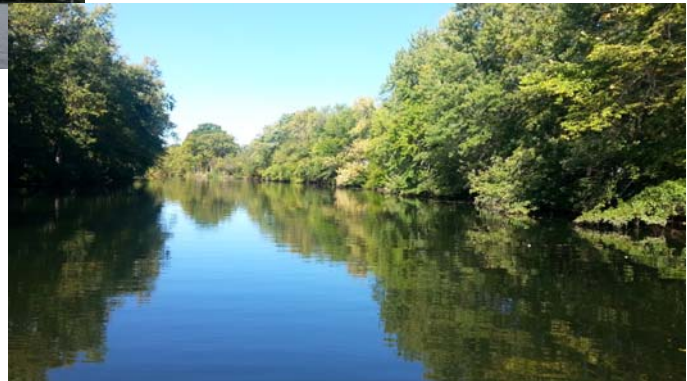


Summary of CSO Receiving Water Quality Monitoring in Upper Mystic River/Alewife Brook and Charles River, 2020



Massachusetts Water Resources Authority
Environmental Quality Department
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**Summary of CSO Receiving Water Quality Monitoring
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and Charles River, 2020**

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TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	OVERVIEW OF THE MONITORING PROGRAM	6
1.2	ORGANIZATION AND PURPOSE OF THE REPORT	6
2	MATERIALS AND METHODS	8
2.1	FIELD AND LABORATORY METHODS	8
2.1.1	<i>Selection of sampling locations</i>	8
2.1.2	<i>Sampling schedules</i>	8
2.1.3	<i>Sample collection</i>	8
2.1.4	<i>Field measurements</i>	8
2.1.5	<i>Rainfall measurements and conditions</i>	9
2.1.6	<i>Laboratory analyses</i>	10
2.2	DATA ANALYSIS	11
2.3	WATER QUALITY STANDARDS USED IN THIS REPORT	12
3	CHARLES RIVER	14
3.1	SAMPLING AREA	14
3.2	POLLUTION SOURCES	16
3.3	SUMMARY OF WATER QUALITY, 2016-2020	18
3.4	WATER QUALITY RESULTS, 2020	21
3.4.1	<i>Physical measurements</i>	21
3.4.2	<i>Nutrients, TSS and chlorophyll</i>	22
3.4.3	<i>Bacterial water quality</i>	25
3.5	SUMMARY OF CHARLES RIVER WATER QUALITY	33
4	MYSTIC RIVER AND ALEWIFE BROOK	34
4.1	SAMPLING AREA	34
4.2	POLLUTION SOURCES	34
4.3	SUMMARY OF WATER QUALITY, 2016-2020	38
4.4	WATER QUALITY RESULTS, 2020	41
4.4.1	<i>Physical measurements</i>	41
4.4.2	<i>Nutrients, TSS and chlorophyll</i>	42
4.4.3	<i>Bacterial water quality</i>	47
4.5	SUMMARY OF MYSTIC RIVER/ALEWIFE BROOK WATER QUALITY	58
5	STORM SIZE AND BACTERIAL COUNT ANALYSIS	59
5.1	2016-2020 BACTERIA COUNTS BY TIME PERIOD AND STORM SIZE	59
5.1.1	<i>Charles River</i>	59
5.1.2	<i>Mystic River & Alewife Brook</i>	63
6	REFERENCES	66
	APPENDIX I: Use of Local Rain Gauge Data for Rainfall Categorization	
	APPENDIX II: Raw data, laboratory analyses	
	APPENDIX III: Raw data, physical profile results	

LIST OF TABLES

Table 1-1. Comparison of rain event frequency by rainfall volume, 2020 rainfall vs. Typical Year.	5
Table 1-2. Number of rain events with peak intensity >0.4 inches/hour, 2020 vs. Typical Year.	6
Table 2-1. Field measurements.	9
Table 2-2. Laboratory measurements.	11
Table 2-3. Water quality standards for Class B and Class SB waters.	13
Table 3-1. MWRA monitoring locations, Charles River Basin.	15
Table 3-2. Charles River Basin pollution sources.	17
Table 3-3. Charles River Basin CSO activations, results of MWRA calibrated hydraulic model simulations and facility records for 2020 system conditions and 2020 rainfall.	18
Table 3-4. Charles River station visits by rainfall condition.	18
Table 3-5. Summary of water quality, Charles River Basin, 2016-2020.	19
Table 3-6. Geometric mean indicator bacteria, Charles River Basin, 2015 – 2019 and 2020.	28
Table 4-1. MWRA monitoring locations, Mystic River and Alewife Brook.	36
Table 4-2. Mystic River/Alewife Brook pollution sources.	37
Table 4-3. Mystic River/Alewife Brook CSO activations, results of MWRA calibrated hydraulic model simulations and facility records for 2020 system conditions and 2020 rainfall.	38
Table 4-4. Mystic River/Alewife Brook station visits by rainfall condition.	38
Table 4-5. Summary of water quality, Mystic River/Alewife Brook, 2016 - 2020.	39
Table 4-6. Geometric mean indicator bacteria, Alewife Brook, 2015 – 2019 and 2020.	50
Table 4-7. Geometric mean indicator bacteria, Mystic River, 2015 – 2019 and 2020.	51

LIST OF FIGURES

Figure 1-1. Estimated Treated, Untreated and Total CSO Volume in the Typical Year, 1988-2020.	4
Figure 1-2. CSO Typical Year Discharge Volume Estimates for 1988, Current, and Approved Long Term Control Plan	4
Figure 2-1. Summary and comparison of the two rainfall classification systems.....	10
Figure 2-2. Percentile distributions indicated on percentile box plots.....	11
Figure 3-1. Map of MWRA Charles River sampling locations.	14
Figure 3-2. Summer Secchi depth, Charles River Basin, 2020.....	21
Figure 3-3. Monthly average nutrients, TSS and Chlorophyll 2015 – 2019 and 2020, Station 012, Watertown Dam.	23
Figure 3-4. Monthly average nutrients, TSS and Chlorophyll 2015 – 2019 and 2020, Station 166, Science Museum.	24
Figure 3-5. Indicator bacteria concentrations, Charles River Basin, 2020.	27
Figure 3-6. <i>Enterococcus</i> by rainfall condition, Charles Basin, 2020.	29
Figure 3-7. <i>Enterococcus</i> over time, Upper Charles Basin (upstream of most CSOs) by phase of Long Term CSO Plan and rainfall condition.....	30
Figure 3-8. <i>Enterococcus</i> over time, Lower and Middle Charles Basin by phase of Long Term CSO Plan and rainfall condition.	30
Figure 3-9. Charles River <i>Enterococcus</i> percent compliance by weather condition, 2020.	31
Figure 3-10. Charles River <i>E. coli</i> percent compliance by weather condition, 2020.....	32
Figure 4-1. Map of Mystic River sampling locations.	34
Figure 4-2. Secchi depth, Mystic River, 2020.	41
Figure 4-3. Monthly average nutrients, TSS and Chlorophyll, 2015 – 2019 and 2020, Station 083, Mystic upstream of Alewife Brook.	43
Figure 4-4. Monthly average nutrients, TSS and Chlorophyll 2015 – 2019 and 2020, Station 066, Boston Ave.	44
Figure 4-5. Monthly average nutrients, TSS and Chlorophyll 2015 – 2019 and 2020, Station 167, Amelia Earhart Dam (upstream/freshwater).	45
Figure 4-6. Monthly average nutrients, TSS and Chlorophyll 2015 – 2019 and 2020, Station 137, Mystic River mouth (marine).	46
Figure 4-7. Indicator bacteria concentrations, Mystic River/Alewife Brook, 2020.....	49
Figure 4-8. <i>Enterococcus</i> by rainfall condition, Mystic River/Alewife Brook, 2020.....	52
Figure 4-9. <i>Enterococcus</i> over time, Alewife Brook by phase of CSO LTCP and rainfall condition.	53
Figure 4-10. <i>Enterococcus</i> over time, Mystic River by phase of CSO LTCP and rainfall condition.	53
Figure 4-11. Mystic River <i>Enterococcus</i> percent compliance by weather condition, 2020.....	54
Figure 4-12. Mystic River <i>E. coli</i> percent compliance by weather condition, 2020.....	55
Figure 4-13. Alewife Brook <i>Enterococcus</i> percent compliance by weather condition, 2020.....	56
Figure 4-14. Alewife Brook <i>E. coli</i> percent compliance by weather condition, 2020.....	57
Figure 5-1. 2016-2020 <i>E. coli</i> counts at Charles River stations upstream of all CSOs by storm size and hours after start of rain.....	61
Figure 5-2. 2016-2020 <i>E. coli</i> counts at Charles River stations in reaches downstream of CSOs by storm size and hours after start of rain.....	61
Figure 5-3. 2016-2020 <i>Enterococcus</i> counts at Charles River stations upstream of all CSOs by storm size and hours after start of rain.	62
Figure 5-4. 2016-2020 <i>Enterococcus</i> counts at Charles River stations in reaches downstream of CSOs by storm size and hours after start of rain.	62
Figure 5-5. 2016-2020 <i>E. coli</i> counts in Alewife Brook by storm size and hours after start of rain.	64
Figure 5-6. 2016-2020 <i>E. coli</i> counts in the Mystic River by storm size and hours after start of rain.	64
Figure 5-7. 2016-2020 <i>Enterococcus</i> counts in Alewife Brook by storm size and hours after start of rain.	65
Figure 5-8. 2016-2020 <i>Enterococcus</i> counts in the Mystic River by storm size and hours after start of rain.	65

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1 Introduction

This report summarizes data collected as part of the Massachusetts Water Resources Authority (MWRA) combined sewer overflow (CSO) receiving water monitoring program, and is produced in accordance with the variances for CSO discharges to the Lower Charles River/Charles Basin and the Alewife Brook/Upper Mystic River Basin.

Due to the global COVID-19 pandemic that affected the United States right before the beginning of the 2020 field sampling season, MWRA made a number of temporary changes to the program to align with employee safety protocols recommended by the Centers for Disease Control (CDC) and the Commonwealth of Massachusetts. Chapter 2 details these changes in full.

The Massachusetts Department of Environmental Protection (MADEP) issued initial variances in October 1998 and March 1999, respectively, and extended both variances several times through August 2019. On August 30, 2019, MADEP issued new variances for the Lower Charles River/Charles Basin and the Alewife Brook/Upper Mystic River Basin with a five-year term, running until August 31, 2024.¹ EPA Region 1 approved these variances on May 31, 2020. The 2019 variances are largely similar to the previous variances with regard to water quality monitoring and reporting conditions. This monitoring summary is submitted pursuant to the variance conditions and provides an assessment of water quality in 2020 in the Charles River, Upper Mystic River, and Alewife Brook, which benefitted from some of the 35 CSO projects in MWRA's Long-Term CSO Control Plan (LTCP).

As part of the Boston Harbor Case (U.S. v. M.D.C, et al., No. 85-0489-RGS), MWRA developed and implemented its LTCP, which addresses CSO discharges from CSO outfalls hydraulically related to the MWRA sewer system and member community sewer systems. The LTCP consists of 35 CSO control projects, the last of which was completed and brought into operation in December 2015. Pursuant to the federal court order in the Boston Harbor Case, MWRA was originally required to commence a three-year CSO post-construction monitoring and performance assessment by January 2018 and submit the results to the United States Environmental Protection Agency (EPA) and the MADEP by December 2020. MWRA commenced its three-year CSO post-construction monitoring and performance assessment in November 2017. In July 2019, MWRA requested, and was granted, an additional year to complete its CSO post-construction monitoring and performance assessment. This additional year was needed to allow MWRA to complete receiving water models added to the performance assessment by a 2019 agreement with EPA and MADEP. The goal of the MWRA's CSO post-construction monitoring and performance assessment, which will now conclude in December 2021, is to demonstrate whether MWRA has achieved the levels of control specified in its LTCP.

In 2006, MADEP agreed, as part of the Boston Harbor Case, to issue a series of three-year variance extensions through 2020 with no additional CSO obligations and related construction activities beyond the

¹ Sanitary Sewer Overflows & Combined Sewer Overflows. <https://www.mass.gov/guides/sanitary-sewer-systems-combined-sewer-overflows#-2019-charles-river-basin-and-alewife/upper-mystic-river-final-combined-sewer-overflow-variances->

then-approved LTCP, to allow MWRA to complete implementation of its LTCP and three-year CSO post-construction monitoring and performance assessment. The new five-year variances issued on August 30, 2019 give MWRA and the Cities of Cambridge and Somerville more time to complete additional CSO control planning, including the evaluation and potential implementation of additional CSO reduction measures for the Lower Charles/Charles Basin and the Alewife Brook/Upper Mystic River Basin. Since commencement of the CSO performance assessment in November 2017, MWRA, Cambridge, and Somerville have implemented or are implementing the following additional CSO mitigation measures:

Charles River

- Cambridge completed improvements that now allow most of the stormwater it removed from sewers serving Cambridgeport to discharge to the Charles River, reducing treated CSO discharge volume from MWRA's Cottage Farm Facility while ensuring compliance with Charles River phosphorus limits.
- With Cambridge's assistance and support, MWRA is evaluating system optimization measures that may further reduce CSO discharges at Charles River outfalls.
- Cambridge continues to separate combined sewers in areas tributary to the CAM017 outfall.

Alewife Brook

- MWRA modified the wet weather pumping strategy at its Alewife Brook Pumping Station, which slightly reduces upstream CSOs.
- MWRA increased the connection size from Somerville's Tannery Brook Conduit to the MWRA interceptor system, reducing CSO at outfall SOM001A.
- Cambridge modified the regulator structure associated with outfall CAM002, reducing CSO at this outfall.
- Cambridge removed sediments from its sewer system related to outfall CAM401A, significantly improving sewer system conveyance and reducing CSO at the outfall.
- With Cambridge and Somerville's assistance and support, MWRA is evaluating system optimization measures that may further reduce CSO discharges at Alewife Brook outfalls.

Upper Mystic River Basin

- MWRA modified influent gate operation at its Somerville Marginal Facility. MWRA is also replacing a leaky tide gate on the facility's outfall. Both actions will reduce treated CSO at outfall SOM007A/MWR205A.
- With Somerville's assistance and support, MWRA is pursuing the construction of an additional connection from the Somerville combined sewer system to the MWRA interceptor system that will significantly reduce treated discharge activations and volumes from the Somerville Marginal Facility.

Variance conditions require MWRA and the municipalities with CSOs discharging to variance waters (Cambridge and Somerville²) to continue to implement the Nine Minimum Controls of EPA's National CSO Control Policy, and require them to report estimated CSO discharge frequencies and volumes from their respective outfalls to these receiving waters on an annual basis. MWRA is also required to submit an annual report on results for its water quality monitoring program to MADEP and EPA assessing the impacts of CSO

² Boston and Chelsea also have community CSOs, but they do not discharge into waters covered by the CSO variances.

discharges. This report is submitted pursuant to the latter requirement. The variances also include the requirement of rapid notification of the public within four hours of a CSO discharge,³ and evaluating additional CSO control measures.

As noted above, the variances, as well as the 2019 agreement for extending the final CSO post-construction monitoring and performance assessment report to 2021, require MWRA to develop receiving water quality models for the Lower Charles River and the Alewife Brook/Upper Mystic River. As of July 2021, the models for both the Lower Charles/Charles Basin and the Alewife Brook/Upper Mystic River have been calibrated and draft versions of the final water quality assessment have been produced. More details can be found in the CSO Assessment's Semiannual Report No. 6.⁴

Since the beginning of MWRA's CSO control planning efforts in the late 1980s, MWRA and the CSO communities have eliminated or virtually eliminated (i.e., achieved 25-year storm level of control, specifically for the South Boston beaches) CSO discharges at 40 of the 86 discharge locations addressed in the LTCP. MWRA and the CSO communities have also greatly reduced CSO discharges at the 46 locations that remain. Along the Charles River, ten CSO outfalls were closed (including two that are closed pending additional evaluations by the City of Cambridge) and eight untreated and one treated CSO outfall remain active. Along the Alewife Brook, seven CSO outfalls were closed and six CSO outfalls remain active. Along the Upper Mystic River (Mystic Basin), two CSO outfalls were closed and one treated CSO outfall remains active (SOM007A/MWR205A is jointly permitted to Somerville and MWRA and can discharge Somerville Marginal CSO Facility flows to the Mystic River during higher tides). The Somerville Marginal facility primarily discharges at outfall MWR205 below the Amelia Earhart Dam in marine waters (not subject to the variance) when not restricted by the tide.

Since the early 1990s, major MWRA system improvements, such as the upgrade of the Deer Island Treatment Plant and related transport systems and the completed CSO projects, have reduced the frequency and volume of CSO discharges and have increased the percentage of discharges receiving treatment. The LTCP is predicted to reduce region-wide CSO discharge volume in a Typical Year⁵ from 3.3 billion gallons in 1988 to 0.4 billion gallons, an 88% reduction, with 94% of the remaining discharge volume receiving treatment at MWRA's four CSO treatment facilities. Figure 1-1 shows the estimated Typical Year CSO volume reduction system-wide since 1988, and Figure 1-2 shows the CSO volume reduction by receiving water. The estimate annual discharge volumes in Figure 1-1 are from Typical Year model runs utilizing MWRA's collection system model. MWRA updates the collection system model each year with new information about the system, including completed MWRA and community system improvements. For purposes of this report, receiving water quality data for the past 5 years (2016-2020) is considered representative of current conditions.

³ MWRA reports CSO discharges from MWRA-permitted outfalls via a subscriber-based system. To subscribe to the notifications, see https://www.mwra.com/harbor/html/cso_reporting.htm.

⁴ To download Semiannual Report No. 6, go to https://www.mwra.com/cso/pcmpa-reports/06_070120-123120.pdf.

⁵ Typical Year rainfall was developed by MWRA in 1992 using a 40-year rainfall record and was approved by EPA and DEP as a basis for measuring the performance of CSO control alternatives and the water quality impacts of remaining CSO discharges. Level of CSO control in the Typical Year is a key performance objective of the LTCP.

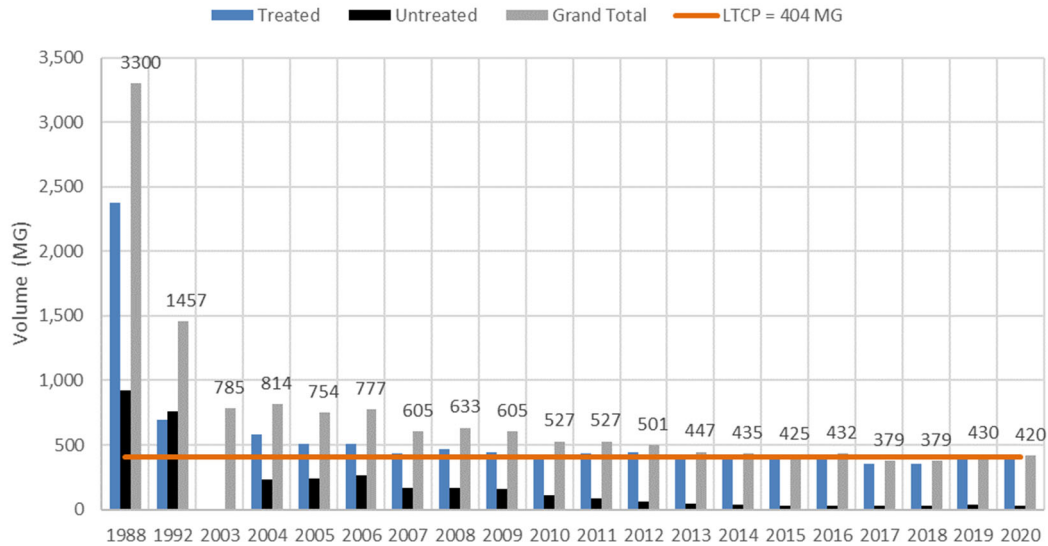


Figure 1-1. Estimated Treated, Untreated and Total CSO Volume in the Typical Year, 1988-2020.

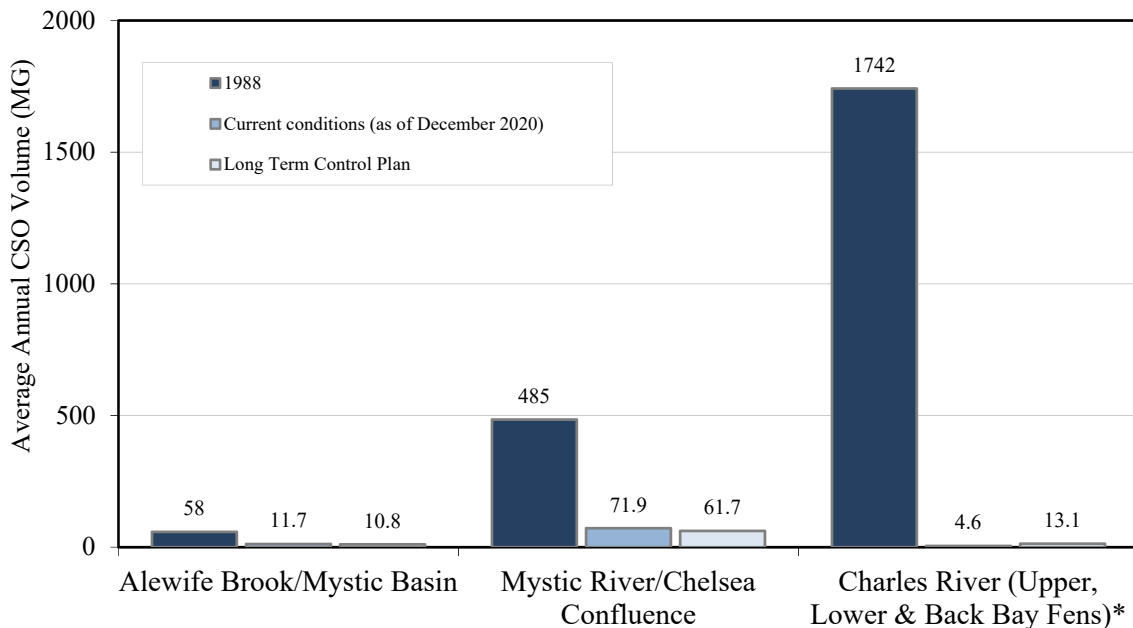


Figure 1-2. CSO Typical Year Discharge Volume Estimates for 1988, Current, and Approved Long Term Control Plan

* Back Bay Fens (Muddy River) is tributary to the Charles Basin but is not a variance water. Source: Updated from MWRA (2021)

Rainfall volumes for calendar year 2020 at various gauge locations in the MWRA service area and comparison to MWRA’s approved Typical Year appear in Table 1-1. The table summarizes the frequency of rain events in 2020 within selected ranges of rainfall volume. 2020 was a drier year compared to the Typical Year for number of rainfall events (approximately 88 versus 93), while total rainfall volume was much less than the Typical Year (approximately 38.1 versus 46.9 inches), and several inches lower than the official average annual rainfall for the Boston area (43 inches). Numbers of storms were higher than the Typical

Year at most gauges for the 0.25-0.5 and 0.5-1.0 inch categories. For the <0.25 inch category, only the Chelsea Creek gauge recorded more storms than the Typical Year. In the 1.0-2.0 inches category, Chelsea Creek, Ward Street, and Somerville Marginal all recorded fewer storms than the Typical Year, while the other three relevant gauges recorded more (BWSC Charlestown) or an equivalent number of storms to the Typical Year. Large storms – those greater than or equal to two inches of rainfall – occurred fewer times in 2020 than the Typical Year – at around one-half to one-third of the Typical Year number. Table 1-2 lists the number of storms in 2020 that had high peak rainfall intensities, which can drive CSO activations. Table 1-2 compares rainfall event relative intensities to the Typical Year using 0.4 inches/hour as a reference. Only at Ward Street were there more high intensity storms than the Typical Year. (Refer to Tables 3-3 and Table 4-3 for CSO discharge estimates for the Charles and Mystic, respectively.)

Table 1-1. Comparison of rain event frequency by rainfall volume, 2020 rainfall vs. Typical Year.

	Total Rainfall (in.)	Total Number of Storms	Number of storms, by rainfall volume				
			<0.25 inches	0.25 – 0.5 inches	0.5 – 1.0 inches	1.0 – 2.0 inches	≥2.0 inches
Typical Year	46.8	93	49	14	16	8	6
2020 Chelsea Creek Headworks (MWRA)	35.41	92	51	16	16	6	3
2020 Ward St. Headworks (MWRA)	40.3	89	44	16	20	6	3
2020 Somerville Marginal CSO Facility (MWRA)	36.04	92	48	19	17	6	2
2020 BWSC Charlestown	39.47	85	38	18	17	10	2
2020 BWSC Allston	38.71	89	45	18	16	8	2
2020 Fresh Pond (USGS)	38.45	79	37	13	19	8	2

Source: MWRA (2021)

Table 1-2. Number of rain events with peak intensity >0.4 inches/hour, 2020 vs. Typical Year.

	Number of storms (peak hourly intensity > 0.4 in/hr)	Average total rainfall per storm (inches)	Average peak hourly intensity (inches/hour)
Typical Year	9	1.56	0.63
2020 Chelsea Creek Headworks (MWRA)	5	1.48	0.69
2020 Ward St. Headworks (MWRA)	10	1.17	0.57
2020 Somerville Marginal CSO Facility (MWRA)	7	1.17	0.61
2020 BWSC Charlestown	7	1.08	0.52
2020 BWSC Allston	6	1.5	0.59
2020 Fresh Pond (USGS)	7	1.06	0.57

Source: MWRA (2021) and MWRA rainfall data

1.1 Overview of the monitoring program

MWRA’s CSO receiving water quality monitoring program has been ongoing since 1989, with most sampling locations continuously monitored since 1991. All harbor and tributary areas affected by CSOs in Boston, Chelsea, Cambridge, and Somerville are included in the monitoring program. For most sampling locations included in this report, which presents sampling results for the Lower Charles River/Charles Basin and the Alewife Brook/Upper Mystic River only, at least 20 samples have been collected each year.

1.2 Organization and purpose of the report

Chapter 2 presents the materials and methods used in monitoring. Chapters 3 and 4 discuss the results of the CSO receiving water quality monitoring program in the Charles River and Alewife Brook/Upper Mystic River, respectively. Due to the COVID-19 pandemic and social distancing requirements, not all the parameters that were collected in the past were collected in 2020. Chapter 2 details the exact changes in the program due to the pandemic. Water quality parameters examined for each region include: bacterial indicators (*E. coli*, *Enterococcus*, and fecal coliform), water clarity (Secchi depth, total suspended solids), nutrients (phosphate, ammonium, nitrate/nitrite), and chlorophyll.

As noted in the previous report, receiving water quality results in the report that include data from before 2020 reflect the changes in the monitoring program made by MWRA in 2016-2019; in short, a switch to more storm-based sampling with the addition of weekend sampling to close temporal data gaps. This storm-based sampling was discontinued in 2020 due to COVID-19 safety concerns for the additional staff needed, and with the completion of calibration for the water quality models (see below). The storm-based sampling provided critical data for the calibration of the models. However, for tables and figures in this report that include pre-2020 data – especially ones that do not aggregate data by rainfall condition – considerably more

post-storm, wet weather data was gathered in 2018 and 2019 than previously. For example, Tables 3-4 and 4-4, which break down visits to the sampling stations in the Charles River and Mystic River/Alewife Brook by rainfall condition, reflects this wet weather bias for the period before 2020. Finally, where the data are aggregated by rainfall category, most rain data come from more local rain gauges rather than the Logan Airport gauge. This provides more spatially relevant rainfall data, rather than using a single rain gauge that can be several miles distant from some of the sampling locations.

The purpose of the report is to summarize 2020 water quality in the Charles River and Alewife Brook/Upper Mystic River. The report compares sampling results to water quality standards, shows spatial and temporal variations in water quality, and differences between wet and dry weather. For some bacterial and physical parameters, data from the previous five monitoring years are analyzed and compared with the 2020 data.

2 Materials and Methods

2.1 *Field and laboratory methods*

2.1.1 Selection of sampling locations

Some sampling locations were selected for their proximity to CSO discharges and others were selected to provide representative water quality measurements for a given area. Typically, all samples were collected by boat, but beginning in 2017, existing stations that were also accessible from the shore were identified so sampling could continue in inclement, non-boating weather. Complete lists of stations for the Charles River and the Alewife Brook/Mystic River, including maps and descriptions, appear in Figure 3-1 and Table 3-1 (Charles) and Figure 4-1 and Table 4-1 (Alewife/Mystic). Sampling at station 308 was discontinued after mid-June 2020 due to both access and safety issues.

2.1.2 Sampling schedules

The COVID-19 pandemic disrupted the usual sampling schedule in 2020. As much of the sampling involved staff working in close proximity and in enclosed vehicles, the sampling program was modified to allow for proper social distancing. At least 20 station visits were made to each location last year, within two separate monitoring projects described below. In 2020, eutrophication monitoring was conducted biweekly year-round, without interruptions from COVID-19, at a subset of river locations. Parameters sampled were limited to nutrients, chlorophyll, total suspended solids (TSS), and bacteria. Physical measurements collected through water quality sondes were omitted. CSO receiving water monitoring included bacteria sampling and physical parameter measurements collected roughly between April and October. Pre-COVID, sampling was tentatively scheduled to start in late March, but post-COVID the start was pushed back to April, and only at selected shoreline locations. Sampling by boat began in late June, and from this point forward, staff visited all sampling locations. Bacteria samples were collected as usual, although to comply with social distancing guidelines staff did not collect sonde data. The intensive post-storm sampling program was also suspended due to COVID-19, and finally ended due to the final calibration of the water quality models described in Section 1.

2.1.3 Sample collection

As noted above, due to COVID-19, the use of water quality sondes was omitted for 2020. At all locations, water samples were collected near-surface (approximately 0.1 meters below surface). Surface samples were collected by grab into rinsed sample containers. Bottom samples were collected at locations with a water depth greater than 3 meters, using a Kemmerer sampler or alpha bottle at 0.5 meter above the sediment surface. Separate sampling containers were used for bacteria, nutrient, and TSS analyses.

2.1.4 Field measurements

Field measurements were made with different instruments over the course of the monitoring program. Table 2-1 lists the instruments used and the variables measured.

Table 2-1. Field measurements.

Variable	Instruments used
Temperature, conductivity/salinity, dissolved oxygen, turbidity, pH ¹	Hydrolab Datasonde 4 (1997 - 2008) Hydrolab Datasonde 5 (2006 - 2008) YSI 600XL for temperature, conductivity, dissolved oxygen (1999 – 2013) YSI6600, YSI6820 (2009 – March 2019) YSI EXO2, EXO3 (April 2019 – present)
Secchi Depth	Wildco 8-inch limnological Secchi disk (upstream of dams) Wildco 8-inch oceanographic Secchi disk (marine waters)

¹ Water quality sondes were not used in 2020.

2.1.5 Rainfall measurements and conditions

Most analyses use 15-minute rainfall data from rain gauges throughout the region which may be more local to CSO outfalls and/or monitoring locations: Ward Street and Somerville Marginal (MWRA); Allston and Charlestown (BWSC); and Fresh Pond (US Geological Survey). These data are also stored in the MWRA’s Environmental Monitoring & Mapping System (EM&MS) database. Daily rainfall measurements were also taken from the National Weather Service (NWS) rain gauge located at Logan Airport in East Boston, as this was considered the most representative location for the entire monitoring area, and data is available for the entire monitoring period. Results from this gauge are reported in one-day intervals. Data are downloaded from the NWS website and stored in the EM&MS database.

For a number of figures in Chapters 3 and 4, rainfall conditions are used to separate bacteria results into different “bins” based on antecedent rainfall. Two different sets of conditions are used – one with three categories (dry, damp, and wet) and one with four categories (dry, damp, light rain, and heavy rain). Dry and damp conditions are identical between the two sets, and taken together, the “light rain” and “heavy rain” conditions in the four category system are combined in the “wet” condition in the three category system. Data from both the local gauges and the Logan gauge can be categorized in either system.

Figure 2-1 shows the two rainfall classification systems and the different conditions graphically.

Antecedent time	Rainfall (inches)						
	0	Less than 0.1	0.1 – 0.2	0.2 – 0.3	0.3 – 0.4	0.4 – 0.5	0.5+
1 day							
2 day							
3 day							

Dry	
Damp	
Wet	Light Rain
	Heavy Rain

Figure 2-1. Summary and comparison of the two rainfall classification systems

2.1.6 Laboratory analyses

Samples were analyzed at the MWRA Central Laboratory. For enumeration of bacteria, chlorophyll, nutrients, and TSS, MWRA Department of Laboratory Services (DLS) Standard Operating Procedures are followed.

Detailed laboratory methods with quality assurance and quality control procedures are described in the Central Laboratory Quality Management Plan (MWRA 2020a) and the DLS Standard Operating Procedures (MWRA various).

Table 2-2 lists the analytes measured and methods used in the monitoring program. MWRA discontinued *E. coli* monitoring at marine locations in 2007 due to methodological concerns with the Colilert method for marine samples, replacing *E. coli* with fecal coliform.

Table 2-2. Laboratory measurements.

Analyte	Method
<i>Enterococcus</i>	Standard Methods 9230C 2c, membrane filtration (for samples collected 1996 – 2003) EPA Method 1600 (for samples collected 1999 – 2007) Enterolert (ASTM D-6503-99; for samples collected 2007 – present)
<i>E. coli</i>	Modified EPA 1103.1, membrane filtration (for samples collected 2000 – 2006) Colilert-18 (Standard Methods 9223B; for freshwater samples collected 2007 - present)
Fecal coliform	Standard Methods 9222D, membrane filtration
Total suspended solids	Clesceri et al. (1998, Method 2540D), using nucleopore filters
Total phosphorus	TP and/or TDP: Solarzano and Sharp (1980a); PP: Solarzano and Sharp (1980a), Whatman GF/F
Phosphate	Murphy and Riley (1962), modified as in Clesceri et al (1998, Method 4500-P F) Skalar SAN ^{plus} autoanalyzer, Whatman GF/F filters
Total Nitrogen	TN and/or TDN: Solarzano and Sharp (1980b), Whatman G/F filters; PN: Perkin Elmer CHN analyzer, Whatman GF/F
Ammonium	Fiore and O'Brien (1962), modified as in Clesceri et al. (1998, Method 4500-NH3 H), Skalar SAN ^{plus} autoanalyzer, Whatman GF/F filters
Nitrate+nitrite	Bendschneider and Robinson (1952), modified as in Clesceri et al, (1998, Method 4500- NO3 F), Skalar SAN ^{plus} autoanalyzer, Whatman GF/F filters
Chlorophyll <i>a</i>	Acid-corrected (Holm-Hansen et al. 1965) as described in US EPA (1992). Trilogy fluorometer, GF/F filters

2.2 Data analysis

Descriptive Analyses. Indicator bacteria counts are typically log-normally distributed, and therefore a proper measure of central tendency for these data is the geometric mean. Geometric means and their associated 95% confidence intervals were calculated for the measurements made at each station over the sampling period.

Many results are plotted as percentile box plots, as shown in Figure 2-2. These plots present a frequency distribution of a group of measurements. Each box comprises measurements from a single sampling location. Values are shown in Figure 2-1 for the 10th, 25th, 50th, 75th, and 90th percentiles. Open circles at the top and bottom represent maximum and minimum measurements.

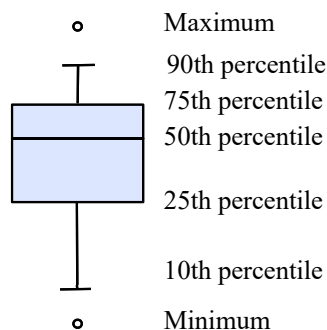


Figure 2-2. Percentile distributions indicated on percentile box plots

Box plots display the range and central tendencies of the data and allow for easy comparison of the results among stations. The 50th percentile (median) is equivalent to the geometric mean, assuming the data are log-normally distributed.

2.3 *Water Quality Standards used in this report*

Standards are shown in Table 2-3, and include standards and guidelines from the Massachusetts Department of Environmental Protection (MADEP), Environmental Protection Agency (EPA), Massachusetts Department of Public Health (MADPH), and the Massachusetts Division of Marine Fisheries (MADMF). The MADEP standard for Class B/SB waters (fishable and swimmable) are based on *E. coli* and/or *Enterococcus* counts for freshwater, and *Enterococcus* counts for marine waters, following a USEPA recommendation for *Enterococcus* in marine waters (USEPA 1986). The MADPH issued regulations for beach management are based on the USEPA criteria. There are no public bathing beaches in the Charles or Upper Mystic/Alewife Brook, but these standards can still serve as a useful benchmark. MADMF uses fecal coliform to monitor shellfish growing waters. MADEP uses a Secchi depth guideline to assess water clarity as an approximation for signs of eutrophication.

Table 2-3. Water quality standards for Class B and Class SB waters.¹

Designated Use	Parameter	Standard
Inland waters (Class B) warm water fishery Massachusetts waters, MADEP	Dissolved Oxygen	≥ 5.0 mg/L
	Temperature	≤ 28.3°C (83°F)
	pH	6.5 to 8.3 S.U.
Coastal/marine waters (Class SB) Massachusetts waters, MADEP	Dissolved Oxygen	≥ 5.0 mg/L
	Temperature	< 26.7°C (80°F)
	pH	6.5 to 8.5 S.U.
Marine and freshwater primary contact recreation (designated swimming area), MADPH, MADEP	<i>Enterococcus</i>	Single sample limit: 61 counts/100 mL (freshwater), 104 counts/100 mL (marine); Geometric mean: 33 counts/100 mL (freshwater), 35 counts/100 mL (marine)
Freshwater primary contact recreation (designated swimming area), MADPH, MADEP	<i>E. coli</i>	Single sample limit: 235 counts/100 mL (freshwater only); geometric mean: 126 counts/100 mL (freshwater only)
Former standard, primary contact recreation, MADEP (pre-2007)	Fecal coliform	Geometric mean: ≤ 200 counts/100 mL, no more than 10% of samples above 400 counts/100 mL
Restricted shellfishing, MADMF	Fecal coliform	Geometric mean: ≤ 88 counts/100 mL, <10% of samples > 260 per 100 mL
Primary contact recreation, aesthetics/transparency	Secchi disk depth	≥ 1.2 meters (4 feet)

¹ All receiving water areas discussed in this report are Class B according to MADEP standards current as of December 2013 (except for Mystic River mouth downstream of the Amelia Earhart Dam, which is SB_{CSO}. SB_{CSO} has the same water quality standards as SB except for an allowance for CSO discharges).

From MADEP 2013:

Inland Water Class B: These waters are designated as a habitat for fish, other aquatic life, and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation. Where designated in 314 CMR 4.06, they shall be suitable as a source of water supply with appropriate treatment (“Treated Water Supply”). They shall be suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses. These waters shall have consistently good aesthetic value.

Coastal and Marine Class SB: These waters are designated as a habitat for fish, other aquatic life, and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation. In certain waters, habitat for fish, other aquatic life and wildlife may include, but is not limited to, seagrass. Where designated in the tables to 314 CMR 4.00 for shellfishing, these waters shall be suitable for shellfish harvesting with depuration (Restricted and Conditionally Restricted Shellfish Areas). These waters shall have consistently good aesthetic value.

3 Charles River

3.1 Sampling area

MWRA’s sampling area in the Charles River includes the river segment from the Watertown Dam in Watertown downstream to the New Charles River Dam in Boston, near the river mouth. This area, the “Charles Basin” for purposes of this report, is freshwater and designated Class B with a variance for Combined Sewer Overflows by MADEP (with the variance currently extending to August 31, 2024). The river segment is approximately 10.3 km (8.6 mi) long. The New Charles River Dam and locks limit river flow and tidal exchange at the river mouth.

MWRA monitoring locations are primarily located midstream, bracketing CSO outfalls. Boat-accessible locations were also selected near to or downstream of outfalls: at the Stony Brook outlet and CSO (MWR023), the Faneuil Brook outlet and CSO that has since been closed (BOS032, closed in 1997), and downstream of the Cottage Farm CSO treatment facility outfall diffusers (MWR201). In 2019, a shoreline sampling location (station 206) was added downstream of MWR201, in addition to the boat-accessible station 006. The addition of 206 allows for sampling when conditions are unsafe for boating. Results for 006 and 206 are combined in Figures 3-2, 3-5, 3-6, 3-9, 3-10 and Table 3-6.

For purposes of this report, MWRA’s monitoring area in the lower Charles is divided into three smaller reaches. Sampling locations and CSOs appear in Figure 3-1. Table 3-1 describes the reaches, and the sampling locations and CSOs within each reach.

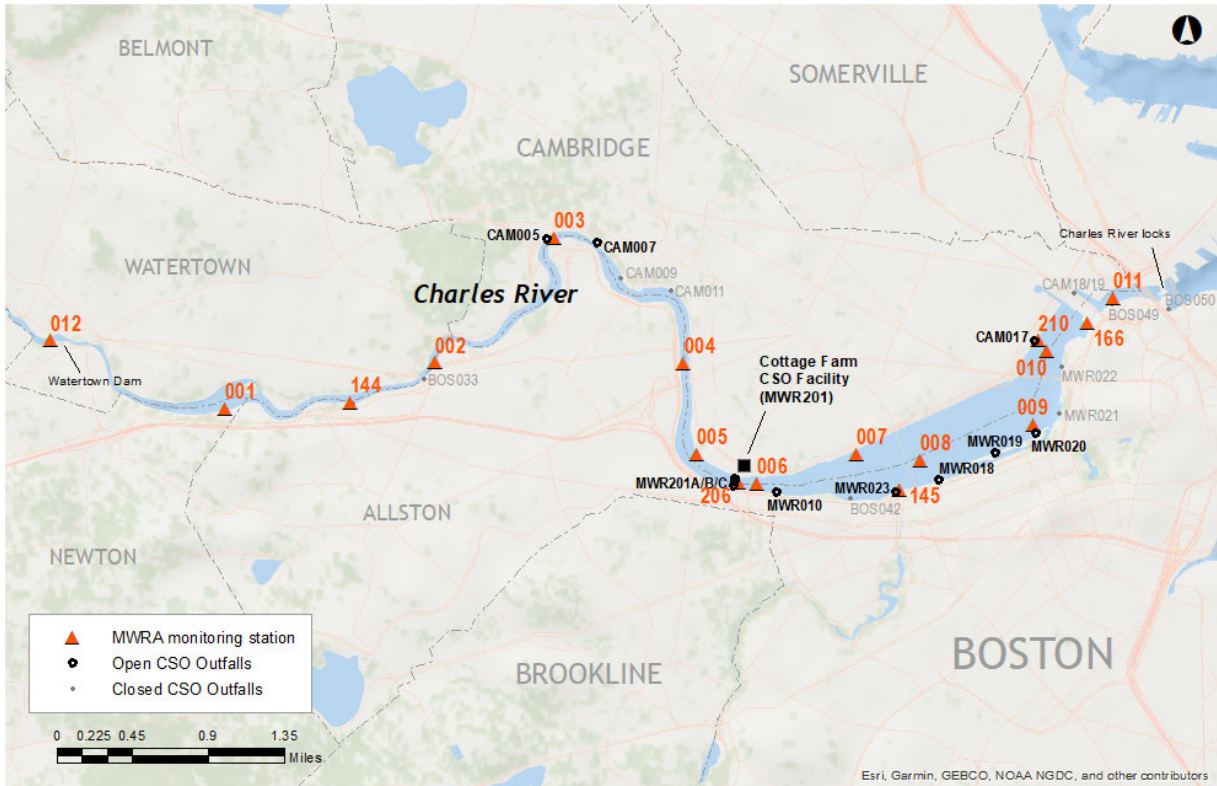


Figure 3-1. Map of MWRA Charles River sampling locations.

Table 3-1. MWRA monitoring locations, Charles River Basin.

Reach	Description of Reach	Sampling station	Location Description
Upper Basin (Class B/Variance, warm water fishery)	Watertown Dam in Watertown, downstream to Magazine Beach (near BU Bridge) in Cambridge	*012, Watertown *001, Newton 144, Allston *002, Allston *003, Cambridge 004, Cambridge/Allston *005, Cambridge	Watertown Dam at footbridge (upstream of all CSOs) Downstream of Newton Yacht Club (upstream of all CSOs) Faneuil Brook outlet (at BOS032, closed 11/97) Downstream of Beacon St. Bridge (downstream of BOS033, closed 10/96) Downstream of Eliot Bridge, Cambridge side (at CAM005) Between River St. and Western Ave. bridges 10 m off of Magazine Beach
Mid-Basin (Class B/Variance, warm water fishery)	BU Bridge on Boston/Cambridge line to downstream of Longfellow Bridge	006, Cambridge/Boston *206, Cambridge/Boston *007, Cambridge *145, Boston 008, Cambridge/Boston *009, Cambridge/Boston 010, Boston *210, Cambridge	BU Bridge, downstream side (downstream of MWR201) Mid-channel, sampled on the upstream side of the BU Bridge MIT Boathouse, Cambridge side Stony Brook outlet, Boston side (at MWR023) Mass. Ave Bridge, downstream side (downstream of MWR023, MWR018) Longfellow Bridge, upstream side (downstream of MWR021, closed 3/00) Longfellow Bridge, downstream side (downstream of MWR022, closed 3/00) Dock SE of Front Park, Cambridge Pkwy (at CAM017)
Lower Basin (Class B/Variance, warm water fishery)	Science Museum to North Station railroad bridge, near Charlestown.	166, Boston *011, Boston	Science Museum, upstream of old dam (downstream of all lower basin CSOs) Between Science Museum and New Charles River Dam/locks (downstream of all Charles CSOs)

Sampling locations are midstream unless otherwise noted. * indicates sampling location is also a shoreline sampling location.

