

Appendix 2

2019 MS4 Stormwater Annual Report

Water Testing Data

Part 2 – Summary Sheets

TABLE 4
STORMWATER LABORATORY ANALYTICAL RESULTS
Mill River - Outfall 129
December 2019
New Haven, Connecticut

Location ID	Sample Date	Field Parameters										Laboratory Analytical Parameters														
		Temp	Conductivity	pH	DO	ORP	Turbidity	Color	Boron (mg/L)	Hardness CaCO3 (mg/L)	Chloride (mg/L)	COD (mg/L)	MEAS (mg/L)	Arsenic (mg/L)	Nitrite-N (mg/L)	Nitrate-N (mg/L)	Oil and Grease (mg/L)	TKN (mg/L)	Total P (mg/L)	TES (mg/L)	Embroided Cob (mg/100ml)	Inorganic Boron (mg/100ml)	Picoc Coliform MPN (MPN/100ml)	Total Coliform (MPN/100ml)	Conductivity (microhm/cm)	Solubility (ppb)
0129	6/18/19	21.7	20.1	7.66	87.2	192.8	50.69	Clear	<0.05	6.4	<0.02	14	<0.05	0.12	<0.010	0.15	<1.4	0.29	0.047	25	537	988	437	24,200	19	<0.5
	12/9/19	9.0	339.6	7.70	8.39	339.5	183	Greyish	0.10	118	<0.02	161	0.41	0.44	0.066	0.13	10	1.94	0.265	100	327	857	189	>24,200	928	0.5
CB13157	12/9/19	9.9	91.3	8.10	9.22	315.4	53.1	Greyish	<0.05	11.1	<0.02	690	0.27	0.58	0.011	0.06	5.7	7.28	1.10	160	31	557	20	>24,200	84	<0.5
CB9473	12/9/19	9.9	220.8	7.11	8.86	940.9	90.3	Greyish	<0.05	60.0	<0.02	378	0.32	0.60	0.031	0.10	13	4.42	4.70	250	134	1,350	52	>24,200	226	<0.5
CB13205	12/9/19	9.9	314.7	8.29	8.68	329.5	110	Greyish	<0.05	26.6	<0.02	152	0.25	0.61	0.046	0.11	6.2	2.27	0.390	92	51	1,210	10	14,100	314	<0.5

Notes:
Concentrations in bold were reported above the laboratory reporting limits
mg/L - milligrams per liter
TKN - Nitrogen Tot Kjeldahl
<0.5 indicates compound was Not Detected at or above the specified laboratory reporting limit
>24,200 indicates sample was found above laboratory detection limits

TABLE 5
STORMWATER LABORATORY ANALYTICAL RESULTS

Mill River - Outfall 126
December 2019
New Haven, Connecticut

Location ID	Sample Date	Field Parameters										Laboratory Analytical Parameters													
		Temp	Conductivity	pH	DO	ORP	Turbidity	Color	Brown (mg/L)	Blackness (CuCO3 (mg/L))	Chloride (mg/L)	COD (mg/L)	Ammonia as Nitrogen (mg/L)	Nitrite-N (mg/L)	Nitrate-N (mg/L)	OR and Oxidation (mg/L)	TKN (mg/L)	Total P (mg/L)	TSS (mg/L)	Escherichia Coli (MPN/100ml)	Enterococci (MPN/100ml)	Coliforms (MPN/100ml)	Total Coliforms (MPN/100ml)	Conductivity (microhm/cm)	Salinity (ppt)
O126	12/26/19	13.2	548.9	7.28	2.34	-73.8	51.1	Gray, brown	0.06	136	<0.02	459	1.92	14.50	0.093	0.25	27	26.6	4.00	130	>24,200	>24,200	>24,200	608	<0.5
	12/29/19	9.9	162.3	7.49	8.98	334.4	287.1	Greyish/Brown	<0.05	15.4	<0.02	293	0.20	0.51	0.024	0.04	7.5	3.95	0.812	110	2,600	>24,200	>24,200	205	<0.5
CB13001	12/29/19	9.8	295.5	7.46	9.25	347.5	116.7	Greyish/Brown	<0.05	12.0	<0.02	118	0.15	<0.10	0.010	0.05	2.0	0.91	0.149	90	459	2,610	>24,200	297	<0.5
CB13015	12/29/19	11.6	329.8	7.37	8.30	328	28.6	Greyish	<0.05	4.5	<0.02	36	0.12	<0.05	0.013	0.06	<1.4	0.46	0.124	28	10	633	12,000	38	<0.5
CB13033	12/29/19	9.9	103.6	7.98	9.42	313.2	8.65	Greyish	<0.05	2.7	<0.02	19	0.12	<0.05	<0.010	0.07	<1.4	0.51	0.075	13	31	448	17,300	64	<0.5
CB13073	12/29/19	9.8	1,029	7.11	9.06	356.8	125.1	Greyish/Brown	<0.05	22.4	<0.02	125	0.14	0.32	0.053	0.15	3.6	1.70	0.386	70	1,040	3,450	>24,200	3,460	0.5
CB13089	12/29/19	9.8	194.6	7.57	9.42	343.3	28.7	Greyish	<0.05	16.2	<0.02	223	0.12	<0.25	0.013	0.03	<1.4	3.08	1.14	25	958	3,870	>24,200	199	<0.5
CB8609	12/29/19	11.2	474.4	6.96	7.82	354.8	118.7	Greyish/Brown	<0.05	44.8	<0.02	220	0.13	0.42	0.071	0.13	8.4	2.20	0.553	220	134	1,400	24,200	471	<0.5
CB9129	12/29/19	9.9	175.1	7.16	9.44	338.6	55.2	Greyish	<0.05	12.6	<0.02	42	0.11	0.16	<0.010	0.06	<1.4	1.01	0.182	29	145	3,450	>24,200	174	<0.5
CB13175	12/29/19	10.0	189.7	7.24	9.12	377.8	78.7	Greyish	<0.05	12.9	<0.02	70	0.16	0.31	0.030	0.10	2.1	1.10	0.257	39	2,050	9,800	>24,200	214	<0.5
CB9436	12/29/19	11.0	427.3	6.97	5.72	355.2	287.1	Greyish/Brown	<0.05	55.1	<0.03	405	0.27	<0.25	0.025	0.04	8.2	5.83	1.39	240	987	9,800	>24,200	293	<0.5

