



CITY OF HAVERHILL, MASSACHUSETTS
NPDES PERMIT No. MA0101621
CONSENT DECREE
(Civil Action No. 16-11698-IT, 11/10/16)

COMPLIANCE REPORT No. 18
JANUARY- JUNE 2025

SUBMITTED

OCTOBER 2025

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SECTION 1 INTRODUCTION

1.1 Background

The United States Environmental Protection Agency (EPA), Massachusetts Department of Environmental Protection (MassDEP), and the City of Haverhill entered into a Consent Decree to require the City to take measures necessary to meet the requirements of the Clean Water Act and the Massachusetts Clean Water Act, and to achieve and maintain compliance with the Small Municipal Separate Stormwater Sewer System (MS4) General Permit and the Publicly Owned Treatment Works (POTW) Permit, and all applicable federal and state regulations. The effective date of the Consent Decree is November 10, 2016.

As part of the Consent Decree, the City is required to submit a Compliance Report to EPA and MassDEP for the previous six-month period, referred to as a “Reporting Period.” The bi-annual Reporting Periods run from January through June and July through December, with the Compliance Reports due on April 30th and October 31st for the previous period. The goal of this Compliance Report is to provide the EPA and MassDEP an updated summary of the work performed by the City to achieve and maintain compliance over the course of the Reporting Period.

1.2 VACANT POSITIONS

At this time, the City is working to hire a collections system operator, collections system laborer, a WWTP operator and a maintenance mechanic. The Collection System Supervisor position is advertised for hire as an anticipated opening. The City continues to look for a long-term solution for this critical role. This position is currently being filled by a former City Employee.

1.3 REPORT ORGANIZATION

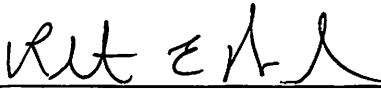
The Compliance Report is divided into several sections including:

- Section 2 IDDE Program
- Section 3 SSO and Building/Private Party Backup Events
- Section 4 Construction Site Inspection and Enforcement Program
- Section 5 General Status
- Section 6 Secondary Treatment Bypass
- Section 7 CMOM Corrective Action Plan (per MassDEP request)

Each section summarizes the City’s actions, activities, and events that have occurred during the Reporting Period in accordance with the Consent Decree.

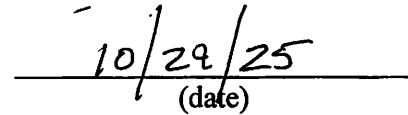
1.4 CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Robert E. Ward
DPW Director

City of Haverhill, Massachusetts


(date)

SECTION 2 IDDE PROGRAM

2.1 INTRODUCTION

The City identified and inspected 1,200 stormwater outfalls (thirteen of these outfalls are shared stormwater/combined sewer overflow (CSO) outfalls) as part of the 2014/2015 Stormwater Outfall Inspection Report. Based on the findings, the City established a draft schedule of prioritized inspections.

In 2017, the City prepared the “Illicit Discharge Detection and Elimination (IDDE) Manual.” The manual identified the procedures that the City will follow to continue their comprehensive inspections of its stormwater outfalls, upstream system investigations, and enforcement procedures when an illicit connection is identified. Most recently, the IDDE Manual was updated in 2020 to be in compliance with the City’s MS4 permit.

THE IDDE MANUAL CAN BE FOUND ON THE CITY’S STORMWATER WEBSITE AT: [https://www.haverhillma.gov/living-here/waterwastewater-services/stormwater/CURRENT REVISED PRIORITY LISTING](https://www.haverhillma.gov/living-here/waterwastewater-services/stormwater/CURRENT%20REVISED%20PRIORITY%20LISTING)

The City continues to conduct IDDE sampling and update priorities based on field investigation and lab analysis testing results. The current IDDE investigation priorities as of June 2025 are shown in Table 2-1. The current priorities categories reflect the following inventory: four Problem Priority outfalls; three High Priority outfalls; and thirty-four Low Priority outfalls. Table 2-1 has been updated with the most recent sampling results for each outfall. The priority listing of outfalls, with sample results, is also available at the City’s stormwater website. https://www.haverhillma.gov/media/ojfglj2/21_idde_master_cd8.pdf

2.2 IDDE INVESTIGATION PROGRESS REPORTING

Table 2-2 shows the City’s progress to date on their IDDE investigations during the reporting period (January through June 2025). Updated results for outfall catchment areas have been updated on Table 2-2 and IDDE catchment investigation maps in Appendix. Table 2-3 shows the City’s current list of priority outfalls for maintenance.

Using GIS, the City identified a total of 26.12 miles of storm drain piping and 2,617 drainage manholes and catch basins in the tributary area upstream of the outfalls included in the Priorities List as Problem, High, Low priorities. The total length investigated is included and updated from previous reporting for a cumulative percentage investigated. Some outfalls are considered fully investigated if there is no flow in an upstream asset.

Table 2-1 Prioritized List of Outfall Sub-Area Investigations
Based On Outfall Inspection Program
2014-2025 Dry-Weather MS4/Stormwater Outfall Inspection Program
Summary of Water Quality Testing of Dry Weather Flow at MS4/CSO Outfalls