3.2 *Pollution sources*

Known pollution sources to the Charles River Basin are shown in Table 3-2 and consist of stormwater, dry weather inputs, upstream inputs, and CSOs. These sources include nine CSO outfalls, eight untreated and one treated. MWRA's Cottage Farm CSO treatment facility, located immediately upstream of the BU Bridge, treats CSO flow (screening, chlorination, and dechlorination) before discharge, and is the only source of treated CSO discharge to the river. (MWRA's Prison Point CSO facility, located near the Charles River mouth, has its discharge point on the Boston Harbor side of the New Charles River Dam.) With increases in sewer system capacity and removal of large volumes of stormwater from the sewer system with sewer separation projects, the number of activations at Cottage Farm has decreased over the last two decades. In the late 1990s, more than 20 activations annually were common, but in the 2014-2017 period there were only one to three activations annually. As shown in Table 1-1, 2020 was slightly dryer than the Typical Year, driven by a lack of storms over 2.0 inches in rainfall volume. There were three activations at Cottage Farm in 2020. The Stony Brook/Muddy River outlet near Kenmore Square is a source of contaminated brook flow and stormwater flows to the basin area, as well as infrequent CSO discharges. CSO discharge volumes to the Stony Brook were greatly reduced in 2006 with completion of sewer separation by BWSC.

Table 3-3 shows the MWRA model simulation results for CSOs affecting the Charles River Basin for 2020. Measured CSO volumes and activation frequency are available for the Cottage Farm CSO facility.

The receiving water program is designed to capture water quality in all weather conditions. Table 3-4 summarizes the proportion of samples collected in dry, damp, and wet weather. In support of the receiving water models described in Chapter 1, MWRA intensively sampled storm events from 2017 through 2019. A large portion of the samples in this time period were collected in wet weather conditions, and this wet weather bias will skew water quality impacts seen in any presentation of an overall data set that includes 2017 – 2019 data (i.e., Table 3-5). The addition of shoreline sampling locations increased the number of sampling events, as sampling could be performed in weather conditions that previously were unsafe for boat-based sampling.

Table 3-2. Charles River Basin pollution sources.

Source	Upper Basin	Mid-Basin	Lower Basin
CSOs (untreated)	2 active, 4 closed CAM005, CAM007 CAM009 closed 11/07 ¹ CAM011 closed 11/07 ¹ BOS032 closed 11/97 BOS033 closed 10/96	6 active, 3 closed MWR010, MWR018, MWR019, MWR020, MWR023, CAM017 BOS042 closed 5/96 MWR021 closed 3/00 MWR022 closed 3/00	3 closed BOS049 closed 7/10 BOS028 closed prior to 1997 SOM010 closed prior to 1996
CSO treatment facility (settling and detention; screened, chlorinated and dechlorinated CSO discharge)	No	Yes Cottage Farm (MWR201) activated 3 times in 2020	No
Storm drains	Yes	Yes	Yes
Upstream inputs (elevated bacteria counts upstream)	Yes	Yes	Yes
Dry weather inputs (elevated bacteria counts in dry weather)	Yes	Yes	Yes
Tributary brook or stream flow	Yes	Yes	Yes

¹ Pending continuing hydraulic evaluations by City of Cambridge.

Table 3-3. Charles River Basin CSO activations, results of MWRA calibrated hydraulic model simulations and facility records for 2020 system conditions and 2020 rainfall.¹

CSO Outfall	Activation Frequency	Total Discharge Duration (hr)	Total Discharge Volume (million gallons)
<i>Upper Charles</i>			
CAM005	6	2.49	0.36
CAM007	1	0.50	0.68
TOTAL		2.99	1.04
<i>Lower Charles</i>			
CAM017	0	0	0.00
MWR010	0	0	0.00
MWR018	0	0	0.00
MWR019	0	0	0.00
MWR020	0	0	0.00
MWR201 (Cottage Farm Facility) ²	3	3.17	6.07
MWR023 (Stony Brook) ³	1	0.33	0.03
TOTAL			3.51

¹For the untreated CSO outfalls, activation frequency, duration and volume for 2020 rainfall are from recently calibrated hydraulic model (MWRA 2021).

²Treated discharge. Activation frequency and volume are from MWRA facility records.

³Estimated discharge volume; past modeling of the sewer system tributary to MWR023 has shown very infrequent and small discharges of CSO through MWR023, which also conveys a large amount of stormwater.

Table 3-4. Charles River station visits by rainfall condition.

Sampling period	Dry ¹	Damp ¹	Wet ¹	Total
2015-2019 ²	21% 696 station visits	30% 975 station visits	49% 1590 station visits	100% 3261 station visits
2020	31% 173 station visits	29% 162 station visits	40% 224 station visits	100% 559 station visits

¹ See Section 2.1.5 for descriptions of rainfall conditions.

² 2017-2019 samples tended to be collected in wetter conditions with increased focus on sampling following large storms.

3.3 Summary of water quality, 2016-2020

A summary of water quality results collected during the last five years is shown in Table 3-5.

Table 3-5. Summary of water quality, Charles River Basin, 2016-2020.

Parameter		MADEP Water Quality Guideline or Standard	Upper Basin				Mid-Basin				Lower Basin			
			Mean ± SD	% meeting guideline	Range	n	Mean ± SD	% meeting guideline	Range	n	Mean ± SD	% meeting guideline	Range	n
Surface Temperature (°C) ¹	Summer	≤ 28.3	21.8 ± 4.5	99.1	7.7 – 28.9	694	22 ± 4.3	98.9	8.4 – 29.2	639	22.1 ± 4.2	98.6	9.0 – 28.4	148
	Winter		4.8 ± 2.3	100.0	0.0 – 10.1	105	5.3 ± 1.3	100.0	3.1 - 8.3	62	4.0 ± 2.2	100.0	0.3 – 9.0	40
Bottom water dissolved oxygen (mg/L) ¹	Summer	≥ 5.0	6.9 ± 1.6	91.3	1.4 – 12.0	458	4.2 ± 3	45.0	0.1 – 10.7	587	5.9 ± 2.7	61.9	0.8 - 11.4	126
	Winter	≥ 5.0	12.2 ± 0.7	100.0	11 - 14.8	48	9.6 ± 3.8	78.6	0.9 – 12.4	56	12.4 ± 1.1	100.0	9.4 - 14.3	35
pH ² (S.U.)		6.5-8.3	7.4 ± 0.4	97.8	6.7 – 9.0	1774	7.3 ± 0.5	93.8	6.1 – 8.9	1838	7.0 ± 0.6	91.2	5.9 – 8.8	488
Water clarity	Total Suspended Solids (mg/L)	NS	3.3 ± 6.0	-	0.2 – 55.3	125	ND	-	ND		4.2 ± 4.8	-	0.6 – 44.9	125
	Secchi depth (m) ³	NS	1.0 ± 0.3	-	0.3 – 2.2	716	1.1 ± 0.3	-	0.4 – 2.1	974	1.2 ± 0.3	-	0.6 – 2.6	278
	Turbidity (NTU)	NS	6.5 ± 4.8	-	0.1 – 63.6	1567	6.2 ± 4.1	-	0.1 - 49	1723	5.7 ± 3.8	-	0.2 – 40.9	382

For footnotes, see following page.

Table 3-5. Summary of water quality, Charles River Basin, 2016-2020, continued.

Parameter		MA DEP Water Quality Guideline or Standard	Upper Basin				Mid- Basin				Lower Basin			
			Mean ± SD (95% CI)	% meeting guideline	Range	n	Mean ± SD (95% CI)	% meeting guideline	Range	n	Mean ± SD (95% CI)	% meeting guideline	Range	n
Bacteria (col/100mL) ⁴	<i>E. coli</i>	126 / 235 ⁵	216 (201 - 232)	56.6	0 - 24200	1573	80 (73 - 87)	70.3	0 - 19900	1975	70 (60 - 81)	76.0	0 - 11200	524
	<i>Enterococcus</i>	33/ 61 ^{5,6}	34 (30 - 38)	58.5	0 - 24200	1572	14 (12 - 15)	73.2	0 - 19900	1978	14 (11 - 16)	75.8	0 - 2760	524
Nutrients (µmol/L)	Phosphate	NS	0.6 ± 0.4	-	0.1 - 2.4	127	ND	-	ND		0.6 ± 0.4	-	0 - 2.0	127
	Ammonium	NS	3.6 ± 2.6	-	0.2 - 22.2	125	ND	-	ND		4.9 ± 4.2	-	0 - 16.9	125
	Nitrate+nitrite	NS	38.9 ± 5.6	-	9.7 - 81.4	127	ND	-	ND		36.8 ± 22.3	-	0 - 88.3	127
Algae (µg/L)	Chlorophyll	NS	3.7 ± 4.0	-	0.1 - 22.4	127	ND	-	ND		12.8 ± 13.8	-	0.4 - 58.1	127

NS: no applicable numerical standard or guideline. ND: no data. n: number of samples

¹ Summer (June-October), Winter (January-March).

² Median and standard error of the median are shown for pH, rather than arithmetic mean and standard deviation.

³ MADPH standard of ≥1.2 meters applies only to public bathing beaches; there are none in the Charles River Basin.

⁴ For bacterial data, 95% confidence intervals (CI) are provided in lieu of standard deviations. “Mean” = geometric mean for bacteria data.

⁵ First number is the all samples geometric mean limit - compare to the "Mean±SD" column (i.e., the Mean in that column is the geometric mean of all stations in that region for the specified indicator bacteria); the second number is the single sample standard - compare to the "% meeting guideline" column (i.e., the "% meeting guideline" column is the percentage of samples meeting the single sample standard). The “Range” column gives the range of single sample results.

⁶ Either *E. coli* or *Enterococcus* are acceptable indicators for EPA, MADEP, and MADPH to assess suitability for swimming in freshwater.

3.4 Water quality results, 2020

This section provides an analysis of water quality parameters measured in the lower Charles in the 2020 monitoring year.

3.4.1 Physical measurements

Temperature and Dissolved Oxygen. Physical measurements collected by water quality sonde could not be collected during the summer of 2020 due to employee safety procedures developed in response to the coronavirus pandemic.

Water clarity. Water clarity is indicated by Secchi disk depth. Summer Secchi readings are shown for individual sampling locations in Figure 3-2. Station 012 at the further upstream end is too shallow for Secchi measurements but is typically clear to the river bottom. In 2020, most locations in the Lower Charles had relatively similar average Secchi depths, with values slightly below the MADPH beach guideline of 1.2 meters. Secchi depth tends to be highest in the Mid and Lower Basins with the exception of station 145 at the outlet of Stony Brook / Muddy River.

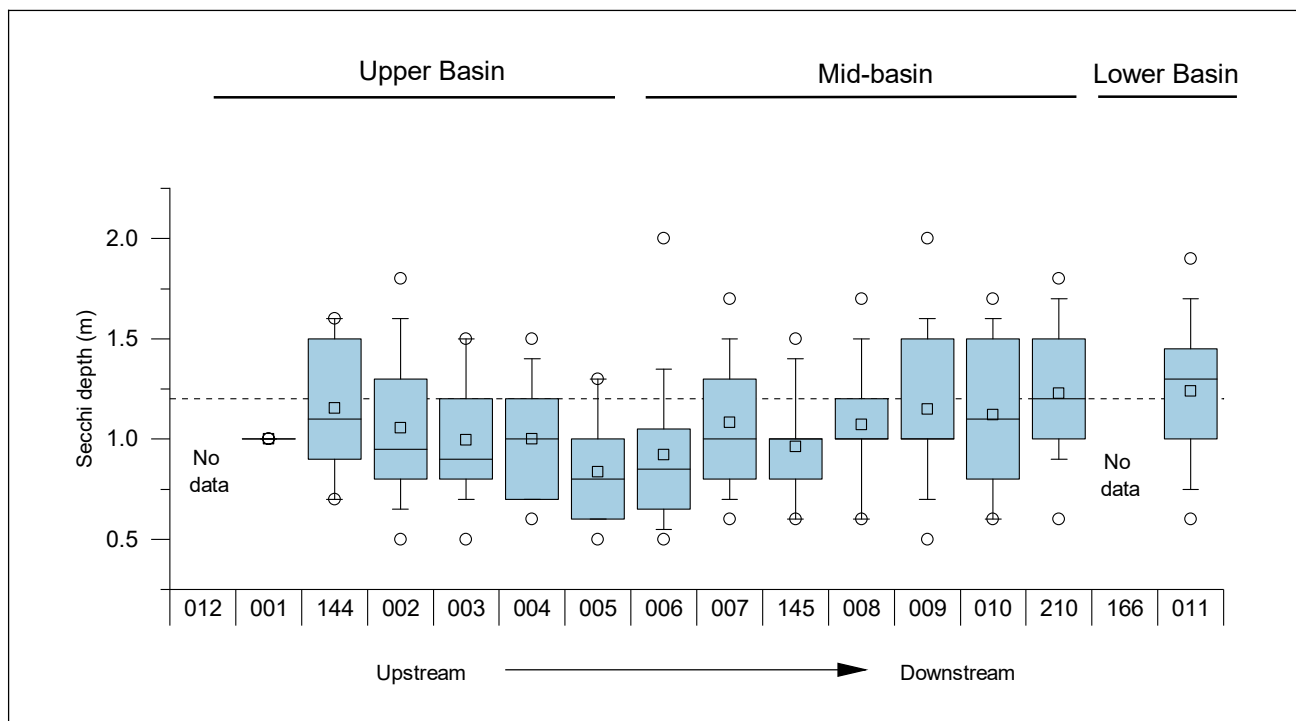


Figure 3-2. Summer Secchi depth, Charles River Basin, 2020.

Dashed line represents Secchi guideline of 1.2 meters. No Secchi data are available for station 012 because of shallow depth; the bottom is typically visible at this site. No Secchi data are available for station 166 collected from the shoreline. Hollow squares indicate the arithmetic mean.

3.4.2 Nutrients, TSS and chlorophyll

Monthly means for total nitrogen, ammonium, nitrate/nitrite, total phosphorus, phosphate, total suspended solids (TSS), and chlorophyll *a* at the upstream (012) and downstream (166) locations in the lower Charles are shown in Figure 3-3 and Figure 3-4, respectively. 2020 averages are plotted with the average of the previous five years (2015 – 2019) for comparison.

Seasonal patterns for the 2020 monitoring year were similar to the 2015 – 2019 averages at both stations, for most parameters. Total nitrogen and total phosphorus concentrations tracked closely with historical averages. Seasonal signals during 2020 were most evident for nitrate/nitrite, ammonium, and chlorophyll *a*. At both locations, nitrate/nitrite levels were highest in winter when biological uptake is low. Both locations exhibit an increase in ammonium concentrations during the spring to summer transition. While the two locations showed similar concentrations for most parameters, there were differences between the two stations for chlorophyll *a*. Historically, station 012 has the highest chlorophyll concentrations in spring, whereas the Lower Basin has highest concentrations in late summer. A large cyanobacteria bloom occurred in the Lower to Mid Basin in July and August 2020, as evident in the peak chlorophyll *a* concentrations at station 166. Nitrate/nitrite levels were extremely low following this bloom. Unlike previous years, there were no TSS spikes captured by the sampling program in 2020.

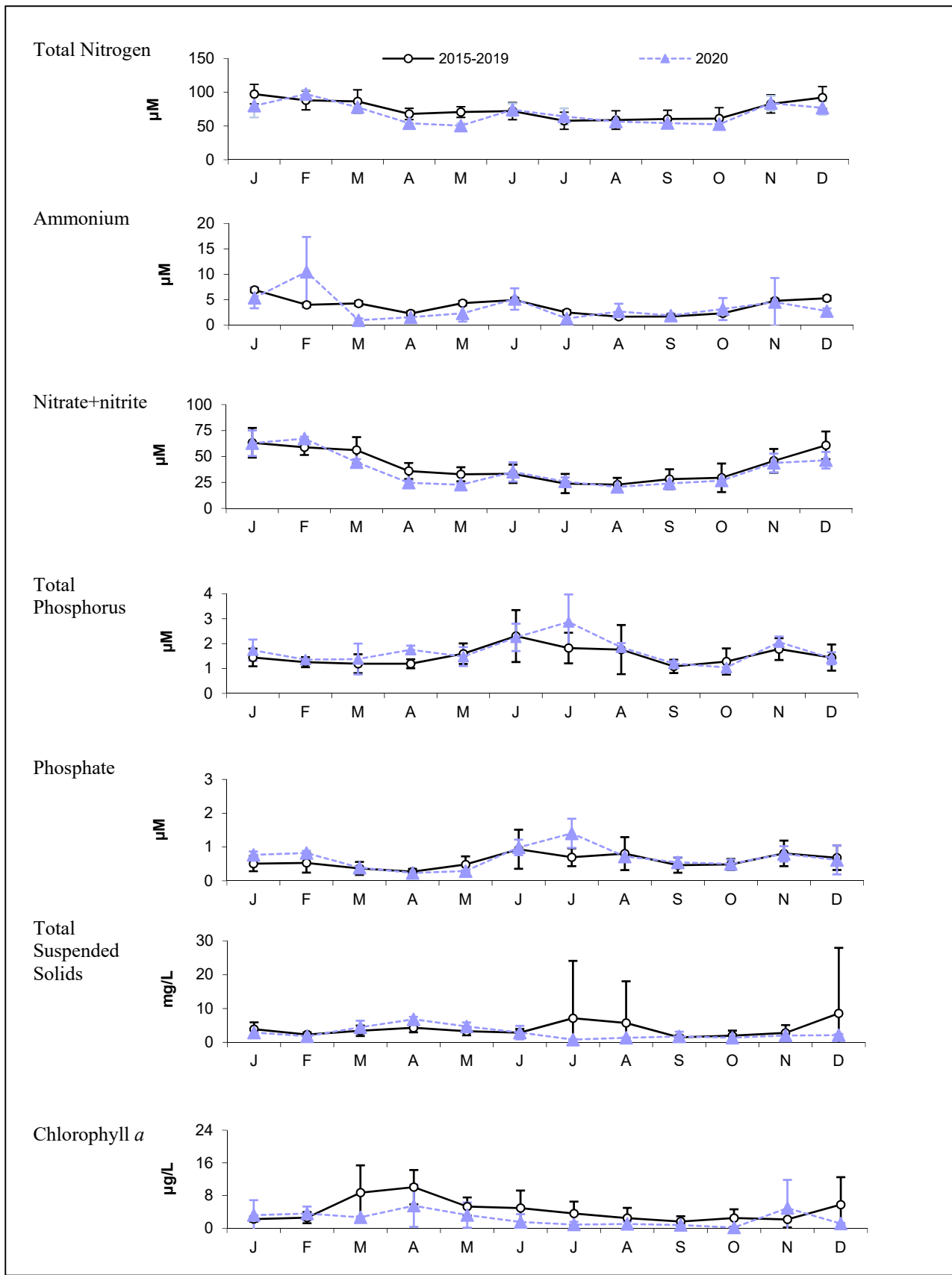


Figure 3-3. Monthly average nutrients, TSS and Chlorophyll 2015 – 2019 and 2020, Station 012, Watertown Dam.

Error bars are ± 1 SD. Note different scales than Figure 3-4 for most parameters.

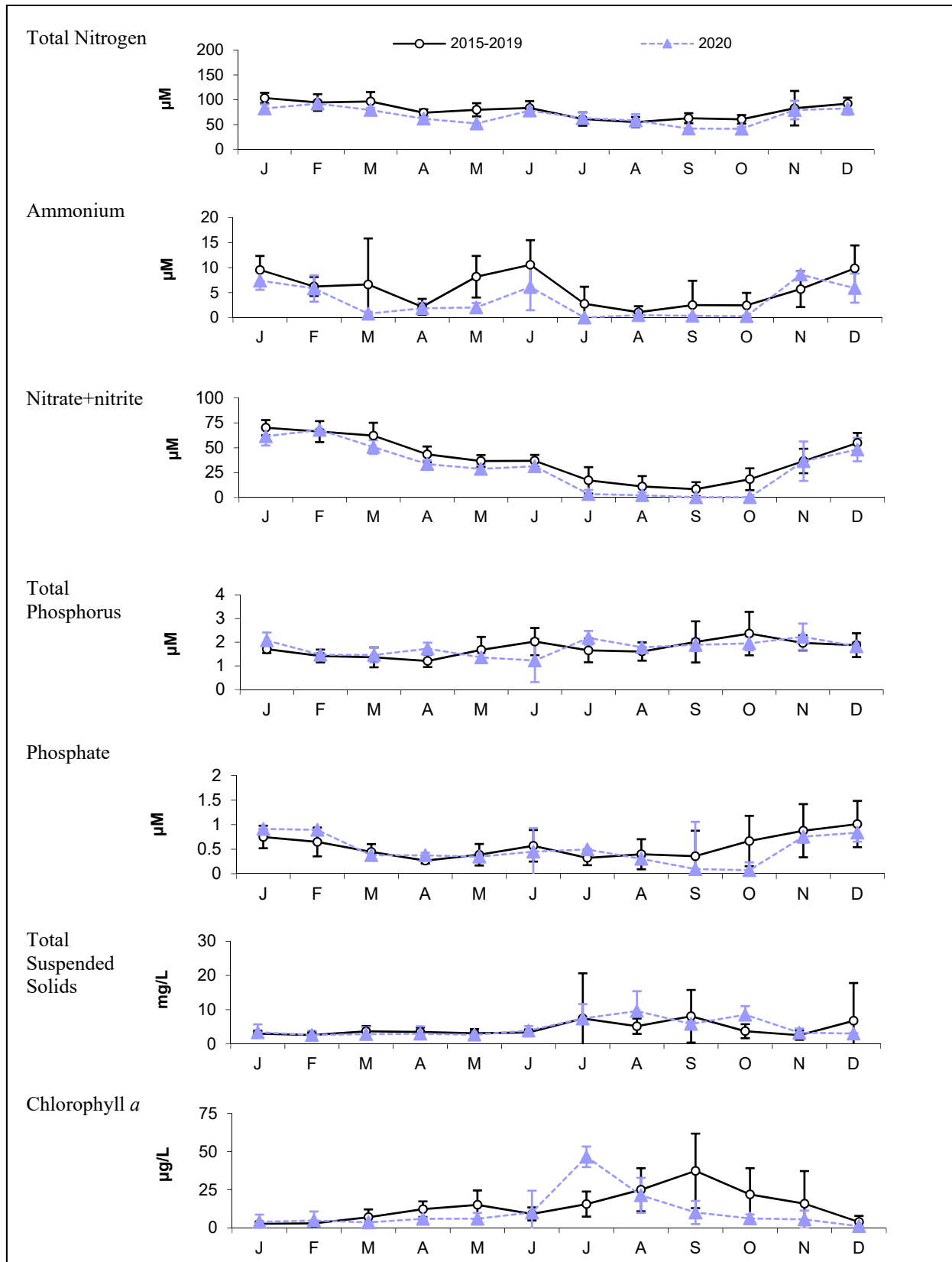


Figure 3-4. Monthly average nutrients, TSS and Chlorophyll 2015 – 2019 and 2020, Station 166, Science Museum.

Error bars are ± 1 SD. Note different scales than Figure 3-3 for most parameters.

3.4.3 Bacterial water quality

Figure 3-5 shows the 2020 bacterial water quality at each location sampled in the Charles for dry, damp, and wet weather. The rainfall categories are derived from rainfall measured at four local rain gauges: MWRA's Ward Street, BWSC's Allston and Charlestown, and USGS's Fresh Pond gauges. Each sampling location is paired with the closest rain gauge. As shown in Table 3-4, sampling the Charles River was balanced between weather conditions in 2020, in stark contrast to the wet weather sampling focus from 2017-2019.

The top and bottom graphs in Figure 3-5 show percentile plots of *Enterococcus* and *E. coli* counts arranged from upstream to downstream locations for 2020 respectively (note log scale). In 2020, both *Enterococcus* and *E. coli* show the historic spatial trend with more elevated bacteria counts upstream relative to downstream locations. The higher prevalence of high counts in wet weather was less pronounced in 2020 than previous years at most stations. Most stations met standards in dry and damp conditions for *Enterococcus*, but several stations in the Upper Basin did not meet *E. coli* standards in dry and damp conditions. For stations downstream of the Mass. Ave. Bridge (008 through 011), results met standards for both indicators in dry and damp conditions, and often in wet weather. Results at stations 005 and 166 were generally higher than previous years and nearby stations. These stations along with station 012 are collected biweekly year-round while others are collected mostly during the bathing season.

Geometric means for each location under all rain conditions for 2015 - 2019 appear in Table 3-6. Geometric means for 2020 are shown in a separate column from the 5-year geometric means. For both indicators, 2020 geometric means were lower than the 5-year mean at nearly all locations. This is largely due to a return to routine sampling in 2020, a departure from the focus on sampling after large storms in the previous 5-year period. Annual geometric means met standards at all locations except for 012 and 005 for *Enterococcus*. *E. coli* annual geometric means were exceeded however at several upstream locations.

Figure 3-6 shows the impact of rainfall on the three Lower Charles reaches on *Enterococcus* densities (upper figure), along with results for individual locations near CSO outfalls (lower figure). Here, wet weather is broken down further into light and heavy rain conditions. The upper figure shows that for 2020, bacterial concentrations in the Upper Basin were routinely higher than Mid-Basin and Lower Basin stations particularly in dry and damp weather. The 2020 geometric means, the line within the box, met the state standard in dry, damp, and light rain conditions, but typically exceeded in heavy rain. The lower figure shows that station 005 had elevated *Enterococcus* levels in all conditions relative to other downstream locations. Results were generally very low in the Mid and Lower Basin in 2020, with results above the standards mostly in heavy rain only.

The change in *Enterococcus* concentrations since 1989 in the Upper Charles Basin (upstream of most CSO influences) and the lower Charles (including the Mid- and Lower-Basin locations) appear in Figure 3-7 and Figure 3-8. Results are grouped by phases of the LTCP improvements with the last period (2014-2020) after the completion of all LTCP-related projects in the Charles. The plot includes the counts for all locations in the Charles combined, in each rainfall condition. These figures show change over time in both regions, with significant improvement in water quality from the initial phase to the latest phase. Looking at the current phase, the Upper Basin shows improvement in both dry and wet conditions and meets the geometric mean swimming standard in dry, damp, and light rain weather, although individual high counts are still seen in all

conditions. The most pronounced change is in the Middle and Lower Charles Basins, which met the geometric mean swimming standard in all conditions besides heavy rain in the Lower Basin.

2020 compliance rates with State single sample standards by weather condition are shown in Figures 3-9 (*Enterococcus*) and 3-10 (*E. coli*). Stations in the Mid-basin and Lower Basin exhibit high compliance in dry and damp weather. Stations at the widest portion of the river exhibit the highest compliance rates in wet weather, even those immediately downstream of untreated CSOs (stations 009 and 210). While the overall dry to wet pattern is clear, there are occasionally stark differences in compliance rates between the two freshwater bacteria indicators.

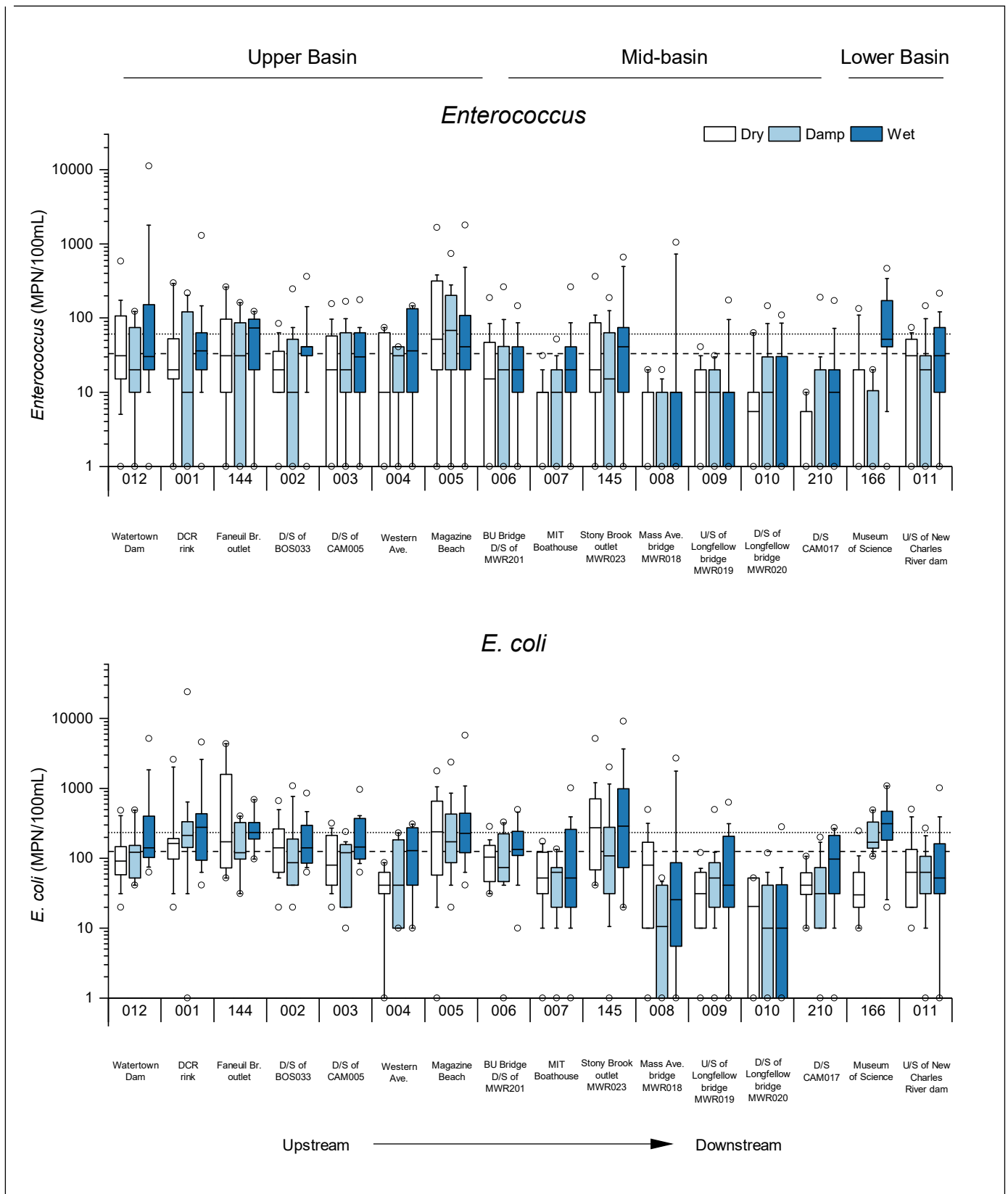


Figure 3-5. Indicator bacteria concentrations, Charles River Basin, 2020.

Dashed lines show MADEP *Enterococcus* and *E. coli* geometric mean standards, dotted lines show single sample standards. See Section 2.1.5 for definitions of rainfall conditions. “D/S” and “U/S”: downstream and upstream, respectively. Station 006 includes samples from nearby station 206.

Table 3-6. Geometric mean indicator bacteria, Charles River Basin, 2015 – 2019 and 2020.

Stations designated for shoreline sampling (weekends or unsafe boating conditions) are shaded.

Station	Location	Surface or Bottom	Number of samples		<i>Enterococcus</i> (95% CI) ¹ MPN/100 mL DEP limit: 33 MPN/100 mL		<i>E. coli</i> (95% CI) ¹ MPN/100 mL DEP limit: 126 MPN/100 mL	
			2015 – 19	2020	2015 – 19	2020	2015 – 19	2020
			012	Newton/Watertown, footbridge upstream of Watertown Dam	S	180	38	42 (32-55)
001	Newton, near Nonantum Rd., rear of DCR skating rink	S	227	39	66 (50-88)	23 (12-42)	305 (260-357)	213 (125-360)
144	Brighton, downstream of N. Beacon St. bridge, Faneuil Brook outlet, BOS032 (closed 1999)	S	146	20	29 (19-43)	24 (10-54)	235 (190-289)	209 (126-345)
002	Allston, downstream of Arsenal Street bridge, BOS033	S	229	39	46 (34-62)	19 (11-31)	248 (206-298)	136 (99-185)
003	Allston/Cambridge, midstream, near Mt. Auburn Street, between CAM005 and CAM007	S	229	39	34 (25-47)	14 (8-26)	256 (215-305)	109 (79-148)
004	Allston/Cambridge, midstream, between River Street and Western Avenue bridges	S	148	20	12 (8-18)	13 (5-28)	120 (88-163)	47 (25-86)
005	Cambridge, near Magazine Beach, upstream of Cottage Farm	S	318	63	26 (20-33)	46 (28-75)	166 (141-196)	200 (140-285)
006 ²	Cambridge/Boston, midstream, downstream of Cottage Farm, BU bridge	S	166	39	31 (22-43)	11 (6-19)	174 (140-216)	96 (67-136)
007	Cambridge, near Memorial Dr., MIT Boathouse	S	228	39	22 (16-30)	7 (4-12)	128 (102-162)	55 (33-91)
		B	148	20	24 (16-35)	10 (5-19)	131 (99-173)	36 (20-65)
145	Boston (Charlesgate), Muddy River/Stony Brook outlet	S	229	39	34 (25-47)	21 (11-39)	225 (180-282)	206 (115-366)
008	Cambridge/Boston, midstream, downstream of Harvard Bridge	S	148	20	12 (8-18)	3 (1-9)	79 (56-110)	24 (9-62)
		B	148	20	16 (11-24)	2 (1-6)	99 (72-135)	18 (6-52)
009	Cambridge/Boston, midstream, upstream of Longfellow Bridge near Community Sailing	S	234	39	12 (8-16)	3 (2-6)	81 (62-105)	46 (29-73)
		B	148	20	1 (0-1)	6 (2-12)	9 (6-12)	24 (13-44)
010	Boston, downstream of Longfellow Bridge, MWR022	S	148	20	6 (4-9)	1 (0-3)	44 (33-59)	5 (2-12)
		B	148	20	5 (3-7)	12 (5-29)	15 (11-21)	13 (6-28)
210	Cambridge, Cambridge Pkwy (at CAM017)	S	120	39	18 (12-26)	4 (2-7)	113 (82-157)	42 (27-66)
166	Boston, old Charles River dam, rear of Science Museum	S	132	27	5 (4-8)	8 (3-21)	59 (42-82)	89 (52-154)
011	Boston, upstream of river locks (New Charles River Dam) and I-93, near Nashua St.	S	229	39	15 (11-20)	9 (5-17)	70 (54-91)	79 (53-119)
		B	148	20	16 (12-22)	26 (13-51)	52 (39-68)	30 (16-56)

¹ The MADEP limits are geometric means for both *Enterococcus* and *E. coli*.

² Includes samples taken at both 006 and 206.

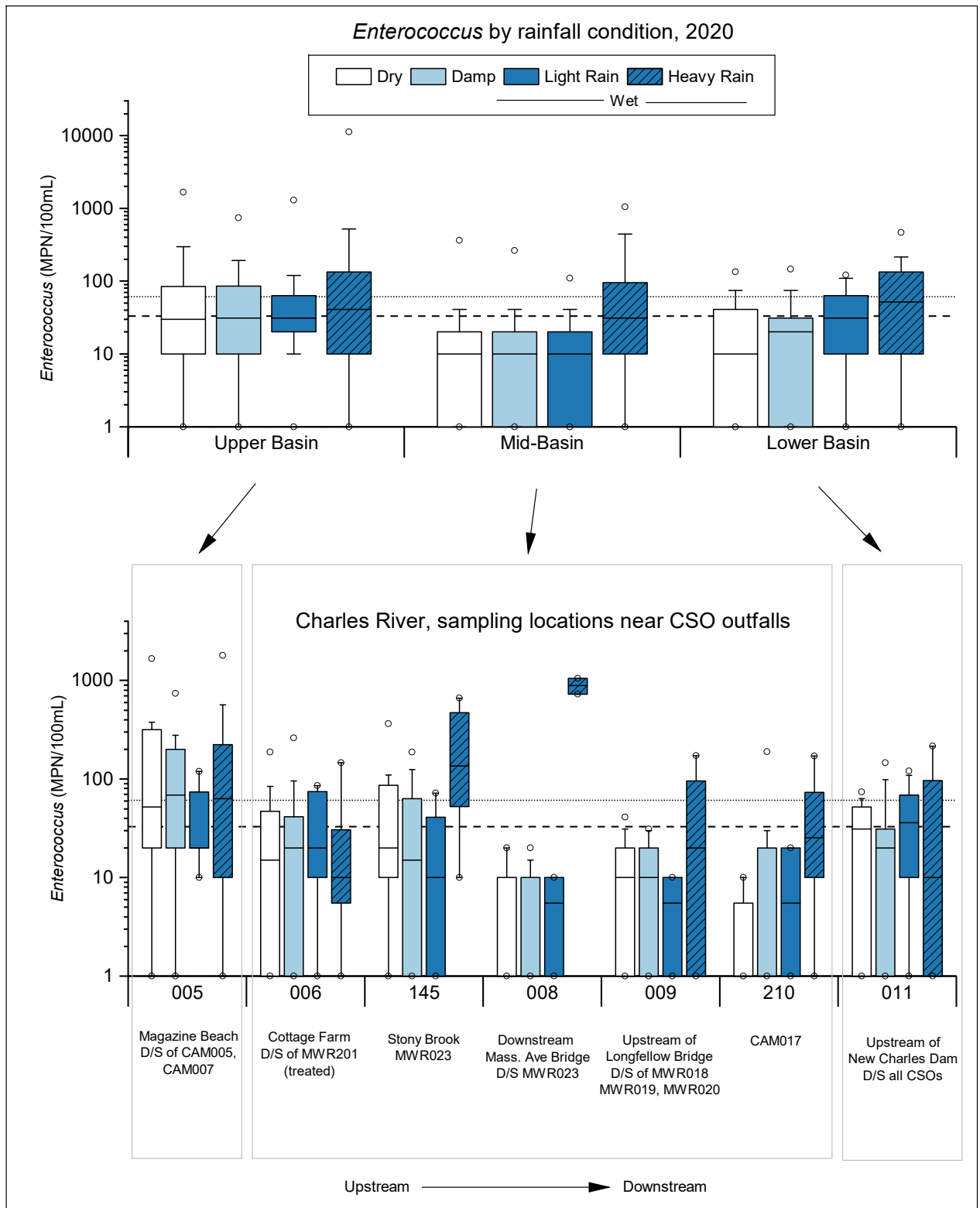


Figure 3-6. Enterococcus by rainfall condition, Charles Basin, 2020.

Dashed line shows State geometric mean standard (33 MPN/100mL), dotted line shows single sample standard (61 MPN/100mL). Rainfall is NOAA rainfall from Logan airport. See Section 2.1.5 for definitions of rainfall conditions. “D/S”: downstream. Station 006 includes samples from nearby station 206.

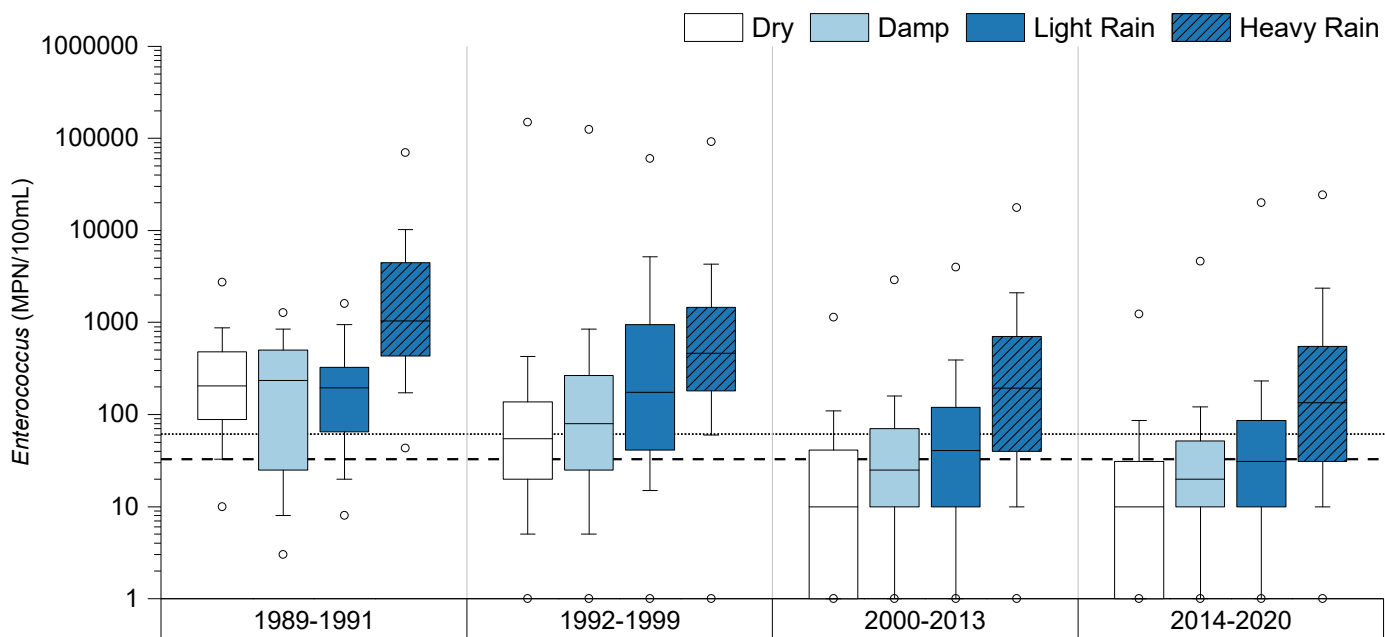


Figure 3-7. *Enterococcus* over time, Upper Charles Basin (upstream of most CSOs) by phase of Long Term CSO Plan and rainfall condition.

Dashed line shows State geometric mean standard (33 MPN/100mL), dotted line shows single sample standard (61 MPN/100mL). Data includes results for stations 012, 001, 144, 002, 004, and 005. Rainfall is NOAA rainfall from Logan airport. See Section 2.1.5 for definitions of rainfall conditions.

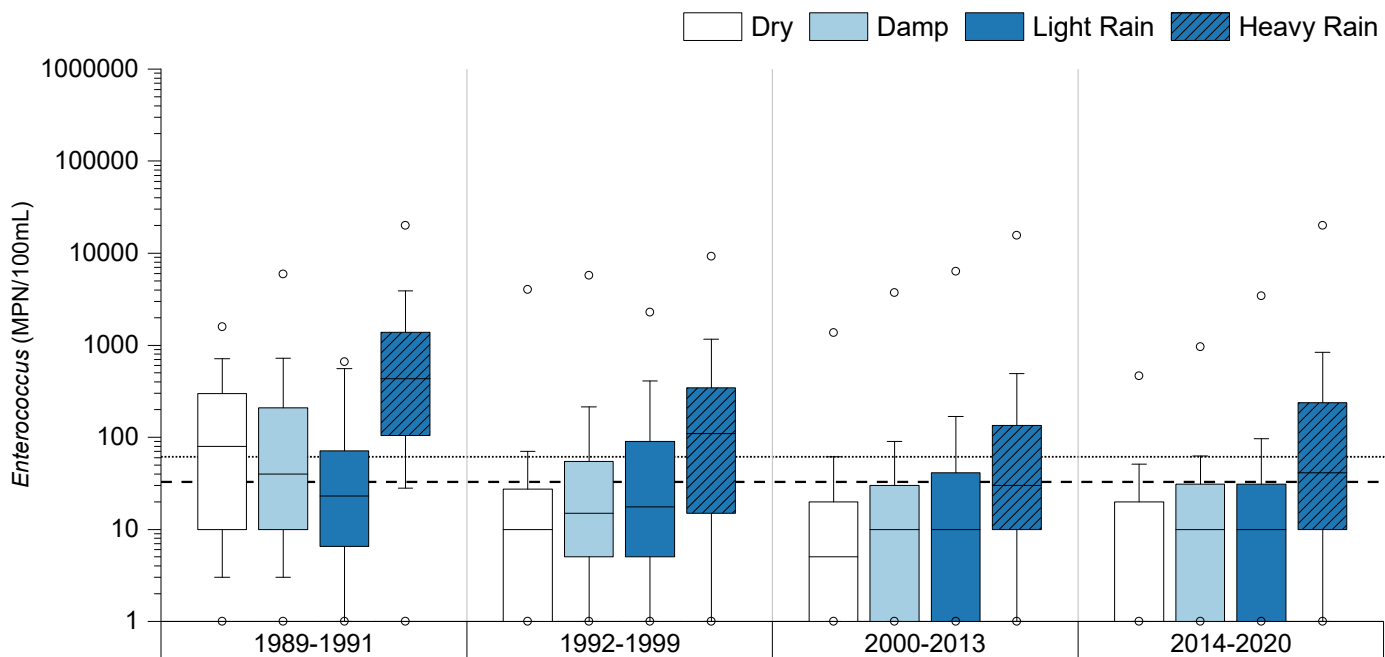


Figure 3-8. *Enterococcus* over time, Lower and Middle Charles Basin by phase of Long Term CSO Plan and rainfall condition.

