Table W-1
Outfall Dry Weather Sampling
Surface Water Results Summary
9/25/2019

Sample Identification: **Receiving Waterbody** **Watershed** **Date Sampled:**	**UNITS**	**IDDE PRIORITY SOURCE**	**IDDE PRIORITY STANDARD**	**Outfall Number** OF-28 Stop River Charles 9/25/2019	OF-42 Vine Brook Charles 9/25/2019	OF-73 Stop River Charles 9/25/2019	OF-85 Mill Brook Neponset 9/25/2019	OF-484 T.B.D. 9/25/2019	OF-541 T.B.D. 9/25/2019
FIELD SCREENING									
Field pH	su units	Center for Watershed Protection	> 5	6.89	6.78	7.10	7.25	7.10	6.72
Field pH	su units	Charles River TMDL	6.5 - 8.3	6.89	6.78	7.10	7.25	7.10	6.72
Temperature	°C	314 CMR 4.00 for Class B Warm Water	< 28.3	18.21	18.11	17.46	18.56	15.71	15.64
Field Specific Conductance	µs/cm °C	Center for Watershed Protection	< 2000	12.4	14.8	15.10	-5.7	-2.4	31.0
Dissolved Oxygen	%	314 CMR 4.00 for Class B Warm Water	> 43.22%	54.3%	90.30%	**40.00%**	71.00%	91.00%	**24.00%**
Dissolved Oxygen	mg/L	314 CMR 4.00 for Class B Warm Water	> 5	-	-	-	-	-	-
Turbidity	NTU			15.62	15.67	28.45	38.77	29.42	27.45
Salinity	ppt			343.0	301.0	215.0	204.0	1324.0	13.0
LABORATORY TESTING									
Ammonia as N (SM19-22 4500 NH3 C)	mg/L	EPA New England Bacterial Source Tracking Protocol	< 0.5	ND	ND	0.53	0.53	ND	ND
Chlorine, Free (SM21-22 4500 CL G)	mg/L	EPA 2018 General Permit	< 0.02	ND	ND	0.041	ND	ND	0.83
Chlorine, Residual (SM21-22 4500 CL G)	mg/L	EPA 2018 General Permit	< 0.02	ND	0.036	0.087	0.024	ND	0.59
Coliform, Fecal (SM 9223B - COLILERT)	MPN/100 mL	Neponset River TMDL	≤ 200	7.5	7.4	100	**370**	86	140
Coliform, Total (SM 9223B - COLILERT)	MPN/100 mL			>2419.6	2400	>2419.6	>2419.6	>2419.6	4900
Phosphorus, Total (SM 21-22 4500 P E)	mg/L	Center for Watershed Protection IDDE Guidance	0.4	ND	ND	.11	ND	ND	0.22
Total Suspended Solids (SM21-22 2540D)	mg/L			ND	2.6	27	2.4	ND	240
E. Coli (SM 9223B - COLILERT)	MPN/100 mL		< 235	14	11	140	2400	91	180
Enterococci (ENTEROLERT)	present/absent			Present	Present	Absent	Present	Absent	Present
Surfactants - Methylene blue active substances (SM5540 C-1)	mg/L	EPA New England Bacterial Source Tracking Protocol	< 0.25	0.06	0.06	0.10	0.06	0.12	0.07

Notes:

Any outfalls that are found during screening to contain one or more of the following signs of sewage contamination will automatically be re-prioritized to the top of the high priority outfalls for catchment investigation:

√ Olfactory or visual evidence of sewage;

√ Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, AND bacteria levels greater than the applicable water quality criteria for receiving water (235 CFU or MPN for E. coli or 61 CFU or MPN for Enterococcus); or

√ Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L AND detectable levels of chlorine.

