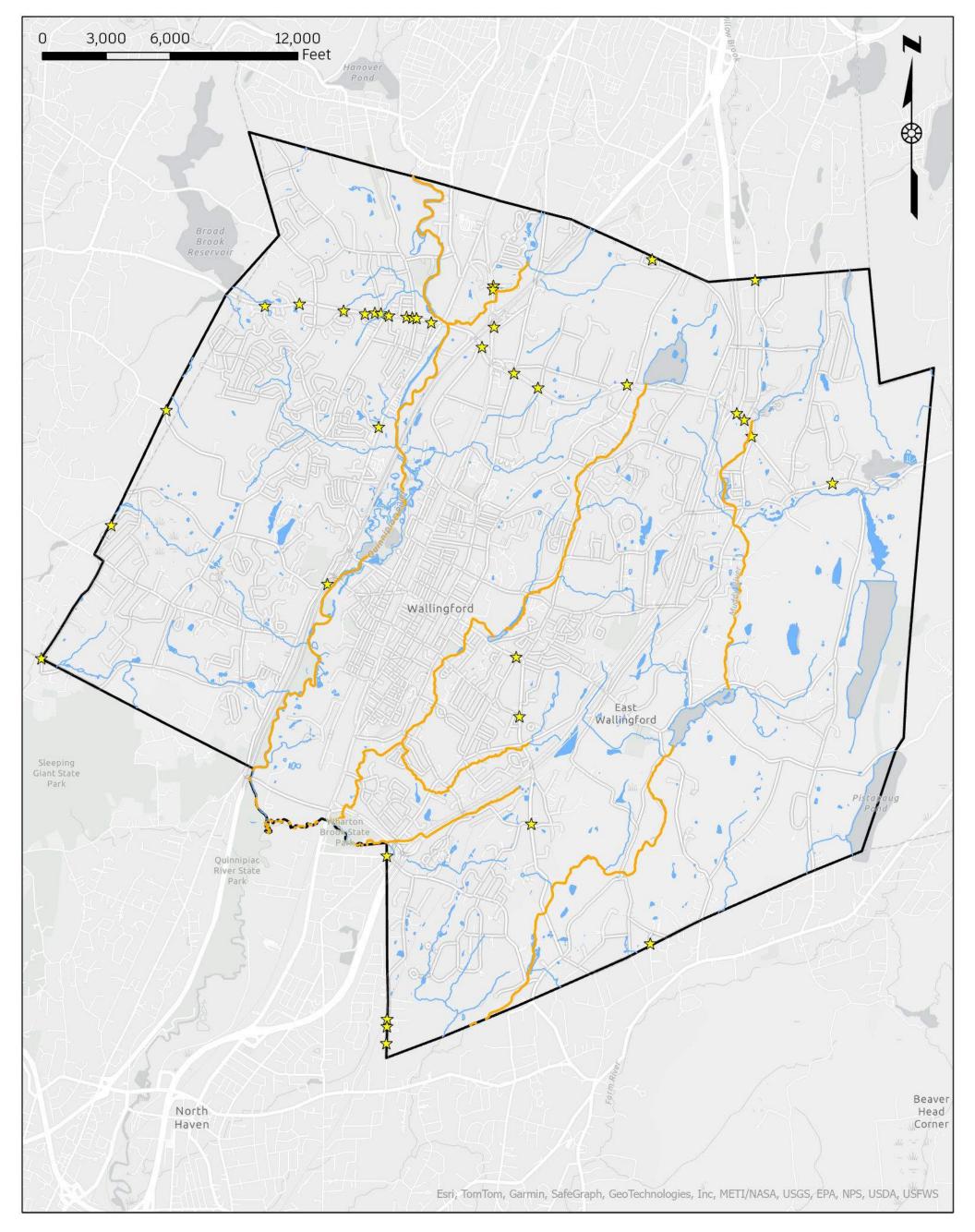


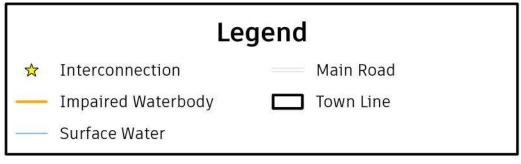




2023 Annual Report Impaired Waters by Catchment

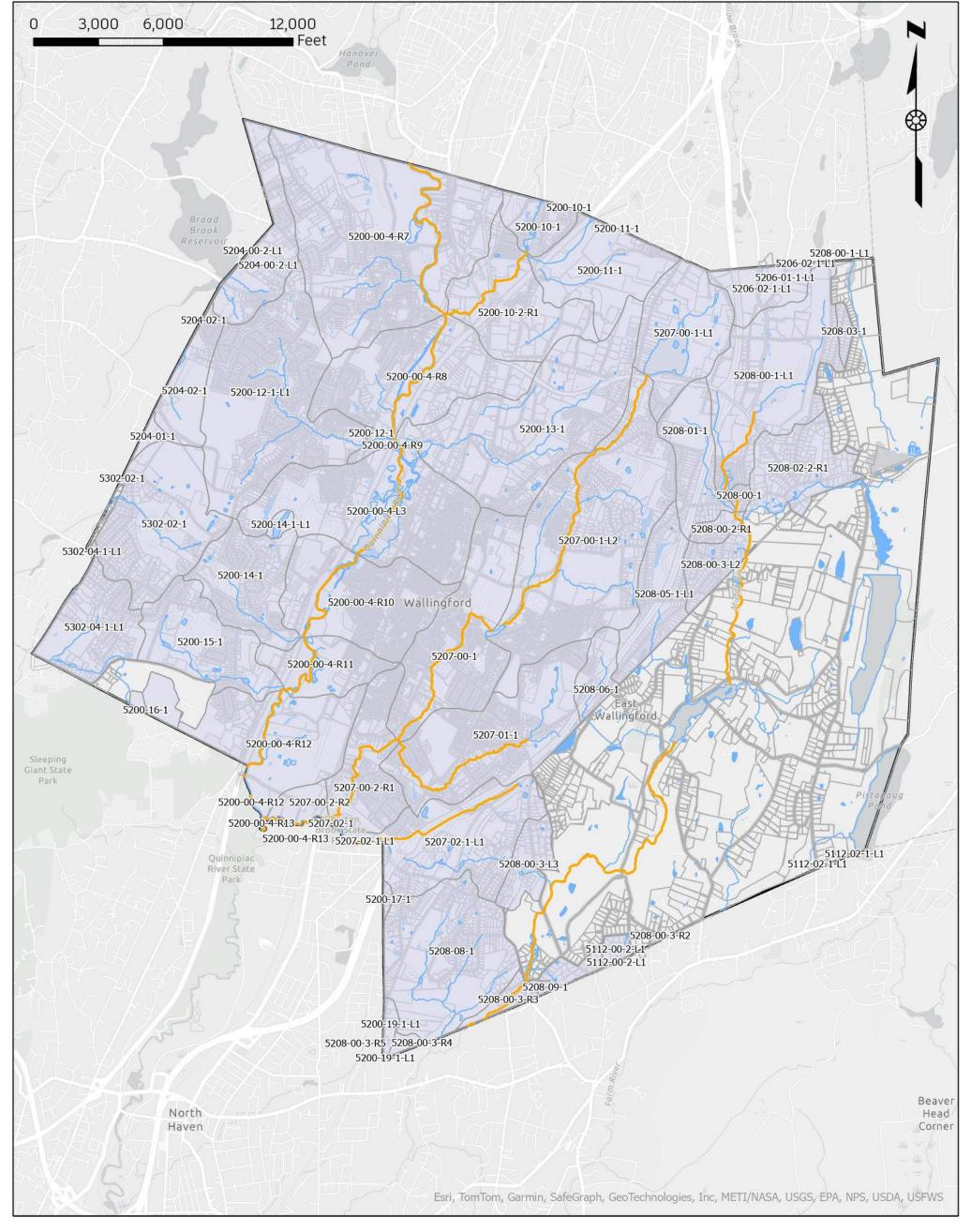






2023 Annual Report DOT Interconnections

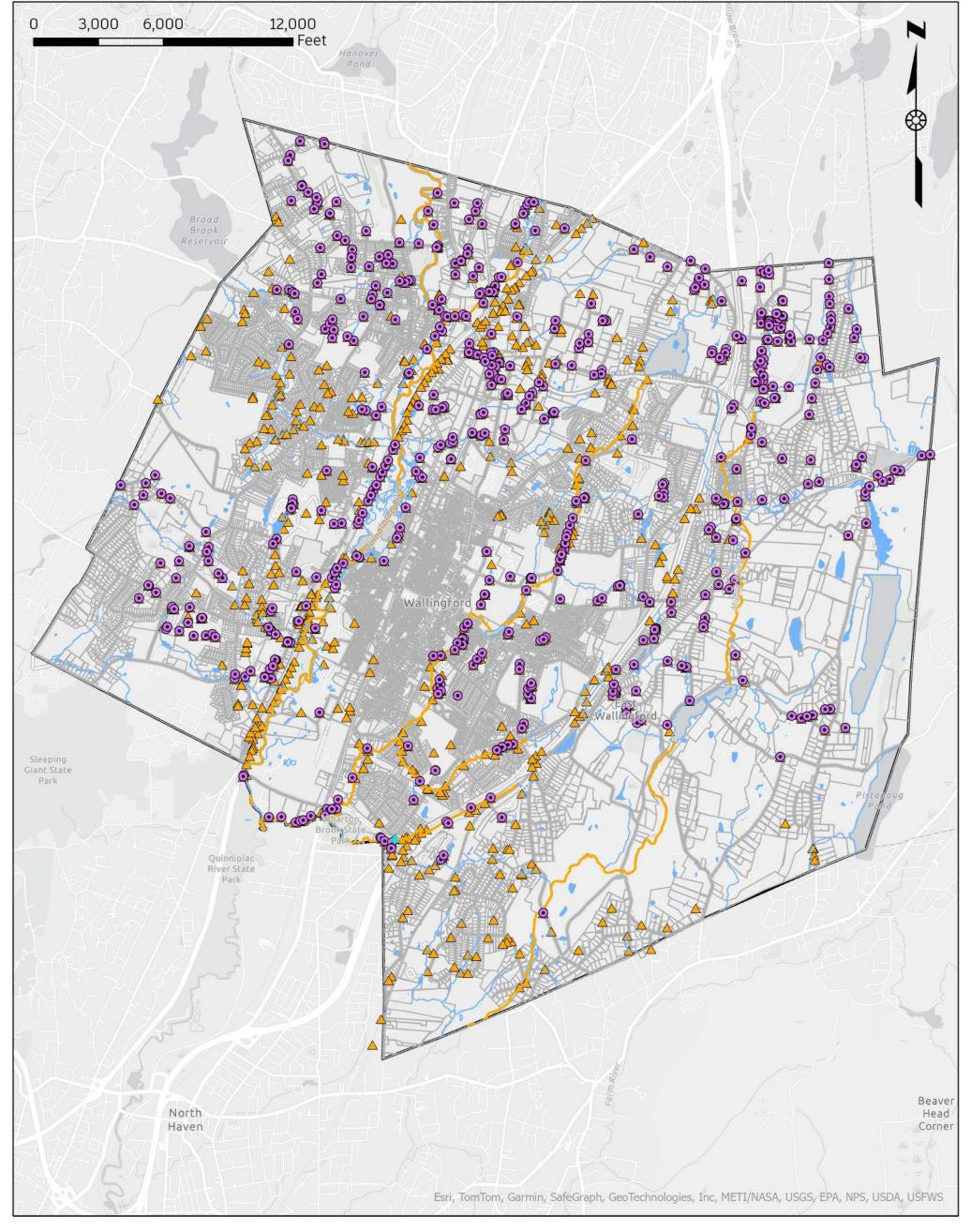


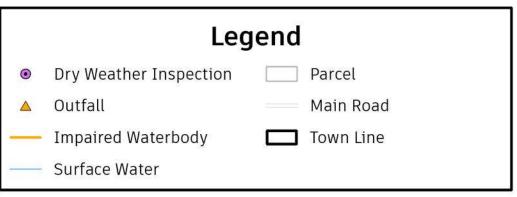




2023 Annual Report Urbanized Areas by Catchment

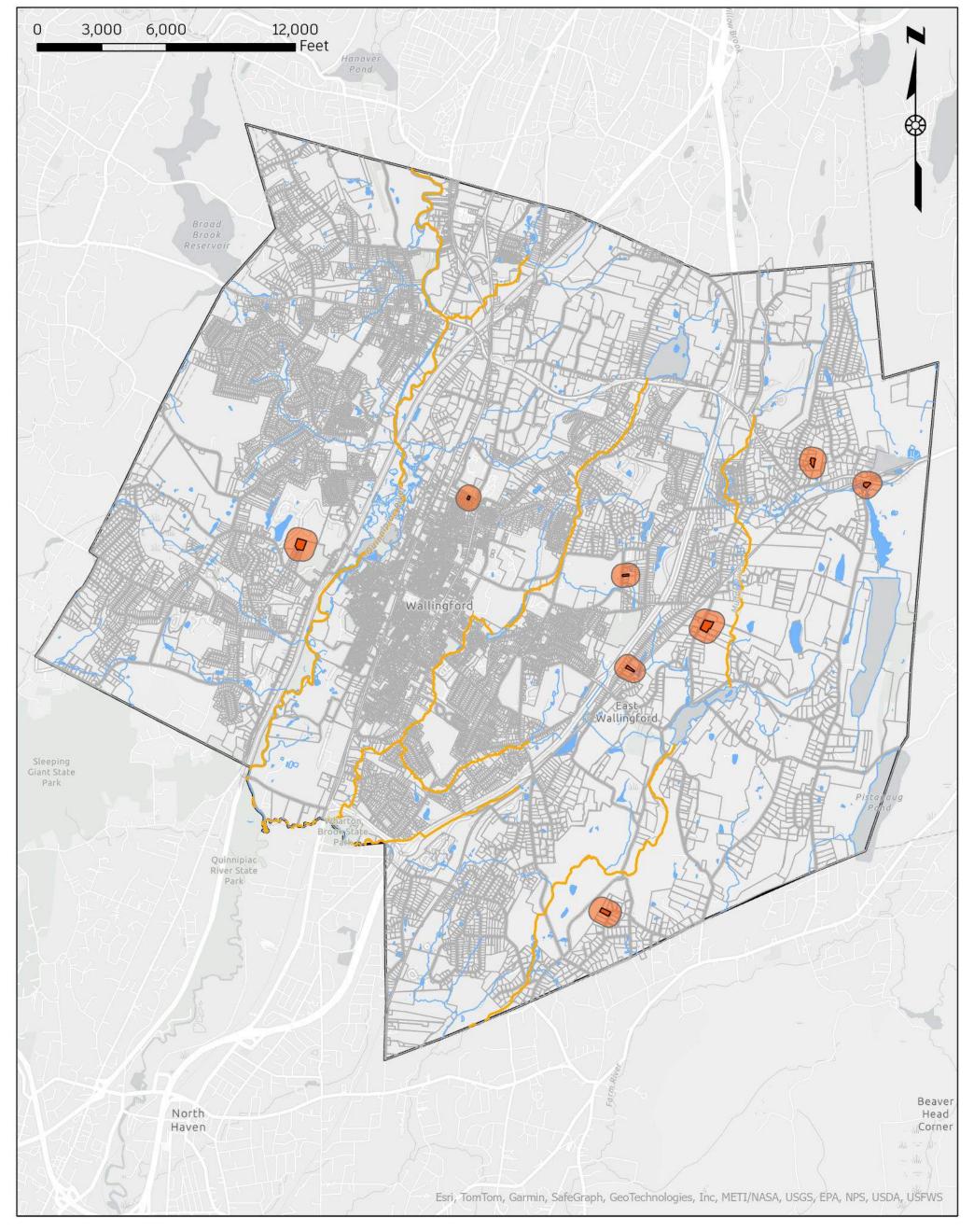


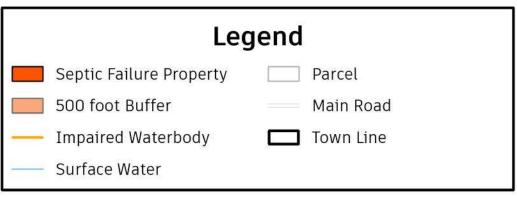




2023 Annual Report Dry Weather Inspections

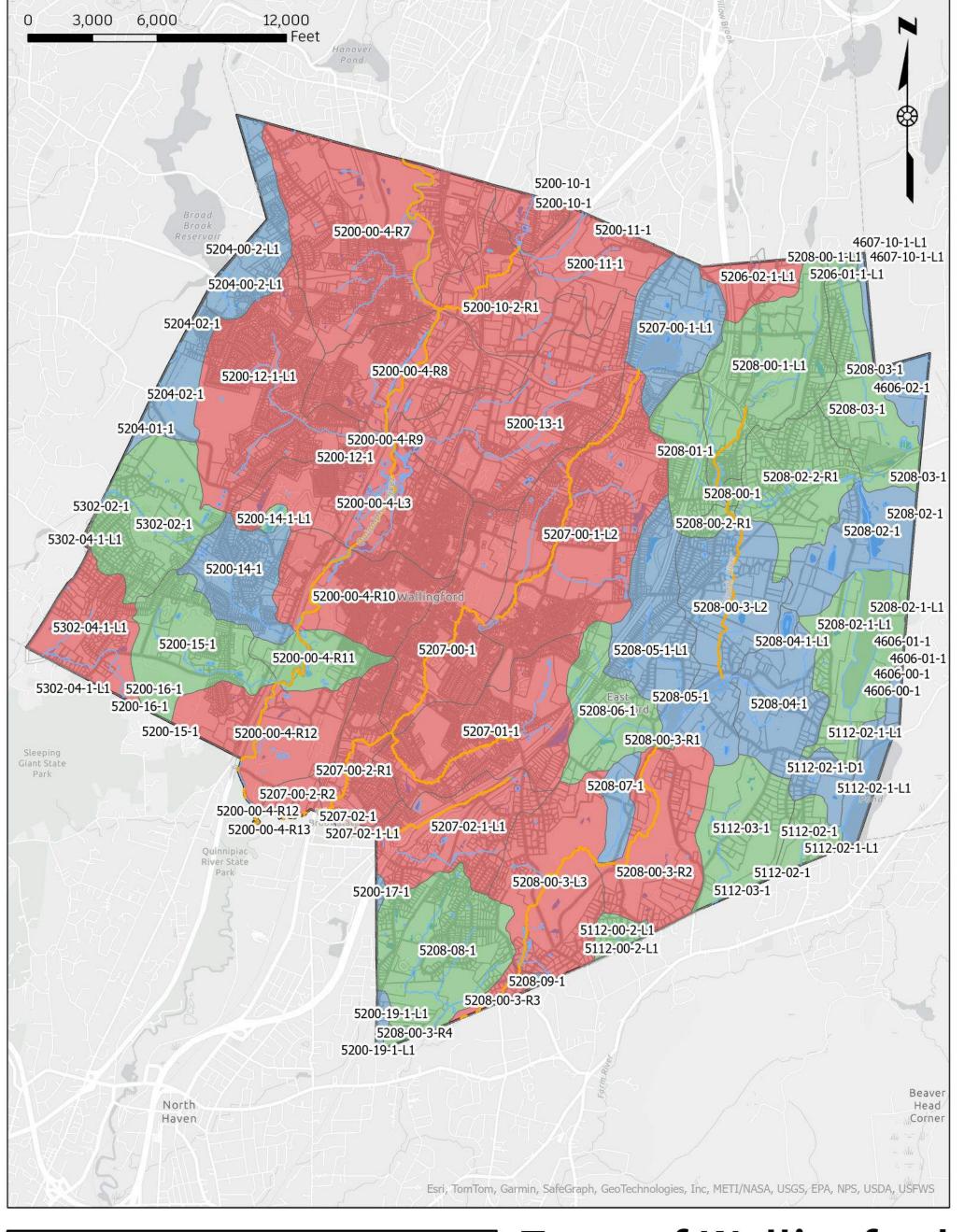






Town of Wallingford 2023 Annual Report Septic Failures







Town of Wallingford 2023 Annual Report Catchment Priority Rankings



APPENDIX I 2023 WET WEATHER SAMPLING RESULTS

Town of Wallingford MS4 General Permit Annual Priority Outfall Sampling

				Field Parameters								Other Paramet	ers
Outfall ID	Inspection Date	Outfall Condition	Discharge Description	Temperature	рН	Dissolved Oxygen	Specific Conductivity	Oxidation- Reduction Potential	Turbidity	Odor?	Phosphorus (mg/L)	Escheriachia Coli	Total Coliforms
QR-6	8/25/23	Good	Light brown tint. Light trickle.	°C 22.2	6.97	mg/L 2.04	uS/cm 492.7	-73.4	72.93	No	1.53	>24,200	>24,200
QR-8	8/25/23	Good	Discharge is clear. Light flow.	22.3	7.17	4.89	408.6	-63.4	13.06	No	0.185	414	>24,200
QR-9	8/25/23		Discharge is brown with suspended organics.	22.2	7	5.82	62.6	-84	75.48	No	1.38	364	>24,200
QR-10	8/25/23	Good	Discharge is clear. Very heavy flow.	22.5	7.8	5.82	543	-70.5	8.19	No	0.097	4,350	>24,200
QR-11	8/25/23	Excellent	Discharge is clear with some foam. Very heavy flow.	22.3	7.18	6.16	56.1	-90.2	16.53	No	0.098	24,200	>24,200
QR-17	8/25/23	Good	Discharge is light brown. High flow.	22.2	7.15	5.71	85.9	-87.5	27.18	No	0.376	>24,200	>24,200
AB-1	8/25/23	Good	Discharge is clear. High flow.	22.3	6.35	4.68	57	-57.4	13.39	No		24,200	>24,200
AB-2	8/25/23		Discharge is clear.	22.1	7.1	5.61	63.4	-78.9	12.63	No		959	>24,200
AB-3	8/25/23	Poor	Disharge is clear. Outfall completely blocked by sediment.	22.4	6.8	5.08	28.8	-73.7	15.7	No		>24,200	>24,200
AB-4	8/25/23	Good	Discharge has a yellow tint. Moderate flow.	22.4	7.18	6.75	55.5	-87.2	18.7	No		4,880	>24,200
MR-1	8/25/23		Discharge is clear.	22.4	6.65	4.97	18.3	-71.5	8.24	No		6,130	>24,200
MR-2	8/25/23	Excellent	Discharge has a yellow tint and minor foam. High flow.	21.8	7.07	6.2	74.1	-78.7	22.23	No		1,470	>24,200