Dashed line shows State geometric mean standard (33 MPN/100mL), dotted line shows single sample standard (61 MPN/100mL). Data includes results for all stations from 006 (BU Bridge) downstream. Rainfall is NOAA rainfall from Logan airport. See Section 2.1.5 for definitions of rainfall conditions.

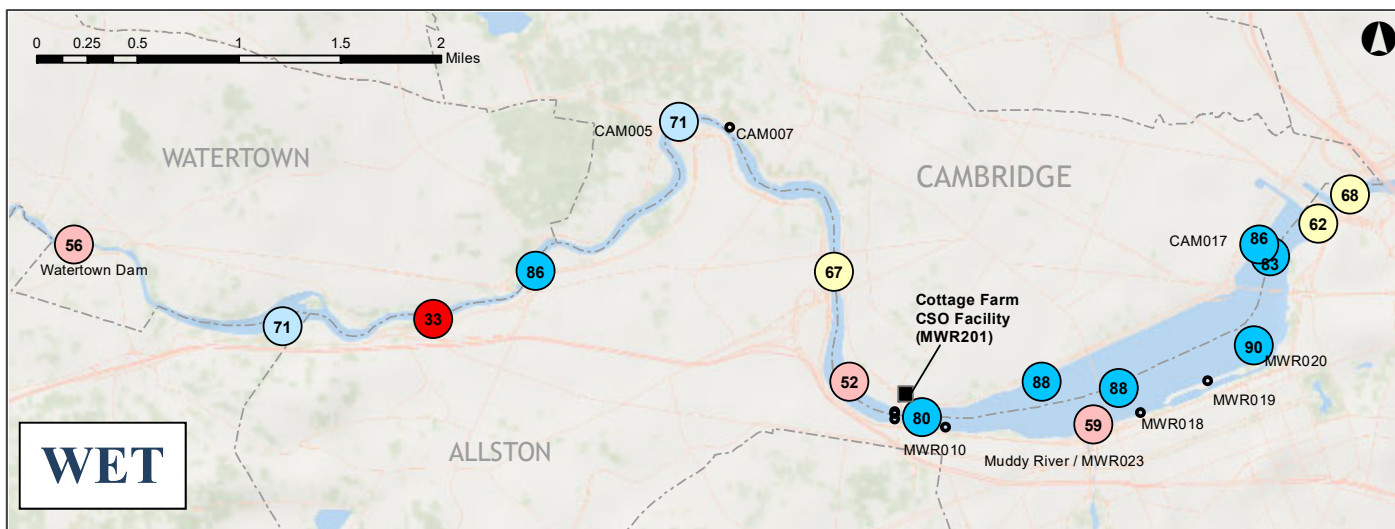
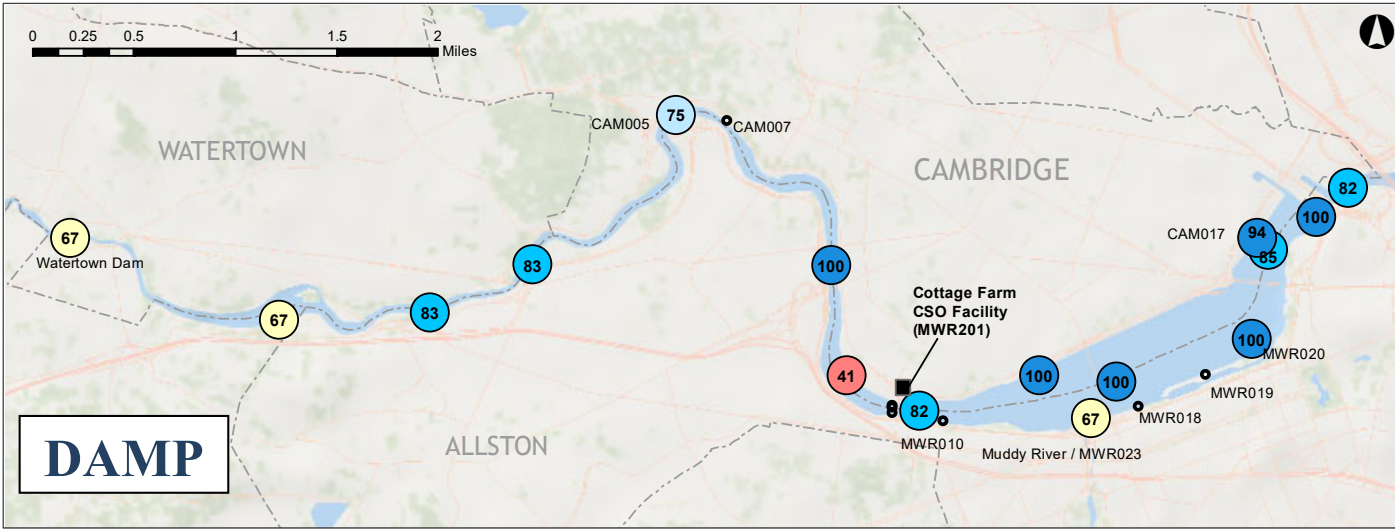
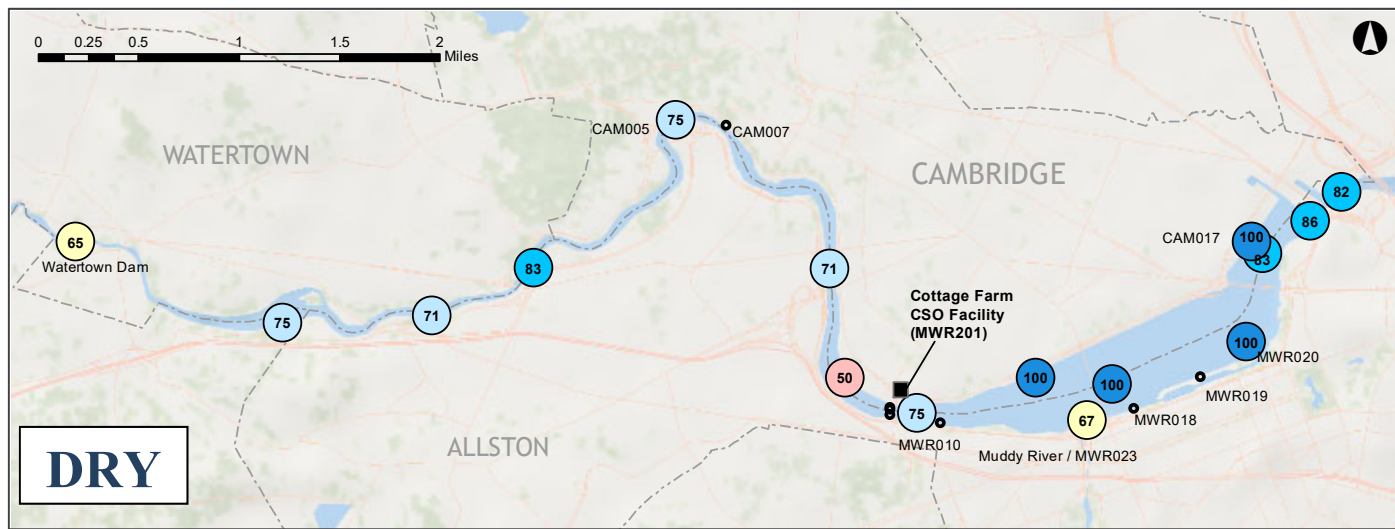
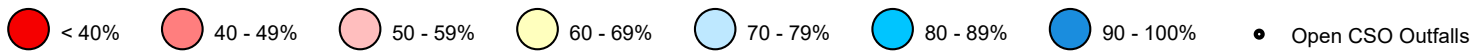


Figure 3-9. Charles River *Enterococcus* percent compliance by weather condition, 2020. Compliance with 61 MPN/100mL single sample State standard. Rainfall is from nearest rain gauge to station. See Section 2.1.5 for definitions of rainfall conditions. Dots are the monitoring locations in Figure 3-1 and listed in Table 3-1.

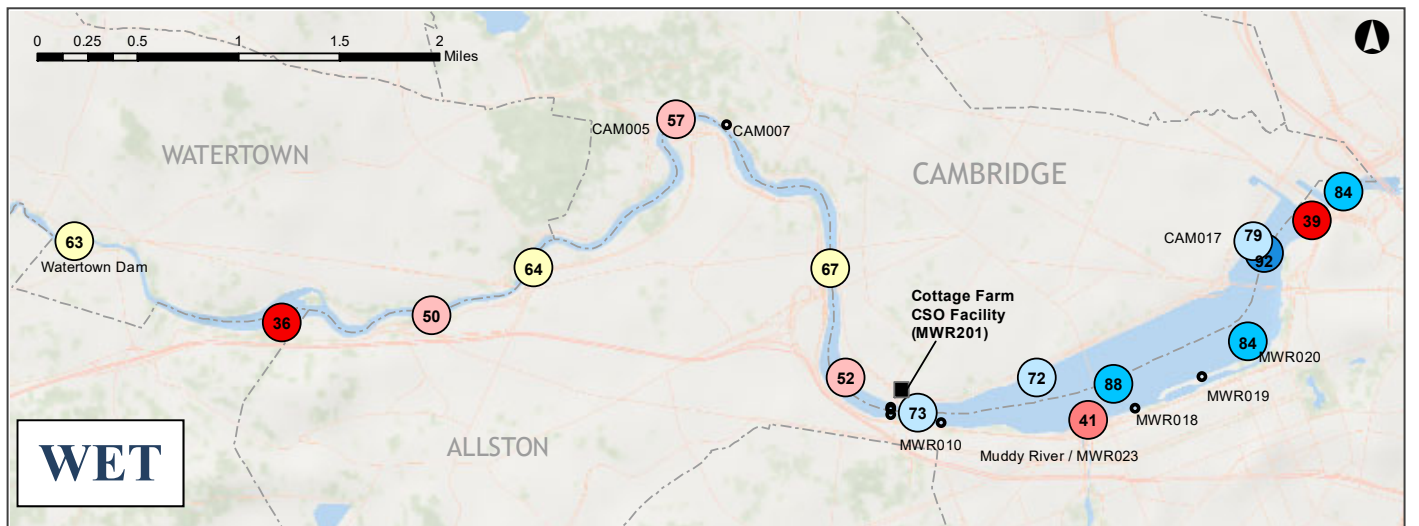
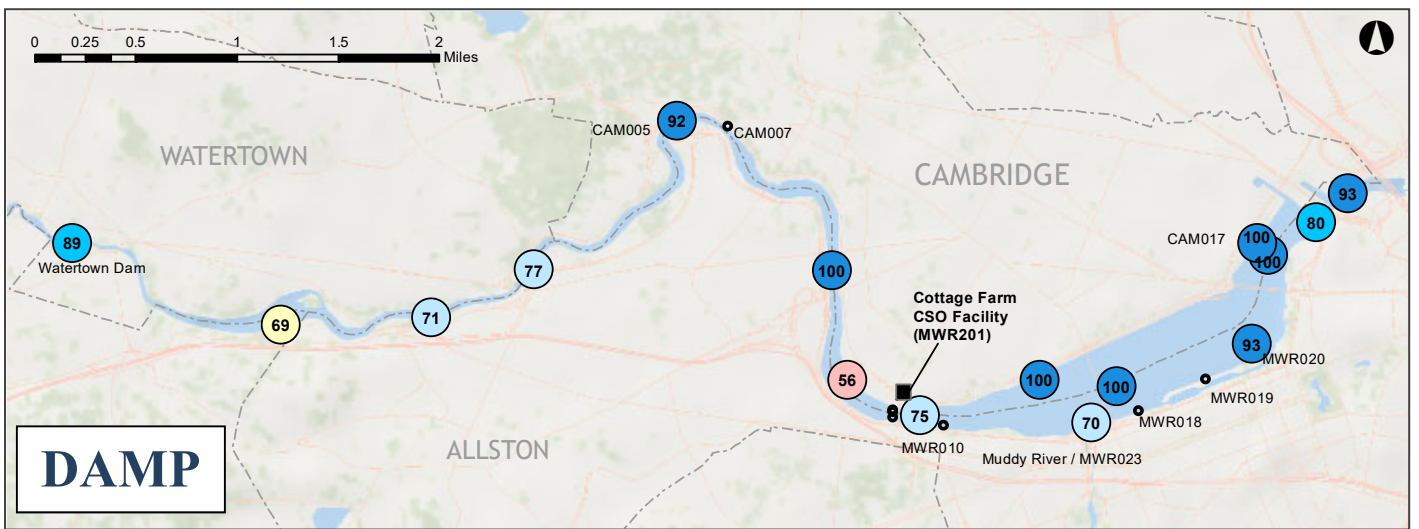
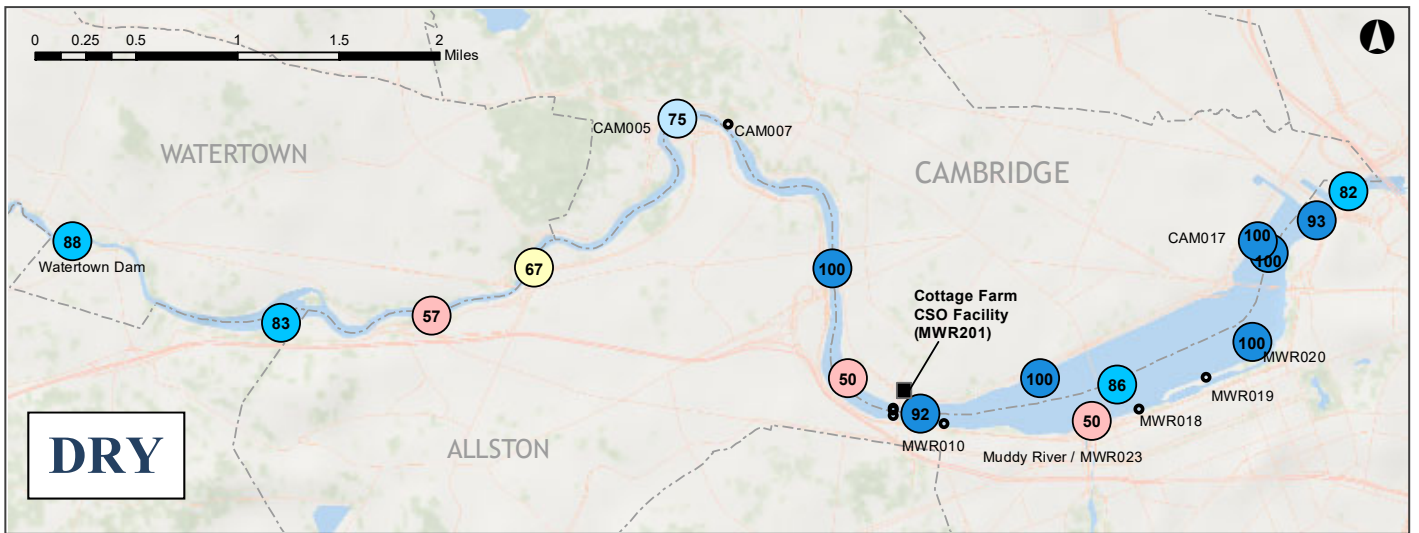


Figure 3-10. Charles River *E. coli* percent compliance by weather condition, 2020. Compliance with 235 MPN/100mL single sample State standard. Rainfall is from nearest rain gauge to station. See Section 2.1.5 for definitions of rainfall conditions. Dots are the monitoring locations pictured in Figure 3-1 and listed in Table 3-1.

3.5 Summary of Charles River Water Quality

The spatial distribution of 2020 bacterial water quality in the Charles across rain conditions was generally consistent with the previous several years. Annual geometric means met standards for *Enterococcus* at nearly all locations. River stations from 144 downstream routinely meet *Enterococcus* standards in dry and damp weather, but exhibit exceedances in wet weather, particularly at Upper Basin and upstream Mid-Basin stations. Generally, water quality was consistent with prior years, with more elevated concentrations at upstream locations (upstream of most CSOs) in all weather, and improving moving downstream to the New Charles River Dam. Percent compliance rates were very high in all weather conditions at most Lower basin stations.

As shown in Figure 3-7 and 3-8, *Enterococcus* counts have generally decreased in all regions of the Charles River, in all weather conditions, through the progression of MWRA's Long Term CSO Plan. In the 2014-2020 period, after completion of all construction projects in the study area, the geometric mean of *Enterococcus* in all regions meets state standards in all but heavy rain.

Dissolved oxygen, temperature, and other physical parameters could not be measured in 2020 due to employee safety procedures developed in response to the coronavirus pandemic.

Nutrients and chlorophyll exhibited seasonal signals as expected, and closely followed long term averages overall. Elevated chlorophyll *a* was observed at station 166 in July and August corresponding with a reported cyanobacteria bloom in the Lower Charles Basin.

flow downstream of the Amelia Earhart dam. It is the only source of treated CSO discharge to the Mystic River below the Amelia Earhart dam, although there is an untreated outfall (BOS017) as well. This area downstream of the dam is not in the variance area for the Alewife Brook/Upper Mystic River. In 2020, Somerville Marginal MWR205A/SOM007A had nine discharge events, and Somerville Marginal MWR205 had 25 activations resulting in discharge below the dam. BOS017 discharged three times in 2020. CAM401A is the most frequent CSO discharge to Alewife Brook, discharging six times in 2020.

Table 4-3 shows the MWRA model simulation results for CSOs affecting the Mystic River and Alewife Brook in calendar year 2020. Measured CSO volumes and activation frequency are available for the Somerville Marginal CSO facility. Table 4-4 summarizes the proportion of samples collected in dry, damp, and wet weather.

Table 4-1. MWRA monitoring locations, Mystic River and Alewife Brook.

Reach	Description of Reach	Sampling station	Location Description
Alewife Brook (Class B/Variance, warm water fishery)	Tributary to Mystic River. From confluence at Little River in Cambridge/Arlington to confluence with Mystic River in Arlington/Somerville	*174, Cambridge/Arlington *308, Cambridge *074, Cambridge/Arlington *277, Cambridge/Arlington *172, Cambridge/Arlington *276, Cambridge/Arlington *070, Arlington/Somerville	Little River, upstream of Rt. 2 and off ramp to Alewife T station. Upstream of all CSOs Alewife Brook at CAM401A outfall Downstream of CAM401A, MWR003 Upstream of CAM401B Downstream of CAM401B Downstream of SOM001A Mystic Valley Parkway bridge. Downstream of all Alewife CSOs
Upper Mystic River (Class B/Variance, warm water fishery)	Downstream of Lower Mystic Lake in Arlington/Medford to Route 28 bridge in Medford	*083, Arlington/Medford *057, Medford 066, Medford *056, Medford	Upstream of confluence of Mystic River and Alewife Brook Confluence of Mystic River and Alewife Brook Boston Ave bridge, downstream side Upstream of I-93 bridge, near Medford Square off ramp
Lower Mystic River basin (Class B/Variance, warm water fishery)	Route 28 bridge in Medford to Amelia Earhart Dam in Somerville/Everett, including the Malden River	177, Medford *067, Medford *176, Medford/Everett 059, Somerville/Everett *167, Somerville/Everett	Downstream of Rt. 16 bridge Rt. 28 bridge, downstream side, near Somerville Marginal MWR205A outfall Malden River, upstream of Rt. 16 bridge Confluence of Mystic and Malden Rivers Amelia Earhart Dam, upstream side
Mystic River mouth (Class SB _{CSO} , marine)	Downstream of Amelia Earhart Dam in Somerville/Everett to Tobin Bridge, Chelsea R. confluence in Chelsea/East Boston	052, Somerville 069, Charlestown 137, Charlestown/Everett	Downstream of Amelia Earhart dam, near Somerville Marginal CSO facility outfall (MWR205) Rear of Schrafft's Center at BOS017 outfall Upstream of Tobin Bridge near confluence of Mystic, Chelsea Rivers and upper inner harbor

Sampling locations are midstream unless otherwise noted. * indicates sampling location is also a shoreline sampling location.

Table 4-2. Mystic River/Alewife Brook pollution sources.

Source	Alewife Brook	Upper Mystic River	Lower Mystic Basin	Mystic River mouth
CSOs (untreated)	6 active, 7 closed CAM401A, MWR003, CAM001, CAM002, CAM401B, SOM001A CAM004 closed 12/15 CAM400 closed 3/11 SOM001 closed 12/96 SOM002 closed 1994 SOM002A closed 8/95 SOM003 closed 8/95 SOM004 closed 12/95	2 closed SOM006 closed 12/96 SOM007 closed 12/96	No	1 active BOS017
CSO treatment facility (screened, chlorinated and dechlorinated CSO discharge)	No	No	Yes Somerville Marginal (MWR205A/SOM007A, high tide only) Activated 9 times in 2020	Yes Somerville Marginal (MWR205) Activated 25 times in 2020
Storm drains	Yes	Yes	Yes	Yes
Upstream inputs (elevated bacteria counts upstream)	Yes	Yes	Yes	Yes
Dry weather inputs (elevated bacteria counts in dry weather)	Yes	Yes	Yes	Yes
Tributary brook or stream flow	Yes	Yes	Yes	Yes

Table 4-3. Mystic River/Alewife Brook CSO activations, results of MWRA calibrated hydraulic model simulations and facility records for 2020 system conditions and 2020 rainfall.¹

CSO Outfall	Activation Frequency	Total Discharge Duration (hr)	Total Discharge Volume (Million Gallons)
<i>Alewife Brook</i>			
CAM001	1	0.33	0.02
CAM002	0		0.00
MWR003	1	0.61	0.29
CAM401A	6	7.15	0.75
CAM401B	2	1.58	0.24
SOM001A	2	0.63	0.98
TOTAL		10.3	2.28
<i>Mystic River (upstream of dam)</i>			
SOM007A/MWR205A (Somerville Marginal, high tide discharge only) ²	9	18.23	>10.56
TOTAL³		18.23	>10.56
<i>Mystic River mouth (downstream of dam, marine outfalls)</i>			
MWR205 (Somerville Marginal Facility) ⁴	25	69.51	73.19
BOS017	3	1.70	0.04
TOTAL		71.21	73.23

¹ For the untreated CSO outfalls, activation frequency, duration and volume for 2020 rainfall are from recently calibrated hydraulic model results (MWRA 2021).

²Treated discharge. Activation frequency from MWRA facility records. Volume measurements only available from 11/30/2020 activation onward.

³In 2020, 100% of the volume discharged to the Mystic River (upstream of dam) was treated.

⁴Treated discharge.

Table 4-4. Mystic River/Alewife Brook station visits by rainfall condition.

Sampling period	Dry ¹	Damp ¹	Wet ¹	Total
2015 - 2019	24% 912 station visits	33% 1236 station visits	43% 1596 station visits	100% 3744 station visits
2020	50.6% 317 station visits	16.6% 104 station visits	32.8% 205 station visits	100% 626 station visits

¹ See Section 2.1.5 for descriptions of rainfall conditions.

² 2017-2019 samples tended to be collected in wetter conditions with increased focus on sampling following large storms.

4.3 Summary of water quality, 2016-2020

A summary of water quality results collected from the last five years is shown in Table 4-5.

Table 4-5. Summary of water quality, Mystic River/Alewife Brook, 2016 - 2020.

Parameter		Water Quality Guideline or Standard	Alewife Brook				Upper Mystic				Lower Mystic Basin				Malden River				Mystic Mouth			
			Mean ± SD	% meeting guideline	Range	n	Mean ± SD	% meeting guideline	Range	n	Mean ± SD	% meeting guideline	Range	n	Mean ± SD	% meeting guideline	Range	n	Mean ± SD	% meeting guideline	Range	n
Surface Temperature (°C) ¹	Summer	≤ 28.3	18.4±4.2	100	6.9 - 25.9	481	21.2 ± 4.4	99.8	10.4-28.6	404	21.4 ± 4.6	99.3	9.3 - 28.6	294	21.2±4.6	100	9.5 - 27.3	104	18.5±2.5	100	9.6 - 22.9	205
	Winter		7.3 ± 0.8	100	6.3 - 8	6	3.7±2	100	-0.1 - 8	65	4.4±2.2	100	0.1 - 10.1	56	7.9 ± 0.3	100	7.7 - 8.2	2	4.3±1.5	100	1.7-7.4	32
Bottom water dissolved oxygen (mg/L) ¹	Summer	≥ 5.0	ND	-	ND		5. ± 2.4	48.7	0.6 - 11.4	154	6.4 ± 2.7	65.7	0.6 - 14.3	233	6.3 ± 2.4	68.7	0.6 - 12.1	67	6.9 ± 1.3	94.7	2.8 - 11.4	171
	Winter	≥ 5.0	ND	-	ND		11.6 ± 0.6	100	10.6 - 13.2	22	10.8 ± 1.3	100	7.2 - 13.4	50	11 ± 0.2	100	10.8 - 11.1	2	10.2 ± 0.5	100	9.2 - 11.4	32
pH ⁶ (S.U.)		6.5-8.3 (8.5 marine)	6.9 ± 0.3	99.3	6.1 - 8.2	750	7.5 ± 0.6	89.9	6.3 - 9.6	929	7.5 ± 0.7	78.7	6.1 - 9.4	935	7.6 ± 0.7	78.2	6.3 - 9.2	257	7.8 ± 0.3	98.9	6.3 - 8.4	635
Water clarity	Total Suspended Solids (mg/L)	NS	ND	-	ND		3.9 ± 4	-	0.5 - 44.8	251	6.9 ± 4.9	-	0.8 - 30.2	116	ND	-	ND	-	3.5 ± 2.6	-	1 - 18.5	196
	Secchi depth (m) ³	NS	0.4 ± 0.2	-	0 - 0.6	9	1.2 ± 0.5	-	0.4 - 2.5	141	0.8 ± 0.4	-	0.2 - 3	365	0.7 ± 0.3	-	0 - 1.5	126	2 ± 0.7	-	0.2 - 4.2	293
	Turbidity (NTU)	NS	8.9 ± 6.9	-	0.1 - 44.9	320	6.6 ± 5.9	-	0 - 54	743	8.4 ± 6	-	0.5 - 68.5	685	9.7 ± 6	-	0.5 - 43.3	221	5.9 ± 4.8	-	0 - 93.4	579

For footnotes, see following page.

Table 4-5. Summary of water quality, Mystic River/Alewife Brook, 2016 - 2020, continued.

Parameter	Water Quality Guideline or Standard	Alewife Brook				Upper Mystic				Lower Mystic Basin				Malden River				Mystic Mouth				
		Mean ± SD (95% CI)	% meeting guideline	Range	n	Mean ± SD (95% CI)	% meeting guideline	Range	n	Mean ± SD (95% CI)	% meeting guideline	Range	n	Mean ± SD (95% CI)	% meeting guideline	Range	n	Mean ± SD (95% CI)	% meeting guideline	Range	n	
Bacteria (counts/100mL) ⁴	Fecal coliform	200 / 400 ⁵	ND	-	ND		ND	-	ND		ND	-	ND		ND	-	ND		22 (19 - 28)	88.5	0 - 620000	659
	<i>E. coli</i>	126 / 235 ^{5,6}	699 (648 - 755)	21.8	0 - 1990000	1431	139 (129 - 151)	69.5	0 - 72700	991	82 (72 - 94)	74.8	0 - 24200	735	165 (126 - 216)	60.1	0 - 44100	243	ND	-	ND	
	<i>Enterococcus</i>	33 / 61 ⁵	226(208 - 247)	15.9	0 - 201000	1436	41 (36 - 46)	54.2	0 - 19900	992	9(8 - 11)	78.5	0 - 19900	736	28 (20 - 39)	67.1	0 - 14100	243	6 (5 - 7)	82.1	0 - 24200	659
Nutrients (µmol/L)	Phosphate	NS	ND	-	ND		0.5 ± 0.5	-	0 - 3.7	254	0.7 ± 1.5	-	0 - 11.1	118	ND	-	ND		0.8 ± 0.4	-	0 - 2.5	222
	Ammonium	NS	ND	-	ND		13.7 ± 10.3	-	0.1 - 44.3	250	9.6 ± 9.4	-	0 - 32.4	117	ND	-	ND		4.1 ± 3.6	-	0 - 20.9	216
	Nitrate+nitrite	NS	ND	-	ND		47.5 ± 27.5	-	0.1 - 264	255	31.2 ± 25.9	-	0 - 78.9	118	ND	-	ND		7.3 ± 7.5	-	0 - 34.1	222
Algae (µg/L)	Chlorophyll <i>a</i>	NS	ND	-	ND		8.8 ± 9.4	-	0.8 - 71.6	255	24.5 ± 25.8	-	1 - 156	118	ND	-	ND		4 ± 4.9	-	0.1 - 49.4	222

NS: no applicable numerical standard or guideline. ND: no data. n: number of samples.

¹ Summer (June-October), Winter (January-March).

² Median and standard error of the median are shown for pH, rather than arithmetic mean and standard deviation.

³ MADPH standard of ≥1.2 meters applies only to public bathing beaches; there are none in the Upper Mystic/Alewife Brook.

⁴ For bacterial data, 95% confidence intervals (CI) are provided rather than standard deviations

⁵ First number is the all samples geometric mean limit - compare to the "Mean±SD" column (i.e., the Mean in that column is the geometric mean of all stations in that region for the specified indicator bacteria); the second number is the single sample standard - compare to the "% meeting guideline" column (i.e., the "% meeting guideline" column is the percentage of samples meeting the single sample standard). The "Range" column gives the range of single sample results.

⁶ Either *E. coli* or *Enterococcus* are acceptable indicators for EPA, MADEP, and MADPH to assess suitability for swimming in freshwater.

4.4 Water quality results, 2020

This section reports spatial trends for water quality parameters measured in the Mystic River/Alewife Brook in 2020.

4.4.1 Physical measurements

Temperature and Dissolved Oxygen. During the summer of 2020, physical measurements that are obtained with a water quality sonde were not collected due to employee safety procedures developed in response to the coronavirus pandemic.

Water clarity. Water clarity is indicated by Secchi disk depth. Summer Secchi readings are shown for each sampling location in the bottom graph of Figure 4-2. Water clarity for all but the Mystic River mouth is low, with all stations upstream of the Dam failing to meet the MADPH beach guideline of 1.2 meters most of the time. Alewife Brook and several of the Upper Mystic locations are often clear to the bottom and too shallow to measure Secchi depth. River depth at those locations are typically 0.5 meters in Alewife Brook, and 1 meter in the Mystic River.

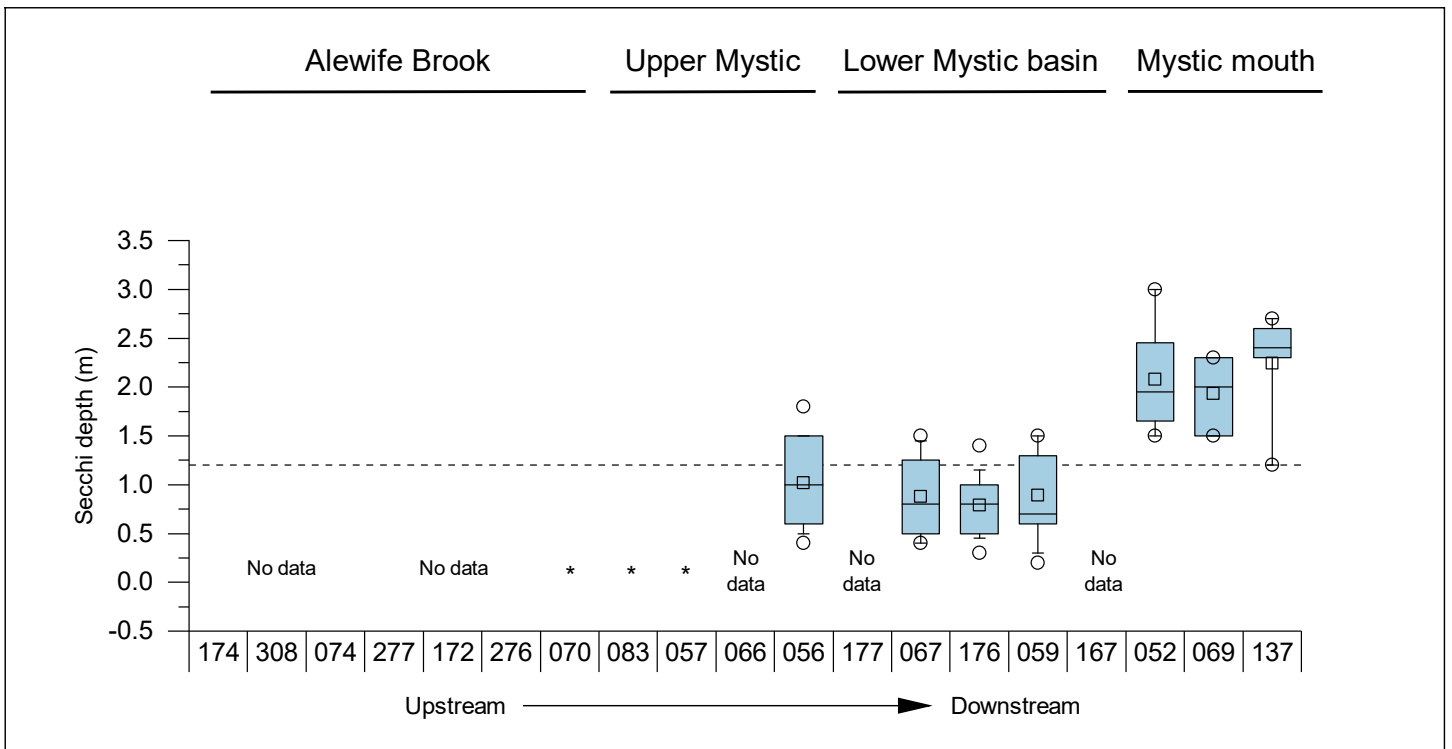


Figure 4-2. Secchi depth, Mystic River, 2020.

Dashed line is the Secchi guideline of 1.2 meters. Stations 174, 308, 074, 277, 172, 276, 066, and 177 were typically too shallow for Secchi measurements in the summer months of 2020. Stations 070, 083, and 057 were clear to the bottom for all visits in 2020, indicated by *. Hollow squares indicate the arithmetic mean.

4.4.2 Nutrients, TSS and chlorophyll

Figures 4-3 through 4-6 show monthly average total nitrogen, ammonium, nitrate/nitrite, total phosphorus, phosphate, total suspended solids, and chlorophyll *a* at the upstream Mystic locations (083 upstream of Alewife Brook and 066 at Boston Ave.), downstream (167 at Amelia Earhart Dam) and river mouth (137). Results are not available at station 137 from mid-March through May 2020 due to COVID-19 restrictions.

Regionally, ammonium, nitrate/nitrite, and phosphate results show relatively strong seasonal effects, as biological activity increases during the summer months. In winter months, when biological nutrient uptake is low, ammonium concentrations in the Upper Mystic are double the concentration in the Charles Basin.

At freshwater Mystic River locations 083, 066, and 167, nutrient results in 2020 were similar to the previous five-year average (2015-2019) except as described below. Seasonal signals are more evident in nitrogenous compounds than in total phosphorus or phosphate. All three stations had elevated total phosphorous and phosphate results, for different months: 083 in April-May; 066 in June-August; and 167 in August-November. TSS was also elevated at station 167 in August-November. Chlorophyll *a* values were lower than the five-year average throughout most of the year. Notably, there were no algae blooms reported in the Mystic River in 2020.

At marine station 137 in the Mystic mouth, sample collection was suspended mid-March through May due to employee safety procedures developed in response to the coronavirus pandemic. For the remainder of the year, TSS was not sampled at station 137 for that same reason. Most nutrient results generally aligned with the seasonal pattern of the previous five years. Phosphate and total phosphorous were elevated late summer through the fall months. Chlorophyll *a* in July and August was lower than the typical average.

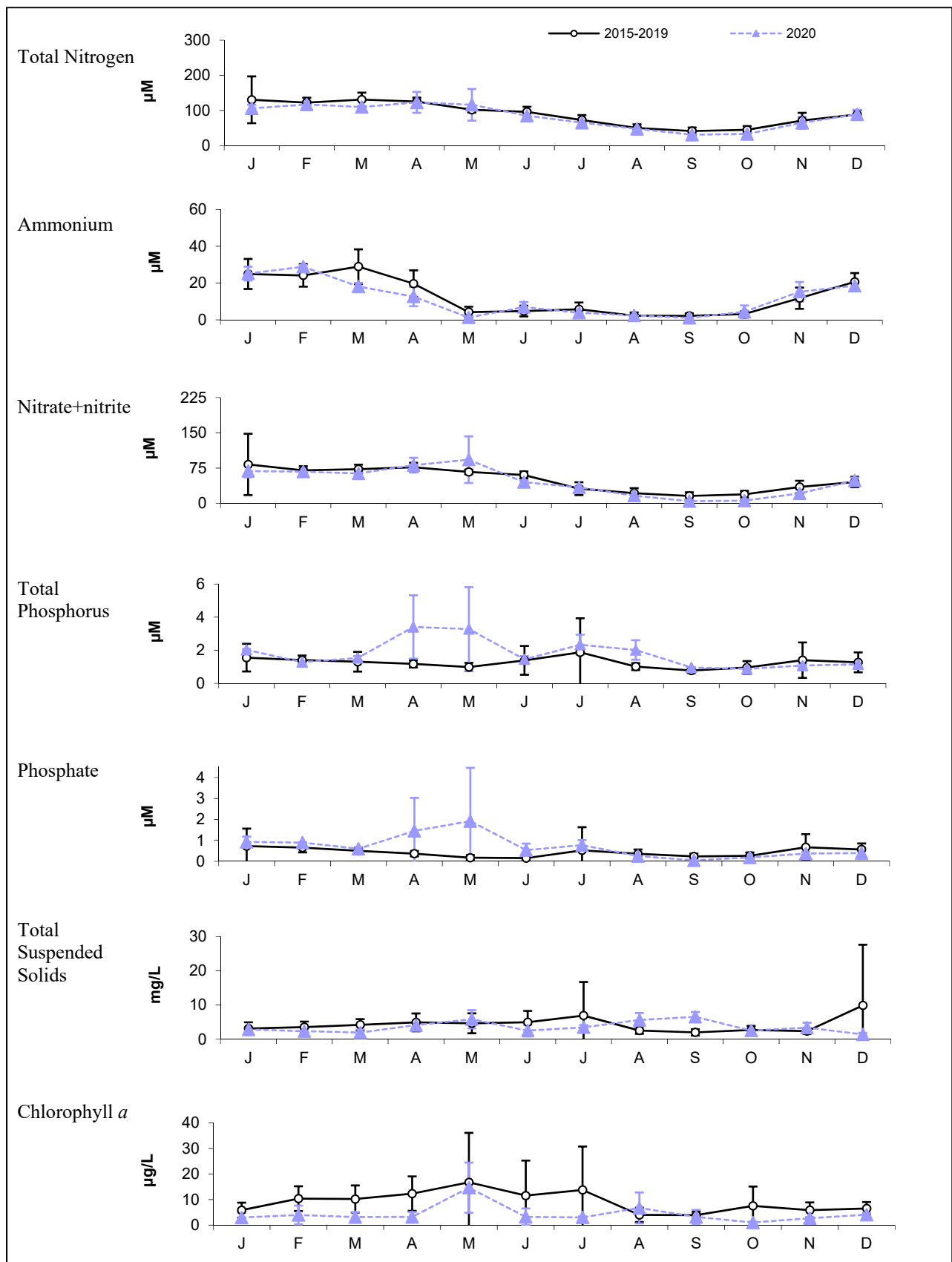


Figure 4-3. Monthly average nutrients, TSS and Chlorophyll, 2015 – 2019 and 2020, Station 083, Mystic upstream of Alewife Brook.

Error bars are ± 1 SD. Note different scales than for Figures 4-4, 4-5 and 4-6 for most parameters.

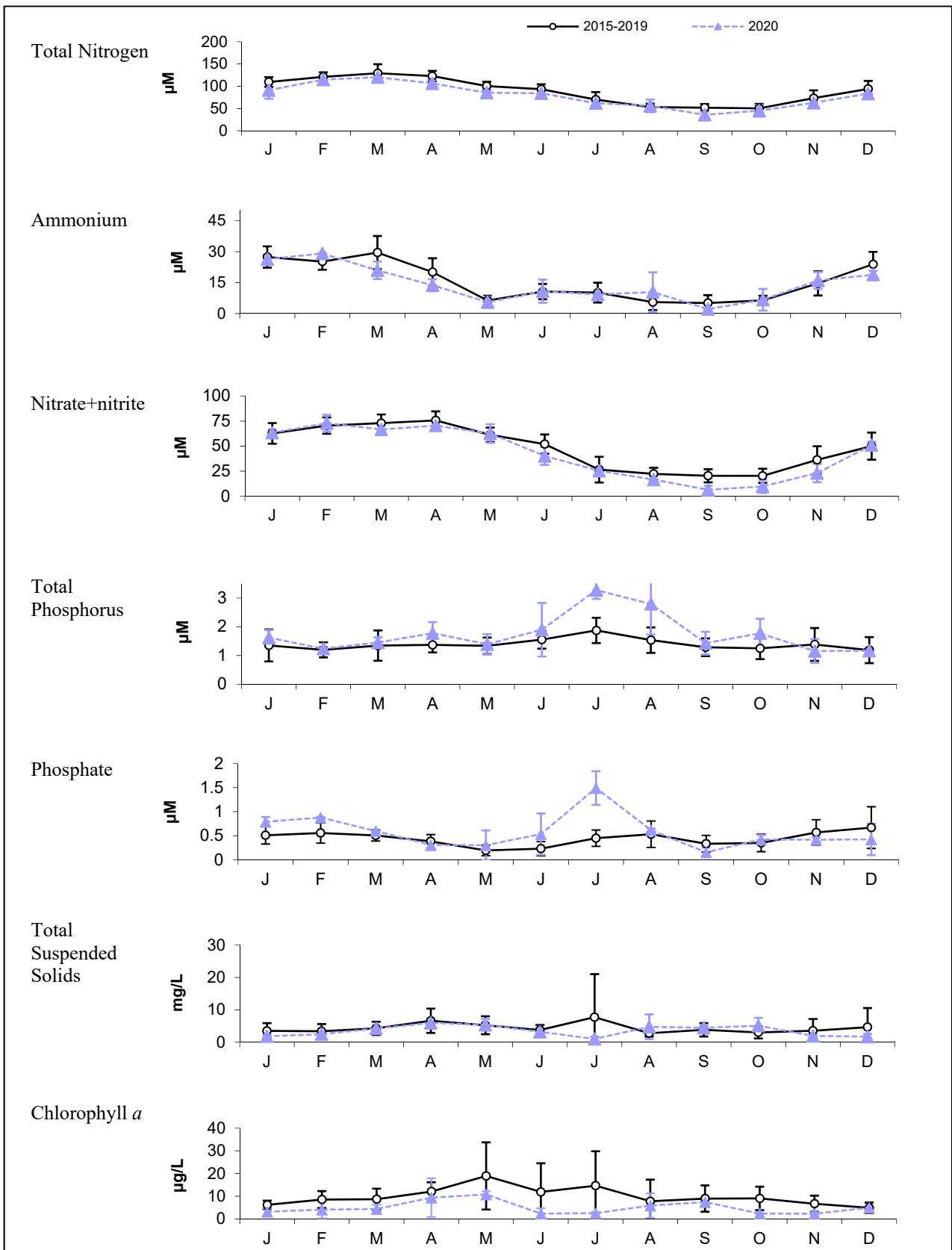


Figure 4-4. Monthly average nutrients, TSS and Chlorophyll 2015 – 2019 and 2020, Station 066, Boston Ave.

Error bars are ± 1 SD. Note different scales than Figures 4-3, 4-5 and 4-6 for most parameters.