Outfall Information					Field Inspection Information		Dry-Weather Flow Characteristics					Field Parameter Test Results							Coliform Laboratory Sampling/Analysis					
					Date	Previous Rainfall Dates	Flow Description	Odor	Color	Floatables	Turbidity	Sample Time	Sample Temp (F)	pH	Conductivity	Ammonia (mg/l)	Surfactants (mg/l)	Chlorine (mg/l)	Sample Date for Bacteria	Previous Rainfall (inches)	Previous Rainfall (Date)	Previous Rainfall (End Time)	E.coli (MPN/ 100 ml)	Enterococcus (MPN/ 100 ml)
GIS Identifier	Diameter	Material	Outfall Location	Owner-ship	Problem Priority																			
UNK0955	36"	RCP	South Main Street (Dominator Plaza)	City	09/16/20	.01" on 9/13/20	Trickle	None	Clear	None	None	725	62.2	7	1630	0.13	0.1	0	09/16/20	0.1	09/13/20		>2400	
PL0891	30"	RCP	Main Street @ Marsh Avenue	City	05/02/22	.4" on 4/27/22	Moderate	None	None	None	Clear	710	45	6.8	1470	0.2	0	0	05/02/22	0.4	04/27/22	225	15406	
PL0891 wet weather	30"	RCP	Main Street @ Marsh Avenue	City	05/02/23	Current	Moderate	None	None	None	Clear	904	52	6.8	908	0.37	0.28	0	05/02/23	Current			687	
MR1109	12"	RCP	350 Water Street	City	11/09/20	.01" on 11/3/20	Trickle	None	None	None	None	930	59.3	7.31	3	0	0	0	12/10/15	0.1	12/03/15		1413.6	> 2420
UNK1767	36"	CMP	Tudor Court	City	06/23/20	.02" on 06/11/20	Trickle	None	Clear	None	Clear	750	64	7	453	0.07	0	0	06/23/20	0.2	06/11/20		>2400	
UNK1767 wet weather	36"	CMP	Tudor Court	City	05/02/23	Current	Moderate	None	None	None	Clear	955	39	6.9	620	0.083	0	0	05/02/23	Current			4727	
High Priority																								
LR1260	3'x4'	other, blocks	140 Hale Street	City	05/02/22	.4" on 04/27/22	Trickle	None	None	None	None	745	42	7.4	608	0.14	0	0.02	05/02/22	0.4	04/27/22	225	195.99	
UNK1166	34"	RCP	8 Franzone Drive	City	06/11/20	0.01 on 06/11/20	Substantial	None	Clear	None	Clear	831	62	6.5	1000	0.09	0	0.03	06/11/20	0.01	06/11/20		461.1	
UNK1177	48"	RCP	Franzone Drive	City	06/11/20	0.01" on 06/11/20	Substantial	None	Clear	None	Clear	925	63	6.1	1000	0.1	0.15	0.01	06/11/20	0.01	06/11/20		770.1	
Low Priority																								
BZB0847	15"	RCP	Fermanagh Street	City	05/02/22	.4" on 04/27/22	Trickle	None	Clear	None	None	830	54	6.9	727	1.42	0	0	05/02/22	0.4	04/27/22	225	4874	
MR20718	10"	RCP	1 Water Street	City	08/14/15	0.57" on 08/11/15	No Information	None	None	None	None	1000	78	7.99	2		0	0	08/31/15	0.19	08/23/15		556	631
FBO0638	12"	RCP	Hilldale Avenue	City	05/11/22	.2" on 05/04/22	No Flow																	
PL1222	36"	RCP	West Gile Street	City	05/11/22	.2" on 05/04/22	Substantial	None	None	None	None	805	48	7.3	545	0.25	0.07	0	05/11/22	0.2	05/04/22	1325	2419.57	
UNK0661	24"	RCP	Parkridge Road	City	05/02/22	.4" on 04/27/22	Trickle	None	Clear	None	None	910	48	6.4	1880	0	0	0	05/02/22	0.4	04/27/22	225	31.29	
MR0982	18"	CLAY	20 Back Lane	City	05/11/22	.2" on 05/04/22	Trickle	None	None	None	None	730	49	8.6	374	0.17	0	0	05/11/22	0.2	05/04/22	1325	12.11	6.2
MR23912	8"	STEEL	120 Merrimack Street	City	05/10/22	.2" on 05/04/22	No Flow																	
MR1140	15"	RCP	River Street	City	11/04/21	1.9" on 10/31/21	Trickle	None	None	Other	Cloudy	1045	42.6	8.18	484	0	0		11/13/14	0.06	11/07/14		62.4	
MR0834	48"	RCP	Merrimac River (Bradley Avenue)	City	06/30/21	.01" on 06/25/21	No Flow																	
MR0662	18"	RCP	Parkridge Road	City	05/25/22	2" on 05/22/22	Trickle	None	Clear	None	None	845	54	7.3	1061	0.12	0	0.02	05/25/22	0.2	05/22/22		0	
LR0963	15"	HDPE	Alvanos Street	City	06/07/22	.1" on 06/03/22	Trickle	None	Clear	None	None	725	49	7.2	1146	0.12	0.07	0	06/07/22	0.1	06/03/22	915	23	
CB1198	NA	RCP	Research Drive	City	11/04/14	0.25" on 11/02/14	Moderate	None	Clear	None	Clear	1003	50.2	7.06	208	0	0.25		11/13/14	0.06	11/07/14		21.3	
MR0770	36"	RCP	Merrimac	City	09/23/14	0.36" on	Trickle	None	Clear	None	Clear	930	60.6	7.86	713	0	0.25		09/30/14	0.01	09/29/14		19.9	

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Based On Outfall Inspection Program
2014-2025 Dry-Weather MS4/Stormwater Outfall Inspection Program
Summary of Water Quality Testing of Dry Weather Flow at MS4/CSO Outfalls

Outfall Information					Field Inspection Information		Dry-Weather Flow Characteristics					Field Parameter Test Results							Coliform Laboratory Sampling/Analysis					
					Date	Previous Rainfall Dates	Flow Description	Odor	Color	Floatables	Turbidity	Sample Time	Sample Temp (F)	pH	Conductivity	Ammonia (mg/l)	Surfactants (mg/l)	Chlorine (mg/l)	Sample Date for Bacteria	Previous Rainfall (inches)	Previous Rainfall (Date)	Previous Rainfall (End Time)	E.coli (MPN/ 100 ml)	Enterococcus (MPN/ 100 ml)
			River (River Street)			09/21/14																		
UNK1836	36"	RCP	Computer Drive	City	05/25/22	.2" on 05/22/2022	Trickle	None	Clear	None	Clear	800	51	7.06	6	0.155	0.06	0.05	05/25/22	0.2	05/22/22	2110	0	
UNK1011	24"	RCP	Lake Street	City	06/15/22	.01" on 06/13/22	Trickle	None	None	None	None	815	61	8.2	1795	0	0	0	06/15/22	0.01	06/13/22	0045	8.52	
UNK0627	15"	RCP	Haley Road	City	05/21/15	0.07" on 05/19/15	No Information	None	None	None	None	840	64.5	6.82	791	0	0	0.25	05/22/15	0.07	05/19/15		2	
DPI0947	18"	RCP	177 Brook Street	City	06/15/22	.01" on 06/13/22	Trickle	None	None	None	None	855	60	7.8	1144	0	0	0.02	06/15/22	0.01	06/13/22	0045	34.51	
UNK1189	NA	NA	Primrose Street (DPW)	City	06/15/22	.01" on 06/13/22	No Flow																	
TS0984	24"	RCP	Newton Road	City	05/11/15	0.03" on 05/12/15	Moderate	None	Brown	None	Slight Cloudiness	1111	62.2	6.81	76	0	0	0.25	05/22/15	0.07	05/19/15		<1	
TS0989	24"	RCP	Newton Road	City	05/18/15	0.03" on 05/12/15	Substantial	None	Clear	None	Slight Cloudiness	1100	63.3	7.2	48	0	0	0.25	05/22/15	0.07	05/19/15		<1	
UNK1750	24"	RCP	36 Magnavista Drive	City	05/18/15	0.03" on 05/12/15	Trickle	None	None	None	None	955	64.7	7.6	574	0	0	0.25	05/22/15	0.07	05/19/15		<1	
UNK1040	24"	RCP	Gile Street	City	11/04/21	1.9" on 10/31/21	Trickle	None	None	None	None	930	63.1	7.3	877	0	0	0	05/22/15	0.07	05/22/15		<1	
UNK0902	40"	CMP	Shelley Road - Culvert	City	11/04/21	1.9" on 10/31/21	Moderate	None	Clear	None	Clear		62.6	7.02	1567	0	0	0						
DPO1007	54"	CMP	Kenilworth Lane	City	05/19/21	44697	No Flow																	
UNK0848	18"	RCP	Woodrow Avenue	City	09/09/20	.1" on 09/03/20	No Flow																	
FB0723	18"	RCP	Hanna Ridge Road	City	07/31/19	1.2" on 07/23/19	Moderate	None	None	None	Clear	923	76.6	7.77	440	0	<0.05	0	07/31/19	1.2	07/23/19	1045	8.5	
UNK0888	NA	NA	West Lowell Street	City	06/12/15	0.1" on 06/06/15	Moderate																	
UNK1188	32"	RCP	Primrose Street	City	07/16/19	0.45" on 07/12/19	Trickle	None	None	None	Clear	930	73.9	7.48	855	0.5	<0.05	0	07/16/29	0.45	07/12/19	2045	770.1	
MR38714	6"	PVC	Parkridge Road - Stream Convey	City	06/14/22	.01" on 06/13/22	No Flow																	
MR38718	18"	RCP	Merrimack River	City	09/26/19	0.01" on 09/23/19	Trickle	None	None	None	Clear	1013	68.1	8.01	509	0	<0.05	0	09/29/19	0.01	09/23/19	2240	>2400	
UNK1011	24"	RCP	Lake Street	City	06/15/22	.01" on 06/13/22	Trickle	None	None	None	None	815	61	8.2	1795	0	0	0	06/15/22	0.01	06/13/22	0045	8.52	
UNK0627	15"	RCP	Haley Road	City	05/21/15	0.07" on 05/19/15	No Information	None	None	None	None	840	64.5	6.82	791	0	0	0.25	05/22/15	0.07	05/19/15		2	
DPI0947	18"	RCP	177 Brook Street	City	06/15/22	.01" on 06/13/22	Trickle	None	None	None	None	855	60	7.8	1144	0	0	0.02	06/15/22	0.01	06/13/22	0045	34.51	
LR39512	48"	RCP	Little River	City	07/31/19	1.2" on 7/23/19	No Flow																	