* All highlighted bacterial concentrations are required for follow-up investigations at associated outfall.
*Highlighting is based on the following criteria;

1. E. Coli >235/100mL for Swimming Areas, and >410 col/100mL for all others.

2. Total Coliform > 500 col/100mL

3. Fecal Coliform >31 col/100 mL for Class SA and >260 col/100mL for Class SB

5. Ammonia: >0.5 mg/L

6. Surfactants (MBAS): > 0.25 mg/L

7. Chlorine: detectable level

8. Conductivity: >1,500 uS

9. Sallnity: ≥ 0.5 ppt

10. Nitrogen >2.5 mg/L

11. Phosphorus >2.5 mg/L

12. Turbidity >5 NTU



APPENDIX II 2023 DRY WEATHER INSPECTIONS AND SAMPLING RESULTS

Outfall ID	Inspection Date	Material	Subtype	Diameter (Inches)	Condition	Erosion Control	Notes	Illicit Discharge	Illicit Discharge Flow Type	Illicit Discharge Description	Sample Collection	Longitude	Latitude
OF-713	3/29/2023	Concrete	Endwall	24	Poor	No	Almost completely silted in, some refuse, evidence of some water flow to toe of the slope where storm water infiltrates	No				-72.82606	41.4241
OF-718	3/29/2023	Concrete	Endwall	18	Good	Yes	Little sediment observed in pipe, concrete swale discharging to larger concrete swale which ultimately leads to culvert	No			I	-72.8262	41.42336
OF-719	3/29/2023	Concrete	Endwall	24	Good	Yes	Groundwater infiltration evident, little seepage with algae growth. Drains to concrete swale which feeds larger concrete swale with moving water which feeds into a culvert	No				-72.82619	41.42333
OF-609	3/30/2023	Concrete	Endwall		Good	Yes	Retention basin collecting storm water from neighboring businesses, emergency overflow located above basin	No				-72.76387	41.49673
OF-608	3/30/2023	Concrete	Flared End	48	Fair	No	Sediment buildup and pooling observed. Lots of overgrowth directly on top of flared end, connected to upgradient catch basin located in nearby business (graybar) parking lot, water and sediment observed in catch basin, sample collected	Yes	Low	No color, odor or sheen observed	Yes	-72.76395	41.49466
OF-605	3/30/2023	Concrete	Flared End	36	Good	Yes	Medium-large rip rap surrounding outfall retention basin, some algae observed in pooling, overgrowth and sediment accumulation observed down gradient of oitfall, absorbent boom observed on rip rap	No		-1	-	-72.76316	41.49648
OF-606	3/30/2023	Concrete	Flared End	24	Poor	Yes	Observed mostly buried in sediment and silt, medium-large rip rap observed channeling storm water away from upgradient building, little algae and general refuse observed	No				-72.7624	41.49633
OF-607	3/30/2023	Concrete	Flared End	24	Fair	Yes	OF-607 observed partially submerged in retention basin, medium- large rip rap leading from upgradient to outfall	No				-72.7625	41.49683
OF-610	3/30/2023	Concrete	Other		Fair	Yes	OF-610 36in square outfall partially submerged in retention basin, little sediment observed in and around outfall, medium-large rip rap around outfall, connected to upgradient catch basin located on USPS site, pipe leading from building into catch basin	No				-72.76703	41.49545

OF-921	3/31/2023	Plastic	flared end	16	Fair	No	OF-921 observed with some some sediment accumulation inside and around outfall, sediment and overgrowth preventing flow path	No				-72.79295	41.48767
OF-922	3/31/2023	Plastic	flared end	14	Good	Yes	OF-922 observed clean and free of debris, leads into a dry retention basin, lots of medium sized riprap around basin, overflow pipe observed at opposite end of basin leading into a smaller basin of riprap	No				-72.79292	41.48868
OF-926	3/31/2023	Concrete	flared end	24	Poor	No	OF-926 observed fully buried in sediment, lots of sediment accumulation and brush overgrowth restricting flow path to basin, lots of algae observed in basin	No				-72.79057	41.49038
OF-927	3/31/2023	Concrete	flared end	24	Poor	No	OF-927 observed fully submerged in retention basin, lots of overgrowth, sediment, and algae observed in basin, some riprap observed around outfall	No				-72.79035	41.49053
OF-928	3/31/2023	Concrete	flared end	24	Poor	No	OF-928 observed mostly buried in sediment, lots of overgrowth and debris restricting flow path into retention basin, lots of sediment and algae observed in basin	No				-72.78991	41.49042
OF-861	3/30/2023						OF-861, could not locate outfall, some discoloration and potential flowpath observed on grassy area nearby outfall location, brush and grass debris observed nearby					-72.77568	41.49801
OF-860	3/30/2023						OF-860, could not locate, nearby construction observed, possibly area redone and outfall location relocated, several catch basins observed nearby					-72.77321	41.49698
OF-943	3/30/2023	Plastic	Flared End	16	Fair	No	OF-943 observed with silt some black color, commercial buildings observed nearby, one site appears to be a garage, rubber burning odor and welding observed at garage, staff mentioned that outfall causes severe ponding and flooding of gravel parking lot	Yes	Trickle	Some black sheen observed	Yes	-72.7601	41.49292
OF-942	3/30/2023	Plastic	Flared End	16	Fair	No	OF-942 with lots of overgrowth and organic debris blocking flow path, little seepage from pipe, outfall located in between two commercial properties, strong burning odor/welding observed nearby, little refuse, and 2 unlabeled drums nearby outfall	No				-72.76023	41.49303

OF-919	3/31/2023	Concrete		18	Good	No	OF-919 observed with little silt/sediment accumulation inside pipe, lots of overgrowth observed surrounding outfall	No	 	 -72.79457	41.48692
OF-920	3/31/2023						OF-920, could not locate outfall, lots of overgrowth and sediment accumulation observed, possible that outfall is buried		 	 -72.79443	41.48752
OF-696	4/7/2023	Concrete	other	12	Fair	No	OF-696 observed with minor deterioration at mouth of pipe, lots of algae observed in stream, possible organic sheen observed on storm water, lots of trash and overgrowth observed in flow path, evidence of curb removal taking in runoff	No	 +	 -72.80454	41.44677
OF-697	4/7/2023	Concrete	endwall		Poor	No	OF-697 observed completely silted in, evidence of road construction and curb cutting for run-on observed at outfall location, may have been disconnected from previous catch basin, lots of organic debris and general refuse observed in stream	No	 	 -72.80457	41.4461
OF-555	4/7/2023	Concrete	flared end	24	Good	No	OF-555 connected to culvert (taking inflow) and connected to up gradient catch basin, medium to large rip rap around outfall, some silt and sediment observed in pipe, organic debris and sheen observed in storm water, sheen and metal rust at culvert	No	 	 -72.80276	41.44237
OF-556	4/7/2023	Concrete	flared end	16	Fair	No	OF-556 observed with silt and sediment accumulation and leaf litter around pipe, restricting flow path, little rip rap observed, absorbent berms and sheen observed along downgradient stream	No	 -1	 -72.80258	41.44239
OF-557	4/7/2023	Concrete	other	16	Good	Yes	OF-557 observed with some leaf litter and organic debris nearby restricting flow path, connected to up gradient catch basin	No	 	 -72.80312	41.44294
OF-554	4/7/2023	Concrete	flared end	12	Fair	No	OF-554 observed with silt and sediment accumulation at mouth, leaf littler restricting flow path, lots of algae in stream	No	 +	 -72.80309	41.44363
OF-552	4/7/2023			24	Poor	Yes	OF-552 (metal pipe) observed mostly submerged with deterioration to mouth of pipe, sediment accumulation in pipe, small to medium riprap, lots of algae and organic debris, roof drain inlet from abutting property near outfall	No	 	 -72.80264	41.44384

OF-553	4/7/2023	Plastic	other	4	Fair	No	OF-553 observed with some deterioration at mouth of pipe, curb cut to allow flow, likely connected to manhole and outfall in nearby wooded area	No		 	-72.80245	41.44402
OF-551	4/7/2023	Concrete	flared end	28	Good	No	OF-551 observed with little algae in pipe, lots of algae and organic sheen in stream, two other pipes observed nearby, one adjacent (unknown source) and one connected to nearby pond, nearby concrete block creating ponding (images)	No		 	-72.80258	41.44434
OF-558	4/7/2023	Concrete	other	16	Good	No	OF-558 orange flocculation and little sheen in pipe and runoff, little rill erosion and ponding in abutting properties (soggy ground) connected to upgradient catch basin which is connected to adjacent CB with brick, sheen, and orange flocculation.	Yes	Trickle	 Yes	-72.80381	41.4392
OF-559	4/7/2023		other	18	Fair	No	OF-559 observed with little deterioration to mouth, some sediment accumulation observed in basin, small riprap, connected to manhole cover and catch basin upgradient	No		 	-72.80415	41.43862
LH-16	4/7/2023	Concrete	flared end	16	Good	Yes	Observed with little algae and some sediment accumulation at mouth of pipe, little organic sheen observed in steam, little orange flocculation nearby, asphalt on top of and around outfall, connected to upgradient catch basin	No		 	-72.80561	41.43659
LH-15	4/7/2023	Concrete	flared end	16	Fair	No	Pipe disconnected from flared end, organic sheen and yellow- orange flocculation observed at mouth of pipe, some sediment accumulation observed in stream, connected to upgradient catch basin	No		 	-72.80651	41.43649
LH-14	4/7/2023	Concrete	other	16	Fair	No	Disconnected from final pipe, little organic sheen observed at mouth of pipe, little foam and orange flocculation, sediment accumulation and leaf litter restricting flow	No		 	-72.80746	41.43621
LH-13	4/7/2023	Concrete	flared end	28	Good	Yes	Little algae in pipe, sediment accumulation around outfall and along stream, little foam and organic sheen observed, little medium-large riprap	No		 	-72.80834	41.43584

LH-12	4/7/2023	Concrete	other	12	Fair	No	Little deterioration at mouth of pipe, leaf litter, sediment accumulation and cinder blocks restricting flow, significant ponding nearby due to fallen tree and organic debris restricting flow	No	 	 -72.80839	41.43582
OF-902	4/11/2023	Concrete	endwall	48	Good	Yes	OF-902. Drains into a large retention pond with phragmites. Standing water around the base of the outfall with some algae growth. Falling water could be heard from within the pipe but no flowing water observed. Some trash debris	No	 	 -72.79068	41.48412
OF-903	4/11/2023	Concrete	chflow dissipat	24	Fair	Yes	OF-903. Drains into a large retention pond with phragmites. No standing water at the base of the outfall. Some leaf build up.	No	 	 -72.79078	41.48362
OF-904	4/11/2023	Concrete	endwall	28	Poor	No	OF-904. Outfall 2/3 blocked with leaf litter. Moderate trash debris. Outfall drains into a low forested area with no standing water observed. Erosion paths observed from the outfall.	No	 	 -72.79198	41.48351
OF-909	4/11/2023	Concrete	flared end	30	Excellent	Yes	OF-909. Drains into a drainage swale lined with large cobbles. Some areas of wash out where cobbles are missing further down from the outfall. Very little trash debris.	No	 	 -72.79577	41.48471
OF-893	4/11/2023	Precast	flared end	32	Good	Yes	OF-893. Left. Steel outfall. Drains into a shallow rocky stream with heavy algae growth. Algae growth observed within the outfall pipe and some hgroundwater intrusion with a light running flow of water from the outfall.	No	 	 -72.79867	41.48943
OF-894	4/11/2023	Precast	flared end	32	Poor	Yes	OF-894. Right Steel outfall. Drains into a shallow rocky stream with heavy algae growth. Algae growth observed within the outfall and some groundwater intrusion with heavy running flow of water from outfall. Flared end of the outfall is rusted and torn	No	 	 -72.79868	41.48937
OF-889	4/11/2023	Precast	flared end	32	Fair	Yes	OF-889. Steel construction. Flared end eroded, algae growth on the pipe. drains into a swampy area. Standing water at the base of the outfall. Groundwater intrusion with a light flow of water. Location different than mapped. Mapped spot is a manhole.	No	 	 -72.79852	41.4904
OF-911	4/11/2023	Precast	flared end	24	Fair	Yes	OF-911. Steel. Drains into a a shallow stream bed with running water. Some sediment build up in pipe.	No	 	 -72.79852	41.48489

OF-901	4/11/2023	Concrete	flared end	24	Poor	No	OF-901. Drains into a small stream with excessive algae growth and iron flocking. Sheen from organics on surface. No odor. Pipe almost completely full of standing water and leaf litter.	Yes	Trickle	Cloudy grey water with algae and iron flocking. Unable to investigate upstream CBS - unsafe access.	Yes. Samples collected 4/11/23	-72.80061	41.48208
OF-899	4/11/2023	Concrete	endwall	32	Good	No	OF-899. Flowing water with algae growth. No odors. Flows into wooded area. Some leaf litter berms forming and little trash debris. Actual location on marked screenshot	Yes	Steady	Discharge has excessive algae growth and some grey discoloration. See screen shot of notes for detail for suspected source.	Yes. Collected 4/11/23	-72.8013	41.48256
OF-506	4/11/2023	Concrete	flared end	32	Good	No	OF-506. Two outfalls side by side. Drains into a small detention pond which was dry and mostly grassy. Area fenced and locked - no direct access so diameter unknown. Some grass growing into pipes but otherwise clear.	No				-72.80863	41.48458
OF-501	4/11/2023	Concrete	endwall	19	Fair	No	OF-501. Some sediment and leaf build up around outfall. Some to little trash debris. Pipe 1/3 blocked. Drainage follows ditch along roadside.	No				-72.80894	41.48638
OF-500	4/11/2023	Concrete	endwall	15	Fair	No	OF-500. Drains into a ditch along the roadside which was dry. Some sediment and leaf build up. Some trash debris. Pipe 1/4 blocked.	No				-72.8094	41.48631
OF-502	4/11/2023	Precast	endwall	16	Fair	No	OF-502. Steel pipe. Drains towards and open field area. Some sediment and leaf build up. No standing water but evidence of previously pooled water. Pipe 1/3 blocked with sediment.	No			+	-72.8092	41.48594
OF-604	4/12/2023	Plastic	flared end	24	Fair	Yes	OF-604, organic debris is mouth of outfall, rip rap in good condition, some sediment inside of outfall, located along gravel access road across from New Life Church	No			-	-72.75236	41.49775
OF-1	4/12/2023	Plastic	other	12	Good	No	OF-1; plastic pipe off of roadside; discharges to field; significant sediment buildup and leaf litter blocking outfall discharge area, needs clearing; minor standing water; catch basin filled with leaf litter	No			-	-72.84171	41.51317
OF-603	4/12/2023	Concrete	flared end	24	Poor	Yes	OF-603, organic debris and sediment almost completely blocking mouth, riprap in good condition, located across from 332 high hill road.	No			-	-72.7523	41.49565
OF-602	4/12/2023	Concrete	flared end	24	Poor	Yes	OF-602, mouth of outfall filled in with organic debris and sediment, rip rap in place but covered with sediment and organic debris, located across from 320 high hill rd	No				-72.75228	41.49349

OF-584	4/12/2023	Concrete	flared end	24	Poor	Yes	OF-584, very poor conditions with organic debris completely covering mouth, riprap covered as well, located across the street from 104 high hill road	No		 	-72.75565	41.47848
OF-596	4/12/2023	Concrete	flared end	48	Excellent	No	OF-596, flared end with a stream coming out of it, little sediment in mouth, stream was flowing. Catch basins go directly into culverted stream that feed to outfall, located at intersection of high hill and carpenter	No		 	-72.75334	41.48794
OF-7	4/12/2023	Concrete	flared end	12	Good	Yes	OF-7 lots of riprap, little flow, lots of leaf litter on flow path	No		 	-72.84141	41.50749
OF-6	4/12/2023	Concrete	other	18	Fair	Yes	OF-6; concrete pipe located in wooded area between two residential houses; riprap along sides of pipe and drainage area in the form of small angular cobbles; small pond of foamy water in drainage; possibly connected to storm manhole up road	No		 	-72.84137	41.50759
OF-597	4/12/2023	Concrete	flared end	24	Poor	Yes	OF-597, almost completely filled in with sediment and organic debris, little rip rap, located across from 198 high hill rd	No		 	-72.75255	41.48877
OF-5	4/12/2023	Concrete	flared end	14	Good	Yes	OF-5; concrete outfall connected to catch basin along roadway; riprap in the form of small cobbles along swale; swale flows into small stream in wooded area; leaf litter at flared end	No	-	 	-72.84372	41.5107
OF-599	4/12/2023	Concrete	flared end	32	Fair	Yes	OF-599, organic debris and sediment in mouth, some riprap, located across from 204 high hill road.	No		 	-72.75194	41.49042
OF-600	4/12/2023	Concrete	flared end	24	Fair	Yes	OF-600, mouth of outfall partially blocked with organic debris and minor refuse, rip rap in good condition, located across from house with grey mailbox	No		 	-72.75199	41.49102
OF-598	4/12/2023	Concrete	flared end	27	Fair	Yes	OF-598, some organic debris and sediment in mouth of outfall, rip rap in good condition	No		 	-72.7521	41.48952
OF-2	4/12/2023	Concrete	flared end	24	Good	Yes	OF-2 observed mostly free of debris, lots of medium to large rip rap, little flow, little foam in flow, connected to 2 CB, far CB completely obstructed by leaf litter and organic debris	No		 	-72.84335	41.5114
OF-601	4/12/2023	Concrete	flared end	32	Excellent	Yes	OF-601, mouth cleared of organic debris and sediment, some riprap, located across from intersection of cliff side road and high hill road	No		 	-72.75217	41.49255

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OF-271	4/12/2023	Concrete	other	16	Good	Yes	OF-271 little flow, small to large riprap, some leaf litter and organic debris, little ponding, little algae in flow, connected to CB across the street with inflow at all 4 sides	No			 -72.84033	41.50668
OF-585	4/12/2023	Concrete	flared end	24	Poor	Yes	OF-585, outfall completely filled in and covered with organic debris and sediment, some rip rap, located across from 124 high hill rd	No			 -72.75521	41.48055
OF-12	4/12/2023	Concrete	flared end	24	Excellent	Yes	OF-12; outfall located in wooded area along roadway; riprap in the form of medium sized boulders along edges of discharge area; discharge area is a small pond and mouth of outfall; connected to catch basin on road	No			 -72.83887	41.50513
OF-586	4/12/2023	Concrete	flared end	24	Poor	Yes	OF-586, outfall mostly filled with organic debris, discharge swale is filled with organics and sediment, some rip rap, located across from stone house	No			 -72.75463	41.48247
OF-11	4/12/2023	Concrete	other	16	Good	Yes	OF-11 little flow, small riprap surrounding swale at mouth of discharge pipe, some algae and organic sheen observed, smaller effluent metal pipe observed ~45ft from outfall, significant organic sheen observed here	No	-		 -72.83867	41.50547
OF-587	4/12/2023	Concrete	flared end	40	Excellent	Yes	OF-587, rip rap at mouth of outfall, two outfall pipes exist, one a culverted stream which was discharging, other connected to catch basins no discharge, located to the right of 160 high hill road when looking from outfall, map off but corrected in field	No			 -72.75432	41.48419
OF-10	4/12/2023	Concrete	other	15	Good	Yes	OF-10 some sediment accumulation and organic debris in pipe, little flow, little sheen, flow into bio retention basin	No			 -72.8389	41.50602
OF-590	4/12/2023	Concrete	flared end	32	Poor	Yes	OF-590, located across from 174 high hill road, organic debris and sediment completely covering the mouth, riprap also covered, map was off corrected in field	No			 -72.75371	41.48573
OF-9	4/12/2023	Concrete	flared end	24	Poor	Yes	OF-9; outfall located in woods along road; connected to catch basin; outfall discharges to drainage pond and small stream; flooded with water containing an algae bloom; cobble riprap also buried and/or flooded over	No			 -72.83932	41.50454