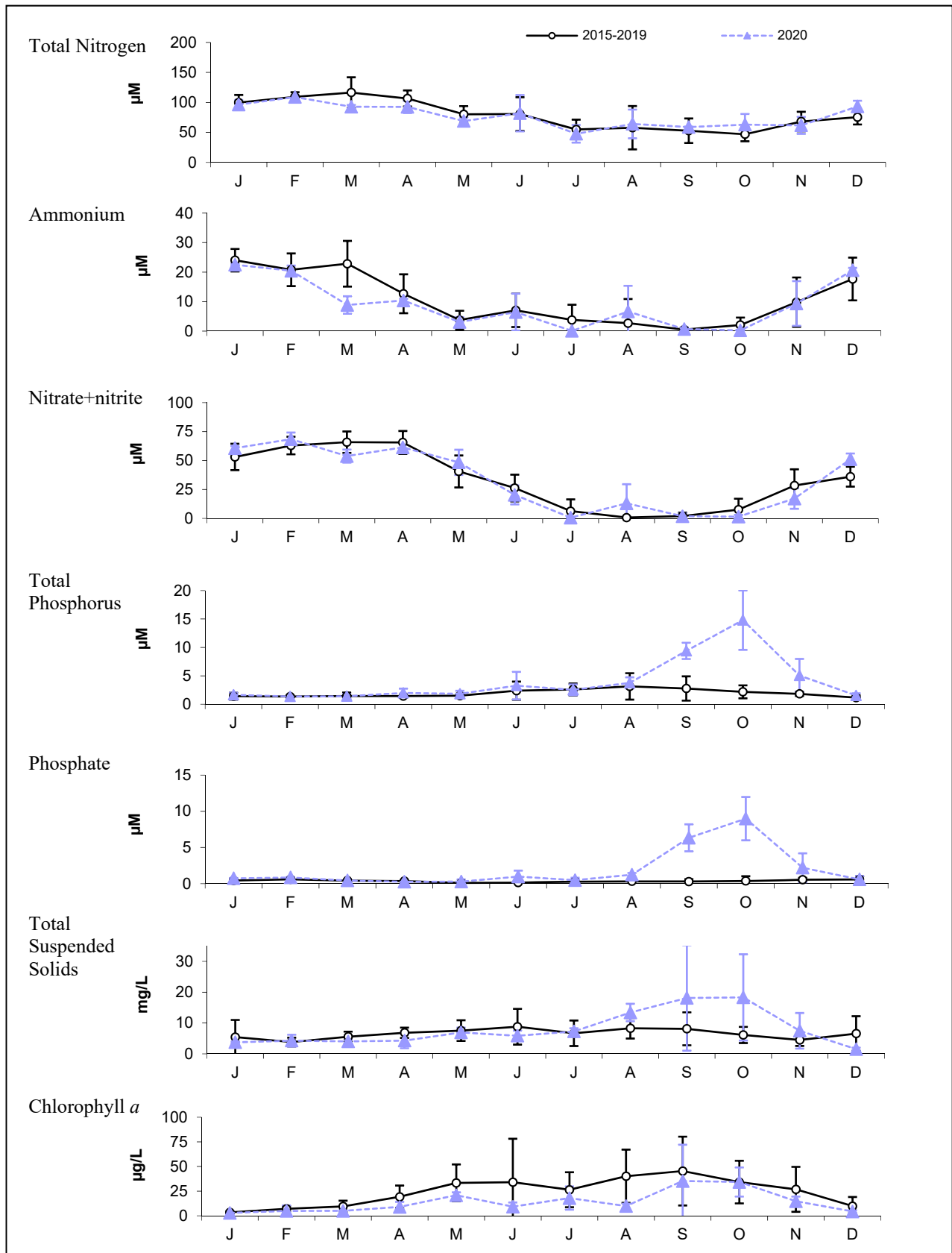


Figure 4-5. Monthly average nutrients, TSS and Chlorophyll 2015 – 2019 and 2020, Station 167, Amelia Earhart Dam (upstream/freshwater).

Error bars are ± 1 SD. Note different scales than Figures 4-3, 4-4 and 4-6 for most parameters.

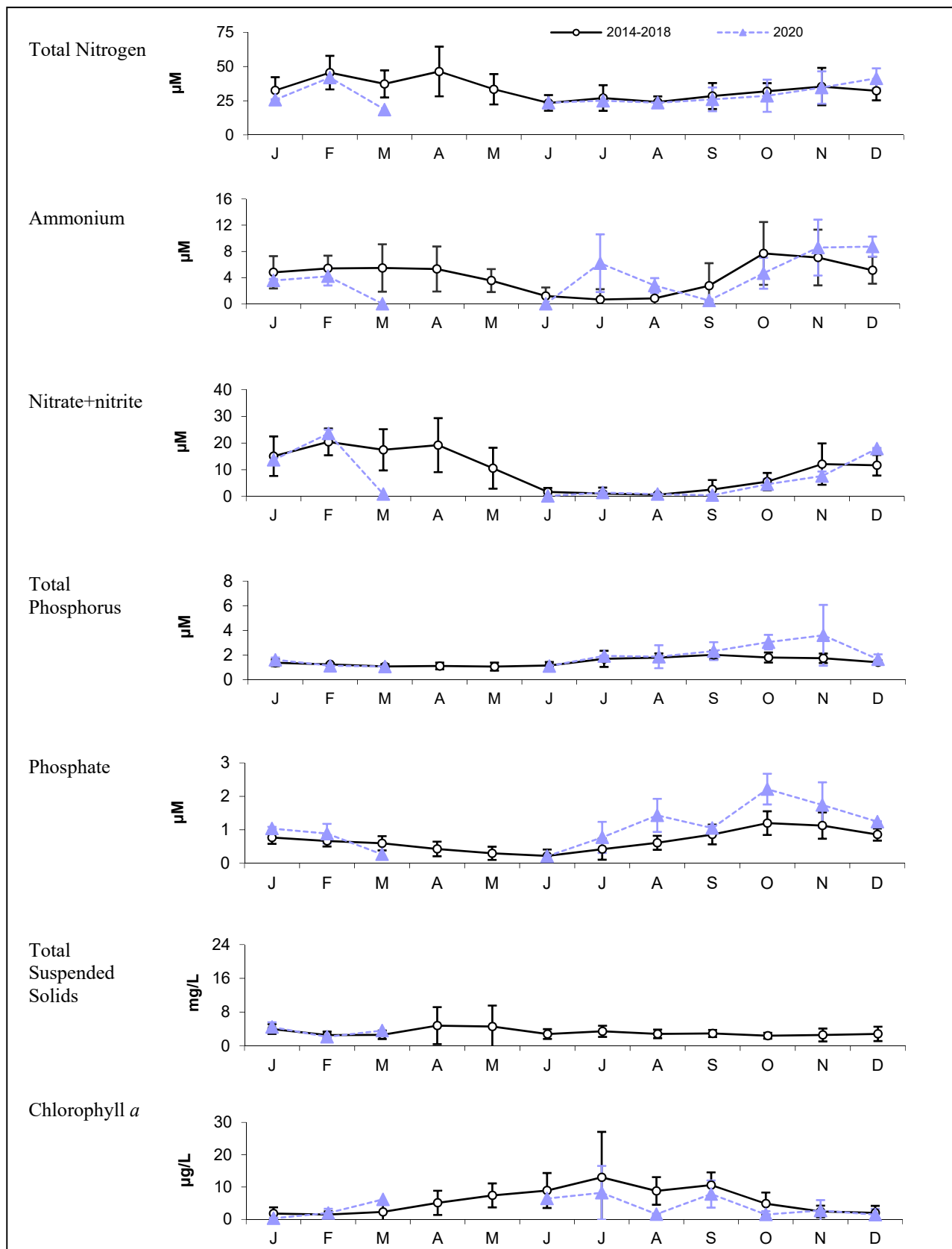


Figure 4-6. Monthly average nutrients, TSS and Chlorophyll 2015 – 2019 and 2020, Station 137, Mystic River mouth (marine).

Error bars are ± 1 SD. Note different scales than Figures 4-3, 4-4 and 4-5 for most parameters.

4.4.3 Bacterial water quality

Figure 4-7 shows the bacterial water quality at each location sampled in the Mystic River and Alewife Brook for 2020 for dry, damp, and wet weather. The rainfall conditions are derived on a station-by-station basis from the nearest rain gauge. For this area, the three gauges in use are the BWSC Charlestown gauge, the USGS Fresh Pond gauge, and the MWRA gauge at the Somerville-Marginal CSO Treatment Facility. The uppermost graph in the figure shows percentile plots of *Enterococcus* counts for each location, arranged from upstream to downstream for 2020. The center graph shows percentile plots of *E. coli*, which is only monitored in the freshwater portion of the Mystic River, and the bottom graph fecal coliform, which is only monitored in the marine portion of the Mystic River in place of *E. coli*.

As shown in Figure 4-7, in 2020 all locations in Alewife Brook consistently failed to meet *E. coli* geometric mean standards in dry, damp, and wet weather and failed to meet *Enterococcus* geometric mean standards at most stations under most conditions. Bacteria concentrations at stations 083 (Mystic Lakes outlet, before the confluence with the Alewife Brook) and 057 (Alewife Brook/Mystic River confluence) exhibited a similar distribution in wet weather. Samples taken in the Lower Mystic Basin met standards in dry and damp weather most of the time and occasionally in wet weather. Malden River station 176 met standards in dry and damp weather, but exhibited high counts in wet weather. *Enterococcus* and fecal coliform results from the three marine stations demonstrated compliance in dry weather, but some elevated results in wet and damp weather.

Geometric means for each indicator for 2015 - 2019 and 2020 appear in Table 4-6 (Alewife Brook) and 4-7 (Mystic River), for all weather conditions combined. Overall, annual geometric means did not meet water quality standards at most locations, though most 2020 geometric means were lower than the previous five years. Stations 067 and 167 in the Lower Mystic Basin met standards for both indicators. Malden River station 176 was below the state standard for *Enterococcus* but exceeded it for *E. coli*. Annual geometric means did not meet standards at the seven Alewife Brook stations. Results at Alewife Brook stations 172 (Mass. Ave. bridge) and 276 (downstream of SOM001A) were very similarly distributed. The highest bacteria counts in Alewife Brook were seen at station 308, immediately downstream of the CAM401A CSO outfall. Like the Charles River, *E. coli* counts are consistently higher than *Enterococcus* counts at all stations.

Annual geometric means for both *Enterococcus* and fecal coliform were met at all of the Mystic mouth stations, including 052, downstream of Amelia Earhart Dam, 069 at CSO outfall BOS017 and 137 upstream of the Tobin Bridge.

The spatial and temporal change in *Enterococcus* concentrations in Alewife Brook and the Mystic River appear in Figure 4-8 through Figure 4-10. Figure 4-8 shows the impact of rainfall on *Enterococcus* densities on the four river reaches in 2020, along with locations near CSO outfalls. In the Alewife, the Little River station 174 upstream of CSOs – as well as all other stations – fails to meet standards in dry and wet weather, suggesting persistent contamination not necessarily tied to CSOs. In the Upper Mystic, results were often below the single sample standard in dry and damp conditions, but frequently exceeded

in wet weather. Lower Mystic counts were low in dry, damp, and met often in light and heavy rain conditions. Station 052 at the Amelia Earhart Dam and the treated Somerville Marginal CSO facility outfall, had a wide distribution of results in light rain weather, but often met standards in dry, damp and heavy rain conditions. It is important to note that stormwater enters the Somerville Marginal CSO facility outfall conduit before the discharge enters the Mystic River. Therefore, results at station 052 reflect ambient conditions in the river and the potential effects of treated CSO and untreated stormwater.

Results in Figures 4-9 (Alewife Brook) and 4-10 (remainder of the Mystic) are grouped by phases of the Long Term CSO Plan improvements and include the geometric mean counts in each rainfall condition. Figure 4-9 shows minimal changes in dry or damp *Enterococcus* counts in the Alewife, but decreases in the magnitude of exceedance in wet weather, particularly in the 2016-2020 period following completion of all LTCP-related construction in this region. *Enterococcus* results in Figure 4-10 show slight improvement over time in the Mystic River in dry and wet weather since the early 1990s, particularly in dry and light rain conditions. In the five years of data collected following LTCP project completion, results are similarly distributed to the previous LTCP phase.

Mystic River 2020 compliance rates with single sample State standards for both indicators are shown in Figures 4-11 (*Enterococcus*) and 4-12 (*E. coli*). Dots on the figure are the monitoring locations shown in Figure 4-1 and listed in Table 4-1. Compliance rates vary highly year-to-year and between indicators. Compliance rates in the Mystic River were generally higher for *E. coli* than *Enterococcus*. Station 056 near Medford Square exhibited very low compliance in wet weather without influence of nearby CSO. Mystic stations 057 and 066 near the confluence with Alewife Brook demonstrate the limited impact of Alewife Brook on the Mystic in dry and damp weather. Stations 059 and 167 near Amelia Earhart Dam and downstream of the Somerville Marginal CSO relief outfall demonstrated high compliance rates in dry and damp weather in 2020.

Alewife Brook 2020 compliance rates with single sample State standards for both indicators are shown in Figures 4-13 (*Enterococcus*) and 4-14 (*E. coli*). The dots shown on the maps correspond to the monitoring locations shown in Figure 4-1 and listed on Table 4-1. Compliance rates were generally low in all weather conditions, though some stations were over 60% compliant in damp conditions. All Alewife stations were below 25% compliant in wet weather for both indicators. Like the Charles, some discrepancies in compliance between the two indicators exist.

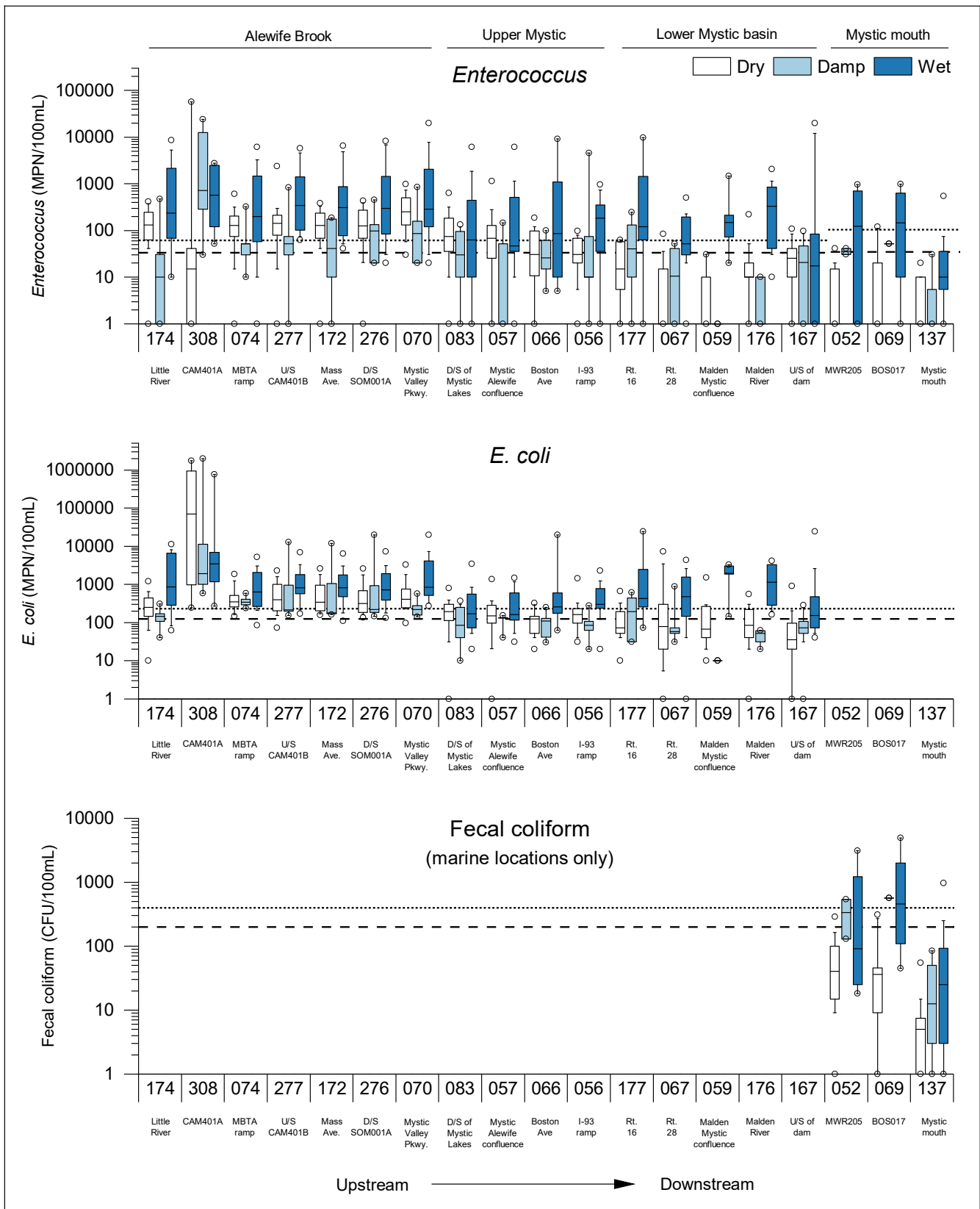


Figure 4-7. Indicator bacteria concentrations, Mystic River/Alewife Brook, 2020. Dashed lines show MADEP *Enterococcus* and *E. coli* and the former fecal coliform geometric mean standards. Dotted lines show the single sample standards. Note that freshwater and marine *Enterococcus* standards differ. See Section 2.1.5 for descriptions of rainfall conditions. “D/S”: downstream; “U/S”: upstream.

Table 4-6. Geometric mean indicator bacteria, Alewife Brook, 2015 – 2019 and 2020.

All Alewife Brook stations are designated for shoreline sampling (including weekends), shaded.

Station	Location	Surface or Bottom	Number of samples		<i>Enterococcus</i> (95% CI) counts/100 mL DEP limit: 33 counts/100 mL		<i>E. coli</i> (95% CI) counts/100 mL DEP limit: 126 counts/100 mL	
			2015–2019	2020	2015 – 2019	2020	2015 – 2019	2020
174	Cambridge, Little River, upstream of Rt. 2 and off ramp to Alewife T station	S	242	36	176 (140-222)	106 (53-210)	587 (489-705)	348 (214-567)
308	Cambridge, Alewife Brook at CAM401A CSO outfall	S	62	17	1311 (901-1908)	210 (47-922)	5941 (3620-9748)	7379 (1856-29335)
074	Cambridge, Little River, at off ramp to Alewife T station	S	243	37	147 (118-185)	104 (58-187)	604 (511-714)	463 (347-616)
277	Arlington, Alewife Brook, upstream of 4 CSO outfalls near Mass. Ave bridge.	S	133	37	330 (264-412)	137 (76-247)	726 (569-926)	583 (403-844)
172	Arlington, Alewife Brook, upstream of Massachusetts Ave bridge, midchannel	S	243	37	215 (179-259)	126 (72-219)	571 (485-671)	556 (385-803)
276	Arlington, Alewife Brook, downstream of SOM001A	S	135	37	282 (225-355)	143 (83-245)	613 (488-772)	547 (373-802)
070	Arlington, Alewife Brook, off Mystic Valley Parkway bridge	S	244	37	285 (238-343)	246 (150-404)	701 (594-827)	605 (418-877)

Table 4-7. Geometric mean indicator bacteria, Mystic River, 2015 – 2019 and 2020.

Stations designated for shoreline sampling (weekends or unsafe boating conditions) are shaded.

Station	Location	Surface or Bottom	Number of samples		<i>Enterococcus</i> (95% CI) counts/100 mL DEP limit: 33 counts/100 mL ²		<i>E. coli</i> ¹ (95% CI) counts/100 mL DEP limit: 126 counts/100 mL	
			2015 – 2019	2020	2015 – 2019	2020	2015 – 2019	2020
083	Medford, upstream of confluence of Mystic River and Alewife Brook	S	348	64	33 (27-41)	55 (33-90)	95 (83-109)	148 (107-205)
057	Medford, confluence of Mystic River and Alewife Brook	S	229	37	47 (36-61)	42 (20-87)	132 (112-155)	136 (83-220)
066	Medford, Mystic River, Boston Ave bridge	S	128	27	27 (20-37)	39 (17-87)	106 (88-128)	150 (90-248)
056	Medford, Mystic River, upstream of I-93 bridge	S	228	37	36 (27-47)	37 (19-71)	233 (196-278)	178 (125-252)
177	Medford, Downstream of Rt. 16 bridge, mid-channel	S	121	27	11 (7-16)	35 (14-89)	157 (121-203)	213 (110-411)
067	Medford, Mystic River, Rt. 28 bridge	S	227	37	8 (6-11)	7 (3-15)	67 (52-86)	126 (60-261)
059	Everett, confluence of Mystic and Malden Rivers	S	131	20	4 (3-6)	5 (1-17)	46 (33-63)	155 (69-349)
176	Malden River, upstream of Rt. 16 bridge	S	225	37	26 (18-36)	19 (9-40)	148 (111-198)	151 (86-266)
167	Medford, Mystic River, upstream side of Amelia Earhart Dam	S	221	44	9 (7-12)	14 (6-29)	65 (52-81)	74 (43-129)
052 ²	Somerville, Mystic River, near Somerville Marginal CSO facility (MWR205) – marine	S	165	20	23 (16-35)	6 (2-16)	<i>102 (67-153)</i>	<i>92 (50-169)</i>
		B	70	13	5 (3-8)	4 (1-16)	<i>13 (9-20)</i>	<i>27 (10-71)</i>
069 ²	Charlestown, near Schrafft's Center at BOS-017 outfall - marine	S	165	20	12 (8-19)	10 (3-30)	<i>69 (49-97)</i>	<i>91 (41-197)</i>
		B	60	7	2 (1-3)	4 (0-22)	<i>8 (5-12)</i>	<i>14 (2-81)</i>
137 ²	Mystic River, upstream of Tobin Bridge – marine/Inner Harbor	S	116	18	2 (1 - 3)	8 (2-20)	<i>11 (8-15)</i>	<i>26 (11-62)</i>
		B	116	18	1 (0 - 1)	2 (0-4)	<i>2 (1-2)</i>	<i>3 (1-6)</i>

¹Results in italics are fecal coliform, not *E. coli*.

² Geometric mean limit for *Enterococcus* is 35 MPN/100 mL in marine water.

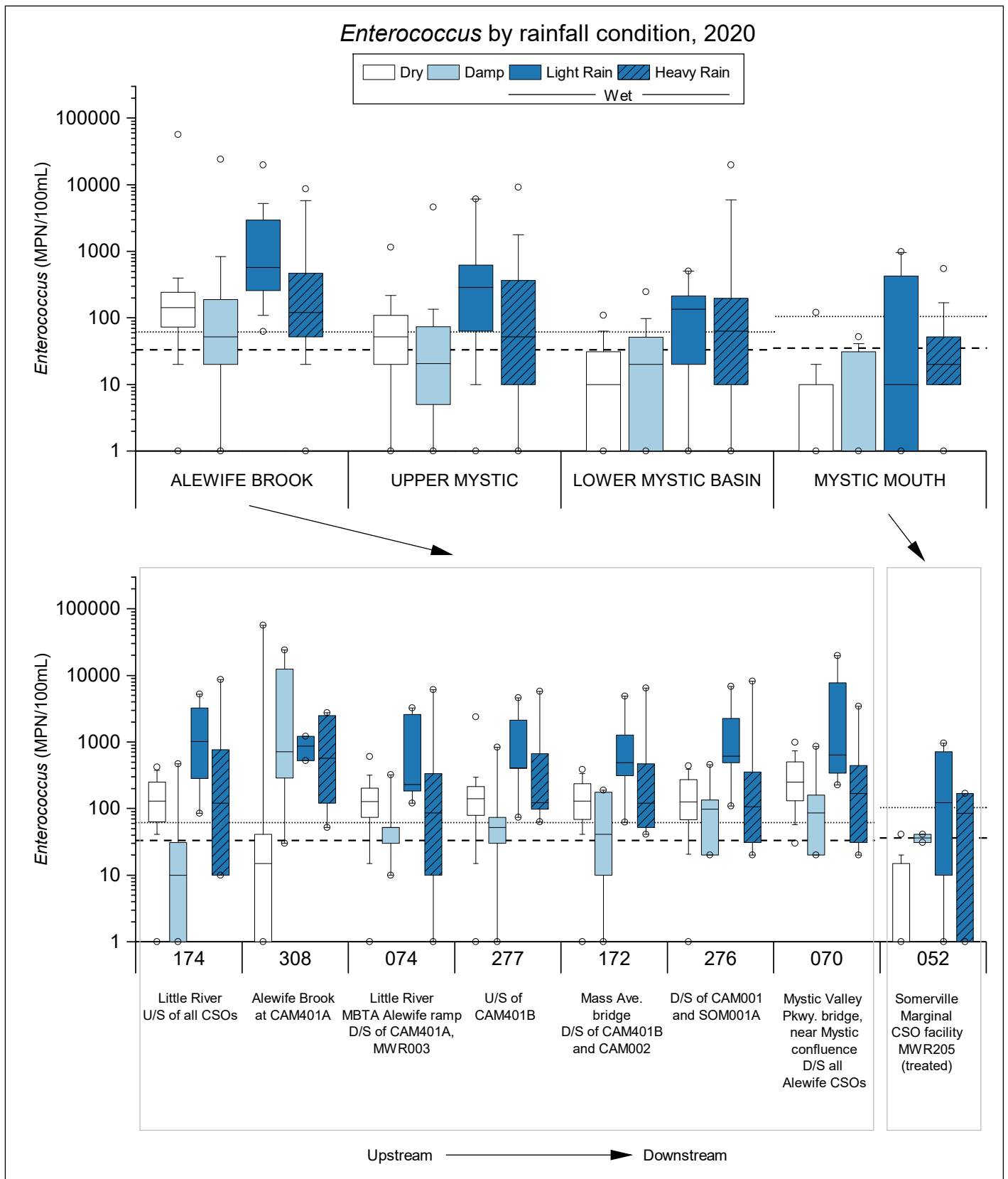


Figure 4-8. Enterococcus by rainfall condition, Mystic River/Alewife Brook, 2020. Dashed lines show MADEP state geometric mean standards (33 MPN/100mL and 35 MPN/100mL for freshwater and marine). Dotted lines show single sample State standards (61 MPN/100mL and 104 MPN/100mL for freshwater and marine). Rainfall is from the BWSC Charlestown or USGS Fresh Pond gauge. See Section 2.1.5 for descriptions of rainfall conditions. “D/S”: downstream; “U/S”: upstream.

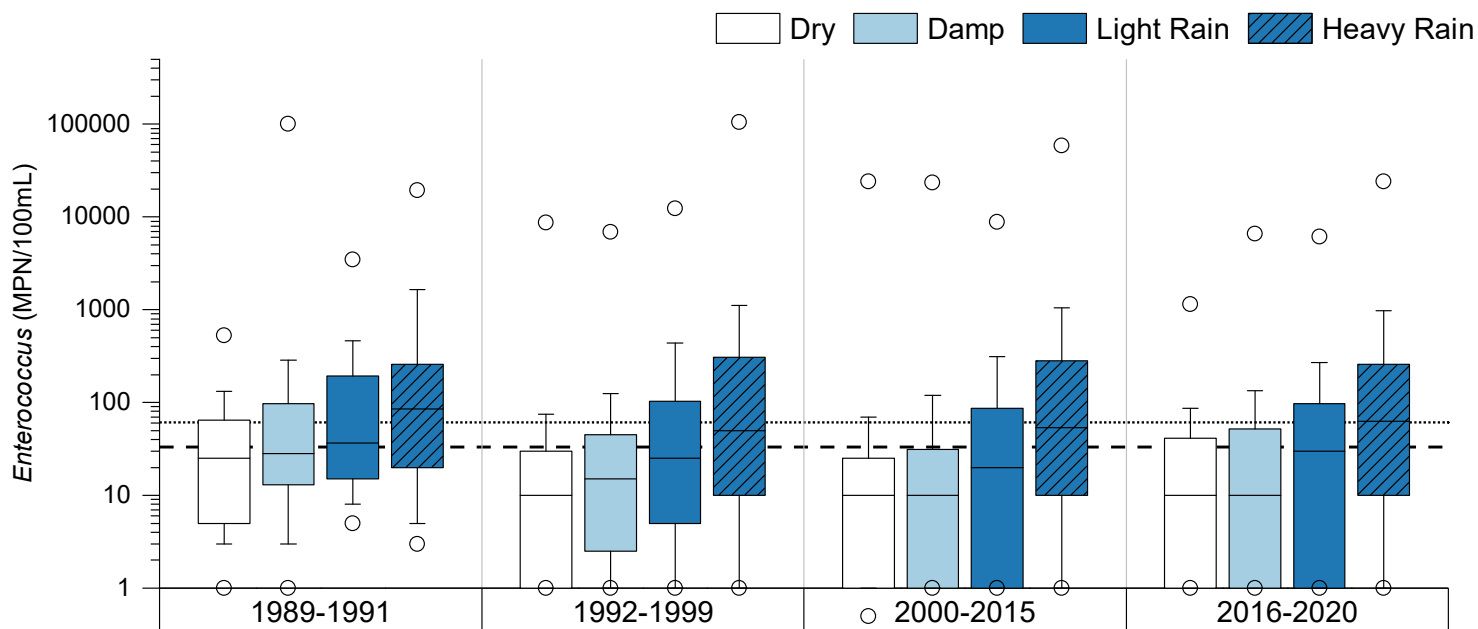


Figure 4-9. *Enterococcus* over time, Alewife Brook by phase of CSO LTCP and rainfall condition. Dashed line shows State geometric mean standard (33 MPN/100mL), dotted line shows single sample standard (61 MPN/100mL). Data includes results for stations 174, 074, 277, 172, 276 and 070. Rainfall is NOAA rainfall from Logan airport. See Section 2.1.5 for descriptions of rainfall conditions.

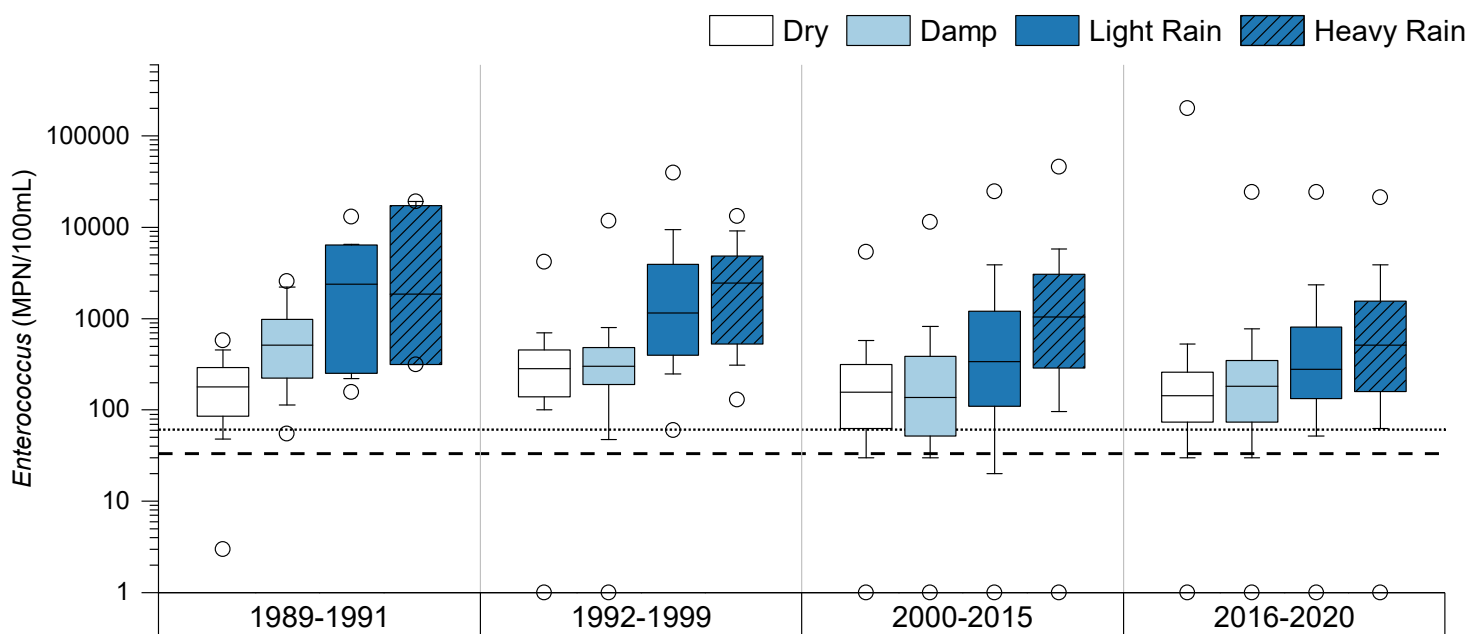


Figure 4-10. *Enterococcus* over time, Mystic River by phase of CSO LTCP and rainfall condition. Dashed line shows State geometric mean standard (33 MPN/100mL), dotted line shows single sample standard (61 MPN/100mL). Data includes results for all Mystic River stations in Table 4-1 excepting Alewife Brook. Rainfall is NOAA rainfall from Logan airport. See Section 2.1.5 for descriptions of rainfall conditions.

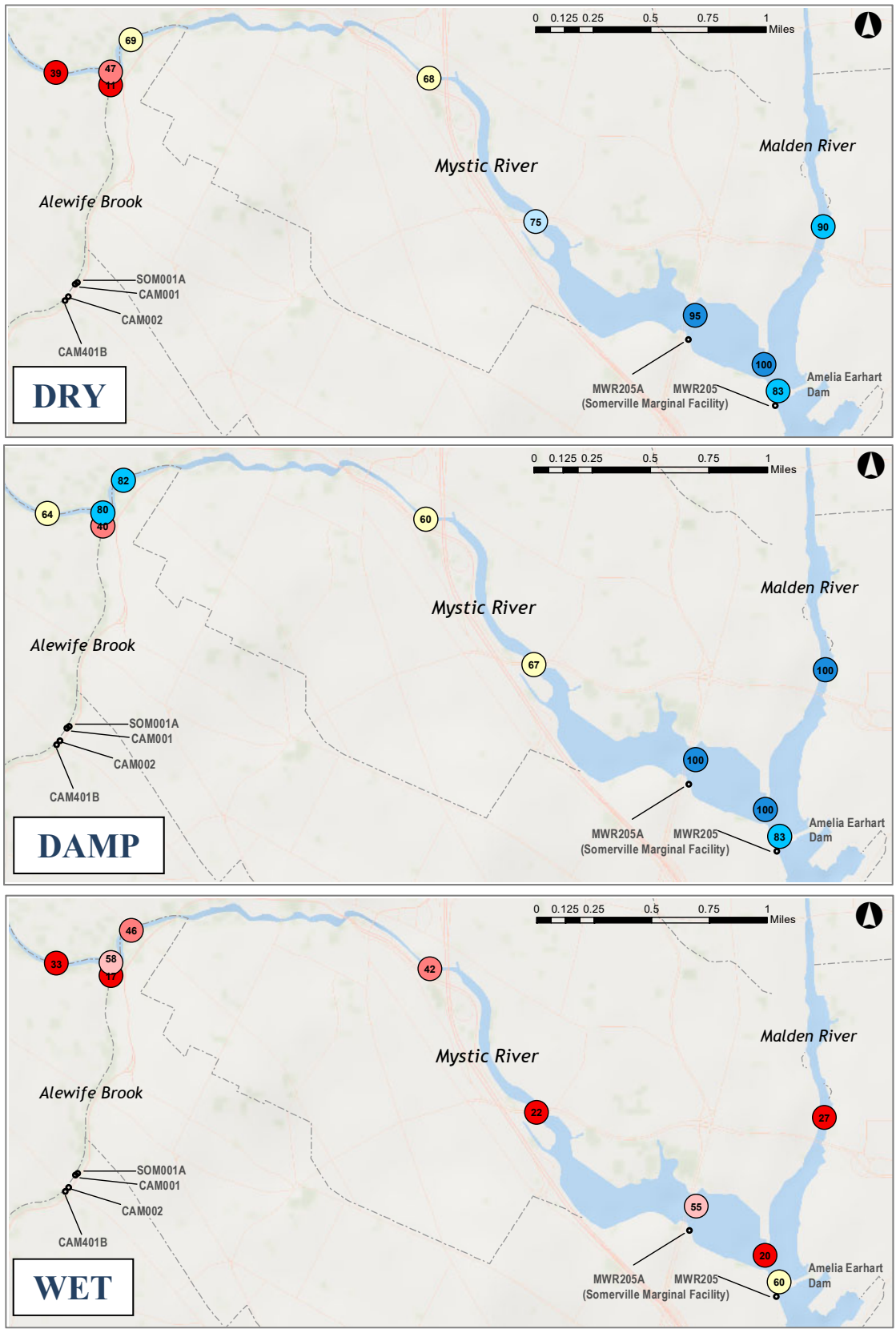


Figure 4-11. Mystic River *Enterococcus* percent compliance by weather condition, 2020. Compliance with 61 MPN/100mL single sample State standard. Rainfall is from nearest rain gauge to station. See Section 2.1.5 for descriptions of rainfall conditions. Alewife Brook station 070 near Mystic River confluence included for reference.

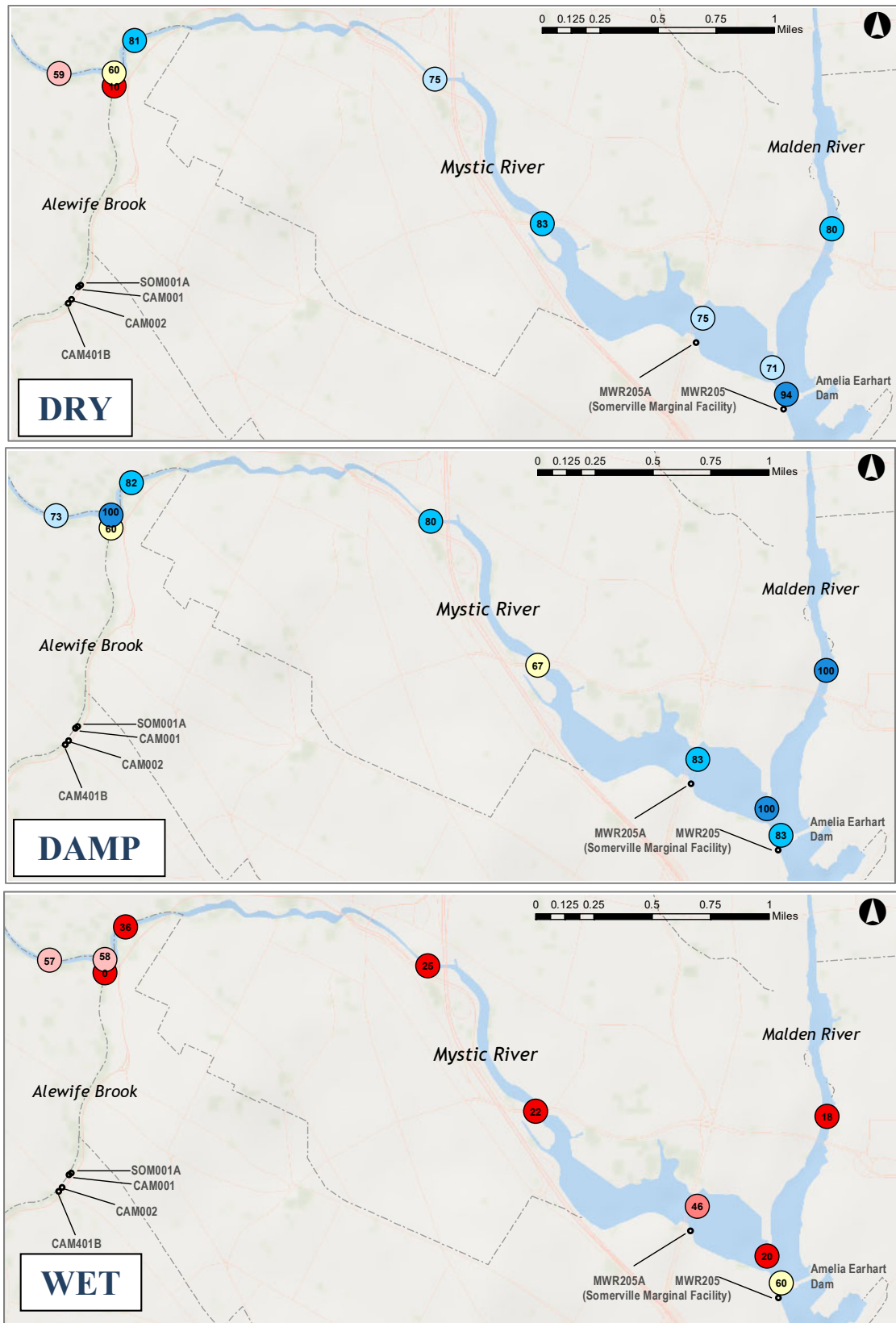
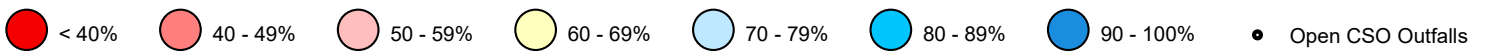


Figure 4-12. Mystic River *E. coli* percent compliance by weather condition, 2020.

Compliance with 235 MPN/100mL single sample State standard. Rainfall is from nearest rain gauge to station. Section 2.1.5 for descriptions of rainfall conditions. Alewife Brook station 070 near Mystic River confluence included for reference.

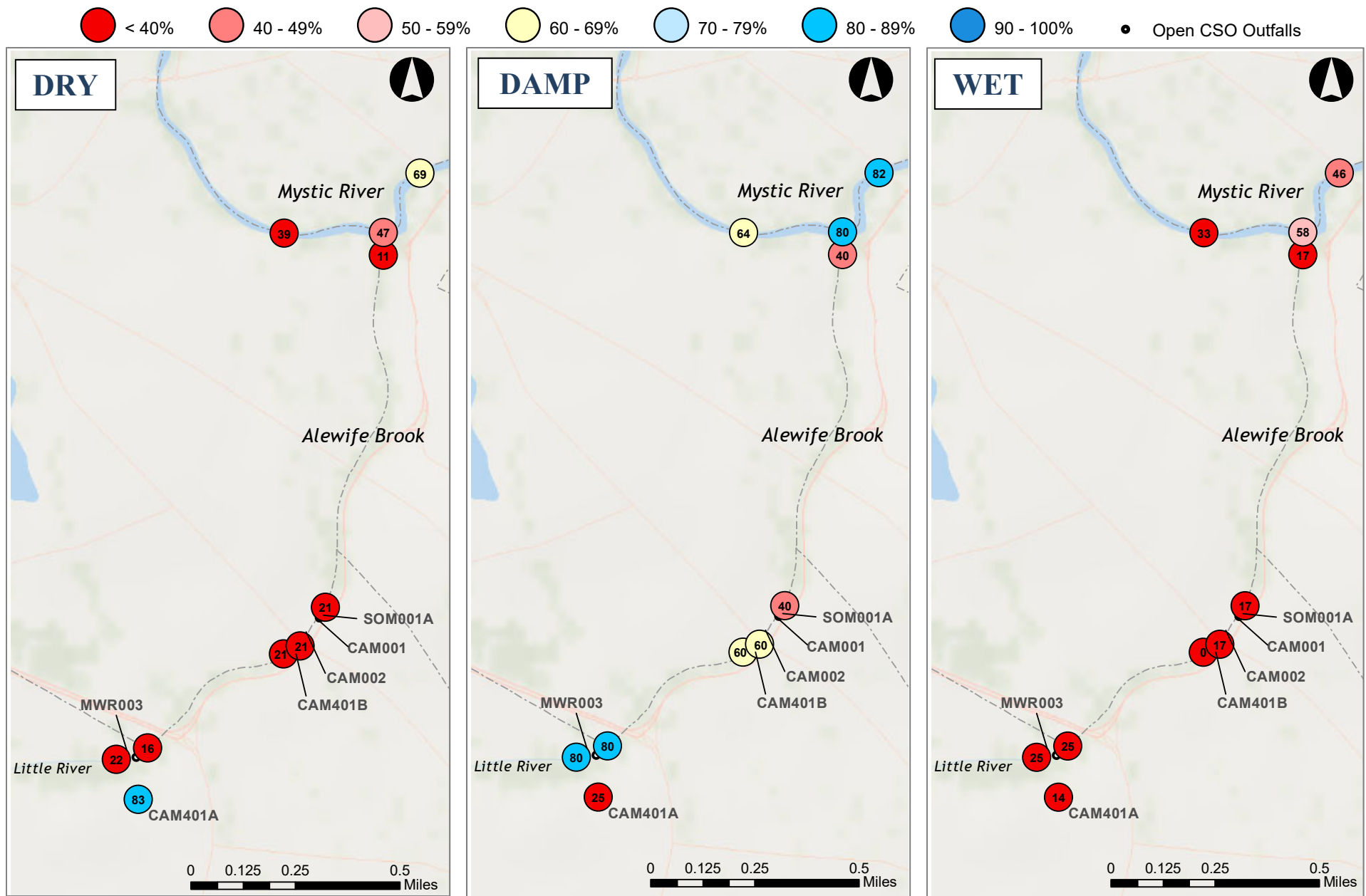


Figure 4-13. Alewife Brook *Enterococcus* percent compliance by weather condition, 2020.

Compliance with 61 MPN/100mL single sample State standard. Rainfall is from nearest rain gauge to station. Section 2.1.5 for descriptions of rainfall conditions. Mystic River stations 083, 057, and 066 included for reference.