NOTE:

Data exceeds one of the parameter thresholds that suggest it should be added to the IDDE program

Laboratory Sampling Dates in Red are the samples taken with less than 48 hours of dry weather.

Table 2-2 Summary Of IDDE Investigations Of Systems With Potential Illicit Connections By Basin

(Based On Outfall Inspection Program)

2014-2025 Dry-Weather MS4/Stormwater Outfall Inspection Program

IDDE Investigation Priorities

		Current Report Period						Completed to Date			
		January2025 - June 2025						Including this Reporting Period			
Basin ID	Outfall ID	Existing System Estimates		Investigated				Complete to Date			
		Length of Pipe (ft)	Number of Manholes and Catch Basins	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed
Buswell Brook	BZB0847	1,697	24					1,697	100%	24	100%
Buswell Brook TOTAL		1,697	24	0	0%	0	0%	1,697	100%	24	100%
Creek Brook	CB1193	70	0					70	100%		
	CB1198	144	5					144	100%	5	100
	CB1710	71	0					71	100%		
Creek Brook Outlet TOTAL		285	5	0	0%	0	0%	285	100%	5	100%
Detention Pond Outlet	DPO0657	422	7								
	DPO0696	61	2					61	100%	2	100%
	DPO1079	37	0								
Detention Pond Outlet TOTAL		520	9	0	0%	0	0%	61	12%	2	22%
Detention Pond Inlet	DPI0946	7,421	172					7,421	100%	172	100%
	DPI0947	1,360	11								
	DPI0969	1,515	22								
	DPI1007	1,634	0								
	DPI1074	694	14								
	DPI1094	22	0					22	100%		
Detention Pond Inlet TOTAL		12,646	219	0	0%	0	0%	7,443	59%	172	79%
Fishing Brook	FBO0638	852	15					852	100%	15	100%
Fishing Brook TOTAL		852	15	0	0%	0	0%	852	100%	15	100%
Frey's Pond	FP7115	72	3					72	100%	3	100%
Frey's Pond TOTAL		72	3	0	0%	0	0%	72	100%	3	100%
Johnston's Creek	JC1028	1,397	12					1,397	100%	12	100%
Johnston's Creek TOTAL		1,397	12	0	0%	0	0%	1,397	100%	12	100%
Little River	LR0952	7,268	88					7,268	100%	88	100%

Table 2-2 Summary Of IDDE Investigations Of Systems With Potential Illicit Connections By Basin

(Based On Outfall Inspection Program)

2014-2025 Dry-Weather MS4/Stormwater Outfall Inspection Program

IDDE Investigation Priorities

		Current Report Period						Completed to Date			
		January2025 - June 2025						Including this Reporting Period			
Basin ID	Outfall ID	Existing System Estimates		Investigated				Complete to Date			
		Length of Pipe (ft)	Number of Manholes and Catch Basins	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed
	LR0963	703	11								
	LR0993	539	4					539	100%	4	100%
	LR0995	822	0								
	LR1103	4,418	4					4,418	100%	4	100%
	LR1260 ¹	26,134	614					26,134	100%	622	100%
Little River TOTAL		39,884	721	0	0%	0	0%	38,359	96%	718	100%
Merrimack River	MR0662	210	5								
	MR0770	2,980	47								
	MR0834	756	8					756	100%	8	100%
	MR0982	128	10					128	100%	10	100%
	MR1109	941	12					941	100%	12	100%
	MR1138	289	18					289	100%	18	100%
	MR1140	90	2								
	MR1141 ²	3,899	104					3,899	100%	104	100%
	MR1164	1,746	116					1,746	100%	116	100%
	MR20718	NA									
	MR23912	0	1								
	MR38718	1,713	30					1,713	100%	30	100%
	MR24314	541	24					541	100%	24	100%
Merrimack River TOTAL		13,293	377	0	0%	0	0%	10,013	75%	322	85%
Pentucket Lake	PL0891	5,463	128					5,463	100%	128	100%
	PL1222 ¹	3,292	102					3,292	100%	102	100%
Pentucket Lake TOTAL		8,755	230	0	0%	0	0%	8,755	100%	230	100%
Tilton Swamp	TS0984	52	1					52	100%	1	100%
	TS0989	3,893	47								
Tilton Swamp		3,945	48	0	0%	0	0%	52	1%	1	2%

Table 2-2 Summary Of IDDE Investigations Of Systems With Potential Illicit Connections By Basin

(Based On Outfall Inspection Program)

2014-2025 Dry-Weather MS4/Stormwater Outfall Inspection Program

IDDE Investigation Priorities

		Current Report Period						Completed to Date			
		January2025 - June 2025						Including this Reporting Period			
Basin ID	Outfall ID	Existing System Estimates		Investigated				Complete to Date			
		Length of Pipe (ft)	Number of Manholes and Catch Basins	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed
Unknown	UNK0627	254	8								
	UNK0661	410	11					410	100%	11	100%
	UNK0668	854	18								
	UNK0788	869	16					869	100%	16	100%
	UNK0836	842	12								
	UNK0883	570	7								
	UNK0898	91	0					91	100%		
	UNK0902	54	2								
	UNK0951	1,910	34					1,910	100%	34	100%
	UNK0953	225	0					225	100%		
	UNK0954	81	0					81	100%		
	UNK0955	6,058	146					6,058	100%	146	100%
	UNK1011	5306	44								
	UNK1020	71	2								
	UNK1040	1414	21								
	UNK1063	49	0								
	UNK1166	1,079	28					1,079	100%	28	100%
	UNK1177	156	3					156	100%	3	100%
	UNK1188	25,926	470					25,926	100%	470	100%
	UNK1189	2,043	17					2,043	100%	17	100%
	UNK1680	719	8								
	UNK1750	1,239	23					1,239	100%	23	100%
Unknown	UNK1767	2,077	52					2,077	100%	52	100%
	UNK1835	761	10					761	100%	10	100%
	UNK1836	1179	22								
	UNK1886	20	0					20	100%		
	UNK1887	20	0					20	100%		