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OF-588	4/12/2023	Concrete	flared end	27	Poor	No	OF-588, outfall is under water and filled with sediment, catch basin is backed up and filled with water, located near telephone pole with box that says P5319, appears to discharge into a swampy area so standing water may be a constant	No				-72.7527	41.48483
OF-8	4/12/2023	Concrete	flared end		Poor	No	OF-8 lots of sediment accumulation restricting flow, lots of algae, basin dry, oil sheen observed in connected catch basins	No				-72.84317	41.5056
OF-589	4/12/2023	Concrete	flared end	32	Excellent	Yes	OF-589, excellent condition with no organic debris covering the mouth or riprap	No				-72.75219	41.48449
OF-591	4/12/2023	Concrete	flared end	40	Good	Yes	OF-591, good condition with little organic debris located along riprap, slow flow of water coming out of the mouth, located at the end of the Wisk Key Wind road, flow of water is likely groundwater derived, neighborhood built into hill outfall at bottom	Yes				-72.74638	41.48565
OF-16	4/12/2023	Concrete	flared end	24	Good	Yes	OF-16 little deterioration to flared end, lots of algae in water, organic odor	No				-72.83407	41.50056
OF-591	4/12/2023	Plastic	other	4	Good		Not an outfall, this catch basin has a black plastic pipe discharging into it, the pipe appears to come from 50 Wisk-Key Way, the discharge from this pipe ends up flowing from outfall 591	Yes	Low	Water flowing out of plastic pipe coming from house	Yes, Discharge-1, 9:30	-72.74703	41.48571
OF-14	4/12/2023	Concrete	flared end	18	Fair	Yes	OF-14; outfall located in wooded area adjacent to culvert; rip rap in the form of small angular cobbles along sides of outfall and swale; discharges to small swale connected to culverted stream at the base; minor sediment and leaf litter buildup	No	-			-72.8367	41.50389
OF-13	4/12/2023	Concrete	flared end	16	Good	Yes	OF-13 little flow, medium to large riprap, some leaf litter and sediment accumulation along stream, some sediment accumulation/gravel inside connected CB, nearby culvert	No	-			-72.83664	41.504
OF-272	4/12/2023	Concrete	flared end	12	Excellent	Yes	OF-272; Outfall located in wooded area along road; discharges to drainage swale parallel to road; riprap in the form of small cobbles; riprap extends into outfall pipe; no sediment buildup; connected to catch basin	No				-72.83541	41.50117
OF-17	4/12/2023	Concrete	flared end	14	Good	Yes	OF-17 little flow, lots of algae and organic debris, frog eggs (bubbles) in pipe, riprap swale leading into woods	No				-72.83827	41.49963

OF-20	4/12/2023	Concrete	flared end	12	Good	Yes	OF-20; outfall located in between two residential houses; riprap in the form of medium cobbles around the pipe and into riprap swale to woods; significant sediment and leaf litter blockage; needs clearing; connected to catch basin	No				-72.83806	41.49626
OF-594	4/12/2023	Concrete	flared end	32	Excellent	Yes	OF-594, located in between two houses, rip rap present, small trickle attributed to groundwater, water was clear no odor	Yes	Trickle	Groundwater derived, clear, no odor, could not get picture	No	-72.74807	41.48824
OF-19	4/12/2023	Concrete	other	12	Good	No	OF-19 observed dry, leaf litter and sediment accumulation along swale, owner of abutting property explained that he has cleared out swale several times, very muddy in wet conditions, swale leading into woods	No				-72.83873	41.49515
OF-593	4/12/2023						OF-593, could not access, located behold someone's house. Knocked on door to ask for permission, no answer					-72.74763	41.48931
OF-592	4/12/2023						OF-592, located behind someone's house, knocked on door to ask for permission no one answered, did not look for outfall					-72.749	41.49192
OF-438	4/12/2023	Concrete	endwall	54	Good	No	OF-438 algae/organic debris and bubbles in water, general refuse (3 bags of dog poop), drainage swale/stream flow into woods	No				-72.83483	41.49315
OF-595	4/12/2023	Concrete	flared end	40	Fair	No	OF-595, organic debris covering but not blocking water flow and mouth, no erosion control and swamp-like stream that the mouth discharges into	Yes	Trickle	Discharges into waterbody		-72.75559	41.48805
OF-624	4/12/2023	Plastic	flared end	20	Good	No	OF-624, clear of debris, little to no rip rap in drainage swale	No				-72.759	41.4881
OF-626	4/12/2023	Plastic	flared end	20	Good	No	OF-626, rip rap st mouth of outfall, little sediment and organic debris, outfall comes from a catch basin located next to a retention basin in woods, acres road comes down from driveway	No				-72.75883	41.48824
OF-625	4/12/2023	Concrete	flared end	40	Poor	No	OF-625, very thick brush all around the mouth, no riprap, trickling discharge into a small stream associated with natural stream flow	No				-72.75873	41.48774
OF-623	4/12/2023	Plastic	flared end	20	Excellent	Yes	OF-623, outfall goes into a retention basin, rip rap in good condition, little organic debris, walk down access road, marked with flagging tape	No				-72.7589	41.48853
OF-621	4/12/2023	Plastic	flared end	20	Excellent	Yes	OF-621, outfall goes into a retention basin, rip rap present, not sure this is actual outfall, point on map was in the middle of two pipes	No				-72.76044	41.48936

OF-622	4/12/2023	Plastic	flared end	24	Fair	Yes	OF-622, located about 20 ft in the woods, riprap looks good, some brush covering the mouth area but not blocking it	No		 	-72.76101	41.48941
OF-621	4/12/2023	Plastic	flared end	20	Excellent	Yes	OF-621A, other outfall that could be 621, rip rap present, drains into adjacent retention basin from other 621	No		 	-72.76041	41.48957
OF-948	4/12/2023	Concrete	flared end	36	Good	No	OF-948, partially filled with sediment, organic debris in mouth, no rip rap present, marked with pink tap	No		 	-72.76122	41.4903
OF-947	4/12/2023	Plastic	flared end	24	Poor	No	OF-947, organic debris and sediment covering mouth and also inside catch basin, no riprap	No	+	 	-72.76024	41.49062
on map, sh	4/12/2023	Plastic	flared end	24	Good	Yes	Labeled wrong on map, should be OF-946, mouth and riprap are clear of organic debris, concrete structure in woods receives water from 4 plastic pipe and then flows to OF	No	+	 	-72.7607	41.49069
OF-282	4/12/2023	Precast	flared end	24	Good	Yes	OF-282; aluminum pipe located in wooded area between two residential houses; oxygen bubbles at mouth of outfall from algae; low flow to riprap drainage swale to woods; small cobble riprap; connected to catch basin	No	+	 	-72.83555	41.50547
OF-945	4/12/2023	Plastic	flared end	40	Poor	No	OF-945, organic debris covering entire mouth but not blocking possible water flow, no riprap erosion control	No	-	 	-72.76008	41.49094
OF-944	4/12/2023	Plastic	flared end	32	Good		OF-944, catch basin in woods receives water then discharged to outfall, rip rap present, another OF was there, likely connected to catch basin adjacent to driveway	No		 	-72.76013	41.491
OF-941	4/12/2023	Precast	endwall	12	Good	Yes	OF-941, catch basin located in woods with a hole in side that is the outfall, catch basin also discharges towards OF- 940, rip rap present, location not right, fixed in field	No		 	-72.76108	41.4913
OF-3	4/12/2023	Concrete	other	12		Yes	OF-3; concrete pipe in wooded area adjacent to gravel driveway; small cobble riprap on sides and top of pipe; low flow discharge into natural swale to woods	No		 	-72.83769	41.51307
OF-4	4/12/2023	Concrete	flared end	24	Good	Yes	OF-4; outfall located in woods adjacent to gravel driveway; medium cobble riprap along perimeter of outfall; discharges to natural swale in woods without riprap	No		 	-72.83756	41.51279
OF-941	4/12/2023	Plastic	flared end	32	Good	Yes	OF-941, organic debris covering parts of riprap but not blocking mouth for water flow, an adjacent pipe from 941 discharges into the same riprap as well	No		 	-72.76118	41.49126

OF-612	4/12/2023	Plastic	flared end	24	Fair	Yes	OF-612, refuse in OF, rip rap present, discharges into retention basin, some water in basin	No	-	 	-72.76377	41.49117
OF-611	4/12/2023	1	-		Poor		OF-611, could not locate actual OF, believed that OF is connected to white pipe in retention basin, found what looks to be drainage awake, but OF might be buried		+	 -	-72.76372	41.4914
OF-613	4/12/2023	Plastic	flared end	12	Excellent	Yes	OF-613, plenty of rip rap, OF free of debris, catch basin appears to have some kind of fabric below the grate to catch solids	No	+	 	-72.7638	41.49006
OF-616	4/12/2023	-	-		Poor	Yes	OF-616, outfall is believed to be underneath a tree, could not locate actual pipe, but rip rap drainage and swale indicate the OF is there, catch basin has water	No		 	-72.76256	41.49038
OF-617	4/12/2023	HDPE	flared end	18	Fair	Yes	OF-617, outfall is partially filled with sediment, little rip rap	No		 	-72.76241	41.4904
OF-618	4/12/2023	Plastic	flared end	24	Poor	No	OF-618, no riprap visible, organic debris covering path for waterflow as well as the mouth of the pipe	No		 	-72.76242	41.49031
OF-163	4/12/2023	Concrete	flared end	24	Excellent	Yes	OF-163; outfall located in wooded area adjacent to parking area of industrial facility; small cobble riprap along all sides of outfall and drainage swale; outfall discharges to drainage swale with steep banks towards route 15	No		 	-72.83908	41.45123
OF-620	4/12/2023						OF-620 could not locate outfall, did not want to spend too much time in woods next to facility for little kids			 	-72.7625	41.49002
OF-619	4/12/2023						OF-619 Could not locate outfall, did not want to spend too much time in woods next to facility for children			 	-72.76241	41.48978
OF-164 OF-615	4/12/2023 4/12/2023	Concrete		24	 Poor	No No	OF-164 Not located OF-615, two outfalls, both partially filled with sediment, covered with organic debris, discharge into a stream, one pipe is likely a culverted stream, the other is connected to the catch basin at intersection of carpenter and research	No		 		41.45129
OF-614	4/12/2023	Concrete	flared end	40	Fair	No	OF-614, there are two pipes, one is a culverted stream with flow, the other is connected to the catch basin and is the outfall and has no flow, there is no riprap, goes directly into stream, organic debris covering the mouths of both pipes	Yes		 	-72.76262	41.48799
OF-627	4/12/2023	Concrete	flared end	30	Poor	Yes	OF-627, outfall pipe is separated from flared end, rip rap in mouth of outfall, overgrown, partially filled with sediment	No		 	-72.76097	41.48776

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OF-939	4/12/2023						OF-939, outfall is not accessible, need to go through someone's back yard and outfall is close to interstate 91					-72.76708	41.48808
OF-938	4/12/2023	Concrete	endwall	12	Poor	No	OF-938, organic debris and sediment covering roughly 80 percent of the hole, no riprap and very little area for the water to discharge	No				-72.7679	41.48849
OF-273	4/12/2023	Concrete	flared end	12	Poor	No	OF-273; outfall located in wooded area behind residential houses; outfall pipe broken into 3 pieces and disconnected from system; discharges to small pond with algal bloom and submerged oxygen bubbles; sediment and leaf litter (clear); pipe needs repair	No				-72.83287	41.4994
OF-631	4/12/2023	HDPE	other	6	Good	Yes	OF-631 3 pipes coming from retention basin, rip rap present, slightly blocked by sediment	No				-72.76372	41.48628
OF-630	4/12/2023	Concrete	flared end	30	Fair	Yes	OF-630, partially blocked with organic debris and sediment, wasn't very much riprap	No				-72.7637	41.48656
OF-274	4/12/2023				Poor	No	OF-274; outfall located in the wooded area behind residence; completely buried in downed trees and brush; unknown material; discharges to riprap (small cobbles) drainage swale towards woodland stream; connected to catch basin on street	No				-72.83301	41.49842
OF-633	4/12/2023	Concrete	flared end	24	Fair	Yes	OF-633, some organic debris and sediment covering mouth and riprap	No				-72.76432	41.48476
OF-629	4/12/2023	Concrete	flared end	40	Fair	Yes	OF-629, partially filled with sediment, some refuse, rip rap partially exposed other parts covered, organic debris is mouth, discharge swale goes into pond	No				-72.76334	41.48553
OF-455	4/12/2023	Concrete	flared end		Poor	Yes	OF-455 significant sediment accumulation, pipe almost fully silted in, small to medium riprap along stream, lots of overgrowth at outfall location, flow path into woods	No				-72.83051	41.50176
OF-628	4/12/2023	Concrete	flared end	40	Fair	Yes	OF-628, outfall partially filled with sediment, organic debris and refuse in drainage swale, rip rap covered by sediment	No				-72.76353	41.48488
OF-632	4/12/2023	Plastic	flared end	24	Fair	No	OF-632, drainage pipe was clear of organic debris, some sediment build up at the mouth, no riprap	No				-72.7639	41.48529
OF-275	4/12/2023	Concrete	flared end	36		Yes	OF-275 ponded water with organic sheen/foam, small riprap along drainage swale, flow into woods, small fallen tree on flared end, connected to two CB, CB across the street connected to concrete box with inflow	No				-72.83307	41.49712

OF-276	4/12/2023		other	48	Good	Yes	OF-276; Outfall located on side of road; directs sheetflow towards culverted stream below; asphalt curb acts as erosion control; stream water clear with a steady flow; catch basin directs flow to stream; evidence of new catch basin	No	 	 -72.83001	41.49725
OF-448	4/12/2023	Concrete	flared end	36	Good	Yes	OF-448 some flow, also a culvert, connected to 2 CB, small to large riprap around discharge area, little algae and bubbles,	No	 	 -72.82889	41.49482
OF-636	4/13/2023	Concrete	flared end	40	Good	Yes	OF-636, some organic debris and sediment in mouth of outfall, general refuse is discharge swale, rip rap present, across from auto home and life business	No	 	 -72.76342	41.48281
OF-634	4/13/2023	Plastic	flared end	12	Excellent	Yes	OF-634- across the street looks like recently redone stormwater runoff system, outfall directly across the street from point. Plastic flared end outfall with rip rap erosion control in good condition.	No	 	 -72.76386	41.48391
OF-635	4/13/2023						OF-635, could not locate outfall, there is no pipe from catch basin that goes to where outfall is supposed to be		 	 -72.76338	41.48332
OF-637	4/13/2023	Concrete	flared end	12	Good	Yes	OF-637- concrete flared end outfall with rip rap erosion control in good condition.	No	 	 -72.76406	41.48261
OF-638	4/13/2023	HDPE	flared end	12	Good	Yes	OF-638, some sediment and organic debris in mouth of outfall, discharges in retention basin, some rip rap, two manholes go to outfall	No	 	 -72.76451	41.4826
OF-639	4/13/2023	HDPE	flared end	12	Good	Yes	OF-639, outfall goes into retention basin, series of manholes go to outfall, rip rap present, minor refuse and sediment in mouth	No	 	 -72.76477	41.48266
OF-640	4/13/2023						OF-640, could not access outfall as it is behind a barbed wire fence, found catch basin in woods that drains to outfall		 	 -72.76339	41.4817
OF-277	4/13/2023	Precast	flared end	18	Poor	Yes	OF-277; outfall located in wooded area behind residence; significant rust on the outfall; discharges to riprap (small cobbles) drainage swale to stream; owner of property removed riprap dam in stream last year	No	 	 -72.82829	41.4985
OF-641	4/13/2023						OF-641, located behind an abandoned school, could not access due to fences		 	 -72.76177	41.48205
OF-280	4/13/2023	Concrete	endwall	12	Excellent	Yes	OF-280; concrete outfall located in a culverted stream; connected to catch basin; discharges to culverted stream with gravel bed; manmade stone wall banks; clear water with steady stream	No	 	 -72.8268	41.49879

OF-281	4/13/2023	Concrete	endwall	12	Poor	No	OF-281 lots of sediment accumulation, almost completely silted in, connected to catch basin filled with sediment and leaf litter, little organic sheen in CB, OF adjacent to culvert and OF-280,	No	 	 -72.8268	41.49873
OF-642	4/13/2023						OF-642, could not access, fenced in property that is closed and abandoned		 	 -72.75909	41.48203
OF-646	4/13/2023						OF-646- could not access, fenced in property that is closed and abandoned		 	 -72.76389	41.48016
OF-643	4/13/2023						OF-643, could not access, fenced in property that is closed and abandoned		 	 -72.76132	41.48058
OF-645	4/13/2023						OF-645- could not access, fenced in property that is closed and abandoned		 	 -72.76317	41.47992
OF-644	4/13/2023						OF-644, could not access, fenced in property that is closed and abandoned		 	 -72.7615	41.48058
OF-279	4/13/2023	Precast	endwall	60	Good	Yes	OF-279; aluminum pipe within concrete end wall; connected to catch basin; acts as a culvert and outfall; discharges to concrete drainage canal connected to stream in wooded area behind residences; clear, low flow	No	 	 -72.82601	41.49761
OF-651	4/13/2023	Precast	flared end	36	Good	Yes	OF-651, outfall discharges into a stream, stream was flowing during inspection, rip rap in place, some general refuse	No	 	 -72.76839	41.47971
OF-651	4/13/2023	Precast	endwall	18	Poor	Yes	OF-651, outfall covered and filled with sediment, some rip rap and general refuse	No	 	 -72.76878	41.47927
OF-278	4/13/2023				Poor		OF-278 could not locate, likely buried, owner of abutting property (10 years) hasn't seen outfall, new construction on property, 2 pipes (white and black) from private property into nearby CB. One pipe is curtain drain and one circles foundation		 	 -72.82711	41.49766
OF-652	4/13/2023	Precast	flared end	12	Fair	No	OF-652- corrected location in field, metal flared end outfall on side of road, no erosion control observed	No	 	 -72.76551	41.47586
OF-50	4/13/2023	Concrete	other	24	Good	Yes	OF-50; outfall located in wooded area adjacent to road; concrete pipe connected to catch basin; discharges to riprap (small cobbles) drainage swale pitched downwards towards woods	No	 	 -72.82488	41.5003
OF-647	4/13/2023	Concrete	endwall	18	Good	Yes	OF-647, culverted stream flowing out of outfall into Muddy River, rip rap in place, minor sediment built up in pipe	No	 	 -72.76541	41.47679