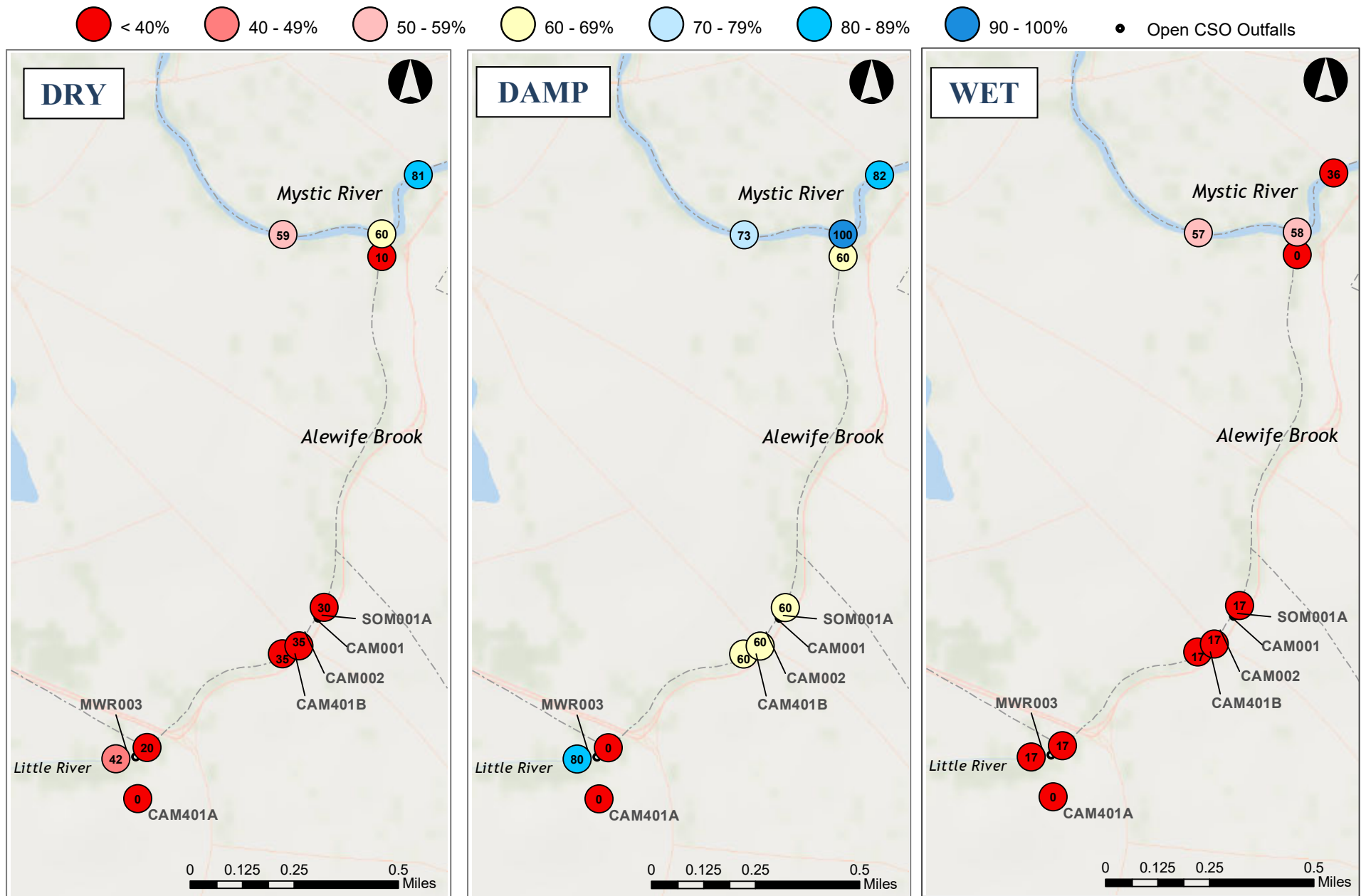


Figure 4-14. Alewife Brook *E. coli* percent compliance by weather condition, 2020.

Compliance with 235 MPN/100mL single sample State standard. Rainfall is from nearest rain gauge to station. Section 2.1.5 for descriptions of rainfall conditions. Mystic River stations 083, 057, and 066 included for reference.

4.5 Summary of Mystic River/Alewife Brook water quality

In general, bacterial water quality in the Mystic River and Alewife Brook was similar in pattern to recent years. Bacteria concentrations in the Mystic River met standards for much of the upper and lower Mystic Basin and Mystic River mouth in dry and damp weather, but did not meet standards in wet weather conditions at most locations. Bacteria concentrations in Alewife Brook fail to meet standards in most weather conditions both upstream and downstream of CSOs in that region. Station 174, which is upstream of all CSOs, had poor water quality in dry and wet weather. With the exception of Alewife Brook, most locations in the Mystic River met *Enterococcus* and *E. coli* geometric mean limits in dry and damp conditions most of the time.

In 2020, dissolved oxygen and temperature could not be measured due to employee safety procedures developed in response to the coronavirus pandemic. Clarity results were generally low or too shallow to be measured.

Nutrient levels in 2020 were similar to previous years, with monthly concentrations near long-term averages for most parameters. Elevated total phosphate and phosphorus results were observed at the four stations sampled for nutrients for one to two month periods in 2020. Summer chlorophyll *a* values were lower than the previous 5-year average.

5 Storm Size and Bacterial Count Analysis

From 2017 to 2020, MWRA instituted a comprehensive storm sampling program building on the routine monitoring program which has been in place since 1989. These additions supported the calibration of receiving water models for both the Charles and Mystic/Alewife regions, which will be used to evaluate remaining CSO impact on water quality in the Final CSO Water Quality Impact Report. This report will be submitted to EPA and MADEP in December 2021. The two primary enhancements were sampling on weekends in addition to weekdays during and after storm events to minimize data gaps, and the utilization of a subset of sampling locations that can be sampled from shore in the event of inclement weather that would prevent, for safety reasons, the usual method of sampling by boat. A given region was typically sampled for five consecutive days following a rain event, unless an additional storm in that period spurred a schedule adjustment. Finally, storm sampling was given a high priority, so sampling in the aftermath of a storm frequently “bumped” other sampling projects into lower places in the queue.

While maintaining sampling programs in Boston Harbor, Massachusetts Bay, and the Neponset River, MWRA sampled 33 storms in the Mystic/Alewife and Charles regions from 2018 to 2019 and captured a range of storm events despite pandemic related restrictions in 2020. These storms span a wide array of rainfall patterns and CSO events. The storm counts in 2018 and 2019 were slightly above the Typical Year, facilitating a large sample size of bacteria results to be used in receiving water model calibration. Results presented below include samples collected from 2016 through 2020, summarizing bacteria results after storms from the past five years.

5.1 2016-2020 bacteria counts by time period and storm size

Figures 5-1 through 5-8 present bacteria counts for both *E. coli* and *Enterococcus* in the Charles and Mystic/Alewife regions following varied storm events. Results are binned first by the total rainfall of the most recent storm at a station’s nearest rain gauge, and then by the hours after the start of that storm that the sample was collected. This allows a comparison of the magnitude and duration of wet weather impacts by region, bacterial indicator, and storm size. The bins for total rainfall are dictated by those in the Typical Year (Table 1-1), and hours after storm are in 12-hour increments up to 3 days, then by 24-hours to 5 days and beyond. Lines are drawn between the median lines of each box to emphasize the pattern of wet weather impact and recovery. Note that these are percentile plots as explained by Figure 2-1, but as the number of samples is smaller, the percentile “whiskers” have been omitted. Due to the high counts in Alewife Brook, the vertical axis scale is higher for the Mystic/Alewife figures.

5.1.1 Charles River

For the Charles River, the results described above are further grouped by region. The following Figures 5-1 and 5-3 (top) contain results from stations upstream of any CSO outfalls, while the bottom Figures 5-2 and 5-4 include stations from the CAM005 CSO outfall to the Charles River Dam. These figures do not distinguish results between storms with CSO discharges and those without. Approximately 850 results are included in the upstream figures, and 2500 results in the downstream figures. Sample counts are highest in storms <0.25” and lowest in storms >2.0” due to the relative frequency of these events.

As seen in the top figures, locations upstream of CSOs show high bacteria counts from non-CSO sources in storms $>0.25''$. Locations downstream of CSOs in the Lower Charles showed minimal contamination in storms below $0.5''$. Both indicator bacteria display a similar pattern relative to their respective standards. Peak concentrations tended to occur within 24 hours after the onset of rain, when stormwater and potential CSO impacts would be at their greatest. The magnitude of impact was higher in the region upstream of all CSOs, but the duration of impact appears shorter at these locations, as flows quickly move to the wider parts of the Lower Basin. As expected, the duration of impact increased with storm size, with results typically returning to baseline around 72 hours, even in the largest storms.

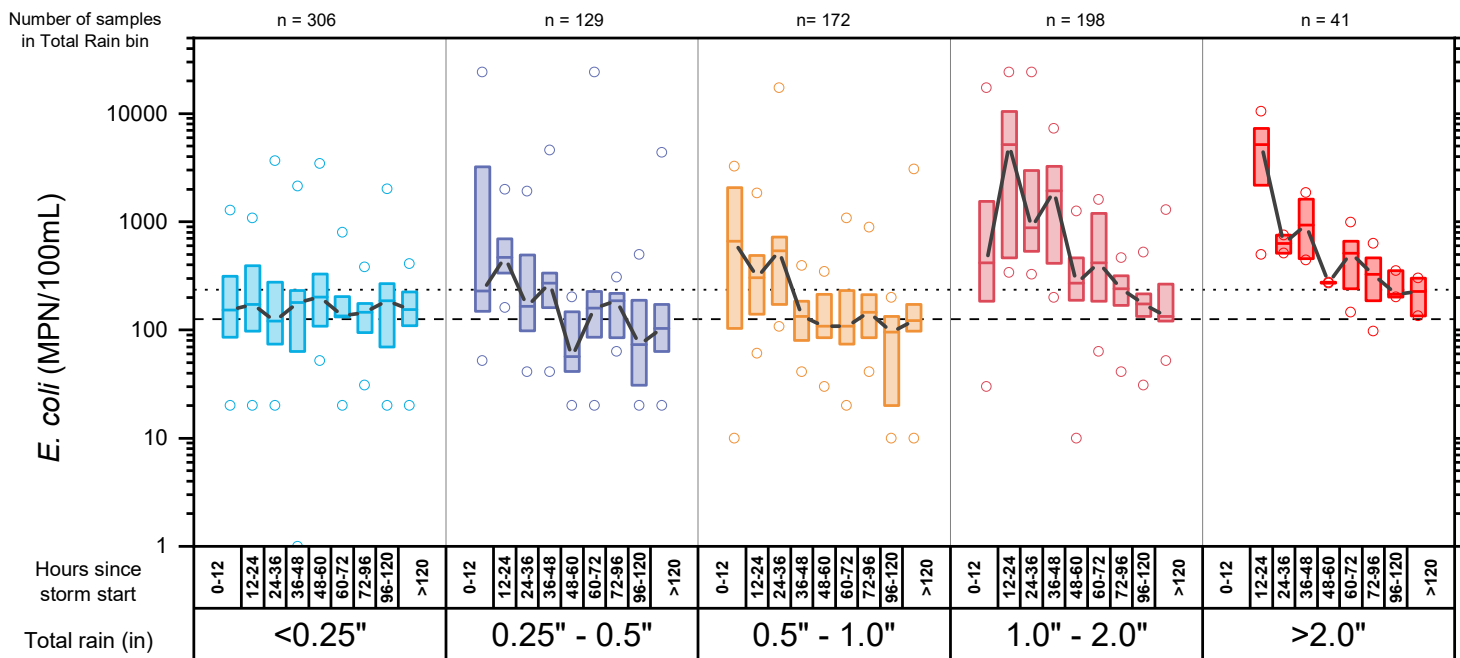


Figure 5-1. 2016-2020 *E. coli* counts at Charles River stations upstream of all CSOs by storm size and hours after start of rain.

Dashed line shows MADEP freshwater geometric mean standard of 126 MPN/100mL for *E. coli*; dotted line shows the single sample standard of 235 MPN/100mL. Total rain is rainfall from nearest MWRA, BWSC or USGS rain gauge to a given location. Total rain is binned to follow Typical Year rainfall categories. Hours since storm start is taken from the onset of rain to the time of sample collection. All four stations upstream of the CAM005 CSO outfall are included (012, 001, 144, 002).

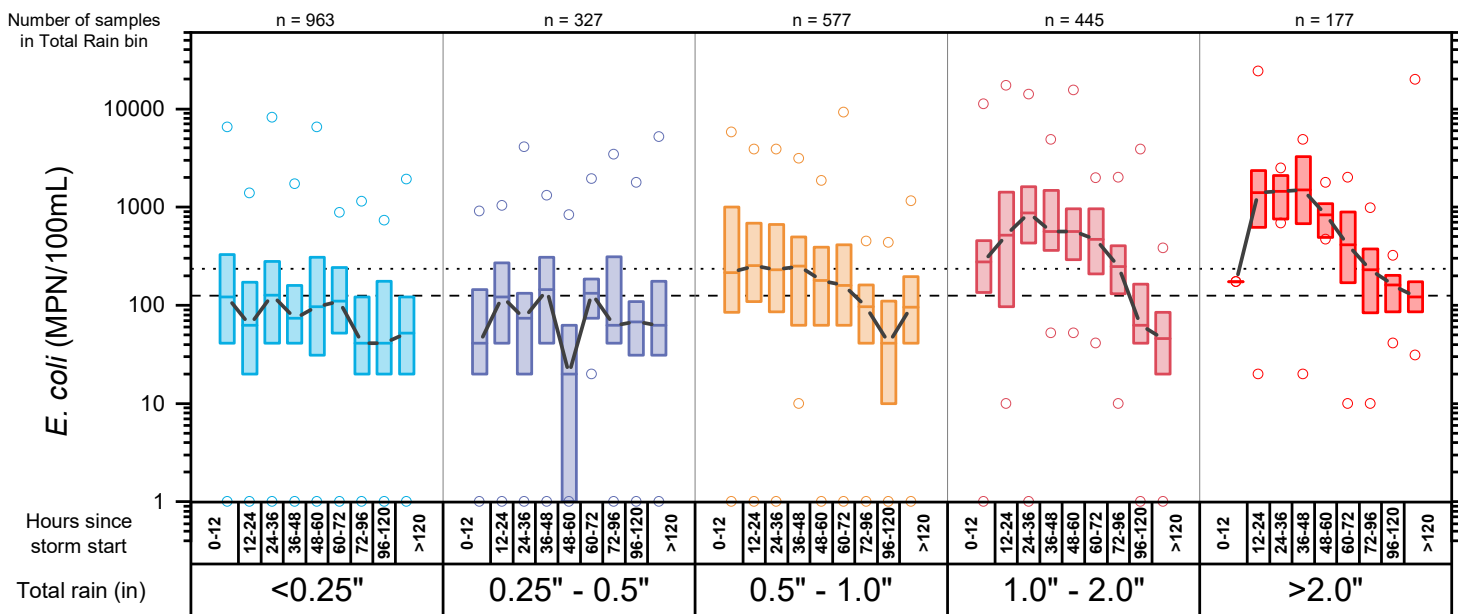


Figure 5-2. 2016-2020 *E. coli* counts at Charles River stations in reaches downstream of CSOs by storm size and hours after start of rain.

Dashed line shows MADEP freshwater geometric mean standard of 126 MPN/100mL for *E. coli*; dotted line shows the single sample standard of 235 MPN/100mL. Total rain is rainfall from nearest MWRA, BWSC or USGS rain gauge to a given location. Total rain is binned to follow Typical Year rainfall categories. Hours since storm start is taken from the onset of rain to the time of sample collection. All 13 stations downstream of the CAM005 outfall are included. All storms are included, both with and without CSO discharges.

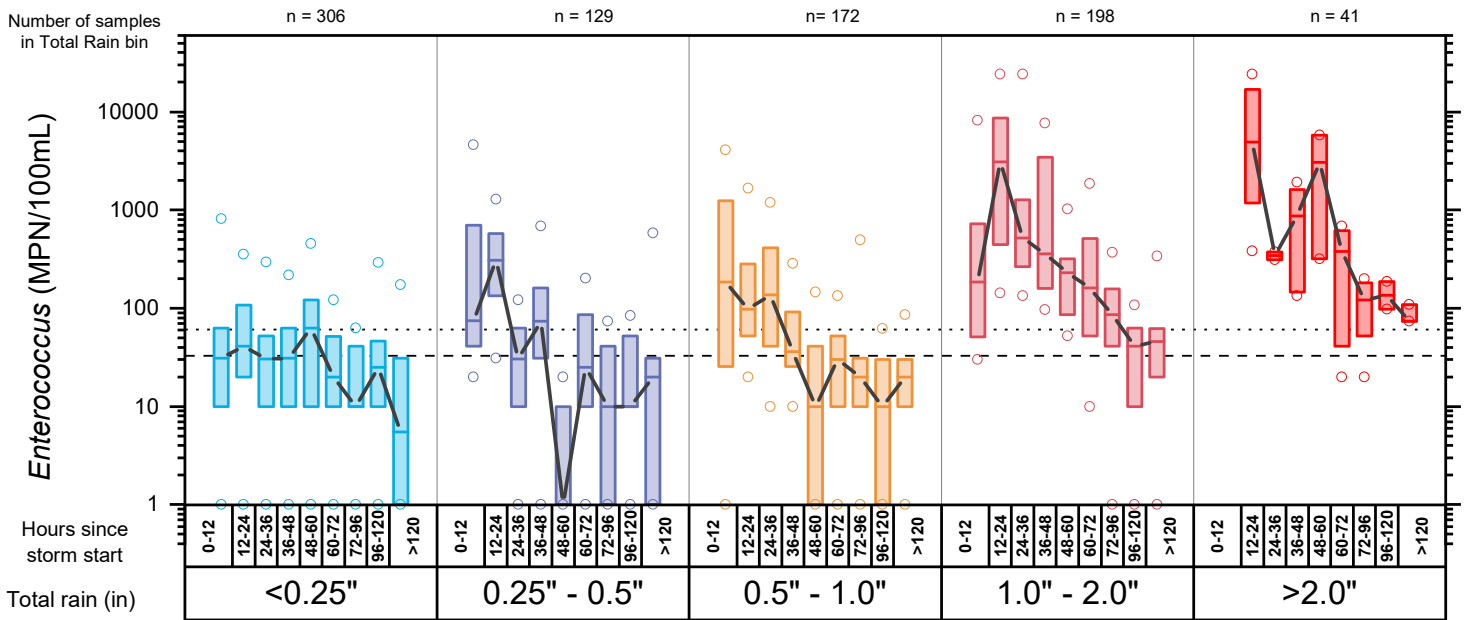


Figure 5-3. 2016-2020 *Enterococcus* counts at Charles River stations upstream of all CSOs by storm size and hours after start of rain.

Dashed line shows MADEP freshwater geometric mean standard of 33 MPN/100mL for *Enterococcus*; dotted line shows the single sample standard of 61 MPN/100mL. Total rain is rainfall from nearest MWRA, BWSC or USGS rain gauge to a given location. Total rain is binned to follow Typical Year rainfall categories. Hours since storm start is taken from the onset of rain to the time of sample collection. All four stations upstream of CAM005 CSO outfall are included (012, 001, 144, 002).

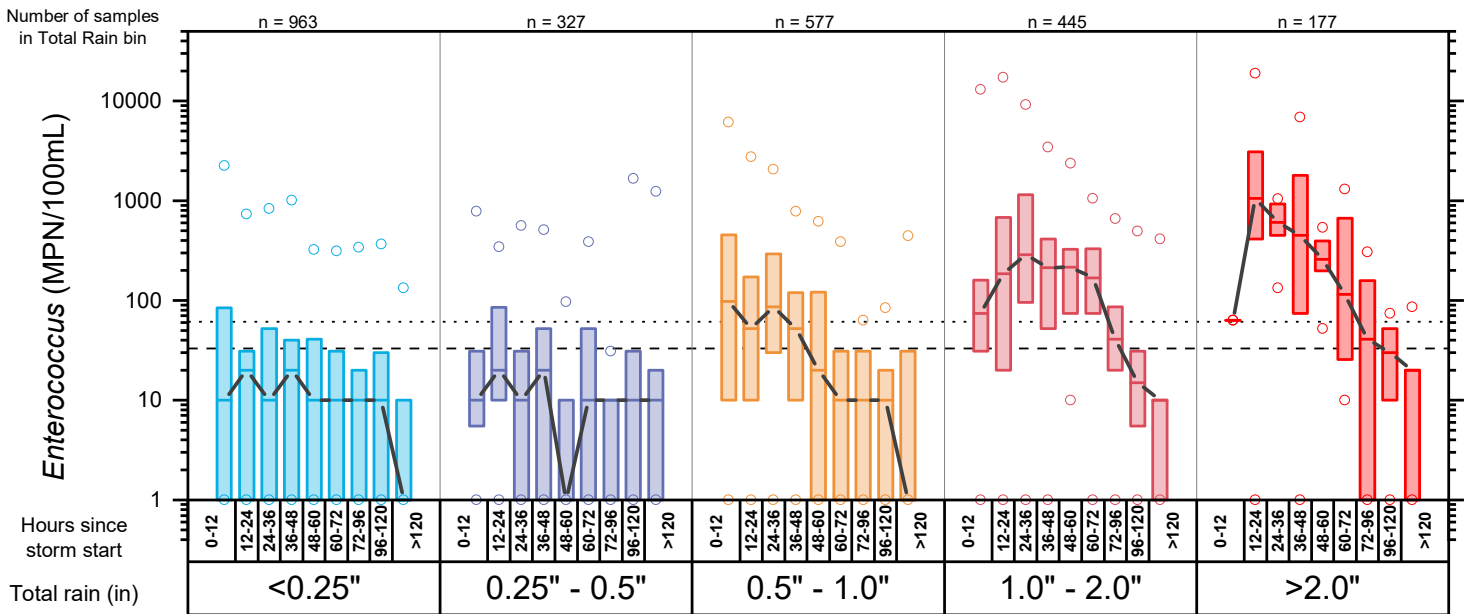


Figure 5-4. 2016-2020 *Enterococcus* counts at Charles River stations in reaches downstream of CSOs by storm size and hours after start of rain.

Dashed line shows MADEP freshwater geometric mean standard of 33 MPN/100mL for *Enterococcus*; dotted line shows the single sample standard of 61 MPN/100mL. Total rain is rainfall from nearest MWRA, BWSC or USGS rain gauge to a given location. Total rain is binned to follow Typical Year rainfall categories. Hours since storm start is taken from the onset of rain to the time of sample collection. All 13 stations downstream of CAM005 CSO outfall are included. All storms are included, both with and without CSO discharges.

5.1.2 Mystic River & Alewife Brook

The following Figures 5-5 and 5-7 (top) contain results from all Alewife Brook stations, while the bottom Figures 5-6 and 5-8 include all freshwater Mystic River stations. Due to extremely low sample size, results in storms $>2.0''$ are not shown. Sample counts are evenly distributed between storm sizes.

The recovery patterns of bacterial water quality impact are similar between the two indicator species. As discussed in Chapter 4, stations in Alewife Brook often fail to meet state standards in all weather conditions, so the wet weather impacts here should be evaluated by a return to baseline conditions approximated by the >120 hour category. Alewife Brook exhibits a sharper increase and decrease in bacteria counts than the Mystic River, as flows increase dramatically in the shallow, narrow Alewife Brook during storms. The Mystic River only exhibited a sharp peak in water quality impact in storms over $1.0''$. As expected, the largest storms resulted in the greatest bacteria counts and duration of impact, with results still returning to baseline within 2-3 days of the storm start.

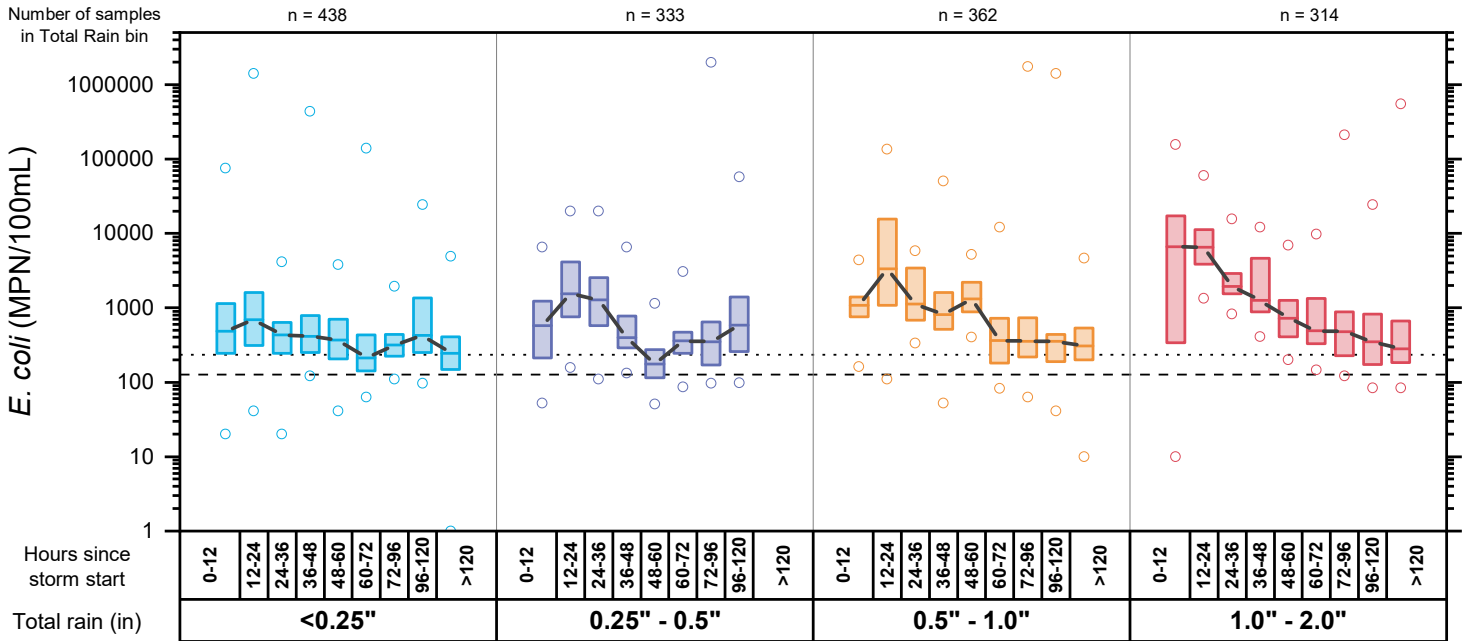


Figure 5-5. 2016-2020 *E. coli* counts in Alewife Brook by storm size and hours after start of rain. Dashed line shows MADEP freshwater geometric mean standard of 126 MPN/100mL for *E. coli*; dotted line shows the single sample standard of 235 MPN/100mL. Total rain is rainfall from nearest MWRA, BWSC or USGS rain gauge to a given location. Total rain is binned to follow Typical Year rainfall categories. Hours since storm start is taken from the onset of rain to the time of sample collection.

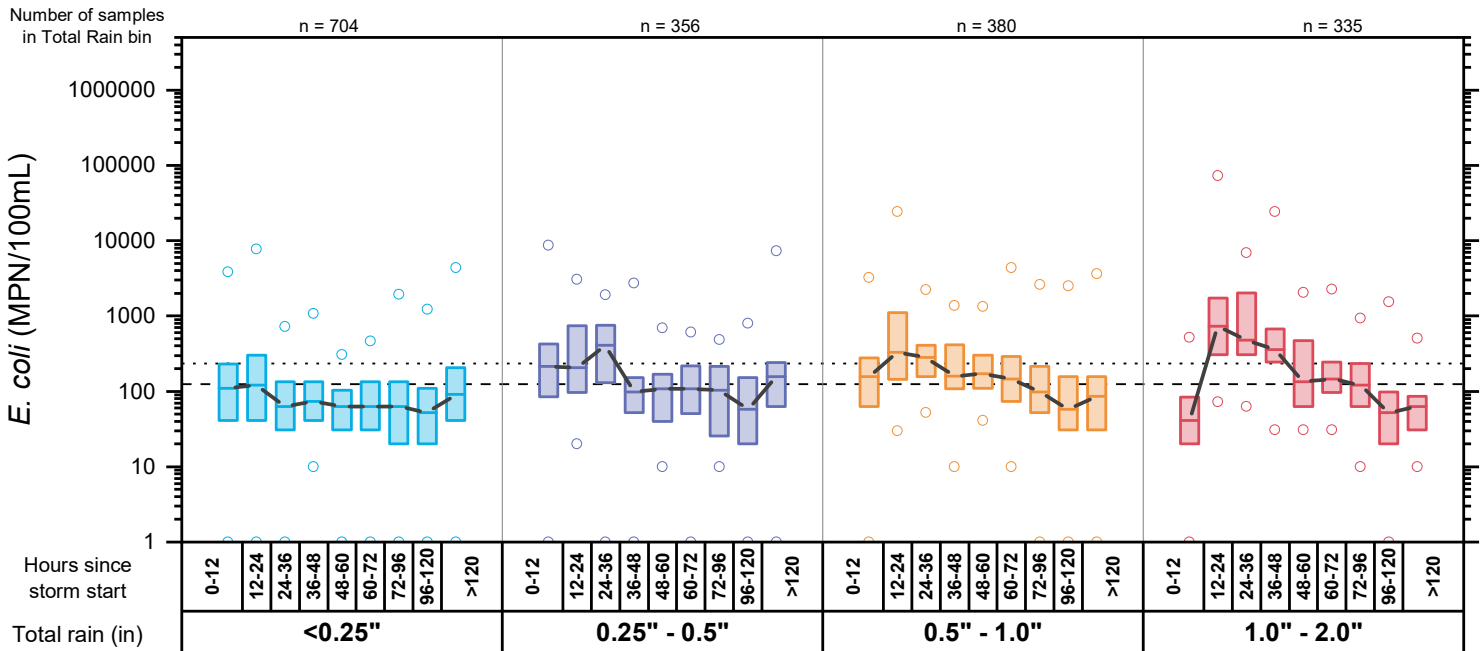


Figure 5-6. 2016-2020 *E. coli* counts in the Mystic River by storm size and hours after start of rain. Dashed line shows MADEP freshwater geometric mean standard of 126 MPN/100mL for *E. coli*; dotted line shows the single sample standard of 235 MPN/100mL. Total rain is rainfall from nearest MWRA, BWSC or USGS rain gauge to a given location. Total rain is binned to follow Typical Year rainfall categories. Hours since storm start is taken from the onset of rain to the time of sample collection. Alewife Brook and Malden River stations not included.

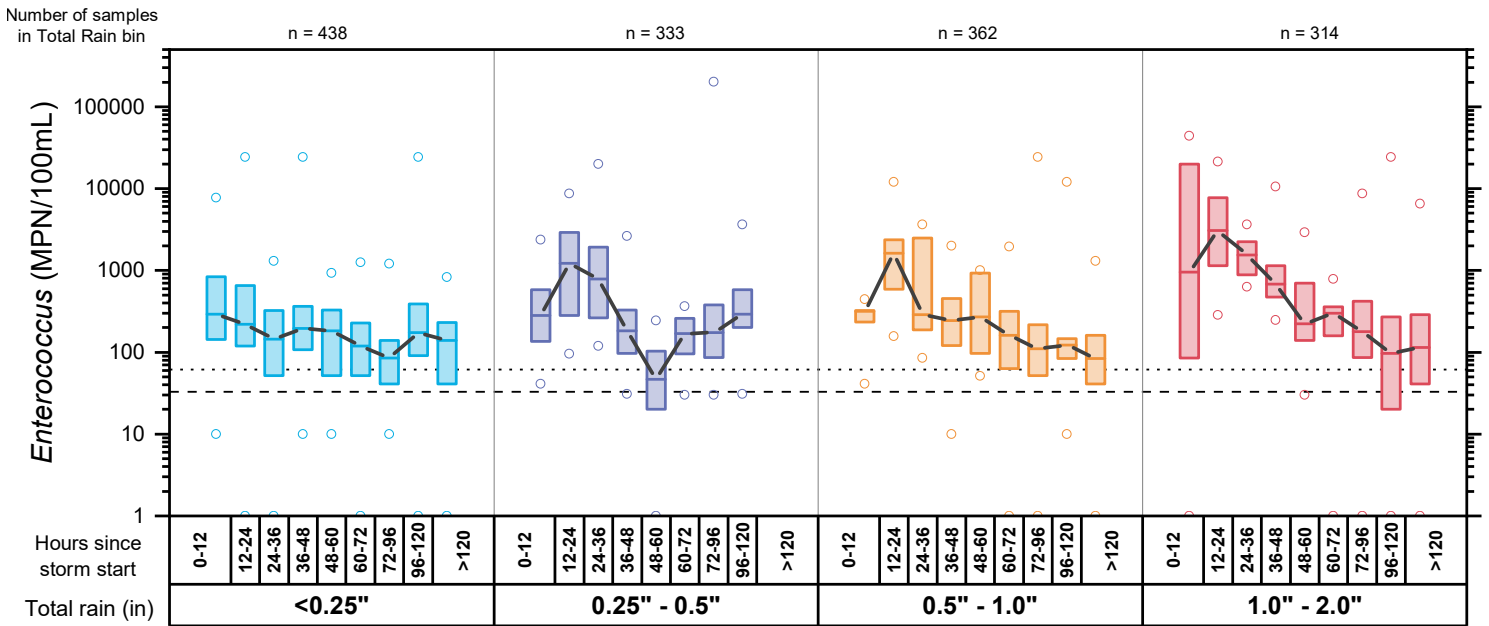


Figure 5-7. 2016-2020 *Enterococcus* counts in Alewife Brook by storm size and hours after start of rain.

Dashed line shows MADEP freshwater geometric mean standard of 33 MPN/100mL for *Enterococcus*; dotted line shows the single sample standard of 61 MPN/100mL. Total rain is rainfall from nearest MWRA, BWSC or USGS rain gauge to a given location. Total rain is binned to follow Typical Year rainfall categories. Hours since storm start is taken from the onset of rain to the time of sample collection.

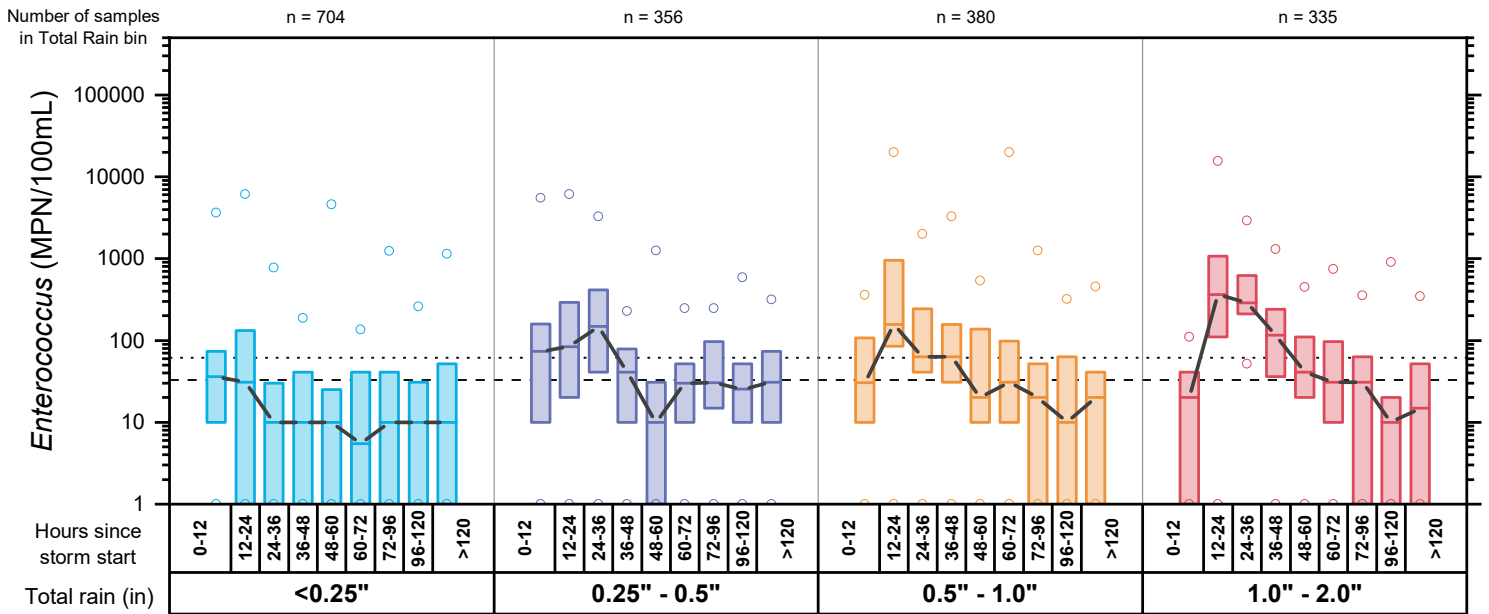


Figure 5-8. 2016-2020 *Enterococcus* counts in the Mystic River by storm size and hours after start of rain.

Dashed line shows MADEP freshwater geometric mean standard of 33 MPN/100mL for *Enterococcus*; dotted line shows the single sample standard of 61 MPN/100mL. Total rain is rainfall from nearest MWRA, BWSC or USGS rain gauge to a given location. Total rain is binned to follow Typical Year rainfall categories. Hours since storm start is taken from the onset of rain to the time of sample collection. Alewife Brook and Malden River stations not included.

6 References

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APPENDICES

Appendix I

Use of local rain gauge data for rainfall characterization

Appendix II

2020 raw data, laboratory analyses

Appendix III

2020 raw data, physical profile results

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Appendix I: Use of Local Rain Gauge Data for Rainfall Categorization

Numerous earlier figures in this report use rainfall categories of Dry/Damp/Wet or Dry/Damp/Light Rain/Heavy Rain (e.g., Figure 3-5, etc.). In past reports, these categories have been based on daily rainfall data collected at the NOAA rain gauge at Logan Airport, which depending on the spatial characteristics of a specific storm, may or may not give an accurate picture of the total rainfall amount in a certain area. As CSO activations are heavily influenced by rainfall in the area “served” by the CSO, MADEP requested that more localized rainfall data be used by MWRA.

For this report, all rainfall conditions (with several exceptions, see below) are calculated from the rain gauge most local to the sampling station. The pairings of local rain gauges with sampling locations is below in Table I-1. These local rain gauges are maintained by MWRA, BWSC, and USGS (Figure I-1). These are the same gauges used by the MWRA’s Infoworks sewer system hydraulic model. These gauges report not only rainfall depth, but also rainfall intensity, generally in 15 minute intervals. Due to the greater temporal resolution of the local rain gauges compared to the Logan gauge, antecedent rainfall can be calculated precisely 24, 48, or 72 hours (or, if needed, any arbitrary number) prior to the exact sample collection time.

The only exceptions to the use of local rain gauges are Figures 3-7, 3-8, 4-9, and 4-10, which present data dating back to 1989. As the Logan rain gauge is the only gauge available with a complete data set for the entirety of the period, for consistency the rainfall conditions on those plots are calculated using the Logan rain gauge data for 1989 to present.

Table I-1. Rain gauges nearest to MWRA sampling locations.

Charles River		Mystic River/Alewife Brook	
Sampling Location	Nearest Rain Gauge	Sampling Location	Nearest Rain Gauge
012	USGS Fresh Pond	174	USGS Fresh Pond
001	USGS Fresh Pond	308	USGS Fresh Pond
144	USGS Fresh Pond	074	USGS Fresh Pond
002	USGS Fresh Pond	277	USGS Fresh Pond
003	USGS Fresh Pond	172	USGS Fresh Pond
004	BWSC Allston	276	USGS Fresh Pond
005	BWSC Allston	070	USGS Fresh Pond
006	BWSC Allston	083	USGS Fresh Pond
206	BWSC Longwood	057	USGS Fresh Pond
007	MWRA Ward St.	066	USGS Fresh Pond
145	MWRA Ward St.	056	USGS Fresh Pond
008	MWRA Ward St.	177	USGS Fresh Pond
009	BWSC Charlestown	067	BWSC Charlestown
010	BWSC Charlestown	059	MWRA Somerville Marginal
210	BWSC Charlestown	176	BWSC Charlestown
166	BWSC Charlestown	167	MWRA Somerville Marginal
011	BWSC Charlestown	052	MWRA Somerville Marginal
		069	BWSC Charlestown
		137	BWSC Charlestown

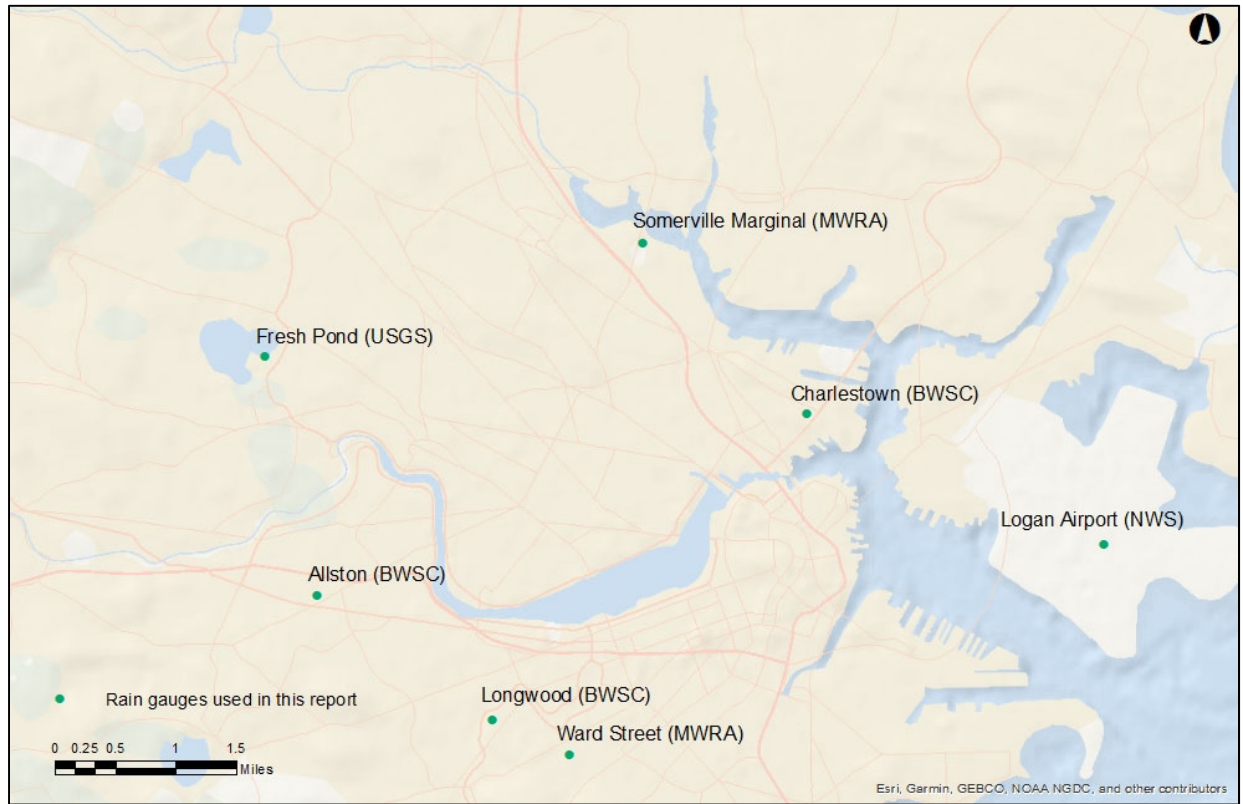


Figure I-1. Map of rain gauges utilized in this report.

Permanent rain gauges used in the analysis of water quality data in this report. This is a subset of MWRA’s rain gauge network, and are the most relevant gauges for the Charles River and Alewife Brook/Upper Mystic River Variance waters.

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APPENDIX II

2020 raw data for laboratory results.

Non-detected results have been converted to detection limit for all results except for bacteria, which are converted to 0.