Table 2-2 Summary Of IDDE Investigations Of Systems With Potential Illicit Connections By Basin

(Based On Outfall Inspection Program)

2014-2025 Dry-Weather MS4/Stormwater Outfall Inspection Program

IDDE Investigation Priorities

		Current Report Period						Completed to Date			
		January2025 - June 2025						Including this Reporting Period			
Basin ID	Outfall ID	Existing System Estimates		Investigated				Complete to Date			
		Length of Pipe (ft)	Number of Manholes and Catch Basins	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed
	UNK1888	21	0					21	100%		
	UNK1889	21	0					21	100%		
Unknown TOTAL		54,319	954	0	0%	0	0%	43,007	79%	810	85%
West Meadow Brook	WMB0738	80	0					80	100%		
	WMB0739	80	0					80	100%		
	WMB0740	82	0					82	100%		
	WMB0759	20	0					20	100%		
West Meadow Brook TOTAL		262	0					262	100%		
GRAND TOTAL		137,927	2,617	0	0%	0	0%	112,255	81%	2,314	88%
		26.12mi.		0.00mi.				21.26mi.			

¹ Estimate Base upon Percentage of Manholes Inspected

² Catchment includes State owned drainage and outfall. City inspected City owned drainage.

Table 2-3 Outfall Maintenance Priority Table January through June 2025

Outfall ID	Work Order Number	High Priority		Medium Priority	Low Priority					Inspection Date	Re-Inspection Date
		Could Not Locate	Buried	Fully Submerged in Sediment	Partially Submerged in Sediment	Fully Submerged in Water	Partially Submerged in Water	Abnormal Vegetation	Outfall Damage		
MR1224	ST00000540	X	X					X	UNK		June-24
UNK0888	ST00000478		X						UNK	March-19	June-24
UNK0889	ST00000554		X						UNK	August-18	June-24
UNK0905	ST00000556		X						UNK	August-18	June-24
UNK0997	ST00000560	X	X						UNK	August-18	June-25
UNK1207	STI0001312	X	X						UNK	March-19	June-25
UNK1221	ST00000568	X	X						UNK	August-18	June-25
UNK1907	STI0001313	Not Built								August-18	June-25
UNK35912	STI0001314		X			X			UNK	August-18	June-25
UNK1773	ST00000575		X							March-19	
UNK1774	ST00000576		X							August-18	
CB1196	ST00000510		X	X				X	UNK	March-19	June-25
DPI0655	ST00000514			X						March-19	
DPI1008	ST00000520			X						April-19	
DPO1154	ST00000524			X						March-19	
JP1179	ST00000530		X	X				X	UNK	April-19	June-25
LR0844	ST00000083			X						March-19	
LR1118	ST00001283			X						March-19	
MR1278	ST00000541			X						April-19	
MR24329	ST00000544			X						April-19	
SB11512	ST00000545			X						August-18	
TS0987	ST00000548			X						March-19	
UNK0064	ST00000551			X						April-19	
UNK0782	ST00000553			X						March-19	
UNK0935	ST00000558			X						March-19	
UNK1017	ST00000561			X						March-19	
UNK1076	ST00000563			X						March-19	
UNK1137	ST00000564			X						March-19	
UNK1183	ST00000566			X						March-19	
UNK1748	ST00000573			X						March-19	
UNK1772	ST00000574			X						March-19	
UNK1906	ST00000580			X						March-19	

UNK25513	ST00000583			X						March-19	
UNK31513	ST00000584			X						March-19	
CL0701	ST00000603				X					April-19	
DPI0634	ST00000606				X					April-19	
DPI1081	ST00000615				X						
DPI1090	ST00000617				X					April-19	
FB7114	ST00000629				X					April-19	
LR0931	ST00000635				X					April-19	
LR1099	ST00000636				X					April-19	
LR1102	ST00000637				X					April-19	
MR23513	ST00000650				X					August-21	
MR23514	ST00000651				X						
MR23516	ST00000653				X						
MR23517	ST00000654				X						
MR23518	ST00000655				X						
MR23519	ST00000656				X						
MR23523	ST00000660				X						
MR23524	ST00000661				X						
MR23525	ST00000662				X						
MR24316	ST00000663				X					April-19	
MR24318	ST00000664				X						
MR24718	ST00000665				X					April-19	
SB1117	ST00000668				X					April-19	
UNK0885	ST00000701				X					April-19	
UNK0950	ST00000706				X					April-19	
UNK1000	ST00000710				X					April-19	
UNK1005	ST00000711				X					April-19	
UNK1006	ST00000712				X					April-19	
UNK1111	ST00000717				X					April-19	
UNK1123	ST00000718				X					April-19	
UNK1160	ST00000722				X					April-19	
UNK1174	ST00000726				X					April-19	
UNK1205	ST00000732				X					April-19	
UNK1213	ST00000734				X					April-19	
UNK1263	ST00000736				X					April-19	
UNK1265	ST00000737				X					April-19	
UNK1684	ST00000742				X					April-19	
UNK1686	ST00000744				X					July-19	
UNK1738	ST00000751				X					May-21	
UNK1802	ST00000759				X					July-19	
UNK1867	ST00000770				X						
UNK1891	ST00000773				X					April-19	
UNK1899	ST00000775				X					July-19	
UNK1900	ST00000776				X					July-19	

UNK24721	ST00000780				X					August-19	
UNK26725	ST00001286				X					May-19	
UNK26726	ST00000784				X						
CB0977	ST00001288							X			
DPO0657	ST00001291							X		May-19	
FB0715	ST00001293							X			
UNK0906	ST00001294							X			
DPI0945	ST00000519					X				May-19	
DPI1133	ST00000522					X				May-19	
MR20719	ST00000542					X					
TS0989	ST00000549					X				April-19	
KL26714	ST00000533					X					
DPI0970	ST00000610						X				
DPI1007	ST00000614						X				
DPI1084	ST00000616						X				
DPI1125	ST00000618						X				
DPI1197	ST00001299						X				
KL1178	ST00000633						X			April-19	
LR1260	ST00000642						X				
TS0984	ST00000670						X			April-19	
TS33514	ST00000673						X			April-19	
UNK0665	ST00000678						X			May-19	
UNK0666	ST00000679						X			May-19	
UNK0729	ST00000689						X				
UNK0955	ST00000708						X				
FB1168	ST00000723						X				
UNK1176	ST00000728						X			July-19	
UNK1188	ST00001301						X			April-19	
UNK1206	ST00000733						X			May-19	
UNK1220	ST00000735						X				
UNK1695	ST00000745						X			April-19	
UNK1749	ST00000752						X			April-19	
UNK6316	ST00001303						X			May-19	
UNK8312	ST00000797						X				
MR0607	ST00001305								X	May-19	
TS0983	ST00001307								X	April-19	
UNK1173	ST00001308								X		
MR0927	ST00001309										
UNK1189	ST00001310										
Unknown Ownership Outfalls											
Inspection dates in blue indicate an item has been closed											
Inspection dates in Orange indicate needing future work											

2.3 Identified Illicit Connections And Current Priority List Status Resolution

The ongoing and cumulative status of the City's efforts to remove any identified illicit connections or discharges is summarized in Table 2-4.