OF-649	4/13/2023	Concrete	endwall	48	Good	Yes	OF-649- concrete end wall outfall with rip rap erosion control, flows into a culverted stream that discharges into a muddy river	No	 	 -72.76548	41.47679
OF-648	4/13/2023						OF-648, could not locate outfall, too much brush growth		 	 -72.76538	41.47677
OF-51	4/13/2023				Poor	No	OF-51; could not locate; most likely buried in brush; catch basin on road observed to be completely filled with leaf litter	No	 	 -72.82163	41.50019
OF-655	4/13/2023						OF-655, could not access outfall, located behind someone's house		 	 -72.7679	41.47155
OF-647	4/13/2023						OF-647- could not access, private property		 	 -72.76361	41.46764
QR-4	4/13/2023	Concrete	other	24	Fair	Yes	QR-4; outfall located along bank of Quinnipiac River; discharges to medium cobble riprap drainage swale connected to river; half buried in leaf litter; needs clearing	No	 	 -72.8184	41.49965
OF-658	4/13/2023	Concrete	flared end	20	Good	Yes	OF-658, flared end outfall on side of road in residential area, with rip rap erosion in good condition, flows into wooded area,	No	 	 -72.75988	41.46779
QR-3	4/13/2023	Concrete	endwall	16	Poor	Yes	Lots of sediment accumulation, almost completely silted in, medium to large riprap leading to river, OF connected to bridge, little dog poop bags	No	 	 -72.81862	41.49971
OF-656	4/13/2023						OF-656- unable to locate		 	 -72.76023	41.47289
OF-476	4/13/2023	Concrete	flared end	24	Good	Yes	OF-476 little standing water and organic sheen in basin, small riprap around flared end, storm drain manhole nearby	No	 	 -72.81561	41.50532
OF-653	4/13/2023	Concrete	other	24	Good	No	OF-653- outfall on side of road in residential area, no erosion control observed	No	 	 -72.76362	41.47496
OF-477	4/13/2023	Concrete	flared end	16	Fair	Yes	OF-477; outfall located in wooded area of residential condos; connected to catch basin; discharges to large sediment swale; fenced in; pvc pipe also discharges to same area; flared end filled with sediment and leaves; needs clearing	No	 	 -72.81312	41.50326
OF-582	4/13/2023	Concrete	flared end	24	Fair	No	OF-582- flared end concrete outfall at the end of a dead end road in a residential neighborhood, no erosion control observed, thick brush surrounding it	No	 	 -72.7554	41.47272
OF-583	4/13/2023	Precast	other	12	Poor	No	OF-583- very rusted/ corroded outfall on side of busy road. Flows into a seasonal stream in a wooded area	No	 	 -72.75585	41.46966
OF-581	4/13/2023	Precast	endwall	24	Poor	No	OF-581, outfall discharges into a stream, outfall is almost completely blocked with sediment and organic debris, some refuse, no rip rap	No	 	 -72.75397	41.46993

OF-478	4/13/2023					No	OF-478 curb cut to channel storm water, two 16in metal pipes acting as culvert at outfall location, no nearby catch basins observed, evidence of road construction (CB may have been removed)	No	 	 -72.81203	41.50428
OF-579	4/13/2023	Plastic	flared end	30	Poor	No	OF-579, outfall pipe is broken is several spots, outfall is significantly overgrown and covered with organics, sediment covers mouth of outfall, no rip rap visible	No	 	 -72.74783	41.47187
OF-580	4/13/2023	Plastic	flared end	12	Good	No	OF-580- flared end plastic outfall in wooded ditch next to residential driveway, flows into drainage depression/ basin, no erosion control observed	No	 	 -72.74769	41.47213
OF-578	4/13/2023	-					OF-578 located catch basin and found direction of outflow pipe, could not locate actual outfall, is likely covered with brush and organic debris		 -	 -72.74672	41.47311
OF-479	4/13/2023	Concrete	endwall	16	Good	No	OF-479: 3, 16 in pipes at end wall, two pipes likely connected to culvert across gravel road, OF likely connected to CB in grassy area covered with organic debris, lots of overgrowth, little general reuse (scrap metal) nearby	No	 	 -72.81172	41.50532
QR-2	4/13/2023	Concrete	flared end	24	Good	Yes	QR-2 little flow, little algae on flared end and on pond, some foam, medium riprap, no nearby CB observed, abutting property with piles of gravel and brush, CB may be covered	No	 	 -72.81914	41.50256
OF-568	4/13/2023	Concrete	flared end	24	Fair	Yes	OF-568, outfall partially blocked with organic debris and sediment, rip rap in place, catch basin partially filled with organics	No	 	 -72.74617	41.46813
OF-569	4/13/2023			1			OF-569, unable to locate pipe due to excessive amounts of brush and organic debris		 	 -72.74616	41.46862
OF-570	4/13/2023						OF-570 Unable to locate, catch basin drains downhill into wooded swale/marshland on side of road		 	 -72.74547	41.46936
OF-567	4/13/2023	Concrete	flared end	12	Good	Yes	OF-567- concrete flared end outfall with rip rap erosion control in good condition, flows down hill from street into wooded marshland	No	 	 -72.74603	41.46467
OF-566	4/13/2023						OF-566, could not locate outfall, this is an unpacked road with no catch basins, the outfall appears to be a low spot on the road where runoff goes into the woods		 	 -72.74906	41.46313

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OF-480	4/13/2023				Poor	No	OF-480; outfall located in overgrowth on side of road between commercial plazas; unable to locate; possibly buried in brush and sediment; catch basin on road observed to possibly connect	No	 	 -72.81092	41.50265
OF-573							OF-573, could not locate actual outfall but it is somewhere underneath the pile of brush	1-	 	 -72.74207	41.47024
OF-574	4/13/2023		other				OF-574- hole in the ground filled with water in a wooded marshland next to the road- no other outfall located	No	 	 -72.74028	41.47134
OF-572	4/13/2023						OF-572, outfall appears to be a hole in the ground, no actual pipe can be located, but there are other outfalls in the area that have the same hole in the ground with a sign sticking out of it in line with catch basins	No	 	 -72.74324	41.46999
OF-481	4/13/2023	Concrete	endwall	24	Good	Yes	OF-481 connected to 2 CB, orange flocculation in pipe, riprap along stream, little foam and organic sheen in standing water, 1 small discharge pipe to the left of OF, 1 metal discharge pipe slightly downstream (both 8 in and dry)	No	 	 -72.81328	41.49956
OF-575	4/13/2023		other				OF-575- drainage pond off of street in wooded marshland		 	 -72.74121	41.47147
OF-482	4/13/2023	Concrete	endwall	36	Excellent	Yes	OF-482; outfall located in wooded area near main road and automotive business; discharges to medium cobble riprap drainage swale with low flow water; connected to catch basin; catch basin contains standing water above pipe	No	 	 -72.81338	41.49888
OF-483	4/13/2023	Concrete	endwall	36	Poor	Yes	OF-483; outfall located in brush on side of road; discharges to swale covered in downed brush; sediment and brush buildup around opening; connected to catch basin	No	 	 -72.81338	41.49888
OF-576	4/13/2023	Precast	endwall	24	Fair	No	OF-576, outfall goes under train tracks, no rip rap visible, water covering outfal	No	 	 -72.73665	41.47327
OF-577	4/13/2023	Concrete	flared end	20	Poor	Yes	OF-577, outfall is mostly blocked and covered with sediment and organic debris, rip rap in place	No	 	 -72.73521	41.47339
OF-55	4/13/2023						OF-55 could not locate, lots of riprap alongside hill to railroad tracks, dry swale at bottom of hill		 	 -72.81444	41.49804
OF-57	4/13/2023	Concrete	flared end	12	Poor	No	OF-57; outfall located in wooded area next to road; discharges to small swale with no visible erosion control; outfall filled with leaf litter and general refuse (needs clearing); connected to catch basin across street (filled with debris)	No	 	 -72.81546	41.49766

OF-56	4/13/2023	Concrete	endwall	12	Fair	No	OF-56 lots of sediment accumulation, connected to to CB across street, outfall discharges into dry swale, curb cut near OF to channel SW, may actually be OF-55 (not found near train tracks)	No	 	 -72.81447	41.49796
OF-571	4/13/2023	Concrete	endwall	24	Fair	No	OF-571- concrete end wall outfall, flows under road and into stream in wooded area, the outfall pipe is underwater at the bottom of the wall. Some rip rap erosion control and side wall, catch basins tie into culverted stream under bridge	No	 	 -72.74405	41.4708
OF-58	4/13/2023	Concrete	flared end	16	Fair	No	OF-58 lots of sediment accumulation, connected to CB in grassy area of abutting property, OF discharges into front yard of 515 main st, some rill erosion, leads to culvert	No	 	 -72.81544	41.49624
OF-452	4/13/2023	Precast	endwall	18	Fair	Yes	OF-452; out all located in wooded area between residences; discharges to drainage channel/stream; concrete surrounding outfall; connected to catch basin and in area of culvert	No	 	 -72.82296	41.49552
OF-454	4/13/2023	Precast	endwall	16	Fair	Yes	OF-454; outfall located in wooded area between residences in drainage channel; channel contains small riprap on banks; culvert adjacent; clear, steady stream in water	No	 	 -72.82334	41.49549
OF-451	4/13/2023	Concrete	endwall	12	Fair	Yes	OF-451 disconnected at end, end wall breaking, some sediment accumulation along stream, lots of riprap, little organic sheen in standing water	No	 	 -72.82398	41.49521
OF-450	4/13/2023		flared end	16	Good	No	OF-450 little riprap along stream, algae on stone, 2 other discharge pipes nearby (32 in concrete with flow and 20 in black plastic dry), lots of sediment accumulation and organic sheen near concrete pipe, could not locate source of flow or black pipe	No	 	 -72.82486	41.4954
OF-654	4/13/2023	Precast	endwall	18	Fair	Yes	OF-654, outfall directly from catch basin is an end wall, rip rap present, discharge flows down drainage swale into another pipe, flared end, flared end is buried under brush	No	 	 -72.77053	41.47305
OF-449	4/13/2023	Concrete	endwall	16	Excellent	No	OF-449; outfall located in wooded area to rear of residence; discharges to stream via hill; no riprap visible; connected to catch basin	No	 	 -72.82691	41.49392
OF-662	4/13/2023	Concrete	flared end	24	Good	Yes	OF-662, no organic debris or sediment covering mouth of outfall, some riprap for erosion control	No	 	 -72.7699	41.46716

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OF-663	4/13/2023	Concrete	flared end	12	Good	Yes	OF-663- concrete flared end outfall next to street in residential neighborhood, flows into stream, rip rap erosion control in good condition	No		 	-72.77009	41.46708
OF-665	4/13/2023						OF-665, could not locate outfall pipe, is likely covered by homeowners mulch, discharge is likely into the stream			 	-72.77111	41.46757
OF-664	4/13/2023						OF-664, could not locate actual outfall, likely discharges into stream, located on someone's property and did not want to go on their property			 	-72.77138	41.46781
OF-442	4/13/2023	Concrete	endwall	36	Good	Yes	OF-442; outfall located in wooded culverted stream at corner of two roads; discharges to stream; organic sheen with iron floc in discharge area; large felled tree blocking flown	No		 	-72.82816	41.49238
OF-445	4/13/2023						OF-445 could not locate, likely buried under fallen tree and organ debris, catch basin nearby with standing water and significant organic debris			 	-72.82822	41.49237
OF-661	4/13/2023	Concrete	flared end	12	Good	Yes	OF-661- concrete flared end outfall on side of road, flows into stream in residential neighborhood, rip rap erosion control	No		 	-72.76776	41.46739
OF-443	4/13/2023				Poor	No	OF-443; pitfall located in wooded swale; covered and/or destroyed by felled log; connected to catch basin on road	No		 	-72.82819	41.49235
OF-444	4/13/2023						OF-444 could not locate, likely buried by fallen trees and organic debris, organic sheen and algae in water, culvert nearby			 	-72.82824	41.49236
OF-660	4/13/2023	Precast	endwall	18	Excellent	Yes	OF-660, catch basins go into culvert under bridge, outfall is located underneath bridge inside of a concrete tunnel, rip rap in place, outfall ends up in stream	No		 	-72.76803	41.46515
OF-659	4/13/2023	Concrete	endwall	32	Good	No	OF-659, outfall is inside a tunnel under the bridge next to a stream, no organic debris or sediment covering the mouth of the tunnel	No		 	-72.76796	41.46526
OF-447	4/13/2023	Concrete	other	12	Poor	No	OF-447; outfall located in wooded area by residence; discharges to flat drainage basin with significant sediment buildup; no riprap visible; pipe buried and needs to be cleared	No		 	-72.82557	41.49051
OF-824	4/13/2023	Concrete	other	12	Fair	No	OF-824- outfall flowing from street to stream under a foot bridge in a residential neighborhood, some staining from iron flocculation, no erosion control	No		 	-72.76642	41.46089
OF-822	4/13/2023	Concrete	flared end	24	Poor	Yes	OF-822 outfall is mostly blocked by sediment and organics, some refuse, rip rap in place, drains into swampy area	No		 	-72.7685	41.4625

							OF-473; outfall located				
OF-473	4/13/2023	Concrete	endwall	12	Fair	No	in small wooded basin behind bleachers; discharges to pond with phragmites and trees; algae and organic matter visible; connected to storm manhole	No	 +	 -72.8326	41.48784
OF-823	4/13/2023	Concrete	flared end	24	Poor	No	OF-823, organic debris and sediment covering and partially blocking the mouth of the outfall	No	 	 -72.77137	41.46286
OF-821	4/13/2023						OF-821- unable to access, on residential property and owner was not home		 	 -72.77227	41.46417
OF-820	4/13/2023	Concrete	flared end	24	Poor	Yes	OF-820, outfall is raised above drainage swale, rip rap present, flared end is separated from pipe, slightly overgrown	No	 	 -72.77261	41.46385
OF-434	4/14/2023	Concrete	flared end	12	Good	Yes	OF-434- concrete flared end outfall in residential neighborhood with rip rap erosion control, flows into a wooded area, in good condition	No	 	 -72.83743	41.48931
OF-827	4/14/2023						OF-827, could not locate the outfall, behind someone's fenced in property		 	 -72.76915	41.4563
OF-435	4/14/2023	Concrete	flared end	12	Poor	No	OF-435- concrete flared end outfall, covered in leaf litter and brush, needs to be cleared out, in residential neighborhood, no erosion control area observed	No	 	 -72.83665	41.49001
OF-828	4/14/2023	Concrete	other	12	Poor	No	OF-828, outfall is almost completely blocked with sediment, discharges directly into pond, c at ch basin partially filled with organic debris	No	 +	 -72.76822	41.45751
OF-437	4/14/2023				Poor	No	OF-437; outfall located in wooded area between residences; completely buried in leaf litter and unable to be located; connected to catch basin; catch basin filled with debris	No	 	 -72.83618	41.49054
OF-436	4/14/2023						OF-436- unable to access, behind residential houses, private property		 	 -72.83595	41.48921
OF-850	4/14/2023						OF-850, could not locate outfall, behind someone's house		 	 -72.77322	41.45268
OF-845	4/14/2023						OF-845, could not locate outfall, behind someone's house		 	 -72.77346	41.45191
OF-844	4/14/2023						OF-844, could not access, located behind someone's house, outfall likely discharges into pond		 	 -72.77352	41.45146
OF-841	4/14/2023	Concrete	flared end	24	Good	Yes	OF-841, no organic debris covering outfall, discharge from culverted stream	No	 	 -72.77648	41.44634
OF-474	4/14/2023				Poor	Yes	OF-474; outfall located in woods adjacent to school; discharges to medium stone riprap drainage swale; covered in brush and inaccessible	No	 	 -72.83623	41.48817

OF-441	4/14/2023	Plastic	endwall	12	Good	No	OF-441- plastic outfall pipe going into a concrete end wall located in a wooded area within a residential neighborhood. No erosion control observed around end wall.	No	 	 -72.82965	41.49315
OF-440	4/14/2023	Plastic	flared end	12	Poor	Yes	OF-440; outfall located in wooded wetland area behind residence; discharges to small pond with organic sheen and algae; outfall smashed by felled tree and not usable; small riprap at mouth of outfall	No	 	 -72.82943	41.49368
OF-592	4/14/2023	HDPE	other	4	Fair	Yes	OF-592, outfall location corrected in field, outfall is overgrown and buried in grass, has a metal grate on the end, rip rap in place	No	 	 -72.78471	41.43927
OF-581	4/14/2023	Concrete	endwall	24	Fair	No	OF-581, no riprap erosion control, nothing blocking the mouth of the outfall but a lot of brush surrounding the area, culverted stream flowing into catch basin and out of outfall	No	 	 -72.78652	41.4404
OF-439	4/14/2023						OF-439- unable to access, located in fenced-in backyard of residential house		 	 -72.83097	41.49089
OF-579	4/14/2023	Precast	other	4	Fair	Yes	OF-579, large concrete structure with a square hole in it, metal grate around square hole likely to stop large debris, overgrown and hard to photograph	No	 	 -72.78655	41.44123
OF-850	4/14/2023	Concrete	flared end	30	Good	Yes	OF-850, outfall pipe receives a culverted stream, stream was flowing into outfall during inspection, slightly overgrown, rip rap in place	No	 	 -72.78655	41.44111
OF-578	4/14/2023	Concrete	flared end	24	Poor	No	OF-578, no riprap erosion control, sediment and organic debris build up in the mouth of the outfall	No	 	 -72.786	41.44152
OF-475	4/14/2023	Concrete	endwall	12	Good	Yes	OF-475- concrete end wall outfall behind a football field of a school, flows into a wooded wetland, rip rap erosion control in good condition, connected to stormwater man hole	No	 	 -72.83367	41.48836
OF-840	4/14/2023	Concrete	flared end	24	Fair	No	OF-840, no riprap erosion control, organic debris and sediment in the mouth of the outfall but not blocking it	No	 	 -72.77955	41.44716
OF-843	4/14/2023	Concrete	flared end	24	Fair	Yes	OF-843, outfall is partially blocked by sediment, water sitting in mouth, rip rap not visible in discharge swale, water in catch basin	No	 	 -72.77718	41.44657
OF-842	4/14/2023	Plastic	other	24	Poor	No	OF-842, no riprap erosion control, a log was located directly in front of the outfall as well, and the pipe was steel but there wasn't an option for that in the materials section so I put plastic	No	 	 -72.77637	41.44639

OF-593	4/14/2023					-1	OF-593, could not locate, outfall likely discharges into overgrown area, also the outfall location on the map is incorrect		 		-72.78398	41.43969
OF-472	4/14/2023				Poor	No	OF-472- appears to be completely buried under leaf litter and dirt, next to field of middle school, in wooded area		 		-72.83073	41.48379
OF-594	4/14/2023	Precast	endwall	20	Fair	Yes	OF-594, marked wrong but corrected in field, outfall is mostly blocked with sediment and organics, rip rap in place	No	 		-72.77961	41.43903
OF-597	4/14/2023	Concrete	endwall	24	Poor	No	OF-597, the outfall is a culverted stream, the original outfall location was incorrectly placed, there was organic debris around the mouth and the outfall pipe was submerged	No	 		-72.76688	41.4447
OF-595	4/14/2023	Plastic	other	20	Fair	Yes	OF-595, outfall is partially blocked with sediment, very overgrown, discharges into a pond, rip rap in place, another outfall (end wall) located next to 595	No	 		-72.77583	41.44211
OF-487	4/14/2023					1	OF-487 and OF-488 unable to locate where originally mapped. Behind Lowe's there is a drainage channel and a stormwater drain man hole, outfalls may be buried closer to water level. Rip rap was observed on the side of the channel		 	1	-72.80492	41.49779
OF-596	4/14/2023	Concrete	flared end	30	Excellent	Yes	OF-596, rip rap in place, pitfall not blocked or overgrown, discharges into a swampy area	No	 		-72.7681	41.44792
OF-242	4/14/2023	Concrete	flared end	24	Fair	Yes	OF-242; outfall located adjacent to Lowe's parking lot; discharges to bioretention basin with phragmites; small cobble riprap around perimeter of basin; outfall filled with sediment and needs clearing; waste guard at head of outfall	No	 		-72.80809	41.4959
OF-243	4/14/2023	Concrete	flared end	16	Good	Yes	OF-243- concrete flared end outfall that flows into a bio-retention basin next to Lowe's. Rip rap erosion control in good condition. Connected to stormwater man hole	No	 		-72.80766	41.49594
OF-574	4/14/2023	Concrete	flared end	24	Poor	No	OF-574, no riprap erosion control, mouth was halfway filled with organic debris and sediment	No	 		-72.7883	41.44319
OF-575	4/14/2023	Concrete	flared end	24	Poor	Yes	OF-575, outfall nearly covered by organic debris and sediment, overgrown, rip rap in place, discharges into drainage swale	No	 		-72.78826	41.44348
OF-573	4/14/2023	Concrete	flared end	32	Poor	No	OF-573, no riprap erosion control, organic debris and sediment on the bottom of the outfall but not covering the mouth	No	 		-72.78851	41.443