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2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
012	1/2/20 10:35 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.27	86	341	
012	1/13/20 11:07 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.03	0.03	10	52	
012	1/28/20 11:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	288	
012	2/10/20 10:49 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.16	0.16	10	153	
012	2/24/20 11:05 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	5	58	
012	3/10/20 10:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	20	
012	3/26/20 8:18 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.35	10	63	
012	3/30/20 10:15 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.08	0.82	0.9	20	121	
012	4/3/20 9:24 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.83	0.96	0.96	156	459	
012	4/6/20 9:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.04	86	41	
012	4/7/20 9:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	31	31	
012	4/8/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.07	0.07	0	488	
012	4/9/20 8:36 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.64	0.71	0.71	20	41	
012	4/13/20 9:28 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.56	0.56	0.56	20	108	
012	4/15/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.56	0	109	
012	4/20/20 9:33 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.67	10	98	
012	4/22/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.33	0.33	31	161	
012	4/27/20 9:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.6	0.82	0.82	20	122	
012	4/29/20 8:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.61	30	86	
012	5/4/20 9:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.01	20	63	
012	5/5/20 9:07 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	15	58.5	
012	5/19/20 9:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	86	
012	6/3/20 8:35 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.03	0.03	20	185	
012	6/16/20 9:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	30	199	
012	6/29/20 9:22 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.19	1.38	1.4	11200	5170	
012	7/13/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.07	0.08	122	143	
012	7/29/20 9:04 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	586	487	
012	8/10/20 9:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	173	408	
012	8/24/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	1.33	1.33	1660	1840	
012	9/8/20 9:25 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	107	108	
012	9/22/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	10	91.5	
012	10/6/20 9:27 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	31	74	
012	10/20/20 9:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	121	146	
012	11/2/20 9:12 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.62	0.62	1790	1410	
012	11/18/20 10:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.05	74	122	
012	11/30/20 10:25 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.85	0.85	0.85	68.5	145	
012	12/15/20 11:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.06	98	75	
012	12/28/20 10:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	148	187	
001	3/30/20 10:07 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.08	0.82	0.9	31	63	
001	4/3/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.83	0.96	0.96	146	435	
001	4/6/20 9:35 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.04	41	213	
001	4/9/20 8:28 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.64	0.71	0.71	10	31	
001	4/13/20 9:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.56	0.56	0.56	31	173	
001	4/15/20 8:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.56	10	94	
001	4/20/20 9:28 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.67	10	41	
001	4/27/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.6	0.82	0.82	97	265	
001	4/29/20 8:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.61	0	73	
001	5/4/20 9:06 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.01	0	160	
001	5/11/20 9:11 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.23	0.23	0.35	0	143	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
001	5/13/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.23	30	4610	
001	5/21/20 8:57 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	160	
001	5/26/20 9:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	31	121	
001	5/28/20 9:13 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	171	
001	6/4/20 8:32 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.03	218	637	
001	6/9/20 9:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	201	24200	
001	6/11/20 8:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.74	0.74	0.74	74	209	
001	6/17/20 9:18 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	30	173	
001	7/7/20 9:29 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11	52	288	
001	7/8/20 9:22 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	185	203	
001	7/10/20 9:33 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	292	2010	
001	7/14/20 7:05 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69	121	228	
001	7/15/20 9:34 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76	97	336	
001	7/17/20 8:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18	63	395	
001	8/18/20 9:36 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4	20	256	
001	8/19/20 9:37 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3	10	216	
001	8/20/20 9:10 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22	0	52	
001	8/21/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06	0	0	
001	8/31/20 9:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07	10	393	
001	9/3/20 9:37 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21	1290	1090	
001	9/4/20 9:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21	41	332	
001	9/15/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	31	
001	9/16/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	168	
001	9/17/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	20	
001	9/18/20 8:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	10	156	
001	9/28/20 9:10 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05	298	2600	
001	9/29/20 9:15 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05	20	74	
001	10/1/20 9:12 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46	41	2610	
144	7/7/20 9:18 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11	97	98	
144	7/8/20 9:09 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	86	173	
144	7/10/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	31	262	
144	7/14/20 9:47 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69	161	404	
144	7/15/20 9:22 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76	31	324	
144	7/17/20 10:01 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18	0	197	
144	8/18/20 9:26 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4	20	189	
144	8/19/20 9:34 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3	0	98	
144	8/20/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22	31	120	
144	8/21/20 8:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06	31	31	
144	8/31/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07	0	121	
144	9/3/20 9:25 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21	63	272	
144	9/4/20 9:02 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21	122	327	
144	9/15/20 8:52 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	52	73	
144	9/16/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	52	
144	9/17/20 9:07 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	97	1600	
144	9/18/20 8:31 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	262	4360	
144	9/28/20 8:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05	10	173	
144	9/29/20 9:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05	31	86	
144	10/1/20 9:04 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46	84	691	
002	3/30/20 9:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.08	0.82	0.9	41	185	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
002	4/3/20 9:12 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.83	0.96	0.96	143	374	
002	4/6/20 9:12 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.04	41	97	
002	4/9/20 8:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.64	0.71	0.71	10	41	
002	4/13/20 8:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.56	0.56	0.56	31	98	
002	4/15/20 8:43 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.56	0	85	
002	4/20/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.67	41	122	
002	4/27/20 8:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.6	0.82	0.82	41	121	
002	4/29/20 8:43 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.61	10	63	
002	5/4/20 8:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.01	0	74	
002	5/11/20 9:02 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.23	0.23	0.35	0	122	
002	5/13/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.23	41	160	
002	5/21/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	30	185	
002	5/26/20 9:11 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	10	288	
002	5/28/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	110	
002	6/4/20 8:26 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.03	52	189	
002	6/9/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	74	766	
002	6/11/20 8:47 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.74	0.74	0.74	84	496	
002	6/17/20 9:10 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	171	
002	7/7/20 9:11 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11	41	295	
002	7/8/20 9:01 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	52	74	
002	7/10/20 9:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	63	240	
002	7/14/20 9:41 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69	246	1080	
002	7/15/20 9:13 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76	41	313	
002	7/17/20 9:54 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18	31	84	
002	8/18/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4	41	74	
002	8/19/20 9:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3	0	86	
002	8/20/20 8:54 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22	0	41	
002	8/21/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06	10	20	
002	8/31/20 9:16 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07	10	41	
002	9/3/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21	364	464	
002	9/4/20 8:54 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21	41	272	
002	9/15/20 8:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	10	52	
002	9/16/20 8:34 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	10	20	
002	9/17/20 9:04 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	63	
002	9/18/20 8:28 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	663	
002	9/28/20 8:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05	41	63	
002	9/29/20 9:05 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05	20	63	
002	10/1/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46	20	860	
003	3/30/20 9:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.08	0.82	0.9	74	278	
003	4/3/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.83	0.96	0.96	30	410	
003	4/6/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.04	20	156	
003	4/9/20 8:12 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.64	0.71	0.71	20	85	
003	4/13/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.56	0.56	0.56	0	98	
003	4/15/20 8:35 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.56	31	63	
003	4/20/20 9:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.67	10	121	
003	4/27/20 8:36 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.6	0.82	0.82	63	408	
003	4/29/20 8:33 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.61	0	132	
003	5/4/20 8:41 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.01	20	120	
003	5/11/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.23	0.23	0.35	10	158	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
003	5/13/20 8:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.23	20	329	
003	5/21/20 8:43 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	97	171	
003	5/26/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	269	
003	5/28/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	41	181	
003	6/4/20 8:18 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.03	41	74	
003	6/9/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	168	132	
003	6/11/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.74	0.74	0.74	156	318	
003	6/17/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	10	41	
003	7/7/20 8:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11	0	369	
003	7/8/20 8:44 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	98	121	
003	7/10/20 8:58 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	74	243	
003	7/14/20 9:26 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69	63	173	
003	7/15/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76	84	241	
003	7/17/20 9:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18	63	84	
003	8/18/20 9:06 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4	10	120	
003	8/19/20 9:15 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3	0	10	
003	8/20/20 8:41 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22	41	20	
003	8/21/20 8:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06	0	20	
003	8/31/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07	0	20	
003	9/3/20 9:04 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21	30	85	
003	9/4/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21	31	158	
003	9/15/20 8:36 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	31	85	
003	9/16/20 8:24 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	63	
003	9/17/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	41	
003	9/18/20 8:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	74	
003	9/28/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05	0	31	
003	9/29/20 8:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05	0	20	
003	10/1/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46	175	959	
004	7/7/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11	52	272	
004	7/8/20 8:34 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	41	231	
004	7/10/20 8:44 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	63	86	
004	7/14/20 9:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69	31	185	
004	7/15/20 8:46 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76	41	52	
004	7/17/20 9:26 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18	10	41	
004	8/18/20 8:51 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4	0	10	
004	8/19/20 8:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3	0	10	
004	8/20/20 8:32 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22	10	41	
004	8/21/20 8:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06	41	10	
004	8/31/20 8:47 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07	10	41	
004	9/3/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21	146	171	
004	9/4/20 8:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21	20	86	
004	9/15/20 8:22 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	31	
004	9/16/20 8:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	41	
004	9/17/20 8:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	10	0	
004	9/18/20 8:06 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	41	
004	9/28/20 8:25 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05	10	63	
004	9/29/20 8:44 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05	74	41	
004	10/1/20 8:37 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46	134	309	
005	2/10/20 10:31 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.16	0.16	31	2380	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
005	2/24/20 10:44 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	74	
005	3/10/20 9:47 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	10	
005	3/26/20 8:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.35	0	74	
005	3/30/20 8:41 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.08	0.82	0.9	41	571	
005	4/3/20 8:16 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.83	0.96	0.96	63	201	
005	4/6/20 7:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.04	122	52	
005	4/8/20 8:32 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.07	0.07	0	272	
005	4/9/20 7:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.64	0.71	0.71	10	110	
005	4/13/20 8:04 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.56	0.56	0.56	20	41	
005	4/15/20 7:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.56	10	148	
005	4/20/20 8:36 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.67	0	441	
005	4/22/20 8:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.33	0.33	85	332	
005	4/27/20 7:57 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.6	0.82	0.82	31	249	
005	4/29/20 7:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.61	0	161	
005	5/4/20 7:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.01	20	86	
005	5/5/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	84	
005	5/11/20 7:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.23	0.23	0.35	0	185	
005	5/13/20 8:05 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.23	20	309	
005	5/19/20 9:09 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	31	63	
005	5/21/20 7:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	201	1160	
005	5/26/20 8:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	41	717	
005	5/28/20 8:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	63	228	
005	6/3/20 8:13 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.03	0.03	738	428	
005	6/4/20 7:32 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.03	278	857	
005	6/9/20 7:57 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	201	158	
005	6/11/20 7:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.74	0.74	0.74	1670	1780	
005	6/16/20 8:56 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	10	253	
005	6/17/20 8:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	86	399	
005	6/29/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.19	1.38	1.4	481	5790	
005	7/7/20 8:35 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11	20	228	
005	7/8/20 8:27 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	41	146	
005	7/10/20 8:37 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	369	733	
005	7/13/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.07	0.08	218	663	
005	7/14/20 9:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69	108	134	
005	7/15/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76	86	285	
005	7/17/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18	20	96	
005	7/29/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	314	988	
005	8/10/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	85	122	
005	8/18/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4	10	63	
005	8/19/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3	63	256	
005	8/20/20 8:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22	74	86	
005	8/21/20 8:11 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06	10	20	
005	8/24/20 9:02 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	1.33	1.33	1790	882	
005	8/31/20 8:43 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07	52	41	
005	9/3/20 8:39 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21	119	121	
005	9/4/20 8:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21	63	63	
005	9/8/20 9:05 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	379	547	
005	9/15/20 8:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	30	52	
005	9/16/20 8:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	0	0	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
005	9/17/20 8:31 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	31	41	
005	9/18/20 8:01 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	20	41	
005	9/22/20 9:06 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	1240	1050	
005	9/28/20 8:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05	10	20	
005	9/29/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05	41	73	
005	10/1/20 8:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46	108	336	
005	10/6/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	341	410	
005	10/20/20 9:06 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	318	594	
005	11/2/20 8:58 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.62	0.62	565	1080	
005	11/18/20 10:15 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.05	246	581	
005	11/30/20 10:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.85	0.85	0.85	189	512	
005	12/15/20 10:25 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.06	74	1990	
005	12/28/20 10:15 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	223	135	
006	7/7/20 8:29 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11	20	121	
006	7/8/20 8:22 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	31	134	
006	7/10/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	20	98	
006	7/14/20 9:02 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69	0	52	
006	7/15/20 8:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76	96	323	
006	7/17/20 9:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18	86	243	
006	8/18/20 8:39 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4	10	134	
006	8/19/20 8:47 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3	20	41	
006	8/20/20 8:14 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22	20	0	
006	8/21/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06	20	41	
006	8/31/20 8:37 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07	52	74	
006	9/3/20 8:32 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21	75	145	
006	9/4/20 8:04 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21	20	10	
006	9/15/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	84	109	
006	9/16/20 8:04 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	187	161	
006	9/17/20 8:28 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	183	
006	9/18/20 7:57 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	63	146	
006	9/28/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05	31	41	
006	9/29/20 8:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05	0	86	
006	10/1/20 8:25 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46	146	459	
206	3/30/20 8:52 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.08	0.82	0.9	41	496	
206	4/3/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.83	0.96	0.96	10	166	
206	4/6/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.04	0	52	
206	4/9/20 7:40 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.64	0.71	0.71	10	86	
206	4/13/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.56	0.56	0.56	0	41	
206	4/15/20 8:03 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.56	10	110	
206	4/20/20 8:48 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.67	10	109	
206	4/27/20 8:08 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.6	0.82	0.82	20	243	
206	4/29/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.61	0	122	
206	5/4/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.01	0	74	
206	5/11/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.23	0.23	0.35	0	317	
206	5/13/20 8:13 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.23	20	183	
206	5/21/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	31	
206	5/26/20 8:17 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	52	
206	5/28/20 8:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	285	
206	6/4/20 7:43 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.03	262	328	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
206	6/9/20 8:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	121	
206	6/11/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.74	0.74	0.74	20	110	
206	6/17/20 8:25 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	31	
007	3/30/20 9:02 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.08	0.82	0.9	86	336	
007	4/3/20 8:40 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.83	0.96	0.96	0	233	
007	4/6/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.04	10	122	
007	4/9/20 7:51 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.64	0.71	0.71	20	63	
007	4/13/20 8:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.56	0.56	0.56	20	52	
007	4/15/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.56	0	160	
007	4/20/20 9:01 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.67	20	259	
007	4/27/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.6	0.82	0.82	41	341	
007	4/29/20 8:13 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.61	0	146	
007	5/4/20 8:14 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.01	0	63	
007	5/11/20 8:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.23	0.23	0.35	0	20	
007	5/13/20 8:23 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.23	0	20	
007	5/21/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	10	
007	5/26/20 8:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	41	
007	5/28/20 8:50 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	31	161	
007	6/4/20 7:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.03	10	63	
007	6/9/20 8:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	30	413	
007	6/11/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.74	0.74	0.74	10	155	
007	6/17/20 8:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	31	
007	7/7/20 8:16 AM	B	CHARLES RIVER	MID-BASIN	4.3	0	0	0.11	10	31	
007	7/7/20 8:16 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11	10	74	
007	7/8/20 8:09 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	134	
007	7/8/20 8:09 AM	B	CHARLES RIVER	MID-BASIN	3.9	0	0	0	10	135	
007	7/10/20 8:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	74	
007	7/10/20 8:24 AM	B	CHARLES RIVER	MID-BASIN	4	0	0	0	20	31	
007	7/14/20 8:50 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69	20	0	
007	7/14/20 8:50 AM	B	CHARLES RIVER	MID-BASIN	4.3	0.62	0.69	0.69	10	10	
007	7/15/20 8:29 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76	10	393	
007	7/15/20 8:29 AM	B	CHARLES RIVER	MID-BASIN	4	0.07	0.69	0.76	0	31	
007	7/17/20 8:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18	0	10	
007	7/17/20 8:59 AM	B	CHARLES RIVER	MID-BASIN	4.1	0.11	0.11	0.18	10	20	
007	8/18/20 8:30 AM	B	CHARLES RIVER	MID-BASIN	4.2	0.16	0.24	0.4	52	20	
007	8/18/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4	10	0	
007	8/19/20 8:39 AM	B	CHARLES RIVER	MID-BASIN	4.2	0.06	0.22	0.3	10	20	
007	8/19/20 8:39 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3	0	74	
007	8/20/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22	10	0	
007	8/20/20 8:05 AM	B	CHARLES RIVER	MID-BASIN	4.2	0	0.06	0.22	52	10	
007	8/21/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06	31	41	
007	8/21/20 7:59 AM	B	CHARLES RIVER	MID-BASIN	4.1	0	0	0.06	0	74	
007	8/31/20 8:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07	30	30	
007	8/31/20 8:24 AM	B	CHARLES RIVER	MID-BASIN	4.2	0	0	0.07	10	31	
007	9/3/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21	41	52	
007	9/3/20 8:21 AM	B	CHARLES RIVER	MID-BASIN	4.2	0.01	0.21	0.21	40	30	
007	9/4/20 7:56 AM	B	CHARLES RIVER	MID-BASIN	4.6	0	0.01	0.21	41	173	
007	9/4/20 7:56 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21	20	10	
007	9/15/20 8:05 AM	B	CHARLES RIVER	MID-BASIN	4.2	0	0	0	0	107	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
007	9/15/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	52	
007	9/16/20 7:54 AM	B	CHARLES RIVER	MID-BASIN	4.1	0	0	0	10	63	
007	9/16/20 7:54 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	31	
007	9/17/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	20	175	
007	9/17/20 8:21 AM	B	CHARLES RIVER	MID-BASIN	4.7	0	0	0	20	161	
007	9/18/20 7:51 AM	B	CHARLES RIVER	MID-BASIN	4.2	0	0	0	10	109	
007	9/18/20 7:51 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	122	
007	9/28/20 8:04 AM	B	CHARLES RIVER	MID-BASIN	4.2	0.05	0.05	0.05	0	0	
007	9/28/20 8:04 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05	0	52	
007	9/29/20 8:25 AM	B	CHARLES RIVER	MID-BASIN	4.3	0	0.05	0.05	10	10	
007	9/29/20 8:25 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05	10	20	
007	10/1/20 8:14 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46	262	1010	
007	10/1/20 8:14 AM	B	CHARLES RIVER	MID-BASIN	4.3	0	0.46	0.46	86	309	
145	3/30/20 8:14 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.08	0.82	0.9	443	2600	
145	4/3/20 8:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.83	0.96	0.96	74	259	
145	4/6/20 7:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.04	187	2010	
145	4/9/20 7:16 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.64	0.71	0.71	63	278	
145	4/13/20 7:50 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.56	0.56	0.56	72	983	
145	4/15/20 7:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.56	31	328	
145	4/20/20 8:25 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.67	74	354	
145	4/27/20 7:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.6	0.82	0.82	496	3650	
145	4/29/20 7:49 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.61	10	288	
145	5/4/20 7:37 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.01	0	98	
145	5/11/20 7:40 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.23	0.23	0.35	10	295	
145	5/13/20 7:57 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.23	52	759	
145	5/21/20 7:36 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	20	122	
145	5/26/20 7:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	382	
145	5/28/20 8:17 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	31	521	
145	6/4/20 7:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.03	63	145	
145	6/9/20 7:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	199	9210	
145	6/11/20 7:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.74	0.74	0.74	10	168	
145	6/17/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	41	
145	7/7/20 8:19 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11	10	74	
145	7/8/20 8:13 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	72	
145	7/10/20 8:27 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	41	
145	7/14/20 8:58 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69	41	228	
145	7/15/20 8:31 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76	10	20	
145	7/17/20 9:04 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18	0	20	
145	8/18/20 8:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4	0	31	
145	8/19/20 8:41 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3	31	20	
145	8/20/20 8:09 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22	20	0	
145	8/21/20 8:02 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06	0	120	
145	8/31/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07	10	31	
145	9/3/20 8:25 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21	41	121	
145	9/4/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21	0	41	
145	9/15/20 8:08 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	110	909	
145	9/16/20 7:57 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	364	5170	
145	9/17/20 8:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	63	1210	
145	9/18/20 7:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	110	465	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
145	9/28/20 8:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05	20	74	
145	9/29/20 8:27 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05	10	63	
145	10/1/20 8:18 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46	663	2100	
008	7/7/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11	10	132	
008	7/7/20 8:12 AM	B	CHARLES RIVER	MID-BASIN	5.7	0	0	0.11	10	226	
008	7/8/20 8:03 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	52	
008	7/8/20 8:03 AM	B	CHARLES RIVER	MID-BASIN	4.1	0	0	0	0	41	
008	7/10/20 8:21 AM	B	CHARLES RIVER	MID-BASIN	5.6	0	0	0	0	10	
008	7/10/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	20	
008	7/14/20 8:45 AM	B	CHARLES RIVER	MID-BASIN	3.7	0.62	0.69	0.69	10	0	
008	7/14/20 8:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69	0	0	
008	7/15/20 8:24 AM	B	CHARLES RIVER	MID-BASIN	3.7	0.07	0.69	0.76	10	31	
008	7/15/20 8:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76	10	0	
008	7/17/20 8:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18	0	20	
008	7/17/20 8:53 AM	B	CHARLES RIVER	MID-BASIN	4.1	0.11	0.11	0.18	0	10	
008	8/18/20 8:26 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4	0	31	
008	8/18/20 8:26 AM	B	CHARLES RIVER	MID-BASIN	3.8	0.16	0.24	0.4	0	41	
008	8/19/20 8:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3	10	41	
008	8/19/20 8:35 AM	B	CHARLES RIVER	MID-BASIN	3.8	0.06	0.22	0.3	0	20	
008	8/20/20 7:59 AM	B	CHARLES RIVER	MID-BASIN	3.7	0	0.06	0.22	0	0	
008	8/20/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22	10	0	
008	8/21/20 7:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06	20	0	
008	8/21/20 7:53 AM	B	CHARLES RIVER	MID-BASIN	3.7	0	0	0.06	0	0	
008	8/31/20 8:18 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07	0	20	
008	8/31/20 8:18 AM	B	CHARLES RIVER	MID-BASIN	2.7	0	0	0.07	0	0	
008	9/3/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21	0	20	
008	9/3/20 8:15 AM	B	CHARLES RIVER	MID-BASIN	3.9	0.01	0.21	0.21	10	40	
008	9/4/20 7:52 AM	B	CHARLES RIVER	MID-BASIN	3.7	0	0.01	0.21	0	0	
008	9/4/20 7:52 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21	10	20	
008	9/15/20 8:00 AM	B	CHARLES RIVER	MID-BASIN	3.6	0	0	0	20	146	
008	9/15/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	63	
008	9/16/20 7:51 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	231	
008	9/16/20 7:51 AM	B	CHARLES RIVER	MID-BASIN	3.7	0	0	0	10	169	
008	9/17/20 8:17 AM	B	CHARLES RIVER	MID-BASIN	3.6	0	0	0	0	496	
008	9/17/20 8:17 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	318	
008	9/18/20 7:48 AM	B	CHARLES RIVER	MID-BASIN	3.8	0	0	0	10	107	
008	9/18/20 7:48 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	20	97	
008	9/28/20 8:00 AM	B	CHARLES RIVER	MID-BASIN	4	0.05	0.05	0.05	0	10	
008	9/28/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05	0	10	
008	9/29/20 8:22 AM	B	CHARLES RIVER	MID-BASIN	4	0	0.05	0.05	0	0	
008	9/29/20 8:22 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05	10	20	
008	10/1/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46	1050	2720	
008	10/1/20 8:12 AM	B	CHARLES RIVER	MID-BASIN	3.9	0	0.46	0.46	727	1780	
009	3/30/20 8:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.08	0.82	0.9	31	233	
009	4/3/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.83	0.96	0.96	0	63	
009	4/6/20 7:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.04	20	262	
009	4/9/20 7:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.64	0.71	0.71	0	110	
009	4/13/20 7:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.56	0.56	0.56	10	97	
009	4/15/20 7:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.56	20	206	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
009	4/20/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.67	0	185	
009	4/27/20 7:36 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.6	0.82	0.82	0	175	
009	4/29/20 7:42 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.61	10	314	
009	5/4/20 7:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.01	0	98	
009	5/11/20 7:28 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.23	0.23	0.35	10	86	
009	5/13/20 7:49 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.23	10	110	
009	5/21/20 7:29 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	31	
009	5/26/20 7:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	63	
009	5/28/20 8:02 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	20	121	
009	6/4/20 7:13 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.03	10	121	
009	6/9/20 7:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	20	496	
009	6/11/20 7:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.74	0.74	0.74	10	52	
009	6/17/20 7:50 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	10	
009	7/7/20 8:06 AM	B	CHARLES RIVER	MID-BASIN	9.2	0	0	0.11	0	20	
009	7/7/20 8:06 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11	30	122	
009	7/8/20 7:50 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	20	
009	7/8/20 7:50 AM	B	CHARLES RIVER	MID-BASIN	8.7	0	0	0	0	31	
009	7/10/20 8:17 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	10	
009	7/10/20 8:17 AM	B	CHARLES RIVER	MID-BASIN	8.8	0	0	0	0	0	
009	7/14/20 8:37 AM	B	CHARLES RIVER	MID-BASIN	8.6	0.62	0.69	0.69	0	10	
009	7/14/20 8:37 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69	0	0	
009	7/15/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76	0	30	
009	7/15/20 8:21 AM	B	CHARLES RIVER	MID-BASIN	8.9	0.07	0.69	0.76	10	41	
009	7/17/20 8:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18	0	10	
009	7/17/20 8:44 AM	B	CHARLES RIVER	MID-BASIN	8.5	0.11	0.11	0.18	10	31	
009	8/18/20 8:21 AM	B	CHARLES RIVER	MID-BASIN	8.2	0.16	0.24	0.4	10	0	
009	8/18/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4	0	0	
009	8/19/20 8:27 AM	B	CHARLES RIVER	MID-BASIN	6.2	0.06	0.22	0.3	10	20	
009	8/19/20 8:27 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3	0	10	
009	8/20/20 7:52 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22	0	20	
009	8/20/20 7:52 AM	B	CHARLES RIVER	MID-BASIN	7.3	0	0.06	0.22	20	85	
009	8/21/20 7:47 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06	20	20	
009	8/21/20 7:47 AM	B	CHARLES RIVER	MID-BASIN	8.8	0	0	0.06	0	52	
009	8/31/20 8:07 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07	20	63	
009	8/31/20 8:07 AM	B	CHARLES RIVER	MID-BASIN	8.8	0	0	0.07	0	10	
009	9/3/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21	0	10	
009	9/3/20 8:05 AM	B	CHARLES RIVER	MID-BASIN	8.7	0.01	0.21	0.21	10	30	
009	9/4/20 7:42 AM	B	CHARLES RIVER	MID-BASIN	7.1	0	0.01	0.21	10	20	
009	9/4/20 7:42 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21	0	31	
009	9/15/20 7:52 AM	B	CHARLES RIVER	MID-BASIN	8.9	0	0	0	41	20	
009	9/15/20 7:52 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	31	72	
009	9/16/20 7:44 AM	B	CHARLES RIVER	MID-BASIN	8.5	0	0	0	10	63	
009	9/16/20 7:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	52	
009	9/17/20 8:15 AM	B	CHARLES RIVER	MID-BASIN	8.4	0	0	0	31	86	
009	9/17/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	20	
009	9/18/20 7:44 AM	B	CHARLES RIVER	MID-BASIN	8.5	0	0	0	31	41	
009	9/18/20 7:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	10	
009	9/28/20 7:49 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05	10	31	
009	9/28/20 7:49 AM	B	CHARLES RIVER	MID-BASIN	8.9	0.05	0.05	0.05	10	20	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
009	9/29/20 8:18 AM	B	CHARLES RIVER	MID-BASIN	8.7	0	0.05	0.05	0	52	
009	9/29/20 8:18 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05	20	10	
009	10/1/20 9:56 AM	B	CHARLES RIVER	MID-BASIN	8.8	0	0.46	0.46	96	278	
009	10/1/20 9:56 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46	173	631	
010	7/7/20 7:59 AM	B	CHARLES RIVER	MID-BASIN	9.4	0	0	0.11	41	31	
010	7/7/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11	0	63	
010	7/8/20 7:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	10	
010	7/8/20 7:44 AM	B	CHARLES RIVER	MID-BASIN	8.6	0	0	0	10	52	
010	7/10/20 8:09 AM	B	CHARLES RIVER	MID-BASIN	9	0	0	0	10	10	
010	7/10/20 8:09 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	0	
010	7/14/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69	0	0	
010	7/14/20 8:30 AM	B	CHARLES RIVER	MID-BASIN	9.1	0.62	0.69	0.69	0	10	
010	7/15/20 8:17 AM	B	CHARLES RIVER	MID-BASIN	8.7	0.07	0.69	0.76	0	0	
010	7/15/20 8:17 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76	10	10	
010	7/17/20 8:38 AM	B	CHARLES RIVER	MID-BASIN	8.8	0.11	0.11	0.18	0	10	
010	7/17/20 8:38 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18	0	10	
010	8/18/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4	0	0	
010	8/18/20 8:15 AM	B	CHARLES RIVER	MID-BASIN	9.3	0.16	0.24	0.4	110	74	
010	8/19/20 8:22 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3	0	0	
010	8/19/20 8:22 AM	B	CHARLES RIVER	MID-BASIN	8.9	0.06	0.22	0.3	0	0	
010	8/20/20 7:43 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22	0	0	
010	8/20/20 7:43 AM	B	CHARLES RIVER	MID-BASIN	4.2	0	0.06	0.22	20	10	
010	8/21/20 7:41 AM	B	CHARLES RIVER	MID-BASIN	9.2	0	0	0.06	97	119	
010	8/21/20 7:41 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06	20	10	
010	8/31/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07	0	20	
010	8/31/20 8:00 AM	B	CHARLES RIVER	MID-BASIN	7	0	0	0.07	31	20	
010	9/3/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21	0	20	
010	9/3/20 7:59 AM	B	CHARLES RIVER	MID-BASIN	9.2	0.01	0.21	0.21	0	0	
010	9/4/20 7:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21	0	0	
010	9/4/20 7:35 AM	B	CHARLES RIVER	MID-BASIN	8.2	0	0.01	0.21	30	52	
010	9/15/20 7:45 AM	B	CHARLES RIVER	MID-BASIN	9.2	0	0	0	10	52	
010	9/15/20 7:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	31	
010	9/16/20 7:39 AM	B	CHARLES RIVER	MID-BASIN	8.9	0	0	0	84	0	
010	9/16/20 7:39 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	10	
010	9/17/20 8:10 AM	B	CHARLES RIVER	MID-BASIN	8.9	0	0	0	0	41	
010	9/17/20 8:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	84	
010	9/18/20 7:41 AM	B	CHARLES RIVER	MID-BASIN	8.9	0	0	0	146	51	
010	9/18/20 7:41 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	0	
010	9/28/20 7:45 AM	B	CHARLES RIVER	MID-BASIN	8.9	0.05	0.05	0.05	63	52	
010	9/28/20 7:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05	0	0	
010	9/29/20 8:15 AM	B	CHARLES RIVER	MID-BASIN	9.1	0	0.05	0.05	30	0	
010	9/29/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05	20	0	
010	10/1/20 8:04 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46	31	282	
010	10/1/20 8:04 AM	B	CHARLES RIVER	MID-BASIN	8.9	0	0.46	0.46	85	31	
210	3/30/20 9:29 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.08	0.82	0.9	171	265	
210	4/3/20 8:46 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.83	0.96	0.96	73	189	
210	4/6/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.04	20	171	
210	4/9/20 7:56 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.64	0.71	0.71	10	73	
210	4/13/20 8:46 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.56	0.56	0.56	0	96	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
210	4/15/20 8:18 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.56	10	211	
210	4/20/20 9:08 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.67	0	97	
210	4/27/20 8:26 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.6	0.82	0.82	0	86	
210	4/29/20 8:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.61	10	275	
210	5/4/20 8:26 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.01	0	74	
210	5/11/20 8:37 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.23	0.23	0.35	0	51	
210	5/13/20 8:29 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.23	20	97	
210	5/21/20 8:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	10	41	
210	5/26/20 8:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	74	
210	5/28/20 8:42 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	41	
210	6/4/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.03	0	74	
210	6/9/20 8:37 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	199	
210	6/11/20 8:27 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.74	0.74	0.74	10	107	
210	6/17/20 8:42 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	51	
210	7/7/20 7:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11	0	86	
210	7/8/20 8:40 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	30	10	
210	7/10/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	20	
210	7/14/20 8:26 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69	10	0	
210	7/15/20 8:13 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76	0	10	
210	7/17/20 8:34 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18	20	213	
210	8/18/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4	0	10	
210	8/19/20 8:19 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3	30	20	
210	8/20/20 7:41 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22	189	86	
210	8/21/20 7:38 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06	20	10	
210	8/31/20 7:55 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07	0	10	
210	9/3/20 7:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21	20	31	
210	9/4/20 7:32 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21	10	0	
210	9/15/20 7:41 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	41	
210	9/16/20 7:36 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	31	
210	9/17/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	20	10	
210	9/18/20 7:38 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0	0	31	
210	9/28/20 7:40 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05	0	10	
210	9/29/20 8:11 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05	0	10	
210	10/1/20 8:02 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46	41	262	
166	1/2/20 10:13 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.27	216	1080	
166	1/13/20 10:15 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.01	0.03	0.03	20	171	
166	1/28/20 10:25 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	41	450	
166	2/10/20 10:17 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.16	0.16	0.16	0	488	
166	2/24/20 10:29 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	0	30	
166	3/10/20 9:29 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	0	20	
166	3/26/20 7:48 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.35	74	471	
166	4/8/20 8:16 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.07	0.07	0.07	0	171	
166	4/22/20 8:18 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.33	0.33	0	181	
166	5/5/20 8:36 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	0	63	
166	5/19/20 8:54 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	0	31	
166	6/3/20 8:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.01	0.03	0.03	0	107	
166	6/16/20 8:29 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	20	10	
166	6/29/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.19	1.38	1.4	10	31	
166	7/13/20 8:30 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.07	0.07	0.08	0	20	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
166	7/29/20 8:28 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	0	10	
166	8/10/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	10	10	
166	8/24/20 8:41 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	1.33	1.33	52	20	
166	9/8/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	31	31	
166	9/22/20 8:38 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	134	73	
166	10/6/20 8:42 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	0	20	
166	10/20/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	0	108	
166	11/2/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.62	0.62	52	292	
166	11/18/20 10:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.05	52	275	
166	11/30/20 9:45 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.85	0.85	0.85	110	246	
166	12/15/20 10:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.06	0.06	172	334	
166	12/28/20 9:55 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	464	1080	
011	3/30/20 8:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.08	0.82	0.9	10	341	
011	4/3/20 7:52 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.83	0.96	0.96	216	1020	
011	4/6/20 7:10 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.04	31	201	
011	4/9/20 7:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.64	0.71	0.71	0	173	
011	4/13/20 7:35 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.56	0.56	0.56	0	85	
011	4/15/20 7:25 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.56	10	389	
011	4/20/20 8:04 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.67	0	86	
011	4/27/20 7:25 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.6	0.82	0.82	0	161	
011	4/29/20 7:35 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.01	0.61	0	41	
011	5/4/20 7:18 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.01	10	52	
011	5/11/20 7:20 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.23	0.23	0.35	10	63	
011	5/13/20 7:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.23	10	145	
011	5/21/20 7:17 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	52	391	
011	5/26/20 7:15 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	0	134	
011	5/28/20 7:52 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	20	109	
011	6/4/20 7:04 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.01	0.03	0	86	
011	6/9/20 7:20 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	20	269	
011	6/11/20 7:05 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.74	0.74	0.74	63	504	
011	6/17/20 7:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	31	63	
011	7/7/20 7:46 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.11	0	107	
011	7/7/20 7:46 AM	B	CHARLES RIVER	LOWER BASIN	6	0	0	0.11	146	107	
011	7/8/20 7:33 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	10	30	
011	7/8/20 7:33 AM	B	CHARLES RIVER	LOWER BASIN	6.2	0	0	0	0	52	
011	7/10/20 7:55 AM	B	CHARLES RIVER	LOWER BASIN	5.1	0	0	0	74	41	
011	7/10/20 7:55 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	41	41	
011	7/14/20 8:20 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.62	0.69	0.69	30	41	
011	7/14/20 8:20 AM	B	CHARLES RIVER	LOWER BASIN	6	0.62	0.69	0.69	0	0	
011	7/15/20 8:07 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.07	0.69	0.76	74	52	
011	7/15/20 8:07 AM	B	CHARLES RIVER	LOWER BASIN	5.7	0.07	0.69	0.76	109	52	
011	7/17/20 8:27 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.11	0.11	0.18	121	201	
011	7/17/20 8:27 AM	B	CHARLES RIVER	LOWER BASIN	6.1	0.11	0.11	0.18	63	52	
011	8/18/20 8:05 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.16	0.24	0.4	10	31	
011	8/18/20 8:05 AM	B	CHARLES RIVER	LOWER BASIN	6.1	0.16	0.24	0.4	52	0	
011	8/19/20 8:13 AM	B	CHARLES RIVER	LOWER BASIN	5.5	0.06	0.22	0.3	31	97	
011	8/19/20 8:13 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.06	0.22	0.3	0	10	
011	8/20/20 7:30 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.06	0.22	20	10	
011	8/20/20 7:30 AM	B	CHARLES RIVER	LOWER BASIN	5.9	0	0.06	0.22	30	63	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
011	8/21/20 7:18 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.06	63	63	
011	8/21/20 7:18 AM	B	CHARLES RIVER	LOWER BASIN	6.5	0	0	0.06	20	96	
011	8/31/20 7:45 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.07	0	41	
011	8/31/20 7:45 AM	B	CHARLES RIVER	LOWER BASIN	6.9	0	0	0.07	98	31	
011	9/3/20 7:45 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.01	0.21	0.21	20	0	
011	9/3/20 7:45 AM	B	CHARLES RIVER	LOWER BASIN	5.8	0.01	0.21	0.21	41	10	
011	9/4/20 7:24 AM	B	CHARLES RIVER	LOWER BASIN	5.3	0	0.01	0.21	31	20	
011	9/4/20 7:24 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.01	0.21	0	41	
011	9/15/20 7:37 AM	B	CHARLES RIVER	LOWER BASIN	6.3	0	0	0	41	20	
011	9/15/20 7:37 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	0	10	
011	9/16/20 7:28 AM	B	CHARLES RIVER	LOWER BASIN	5.8	0	0	0	10	20	
011	9/16/20 7:28 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	74	158	
011	9/17/20 8:00 AM	B	CHARLES RIVER	LOWER BASIN	5.9	0	0	0	110	120	
011	9/17/20 8:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	41	211	
011	9/18/20 7:30 AM	B	CHARLES RIVER	LOWER BASIN	5.9	0	0	0	31	20	
011	9/18/20 7:30 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	31	246	
011	9/28/20 7:30 AM	B	CHARLES RIVER	LOWER BASIN	6.4	0.05	0.05	0.05	0	86	
011	9/28/20 7:30 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.05	0.05	0.05	10	20	
011	9/29/20 8:04 AM	B	CHARLES RIVER	LOWER BASIN	5.9	0	0.05	0.05	41	20	
011	9/29/20 8:04 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.05	0.05	10	52	
011	10/1/20 7:56 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.46	0.46	97	131	
011	10/1/20 7:56 AM	B	CHARLES RIVER	LOWER BASIN	5.9	0	0.46	0.46	41	132	
174	3/31/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82	10	313	
174	4/2/20 9:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13	0	145	
174	4/7/20 9:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	0	84	
174	4/14/20 9:03 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56	187	749	
174	4/16/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	10	63	
174	4/21/20 9:22 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33	0	108	
174	4/28/20 8:54 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83	121	546	
174	4/30/20 8:28 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01	31	171	
174	5/6/20 7:54 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01	63	571	
174	5/12/20 9:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23	282	983	
174	5/18/20 9:24 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04	52	84	
174	5/25/20 9:26 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	74	63	
174	5/27/20 9:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	41	10	
174	6/1/20 9:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09	10	41	
174	6/8/20 9:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14	85	259	
174	6/10/20 9:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	130	1210	
174	6/15/20 9:17 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	216	439	
174	7/22/20 8:04 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11	472	309	
174	7/23/20 8:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68	5250	6890	
174	7/24/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68	8660	8160	
174	7/28/20 9:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	419	538	
174	7/30/20 7:55 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	359	435	
174	8/11/20 8:25 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	63	158	
174	8/12/20 8:13 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	249	657	
174	8/13/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	146	197	
174	8/14/20 8:07 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	51	148	
174	8/26/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	766	1470	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
174	8/27/20 8:41 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18	373	354	
174	8/28/20 9:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18	1010	6130	
174	9/9/20 8:31 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	295	253	
174	9/10/20 9:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25	197	121	
174	9/11/20 8:04 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25	3260	11200	
174	9/21/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	52	233	
174	9/23/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	143	243	
174	9/24/20 8:28 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	96	278	
174	9/25/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	98	410	
308	3/31/20 8:52 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82	120	1180	
308	4/2/20 9:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13	886	139000	
308	4/7/20 9:22 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	0	2010	
308	4/14/20 9:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56	2480	3450	
308	4/16/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	2760	770000	
308	4/21/20 9:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33	24200	1730000	
308	4/28/20 9:08 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83	573	3080	
308	4/30/20 8:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01	30	1730	
308	5/6/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01	0	591	
308	5/12/20 9:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23	1220	6870	
308	5/18/20 9:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04	52	269	
308	5/25/20 9:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	41	1010	
308	5/27/20 9:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	20	1780	
308	6/1/20 9:44 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09	545	246	
308	6/8/20 9:24 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14	528	6490	
308	6/10/20 9:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	56500	1990000	
308	6/15/20 9:37 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	10	11200	
074	3/31/20 8:47 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82	0	265	
074	4/2/20 9:37 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13	52	295	
074	4/7/20 9:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	0	148	
074	4/14/20 9:11 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56	216	722	
074	4/16/20 8:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	10	211	
074	4/21/20 9:26 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33	30	238	
074	4/28/20 9:04 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83	86	520	
074	4/30/20 8:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01	10	341	
074	5/6/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01	20	309	
074	5/12/20 9:14 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23	121	733	
074	5/18/20 9:36 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04	30	85	
074	5/25/20 9:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	10	155	
074	5/27/20 9:12 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	73	240	
074	6/1/20 9:41 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09	52	583	
074	6/8/20 9:13 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14	183	537	
074	6/10/20 9:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	121	388	
074	6/15/20 9:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	86	594	
074	7/21/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	173	173	
074	7/22/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11	323	408	
074	7/23/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68	2610	2850	
074	7/24/20 8:06 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68	6130	5170	
074	7/28/20 9:25 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	243	1270	
074	7/30/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	605	292	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
074	8/11/20 8:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	173	627	
074	8/12/20 8:17 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	388	1220	
074	8/13/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	158	317	
074	8/14/20 8:14 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	158	281	
074	8/26/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	336	1290	
074	8/27/20 8:46 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18	243	313	
074	8/28/20 9:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18	231	262	
074	9/9/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	231	389	
074	9/10/20 9:12 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25	98	233	
074	9/11/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25	3260	3080	
074	9/21/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	74	399	
074	9/23/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	134	419	
074	9/24/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	108	435	
074	9/25/20 8:44 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	74	1850	
277	3/31/20 8:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82	63	748	
277	4/2/20 9:25 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13	52	213	
277	4/7/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	20	201	
277	4/14/20 8:33 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56	288	583	
277	4/16/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	98	557	
277	4/21/20 8:55 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33	0	959	
277	4/28/20 8:37 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83	122	1120	
277	4/30/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01	74	13000	
277	5/6/20 7:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01	0	443	
277	5/12/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23	410	934	
277	5/18/20 9:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04	106	213	
277	5/25/20 9:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	74	1240	
277	5/27/20 8:42 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	10	906	
277	6/1/20 9:22 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09	30	155	
277	6/8/20 8:47 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14	74	171	
277	6/10/20 8:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	85	203	
277	6/15/20 8:44 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	118	231	
277	7/21/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	183	173	
277	7/22/20 7:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11	836	199	
277	7/23/20 7:52 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68	4610	2490	
277	7/24/20 7:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68	5790	6870	
277	7/28/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	231	1310	
277	7/30/20 7:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	213	285	
277	8/11/20 8:12 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	161	419	
277	8/12/20 7:55 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	216	373	
277	8/13/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	364	206	
277	8/14/20 7:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	185	74	
277	8/26/20 8:24 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	669	759	
277	8/27/20 8:29 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18	2400	256	
277	8/28/20 8:43 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18	404	862	
277	9/9/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	175	1110	
277	9/10/20 8:51 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25	216	1900	
277	9/11/20 7:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25	2140	3260	
277	9/21/20 8:22 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	122	823	
277	9/23/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	41	135	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
277	9/24/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	86	2310	
277	9/25/20 8:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	84	759	
172	3/31/20 8:41 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82	41	565	
172	4/2/20 9:27 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13	10	181	
172	4/7/20 8:55 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	0	173	
172	4/14/20 8:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56	314	601	
172	4/16/20 8:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	52	382	
172	4/21/20 9:03 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33	0	1050	
172	4/28/20 8:43 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83	94	805	
172	4/30/20 8:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01	177	12000	
172	5/6/20 7:44 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01	30	341	
172	5/12/20 8:57 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23	313	836	
172	5/18/20 9:07 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04	121	110	
172	5/25/20 9:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	52	1420	
172	5/27/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	63	460	
172	6/1/20 9:28 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09	41	173	
172	6/8/20 8:53 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14	62	181	
172	6/10/20 8:46 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	74	173	
172	6/15/20 8:52 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	74	216	
172	7/21/20 7:47 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	259	459	
172	7/22/20 7:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11	189	161	
172	7/23/20 7:58 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68	4880	2600	
172	7/24/20 7:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68	6490	6490	
172	7/28/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	373	1400	
172	7/30/20 7:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	384	160	
172	8/11/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	231	368	
172	8/12/20 7:58 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	295	327	
172	8/13/20 8:36 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	228	231	
172	8/14/20 7:52 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	158	171	
172	8/26/20 8:27 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	471	957	
172	8/27/20 8:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18	243	272	
172	8/28/20 8:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18	487	988	
172	9/9/20 8:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	148	341	
172	9/10/20 8:54 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25	226	2240	
172	9/11/20 7:52 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25	1270	3070	
172	9/21/20 8:27 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	109	794	
172	9/23/20 8:04 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	52	189	
172	9/24/20 8:22 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	95	2600	
172	9/25/20 8:21 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	109	1140	
276	3/31/20 8:34 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82	20	480	
276	4/2/20 9:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13	98	221	
276	4/7/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	0	160	
276	4/14/20 8:27 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56	240	691	
276	4/16/20 8:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	31	295	
276	4/21/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33	20	932	
276	4/28/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83	107	714	
276	4/30/20 8:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01	135	19900	
276	5/6/20 7:34 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01	10	318	
276	5/12/20 8:41 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23	492	886	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
276	5/18/20 8:51 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04	63	181	
276	5/25/20 9:03 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	31	2190	
276	5/27/20 8:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	73	697	
276	6/1/20 9:17 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09	20	145	
276	6/8/20 8:36 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14	109	132	
276	6/10/20 8:31 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	74	185	
276	6/15/20 8:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	63	187	
276	7/21/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	285	295	
276	7/22/20 7:42 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11	457	183	
276	7/23/20 7:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68	6870	2380	
276	7/24/20 7:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68	8160	7270	
276	7/28/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	379	1380	
276	7/30/20 7:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	399	168	
276	8/11/20 8:08 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	231	341	
276	8/12/20 7:51 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	259	259	
276	8/13/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	435	175	
276	8/14/20 7:42 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	175	135	
276	8/26/20 8:16 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	354	727	
276	8/27/20 8:23 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18	305	313	
276	8/28/20 8:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18	609	1430	
276	9/9/20 8:06 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	231	452	
276	9/10/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25	143	2600	
276	9/11/20 7:37 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25	2250	3130	
276	9/21/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	86	573	
276	9/23/20 7:55 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	110	301	
276	9/24/20 8:16 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	109	1300	
276	9/25/20 8:12 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	52	683	
070	3/31/20 8:29 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82	31	359	
070	4/2/20 9:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13	86	143	
070	4/7/20 8:36 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	30	98	
070	4/14/20 8:16 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56	168	683	
070	4/16/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	20	327	
070	4/21/20 8:33 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33	20	160	
070	4/28/20 8:23 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83	233	2220	
070	4/30/20 8:02 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01	20	278	
070	5/6/20 7:26 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01	31	243	
070	5/12/20 8:24 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23	228	857	
070	5/18/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04	74	275	
070	5/25/20 8:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	84	3260	
070	5/27/20 8:25 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	201	1050	
070	6/1/20 9:03 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09	160	221	
070	6/8/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14	341	820	
070	6/10/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	379	2480	
070	6/15/20 8:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	160	1200	
070	7/21/20 8:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	884	243	
070	7/22/20 7:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11	860	576	
070	7/23/20 7:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68	19900	19900	
070	7/24/20 7:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68	3450	6130	
070	7/28/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	583	586	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
070	7/30/20 7:23 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	987	487	
070	8/11/20 7:54 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	554	448	
070	8/12/20 7:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	435	250	
070	8/13/20 8:07 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	328	354	
070	8/14/20 7:34 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	487	221	
070	8/26/20 8:07 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	441	669	
070	8/27/20 8:13 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18	520	547	
070	8/28/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18	638	1210	
070	9/9/20 7:53 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	247	355	
070	9/10/20 8:31 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25	128	243	
070	9/11/20 7:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25	7700	7270	
070	9/21/20 8:06 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	135	488	
070	9/23/20 7:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	121	359	
070	9/24/20 8:12 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	253	368	
070	9/25/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0	201	933	
083	1/2/20 9:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.27	135	96	
083	1/13/20 9:42 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.03	0.03	10	10	
083	1/28/20 9:54 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	146	
083	2/10/20 9:44 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.16	0.16	0.16	63	373	
083	2/24/20 9:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	52	0	
083	3/10/20 8:47 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	41	262	
083	3/26/20 7:21 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.35	10	74	
083	3/31/20 8:25 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.08	0.82	0	31	
083	4/2/20 9:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.13	0.13	0.13	10	41	
083	4/7/20 8:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	20	
083	4/8/20 7:50 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.07	0.07	0.07	10	10	
083	4/14/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.56	0.56	63	74	
083	4/16/20 7:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	74	
083	4/21/20 8:17 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.33	0.33	0.33	0	131	
083	4/22/20 7:46 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.33	0.33	63	556	
083	4/28/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.61	0.83	10	52	
083	4/30/20 7:50 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.01	0	250	
083	5/5/20 8:24 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	10	52	
083	5/6/20 7:18 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.01	0.01	0	31	
083	5/12/20 8:04 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.23	0.23	63	233	
083	5/18/20 8:27 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.04	10	171	
083	5/19/20 8:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	31	292	
083	5/25/20 8:27 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	10	41	
083	5/27/20 8:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	108	323	
083	6/1/20 8:48 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.09	52	299	
083	6/3/20 7:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.03	0.03	121	85	
083	6/8/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.14	63	98	
083	6/10/20 7:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	181	404	
083	6/15/20 8:04 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	63	63	
083	6/16/20 8:06 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	41	313	
083	6/29/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.19	1.38	1.4	443	842	
083	7/13/20 8:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.07	0.07	0.08	96	86	
083	7/21/20 9:41 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	168	120	
083	7/22/20 9:28 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.11	0.11	0.11	134	74	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
083	7/23/20 9:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.57	0.68	0.68	1080	794	
083	7/24/20 9:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.57	0.68	1870	504	
083	7/28/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	591	798	
083	7/29/20 7:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	269	173	
083	7/30/20 7:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	317	275	
083	8/10/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	336	218	
083	8/11/20 7:49 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	631	738	
083	8/12/20 7:32 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	30	161	
083	8/13/20 7:38 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	120	318	
083	8/14/20 7:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	211	134	
083	8/24/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	1.33	1.33	3130	2190	
083	8/26/20 7:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	364	311	
083	8/27/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.18	0.18	0.18	309	135	
083	8/28/20 8:25 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.18	0.18	6130	3450	
083	9/8/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	52	199	
083	9/9/20 7:41 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	10	108	
083	9/10/20 8:24 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.25	0.25	0.25	85	305	
083	9/11/20 7:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.25	0.25	345	833	
083	9/21/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	74	253	
083	9/22/20 8:06 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	74	148	
083	9/23/20 7:38 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	74	393	
083	9/24/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	161	160	
083	9/25/20 7:46 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	85	201	
083	10/6/20 8:17 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	41	187	
083	10/20/20 8:16 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	185	298	
083	11/2/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.62	0.62	521	538	
083	11/18/20 9:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.05	30	97	
083	11/30/20 9:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.85	0.85	0.85	10	20	
083	12/15/20 9:43 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.06	0.06	30	20	
083	12/28/20 9:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	63	84	
057	3/31/20 8:22 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.08	0.82	0	52	
057	4/2/20 9:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.13	0.13	0.13	0	41	
057	4/7/20 8:32 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	0	
057	4/14/20 8:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.56	0.56	41	156	
057	4/16/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	10	31	
057	4/21/20 8:23 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.33	0.33	0.33	0	131	
057	4/28/20 8:17 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.61	0.83	31	145	
057	4/30/20 7:56 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.01	0	156	
057	5/6/20 7:22 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.01	0.01	0	0	
057	5/12/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.23	0.23	52	135	
057	5/18/20 8:33 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.04	41	171	
057	5/25/20 8:35 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	41	305	
057	5/27/20 8:18 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	20	108	
057	6/1/20 8:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.09	52	135	
057	6/8/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.14	41	97	
057	6/10/20 8:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	20	52	
057	6/15/20 8:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	52	85	
057	7/21/20 9:35 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	74	110	
057	7/22/20 9:23 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.11	0.11	0.11	146	132	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
057	7/23/20 9:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.57	0.68	0.68	620	1180	
057	7/24/20 9:49 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.57	0.68	1140	738	
057	7/28/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	345	292	
057	7/30/20 7:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	86	41	
057	8/11/20 7:51 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	1150	1370	
057	8/12/20 7:35 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	148	109	
057	8/13/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	122	278	
057	8/14/20 7:24 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	86	110	
057	8/26/20 7:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	228	368	
057	8/27/20 7:59 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.18	0.18	0.18	218	298	
057	8/28/20 8:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.18	0.18	399	471	
057	9/9/20 7:49 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	31	240	
057	9/10/20 8:26 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.25	0.25	0.25	135	240	
057	9/11/20 7:22 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.25	0.25	6130	1470	
057	9/21/20 8:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	41	428	
057	9/23/20 7:42 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	74	193	
057	9/24/20 8:08 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	63	158	
057	9/25/20 7:53 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	142	
066	1/2/20 9:33 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.27	86	334	
066	1/13/20 9:33 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.03	0.03	15	30.5	
066	1/28/20 9:47 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	5	315	
066	2/10/20 9:38 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.16	0.16	0.16	20.5	128	
066	2/24/20 9:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	52	
066	3/10/20 8:39 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	52	
066	3/26/20 7:14 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.35	10	197	
066	4/8/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.07	0.07	0.07	5	41.5	
066	4/22/20 7:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.33	0.33	10	175	
066	5/5/20 8:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	41	
066	5/19/20 8:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	20.5	126.5	
066	6/3/20 7:23 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.03	0.03	61	95	
066	6/16/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	31	99.5	
066	6/29/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.19	1.38	1.4	1780	19900	
066	7/13/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.07	0.07	0.08	99	127.5	
066	7/29/20 7:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	121	122	
066	8/10/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	86	135	
066	8/24/20 8:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	1.33	1.33	9210		
066	9/8/20 8:07 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	110	292	
066	9/22/20 8:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	31	158	
066	10/6/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	31	134	
066	10/20/20 8:06 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	187	323	
066	11/2/20 8:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.62	0.62	1100	884	
066	11/18/20 9:35 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.05	31	252.5	
066	11/30/20 9:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.85	0.85	0.85	31	20	
066	12/15/20 9:32 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.06	0.06	41	63	
066	12/28/20 9:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	143	173	
056	3/31/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.08	0.82	31	246	
056	4/2/20 8:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.13	0.13	0.13	10	20	
056	4/7/20 8:09 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	41	
056	4/14/20 7:57 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.56	0.56	52	309	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
056	4/16/20 7:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	122	
056	4/21/20 8:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.33	0.33	0.33	0	63	
056	4/28/20 8:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.61	0.83	41	228	
056	4/30/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.01	10	282	
056	5/6/20 7:07 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.01	0.01	31	1460	
056	5/12/20 7:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.23	0.23	288	933	
056	5/18/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.04	158	295	
056	5/25/20 8:13 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	41	171	
056	5/27/20 7:50 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	30	158	
056	6/1/20 8:28 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.09	4610	109	
056	6/8/20 7:53 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.14	0	20	
056	6/10/20 7:50 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	10	62	
056	6/15/20 7:56 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	0	31	
056	7/21/20 9:11 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	20	109	
056	7/22/20 8:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.11	0.11	0.11	74	86	
056	7/23/20 9:18 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.57	0.68	0.68	733	631	
056	7/24/20 9:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.57	0.68	960	2280	
056	7/28/20 8:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	31	278	
056	7/30/20 8:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	63	158	
056	8/11/20 8:53 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	73	41	
056	8/12/20 9:46 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	20	86	
056	8/13/20 9:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	10	161	
056	8/14/20 8:54 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	20	109	
056	8/26/20 9:32 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	213	288	
056	8/27/20 9:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.18	0.18	0.18	52	240	
056	8/28/20 9:29 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.18	0.18	228	341	
056	9/9/20 8:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	74	228	
056	9/10/20 7:57 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.25	0.25	0.25	74	173	
056	9/11/20 8:47 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.25	0.25	420	1240	
056	9/21/20 9:25 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	98	379	
056	9/23/20 9:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	41	171	
056	9/24/20 9:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	86	240	
056	9/25/20 9:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	20	160	
177	1/2/20 9:07 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.27	121	259	
177	1/13/20 8:56 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.01	0.03	0.03	30	161	
177	1/28/20 9:22 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	391	428	
177	2/10/20 9:15 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.16	0.16	0.16	132	446	
177	2/24/20 9:19 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	10	231	
177	3/10/20 8:08 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	10	41	
177	3/26/20 7:02 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.35	10	86	
177	4/8/20 7:32 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.07	0.07	0.07	0	31	
177	4/22/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.33	0.33	0	74	
177	5/5/20 7:47 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	63	84	
177	5/19/20 8:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	20	156	
177	6/3/20 7:13 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.01	0.03	0.03	10	31	
177	6/16/20 7:37 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	52	
177	6/29/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.19	1.38	1.4	2140	24200	
177	7/13/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.07	0.07	0.08	51	228	
177	7/29/20 7:42 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	10	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
177	8/10/20 7:47 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	52	670	
177	8/24/20 7:48 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	1.33	1.33	9800	11200	
177	9/8/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	63	63	
177	9/22/20 7:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	63	
177	10/6/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	10	52	
177	10/20/20 7:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	52	323	
177	11/2/20 7:42 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.62	0.62	1440	2490	
177	11/18/20 9:20 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.05	246	613	
177	11/30/20 8:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.85	0.85	0.85	63	146	
177	12/15/20 9:12 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.06	0.06	109	727	
177	12/28/20 9:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	63	435	
067	3/31/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.08	0.82	52	479	
067	4/2/20 8:27 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.13	0.13	0.13	0	31	
067	4/7/20 7:53 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	20	
067	4/14/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.56	0.56	31	233	
067	4/16/20 7:25 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	30	0	
067	4/21/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.33	0.33	0.33	0	74	
067	4/28/20 7:51 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.01	0.61	0.83	30	145	
067	4/30/20 7:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.01	0	52	
067	5/6/20 6:58 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.01	0.01	0.01	0	0	
067	5/12/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.23	0.23	20	41	
067	5/18/20 8:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.04	0	213	
067	5/25/20 8:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	0	
067	5/27/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	10	
067	6/1/20 8:13 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.09	41	63	
067	6/8/20 7:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.14	20	52	
067	6/10/20 7:41 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	10	213	
067	6/15/20 7:43 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	20	20	
067	7/21/20 8:54 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	10	31	
067	7/22/20 8:44 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.11	0.11	0.11	52	886	
067	7/23/20 8:58 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.57	0.68	0.68	226	2610	
067	7/24/20 9:04 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.57	0.68	197	909	
067	7/28/20 8:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	20	20	
067	7/30/20 8:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	1020	
067	8/11/20 8:41 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	41	
067	8/12/20 9:24 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	41	
067	8/13/20 8:43 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	4350	
067	8/14/20 8:42 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	97	
067	8/26/20 9:18 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	63	4350	
067	8/27/20 9:34 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.18	0.18	0.18	85	2610	
067	8/28/20 9:15 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.18	0.18	134	1270	
067	9/9/20 8:33 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	10	384	
067	9/10/20 8:07 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.25	0.25	0.25	20	7270	
067	9/11/20 8:36 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.25	0.25	504	1560	
067	9/21/20 9:07 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	175	
067	9/23/20 9:05 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	121	
067	9/24/20 8:54 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	52	98	
067	9/25/20 9:21 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	63	
059	7/21/20 8:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	10	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
059	7/22/20 8:31 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.11	0.11	0.11	0	10	
059	7/23/20 8:41 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.57	0.68	0.68	148	1860	
059	7/24/20 8:51 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.57	0.68	1460	1990	
059	7/28/20 8:31 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	20	
059	7/30/20 8:27 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	10	41	
059	8/11/20 8:29 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	63	
059	8/12/20 9:11 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	63	
059	8/13/20 8:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	285	
059	8/14/20 8:29 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	20	
059	8/26/20 9:05 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	20	145	
059	8/27/20 9:16 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.18	0.18	0.18	0	85	
059	8/28/20 9:05 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.18	0.18	73	3260	
059	9/9/20 8:21 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	31	292	
059	9/10/20 8:20 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.25	0.25	0.25	31	1530	
059	9/11/20 8:24 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.25	0.25	213	3080	
059	9/21/20 8:48 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	262	
059	9/23/20 8:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	109	
059	9/24/20 8:39 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	20	63	
059	9/25/20 8:59 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	74	
176	3/31/20 7:35 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.08	0.82	31	663	
176	4/2/20 8:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.13	0.13	0.13	0	31	
176	4/7/20 7:32 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	0	20	
176	4/14/20 7:35 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.56	0.56	857	2600	
176	4/16/20 7:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	10	161	
176	4/21/20 7:35 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.33	0.33	0.33	0	52	
176	4/28/20 7:32 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.01	0.61	0.83	520	1140	
176	4/30/20 7:32 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0.01	0	63	
176	5/6/20 6:42 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.01	0.01	0.01	0	0	
176	5/12/20 7:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.23	0.23	74	384	
176	5/18/20 7:43 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0.04	41	199	
176	5/25/20 7:40 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	10	52	
176	5/27/20 7:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	221	262	
176	6/1/20 7:45 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0.09	10	52	
176	6/8/20 7:25 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0.14	10	20	
176	6/10/20 7:25 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	10	20	
176	6/15/20 7:24 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	0	169	
176	7/21/20 8:45 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	10	98	
176	7/22/20 8:34 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.11	0.11	0.11	0	61	
176	7/23/20 8:45 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.57	0.68	0.68	583	2380	
176	7/24/20 8:55 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.57	0.68	2050	3260	
176	7/28/20 8:35 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	63	73	
176	7/30/20 8:31 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	31	41	
176	8/11/20 8:32 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	20	41	
176	8/12/20 9:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	10	20	
176	8/13/20 8:33 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	20	206	
176	8/14/20 8:32 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	10	74	
176	8/26/20 9:09 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	146	285	
176	8/27/20 9:21 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.18	0.18	0.18	10	233	
176	8/28/20 9:07 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.18	0.18	328	4110	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
176	9/9/20 8:26 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	41	345	
176	9/10/20 8:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.25	0.25	0.25	20	565	
176	9/11/20 8:28 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.25	0.25	1150	3260	
176	9/21/20 8:55 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	0	169	
176	9/23/20 8:54 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	10	243	
176	9/24/20 8:46 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	10	74	
176	9/25/20 9:07 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0	20	169	
167	1/2/20 8:53 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.27	74	933	
167	1/13/20 8:44 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.01	0.03	0.03	10	86	
167	1/28/20 9:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	85	359	
167	2/10/20 9:01 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.16	0.16	0.16	41	121	
167	2/24/20 9:06 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	0	
167	3/10/20 7:53 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	41	
167	3/26/20 6:48 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.35	25	156	
167	3/31/20 7:43 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.08	0.82	0	216	
167	4/2/20 8:20 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.13	0.13	0.13	0	41	
167	4/7/20 7:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	31	
167	4/8/20 7:18 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.07	0.07	0.07	0	0	
167	4/14/20 7:44 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.56	0.56	0	52	
167	4/16/20 7:20 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	0	74	
167	4/21/20 7:44 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.33	0.33	0.33	0	31	
167	4/22/20 7:18 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.33	0.33	0	41	
167	4/28/20 7:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.01	0.61	0.83	0	62	
167	4/30/20 7:39 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.01	0	63	
167	5/5/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	85	0	
167	5/6/20 6:52 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.01	0.01	0.01	0	10	
167	5/12/20 7:23 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.23	0.23	10	107	
167	5/18/20 7:52 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.04	0	98	
167	5/19/20 7:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	10	31	
167	5/25/20 7:52 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	31	20	
167	5/27/20 7:27 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	41	96	
167	6/1/20 8:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.09	10	74	
167	6/3/20 7:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.01	0.03	0.03	31	74	
167	6/8/20 7:33 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.14	52	97	
167	6/10/20 7:33 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	109	203	
167	6/15/20 7:36 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	11	41	
167	6/16/20 7:24 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	63	31	
167	6/29/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.19	1.38	1.4	12000		
167	7/13/20 7:15 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.07	0.07	0.08	52	20	
167	7/29/20 7:15 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	20	30	
167	8/10/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	31	63	
167	8/24/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	1.33	1.33	19900	24200	
167	9/8/20 7:33 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	31	110	
167	9/22/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	10	98	
167	10/6/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	31	909	
167	10/20/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	31	74	
167	11/2/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.62	0.62	185	2610	
167	11/18/20 9:05 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.05	98	246	
167	11/30/20 8:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.85	0.85	0.85	10	41	