Merrimack River Basin Outfalls – MR1164 has been removed from the priority list as it is seasonal groundwater flow from top of catchment.

Little River Basin Outfalls – LR0952 has been removed from the priority list as it is connected to athletic field drainage and is considered an excluded outfall. Upstream investigation showed no flow from catchment not originating from athletic field drainage.

Unknown Basin Outfalls - UNK0951– has been removed from the priority list as it is connected to athletic field drainage and is considered an excluded outfall. UNK1020 was removed from the priority list as sampling results were within acceptable permit limits. UNK1680 was removed from the priority list for no flow.

Pentucket Lake Basin Outfalls – PL0891 was sampled for wet weather flows and sample results are shown on table 2-1.

Detention Pond Inlets Outfalls – DPI0696 was removed from the priority list as it is connected to athletic field drainage and is considered an excluded outfall.

Table 2-4 Summary Of Illicit Discharges Identified By Basin And Current Status (January through June 2025)

Description		Illicit Discharge/Connection Verified				Ongoing Illicit Discharge Removal Activities					Final Illicit Connection Removal Actions				
Basin ID	Outfall ID	Date Verified	Address Location	Type of Discharge ¹	Estimated Flow	Removed?	Reasons Why Not	Schedule for Removal	Reason why expedited	Legal Actions against Private Property Owners	Actions Taken (with Dates)	Date Connection Eliminated	Est. Cost of Removal	Estimated Volume Removed (gallons)	Assessment: Is the City in compliance with the schedule?
Little River	LR1260	10/26/2017	29 Union Street	Single family broken sewer	400 gpd	not removed	gave extension	Was removed on 2/24/18			Catchment investigation completed on 10/10/2020. City currently conducting sewer separation project			60,000	
Merrimack River	MR1164	11/19/2016	Market Basket Parking Lot	groundwater into drain	Seasonal Flow/ Not able to estimate	N/A	N/A	N/A	N/A	N/A	This dry weather flow appears to be from a groundwater discharge into the drainage system across a parking lot. Additional testing is required to confirm bacteria source is groundwater.	N/A	N/A	N/A	Yes, the City is in compliance with resolving this "illicit discharge".
	MR1109	12/21/2020	350 Water St	IDDE conducted and needs further investigation to determine the source.	500gpd	not removed	verifying bacteria counts				CCTV conducted on 12.21.2020 no defects found. Flow appears to be from top of catchment from depression/wetland flowing through drain. Additional CCTV required in nearby sewer lines to confirm no infiltration				Yes, the City is in compliance
Pentucket Lake	PL0891	10/5/2016	Marsh Avenue	leaking sewer/	Not able to	X	Sewer replacement	2021	This connection	NOV	10/5/18-10/10/18: SMH-2190-point	Dec-21	\$446,000	-	The Marsh Avenue

Description		Illicit Discharge/Connection Verified				Ongoing Illicit Discharge Removal Activities					Final Illicit Connection Removal Actions				
Basin ID	Outfall ID	Date Verified	Address Location	Type of Discharge ¹	Estimated Flow	Removed?	Reasons Why Not	Schedule for Removal	Reason why expedited	Legal Actions against Private Property Owners	Actions Taken (with Dates)	Date Connection Eliminated	Est. Cost of Removal	Estimated Volume Removed (gallons)	Assessment: Is the City in compliance with the schedule?
				exfiltration	estimate		costs/lengths are extensive; cost exceeds discretionary funds; new fund required in next fiscal year to complete project		is being removed as quickly as possible and dependent on the availability of funds within the fiscal year.		repair and manhole rehabilitation complete. 10/11/18-10/16/18: Installation of CIPP main line liner on Main Street 10/17/18-10/23/18: Installation of CIPP main line liner on Marsh Avenue 10/24/18: Began installing CIPP of sewer laterals. Groundwater is too high causing flooding in homes. Project on hold until mid-end March. Project is complete. 6/9/2020: illicit connection located at lateral from laundromat, owner notified to repair, repaired as of December 2021, follow-up testing to be completed next reporting period				sewer repair project was bid on and awarded to National Water Main Cleaning Company and contract had to be extended to 6/30/19 due to high groundwater. Project was completed by the end of June 2019 but after review of CCTV, it was determined that more CCTV needs to be conducted and 1 defect in lining needs to be repaired.
	UNK0951	11/1/2017	Brook Street	Leaking sewer running through drain	Not able to estimate	not removed	Not able to fix due to weather	As soon as weather	-	-	Catchment investigation shows flow	4/17/2018	\$4,277	-	Yes, the City is in compliance

Description		Illicit Discharge/Connection Verified				Ongoing Illicit Discharge Removal Activities					Final Illicit Connection Removal Actions				
Basin ID	Outfall ID	Date Verified	Address Location	Type of Discharge ¹	Estimated Flow	Removed?	Reasons Why Not	Schedule for Removal	Reason why expedited	Legal Actions against Private Property Owners	Actions Taken (with Dates)	Date Connection Eliminated	Est. Cost of Removal	Estimated Volume Removed (gallons)	Assessment: Is the City in compliance with the schedule?
								permits			originating from upstream athletic field drainage				
	UNK0955	10/14/2016	South Main Street	Contaminated private line discharges to City line.	Not able to estimate	not removed	Unable to complete investigation due to weather	As soon as weather permits			Drain manholes will be exposed and CCTV'd when weather permits to identify source of illicit flow. CCTV conducted showing no infiltration from shopping plaza, additional CCTV will continue in upcoming reporting period.				
	UNK1166	6/11/2020	Franzone Drive	Upstream contamination needs additional IDDE	10gpm est	not removed	CCTV to be completed in next reporting period								
	UNK1188	12/25/2012	34 Columbia Park., 66 Columbia Park., 74 Columbia Park., 80 Columbia Park., 90-92 Columbia Park.	5 Single family	N/A	N/A	N/A	N/A	N/A	N/A	5-house sewer services through a drainpipe that were dripping. Install a PVC sleeve through drain	6/8/2016	\$13,000	26,481	The City is in compliance. 60-day deadline was not applicable until November 2016.
	UNK1767	6/23/2020	Tudor Ct	IDDE conducted. CCTV needs	N/A	not removed	CCTV to be completed in next								

Description		Illicit Discharge/Connection Verified				Ongoing Illicit Discharge Removal Activities					Final Illicit Connection Removal Actions				
Basin ID	Outfall ID	Date Verified	Address Location	Type of Discharge ¹	Estimated Flow	Removed?	Reasons Why Not	Schedule for Removal	Reason why expedited	Legal Actions against Private Property Owners	Actions Taken (with Dates)	Date Connection Eliminated	Est. Cost of Removal	Estimated Volume Removed (gallons)	Assessment: Is the City in compliance with the schedule?
				to be completed. High ammonia from private pipe. Dye tested home and their waste goes to sewer.			reporting period								
Detention Pond Outlet	DPO0696	6/12/2015	Pamela Lane	Private drain and outfall DPI0697 that discharge to detention pond and not contaminated.	Not able to estimate	N/A	N/A	N/A	N/A	N/A	No Flow present on multiple inspections in 2020. City will continue to monitor for dry weather flow	N/A	N/A	N/A	Yes, the City is in compliance
											Grand Total =		\$463,277	86,481	

SECTION 3 SSO & BUILDING/PRIVATE PARTY BACKUP EVENTS

3.1 SSO Activity

A chronological list of the sanitary sewer overflows (SSO) and building/private party backup events that occurred during this Reporting Period, are listed in Table 3-1.