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OF-572	4/14/2023	Concrete	flared end	24	Excellent	Yes	OF-572, outfall not blocked, a culverted stream running from a metal pipe is next to outfall, stream was flowing	No	 		-72.78881	41.44277
OF-576	4/14/2023						OF-576, found likely location of outfall but could not find the outfall pipe		 		-72.78879	41.44329
OF-577	4/14/2023					1	OF-577, could not locate outfall, outflow pipe from catch basin goes towards overgrown area where outfall is suspected to be		 		-72.78863	41.44417
OF-486	4/14/2023	Concrete	flared end	12	Good	Yes	OF-486- concrete flared end outfall in wooded area that flows into a small retention pond with rip rap erosion control	No	 		-72.81145	41.49715
OF-839	4/14/2023						OF-839, could not locate outfall		 		-72.78488	41.44335
OF-484	4/14/2023			-		-1	OF-484; outfall located at rear of Home Depot; discharges to riprap (small cobbles) drainage swale in woods; inaccessible (behind fencing); connected to catch basin underneath pallets	No	 		-72.81242	41.49604
OF-252	4/14/2023	Concrete	1			-1	OF-252, unable to access due to fence but took pictures from behind fence, looks like a concrete outfall structure, in wooded area behind industrial building		 		-72.81104	41.49398
OF-253	4/14/2023			1		-1-	OF-253- unable to access/ locate, behind fence next to railroad tracks, unable to see through brush		 		-72.81136	41.49381
OF-829	4/14/2023						OF-829, could not locate outfall, no catch basins in road to determine where outfall is, possibly is in overgrown area		 		-72.7732	41.45558
OF-882	4/14/2023	Concrete	flared end	36	Good	Yes	OF-882; outfall located in wooded area adjacent to residence; discharges to riprap (small cobble) drainage swale and into woods; connected to catch basin on road	No	 		-72.80531	41.50266
OF-882	4/14/2023	Plastic	flared end	12	Good	No	OF-882- plastic flared end outfall in residential neighborhood. Flows into a bio retention basin. No erosion control around outfall observed	No	 		-72.80531	41.5027
OF-826	4/14/2023	Concrete	other	30	Good	No	OF-826, outfall discharges into a stream, catch basin outflow pipe goes under train tracks to outfall, outfall was submerged	No	 		-72.77095	41.45689
OF-879	4/14/2023	Concrete	flared end	12	Poor	Yes	OF-879; outfall located at base of hill alongside road; discharges to retention basin with thatch; buried by brush and litter; connected to catch basin in road	No	 		-72.80374	41.50447
OF-878	4/14/2023						OF-878- unable to locate in thick brush down hill beside road, possibly buried or destroyed		 		-72.8033	41.50514

OF-825	4/14/2023	Concrete	other	30	Excellent	Yes	OF-825, catch basin goes to manhole before outfall, a culverted stream runs through the outfall,outfall goes into a stream, no debris or sediment buildup, stream was flowing	No	 	 -72.77132	41.45849
OF-877	4/14/2023	Concrete	flared end	16	Good	Yes	OF-877- concrete flared end outfall on side of street in residential area, flows into heavily wooded area; some rip rap erosion control on sides of outfall; connected to catch basin on road	No	 	 -72.80301	41.50548
OF-831	4/14/2023						OF-831, could not access outfall located in someone's backyard		 	 -72.77891	41.45332
OF-880	4/14/2023				Poor	No	OF-880; outfall discharges to woods along road; completely buried by brush; connected to catch basin immediately adjacent on road; needs to be cleared out	No	 	 -72.80396	41.504
OF-876	4/14/2023	Concrete	flared end	12	Good	Yes	OF-876- concrete flared end outfall on side of road in residential area, connected to catch basin that flows into a heavily wooded area, some rip rap erosion control	No	 	 -72.80219	41.50546
OF-830	4/14/2023	Concrete	flared end	24	Fair	Yes	OF-830, could not get to outfall, located outfall but due to homeowners dog could not get closer, outfall is overgrown and catch basin was covered with organic debris	No	 	 -72.77897	41.45467
OF-686	4/14/2023	Plastic	other	18	Good	No	OF-686, outfall has no rip rap but discharges into a drainage ditch, outfall pipe is metal, catch basin had some standing water	No	 	 -72.78367	41.4553
OF-685	4/14/2023	Concrete	flared end	32	Good	No	OF-685, no riprap erosion control but the mouth is clear of organic debris and sediment with no brush surround the area	No	 	 -72.78261	41.45464
OF-684	4/14/2023	Precast	endwall	30	Excellent	No	OF-684, outfall has a culverted stream running through it, stream was flowing, no rip rap visible, discharge pipe in the middle of culvert under the road, not sure where it comes from	No	 	 -72.78258	41.45466
OF-870	4/14/2023	Precast	other	12	Excellent	Yes	OF-870; outfall located in wooded area alongside road; discharges into steep riprap (small cobbles) drainage swale to stream deeper in woods; connected to catch basin in road	No	 	 -72.79698	41.50211
OF-835	4/14/2023	Concrete	flared end	32	Fair		OF-835, organic debris and sediment in mouth of outfall, no riprap erosion control	No	 	 -72.78149	41.45131
OF-836	4/14/2023	Concrete	flared end	48	Good	No	OF-836, outcall consists of two flared ends,outfall has a culverted stream running through it both pipes, stream was flowing, sediment buildup on bottom of outfall,	No	 	 -72.78161	41.45126

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OF-834	4/14/2023	Concrete	flared end	24	Poor	No	OF-834, almost completely covered in organic debris and sediment, no riprap erosion control	No		 	-72.78175	41.45115
OF-833	4/14/2023	Plastic	flared end	18	Excellent	Yes	OF-833, outfall discharges to drainage swale that leads to stream, rip rap in place, catch basin goes to manhole then to outfall	No	-	 	-72.78187	41.44999
OF-456	4/14/2023	Concrete	flared end	24	Good	Yes	OF-456- concrete flared end outfall on side of road in residential neighborhood that flows down into a wooded rip rap swale and is connected to a catch basin on the road.	No		 	-72.84355	41.48735
OF-838	4/14/2023	Concrete	flared end	24	Fair	Yes	OF-838, small amount of riprap, no organic debris covering the mouth of the outfall, some sediment at the bottom	No		 	-72.78365	41.44982
OF-583	4/14/2023						OF-583, could not access			 	-72.78522	41.44671
OF-582	4/14/2023						OF-582, could not access, catch basins drain to location on map			 	-72.78826	41.44608
OF-411	4/14/2023	Concrete	flared end	24	Good	Yes	OF-411; outfall located in wooded area of trailer park; connected to catch basin in road; discharges to sediment drainage swale; clear sediment and leaf litter buildup; no riprap; flared end detached from pipe	No		 	-72.82944	41.47174
OF-410	4/14/2023						OF-410- unable to locate, possibly buried under brush and leaf litter			 	-72.82944	41.47178
OF-598	4/14/2023	Concrete	other	20	Poor	No	OF-598, outfall marked wrong on map, corrected in field, outfall buried under organic debris, could not see outfall mouth, no rip rap visible	No	-	 -	-72.75861	41.44019
OF-599	4/14/2023	Concrete			Poor	No	OF-599, outfall was completely buried in organic debris and sediment	No		 	-72.75699	41.4399
OF-561	4/14/2023	Plastic	flared end	40	Good	Yes	OF-561, the material of the outfall was metal, no organic debris or sediment covering or blocking the mouth of the outfall, there was some riprap for erosion control	No		 	-72.75504	41.44029
OF-560	4/14/2023	Concrete	flared end	24	Poor	No	OF-560, outfall buried in sediment and organic debris, could not see much of pipe, no rip rap visible	No		 	-72.75601	41.44012
OF-564	4/14/2023						OF-564, could not access, in someone's yard			 	-72.74954	41.43869
OF-781	4/14/2023	Concrete	flared end	12	Fair	Yes	OF-781- concrete flared end outfall in condominium complex area that flows into a small pond with algae, rip rap erosion control around pond.	No		 	-72.81755	41.42204
OF-563	4/14/2023						OF-563, could not locate outfall, catch basin does not have an outflow pipe in the direction of 563, but it has pipes going toward OF-562 and N Branford road			 	-72.75207	41.44107

OF-562	4/14/2023	Concrete	endwall	12	Poor	No	OF-562, organic debris and sediment blocking half of the mouth, no riprap for erosion control, overgrown brush surrounding the area	No	 		-72.75296	41.44102
OF-780	4/14/2023	Precast	flared end	12	Good	Yes	OF-780; outfall located in condo complex; discharges to pond in common area; connects two ponds; ponds contain algae and organic sheen; home for geese	No	 		-72.81782	41.4219
OF-782	4/14/2023				1		OF-782- catch basin in middle of condominiums, between 2 ponds, plastic pipe flowing into it, no other outfall located		 	1	-72.81736	41.42246
OF-565	4/14/2023				ŧ		OF-565, could not access outfall, catch basin goes to manhole, marked in photo with dashed lines the inferred direction to the outfall from manhole based on topography, put pin on manhole		 	ŧ	-72.75306	41.43841
OF-819	4/14/2023	Concrete	flared end	32	Good	Yes	OF-819, was unable to get a front picture of the outfall due to bar wire fencing, nothing blocking the mouth of the outfall and riprap looks good	No	 	+	-72.76053	41.43499
OF-979	4/14/2023	Concrete	flared end	20	Good	No	OF-979- corrected location, next to middle school and flows into a culvert that leads to a wooded area on the other side of the entrance driveway	No	 		-72.81872	41.43325
OF-980	4/14/2023	Concrete	other	12	Poor	No	OF-980- corrected location, next to culvert in front of middle school that flows under entranceway into a wooded area, outfall is full of leaf litter/ partially buried and should be cleaned out	No	 		-72.81876	41.43322
OF-265	4/28/2023	Concrete	endwall	24	Good	No	OF-265. Drains into a shallow wetland area. Area around outfall dry with some leaf litter and little trash debris. Small amount of soil built up in outfall.	No	 		-72.83187	41.46459
OF-264	4/28/2023	Concrete	endwall	24	Poor	No	OF-264. Drains into wetland area with standing water which covers the opening of the outfall completely.	No	 		-72.83168	41.46504
OF-398	4/28/2023	Concrete	endwall	24	Poor	No	OF-398. Drains into wetland area with standing water which covers the opening of the outfall completely.	No	 		-72.83169	41.46501
OF-262	4/28/2023	Concrete	endwall	24	Poor	No	OF-262. Drains into a forested shrub wetland with deep standing water. Outfall is 1/2 blocked with sediment and fully submersed in standing water. Water very clear. Actual location in screenshot.	No	 		-72.83109	41.46595

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OF-124	4/28/2023	Precast	flared end	80	Good	No	OF-124. Drains into a forested shrub wetland with standing water. Standing water in outfall but not completed submersed. Little trash debris. Outfall shape is long and flat	No	 	 -72.83013	41.46744
OF-259	4/28/2023	Concrete	endwall	14	Fair	No	OF-259. Drains into forested shrub wetland with deep standing water. Outfall half blocked with soil and leaf litter. Soil berm built up around opening.	No	 	 -72.82925	41.46885
OF-123	4/28/2023	Concrete	endwall	14	Fair	No	OF-123. Drains into forested wetland with standing water. Outfall half submerged in clear standing water. Soil and leaf litter berm built up around opening keeping water from draining into wetland.	No	 	 -72.82968	41.46819
OF-122	4/28/2023	Concrete	endwall	14	Poor	No	OF-122. Completely blocked with sediment. Would drain into a forested area. No standing water and little wetland veg noted.	No	 	 -72.82875	41.46949
OF-121	4/28/2023	Concrete	endwall	14	Poor	No	OF-121. Completely blocked by sediment and a felled tree which has been piled onto the outfall. Would drain into a forested area with no standing water.	No	 	 -72.8281	41.47052
OF-258	4/28/2023	Concrete	endwall	12	Fair	No	OF-258. Drains into forested area with no standing water. Outfall half blocked by sediment. Slight sediment and leaf litter berm built up around the outfall. No obvious erosion issues further down form the outfall.	No	 	 -72.82773	41.47114
OF-120	4/28/2023	Concrete	endwall	12	Poor	No	OF-120. 2/3 blocked by sediment. Tall sediment and leaf litter berm built up around outfall with collects leaves. Drains into a dry forested area.	No	 	 -72.8272	41.47194
OF-119	4/28/2023	Concrete	endwall	12	Poor	No	OF-119. 2/3 blocked my sediment. Substantial leaf litter build up around outfall. Drains into a dry forested area.	No	 	 -72.82677	41.47264
OF-118	4/28/2023	Concrete	endwall	12	Poor	No	OF-118. Almost completely blocked by sediment. Significant leaf litter berm built up around outfall. Drains into forested area. Eroded dry bed observed to flow towards walking trail and follow the edge of the trail.	No	 	 -72.82592	41.474
OF-117	4/28/2023	Concrete	endwall	12	Poor	No	OF-117. 2/3 blocked by sediment. Leaf litter berm built up around outfall. Drains into a shrubby forested area.	No	 	 -72.82558	41.47462
OF-692	6/5/2023					No	OF-692, could not locate outfall, located manhole directly behind catch basin before the open field		 	 -72.7977	41.45504
WB-21	6/5/2023	Concrete	endwall	36	Excellent	Yes	Concrete endwall with stream of water flowing from pipe.		 	 -72.79813	41.45865
OF-WB-20	6/5/2023	Concrete	flared end	24	Fair	Yes	OF-WB-20, minimal organic debris, good riprap erosion control, no discharge	No	 	 -72.79768	41.45993

WB-19	6/5/2022			I			Cannot lacate			<u> </u>	<u> </u>	-72.79775	41.46006
WB-19	6/5/2023 6/5/2023	Concrete	other	32	Good	Yes	Cannot locate OF-224, good riprap erosion control, outfall is a culverted stream, no organic debris is covering the mouth of	No					41.45773
WB-23	6/5/2023	Concrete	flared end	24	Fair	Yes	the outfall WB-23, outfall was difficult to find because it is hidden in overgrown organic debris, some riprap as well as a black liner	No				-72.80344	41.45613
WB-23	6/5/2023	Concrete	flared end	36	Excellent	Yes	Dual flared end outfalls discharging into a stream in a wooded area.	No				-72.80344	41.45613
OF-16	6/5/2023	Concrete	endwall	18	Poor	Yes	OF-16.1, the outfall is hidden in overgrown organic debris and the erosion control has some outdated riprap and there is a black liner as well	No	+			-72.79699	41.46134
WB-17	6/5/2023		Endwall	84	Excellent	No	Large metal pipe carrying stream under the road and small 24" pipe discharge into a stream in a wooded area	No				-72.79743	41.46099
WB-18	6/5/2023	Concrete	endwall	12	Poor	Yes	Endwall is almost fully blocked on both the discharge end and the catch basin end	No	-1			-72.79747	41.4607
Could not	6/5/2023						Could not locate outfall	1				-72.79685	41.4621
WB-14	6/5/2023	Concrete	endwall	12	Good	Yes	concrete endwall discharges into wooded swale	No				-72.79646	41.46345
Could not	6/5/2023						Could not locate outfall					-72.79666	41.46289
WB-10	6/5/2023						Outfall appears to be covered by heavy leaf litter and vegetation. Erosion control is present in the area which leads me to believe this.					-72.79606	41.46442
OF-226	6/5/2023						OF-226. Area extremely overgrown and unable to traverse					-72.79483	41.46726
OF-227	6/5/2023						OF-227. could not find. area extremely overgrown					-72.79501	41.46748
WB-5	6/5/2023	Concrete	flared end	24	Excellent	Yes	Concrete flared end discharging into a stream	No				-72.79341	41.47262
WB-9	6/5/2023						Could not locate. Steep embankment makes it difficult to find and dangerous to locate		+			-72.79558	41.46531
OF-298	6/9/2023	Precast	endwall	24	Fair	Yes	OF-298. Steel pipe is misshapen. Discharges to a wooded swale adjacent to a house.	No	-			-72.87194	41.46944
OF-299	6/9/2023	Precast	flared end	36	Fair	Yes	OF-299, metal flared end partially rusted out, some rip rap in place, minor organic debris in mouth	No	-			-72.86963	41.46695
OF-297	6/9/2023						OF-297. Discharges into wooded area behind homes. Cannot locate	1				-72.86767	41.46969
OF-296	6/9/2023						OF-296, could not locate outfall. Located on a golf course and did not want to wander around the course					-72.86611	41.47072
OF-300	6/9/2023						OF-300. Located on someone's property, cannot locate.					-72.86811	41.46818
OF-301	6/9/2023						OF-301 did not located outfall. Outfall is behind someone's house and access was not possible					-72.86505	41.46837

OF-302	6/9/2023	Concrete	endwall	30	Excellent	Yes	OF-302. Discharges into wooded stream. High amounts of foam present in the discharge area.	Yes	Steady	Foamy, clear	Collected samples from outfall adjacent to golf course. Could not track source onto golf course due to access restrictions	-72.86356	41.46779
OF-303	6/9/2023	Concrete	other	30	Poor	No	OF-303 mouth of outfall submerged in water and sediment	No				-72.85752	41.46352
OF-305	6/9/2023	Plastic	other	6	Good	No	OF-305. Pipe coming from house discharges into wooded swale.	No				-72.85705	41.46159
OF-304	6/9/2023						OF-304 could not get access to outfall, located behind someone's house					-72.85737	41.46099
OF-327	6/9/2023	Plastic	endwall	12	Excellent	Yes	OF-327. Discharges into riprap adjacent to wooded area.	No				-72.85708	41.45982
OF-329	6/9/2023						OF-329 could not locate actual outfall, found a drainage swale where outfall is believed to discharge					-72.8547	41.45767
OF-328	6/9/2023						OF-328. Very dense vegetation. Could not find outfall. Likely discharges into pond.	-				-72.8554	41.45824
OF-307	6/9/2023	Concrete	flared end	24	Excellent	Yes	OF-307, outfall in excellent condition, rip rap in place, discharges into a stream	No				-72.86028	41.4616
OF-306	6/9/2023	Concrete	flared end	24	Excellent	Yes	OF-306. Flared end discharges into wooded swale/stream	No				-72.86034	41.46171
OF-308	6/9/2023						OF-308 Could not access, backyard fenced off.					-72.86206	41.45982
OF-310	6/9/2023						OF-310 could not get access to outfall. Outfall is likely in woods, made a markup of where location likely is					-72.86256	41.45766
OF-314	6/9/2023						OF-314, could not access outfall, catch basin goes into a manhole which then relays to outfall					-72.86593	41.4558
OF-312	6/9/2023	Concrete	flared end	30	Excellent	Yes	OF-312. Discharges into wooded swale from catch basin	No				-72.86714	41.45669
OF-311	6/9/2023	Concrete	flared end	24	Good	Yes	OF-311 mouth of outfall partially buried in sediment, some rip rap present	No				-72.86723	41.45672
OF-309	6/9/2023						OF-309. Located behind house that we could not access					-72.8652	41.45955
OF-313	6/9/2023						OF-313, could not get access to outfall, behind someone's house					-72.86882	41.45509
OF-320	6/9/2023						OF-320. Could not access the outfall					-72.862	41.45092
OF-317	6/9/2023	HDPE	flared end	18	Excellent	Yes	OF-317 outfall discharges onto rip rap, no obstructions. Comes out of a concrete tank with a metal grate	No				-72.86328	41.45371
OF-315	6/9/2023	Concrete	flared end	30	Good	Yes	OF-315. Stormwater manhole shows concrete pipe leading into a heavily wooded area, outfall is elevated above stream, rip rap present	No				-72.86322	41.45398
OF-319	6/9/2023	HDPE	flared end	28	Excellent	Yes	OF-319 moved location in the field, discharged into rip rap, no obstructions	No				-72.86422	41.45115
OF-318	6/9/2023	Precast	flared end	24	Excellent	Yes	OF-318 excellent condition, rip rap present, moved location in field	No				-72.86403	41.45144