Notes:
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TKN = Nitrogen Tot Kjeldahl
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>24,200: Indicates sample was found above laboratory detection limits

**TABLE 6
STORMWATER LABORATORY ANALYTICAL RESULTS**

Laboratory Duplicate Bacteria Samples
New Haven, Connecticut

Location ID	Sample Date	Fluents Environmental Lab				Environmental Consulting Laboratories			
		Enteroblasts Coll (CFU/100 ml)	Enterococci Bacteria (CFU/100ml)	Fecal Coliforms MPN (MPN/100ml)	Total Coliforms (CFU/100ml)	Enteroblasts Coll (CFU/100 ml)	Enterococci Bacteria (CFU/100ml)	Fecal Coliforms MPN (MPN/100ml)	Total Coliforms (CFU/100ml)
O11	11/13/18	609	602	383	17,300	200	310	300	17,250
CB157	11/13/18	243	862	134	>24,200	200	630	<100	173,290
CB166A	11/13/18	146	24,200	388	>24,200	<100	12,220	100	>241,960
CB172	11/13/18	439	650	148	>24,200	1,030	850	100	241,960
CB214	11/13/18	161	>24,200	231	>24,200	410	28,120	630	>241,960
CB689	11/13/18	41	201	31	17,300	200	<100	<100	25,950
CB771	11/13/18	>24,200	>24,200	>24,200	>24,200	>241,960	92,080	173,290	>241,960
O7	11/13/18	>24,200	>24,200	>24,200	>24,200	241,960	>241,960	48,840	>241,960
O10	12/28/18	>24,200	>24,200	>24,200	>24,200	>241,960	>241,960	>241,960	>241,960
O12	11/13/18	5,480	5,170	1,860	>24,200	5,040	6,770	1,560	198,630
O13	12/28/18	>24,200	>24,200	>24,200	>24,200	>241,960	61,310	155,310	>241,960
O14	11/13/18	3,450	2,280	588	>24,200	6,310	1,870	630	86,640
O41	12/28/18	>24,200	>24,200	>24,200	>24,200	>241,960	92,080	>241,960	>241,960
O46	12/21/18	637	2,280	197	9,800	410	1,990	200	8,420
O47	12/21/18	9,140	3,870	5,170	10,100	3,360	1,580	1,610	13,540
O57	12/28/18	>24,200	>24,200	>24,200	>24,200	>241,960	>241,960	>241,960	>241,960
O58	12/28/18	>24,200	>24,200	>24,200	>24,200	>241,960	81,640	>241,960	>241,960
O66	11/13/18	3,080	2,190	1,480	>24,200	2,350	1,350	1,610	61,310
O68	12/28/18	30	249	20	13,000	100	8,600	100	5,810
O87	12/28/18	>24,200	6,910	>24,200	>24,200	>241,960	>241,960	>241,960	>241,960
O88	12/28/18	591	471	637	>24,200	520	1,100	200	30,760
O89	12/21/18	7,700	5,480	2,610	>24,200	9,590	5,540	2,980	46,110
O121	12/21/18	708	1,620	288	17,300	520	1,580	310	11,450
O132	12/21/18	12,000	2,190	1,260	19,900	7,940	630	1,100	18,600
O138	12/21/18	171	554	158	>24,200	100	1,630	100	77,010
CB13001	12/9/19	459	2,610	109	>24,200	630	4,540	100	41,060
CB13015	12/9/19	10	633	10	12,000	<100	630	<100	11,780
CB13033	12/9/19	31	448	74	17,300	<100	1,340	<100	11,460
CB13073	12/9/19	1,040	3,450	583	>24,200	740	5,460	310	111,990
CB13089	12/9/19	958	3,870	529	>24,200	850	10,030	300	104,620
CB8609	12/9/19	134	1,400	187	24,200	200	950	310	14,140
CB9129	12/9/19	145	3,450	199	>24,200	100	6,310	520	51,720
CB13175	12/9/19	2,050	9,800	465	>24,200	1,890	15,760	410	98,040
CB9436	12/9/19	987	9,800	520	>24,200	1,600	9,340	1,090	>241,960
O126	12/9/19	2,600	>24,200	1,080	>24,200	2,750	111,990	2,130	>241,960
CB13157	12/9/19	31	557	20	>24,200	<100	740	<100	72,700
CB13205	12/9/19	51	1,210	10	14,100	100	1,580	<100	11,120
O129	12/9/19	327	857	189	>24,200	100	1,090	300	18,600
O128	12/9/19	384	857	189	>24,200	410	1,450	520	21,870
CB9473	12/9/19	134	1,350	52	>24,200	310	2,720	100	24,000

Notes:
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 mg/l: milligrams per liter
 TKN = Nitrogen Tot Kjeldahl
 < 0.5: indicates compound was Not Detected at or above the specified laboratory reporting limit
 >24,200: Indicates sample was found above laboratory detection limits
 Blank cells indicate outfalls that have not yet been sampled