Over the Reporting Period, there was a total of four reportable SSO events associated with the City's sewer collection system.

It is important to note that the SSO's associated with the City collection system operations continue to not be a result of pipe capacity deficiencies and the City continues to make significant progress in reducing the number of SSOs that occur in the system, which are attributed to City operations. For this six-month reporting period, the City had one SSO that was directly attributable to unanticipated City collection system conditions. The EPA reported annual average SSOs in a typical nationwide system is about four SSOs per 100 miles. The City currently has approximately 201 miles of sewer.

Table 3-1 Sanitary Sewer Overflow

CITYWORKS WORK ORDER	24768	25924	25959	25960
SSO ID	SSO-25-01	SSO-25-03	SSO-25-04	SSO-25-05
SSO ADDRESS	21 Lincolshire Drive	503 Primrose Street	15 Dutton	147 Carelton Street
START DATE/TIME	1/8/25 4:00 PM	3/4/25 11:00 AM	3/8/25 5:00 PM	3/9/25 4:15 PM
END DATE/TIME	1/8/25 4:55 PM	3/4/25 11:30 AM	3/8/25 5:35 PM	3/9/25 5:05 PM
DATE REPORTED EPA/DEP	1/9/25 10:00 AM	3/4/25 7:30 PM	3/9/25 12:00 PM	
WHO NOTIFIED	Isaiah Lewis	Isaiah Lewis	Isaiah Lewis	Isaiah Lewis
REASON FOR OCCURRENCE	Sewer main block	Sewer main block	Lift Station Electrical Issue	Sewer main block
DATE OF LAST SSO OCCURRENCE	First Occurance	First Occurance	First Occurance	First Occurance
SSO EST. VOL.	1000	10	100	5000
RECEIVING WATERS IF SEWERAGE ENTERED	NONE	NONE	NONE	YES
METHOD USE TO ESTIMATE VOLUME	Visual	Visual	Visual	Visual
NEAREST CB LOCATION ID	CB-1508	CB-3096	CB-3433	CB-3938
DISTANCE TO NEAREST CB (FT.)	11	71	125	150
NAME OF RECEIVE WATER WHETHER OR NOT THERE WAS A RELEASE	NA	NA	NA	NA
ENTERED CB YES OR NO	NO	NO		NO
MEASURED TAKEN STOP SSO	Flushed sewer main	Flushed sewer main	Replace circuit breaker	Flushed sewer main
DECONTAMINATE	YES	YES	YES	YES
MEASURED TAKEN TO PREVENT FUTURE OVERFLOWS	CCTV main	CCTV main	NA	CCTV main
SEWERAGE LOCATION INTO STREAM	NO	NO	NO	Yes
SSO OWNERSHIP CITY OR PRIVATE	CITY	CITY	CITY	CITY

SECTION 4 CONSTRUCTION SITE INSPECTION AND ENFORCEMENT PROGRAM

4.1 Enforcement Activity

At their June 26, 2018, Haverhill City Council meeting, the Council passed and adopted a Pre and Post Construction Stormwater Management Ordinance (Ch. 219) as required by the Consent Decree and MS4 Stormwater permit. Revisions to this Ordinance were approved by the Haverhill City Council on December 3, 2024, to ensure compliance with the current MS4 requirements. The new ordinance maintains an opportunity for exemption from the Stormwater Management Permit, but applicants must have first demonstrated full compliance with the new Ordinance during another formal permitting process, i.e., Conservation Commission, Planning Board, or City Council.

Since passage of the update, the Conservation Commission has received the following Notices of Intent for projects requiring compliance with this new ordinance.

#33-1580	1400 Hilldale Av	Storage Yard
#33-1581	85 Water Street	Multi-family housing

No new filings have been made with Stormwater Management Permit, since the revision. The Notices were received in early 2025 and will be discussed in the next report.

The project at 85 Water Street was approved by the Conservation Commission to incorporate the use of a surface infiltration basin to remove more than 50% of phosphorus. The project at 1400 Hilldale Av was also approved and phosphorus removal will occur through infiltration.

The following Stormwater Management Permits are active and are monitored for compliance by the City.

SWM-21-1	Forest Street	Sylvan Hill Subdivision
SWM-23-1	Michael Anthony Way	Residential Subdivision
SWM-24-1	685 Washington St	Consentino Middle School
SWM-24-3	51 Merrimack St	Downtown Mixed-Use Development
SWM-24-5	373 North Av	National Grid facility expansion

SECTION 5 GENERAL STATUS

5.1 Introduction

This section summarizes the actions taken by the City of Haverhill to achieve Consent Decree compliance within the Reporting Period.

For this reporting period there was one deliverable and/or activities due within that timeframe to achieve compliance. The deliverable/activity is shown in Table 5-1 below.

For CSO Phase I the City is still waiting for the MBTA Easement. MassDEP has extended the required contract from June 30, 2025, until November 30, 2025.

Wright-Pierce continues the design for Phase 2 CSO separation by conducting a field survey. We will report on the progress in our next Compliance report.

Wright-Pierce Completed the City's Water Pollution Abatement Facility's Rehabilitation and Upgrade Project Evaluation in February of 2023. Preliminary design kicked off in June of 2024 and design work continued through this reporting period.

Table 5-1 Table Submissions Within Current Reporting Period

Part	Activity	Due Date	Submittal Date
Effective Date of Consent Decree (11/10/2016)			
IX	Compliance Reporting		
	Semi Annual CD Report	4/30/2025	4/30/2025

5.2 Issues Of Noncompliance

The City is in compliance with the requirements of the Consent Decree.

5.3 Looking Ahead - Six Month Forecast

The anticipated future deliverable required under the Consent Decree for the next Reporting Period, July through December 2025, is shown in Table 5-1.

Table 5-2 Deliverables During The Next Reporting Period (July to December 2025)

Part	Activity	Trigger Event	# Days Due	Due Dates
			Post Trigger Event	
Effective Date of Consent Decree		11/10/16		
IX	Compliance Reporting			
	Compliance Report No. 19	12/31/25	120	4/30/26

SECTION 6 SECONDARY TREATMENT BYPASS

6.1 Introduction

The intent of this section is to summarize the secondary treatment bypass events that occurred at the City of Haverhill's Water Pollution Abatement Facility during the reporting period, July through December 2024.

6.2 Bypass Events

There were three secondary treatment bypass events that occurred during the reporting period, which are listed below in Table 6-1.