OF-325	6/9/2023	Concrete	endwall	30	Good	Yes	OF-325 Discharges into a	No	 		-72.86025	41.45394
OF-316	6/9/2023	Plastic	flared end	24	Excellent	No	wooded swale OF-316 Flared end discharges into grassy	No	 		-72.86287	41.4537
WB-39	6/12/2023	Concrete	flared end	36	Good	Yes	flat area Rip rap leading to pond; some active flow	No	 		-72.81823	41.4431
OF-211	6/12/2023						OF-211; could not locate due to dense vegetation		 		-72.81841	41.44364
OF-214	6/12/2023	Concrete	flared end	16	Good	Yes	OF-214; Small amount of riprap; discharges to	No	 		-72.81789	41.44413
WB-37	6/12/2023						pond Could not locate in woods		 		-72.81808	41.44479
WB-40	6/12/2023	Concrete	flared end	24	Excellent	No	flared end discharges into grassy area	No	 		-72.8183	41.44298
OF-213	6/12/2023	Concrete	flared end	24	Good	Yes	OF-213; Some rip rap with small amount of washout	No	 		-72.81782	41.4433
OF-212	6/12/2023	Concrete	flared end	24	Poor	Yes	OF-212; End of outfall partially filled with rip rap, small stones and blocked by vegetation	No	 		-72.81782	41.44334
WB-40	6/12/2023	Concrete	flared end	24	Good	No	Discharges to low spot in lawn; no rip rap	No	 		-72.8183	41.44298
OF-858	6/12/2023	Plastic	flared end	24	Poor	Yes	OF-858, Very little riprap, some brush growing in front of outfall, it is the outfall in the middle of the 3	No	 		-72.77433	41.49553
OF-859	6/12/2023	Plastic	flared end	12	Good	Yes	OF-859- plastic flared end outfall, located on the side of a commercial building, flowing into a wooded area. Rip rap erosion control directly below outfall. In good condition	No	 		-72.77426	41.49584
OF-856	6/12/2023						OF-856, outfall inaccessible, overgrown brush covering the area	No	 		-72.77509	41.49435
OF-857	6/12/2023						OF-857- inaccessible/ unable to located, in thick brush next to marshland		 		-72.77491	41.49462
OF-548	6/12/2023						OF-548. Could not locate. connected to catch basin uphill.		 		-72.81234	41.44665
OF-550	6/12/2023	Concrete	flared end	24	Fair	No	OF-550. Discharges into pond. Pipe is partially submerged.	No	 		-72.81125	41.44759
Of-549	6/12/2023	1	-1		1	1	Of-549; could not locate due to dense vegetation; channel with standing water seen deeper in woods		 		-72.81174	41.44736
Of-547	6/12/2023	1	ł		1	-	Of-547; could not locate due to dense vegetation; channel with standing water seen deeper in woods		 	1	-72.81174	41.4474
OF-851	6/12/2023				-		OF-851- unable to locate, on private property		 		-72.77332	41.49498
OF-546	6/12/2023						OF-546. could not locate. Area is not heavily wooded but no		 		-72.81088	41.44815
OF-935	6/12/2023	Concrete	flared end	12	Good	Yes	signs were found. OF-935- concrete flared end in swale on the side of the road next to a commercial building. Some rip rap beneath the outfall.	No	 		-72.7697	41.48679
OF-937	6/12/2023	Concrete		32	Fair	Yes	OF-937, very little rip rap, no organic debris covering the mouth of the outfall	No	 		-72.77012	41.48592
OF-936	6/12/2023	-1-					OF-936- unable to locate, found associated catch basin but no sign of outfall, pipe in catch basin is flowing in the opposite direction		 		-72.76983	41.48632

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OF-934							OF-934- unable to locate, possibly buried under brush and fallen trees					-72.77042	41.48544
OF-931	6/12/2023	Concrete	flared end	24	Poor	No	OF-931, no riprap erosion control, sediment and dirt covering the bottom of the outfall	No				-72.77077	41.4857
OF-933	6/12/2023	Concrete	flared end	24	Poor	Yes	OF-933, outfall was covered in overgrown organic debris as well as the rip rap	No				-72.77201	41.4866
OF-932	6/12/2023	Concrete	endwall	6	Fair	Yes	OF-932- concrete end wall with metal grate on top, behind commercial building next to wooded area. Rip rap erosion control. Some branches and brush around it	No				-72.77213	41.48631
OF-508	6/12/2023						OF-508. No outfall located in area surrounding. Just a catch basin with no outlet pipe.	1				-72.80882	41.48345
OF-507	6/12/2023						OF-507. No outfall located in parking lot area	1				-72.80928	41.48473
OF-670	6/12/2023	Concrete	flared end	24	Fair	No	OF-670, no riprap erosion control, also no organic debris covering the mouth of the outfall	No				-72.78015	41.46975
OF-671	6/12/2023	Concrete	other	12	Good	No	OF-671- concrete structure with metal grate on top and concrete outfall inside. Located in woods at dead end residential area.	No				-72.78043	41.46958
OF-511	6/12/2023						OF-511. Possibly located behind fencing. Cannot locate					-72.80931	41.4822
OF-669	6/12/2023	Concrete	flared end	12	Good	Yes	OF-669- flared end concrete outfall in residential neighborhood flowing into wooded area. Some rip rap erosion control	No				-72.7802	41.46854
OF-516	6/12/2023	Concrete	flared end	24	Good	Yes	OF-516. Discharges into rocky pit adjacent to road. Some damage to concrete on the flared end.	No				-72.80694	41.48097
OF-673	6/12/2023	Concrete	flared end	32	Fair	Yes	OF-673, the riprap is in good condition but there is organic debris beginning to cover the mouth of the outfall	No				-72.78024	41.468
OF-515	6/12/2023	Concrete	flared end	24	Excellent	Yes	OF-515. Discharges into rocky pit adjacent to road from parking lot uphill.	No				-72.80655	41.48094
OF-514	6/12/2023	Concrete	flared end	24	Good	Yes	OF-514. Two flared ends (one almost entirely buried) discharge into a grassy swale that discharges into another outfall downhill.	No				-72.80659	41.48115
OF-672	6/12/2023	Concrete	other		Fair	No	OF-672- concrete box structure with metal grate on top, in wooded area going into marshland. No visible erosion control, surrounded by thick brush	No				-72.78104	41.46814
OF-675	6/12/2023						OF-675-unable to access, on private property					-72.78452	41.46581
OF-800	6/12/2023	Concrete	endwall	24	Excellent	No	OF-800. Located next to a stream culvert. Discharges into the stream.	No				-72.80424	41.47912
OF-687	6/12/2023	Concrete	other	24	Fair	No	OF-687, no riprap erosion control, overgrown organic debris surrounding the area	No				-72.78754	41.4568

OF-689	6/12/2023	Concrete	flared end	12	Poor	No	OF-689- concrete flared end outfall on side of road, covered in vines and brush going into muddy wooded area. Should be cleared out. No visible erosion control	No	 	 -72.78797	41.45667
OF-688	6/12/2023	Concrete	flared end	24	Poor	No	OF-688, outfall from the catch basin in the street, there is no riprap erosion control	No	 -1	 -72.78763	41.45673
OF-691	6/12/2023	Concrete	endwall	12	Poor	No	OF-691, I was unable to get down to the actual outfall so these are the best pictures I was able to take, seems to be an end wall with no erosion control	No	 +	 -72.79136	41.4548
OF-695	6/12/2023	Plastic	other	12	Fair	Yes	OF-695, riprap erosion control is in decent condition, the material is a white plastic	No	 	 -72.80104	41.44975
OF-693	6/12/2023	Precast	flared end	24	Poor	No	OF-693- metal flared end outfall flowing into stream in swale behind condominiums, very rusted/corroded. Steep hill going down into stream with thick brush, hard to take a picture.	No	 	 -72.80012	41.45015
OF-694	6/12/2023	Plastic	other	6	Poor	No	OF-694, very small outfall mouth with no erosion control	No	 	 -72.80049	41.44988
and botton	6/12/2023	Concrete	endwall	48	Good	No	Sand bottom, standing water, discharging into drainage ditch; water slightly foamy; can hear active flow at back of outfall but water is not moving at mouth	No	 -	 -72.81061	41.48568
Of-504	6/12/2023	Concrete	endwall	48	Good	No	Of-504; Sand bottom, standing water, discharging into drainage ditch; water slightly foamy; can hear active flow at back of outfall but water is not moving at mouth	No	 	 -72.81038	41.48518
OF-221	6/12/2023	Concrete	endwall	24	Good	Yes	OF-221- concrete/ stone endwall flowing under road into a rip rap swale with stream	No	 	 -72.80653	41.45053
OF-222	6/12/2023						OF-222, unable to locate exact outfall location but assuming it would discharge into this running stream		 	 -72.80634	41.45084
OF-541	6/12/2023	Precast	other	6	Good	Yes	OF-541- plastic pipe going into catch basin, gravel along the bottom of a hill between 2 catch basins, next to school.	No	 	 -72.80614	41.4579
OF-542	6/12/2023						OF-542- unable to find, stormwater manhole and catch basins but no outfall		 	 -72.80965	41.45744
OF-544	6/12/2023	Concrete	other	12	Fair	No	OF-544, no riprap erosion control, grass growing in the mouth of the outfall	No	 	 -72.81035	41.45558
OF-79	6/12/2023						OF-79. Only found a culvert, no signs of an outfall.		 	 -72.81319	41.48631
OF-543	6/12/2023	Concrete	flared end	24	Good	Yes	OF-543- concrete flared end outfall flowing into stream in small rip rap swale	No	 	 -72.81047	41.45561
OF-78	6/12/2023						OF-78; could not locate; probably supposed to represent other side of culvert (OF-79)		 	 -72.81314	41.48636

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OF-545	6/12/2023						OF-545- unable to locate outfall, catch basin with pipe flowing towards wooded area with thick brush					-72.81107	41.45431
OF-85	6/12/2023	Concrete	other	12	Fair	Yes	OF-85; pipe without end structure discharges from side of drainage ditch parallel to road; some scattered rip rap; some rip rap, veg blocking pipe	No				-72.8191	41.48097
OF-86	6/12/2023						OF-86. Could not locate but possibly located within a wetland area adjacent to parking lot.					-72.82161	41.47961
OF-87	6/12/2023	Concrete	endwall	36	Excellent	Yes	OF-87. Culvert that goes under the road	No				-72.81921	41.47908
OF-526	6/12/2023						OF-526. Could not find. Dense vegetation prevents access. Catch basin in parking lot indicates it is located here.					-72.81633	41.47482
OF-525	6/12/2023						OF-525. Could not locate. Possibly located beyond dense vegetation	1				-72.8158	41.47502
OF-524	6/12/2023	Concrete	flared end	12	Good	Yes	OF-524. Discharges into wooded swale	No				-72.81588	41.47557
OF-530	6/12/2023						OF-530. Possibly located in fenced area. Cannot					-72.81834	41.4743
OF-529	6/12/2023						access OF-529. Could not locate. Either located in dense vegetation or in fenced area					-72.8179	41.47459
OF-528	6/12/2023						OF-528- unable to locate, next to train					-72.81618	41.47284
OF-527	6/12/2023						tracks OF-527, unable to locate outfall at car dealership					-72.81614	41.47279
OF-129	6/12/2023	Plastic	other	14	Poor	Yes	OF-129; Plastic pipe from cb w no end structure; some rip rap, some of which blocks pipe; blue foam sprayed around; discharges to ditch which goes to low wetland	No				-72.82098	41.47048
OF-260	6/12/2023	Plastic	other	12	Good	Yes	OF-260, plenty of riprap in front of the outfall, no organic debris covering the mouth either	No				-72.825	41.46311
OF-127	6/12/2023						OF-127; visible but cannot access; no end structure; discharge to creek					-72.82205	41.47122
OF-261	6/12/2023	Precast	other	6	Fair	No	OF-261- small metal pipe sticking out of the side of a hill going into a wooded area beside a pond, no visible erosion control	No				-72.82528	41.46277
QR-8	6/12/2023						QR-8.2. Could not locate. On private property					-72.8238	41.46665
OF-138	6/12/2023	Concrete	endwall	24	Good	No	OF-138- end wall outfall on the side of a bridge next to a small dam	No				-72.83574	41.4584
QR-10	6/12/2023	Concrete	endwall	24	Good	No	Area is severely eroded. Discharges into eroded basin.	Yes				-72.82474	41.46409
OF-137	6/12/2023						OF-137- unable to locate, potentially down by the edge of the stream that goes down to a damn, catch basin in observed directly across the street					-72.83539	41.45895
OF-144	6/12/2023						OF-144, could not locate outfall					-72.83575	41.45641
OF-143	6/12/2023						OF-143- unable to locate, along the side of a pond, possibly covered in brush					-72.83552	41.45684

OF-343	6/22/2023	Concrete	other	12	Fair	Yes	OF-343, concrete pipe coming out at stream bank, flowing out onto rip rap/boulders. Dry, approx ten ft above surface water.	No		 	-72.8465	41.45103
WB-26	6/20/2023	Precast	endwall	30	Good	No	Concrete opening built into an end wall at the underside of bridge, located 6" above surface water level. Slight groundwater discharge, not illicit.	No		 	-72.81335	41.45193
WB-27	6/20/2023	Concrete	flared end	24	Excellent	No	Concrete outfall set into riprap along side of stream. Dry, clean of debris.	No		 	-72.81329	41.4519
WB-33	6/20/2023	Precast	other	14	Fair	No	Metal pipe,partly flattened coming out of hillside. Located 10 feet from and 5 feet above stream. No fluid or debris in pipe or flowing out of pipe.	No		 	-72.8155	41.44857
WB-32	6/20/2023						Unable to locate outfall, vegetative overgrowth.			 	-72.81505	41.44944
WB-33	6/20/2023	Concrete	other	12	Fair	No	12" diameter concrete pipe, unobstructed interior. No signs of debris or sedimentation.	No		 	-72.81419	41.44924
WB-30	6/20/2023	Concrete	endwall	30	Good	No	Large open outfall ending at 15' long end wall right at and into surface level of stream water. No visible sheen, sediment build up or Debris. Two OFs of similar size and construction are side by said at this location.	No		 	-72.81423	41.44992
WB-30	6/20/2023	Concrete	endwall	30	Good	No	Large open outfall ending at 15' long end wall right at and into surface level of stream water. No visible sheen, sediment build up or Debris.	No		 		41.44998
OF-923 WB-29	6/12/2023	 Concrete	 other	10	 Poor	 No	access, on a cliff face overgrown with brush- behind a commercial building Destroyed	 No	 	 		41.49257
OF-156	6/12/2023	Precast	other	12	Poor	Yes	OF-156- metal outfall flowing out of a hill on the side of the road. Some visibly rusting on the pipe. Flows into rip rap swale OF-923- unable to	No		 	-72.84183	41.4522
OF-157	6/12/2023	Concrete	endwall	40	Fair	Yes	OF-157, outfall is a large concrete end wall with some riprap erosion control	No		 	-72.84203	41.45217
OF-153	6/12/2023						OF-153- unable to locate, on hill side off of road, possibly covered in brush/ buried			 	-72.84058	41.45413
OF-395	6/12/2023	Concrete	flared end	24	Good	Yes	OF-395; riprap present with minor washout; discharges to rip rap ditch; some active flow; take sample from CB	Yes	1	 	-72.83804	41.46626
OF-400	6/12/2023	Concrete	flared end	24	Fair	Yes	OF-400, erosion control in decent shape and little to no organic debris and sediment covering mouth	No		 	-72.84225	41.45846
OF-397	6/12/2023						OF-397 not located; likely in heavily wooded area; some water flowing into inlet/CB in parking lot.			 	-72.83592	41.46456

OF-341	6/22/2023	Concrete	endwall	24	Good	Yes	OF-341, concrete end wall beside large open culvert. Flows onto concrete slab, located 2 feet above surface water elevators.	No	 	 -72.84654	41.45094
OF-344	6/22/2023	+		+			West side of OF-344. (Was not able to access east side due to no trespassing area associated with Oakdale property). Resident at 2 Beryl Lane came out to report that the large culvert beside OF-341 fills to the brim during storms and eroded stream.	-	 	 -72.84574	41.45051
OF-340	6/22/2023	Concrete	endwall	12	Poor	No	OF-340, concrete end wall, 2 feet above ground, rocks at ground beneath. Mid section of pipe, behind 16" of concrete end wall, is sinking by 3".	No	 	 -72.84694	41.45138
OF-376	6/22/2023	Concrete	other	16	Poor	Yes	OF-376, concrete/asphalt pipe, 55% filled with sediment, flows out over large rocks that are covered in layer of sediment and dead leaves.	No	 	 -72.84654	41.45344
OF-377	6/22/2023				Poor		OF-377, outfall may be destroyed. A divot in the hill may be the destroyed outfall.		 	 -72.84628	41.45384
OF-402	6/22/2023	Concrete	flared end	18	Fair	No	OF-402 concrete, flared end, some sediment inside, vegetation around.	No	 	 -72.83886	41.45776
OF-45	6/22/2023	Concrete	endwall	36	Fair	No	OF-45, concrete pipe set into end wall of stone/concrete composite. Gw flowing through and creating stream. Sediment at bottom of pipe.	No	 	 -72.83714	41.47131
OF-392	6/22/2023						OF-392, wooded area, many leaves, could not locate an outfall.		 	 -72.84287	41.46767
OF-390	6/22/2023	Concrete	flared end	12	Good	Yes	OF-390, concrete, flaredend pipe flows out onto rip rap.	No	 	 -72.84271	41.46707
OF-391	6/22/2023	Concrete	flared end	12	Good	Yes	OF-391, concrete, flows onto riprap, some sediment and leaves in pipe. Dry.	No	 	 -72.84295	41.46718
OF-388	6/22/2023	Plastic	other	12	Good	Yes	OF-388, plastic pipe out flowing onto riprap.	No	 	 -72.84322	41.46661
Flared-end	6/22/2023	Concrete	flared end	36	Excellent	Yes	Flared-end concrete outfall into drainage basin, at level with some groundwater.	No	 	 -72.84311	41.46653
OF-382	6/22/2023	1			1		OF-382-overgrown, could not locate the outfall		 	 -72.84557	41.46265
OF-381	6/22/2023	1	1		ł		OF-381, observed gully of outfall, outfall itself was obscured by vegetation.	No	 	 -72.8462	41.46202
OF-350	6/22/2023	Precast	other	10	Poor	No	OF-350, metal pipe with black (rubber?) material lining bottom Of inside of pipe. Outflowing at stream bank approx 10 feet above surface water level.	No	 	 -72.84326	41.44949
OF-349	6/22/2023	Precast	endwall	12	Poor	Yes	OF-349, rusting metal pipe Inset into concrete sidewall, outfalling 2 feet over water level onto large rocks.	No	 	 -72.84367	41.44963
OF-348	6/22/2023						OF-348, area steep and densely overgrown. Was not able to observe outfall.		 	 -72.8437	41.44954

Black plastic	6/22/2023	HDPE	flared end	12	Good	Yes	Black plastic pipe with glare end over large rocks, some dip in ground directly in front of pipe. Dry.	No		 	-72.84559	41.4943
OF-499	6/22/2023	Concrete	flared end	36	Good	Yes	OF-499, two concrete outfall pipes: 24" flared end and 12" round pipe, both flowing onto concrete. A fence barrier is also installed to prevent erosion.	No		 	-72.80934	41.48871
OF-826	9/5/2023						No outfall pipe observed in the catch basin. No outfall found in area.			 		41.45689
OF-863	9/5/2023						No visible pipe in catch basin. Indicated location of outfall is in fenced area.			 		41.49848
OF-865	9/5/2023						No pipe observed in catch basin. Indicated location is behind a fence.			 		41.50044
OF-864	9/5/2023	Concrete	Endwall	24	Excellent	Yes	24" concrete pipe discharges to rip rap swale. There is another concrete pipe at the bottom of the swale that takes overflow across the road into another drainage swale.	No		 	-72.78529	41.49944
OF-604	9/5/2023	Plasstic	Flared End	24	Excellent	Yes	24" plastic flared end discharges into wooded swale from catch basin.	No		 	-72.75236	41.49775
OF-603	9/5/2023						Located on private property. Could not locate.			 	-72.7523	41.49565
OF-602	9/5/2023	Concrete	Flared End	24	Poor	No	24" concrete flared end discharges from catch basin to wooded swale. Flared end is completely blocked by lead litter and debris and needs clearing.	No		 	-72.75228	41.49349
OF-601	9/5/2023	Concrete	Flared End	24	Excellent	No	24" concrete flared end discharges from catch basin into wooded swale with no erosion control. Catch basin is partially blocked by leaf litter.	No	-	 	-72.75217	41.49255
OF-592	9/5/2023	Concrete		24	Fair		24" concrete pipe discharges from catch basin to behind home. Condition is based on catch basin visual which exhibition signs of deterioration in the concrete.	No		 	-72.749	41.49192
OF-593	9/5/2023	Concrete		24	Good		24" concrete pipe discharges from catch basin to behind home. Catch basin visual of pipe shows minor deterioration in the concrete.	No		 	-72.74763	41.48931
OF-594	9/5/2023	Concrete		24	Excellent		24" concrete pipe discharges from catch basin to behind home.	No		 	-72.74807	41.48824
OF-591	9/5/2023	Concrete		18	Excellent		18" concrete pipe discharges from catch basin to wooded area. Wooded area is dense and was unable to locate outfall.	No	-	 	-72.74638	41.48565
OF-589	9/5/2023	Concrete		24	Poor	Yes	25" concrete pipe discharges from catch basin to wooded area. Outfall is believed to be buried underneath tree trimmings and needs to be cleared.	No		 	-72.75219	41.48449