Table W-2
Outfall/DMH Dry Weather Sampling
Surface Water Results Summary
6/26/2020

Sample Identification:	UNITS	IDDE PRIORITY SOURCE	IDDE PRIORITY STANDARD	Outfall Number			IDDE Drainage Manholes					
Receiving Waterbody				OF-85 Mill Brook	OF-265 Unknown	OF-526 Unknown	DMH-266	DMH-267	DMH-273 Mill Brook	DMH-274	DMH-927	DMH-938
Watershed				Neponset	Charles	Charles			Neponset			
Date Sampled:				6/26/2020	6/26/2020	6/26/2020	6/26/2020	6/26/2020	6/26/2020	6/26/2020	6/26/2020	6/26/2020
FIELD SCREENING												
Field pH	su units	Center for Watershed Protection	> 5	6.57	7.49	7.66	6.61	Dry	6.06	5.70	6.59	Dry
Field pH	su units	Charles River TMDL	6.5 - 8.3	6.57	7.49	7.66	6.61	Dry	6.06	**5.70**	6.59	Dry
Temperature	°C	314 CMR 4.00 for Class B Warm Water	< 28.3	16.83	18.73	11.92	19.21	Dry	18.48	17.62	16.12	Dry
Field Specific Conductance	µs/cm °C	Center for Watershed Protection	< 2,000	194	258	271	215	Dry	153	151	180	Dry
Dissolved Oxygen	%	314 CMR 4.00 for Class B Warm Water	> 43.22%	74.2%	97.90%	99.20%	**13.40%**	Dry	51.40%	**12.40%**	93.20%	Dry
Dissolved Oxygen	mg/L	314 CMR 4.00 for Class B Warm Water	> 5	7.18	9.16	10.69	**1.23**	Dry	**4.77**	**1.18**	9.16	Dry
Turbidity	NTU			Below	Below	Below	Below	Dry	Below	Below	Below	Dry
Salinity	ppt			Below	Below	Below	Below	Dry	Below	Below	Below	Dry
LABORATORY TESTING												
Ammonia as N (SM19-22 4500 NH3 C)	mg/L	EPA New England Bacterial Source Tracking Protocol	< 0.5	0.40	ND	ND	**2.10**	Dry	0.40	ND	**0.53**	Dry
Chlorine, Free (SM21-22 4500 CL G)	mg/L	EPA 2018 General Permit	< 0.02	**0.021**	**0.040**	ND	**0.400**	Dry	ND	**0.044**	**0.400**	Dry
Chlorine, Residual (SM21-22 4500 CL G)	mg/L	EPA 2018 General Permit	< 0.02	**0.027**	**0.030**	ND	**0.340**	Dry	**0.370**	**0.045**	**0.450**	Dry
Coliform, Fecal (SM 9223B - COLILERT)	MPN/100 mL	Neponset River TMDL	≤ 200	15	28	ND	**2,000**	Dry	20	1	13	Dry
Coliform, Total (SM 9223B - COLILERT)	MPN/100 mL			2000	>2419.6	870	>2419.6	Dry	1400	1600	>2419.6	Dry
Phosphorus, Total (SM 21-22 4500 P E)	mg/L	Center for Watershed Protection IDDE Guidance	0.4	ND	0.17	ND	ND	Dry	**0.46**	ND	ND	Dry
Total Suspended Solids (SM21-22 2540D)	mg/L			4	ND	ND	220	Dry	360	ND	100	Dry
Turbidity (EPA 180.1)	NTU			31	1.5	ND	36	Dry	580	ND	270	Dry
E. Coli (SM 9223B - COLILERT)	MPN/100 mL		< 235	3.1	22	1.0	67	Dry	13	ND	5.1	Dry
Enterococci (ENTEROLERT)	Present/Absent			Absent	Absent	Absent	Present	Dry	Present	Absent	Absent	Dry
Salinity (SM2520B)				ND	ND	ND	ND	Dry	ND	ND	ND	Dry
Surfactants - Methylene blue active substances (SM5540 C-1)	mg/L	EPA New England Bacterial Source Tracking Protocol	< 0.25	0.09	0.05	<0.05	**1.79**	Dry	0.11	<0.05	0.08	Dry

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√ Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, AND bacteria levels greater than the applicable water quality criteria for receiving water (200 CFU or MPN for E. coli or 61 CFU or MPN for Enterococcus); or

√ Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L AND detectable levels of chlorine.