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
167	12/15/20 8:56 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.06	0.06	86	288	
167	12/28/20 8:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	63	480	
052	7/21/20 8:34 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	41		72.7
052	7/21/20 8:34 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.9	0	0	0	20		45
052	7/22/20 8:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.9	0.11	0.11	0.11	41		130
052	7/22/20 8:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.11	0.11	0.11	31		540
052	7/23/20 8:34 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.2	0.57	0.68	0.68	960		1230
052	7/23/20 8:34 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.57	0.68	0.68	712		3100
052	7/24/20 8:40 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.57	0.68	169		739
052	7/28/20 8:22 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.2	0	0	0	10		55
052	7/28/20 8:22 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		63.6
052	7/30/20 8:18 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	20		118
052	7/30/20 8:18 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.4	0	0	0	0		30
052	8/11/20 8:23 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		81.8
052	8/12/20 9:07 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		36.4
052	8/13/20 8:21 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		27.3
052	8/14/20 8:23 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		45.5
052	8/14/20 8:23 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.1	0	0	0	0		5
052	8/26/20 8:58 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		27.3
052	8/27/20 9:08 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.6	0.18	0.18	0.18	0		20
052	8/27/20 9:08 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.18	0.18	0.18	0		36.4
052	8/28/20 9:01 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.8	0	0.18	0.18	0		25
052	8/28/20 9:01 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.18	0.18	10		18.2
052	9/9/20 8:12 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		164
052	9/10/20 8:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.25	0.25	0.25	20		210
052	9/10/20 8:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.8	0.25	0.25	0.25	20		120
052	9/11/20 8:19 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.25	0.25	122		90.9
052	9/21/20 8:38 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.7	0	0	0	0		10
052	9/21/20 8:38 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	20		290
052	9/23/20 8:40 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.5	0	0	0	10		10
052	9/23/20 8:40 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		9.09
052	9/24/20 8:34 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	10		36.4
052	9/24/20 8:34 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.9	0	0	0	0		10
052	9/25/20 8:53 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		118
052	9/25/20 8:53 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.8	0	0	0	0		0
069	7/21/20 8:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		9.09
069	7/21/20 8:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	4.8	0	0	0	0		40
069	7/22/20 8:16 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.11	0.11	0.11	52		570
069	7/23/20 8:22 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.9	0.57	0.68	0.68	213		460
069	7/23/20 8:22 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.57	0.68	0.68	988		2000
069	7/24/20 8:30 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.57	0.68	146		570
069	7/28/20 8:13 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	10		100
069	7/30/20 8:06 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		18.2
069	8/11/20 8:13 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		45.5
069	8/12/20 8:55 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	10		9.09
069	8/13/20 8:12 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		36.4
069	8/14/20 8:12 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		54.5
069	8/26/20 8:48 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	20		109
069	8/27/20 9:01 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.18	0.18	0.18	0		36.4

2020 MWRA Central Lab Analyses - Bacteria

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Enterococcus (col/100 mL)	E coli (col/100 mL)	Fecal coliform (col/100 mL)
069	8/28/20 8:49 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.2	0	0.18	0.18	0		45
069	8/28/20 8:49 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.18	0.18	10		270
069	9/9/20 8:08 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	120		270
069	9/10/20 8:32 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.25	0.25	0.25	110		310
069	9/11/20 8:12 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.25	0.25	637		4900
069	9/21/20 8:30 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.7	0	0	0	10		5
069	9/21/20 8:30 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	20		27.3
069	9/23/20 8:30 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.7	0	0	0	0		40
069	9/23/20 8:30 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		36.4
069	9/24/20 8:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.8	0	0	0	0		0
069	9/24/20 8:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	20		9.09
069	9/25/20 8:49 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		27.3
069	9/25/20 8:49 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.7	0	0	0	20		0
137	1/6/20 11:03 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	12.4	0	0.11	0.24	0		30
137	1/6/20 11:03 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.11	0.24	0		55
137	1/23/20 11:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.3	0	0	0	0		15
137	1/23/20 11:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		10
137	2/5/20 11:35 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	11.6	0.05	0.05	0.05	0		0
137	2/5/20 11:35 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.05	0.05	0.05	0		20
137	2/25/20 11:11 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.26	0.26	0.26	20		55
137	2/25/20 11:11 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.2	0.26	0.26	0.26	0		5
137	3/5/20 9:07 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	12	0	0.03	0.06	0		5
137	3/5/20 9:07 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.03	0.06	31		70
137	6/23/20 10:18 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	12	0	0	0	0		0
137	6/23/20 10:18 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		5
137	7/6/20 9:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	9.9	0	0.11	0.11	0		0
137	7/6/20 9:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.11	0.11	74		973
137	7/27/20 9:45 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	10.4	0	0	0	0		0
137	7/27/20 9:45 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	10		5
137	8/7/20 9:17 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		30
137	8/7/20 9:17 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	10.8	0	0	0	0		0
137	8/17/20 9:35 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.08	0.24	0.24	10		110
137	8/17/20 9:35 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13	0.08	0.24	0.24	0		0
137	9/2/20 10:03 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	12.3	0.2	0.2	0.2	10		0
137	9/2/20 10:03 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.2	0.2	0.2	0		0
137	9/14/20 9:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.1	0	0	0	10		5
137	9/14/20 9:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	0		0
137	10/2/20 9:35 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.02	0.02	0.48	20		130
137	10/2/20 9:35 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.7	0.02	0.02	0.48	10		15
137	10/21/20 9:50 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	10.5	0.06	0.06	0.06	0		85
137	10/21/20 9:50 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.06	0.06	0.06	10		5
137	11/4/20 11:18 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	14.5	0	0	0	10		5
137	11/4/20 11:18 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	52		75
137	11/17/20 10:53 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.05	0.39	31		20
137	11/17/20 10:53 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.9	0	0.05	0.39	10		10
137	12/2/20 11:10 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	14.8	0	0.41	1.26	20		0
137	12/2/20 11:10 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.41	1.26	547		250
137	12/14/20 11:15 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.8	0.06	0.06	0.56	10		0
137	12/14/20 11:15 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.06	0.06	0.56	41		35

2020 MWRA Central Lab Analyses - Nutrients

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Ammonium (uM)	Nitrate+nitrite (uM)	Total Nitrogen (uM)	Particulate P (uM)	Phosphate (uM)	Chlorophyll a (ug/L)	Pheophytin (ug/L)	Particulate carbon (uM)	Particulate nitrogen (uM)	Total dissolved N (uM)	Total dissolved P (uM)	Total phosphorus (uM)	Total suspended solids (mg/L)
012	1/2/20 10:35 AM	S	CHARLES RIVER	UPPER BASIN	5.7	57.7	70.2		0.826	1.22	1.79					1.25	2.68
012	1/13/20 11:07 AM	S	CHARLES RIVER	UPPER BASIN	3.17	53.8	69.8		0.827	0.96	1.43					1.91	2.4
012	1/28/20 11:08 AM	S	CHARLES RIVER	UPPER BASIN	7.26	76.8	100		0.654	7.44	4.41					2.05	3.58
012	2/10/20 10:49 AM	S	CHARLES RIVER	UPPER BASIN	5.63	66	93.2		0.868	4.8	3.42					1.35	1.24
012	2/24/20 11:05 AM	S	CHARLES RIVER	UPPER BASIN	15.35	68.5	101.7		0.7785	2.385	2.35					1.365	2.345
012	3/10/20 10:08 AM	S	CHARLES RIVER	UPPER BASIN	0.703	46.6	77.5		0.359	2.48	2.18					0.944	3.08
012	3/26/20 8:18 AM	S	CHARLES RIVER	UPPER BASIN	1.21	42.3	78.3		0.422	2.84	2.95					1.82	5.83
012	4/8/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	1.56	26.2	54.1		0.21	9.17	12.6					1.64	7.32
012	4/22/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	1.53	23.2	54		0.256	1.86	2.36					1.87	6.3
012	5/5/20 9:07 AM	S	CHARLES RIVER	UPPER BASIN	1.165	21.9	48		0.304	5.405	4.88					1.21	5.52
012	5/19/20 9:20 AM	S	CHARLES RIVER	UPPER BASIN	3.48	23.6	52.9		0.272	1.05	2.04					1.75	3.84
012	6/3/20 8:35 AM	S	CHARLES RIVER	UPPER BASIN	3.74	38.5	80.3		0.726	0.69	1.44					1.87	2.05
012	6/16/20 9:30 AM	S	CHARLES RIVER	UPPER BASIN	4.09	42.2	78.7		1.09	0.18	0.53					2	1.43
012	6/29/20 9:22 AM	S	CHARLES RIVER	UPPER BASIN	7.56	24.6	63.4		1.15	3.71	7.14					2.88	5.15
012	7/13/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	1.82	28.7	72.7		1.71	1.38	2.66					3.65	0.91
012	7/29/20 9:04 AM	S	CHARLES RIVER	UPPER BASIN	0.779	23	55.7		1.1	0.41	0.88					2.09	0.71
012	8/10/20 9:20 AM	S	CHARLES RIVER	UPPER BASIN	1.61	22.4	53.9		0.664	0.64	1.08					1.73	1.42
012	8/24/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	3.76	18.9	59.2		0.773	1.45	2.45					1.97	1.27
012	9/8/20 9:25 AM	S	CHARLES RIVER	UPPER BASIN	2.16	27.7	57.8		0.653	0.43	0.78					1.27	0.75
012	9/22/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	1.585	20.35	50.8		0.4375	1.145	2.36					1.135	2.735
012	10/6/20 9:27 AM	S	CHARLES RIVER	UPPER BASIN	1.62	27.3	51.3		0.41	0.12	0.54					0.893	0.59
012	10/20/20 9:30 AM	S	CHARLES RIVER	UPPER BASIN	4.7	26.3	53.8		0.589	0.22	0.71					1.19	2.16
012	11/2/20 9:12 AM	S	CHARLES RIVER	UPPER BASIN	0.71	33.4	72.2		0.55	12.9	17					2.27	0.89
012	11/18/20 10:40 AM	S	CHARLES RIVER	UPPER BASIN	9.84	47.8	93.6		0.996	1.18	3.69					1.82	1.79
012	11/30/20 10:25 AM	S	CHARLES RIVER	UPPER BASIN	3.075	50	85.95		0.845	0.705	1.12					2.085	3.365
012	12/15/20 11:03 AM	S	CHARLES RIVER	UPPER BASIN	2.36	40.7	69.7		0.92	1.25	2.07					1.58	1.89
012	12/28/20 10:45 AM	S	CHARLES RIVER	UPPER BASIN	3.14	52	84		0.314	1.01	2.63					1.24	2.38
166	1/2/20 10:13 AM	S	CHARLES RIVER	LOWER BASIN	9.52	57.7	78.2		0.921	1.51	2.69					1.71	6.03
166	1/13/20 10:15 AM	S	CHARLES RIVER	LOWER BASIN	6.35	54.8	77.6		1.08	0.93	1.09					2.37	1.76
166	1/28/20 10:25 AM	S	CHARLES RIVER	LOWER BASIN	6.34	72.1	91.5		0.737	9.5	5.07					2.14	2.29
166	2/10/20 10:17 AM	S	CHARLES RIVER	LOWER BASIN	7.69	68.1	96.4		0.971	9.09	4.09					1.52	3.44
166	2/24/20 10:29 AM	S	CHARLES RIVER	LOWER BASIN	3.97	67.9	87.9		0.817	0.72	1.18					1.42	1.76
166	3/10/20 9:29 AM	S	CHARLES RIVER	LOWER BASIN	0.548	55.6	82.5		0.431	3.99	2.71					1.24	1.36
166	3/26/20 7:48 AM	S	CHARLES RIVER	LOWER BASIN	1.07	45.8	76.3		0.325	3.37	2.81					1.68	4.31
166	4/8/20 8:16 AM	S	CHARLES RIVER	LOWER BASIN	2.66	36.4	64.9		0.459	6.56	7.6					1.55	1.4
166	4/22/20 8:18 AM	S	CHARLES RIVER	LOWER BASIN	1.125	30.95	58.85		0.2905	5.43	3.485					1.905	4.48
166	5/5/20 8:36 AM	S	CHARLES RIVER	LOWER BASIN	1.42	32.1	52.5		0.395	8.76	7					1.24	3.07
166	5/19/20 8:54 AM	S	CHARLES RIVER	LOWER BASIN	2.68	25.5	51.8		0.299	3.39	3.39					1.47	2.24
166	6/3/20 8:00 AM	S	CHARLES RIVER	LOWER BASIN	8.145	31.1	80.55		0.214	3.52	2.78					1.68	4.655
166	6/16/20 8:29 AM	S	CHARLES RIVER	LOWER BASIN	9.42	36.5	82.5		0.5	0.4	0.87					0.176	2.31
166	6/29/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.819	26.8	71.45		0.631	26.5	15.4					1.825	4.605
166	7/13/20 8:30 AM	S	CHARLES RIVER	LOWER BASIN	0.028	6.52	55.1		0.55	41.8	25.9					2.39	4.42
166	7/29/20 8:28 AM	S	CHARLES RIVER	LOWER BASIN	0.028	0.459	70.95		0.438	51.35	20.25					1.975	10.395
166	8/10/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.222	0.336	67.3		0.314	29.5	16.8					1.78	13.7
166	8/24/20 8:41 AM	S	CHARLES RIVER	LOWER BASIN	0.795	4.35	49		0.291	13.3	17.2					1.79	5.52
166	9/8/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.327	0.225	42.2		0.0207	4.77	3.99					1.7	6.35
166	9/22/20 8:38 AM	S	CHARLES RIVER	LOWER BASIN	0.421	0.36	41.6		0.168	15.5	18.7					2.07	5.28
166	10/6/20 8:42 AM	S	CHARLES RIVER	LOWER BASIN	0.186	0.235	38.6		0.0768	4.39	3.19					1.74	6.74
166	10/20/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.431	0.463	44.4		0.0668	8.14	3.64					2.16	10.3
166	11/2/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	8.01	14.6	60.7		0.234	12	19					2.36	3.45
166	11/18/20 10:00 AM	S	CHARLES RIVER	LOWER BASIN	8.55	41.9	78.9		0.92	4.01	2.65					1.62	4.36
166	11/30/20 9:45 AM	S	CHARLES RIVER	LOWER BASIN	9.27	53.1	98.1		1.11	0.75	1.05					2.71	1.95
166	12/15/20 10:00 AM	S	CHARLES RIVER	LOWER BASIN	3.86	39.85	73.35		1.08	1.175	2.03					1.95	3.095
166	12/28/20 9:55 AM	S	CHARLES RIVER	LOWER BASIN	7.97	56.5	91.4		0.592	1.24	1.41					1.69	2.91
083	1/2/20 9:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	21.2	83.9	112		1.22	1.46	1.46					1.98	2.48
083	1/13/20 9:42 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	25.7	59	94.5		0.767	2.39	1.91					2.09	2.46
083	1/28/20 9:54 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	28.6	63.5	112		0.803	5	3.38					2.01	3.56
083	2/10/20 9:44 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	28.2	62.2	110		0.883	6.55	4.57					1.24	2.92
083	2/24/20 9:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	29.5	72.9	124		0.909	1.38	1.06					1.33	1.76
083	3/10/20 8:47 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	19.5	61.2	112		0.584	4.51	3.58					1.45	1.36
083	3/26/20 7:21 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	16.7	66.1	108		0.625	1.79	1.27					1.61	2.52
083	4/8/20 7:50 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	16.4	92.3	144		2.57	1.82	1.94					4.76	3.54
083	4/22/20 7:46 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	8.94	70.2	102		0.344	4.56	2.68					2.05	4.69
083	5/5/20 8:24 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	1.75	128	148		3.72	7.67	5.07					5.07	3.95
083	5/19/20 8:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.882	57.9	84.3		0.124	21.6	11.7					1.49	7.71
083	6/3/20 7:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	7.08	48.7	92.2		0.196	1.45	1.32					1.24	4.14
083	6/16/20 8:06 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	9.64	40.9	92.2		0.609	1.22	1.44					1.63	0.75
083	6/29/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	4.26	46.4	70.9		0.809	7	6.04					1.48	2.61
083	7/13/20 8:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	5.4	35.6	70.8		0.943	3.3	8.45					2.76	3.93
083	7/29/20 7:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	2.39	32.5	59.5		0.603	2.75	3.99					1.91	3.02

2020 MWRA Central Lab Analyses - Nutrients

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Ammonium (uM)	Nitrate+nitrite (uM)	Total Nitrogen (uM)	Particulate P (uM)	Phosphate (uM)	Chlorophyll a (ug/L)	Pheophytin (ug/L)	Particulate carbon (uM)	Particulate nitrogen (uM)	Total dissolved N (uM)	Total dissolved P (uM)	Total phosphorus (uM)	Total suspended solids (mg/L)
083	8/10/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	2.75	21.1	46.1		0.283	2.44	4.89					1.6	4.14
083	8/24/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	2.01	12	49.2		0.221	11	17.8					2.43	7.06
083	9/8/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	1.02	7.53	35.3		0.01	1.28	1.73					0.957	5.54
083	9/22/20 8:06 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	1.11	1.91	26.8		0.0975	5.15	9.68					0.957	7.53
083	10/6/20 8:17 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	1.95	3.55	28.6		0.163	0.8	1.17					0.851	2.56
083	10/20/20 8:16 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	6.83	8.06	37.7		0.212	1.24	1.29					0.903	2.52
083	11/2/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	10.1	12.2	45.7		0.319	2.83	5.09					1.08	2.59
083	11/18/20 9:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	15	20.3	73.8		0.46	2.22	2.1					0.965	5.05
083	11/30/20 9:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	20.7	31.1	74.9		0.34	3.08	1.85					1.18	2.53
083	12/15/20 9:43 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	16.9	44.3	80.4		0.586	3.7	3.77					1.26	1.71
083	12/28/20 9:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	20.1	52.9	98		0.207	4.47	2.18					1.04	1.07
066	1/2/20 9:33 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	25.05	63.85	93.1		0.8975	3.695	3.395					1.33	1.97
066	1/13/20 9:33 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	25.2	59.85	71		0.768	1.565	1.335					1.665	2.135
066	1/28/20 9:47 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	28.85	66.35	109.5		0.705	4.265	2.815					1.86	1.465
066	2/10/20 9:38 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	29.2	66.95	114		0.8705	6.825	4.655					1.195	2.165
066	2/24/20 9:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	29.1	78.7	116		0.888	1.36	1.2					1.28	2.8
066	3/10/20 8:39 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	24	67.1	127.5		0.6005	5.69	4.86					1.325	4.295
066	3/26/20 7:14 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	18	66.1	113		0.598	3.02	2.46					1.58	4.19
066	4/8/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	15.8	70.45	112		0.2355	15.4	13.2					1.505	6.805
066	4/22/20 7:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	11.7	70.5	101		0.379	3.3	2.27					2.05	5.11
066	5/5/20 8:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	7.41	69.2	89.9		0.521	9.82	6.5					1.14	4.12
066	5/19/20 8:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	3.62	56	80.95		0.08415	11.75	4.835					1.64	6.66
066	6/3/20 7:23 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	5.31	49.5	91.9		0.0384	0.87	1.03					1.11	3.26
066	6/16/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	16.55	39.15	86.15		0.8025	1.205	1.28					1.655	2.28
066	6/29/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	10.7	31.8	74.5		0.761	5.03	9.12					2.93	4.04
066	7/13/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	10.4	25.25	66.25		1.245	2.17	3.245					3.495	1.52
066	7/29/20 7:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	8.1	25.5	57.9		1.74	2.89	3.53					3.06	0.54
066	8/10/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	3.67	19.8	46		0.639	2.05	3.92					2.04	2.03
066	8/24/20 8:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	17.2	13.4	66		0.594	9.7	13					3.55	7.47
066	9/8/20 8:07 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	2.195	9.215	41.9		0.08575	8.325	5.53					1.71	3.985
066	9/22/20 8:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	2.11	3.73	29.7		0.224	6.54	9.45					1.15	4.96
066	10/6/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	2.96	5.15	35.8		0.356	2.2	2.07					1.42	3.36
066	10/20/20 8:06 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	10.4	14.5	54.2		0.487	2.51	3.24					2.13	6.82
066	11/2/20 8:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	11.9	13.7	54.2		0.4	3.07	4.61					1.59	1.59
066	11/18/20 9:35 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	16.1	23.6	61.85		0.469	1.69	1.25					0.7615	1.65
066	11/30/20 9:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	20.1	32	72.1		0.379	2.12	1.59					1.12	2.61
066	12/15/20 9:32 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	17.5	48.5	84.1		0.656	4.72	3.32					1.23	2.33
066	12/28/20 9:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	20.2	53.5	82.8		0.192	5.21	3.74					1.1	1.11
167	1/2/20 8:53 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	22.7	58.9	88		0.724	3.29	3.39					1.28	3.83
167	1/13/20 8:44 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	22.1	60.4	103		0.794	1.81	1.8					1.94	3.42
167	1/28/20 9:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	22.7	62.6	97.8		0.694	3.51	3.59					1.77	3.98
167	2/10/20 9:01 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	21.7	64.4	107		0.901	8.84	6.74					1.36	5.64
167	2/24/20 9:06 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	19.2	72.5	111		0.799	0.98	0.76					1.38	2.95
167	3/10/20 7:53 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	6.75	57.8	94.9		0.405	4.43	3.34					1.11	4.43
167	3/26/20 6:48 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	10.95	49.8	90.5		0.466	5.515	3.16					1.71	3.625
167	4/8/20 7:18 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	10.8	64.6	99.7		0.283	12.6	10.9					1.46	2.54
167	4/22/20 7:18 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	9.98	58.1	85.3		0.247	5.33	6.28					2.53	6.03
167	5/5/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	4.26	56.1	73		0.497	18.8	19.2					1.46	5.84
167	5/19/20 7:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	1.92	40.7	64.9		0.0578	22.9	18.2					2.21	8.05
167	6/3/20 7:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	6.42	24.8	64.7		0.042	7.07	4.2					1.3	4.52
167	6/16/20 7:24 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.207	10.8	64.3		1.23	6.48	4.56					2.54	7.69
167	6/29/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	12.7	25.3	117		1.64	14.1	14					5.98	5.41
167	7/13/20 7:15 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.028	0.268	58.1		0.248	26.3	15.8					3.2	6.54
167	7/29/20 7:15 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.144	0.953	37.3		0.714	9.59	6.49					1.86	7.99
167	8/10/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.475	1.29	47.2		1.41	11.5	13.6					3.07	15.4
167	8/24/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	12.8	24.7	81.1		1.06	8.23	10.5					4.45	11.4
167	9/8/20 7:33 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	1.09	3.53	58.3		5.02	9.23	6.25					8.38	6.03
167	9/22/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.31	0.193	59.4		7.65	61.3	22.6					10.4	30.2
167	10/6/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.162	0.42	75.5		11.1	23.8	10.4					18.5	28.2
167	10/20/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.368	2.55	50.2		6.87	44.7	23.2					11.1	8.41
167	11/2/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	14.9	10.7	59.5		4.44	14.9	17.8					8.41	2.71
167	11/18/20 9:05 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.74	13.4	48.8		1.55	19.4	15.6					3.73	13.9
167	11/30/20 8:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	12.5	27.2	76.9		0.614	10	6.53					3.04	5.84
167	12/15/20 8:56 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	21.2	47.6	86.5		0.917	5.25	4.06					1.82	1.87
167	12/28/20 8:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	20.1	54.6	100		0.254	3.47	2.64					1.28	1.18
137	1/6/20 11:03 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.58	11.2			1	0.56	1.06						7.15
137	1/6/20 11:03 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.75	14.4		0.443	0.999	0.42	0.79	22.7	2.19	23.4	1.05		3.65
137	1/23/20 11:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.55	10.9			1.04	0.34	0.47						6.45
137	1/23/20 11:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.43	13		0.518	1.07	0.22	0.36	22.6	2.81	23.2	1.22		5.25
137	2/5/20 11:35 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.635	8.83			0.963	1.02	1.06						2.78

2020 MWRA Central Lab Analyses - Nutrients

Station	Day/Time(EST)	Surface/Bottom	Region	Subregion	Ammonium (uM)	Nitrate+nitrate (uM)	Total Nitrogen (uM)	Particulate P (uM)	Phosphate (uM)	Chlorophyll a (ug/L)	Pheophytin (ug/L)	Particulate carbon (uM)	Particulate nitrogen (uM)	Total dissolved N (uM)	Total dissolved P (uM)	Total phosphorus (uM)	Total suspended solids (mg/L)
137	2/5/20 11:35 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	5.22	24.6		0.264	1.09	1.05	0.57	24.3	2.74	41.6	0.847		2.04
137	2/25/20 11:11 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.23	22.6		0.37	0.677	2.88	1.98	39.2	2.37	37.3	0.783		2.22
137	2/25/20 11:11 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.187	7.95			0.642	3.59	2.39						4
137	3/5/20 9:07 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.028	0.699			0.281	5.79	4.73						4.5
137	3/5/20 9:07 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.028	0.862		0.598	0.264	6.18	6.36	66	7.46	11.1	0.475		3.61
137	6/23/20 10:18 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.5	0.597			0.85	1.43	1.53						
137	6/23/20 10:18 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.028	0.162		0.648	0.206	6.44	3.41	82.7	8.4	15.2	0.465		
137	7/6/20 9:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.684	0.191			0.577	1.04	0.86						
137	7/6/20 9:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.11	1.79		1.21	0.442	14.1	5.29			29.2	0.748		
137	7/27/20 9:45 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	4.21	0.782			0.961	1.06	1.5						
137	7/27/20 9:45 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	9.32	1.07		0.382	1.1	2.36	1.42	27.7	3.42	21.6	1.51		
137	8/7/20 9:17 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.02	1.07		0.517	1.08	1.79	0.95	37	5.59	17.8	0.69		
137	8/7/20 9:17 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.17	0.575			1.03	0.33	0.49						
137	8/17/20 9:35 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.61	0.661		0.616	1.78	1.39	0.72	43.5	6.38	17.4	1.91		
137	8/17/20 9:35 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.61	0.0764			1.15	1.69	4.4						
137	9/2/20 10:03 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.46	0.617			1.32	2.6	3.25						
137	9/2/20 10:03 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.591	0.67		0.794	1.1	10.8	6.33	72.7	11.7	20.5	2.04		
137	9/14/20 9:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	4.89	0.659			1.29	2.54	1.65						
137	9/14/20 9:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.48	0.237		0.551	1	4.87	4.2	64.4	7.69	12.2	1.26		
137	10/2/20 9:35 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.02	3.17		0.553	1.89	2.22	1.4	43.6	3.95	16.4	2.08		
137	10/2/20 9:35 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	4.96	2.38			1.34	0.8	1.06						
137	10/21/20 9:50 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	4.35	4.77			1.5	0.1	0.21						
137	10/21/20 9:50 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	6.35	5.98		0.518	2.54	0.78	0.52	26.1	3.42	33.6	2.95		
137	11/4/20 11:18 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	4.65	5.24			1.2	1.41	1.08						
137	11/4/20 11:18 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	11.6	8.83		1.47	2.22	5.01	2.38	31.8	3.47	39.6	3.88		
137	11/17/20 10:53 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	5.58	6.41		0.276	1.26	0.45	0.43	23.8	3.11	23.2	1.58		
137	11/17/20 10:53 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	4.09	5.91			1.17	0.38	0.4						
137	12/2/20 11:10 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.88	7.72			1.25	0.45	0.74						
137	12/2/20 11:10 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	9.82	18.1		0.602	1.25	2.69	3.57	39.3	3.78	42.8	1.34		
137	12/14/20 11:15 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.52	9.73			1.25	0.22	0.29						
137	12/14/20 11:15 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	7.66	17.7		0.214	1.23	0.2	0.36	18.2	1.44	34.9	1.16		

APPENDIX III

2020 raw data for physical profile results.