Table 6-1 Secondary Treatment Bypass Events

Bypass Event	#	2025-01		2025-02		2025-03	
Date of Bypass		3/17/2025		5/10/2025		5/22-23/2025	
Date of Rainfall		3/17/2025	3/18/2025	5/10/2025	5/11/2025	5/22/2025	5/23/2025
Weather Rainfall	Inches	0.41	0.58	0.71	0.02	0.00	2.18
snow melt	(y/n)	Yes	Yes	No	No	No	No
Influent Flow	MGD	20.35	12.28	38.53	21.93	23.34	25.15
Bypass Flow Total	MG	1.64	0.00	6.72	0.00	4.47	2.17
Q, bypass start time		7:35 AM		10:00 AM		8:25 PM	
Plant Flows @ Start	MGD	29		60		54	
Q, bypass stop time		11:25 AM		2:40 PM			4:02 AM
Plant Flows @ Stop	MGD	18		44			36
Max Influent		62	18.47	65.00	28.47	65.00	65
Influent Septage Received	Gallons	36,000	21,500		0	0	0
Influent TSS	mg/L	248	204		84	224	
Effluent TSS	mg/L	10.80	6.00		7.60	37.30	
<u>Aeration Basin #1</u> Sludge Volume Index	ml/g	350	299			348	453
MLSS Lab	mg/L	1,800	2,944			2,586	1,524
Mean Cell Residence Time	Days	6.23	4.47			2.81	
<u>Aeration Basin #2</u> Sludge Volume Index	ml/g	255	368			390	314
MLSS Lab	mg/L	1,176	2,146			1,924	1,052
Mean Cell Residence Time	Days	5.51	3.75			2.41	
<u>Aeration Basin #3</u> Sludge Volume Index	ml/g	339	348			445	362
MLSS Lab	mg/L	1,152	2,214			1,912	1,104
Mean Cell Residence Time	Days	5.49	3.81			2.40	
Aeration Basins Online	#	3	3	3	3	3	3
<u>Secondary Clarifier #1</u> Depth of Blanket	ft	5.0	5.5	11.0	11.0	13.5	12.0
<u>Secondary Clarifier #2</u> Depth of Blanket	ft	11.0	4.5	10.0	5.0	12.0	8.0
<u>Secondary Clarifier #3</u> Depth of Blanket	ft	10.0	5.5	8.0	5.0	8.0	6.5
Secondary Clarifiers Online	#	3	3	3	3	3	3

Note: Gaps for requested data are due to secondary treatment bypass events occurring on a non-sampling day.
Refer to Section 6.3 Regarding NOAA rainfall data.

SECTION 7 CMOM CORRECTIVE ACTION PLAN

7.1 Introduction

Pursuant to the Consent Decree, the City of Haverhill submitted the Capacity, Management, Operation, and Maintenance Program Assessment Corrective Action Plan (CMOM), dated February 22, 2017, to MassDEP and EPA. In their review letter dated August 3, 2017, MassDEP requested that a summary of the status of CMOM related corrective actions that occurred during the reporting period be included in the Compliance Reports.

7.2 CMOM Corrective Actions

The CMOM self assessment identified twenty-six deficiencies, their recommended corrective actions, and an implementation schedule, which are listed in Table 7-1. Table 7-1 was simplified for readability purposes. Item 10 was duplicated and was deleted in Compliance Report Number 10, thus now equaling twenty-five deficiencies.

Table 7-2 has been updated to show all remaining deficiencies and the City's progress. To view the complete table see the previous year submission located

<https://www.haverhillma.gov/media/tl0fwz5f/25-april-30-compliance-report-july24-dec24.pdf>

7.3 Additional CMOM-Related Activities

In conjunction with the corrective activities, the City has also performed additional activities as outlined and recommended in the CMOM Program, which includes collection system maintenance and construction activities. The expenses related to collection system maintenance activities for this reporting period are listed in Table 7-3.

Table 7-1 CMOM Deficiencies Completed

Action #	Deficiency	Recommended Corrective Action	Implementation Schedule	Status
1	The City does not have a formal long-term plan to mitigate SSO.			This action item has been completed and closed. Please see CD Report #12 for final comments.
2	The City does not have a comprehensive system to prioritize investigations, repairs, and rehabilitation.			This action item has been completed and closed. Please see CD Report #12 for final comments.
3	The City does not have updated job descriptions that match technical requirements for a modern collection system utility.			This action item has been completed and closed. Please see CD Report #12 for final comments.
4	Although the City training program includes some key safety training, staff would benefit from a formalized safety and technical training program.			This action item has been completed and closed. Please see CD Report #12 for final comments.
5	Although the City uses MaintStar to track customer complaints, they do not use the database to prioritize preventative maintenance.			This action item has been completed and closed. Please see CD Report #12 for final comments.
6	The City lacks a comprehensive, risk-based approach to maintenance planning.			This action item has been completed and closed. Please see CD Report #12 for final comments.

Action #	Deficiency	Recommended Corrective Action	Implementation Schedule	Status
9	The City should update recordkeeping pertaining to private systems			This action item has been completed and closed. Please see CD Report #12 for final comments.
10	The City does not have a finalized version of their capital improvement plan – which will include pump station upgrades, collection system rehabilitation, and WWTP upgrades			This action item has been completed and closed. Please see CD Report #12 for final comments.
12	The City does not have a standard procedure for maintaining safety training records.			This action item has been completed and closed. Please see CD Report #12 for final comments.
13	The City has a general emergency response plan (ERP). The Division recently completed an ERP for responding to SSOs. The Division lacks ERP for other collection system emergencies.			This action item has been completed and closed. Please see CD Report #12 for final comments.
16	The City does not have adequate staff to perform sufficient preventative maintenance on all 36 pump stations.			This action item has been completed and closed. Please see CD Report #12 for final comments.
18	Not all pump stations have communication ability. Lack of communication at pump stations has contributed to SSOs.			This action item has been completed and closed. Please see CD Report #12 for final comments.
19	11 pump stations do not have working backup power, though most of these have connections for a portable generator or are small enough to pump out.			This action item has been completed and closed. Please see CD Report #12 for final comments.
21	The City does not have a			This action item has been completed and

Action #	Deficiency	Recommended Corrective Action	Implementation Schedule	Status
	dedicated location for offloading and dewatering sewer cleaning. The City does not have an enclosed location for storage of their sewer maintenance vehicles.			closed. Please see CD Report #12 for final comments.
23	There is no systematic program for uncovering manholes that have been paved over.			This action item has been completed and closed. Please see CD Report #12 for final comments.
25	The City lacks public education materials associated with roof leaders and sump pumps.			This action item has been completed and closed. Please see CD Report #12 for final comments.
26	The City does not have a system-wide manhole inspection program			This action item has been completed and closed. Please see CD Report #12 for final comments.

Table 7-2 Remaining Deficiencies

Action Number 7

Deficiency:

Local limits need to be updated.

Recommended Corrective Action:

Perform a local limits study and update the limits table in the ordinance (per Appendix E, Sewer Ordinance Review from CMOM Program Assessment and Corrective Action Plan prepared by Woodard & Curran, February 2017).

Implementation Schedule:

Within **one year** after EPA approves the CMOM Action Plan

Status:

Local limits submitted to EPA for review on June 23, 2021, and subsequently approved. As of June 2025, the EPA is reviewing the updated SUO associated with the newly approved Local Limits. The City needs to final ordinance revisions then move to pass the approved SUO and Local Limits through City Council.