OF-588	9/5/2023	Concrete	Flared End	24	Poor	Yes	24" concrete flared end discharges from catch basin to wooded area. Outfall is completely buried under ground cover and needs to be cleared.	No		 	-72.7527	41.48483
OF-597	9/5/2023	Concrete		12	Poor	Yes	12" concrete pipe discharges from catch basin to wooded area across the street. No signs of the outfall other than a piece of concrete pipe that is the same size sticking up almost vertically. Pipe could potentially be disconnected/broken. wooded area leads to a wetland pond.	No		 	-72.75255	41.48877
OF-598	9/5/2023	Concrete	Flared End	18	Excellent	Yes	18" concrete flared end discharges from catch basin to wooded swale.	No		 	-72.7521	41.48952
OF-599	9/5/2023	Concrete	Flared End	18	Excellent	Yes	18" concrete flared end discharges from catch basin to wooded swale.	No		 	-72.75194	41.49042
OF-600	9/5/2023	Concrete	Flared End	18	Excellent	Yes	18" concrete flared end discharges from catch basin to wooded swale. Excellent erosion control.	No		 	-72.75199	41.49102
OF-590	9/5/2023						Catch basin discharges to wooded area. Could not locate outfall, may be covered with leaf litter.	No		 	-72.75395	41.48531
OF-587	9/5/2023	Concrete		18			18" concrete pipe discharges from catch basin to vegetated area. Vegetation is too high/dense to locate.	No		 	-72.7543	41.48436
OF-586	9/5/2023	Concrete	Flared End	24	Excellent	Yes	24" concrete flared end discharges from catch basin into wooded swale.	No		 	-72.75463	41.48247
OF-586	9/5/2023				Poor	Yes	Catch basin discharges into wooded area. Due to large amounts of leaf litter, outfall was not located. Inside of catch basin is filled with leaf litter and needs to be cleared.	No	-	 	-72.75521	41.48055
OF-584	9/5/2023	Concrete	Flared End	24	Excellent	Yes	24" concrete flared end discharges into wooded swale. Erosion control is minimal.	No		 	-72.75565	41.47848
OF-582	9/5/2023						Stormwater manhole observed. Pipe likely discharges into vegetated low-lying area next to house shown in photo.			 	-72.7554	41.47272
OF-652	9/6/2023						No visible outfall observed. Area is mostly flat and wooded. No erosion control or swales observed in the area. Catch basin was blocked by leaf litter and refuse.	-		 	-72.76595	41.47549
OF-654	9/6/2023	Concrete		18	Excellent	Yes	Could not get close enough to outfall due to dense vegetation. Observed a riprap swale on other side of vegetation. Catch basin visual of 18" concrete pipe shows excellent condition.	No		 	-72.77053	41.47305
OF-662	9/6/2023	Concrete	Flared End	18	Excellent	Yes	18" concrete flared end discharges into wooded stream. Excellent erosion control.	No		 	-72.7699	41.46716

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OF-663	9/6/2023	Concrete	Flared End	24	Excellent	Yes	24" concrete flared end discharges from catch basin to wooded stream. Excellent erosion control present.	No				-72.77009	41.46708
OF-665	9/6/2023	Concrete	Other	60	Excellent	Yes	~60" concrete culvert bringing stream across the street. No catch basin observed on street. Could possibly be a pipe from elsewhere discharging in stream, however none observed due to high vegetation.	No	-			-72.77111	41.46757
OF-664	9/6/2023	Concrete		18	Excellent	Yes	18" concrete pipe (sub type not known due to lack of visual) discharges from catch basin to densely vegetated stream.	No				-72.77138	41.46781
OF-655	9/6/2023			-1			Locates behind home. No catch basin observed on road.		-			-72.7679	41.47155
OF-661	9/6/2023	Concrete	Other	72	Excellent	Yes	72" concrete culvert located in lightly wooded area, transporting a stream under the road. No catch basins or outfalls observed.	No				-72.76776	41.46739
OF-669	9/6/2023	Concrete		18	Excellent		18" concrete pipe discharges from catch basin to behind home.	No				-72.7802	41.46854
OF-670	9/6/2023	Concrete	Flared End	24	Excellent	No	24" concrete flared end discharges from catch basin to wooded area with no erosion control.	No				-72.78025	41.46978
OF-671	9/6/2023	Concrete	Flared End	30	Excellent	No	30" concrete flared end discharges from catch basin in wooded area to wooded swale. No erosion control observed.	No	1	-1		-72.78043	41.46958
OF-673	9/6/2023		ł	1	I	1	Catch basins on street have no discharge pipes. Area indicated is a trail system. No outfall or erosion control was observed in the area.		1	-1		-72.78024	41.468
OF-672	9/6/2023		-	1		1	Catch basins on street have no discharge pipes to follow. Located in area with trails, but not outfalls or erosion control observed.		-			-72.78102	41.46815
OF-674	9/6/2023	Concrete	-	12	Excellent	1	12" concrete pipe discharges from catch basin to landscaped swale next to home. Catch basin visual of pipe shows excellent condition.	No	-			-72.77669	41.46536
OF-677	9/6/2023	Concrete		18	Excellent	1	18" concrete pipe discharges from catch basin to behind home. Catch basin visual of pipe shows it in excellent condition.	No				-72.78163	41.46204
OF-676	9/6/2023						Located at the end of a private driveway. Did not enter.					-72.784	41.46286
OF-675	9/6/2023	Concrete		18	Excellent		18" concrete pipe discharges from catch basin to behind home. Excellent pipe condition observed from inside catch basin.	No				-72.78455	41.46579
OF-687	9/6/2023	Concrete	Flared End	18	Excellent	Yes	18" concrete flared end discharges from catch basin to wooded area. Excellent erosion control observed.	No				-72.78754	41.4568

OF-688	9/6/2023	Concrete	Endwall	18	Excellent	Yes	18" concrete endwall discharges from catch basin to drainage swale. Swale discharges into a pond. Excellent erosion control observed.	No		 	-72.78735	41.4567
OF-689	9/6/2023	Concrete	Flared End	12	Excellent	Yes	12" concrete flared end discharges from catch basin to wooded swale. Good erosion control.	No		 	-72.78797	41.45667
OF-692	9/6/2023						No visual of pipe inside catch basin. Discharges from catch basin to heavily vegetated meadow area.	No		 	-72.7977	41.45504
WB-21	9/6/2023	Concrete		12		Yes	12" concrete pipe discharges to stream with culvert. Could not find outfall pipe, however it points to this area. Pipe condition based on catch basin visual. Excellent erosion control.	No		 	-72.79813	41.45865
OF-541	9/6/2023						No outfall observed. Multiple catch basins in the grass along road, but not discharge pipes visible inside them. There is what appears to be a rip rap drainage swale along a parking lot and soccer field, but no outfall connected to it.			 	-72.8061	41.45788
OF-508	9/6/2023						No outfall in vicinity. Area is a paved parking lot. Multiple catch basins and storm manholes in the parking lot, but no outfalls.			 	-72.80882	41.48345
OF-506	9/6/2023						Manhole leads to fenced drainage area. It appears that multiple catch basins in several parking lots may discharge here.			 	-72.80863	41.48458
OF-369	9/6/2023	Concrete	Flared End	36	Excellent	Yes	36" concrete flared end discharges into wooded rip rap swale. Excellent erosion control.	No		 	-72.85208	41.44182
OF-363	9/6/2023	Concrete	Endwall	18	Excellent	Yes	18" concrete endwall discharges from catch basin to water body. Sampled at 15:00.	Yes	Water discharges into catch basin from unknown source. Found two garden hoses running in adjacent woods (to catch basin) that go underground. Sampled at 15:00.	 	-72.85088	41.44512
OF-303	9/8/2023	Concrete	Flared End	24	Good	Yes	24" concrete flared end discharges into grassy	No		 	-72.85754	41.46351
OF-327	9/8/2023	Plasstic	Endwall	12	Excellent	Yes	swale. 12" plastic pipe discharges from catch basin to rip rap swale. Excellent erosion control.	No		 	-72.85708	41.45982
OF-329	9/8/2023	Concrete					Concrete pipe discharges from catch basin to wooded area. No discharge visible in catch basins.	No		 	-72.8548	41.45769
OF-328	9/8/2023						Likely discharges into a pond behind apartment buildings.			 	-72.8554	41.45824
OF-306	9/8/2023	Concrete	Flared End	24	Excellent	Yes	24" ocnrete flared end discharges into wooded stream. Excellent erosion control.	No		 	-72.86034	41.46171
OF-307	9/8/2023	Concrete	Flared End	24	Excellent	Yes	24" concrete flared end discharges from catch basin to wooded stream. Excellent erosion control.	No		 	-72.86028	41.4616

OF-308	9/8/2023	Concrete		24	Good		24" concrete pipe discharges from catch basin to behind fenced area of home. Pipe visual from catch basin shows some deterioration in the concrete.	No	 	 -72.86206	41.45982
OF-310	9/8/2023	Concrete		18	Good		18" concrete pipe discharges from catch basin to behind home.	No	 	 -72.86256	41.45766
OF-314	9/8/2023	Concrete		12	Excellent		12" concrete pipe discharges from catch basin to behind home.	No	 	 -72.86593	41.4558
OF-312	9/8/2023	Concrete	Flared End	24	Excellent	Yes	24" concrete flared end discharges from catch basin to wooded area.	No	 	 -72.86714	41.45669
OF-311	9/8/2023	Concrete	Flared End	24	Excellent	Yes	24" concrete flared end discharges from catch basin to wooded area across the street. Left outfall in photo.	No	 	 -72.86723	41.45672
OF-309	9/8/2023	Concrete		12	Excellent		12" concrete pipe discharges from catch basin to behind home.	No	 	 -72.8652	41.45955
OF-313	9/8/2023	Concrete		18	Excellent		18" concrete pipe discharges from catch basin to behind home.	No	 	 -72.86882	41.45509
OF-316	9/8/2023	Plasstic	Flared End	18	Excellent	Yes	18" plastic flared end discharges from catch basin to rip rap swale.	No	 	 -72.86287	41.4537
OF-317	9/8/2023						Pipe inside manhole discharges into grassy		 	 -72.86328	41.45371
OF-315	9/8/2023	Plasstic	Flared End	18	Excellent	No	area. 18" plastic flared end discharges from catch basin to grassy swale. No erosion control present.	No	 	 -72.86322	41.45398
OF-319	9/8/2023	Plasstic		24	Excellent		24" plastic pipe discharges from catch basin to heavily wooded area.	No	 	 -72.86467	41.45156
OF-325	9/8/2023	Concrete	Flared End	18	Excellent	Yes	18" concrete endwall discharges from catch basin to wooded swale.	No	 	 -72.86025	41.45394
OF-318	9/8/2023	Plasstic	Flared End	24	Excellent	Yes	24" black plastic flared end discharges from catch basin to rip rap swale in grassy area.	No	 	 -72.86427	41.45168
OF-321	9/8/2023	Concrete		18	Excellent		18" concrete pipe discharges from catch basin to behind home.	No	 	 -72.86053	41.45287
OF-322	9/8/2023	Concrete		18	Good		18" concrete pipe discharges from catch basin to pond behind homes.	No	 	 -72.86052	41.45198
OF-320	9/8/2023	Plasstic		12	Excellent		12" black plastic pipe discharges from catch basin to wooded area.	No	 	 -72.862	41.45092
OF-957	9/8/2023	Concrete		18	Good		18" concrete pipe discharges from catch basin to behind home. Catch basin visual of pipe shows some deterioration in the concrete.	No	 	 -72.85959	41.45032
OF-324	9/8/2023	Concrete	Flared End	18	Fair	Yes	18" concrete flared end discharges from catch basin to rip rap swale. Bottom half of swale has no erosion control and is exhibiting signs of increased erosion.	No	 	 -72.8581	41.4526
OF-323	9/8/2023	Concrete		18	Excellent		18" concrete pipe discharges from catch basin to wooded area.	No	 	 -72.85835	41.45254
OF-958	9/8/2023	Concrete		18	Excellent		18" concrete pipe discharges from catch basin to meadow.	No	 	 -72.85752	41.45037

OF-958	9/8/2023	Concrete		18	Good		18" concrete pipe discharges from catch basin to grassy meadow behind home. Pipe shows signs of deterioration in the concrete from catch basin visual.	No			 -72.85641	41.45054
OF-960	9/8/2023	Concrete		18	Good		18" concrete pipe discharges from catch basin to behind home. Catch basin visual of pipe shoes some signs of deterioration in the concrete.	No		+-	 -72.85592	41.45018
OF-962	9/8/2023	Concrete		12	Excellent		12" concrete pipe discharges from catch basin to behind apartments in wooded area.	No			 -72.85072	41.44883
OF-963	9/8/2023						No outfall found. Manhole present.				 -72.85053	41.44945
OF-964	9/8/2023						Manhole present but no outfall observed.				 -72.85051	41.44961
OF-961	9/8/2023					1	No outfall observed in area. Manhole observed but nearby catch basin has no piping in that direction.		+	+	 -72.85081	41.44832
OF-511	9/8/2023						Cannot see pipe catch basin. Discharges from catch basin into fenced wooded area.	No			 -72.80931	41.4822
OF-507	9/8/2023						Area is a parking lot with no visible outfalls.				 -72.80928	41.48473
OF-516	9/8/2023	Concrete	Flared End	30	Excellent	Yes	30" concrete flared end discharges from catch basin to rip rap swale. Excellent erosion control.	No		ł	 -72.80694	41.48097

Town of Wallingford MS4 Dry Weather Sampling

2023 Dry Weather Analytical Results

				Screening Indicators									
Outfall ID	Inspection Date	Condition	Discharge Description	Chlorine Residual	Ammonia as Nitrogen	MBAS	Conductivitiy	Salinity	Escherichia Coli	Total Coliforms			
					mg/L		umhos/cm	ppt	MPN/1	l00mL			
OF-608	3/30/23	Fair	No color, odor or sheen observed. Low discharge flow.	<0.02	0.38	<0.05	113	16.1	>24,200	>24,200			
OF-903	3/30/23	Fair	Some black sheen observed. Discharge is a trickle.	<0.02	0.65	0.14	21	<0.5	<10	934			
OF-558	4/7/23	Good	Discharge was a trickle. Discharge observed with a sheen and orange flocculation.	<0.02	0.34	<0.05	889	0.5	<10	1,590			
OF-901	4/11/23	Poor	Cloudy grey water with algae and iron flocking. Discharge was a trickle.	<0.02	0.10	<0.10	687	<0.5	<10	86			
OF-899	4/11/23	Good	Discharge has excessive algae growth and some grey discoloration. See screen shot of notes for detail for suspected source. Steady discharge observed.	<0.02	0.07	0.09	761	<0.5	<10	108			
OF-591	4/12/23	Good	Water flowing out of plastic pipe coming from house	<0.02	0.05	<0.05	442	<0.5	<10	557			
OF-302	6/9/23	Excellent	Discharge flow is steady. Observed to be coming from golf course. Discharge is foamy and clear.	0.05	0.09	<0.05	634	<0.5	108	>24,200			
OF-504	6/12/23	Good	Discharge flow is steady. Discharge observed to be slighty foamy.	<0.02	<0.05	0.09	1,060	0.5	488	17,300			
OF-395	6/12/23	Good	Discharge flow is light. Sample collected from catch basin.	<0.02	0.09	0.11	456	<0.5	41	487			
OF-363	9/6/23	Excellent	Discharge flow is steady. Discharge is coming from unknown source	1.14	<0.05	<0.05	265	<0.05	<10	10			

Notes:

* All highlighted bacterial concentrations are required for follow-up investigations.

*Highlighting is based on the following criteria;

1. E. Coli: >235/100mL for Swimming Areas, and >410 col/100mL for all others.

2. Total Coliform: > 500 col/100mL

3. Fecal Coliform: >31 col/100 mL for Class SA and >260 col/100mL for Class SB

4. Enterococci: >104 col/100mL for Swimming Areas and >500 col/100mL for all others.

5. Ammonia: >0.5 mg/L

6. Surfactants (MBAS): > 0.25 mg/L

7. Chlorine: detectable level

8. Conductivity: >1,500 uS

9. Salinity: ≥ 0.5 ppt 10. Turbidity: >5 NTU



APPENDIX III 2023 CATCHMENT ASSESSMENT AND PRIORITY RANKINGS



Field Inspection

Inspector Name: Danielle Whitcomb/Rosie Sibilio **Date:** 12/14/2023

Weather: 40°F, cloudy Outfall ID: AB-1 Priority Ranking: High Catchment ID: 5207-02-1-L1

Impairment: Phosphorous, Nitrogen, E Coli, Total Coliforn, Other (Circle all that apply)

Outfall Information:

Item/Condition to be checked	Observations
Outfall description	The outfall consists of a 12" concrete flared end outfall pipe, discharging directly to the Allen Brook.
Where is the outfall located?	AB-1 is located off of Pond Hill Road and is adjacent to a roadway overpass.
Where does the outfall discharge to?	The outfall discharges directly to Allen Brook.
How many catch basins are connected to the outfall? Where are they located?	Eight (8) catch basins are connected to the outfall. Located on Pond Hill Road.
What is the direction of flow within the catchment.	The flow continues downstream of Allen Brook, eventually discharging to the Quinnipiac River.
What is the primary land use within the catchment?	The north to northeast consists of residential homes. To the south is Interstate-91.
What impervious cover is within the catchment?	Interstate-91 is a major highway crossing through the catchment. A majority of the catchment also consists of residential roads and some wooded areas.

Notes:



Existing Conditions:

Item/Condition to be checked	Yes	No	Notes
Were there any illicit discharges observed at the time of inspection?		X	
Are there any combined sewer systems within the catchment?		X	
Are there any nearby sanitary sewer lines?	X		
Are there any unidentified pipes coming into or going out of any catch basins?	X		An unidentified pipe was observed within the catch basin.
Do any catch basins within the connection exhibit signs of impairment?	X		Catch basins in the area were observed to have significant sediment accumulation.
Any potential MS4 maintenance issues?	X		Catch basins require clean out. Roads should be swept more frequently to prevent sediment accumulation.
Are there any manholes located within the catchment?	X		
Any natural contributors?	X		Potential of pet waste from residential homes.
Are there any business or commercial activities within the catchment that could contribute to outfall impairment?		X	
Any nearby properties with land use / development that could impair the stormwater?		X	
Any additional observations?		X	

Notes:



Connected Catch Basins:

Catch Basin ID	Observations
CB-7306	Contains a single outlet pipe connected to CB-7308.
CB-7308	Contains an inlet pipe from CB-7308 and outlet pipe connected to CB-7310. CB-7309 is also connected via inlet pipe from across Pond Hill Road.
CB-7309	Contains a single outlet pipe connected to CB-7308.
CB-7310	Contains an inlet pipe from CB-7308 and outlet pipe connected to CB-7391. CB-9395 is also connected via inlet pipe from across Pond Hill Road.
СВ-7395	Contains a single outlet pipe connected to CB-7310.
CB-7391	Contains an inlet pipe from CB-7310 and outlet pipe connected to CB-7511. CB-7392 is also connected via inlet pipe from across Pond Hill Road.
CB-7392	Contains a single outlet pipe connected to CB-7391.
CB-7311	Contains an inlet pipe from CB-7391 and an outlet pipe connected of AB-1 across Pond Hill Road.

Contributing Parcels:

Parcel ID	Observations
928693	Single-family residence.
928686	Single-family residence.
928793	Single-family residence.
928694	Single-family residence.
928786	Single-family residence.
928800	Single-family residence.
928811	Single-family residence.
928801	Single-family residence.

ATIAC
TITLITE

928825	Single-family residence.			
928813	Single-family residence.			
928838	Single-family residence.			
928834	Single-family residence.			
928851	Single-family residence.			
928862	Single-family residence.			
928852	Single-family residence.			

Notes: Many of the residences were observed to have evidence of pets. Pet waste in yards or along the Pond Hill Road may contribute to impaired waterbodies. Sediment accumulation was also observed in catch basins connected to AB-1.

Catchment Assessment:

Further investigation needed? ⊠ YES □ NO
The surrounding roads and catch basins of AB-1 were found to have significant accumulation of sediment. No septic failures were reported in the area. Further investigation and sampling of the outfall and connected catch basins is required to determine the source of the bacteria contamination.

TABLE 1

Stormwater Sampling Data

Town of Wallingford MS4

AB-1 Catchment Investigation

						Bacterial						
Outfall ID	Inspection Date	Condition	Discharge Description	Temperature (°C) ⁽³⁾	pH (SU) ⁽³⁾	Dissolved Oxygen (mg/L)	SPC (uS/cm)	ORP (mV)	Turbidity (NTU)	Odor	Escherichia Coli MPN/1	Total Coliforms 00mL
	9/10/2020	Good	Mostly clear, some large floating particles	NA	NA	NA	NA	NA	NA	NA	24,200	>24,200
AB-1	9/1/2021	Good		NA	NA	NA	NA	NA	NA	NA	670	>24,200
	6/7/2022	Fair	Clear	22.1	7.23	5.97	35.9	199.6	9.47	No	1,530	>24,200
	8/25/2023	Good	Clear	22.3	6.35	4.68	57	-57.4	13.39	No	24,200	>24,200

Notes:

* All highlighted bacterial concentrations are required for follow-up investigations.