Table W-3
Outfall/DMH Dry Weather Sampling
Surface Water Results Summary
6/11/2021

				Outfall Number			IDDE Drainage Manholes			
Sample Identification:		**IDDE PRIORITY**	**IDDE PRIORITY**	OF-209	OF-280	OF-414	DMH-262	DMH-407	DMH-411	DMH-781
Receiving Waterbody	**UNITS**	**SOURCE**	**STANDARD**	North Brook	Unknown	Unknown				
Watershed				Charles						
Date Sampled:				6/11/2021	6/11/2021	6/11/2021	6/11/2021	6/11/2021	6/11/2021	6/11/2021
FIELD SCREENING										
Field pH	su units	Center for Watershed Protection	> 5	Dry	6.96	7.50	6.81	7.17	6.96	6.35
Field pH	su units	Charles River TMDL	6.5 - 8.3	Dry	6.96	7.50	6.81	7.17	6.96	**6.35**
Temperature	°C	314 CMR 4.00 for Class B Warm Water	< 28.3	Dry	17.45	17.96	16.36	16.34	14.93	10.52
Field Specific Conductance	µs/cm °C	Center for Watershed Protection	< 2,000	Dry	259	352	559	949	812	214
Dissolved Oxygen	%	314 CMR 4.00 for Class B Warm Water	> 43.22%	Dry	52.5%	83.10%	86.20%	98.10%	88.70%	78.60%
Dissolved Oxygen	mg/L	314 CMR 4.00 for Class B Warm Water	> 5	Dry	>5	7.86	8.43	9.59	8.92	8.71
Turbidity	NTU			Dry	0.00	3.48	1.60	2.85	2.12	0.00
LABORATORY TESTING										
Ammonia as N (SM19-22 4500 NH3 C)	mg/L	EPA New England Bacterial Source Tracking Protocol	< 0.5	Dry	**0.53**	ND	ND	ND	ND	ND
Chlorine, Free (SM21-22 4500 CL G)	mg/L	EPA 2018 General Permit	< 0.02	Dry	NT	NT	NT	NT	NT	NT
Chlorine, Residual (SM21-22 4500 CL G)	mg/L	EPA 2018 General Permit	< 0.02	Dry	ND	ND	ND	ND	ND	ND
Coliform, Fecal (SM 9223B - COLILERT)	MPN/100 mL	Neponset River TMDL	≤ 200	Dry	3.1	6.3	50	66	60	ND
Coliform, Total (SM 9223B - COLILERT)	MPN/100 mL			Dry	670	550	1,000	1,000	1,000	ND
Phosphorus, Total (SM 21-22 4500 P E)	mg/L	Center for Watershed Protection IDDE Guidance	0.4	Dry	ND	0.14	0.092	ND	ND	ND
Total Suspended Solids (SM21-22 2540D)	mg/L			Dry	ND	4.4	6.4	1.20	5.6	1.00
Turbidity (EPA 180.1)	NTU			Dry	NT	NT	NT	NT	NT	NT
E. Coli (SM 9223B - COLILERT)	MPN/100 mL		< 235	Dry	6.3	1.0	21.0	30.0	2.0	NT
Enterococci (ENTEROLERT)	Present/Absent			Dry	Absent	Absent	Present	Present	Present	Absent
Salinity (SM2520B)				Dry	ND	ND	ND	ND	ND	ND
Surfactants - Methylene blue active substances (SM5540 C-1)	mg/L	EPA New England Bacterial Source Tracking Protocol	< 0.25	Dry	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

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