Action Number 8

Deficiency:

The City needs to improve implementation and enforcement of their Sewer Use Ordinance (SUO).

Recommended Corrective Action:

Improve implementation and enforcement of the SUO. Begin mapping Food Service Establishments in GIS and building database of grease trap inspectional data.

Implementation Schedule:

Within **one year** after EPA approves the CMOM Action Plan

Status: COMPLETE

Cityworks (CMMS) has been updated to reflect all food service establishments (FSE) and is updated as new Food Service Wastewater Discharge Permits are issued. All FSE's are inspected annually.

The Enforcement response plan has been last updated in 2022. Recently reviewed by the EPA in 2025, the ERP was found satisfactory.

Action Number 11

Deficiency:

The City has not verified that other air relief valves do not exist. Maintenance of air relief valves has not been performed historically.

Recommended Corrective Action:

Review record drawings and inspect force main routes to confirm location of air relief valves. If located, enter into GIS and schedule routine maintenance in CMMS.

Implementation Schedule:

Within **one year** after EPA approves the CMOM Action Plan

Status:

Ongoing. The City has identified three air release valves for four lift stations including Elliot Street, Lake Street and Fondi Road/Hilldale Lift Station common force main. The City will develop a CityWorks PM schedule following the manufacturer's recommendations. When any other air relief valves are found they will be added to CityWorks PM list.

Action Number 14

Deficiency:

The City does not have formal emergency response training.

Recommended Corrective Action:

Implement a program for training and practicing emergency response.

Implementation Schedule:

Within **one year** after EPA approves the CMOM Action Plan

Status:

The Wastewater Staff have been trained and additional training will be documented in the City's Access File. For minor emergencies, the staff prepares in advance of a weather event (e.g., setting up bypass pumps at the Marginal Pump Station, verifying that equipment has fuel (gasoline, diesel, or propane), along with procuring rental generators. The need for training is incorporated into these routine preparations.

Action Number 15

Deficiency:

The City has a hydraulic model for interceptors and CSOs, but there is no city-wide hydraulic model.

Recommended Corrective Action:

Although developing a comprehensive hydraulic model is not a high priority, Woodard & Curran recommends building out the model as required to address capacity issues and plan for new development as the need arises.

Implementation Schedule:

As Needed

Status: Ongoing

The City's GIS system is updated by City staff on an ongoing basis which will provide a good foundation for a future model.

Action Number 17

Deficiency:

Although there is generally sufficient redundancy of pumps and level controls, some stations require specific upgrades related to redundancy.

Recommended Corrective Action:

The City will utilize the recommendations of the Pump Station Evaluation (Wright Pierce, 2016) to evaluate future rehabilitation.

Implementation Schedule:

Ongoing

Status: Ongoing

The City will be standardizing all their pump stations during upgrades and additional pump stations will be considered for rehabilitation/upgrades as outlined in the Pump Station CIP. The City will utilize remaining life of each station, consequence of failure, and station functions. The City has ranked each station for rehabilitation. Ejector Station rank 1; Vacuum Prime rank 2; Flooded Suction rank 3; Submersible rank 4. Mission alarms are currently installed in all thirty-six lift stations. Design of three more stations are Complete. Contract CWSRF-12419 was awarded June 30, 2024. Construction is planned in the spring 2025.

Action Number 20

Deficiency:

There is currently no schedule for cleaning sewer lines on a system-wide basis.

Recommended Corrective Action:

The City will utilize a 20-year plan to inspect all sewer pipes calculated to have a consequence of failure value ≥ 3 (approximately 57% of system).

Implementation Schedule:

Will begin to implement program within six **months** after EPA approves the CMOM Action Plan

Status: Ongoing?

The City has purchased their own vac truck. Sewers are designed to achieve self-cleaning velocities. The City has used the Vac-Truck to clean the City's sewers as necessary. The City has added flushing PM's with more flushing being conducted with 139 sewer mains cleaned. Sewer lines are also cleaned prior to planned CCTV inspections. The City, with its consultant Weston and Sampson developed a five-year CCTV program focusing on high-risk areas.

Action Number 22

Deficiency:

The City does not have a list of assets located on rights-of-way. The City has also not developed an SOP for maintenance of rights-of-way and easements.

Recommended Corrective Action:

Identify off-street assets using GIS. Schedule preventative maintenance for maintaining accessibility in CMMS. Develop SOPs for specific easements as necessary, including contacting property owners to obtain keys, etc.

Implementation Schedule:

Within **two years** after EPA approves the CMOM Action Plan

Status: Ongoing

The City has input easements into GIS as assets. These assets will be populated, and SOPs will be made, as well as the development of a preventative maintenance plan. These easements will be added to our CMMS program and a PM schedule will be created for easement inspections. Easement assets are created and can be used in the City's CMMS. An inspection form has been created to evaluate the level of maintenance needed for the easement.

Action Number 24

Deficiency:

Although the City has identified areas with high measured inflow, building inspections have not been performed.

Recommended Corrective Action:

The City will perform trial building inspections to a sample of 10% of buildings located in Areas 14 & 23 Infiltration and Inflow Report (CDM Smith, 2011). Sample brochures will be sent out to buildings where inspections are not successfully completed.

Implementation Schedule:

Within **two years** after EPA approves the CMOM Action Plan

Status:

The City is considering this as part of the Phase 3 CSO work. However, recommended corrective action is only practical in separated sewer areas. I/I brochures are available on the City's website.

Table 7-3 CMOM-Related Expenses that Occurred

During Reporting Period 18 (January through JUNE 2025)

Account	Collection Totals :	Account Description
Lift Station Operation and Maintenance	\$117,275	Used to fund costs for all maintenance and repair of the wastewater collection system. Haverhill's system includes approximately 200 miles of gravity sewer which includes 8-inch up to 72-inch pipe, 36 pumping stations and 3 siphons under the Merrimack River.
Sewer Assessment & Inspection	\$79,523	Used to fund cleaning, CCTV inspection, and assessment of sewer lines and grit removal
Service Contracts	\$65,608	Used to fund the annual service contracts for various items in the wastewater department.
Wastewater Infrastructure	\$34,163	This account is use for sewer repair miscellaneous items.
Wastewater Capital	\$0	Funds are used for expenditures greater than \$10,000 with a life greater than 3-years. This is an annual funded from current year revenues.
Storm Water - Capital	\$114,376	Small stormwater improvements
Stormwater Expense	\$845	Funds various expenses related to stormwater system operation and maintenance, street sweeping, federal and state permit requirements, and the downtown flood system. There is currently no revenue source for stormwater expenditures.
Sewer Rehab	\$266,175	Funds are used for expenditures to repair and rehabilitate City's sewer infrastructure.
CSO Phase I Locke Street Sewer Separation Project and sewer replacement Includes Engineer, Police and Contractor Invoices	\$50,525	Locke Street Phase 1 Sewer Separation Design
Total Spent During Reporting Period	\$728,490	



APPENDIX A

CCTV INSPECTION MAP

City of Haverhill CCTV Inspections

Sewer and drain inspections done through our "5 year inspection program" and "on call" from fall of 2022 to present.