*Highlighting is based on the following criteria;

*NA = Not Analyzed

- 1. E. Coli >235/100mL for Swimming Areas, and >410 col/100mL for all others.
- 2. Total Coliform > 500 col/100mL
- 3. Fecal Coliform >31 col/100 mL for Class SA and >260 col/100mL for Class SB
- 4. Enterococci >104 col/100mL for Swimming Areas and >500 col/100mL for all others.



Field Inspection

Inspector Name: Danielle Whitcomb / Rosie Sibilio **Date:** 12/14/2023

Weather: 40°F, cloudy Outfall ID: QR-17 Priority Ranking: High Catchment ID: 5200-00-4-R10

Impairment: Phosphorous, Nitrogen, E Coli Total Coliform, Other (Circle all that apply)

Outfall Information:

Item/Condition to be checked	Observations
Outfall description	QR-17 is a 12" concrete flared end outfall pipe.
Where is the outfall located?	QR-17 is located on the western bank of the Quinnipiac River adjacent to the intersection between River Road and the Quinnipiac Street overpass.
Where does the outfall discharge to?	The outfall discharges directly to the Quinnipiac River.
How many catch basins are connected to the outfall? Where are they located?	Catch basins #9308, #9309, and #9310 are connected to QR-17. They are located on River Road and Quinnipiac Street.
What is the direction of flow within the catchment.	Runoff flows southwest towards the Quinnipiac River.
What is the primary land use within the catchment?	Industrial and commercial.
What impervious cover is within the catchment?	Asphalt pavement from River Road and Quinnipiac Street.

<u>Notes:</u> Could not directly access the outfall and the immediately surrounding area due to busy roadway and river crossing.

Existing Conditions:

	Yes	No	Notes
Item/Condition to be checked			
Were there any illicit discharges observed at the time of inspection?		X	
Are there any combined sewer systems within the catchment?		X	



Are there any nearby sanitary sewer lines?	X		
Are there any unidentified pipes coming into or going out of any catch basins?		X	
Do any catch basins within the connection exhibit signs of impairment?		X	
Any potential MS4 maintenance issues?		X	
Are there any manholes located within the catchment?	X		
Any natural contributors?		X	
Are there any business or commercial activities within the catchment that could contribute to outfall impairment?		X	
Any nearby properties with land use / development that could impair the stormwater?		X	
Any additional observations?		X	

Notes:

Connected Catch Basins:

Catch Basin ID	Observations
CB-9310	CB-9310 contains a single outlet pipe connected to CB-0309.
CB-9309	CB-9309 contains an inlet pipe from CB-9310 and an outlet pipe connected to CB-9308.



CB-9308	CB-9308 contains an inlet pipe from CB-9309 and an outlet pipe connected to QR-17.

Contributing Parcels:

Parcel ID	Observations							
1176382	Town-owned land along the Quinnipiac River containing River Road. No buildings or infrastructure was observed.							
1183763	Town-owned land along the Quinnipiac River consisting of Quinnipiac Street.							

Notes:

Catchment Assessment:

Further investigation needed? ⊠ YES □ NO
The outfall is located on a steep embankment between a busy main road (River Road) and the Quinnipiac River, causing it to be difficult to access. Due to the limited access to the outfall, further investigation is required to determine the cause of elevated bacteria levels from the catchment. Atlas recommends sampling the outfall and catch basins connected to it.

TABLE 1

Stormwater Sampling Data

Town of Wallingford MS4 QR-17

Catchment Investigation

Outfall ID	Inspection Date	Condition	Discharge Description	General Parameters								Bacterial	
				Temperature (°C) ⁽³⁾	pH (SU) ⁽³⁾	Dissolved Oxygen (mg/L)	SPC (uS/cm)	ORP (mV)	Turbidity (NTU)	Odor	Escherichia Coli MPN/	Total Coliforms 100mL	
QR-17	9/1/2021	Good		NA	NA	NA	NA	NA	NA	NA	>24,200	>24,200	
	6/27/2022	Good	Brown-yellow tint, clear, foamy	20.4	6.81	7.07	235.9	235.4	21.39	No	>24,200	>24,200	
	8/25/2023	Good	Light brown	22.2	7.15	5.71	85.9	-87.5	27.18	No	>24,200	>24,200	

Notes:

*NA = Not Analyzed

- 1. E. Coli >235/100mL for Swimming Areas, and >410 col/100mL for all others.
- 2. Total Coliform > 500 col/100mL
- 3. Fecal Coliform >31 col/100 mL for Class SA and >260 col/100mL for Class SB
- 4. Enterococci >104 col/100mL for Swimming Areas and >500 col/100mL for all others.

^{*} All highlighted bacterial concentrations are required for follow-up investigations.

^{*}Highlighting is based on the following criteria;

APPENDIX IV 2023 LABORATORY ANALYTICAL REPORTS



Wednesday, August 30, 2023

Attn: Danielle Whitcomb ATC Associates 290 Roberts St., Suite 301 East Hartford, CT 06108

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

SDG ID: GCO82913

Sample ID#s: CO82913 - CO82924

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301 CT Lab Registration #PH-0618 MA Lab Registration #M-CT007 ME Lab Registration #CT-007 NH Lab Registration #213693-A,B NJ Lab Registration #CT-003 NY Lab Registration #11301 PA Lab Registration #68-03530 RI Lab Registration #63 VT Lab Registration #VT11301



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

August 30, 2023

SDG I.D.: GCO82913

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client Id	Lab Id	Matrix
QR-6	CO82913	SURFACE WATER
QR-8	CO82914	SURFACE WATER
QR-9	CO82915	SURFACE WATER
QR-10	CO82916	SURFACE WATER
QR-11	CO82917	SURFACE WATER
QR-17	CO82918	SURFACE WATER
AB-1	CO82919	SURFACE WATER
AB-2	CO82920	SURFACE WATER
AB-3	CO82921	SURFACE WATER
AB-4	CO82922	SURFACE WATER
MR-1	CO82923	SURFACE WATER
MR-2	CO82924	SURFACE WATER



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information **Custody Information Date** <u>Time</u> SURFACE WATER Collected by: JC 08/25/23 7:45 Matrix: ATC-EHDAS Received by: SR1 Location Code: 08/25/23 11:30

Rush Request: Standard Analyzed by: see "By" below

<u>Laboratory Data</u>

SDG ID: GCO82913 Phoenix ID: CO82913

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: QR-6

P.O.#:

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Escherichia Coli	>24200	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SM9223B-16
Total Coliforms	>24200	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SW9223B-16
Phosphorus, as P	1.53	0.050	mg/L	5	08/28/23	LG	SM4500PE-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 30, 2023



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information **Custody Information Date** <u>Time</u> SURFACE WATER Collected by: JC 08/25/23 7:55 Matrix: ATC-EHDAS Received by: SR1 Location Code: 08/25/23 11:30

Rush Request: Standard Analyzed by: see "By" below

<u>Laboratory Data</u>

SDG ID: GCO82913 Phoenix ID: CO82914

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: QR-8

P.O.#:

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Escherichia Coli	414	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SM9223B-16
Total Coliforms	>24200	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SW9223B-16
Phosphorus, as P	0.185	0.010	mg/L	1	08/28/23	LG	SM4500PE-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

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Phyllis Shiller, Laboratory Director

August 30, 2023



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information **Custody Information** Date <u>Time</u> SURFACE WATER Collected by: JC 08/25/23 Matrix: 8:15 ATC-EHDAS Received by: SR1 Location Code: 08/25/23 11:30 Standard

Rush Request: Analyzed by: see "By" below

P.O.#: aboratory Data

SDG ID: GCO82913

Phoenix ID: CO82915

TOWN OF WALLINGFORD MS4 SW SAMPLING Project ID:

Client ID: QR-9

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Escherichia Coli	364	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SM9223B-16
Total Coliforms	>24200	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SW9223B-16
Phosphorus, as P	1.38	0.050	mg/L	5	08/28/23	LG	SM4500PE-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

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Phyllis Shiller, Laboratory Director



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Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information **Custody Information Date** <u>Time</u> SURFACE WATER Collected by: JC 08/25/23 Matrix: 8:35 ATC-EHDAS Received by: SR1 Location Code: 08/25/23 11:30

Rush Request: Standard Analyzed by: see "By" below

<u>Laboratory Data</u>

SDG ID: GCO82913 Phoenix ID: CO82916

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: QR-10

P.O.#:

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Escherichia Coli	4350	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SM9223B-16
Total Coliforms	>24200	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SW9223B-16
Phosphorus, as P	0.097	0.010	mg/L	1	08/28/23	LG	SM4500PE-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

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Phyllis Shiller, Laboratory Director

August 30, 2023



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information **Custody Information Date** <u>Time</u> SURFACE WATER Collected by: JC 08/25/23 Matrix: 8:50 ATC-EHDAS Received by: SR1 Location Code: 08/25/23 11:30

Rush Request: Standard Analyzed by: see "By" below

<u>Laboratory Data</u>

SDG ID: GCO82913

Phoenix ID: CO82917

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: QR-11

P.O.#:

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Escherichia Coli	24200	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SM9223B-16
Total Coliforms	>24200	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SW9223B-16
Phosphorus, as P	0.098	0.010	mg/L	1	08/28/23	LG	SM4500PE-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 30, 2023



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information **Custody Information Date** <u>Time</u> SURFACE WATER Collected by: JC 08/25/23 Matrix: 9:00 ATC-EHDAS Received by: SR1 Location Code: 08/25/23 11:30

Rush Request: Standard Analyzed by: see "By" below

<u>Laboratory Data</u>

SDG ID: GCO82913

Phoenix ID: CO82918

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: QR-17

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Escherichia Coli	>24200	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SM9223B-16
Total Coliforms	>24200	10	MPN/100 mls	10	08/25/23 14:40	PK/KDB	SW9223B-16
Phosphorus, as P	0.376	0.010	mg/L	1	08/28/23	LG	SM4500PE-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

P.O.#:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 30, 2023



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information **Custody Information Date** <u>Time</u> SURFACE WATER Collected by: JC 08/25/23 Matrix: 9:15 ATC-EHDAS Received by: SR1 Location Code: 08/25/23 11:30

Rush Request: Standard Analyzed by: see "By" below

P.O.#: Laboratory Data

SDG ID: GCO82913

Phoenix ID: CO82919

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: AB-1

Result	RL/ PQL	Units	Dilution	Date/Time By Reference
24200	10	MPN/100 mls	10	08/25/23 14:40 PK/KDB SM9223B-16
>24200	10	MPN/100 mls	10	08/25/23 14:40 PK/KDB SW9223B-16
	24200	Result PQL 24200 10	Result PQL Units 24200 10 MPN/100 mls	Result PQL Units Dilution 24200 10 MPN/100 mls 10

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 30, 2023



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information		Custody Inforn	<u>nation</u>	<u>Date</u>	<u>Time</u>	
Matrix:	SURFACE WATER	Collected by:	JC	08/25/23	9:30	
Location Code:	ATC-EHDAS	Received by:	SR1	08/25/23	11:30	
Buch Boguest	Standard	Applyzed by	ooo "Dy" balayy			

Rush Request: Standard Analyzed by: see "By" below

<u>Laboratory Data</u>

SDG ID: GCO82913

Phoenix ID: CO82920

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: AB-2

P.O.#:

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time By Reference
Escherichia Coli	959	10	MPN/100 mls	10	08/25/23 14:40 PK/KDB SM9223B-16
Total Coliforms	>24200	10	MPN/100 mls	10	08/25/23 14:40 PK/KDB SW9223B-16

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 30, 2023



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information Custody Information Date <u>Time</u> SURFACE WATER Collected by: JC 08/25/23 Matrix: 9:40 ATC-EHDAS Received by: SR1 Location Code: 08/25/23 11:30

Rush Request: Standard Analyzed by: see "By" below

Laboratory Data

SDG ID: GCO82913

Phoenix ID: CO82921

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: AB-3

P.O.#:

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time By Reference
Escherichia Coli	>24200	10	MPN/100 mls	10	08/25/23 14:40 PK/KDB SM9223B-16
Total Coliforms	>24200	10	MPN/100 mls	10	08/25/23 14:40 PK/KDB SW9223B-16

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

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Phyllis Shiller, Laboratory Director

August 30, 2023



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information Custody Information Date <u>Time</u> SURFACE WATER Collected by: JC 08/25/23 Matrix: 9:50 ATC-EHDAS Received by: SR1 Location Code: 08/25/23 11:30

Rush Request: Standard Analyzed by: see "By" below

<u>Laboratory Data</u>

SDG ID: GCO82913 Phoenix ID: CO82922

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: AB-4

P.O.#:

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time By Reference
Escherichia Coli	4880	10	MPN/100 mls	10	08/25/23 14:40 PK/KDB SM9223B-16
Total Coliforms	>24200	10	MPN/100 mls	10	08/25/23 14:40 PK/KDB SW9223B-16

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

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Phyllis Shiller, Laboratory Director

August 30, 2023



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

Sample Information Custody Information Date <u>Time</u> SURFACE WATER Collected by: JC 08/25/23 10:00 Matrix: ATC-EHDAS Received by: SR1 Location Code: 08/25/23 11:30

Rush Request: Standard Analyzed by: see "By" below

P.O.#:

Laboratory Data

SDG ID: GCO82913

Phoenix ID: CO82923

Project ID: TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: MR-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time By Reference
Escherichia Coli	6130	10	MPN/100 mls	10	08/25/23 14:40 PK/KDB SM9223B-16
Total Coliforms	>24200	10	MPN/100 mls	10	08/25/23 14:40 PK/KDB SW9223B-16

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 30, 2023



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Analysis Report

August 30, 2023

FOR: Attn: Danielle Whitcomb

ATC Associates

290 Roberts St., Suite 301 East Hartford, CT 06108

SDG ID: GCO82913 Phoenix ID: CO82924

Sample Information **Custody Information** Date Time SURFACE WATER Collected by: JC 08/25/23 10:10 Matrix: ATC-EHDAS Received by: Location Code: SR1 08/25/23 11:30

Rush Request: Standard Analyzed by: see "By" below

TOWN OF WALLINGFORD MS4 SW SAMPLING

Client ID: MR-2

RL/ Parameter Result **PQL** Units Dilution Date/Time Βv Reference Escherichia Coli 1470 10 MPN/100 mls 10 08/25/23 14:40 PK/KDB SM9223B-16 **Total Coliforms** >24200 MPN/100 mls 08/25/23 14:40 PK/KDB SW9223B-16

aboratory Data

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

P.O.#:

Project ID:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 30, 2023



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102

QA/QC Report

August 30, 2023

QA/QC Data

SDG I.D.: GCO82913

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 694424 (mg/L), (QC Samp	ole No:	CO82898	(CO829	13, CC	082914,	, CO829	15, CO	82916,	CO829	17, CC	82918)	
Phosphorus, as P	BRL	0.01	0.146	0.149	2.00	95.5			94.9			85 - 115	20
Comment:													
Additional criteria matrix spike ac	ceptance	range is	s 75-125%.										

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis Shiller, Laboratory Director

August 30, 2023

Wednesday, August 30, 2023

Criteria: CT: GBM, GWP, RC, SWP

Sample Criteria Exceedances Report GC082913 - ATC-EHDAS

State: CT

RL Analysis SampNo Acode Phoenix Analyte Criteria Units

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

^{***} No Data to Display ***



REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. Client: ATC Associates

Project Location: TOWN OF WALLINGFORD MS4 SW S Project Number:

Laboratory Sample ID(s): CO82913-CO82924 Sampling Date(s): 8/25/2023

List RCP Methods Used (e.g., 8260, 8270, et cetera) None

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	✓ Yes □ No
1A	Were the method specified preservation and holding time requirements met?	✓ Yes □ No
1B	<u>VPH and EPH methods only:</u> Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ✓ NA
2	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	✓ Yes □ No
3	Were samples received at an appropriate temperature (< 6 Degrees C)?	☐ Yes ☑ No ☐ NA
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	✓ Yes □ No
5	a) Were reporting limits specified or referenced on the chain-of-custody?	✓ Yes □ No
	b) Were these reporting limits met?	✓ Yes □ No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes 🗹 No
7	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☐ Yes ☑ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.
Authorized Signature: Project Manager Position: Project Manager
Printed Name: Ethan Lee Date: Wednesday, August 30, 2023
Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



RCP Certification Report

August 30, 2023 SDG I.D.: GCO82913

SDG Comments

Temperature above 6C:

The samples were received in a cooler with ice packs. The samples were delivered to the Laboratory within a short period of time after sample collection. Therefore no significant bias is suspected.

No RCP analyses are included with this report. The RCP narrative is provided at the request of the client.

Wet Chemistry Analysis

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

BECKMAN DU720 #2 08/28/23-4 Logan Gregory, Chemist 08/28/23

CO82913, CO82914, CO82915, CO82916, CO82917, CO82918

QC (Batch Specific):

Batch 694424 (CO82898)

CO82913, CO82914, CO82915, CO82916, CO82917, CO82918

All LCS recoveries were within 85 - 115 with the following exceptions: None.

Additional criteria matrix spike acceptance range is 75-125%.

Temperature Narration

The samples were received at 8.3C with cooling initiated. (Note acceptance criteria for relevant matrices is above freezing up to 6°C)

									Coolant: IF	Cooler: Yes No
		Î		さ	CHAIN OF CUSTODY RECORD	TODY R	ECORD		Temp &,3 °C	
				587 East Mi	87 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040	Box 370, Ma	anchester, CT 06	040	Data Delivery/C	Data Delivery/Contact Options:
Environment	Environmental Laboratories,	Inc.		Email:	Email: info@phoenixlabs.com Fax (860) 64	om Fax	Fax (860) 645-0823] <u> </u>		
					Clieffit Services	(000)	07/0-0	4	Email: <u>danielle.whit</u>	danielle.wnitcomb@oneatias.com
, .	Atlas Technical Consultants, LLC	s, LLC			Project:	Town o	Town of Wallingford MS4 SW Sampling	4 SW Sampling	Project P.O:	
Address: 290	290 Roberts Street				Report to:		Danielle Whitcomb	omb	This	This section MUST be
Ea	East Hartford, CT 06108				Invoice to:	Atlas	Atlas Technical Consultants, LLC	uitants, LLC		completed with
***************************************					QUOTE#				ğ → 	Bottle Quantities.
3	Clent Sample - Information - Identification	- Identifica	tion							
Sampler's Signature	110		Date: 8	12/23	Analysis					\$ 05 C. T.
Matrix Code: DW=Drinking Water G RW=Raw Water SE=St B=Bulk L=Liquid	Matrix Code: DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste RW=RW=RW=RW=RW=SE-Sediment SE-Sediment SE-Soli SD-Soli W=Wipe B=Bulk L=Lqquid	rface Wate	ww=Wast	e Water s OIL=Oil	1500hov					THOOS THOOS
					Strike Co.			180	TO LIEU	14050
PHOENIX USE ONLY SAMPLE#	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	SOLD TO SOLD THE SOLD			\$ 105 10 105 10 10 10 10 10 10 10 10 10 10 10 10 10	05/40 08	Cook Riginer No. No. No.
23962	QR-6	SW	8/25/13	445	×					
hibez	QR-8	SW		255	×				~	-
20015	QR-9	SW	_	815	×				_	
37768	QR-10	SW		635	×				~	_
7,1968	QR-11	SW	_	858	× ×				-	-
83918	QR-17	SW		200	× ×				τ-	-
क्रावाप	AB-1	SW		9 15	×	-				
£29.20	AB-2	SW		9 30	×					-
83931	AB-3	SW		940	×					-
ECPES	AB-4	SW		des	×					-
82473	MR-1	SW		0001	×					_
rickes.	MR-2	SW	1	1010	×					-
Relinadished by:	Accepted by				T			<u>CT</u>	MA	Data Format
(m/kn	4.0	plema	Ŋ		8.25.23 11.	2	Direct Exposure (Residential)	RCP Cert	MCP Certification	Excel
1 H. CARMAN	ian leun	is A			8/25/23 111,	2	□ gw	SW Protection	GW-2	GIS/Key
		, ,] Other	GA Mobility	☐ GW-3	EQuIS
Comments, Special Re	Comments, Special Requirements or Regulations:	ns:			Turnaround:			GB Mobility	S-1	Data Package
7 DAS 0.400					1 Day*;			Residential DEC	S-3	Tier II Checklist
O DAS Nates					3 Days*			Other	☐ MWRA eSMART ☐ Other	Phoenix Std Report Other
4					Other	L	state where sa	State where samples were collected:	cted: CT	* SURCHARGE APPLIES
							,			