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2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
012	1/2/20 10:35 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.27	2.177	0.36	13.57	98.8	0.749	2	7.54	
012	1/13/20 11:07 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.03	0.03	6.624	0.3	12.55	102.6	0.606	2.04	7.39	
012	1/28/20 11:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	2.744	0.37	13.98	103.4	0.756	1.86	7.57	
012	1/28/20 11:08 AM	B	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	2.737	0.37	14.04	103.8	0.757	2.48	7.51	
012	2/10/20 10:49 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.16	0.16	2.28	0.37	14.51	106	0.759	2.73	7.57	
012	2/10/20 10:49 AM	B	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.16	0.16	2.253	0.37	14.75	107.6	0.759	3.16	7.49	
012	2/24/20 11:05 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	3.822	0.3	14.74	112.1	0.612	1.4	7.45	
012	3/10/20 10:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	7.874	0.28	12.36	104.3	0.584	2.04	7.68	
012	3/26/20 8:18 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.35								
012	3/30/20 10:15 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.08	0.82	0.9								
012	4/3/20 9:24 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.83	0.96	0.96								
012	4/6/20 9:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.04								
012	4/7/20 9:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
012	4/8/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.07	0.07								
012	4/9/20 8:36 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.64	0.71	0.71								
012	4/13/20 9:28 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.56	0.56	0.56								
012	4/15/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.56								
012	4/20/20 9:33 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.67								
012	4/22/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.33	0.33								
012	4/27/20 9:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.6	0.82	0.82								
012	4/29/20 8:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.61								
012	5/4/20 9:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.01								
012	5/5/20 9:07 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
012	5/19/20 9:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
012	6/3/20 8:35 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.03	0.03								
012	6/16/20 9:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
012	6/29/20 9:22 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.19	1.38	1.4								
012	7/13/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.07	0.08								
012	7/29/20 9:04 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
012	8/10/20 9:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
012	8/24/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	1.33	1.33								
012	9/8/20 9:25 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
012	9/22/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
012	10/6/20 9:27 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
012	10/20/20 9:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
012	11/2/20 9:12 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.62	0.62								
012	11/18/20 10:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.05								
012	11/30/20 10:25 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.85	0.85	0.85								
012	12/15/20 11:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.06								
012	12/28/20 10:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	3/30/20 10:07 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.08	0.82	0.9								
001	4/3/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.83	0.96	0.96								
001	4/6/20 9:35 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.04								
001	4/9/20 8:28 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.64	0.71	0.71								
001	4/13/20 9:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.56	0.56	0.56								
001	4/15/20 8:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.56								
001	4/20/20 9:28 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.67								
001	4/27/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.6	0.82	0.82								
001	4/29/20 8:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.61								
001	5/4/20 9:06 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.01								
001	5/11/20 9:11 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.23	0.23	0.35								
001	5/13/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.23								
001	5/21/20 8:57 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	5/26/20 9:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	5/28/20 9:13 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	6/4/20 8:32 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.03								
001	6/9/20 9:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	6/11/20 8:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.74	0.74	0.74								
001	6/17/20 9:18 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	7/7/20 9:29 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11								
001	7/8/20 9:22 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	7/10/20 9:33 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	7/14/20 7:05 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69								
001	7/15/20 9:34 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76								
001	7/17/20 8:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18								
001	8/18/20 9:36 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4								
001	8/19/20 9:37 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3								
001	8/20/20 9:10 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22								
001	8/21/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
001	8/31/20 9:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07								
001	9/3/20 9:37 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21								
001	9/4/20 9:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21								
001	9/15/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	9/16/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	9/17/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	9/18/20 8:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
001	9/28/20 9:10 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05								1
001	9/29/20 9:15 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05								
001	10/1/20 9:12 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46								
144	7/7/20 9:18 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11								1.6
144	7/8/20 9:09 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1.2
144	7/10/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1.1
144	7/14/20 9:47 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69								1.5
144	7/15/20 9:22 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76								1.4
144	7/17/20 10:01 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18								1.6
144	8/18/20 9:26 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4								1.3
144	8/19/20 9:34 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3								0.7
144	8/20/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22								1.5
144	8/21/20 8:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06								1.5
144	8/31/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07								1.4
144	9/3/20 9:25 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21								1.5
144	9/4/20 9:02 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21								
144	9/15/20 8:52 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1
144	9/16/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1
144	9/17/20 9:07 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.9
144	9/18/20 8:31 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1
144	9/28/20 8:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05								0.8
144	9/29/20 9:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05								0.8
144	10/1/20 9:04 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46								0.7
002	3/30/20 9:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.08	0.82	0.9								
002	4/3/20 9:12 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.83	0.96	0.96								
002	4/6/20 9:12 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.04								
002	4/9/20 8:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.64	0.71	0.71								
002	4/13/20 8:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.56	0.56	0.56								
002	4/15/20 8:43 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.56								
002	4/20/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.67								
002	4/27/20 8:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.6	0.82	0.82								
002	4/29/20 8:43 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.61								
002	5/4/20 8:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.01								
002	5/11/20 9:02 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.23	0.23	0.35								
002	5/13/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.23								
002	5/21/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
002	5/26/20 9:11 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
002	5/28/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
002	6/4/20 8:26 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.03								
002	6/9/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
002	6/11/20 8:47 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.74	0.74	0.74								
002	6/17/20 9:10 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
002	7/7/20 9:11 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11								1.5
002	7/8/20 9:01 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1.3
002	7/10/20 9:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1.2
002	7/14/20 9:41 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69								1.3
002	7/15/20 9:13 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76								1.7
002	7/17/20 9:54 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18								1.5
002	8/18/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4								0.5
002	8/19/20 9:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3								0.7
002	8/20/20 8:54 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22								1.2
002	8/21/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06								1.1
002	8/31/20 9:16 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07								1.1
002	9/3/20 9:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21								1
002	9/4/20 8:54 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21								1.8
002	9/15/20 8:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.9
002	9/16/20 8:34 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1
002	9/17/20 9:04 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.8
002	9/18/20 8:28 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.9
002	9/28/20 8:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05								0.8
002	9/29/20 9:05 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05								0.6
002	10/1/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46								0.7

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
003	3/30/20 9:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.08	0.82	0.9								
003	4/3/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.83	0.96	0.96								
003	4/6/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.04								
003	4/9/20 8:12 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.64	0.71	0.71								
003	4/13/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.56	0.56	0.56								
003	4/15/20 8:35 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.56								
003	4/20/20 9:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.67								
003	4/27/20 8:36 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.6	0.82	0.82								
003	4/29/20 8:33 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.61								
003	5/4/20 8:41 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.01								
003	5/11/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.23	0.23	0.35								
003	5/13/20 8:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.23								
003	5/21/20 8:43 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
003	5/26/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
003	5/28/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
003	6/4/20 8:18 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.03								
003	6/9/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
003	6/11/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.74	0.74	0.74								
003	6/17/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
003	7/7/20 8:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11								1.1
003	7/8/20 8:44 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1.3
003	7/10/20 8:58 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1.5
003	7/14/20 9:26 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69								1.5
003	7/15/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76								1
003	7/17/20 9:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18								1.4
003	8/18/20 9:06 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4								0.5
003	8/19/20 9:15 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3								0.7
003	8/20/20 8:41 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22								0.9
003	8/21/20 8:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06								1
003	8/31/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07								1
003	9/3/20 9:04 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21								0.9
003	9/4/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21								1.2
003	9/15/20 8:36 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.5
003	9/16/20 8:24 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.9
003	9/17/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.9
003	9/18/20 8:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.7
003	9/28/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05								0.8
003	9/29/20 8:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05								0.6
003	10/1/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46								0.7
004	7/7/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11								1.5
004	7/8/20 8:34 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1.2
004	7/10/20 8:44 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1.2
004	7/14/20 9:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69								1.4
004	7/15/20 8:46 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76								1.2
004	7/17/20 9:26 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18								1.1
004	8/18/20 8:51 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4								1
004	8/19/20 8:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3								0.6
004	8/20/20 8:32 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22								1
004	8/21/20 8:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06								1
004	8/31/20 8:47 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07								0.9
004	9/3/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21								0.6
004	9/4/20 8:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21								1.4
004	9/15/20 8:22 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.7
004	9/16/20 8:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1
004	9/17/20 8:40 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1
004	9/18/20 8:06 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.7
004	9/28/20 8:25 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05								0.8
004	9/29/20 8:44 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05								0.7
004	10/1/20 8:37 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46								0.7
005	2/10/20 10:31 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.16	0.16	2.812	0.47	14.53	107.8	0.962	6.62	7.54	
005	2/24/20 10:44 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	6.22	0.33	14.35	116.1	0.668	5.27	7.51	
005	3/10/20 9:47 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0	9.401	0.3	12.97	113.5	0.604	2.26	7.61	
005	3/26/20 8:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.35								
005	3/30/20 8:41 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.08	0.82	0.9								
005	4/3/20 8:16 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.83	0.96	0.96								
005	4/6/20 7:48 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.04								
005	4/8/20 8:32 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.07	0.07								
005	4/9/20 7:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.64	0.71	0.71								
005	4/13/20 8:04 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.56	0.56	0.56								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
005	4/15/20 7:53 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.56								
005	4/20/20 8:36 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.67								
005	4/22/20 8:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.33	0.33								
005	4/27/20 7:57 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.6	0.82	0.82								
005	4/29/20 7:59 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.61								
005	5/4/20 7:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.01								
005	5/5/20 8:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	5/11/20 7:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.23	0.23	0.35								
005	5/13/20 8:05 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.23								
005	5/19/20 9:09 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	5/21/20 7:50 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	5/26/20 8:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	5/28/20 8:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	6/3/20 8:13 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.03	0.03								
005	6/4/20 7:32 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.03								
005	6/9/20 7:57 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	6/11/20 7:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.74	0.74	0.74								
005	6/16/20 8:56 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	6/17/20 8:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	6/29/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.19	1.38	1.4								
005	7/7/20 8:35 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.11								1
005	7/8/20 8:27 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								1.3
005	7/10/20 8:37 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	7/13/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.07	0.08								
005	7/14/20 9:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.62	0.69	0.69								1.3
005	7/15/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.07	0.69	0.76								
005	7/17/20 9:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.11	0.11	0.18								1.1
005	7/29/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	8/10/20 9:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	8/18/20 8:45 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.16	0.24	0.4								0.6
005	8/19/20 8:55 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.06	0.22	0.3								0.6
005	8/20/20 8:21 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.22								1
005	8/21/20 8:11 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.06								0.9
005	8/24/20 9:02 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	1.33	1.33								
005	8/31/20 8:43 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.07								0.8
005	9/3/20 8:39 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.01	0.21	0.21								0.5
005	9/4/20 8:14 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.01	0.21								1
005	9/8/20 9:05 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	9/15/20 8:17 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.6
005	9/16/20 8:08 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.7
005	9/17/20 8:31 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.7
005	9/18/20 8:01 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								0.8
005	9/22/20 9:06 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	9/28/20 8:20 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.05	0.05	0.05								0.8
005	9/29/20 8:38 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.05	0.05								0.6
005	10/1/20 8:30 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.46	0.46								0.7
005	10/6/20 9:03 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	10/20/20 9:06 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
005	11/2/20 8:58 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.62	0.62								
005	11/18/20 10:15 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0.05								
005	11/30/20 10:00 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0.85	0.85	0.85								
005	12/15/20 10:25 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0.06	0.06								
005	12/28/20 10:15 AM	S	CHARLES RIVER	UPPER BASIN	0.1	0	0	0								
206	3/30/20 8:52 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.08	0.82	0.9								
206	4/3/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.83	0.96	0.96								
206	4/6/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.04								
206	4/9/20 7:40 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.64	0.71	0.71								
206	4/13/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.56	0.56	0.56								
206	4/15/20 8:03 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.56								
206	4/20/20 8:48 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.67								
206	4/27/20 8:08 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.6	0.82	0.82								
206	4/29/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.61								
206	5/4/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.01								
206	5/11/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.23	0.23	0.35								
206	5/13/20 8:13 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.23								
206	5/21/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
206	5/26/20 8:17 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
206	5/28/20 8:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
206	6/4/20 7:43 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.03								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
206	6/9/20 8:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
206	6/11/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.74	0.74	0.74								
206	6/17/20 8:25 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
006	7/7/20 8:29 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11								1.5
006	7/8/20 8:22 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.2
006	7/10/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
006	7/14/20 9:02 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69								1.1
006	7/15/20 8:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76								1
006	7/17/20 9:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18								2
006	8/18/20 8:39 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4								0.7
006	8/19/20 8:47 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3								0.6
006	8/20/20 8:14 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22								1.1
006	8/21/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06								0.9
006	8/31/20 8:37 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07								0.6
006	9/3/20 8:32 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21								0.7
006	9/4/20 8:04 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21								1
006	9/15/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.5
006	9/16/20 8:04 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
006	9/17/20 8:28 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.8
006	9/18/20 7:57 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.8
006	9/28/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05								0.8
006	9/29/20 8:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05								0.5
006	10/1/20 8:25 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46								0.6
007	3/30/20 9:02 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.08	0.82	0.9								
007	4/3/20 8:40 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.83	0.96	0.96								
007	4/6/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.04								
007	4/9/20 7:51 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.64	0.71	0.71								
007	4/13/20 8:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.56	0.56	0.56								
007	4/15/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.56								
007	4/20/20 9:01 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.67								
007	4/27/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.6	0.82	0.82								
007	4/29/20 8:13 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.61								
007	5/4/20 8:14 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.01								
007	5/11/20 8:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.23	0.23	0.35								
007	5/13/20 8:23 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.23								
007	5/21/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
007	5/26/20 8:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
007	5/28/20 8:50 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
007	6/4/20 7:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.03								
007	6/9/20 8:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
007	6/11/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.74	0.74	0.74								
007	6/17/20 8:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
007	7/7/20 8:16 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11								1.3
007	7/7/20 8:16 AM	B	CHARLES RIVER	MID-BASIN	4.3	0	0	0.11								
007	7/8/20 8:09 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.3
007	7/8/20 8:09 AM	B	CHARLES RIVER	MID-BASIN	3.9	0	0	0								
007	7/10/20 8:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
007	7/10/20 8:24 AM	B	CHARLES RIVER	MID-BASIN	4	0	0	0								
007	7/14/20 8:50 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69								1.5
007	7/14/20 8:50 AM	B	CHARLES RIVER	MID-BASIN	4.3	0.62	0.69	0.69								
007	7/15/20 8:29 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76								1.7
007	7/15/20 8:29 AM	B	CHARLES RIVER	MID-BASIN	4	0.07	0.69	0.76								
007	7/17/20 8:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18								1.5
007	7/17/20 8:59 AM	B	CHARLES RIVER	MID-BASIN	4.1	0.11	0.11	0.18								
007	8/18/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4								1.1
007	8/18/20 8:30 AM	B	CHARLES RIVER	MID-BASIN	4.2	0.16	0.24	0.4								
007	8/19/20 8:39 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3								0.7
007	8/19/20 8:39 AM	B	CHARLES RIVER	MID-BASIN	4.2	0.06	0.22	0.3								
007	8/20/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22								1.5
007	8/20/20 8:05 AM	B	CHARLES RIVER	MID-BASIN	4.2	0	0.06	0.22								
007	8/21/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06								1.3
007	8/21/20 7:59 AM	B	CHARLES RIVER	MID-BASIN	4.1	0	0	0.06								
007	8/31/20 8:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07								0.8
007	8/31/20 8:24 AM	B	CHARLES RIVER	MID-BASIN	4.2	0	0	0.07								
007	9/3/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21								0.6
007	9/3/20 8:21 AM	B	CHARLES RIVER	MID-BASIN	4.2	0.01	0.21	0.21								
007	9/4/20 7:56 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21								0.9
007	9/4/20 7:56 AM	B	CHARLES RIVER	MID-BASIN	4.6	0	0.01	0.21								
007	9/15/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
007	9/15/20 8:05 AM	B	CHARLES RIVER	MID-BASIN	4.2	0	0	0								
007	9/16/20 7:54 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
007	9/16/20 7:54 AM	B	CHARLES RIVER	MID-BASIN	4.1	0	0	0								
007	9/17/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
007	9/17/20 8:21 AM	B	CHARLES RIVER	MID-BASIN	4.7	0	0	0								
007	9/18/20 7:51 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.7
007	9/18/20 7:51 AM	B	CHARLES RIVER	MID-BASIN	4.2	0	0	0								
007	9/28/20 8:04 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05								1
007	9/28/20 8:04 AM	B	CHARLES RIVER	MID-BASIN	4.2	0.05	0.05	0.05								
007	9/29/20 8:25 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05								1.2
007	9/29/20 8:25 AM	B	CHARLES RIVER	MID-BASIN	4.3	0	0.05	0.05								
007	10/1/20 8:14 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46								0.8
007	10/1/20 8:14 AM	B	CHARLES RIVER	MID-BASIN	4.3	0	0.46	0.46								
145	3/30/20 8:14 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.08	0.82	0.9								
145	4/3/20 8:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.83	0.96	0.96								
145	4/6/20 7:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.04								
145	4/9/20 7:16 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.64	0.71	0.71								
145	4/13/20 7:50 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.56	0.56	0.56								
145	4/15/20 7:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.56								
145	4/20/20 8:25 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.67								
145	4/27/20 7:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.6	0.82	0.82								
145	4/29/20 7:49 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.61								
145	5/4/20 7:37 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.01								
145	5/11/20 7:40 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.23	0.23	0.35								
145	5/13/20 7:57 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.23								
145	5/21/20 7:36 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
145	5/26/20 7:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
145	5/28/20 8:17 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
145	6/4/20 7:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.03								
145	6/9/20 7:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
145	6/11/20 7:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.74	0.74	0.74								
145	6/17/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
145	7/7/20 8:19 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11								1.4
145	7/8/20 8:13 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
145	7/10/20 8:27 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
145	7/14/20 8:58 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69								1.5
145	7/15/20 8:31 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76								1.2
145	7/17/20 9:04 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18								1.4
145	8/18/20 8:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4								0.9
145	8/19/20 8:41 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3								0.6
145	8/20/20 8:09 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22								1
145	8/21/20 8:02 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06								1.2
145	8/31/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07								0.6
145	9/3/20 8:25 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21								0.7
145	9/4/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21								1
145	9/15/20 8:08 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.6
145	9/16/20 7:57 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.8
145	9/17/20 8:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
145	9/18/20 7:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.7
145	9/28/20 8:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05								1
145	9/29/20 8:27 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05								0.8
145	10/1/20 8:18 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46								0.8
008	7/7/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11								1
008	7/7/20 8:12 AM	B	CHARLES RIVER	MID-BASIN	5.7	0	0	0.11								
008	7/8/20 8:03 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.2
008	7/8/20 8:03 AM	B	CHARLES RIVER	MID-BASIN	4.1	0	0	0								
008	7/10/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
008	7/10/20 8:21 AM	B	CHARLES RIVER	MID-BASIN	5.6	0	0	0								
008	7/14/20 8:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69								1.7
008	7/14/20 8:45 AM	B	CHARLES RIVER	MID-BASIN	3.7	0.62	0.69	0.69								
008	7/15/20 8:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76								1.5
008	7/15/20 8:24 AM	B	CHARLES RIVER	MID-BASIN	3.7	0.07	0.69	0.76								
008	7/17/20 8:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18								1.4
008	7/17/20 8:53 AM	B	CHARLES RIVER	MID-BASIN	4.1	0.11	0.11	0.18								
008	8/18/20 8:26 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4								1.4
008	8/18/20 8:26 AM	B	CHARLES RIVER	MID-BASIN	3.8	0.16	0.24	0.4								
008	8/19/20 8:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3								0.8
008	8/19/20 8:35 AM	B	CHARLES RIVER	MID-BASIN	3.8	0.06	0.22	0.3								
008	8/20/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22								1.1

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
008	8/20/20 7:59 AM	B	CHARLES RIVER	MID-BASIN	3.7	0	0.06	0.22								
008	8/21/20 7:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06								1.4
008	8/21/20 7:53 AM	B	CHARLES RIVER	MID-BASIN	3.7	0	0	0.06								
008	8/31/20 8:18 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07								0.7
008	8/31/20 8:18 AM	B	CHARLES RIVER	MID-BASIN	2.7	0	0	0.07								
008	9/3/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21								0.6
008	9/3/20 8:15 AM	B	CHARLES RIVER	MID-BASIN	3.9	0.01	0.21	0.21								
008	9/4/20 7:52 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21								1
008	9/4/20 7:52 AM	B	CHARLES RIVER	MID-BASIN	3.7	0	0.01	0.21								
008	9/15/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.6
008	9/15/20 8:00 AM	B	CHARLES RIVER	MID-BASIN	3.6	0	0	0								
008	9/16/20 7:51 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
008	9/16/20 7:51 AM	B	CHARLES RIVER	MID-BASIN	3.7	0	0	0								
008	9/17/20 8:17 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.1
008	9/17/20 8:17 AM	B	CHARLES RIVER	MID-BASIN	3.6	0	0	0								
008	9/18/20 7:48 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
008	9/18/20 7:48 AM	B	CHARLES RIVER	MID-BASIN	3.8	0	0	0								
008	9/28/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05								1
008	9/28/20 8:00 AM	B	CHARLES RIVER	MID-BASIN	4	0.05	0.05	0.05								
008	9/29/20 8:22 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05								1.1
008	9/29/20 8:22 AM	B	CHARLES RIVER	MID-BASIN	4	0	0.05	0.05								
008	10/1/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46								0.8
008	10/1/20 8:12 AM	B	CHARLES RIVER	MID-BASIN	3.9	0	0.46	0.46								
009	3/30/20 8:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.08	0.82	0.9								
009	4/3/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.83	0.96	0.96								
009	4/6/20 7:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.04								
009	4/9/20 7:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.64	0.71	0.71								
009	4/13/20 7:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.56	0.56	0.56								
009	4/15/20 7:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.56								
009	4/20/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.67								
009	4/27/20 7:36 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.6	0.82	0.82								
009	4/29/20 7:42 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.61								
009	5/4/20 7:24 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.01								
009	5/11/20 7:28 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.23	0.23	0.35								
009	5/13/20 7:49 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.23								
009	5/21/20 7:29 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
009	5/26/20 7:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
009	5/28/20 8:02 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
009	6/4/20 7:13 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.03								
009	6/9/20 7:33 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
009	6/11/20 7:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.74	0.74	0.74								
009	6/17/20 7:50 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
009	7/7/20 8:06 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11								1.1
009	7/7/20 8:06 AM	B	CHARLES RIVER	MID-BASIN	9.2	0	0	0.11								
009	7/8/20 7:50 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.9
009	7/8/20 7:50 AM	B	CHARLES RIVER	MID-BASIN	8.7	0	0	0								
009	7/10/20 8:17 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
009	7/10/20 8:17 AM	B	CHARLES RIVER	MID-BASIN	8.8	0	0	0								
009	7/14/20 8:37 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69								2
009	7/14/20 8:37 AM	B	CHARLES RIVER	MID-BASIN	8.6	0.62	0.69	0.69								
009	7/15/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76								1.7
009	7/15/20 8:21 AM	B	CHARLES RIVER	MID-BASIN	8.9	0.07	0.69	0.76								
009	7/17/20 8:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18								1.5
009	7/17/20 8:44 AM	B	CHARLES RIVER	MID-BASIN	8.5	0.11	0.11	0.18								
009	8/18/20 8:21 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4								1.5
009	8/18/20 8:21 AM	B	CHARLES RIVER	MID-BASIN	8.2	0.16	0.24	0.4								
009	8/19/20 8:27 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3								1
009	8/19/20 8:27 AM	B	CHARLES RIVER	MID-BASIN	6.2	0.06	0.22	0.3								
009	8/20/20 7:52 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22								1.4
009	8/20/20 7:52 AM	B	CHARLES RIVER	MID-BASIN	7.3	0	0.06	0.22								
009	8/21/20 7:47 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06								1.5
009	8/21/20 7:47 AM	B	CHARLES RIVER	MID-BASIN	8.8	0	0	0.06								
009	8/31/20 8:07 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07								0.6
009	8/31/20 8:07 AM	B	CHARLES RIVER	MID-BASIN	8.8	0	0	0.07								
009	9/3/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21								0.5
009	9/3/20 8:05 AM	B	CHARLES RIVER	MID-BASIN	8.7	0.01	0.21	0.21								
009	9/4/20 7:42 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21								1
009	9/4/20 7:42 AM	B	CHARLES RIVER	MID-BASIN	7.1	0	0.01	0.21								
009	9/15/20 7:52 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.7

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
009	9/15/20 7:52 AM	B	CHARLES RIVER	MID-BASIN	8.9	0	0	0								
009	9/16/20 7:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.8
009	9/16/20 7:44 AM	B	CHARLES RIVER	MID-BASIN	8.5	0	0	0								
009	9/17/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.1
009	9/17/20 8:15 AM	B	CHARLES RIVER	MID-BASIN	8.4	0	0	0								
009	9/18/20 7:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
009	9/18/20 7:44 AM	B	CHARLES RIVER	MID-BASIN	8.5	0	0	0								
009	9/28/20 7:49 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05								1
009	9/28/20 7:49 AM	B	CHARLES RIVER	MID-BASIN	8.9	0.05	0.05	0.05								
009	9/29/20 8:18 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05								1
009	9/29/20 8:18 AM	B	CHARLES RIVER	MID-BASIN	8.7	0	0.05	0.05								
009	10/1/20 9:56 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46								1.1
009	10/1/20 9:56 AM	B	CHARLES RIVER	MID-BASIN	8.8	0	0.46	0.46								
010	7/7/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11								1
010	7/7/20 7:59 AM	B	CHARLES RIVER	MID-BASIN	9.4	0	0	0.11								
010	7/8/20 7:44 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.8
010	7/8/20 7:44 AM	B	CHARLES RIVER	MID-BASIN	8.6	0	0	0								
010	7/10/20 8:09 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
010	7/10/20 8:09 AM	B	CHARLES RIVER	MID-BASIN	9	0	0	0								
010	7/14/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69								1.7
010	7/14/20 8:30 AM	B	CHARLES RIVER	MID-BASIN	9.1	0.62	0.69	0.69								
010	7/15/20 8:17 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76								1.6
010	7/15/20 8:17 AM	B	CHARLES RIVER	MID-BASIN	8.7	0.07	0.69	0.76								
010	7/17/20 8:38 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18								1.6
010	7/17/20 8:38 AM	B	CHARLES RIVER	MID-BASIN	8.8	0.11	0.11	0.18								
010	8/18/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4								1.5
010	8/18/20 8:15 AM	B	CHARLES RIVER	MID-BASIN	9.3	0.16	0.24	0.4								
010	8/19/20 8:22 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3								0.6
010	8/19/20 8:22 AM	B	CHARLES RIVER	MID-BASIN	8.9	0.06	0.22	0.3								
010	8/20/20 7:43 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22								1.5
010	8/20/20 7:43 AM	B	CHARLES RIVER	MID-BASIN	4.2	0	0.06	0.22								
010	8/21/20 7:41 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06								1.4
010	8/21/20 7:41 AM	B	CHARLES RIVER	MID-BASIN	9.2	0	0	0.06								
010	8/31/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07								0.7
010	8/31/20 8:00 AM	B	CHARLES RIVER	MID-BASIN	7	0	0	0.07								
010	9/3/20 7:59 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21								0.6
010	9/3/20 7:59 AM	B	CHARLES RIVER	MID-BASIN	9.2	0.01	0.21	0.21								
010	9/4/20 7:35 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21								1.1
010	9/4/20 7:35 AM	B	CHARLES RIVER	MID-BASIN	8.2	0	0.01	0.21								
010	9/15/20 7:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.7
010	9/15/20 7:45 AM	B	CHARLES RIVER	MID-BASIN	9.2	0	0	0								
010	9/16/20 7:39 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.2
010	9/16/20 7:39 AM	B	CHARLES RIVER	MID-BASIN	8.9	0	0	0								
010	9/17/20 8:10 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.4
010	9/17/20 8:10 AM	B	CHARLES RIVER	MID-BASIN	8.9	0	0	0								
010	9/18/20 7:41 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.2
010	9/18/20 7:41 AM	B	CHARLES RIVER	MID-BASIN	8.9	0	0	0								
010	9/28/20 7:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05								1.1
010	9/28/20 7:45 AM	B	CHARLES RIVER	MID-BASIN	8.9	0.05	0.05	0.05								
010	9/29/20 8:15 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05								1
010	9/29/20 8:15 AM	B	CHARLES RIVER	MID-BASIN	9.1	0	0.05	0.05								
010	10/1/20 8:04 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46								1.1
010	10/1/20 8:04 AM	B	CHARLES RIVER	MID-BASIN	8.9	0	0.46	0.46								
210	3/30/20 9:29 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.08	0.82	0.9								
210	4/3/20 8:46 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.83	0.96	0.96								
210	4/6/20 8:30 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.04								
210	4/9/20 7:56 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.64	0.71	0.71								
210	4/13/20 8:46 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.56	0.56	0.56								
210	4/15/20 8:18 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.56								
210	4/20/20 9:08 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.67								
210	4/27/20 8:26 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.6	0.82	0.82								
210	4/29/20 8:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.61								
210	5/4/20 8:26 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.01								
210	5/11/20 8:37 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.23	0.23	0.35								
210	5/13/20 8:29 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.23								
210	5/21/20 8:20 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
210	5/26/20 8:45 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
210	5/28/20 8:42 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
210	6/4/20 8:00 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.03								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
210	6/9/20 8:37 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
210	6/11/20 8:27 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.74	0.74	0.74								
210	6/17/20 8:42 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								
210	7/7/20 7:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.11								1.2
210	7/8/20 8:40 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.9
210	7/10/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1
210	7/14/20 8:26 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.62	0.69	0.69								1.8
210	7/15/20 8:13 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.07	0.69	0.76								1.6
210	7/17/20 8:34 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.11	0.11	0.18								1.7
210	8/18/20 8:12 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.16	0.24	0.4								1.5
210	8/19/20 8:19 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.06	0.22	0.3								0.6
210	8/20/20 7:41 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.06	0.22								1.6
210	8/21/20 7:38 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.06								1.8
210	8/31/20 7:55 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0.07								1
210	9/3/20 7:53 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.01	0.21	0.21								0.8
210	9/4/20 7:32 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.01	0.21								1
210	9/15/20 7:41 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								0.9
210	9/16/20 7:36 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.3
210	9/17/20 8:05 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.4
210	9/18/20 7:38 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0	0								1.2
210	9/28/20 7:40 AM	S	CHARLES RIVER	MID-BASIN	0.1	0.05	0.05	0.05								1
210	9/29/20 8:11 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.05	0.05								1
210	10/1/20 8:02 AM	S	CHARLES RIVER	MID-BASIN	0.1	0	0.46	0.46								1
166	1/2/20 10:13 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.27	2.533	0.72	12.95	95.4	1.455	5.22	7.49	
166	1/2/20 10:13 AM	B	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.27	2.51	0.72	12.89	95	1.455	7.27	7.45	
166	1/13/20 10:15 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.01	0.03	0.03	5.278	0.51	13.19	104.4	1.034	1.81	7.37	
166	1/13/20 10:15 AM	B	CHARLES RIVER	LOWER BASIN	0.1	0.01	0.03	0.03	5.236	0.51	13.15	104	1.033	3.08	7.36	
166	1/28/20 10:25 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	2.642	0.54	13.71	101.2	1.096	1.58	7.43	
166	1/28/20 10:25 AM	B	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	2.623	0.54	13.72	101.3	1.095	4.88	7.36	
166	2/10/20 10:17 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.16	0.16	0.16	2.353	0.68	13.98	102.5	1.371	3.1	7.46	
166	2/10/20 10:17 AM	B	CHARLES RIVER	LOWER BASIN	0.1	0.16	0.16	0.16	2.374	0.68	13.95	102.3	1.371	10.5	7.46	
166	2/24/20 10:29 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	3.333	0.49	14	105.2	1	2.8	7.42	
166	2/24/20 10:29 AM	B	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	2.724	0.49	14.3	105.8	0.999	1.96	7.41	
166	3/10/20 9:29 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	6.787	0.42	12.64	103.9	0.847	2.72	7.51	
166	3/10/20 9:29 AM	B	CHARLES RIVER	LOWER BASIN	0.1	0	0	0	6.564	0.42	12.82	104.8	0.863	3.15	7.53	
166	3/26/20 7:48 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.35								
166	4/8/20 8:16 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.07	0.07	0.07								
166	4/22/20 8:18 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.33	0.33								
166	5/5/20 8:36 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
166	5/19/20 8:54 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
166	6/3/20 8:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.01	0.03	0.03								
166	6/16/20 8:29 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
166	6/29/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.19	1.38	1.4								
166	7/13/20 8:30 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.07	0.07	0.08								
166	7/29/20 8:28 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
166	8/10/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
166	8/24/20 8:41 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	1.33	1.33								
166	9/8/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
166	9/22/20 8:38 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
166	10/6/20 8:42 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
166	10/20/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
166	11/2/20 8:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.62	0.62								
166	11/18/20 10:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.05								
166	11/30/20 9:45 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.85	0.85	0.85								
166	12/15/20 10:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.06	0.06								
166	12/28/20 9:55 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
011	3/30/20 8:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.08	0.82	0.9								
011	4/3/20 7:52 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.83	0.96	0.96								
011	4/6/20 7:10 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.04								
011	4/9/20 7:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.64	0.71	0.71								
011	4/13/20 7:35 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.56	0.56	0.56								
011	4/15/20 7:25 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.56								
011	4/20/20 8:04 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.67								
011	4/27/20 7:25 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.6	0.82	0.82								
011	4/29/20 7:35 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.01	0.61								
011	5/4/20 7:18 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.01								
011	5/11/20 7:20 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.23	0.23	0.35								
011	5/13/20 7:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.23								
011	5/21/20 7:17 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
011	5/26/20 7:15 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
011	5/28/20 7:52 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
011	6/4/20 7:04 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.01	0.03								
011	6/9/20 7:20 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
011	6/11/20 7:05 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.74	0.74	0.74								
011	6/17/20 7:40 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								
011	7/7/20 7:46 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.11								1.3
011	7/7/20 7:46 AM	B	CHARLES RIVER	LOWER BASIN	6	0	0	0.11								
011	7/8/20 7:33 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								0.8
011	7/8/20 7:33 AM	B	CHARLES RIVER	LOWER BASIN	6.2	0	0	0								
011	7/10/20 7:55 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								0.8
011	7/10/20 7:55 AM	B	CHARLES RIVER	LOWER BASIN	5.1	0	0	0								
011	7/14/20 8:20 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.62	0.69	0.69								1.6
011	7/14/20 8:20 AM	B	CHARLES RIVER	LOWER BASIN	6	0.62	0.69	0.69								
011	7/15/20 8:07 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.07	0.69	0.76								1.6
011	7/15/20 8:07 AM	B	CHARLES RIVER	LOWER BASIN	5.7	0.07	0.69	0.76								
011	7/17/20 8:27 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.11	0.11	0.18								1.9
011	7/17/20 8:27 AM	B	CHARLES RIVER	LOWER BASIN	6.1	0.11	0.11	0.18								
011	8/18/20 8:05 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.16	0.24	0.4								1.4
011	8/18/20 8:05 AM	B	CHARLES RIVER	LOWER BASIN	6.1	0.16	0.24	0.4								
011	8/19/20 8:13 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.06	0.22	0.3								0.6
011	8/19/20 8:13 AM	B	CHARLES RIVER	LOWER BASIN	5.5	0.06	0.22	0.3								
011	8/20/20 7:30 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.06	0.22								1.7
011	8/20/20 7:30 AM	B	CHARLES RIVER	LOWER BASIN	5.9	0	0.06	0.22								
011	8/21/20 7:18 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.06								1.8
011	8/21/20 7:18 AM	B	CHARLES RIVER	LOWER BASIN	6.5	0	0	0.06								
011	8/31/20 7:45 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0.07								1.4
011	8/31/20 7:45 AM	B	CHARLES RIVER	LOWER BASIN	6.9	0	0	0.07								
011	9/3/20 7:45 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.01	0.21	0.21								0.7
011	9/3/20 7:45 AM	B	CHARLES RIVER	LOWER BASIN	5.8	0.01	0.21	0.21								
011	9/4/20 7:24 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.01	0.21								1
011	9/4/20 7:24 AM	B	CHARLES RIVER	LOWER BASIN	5.3	0	0.01	0.21								
011	9/15/20 7:37 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								1.1
011	9/15/20 7:37 AM	B	CHARLES RIVER	LOWER BASIN	6.3	0	0	0								
011	9/16/20 7:28 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								1.3
011	9/16/20 7:28 AM	B	CHARLES RIVER	LOWER BASIN	5.8	0	0	0								
011	9/17/20 8:00 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								1.4
011	9/17/20 8:00 AM	B	CHARLES RIVER	LOWER BASIN	5.9	0	0	0								
011	9/18/20 7:30 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0	0								1.4
011	9/18/20 7:30 AM	B	CHARLES RIVER	LOWER BASIN	5.9	0	0	0								
011	9/28/20 7:30 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0.05	0.05	0.05								1
011	9/28/20 7:30 AM	B	CHARLES RIVER	LOWER BASIN	6.4	0.05	0.05	0.05								
011	9/29/20 8:04 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.05	0.05								1.1
011	9/29/20 8:04 AM	B	CHARLES RIVER	LOWER BASIN	5.9	0	0.05	0.05								
011	10/1/20 7:56 AM	S	CHARLES RIVER	LOWER BASIN	0.1	0	0.46	0.46								1.2
011	10/1/20 7:56 AM	B	CHARLES RIVER	LOWER BASIN	5.9	0	0.46	0.46								
174	3/31/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82								
174	4/2/20 9:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13								
174	4/7/20 9:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	4/14/20 9:03 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56								
174	4/16/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	4/21/20 9:22 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33								
174	4/28/20 8:54 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83								
174	4/30/20 8:28 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01								
174	5/6/20 7:54 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01								
174	5/12/20 9:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23								
174	5/18/20 9:24 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04								
174	5/25/20 9:26 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	5/27/20 9:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	6/1/20 9:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09								
174	6/8/20 9:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14								
174	6/10/20 9:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	6/15/20 9:17 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	7/22/20 8:04 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11								
174	7/23/20 8:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68								
174	7/24/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68								
174	7/28/20 9:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	7/30/20 7:55 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	8/11/20 8:25 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								

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174	8/12/20 8:13 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	8/13/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	8/14/20 8:07 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	8/26/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	8/27/20 8:41 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18								
174	8/28/20 9:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18								
174	9/9/20 8:31 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	9/10/20 9:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25								
174	9/11/20 8:04 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25								
174	9/21/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	9/23/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	9/24/20 8:28 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
174	9/25/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
308	3/31/20 8:52 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82								
308	4/2/20 9:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13								
308	4/7/20 9:22 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
308	4/14/20 9:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56								
308	4/16/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
308	4/21/20 9:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33								
308	4/28/20 9:08 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83								
308	4/30/20 8:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01								
308	5/6/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01								
308	5/12/20 9:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23								
308	5/18/20 9:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04								
308	5/25/20 9:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
308	5/27/20 9:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
308	6/1/20 9:44 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09								
308	6/8/20 9:24 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14								
308	6/10/20 9:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
308	6/15/20 9:37 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	3/31/20 8:47 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82								
074	4/2/20 9:37 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13								
074	4/7/20 9:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	4/14/20 9:11 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56								
074	4/16/20 8:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	4/21/20 9:26 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33								
074	4/28/20 9:04 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83								
074	4/30/20 8:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01								
074	5/6/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01								
074	5/12/20 9:14 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23								
074	5/18/20 9:36 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04								
074	5/25/20 9:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	5/27/20 9:12 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	6/1/20 9:41 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09								
074	6/8/20 9:13 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14								
074	6/10/20 9:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	6/15/20 9:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	7/21/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	7/22/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11								
074	7/23/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68								
074	7/24/20 8:06 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68								
074	7/28/20 9:25 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	7/30/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	8/11/20 8:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	8/12/20 8:17 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	8/13/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	8/14/20 8:14 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	8/26/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	8/27/20 8:46 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18								
074	8/28/20 9:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18								
074	9/9/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	9/10/20 9:12 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25								
074	9/11/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25								
074	9/21/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	9/23/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	9/24/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
074	9/25/20 8:44 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	3/31/20 8:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82								
277	4/2/20 9:25 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
277	4/7/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	4/14/20 8:33 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56								
277	4/16/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	4/21/20 8:55 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33								
277	4/28/20 8:37 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83								
277	4/30/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01								
277	5/6/20 7:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01								
277	5/12/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23								
277	5/18/20 9:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04								
277	5/25/20 9:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	5/27/20 8:42 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	6/1/20 9:22 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09								
277	6/8/20 8:47 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14								
277	6/10/20 8:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	6/15/20 8:44 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	7/21/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	7/22/20 7:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11								
277	7/23/20 7:52 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68								
277	7/24/20 7:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68								
277	7/28/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	7/30/20 7:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	8/11/20 8:12 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	8/12/20 7:55 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	8/13/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	8/14/20 7:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	8/26/20 8:24 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	8/27/20 8:29 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18								
277	8/28/20 8:43 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18								
277	9/9/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	9/10/20 8:51 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25								
277	9/11/20 7:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25								
277	9/21/20 8:22 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	9/23/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	9/24/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
277	9/25/20 8:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	3/31/20 8:41 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82								
172	4/2/20 9:27 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13								
172	4/7/20 8:55 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	4/14/20 8:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56								
172	4/16/20 8:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	4/21/20 9:03 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33								
172	4/28/20 8:43 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83								
172	4/30/20 8:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01								
172	5/6/20 7:44 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01								
172	5/12/20 8:57 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23								
172	5/18/20 9:07 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04								
172	5/25/20 9:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	5/27/20 8:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	6/1/20 9:28 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09								
172	6/8/20 8:53 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14								
172	6/10/20 8:46 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	6/15/20 8:52 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	7/21/20 7:47 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	7/22/20 7:50 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11								
172	7/23/20 7:58 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68								
172	7/24/20 7:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68								
172	7/28/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	7/30/20 7:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	8/11/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	8/12/20 7:58 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	8/13/20 8:36 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	8/14/20 7:52 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	8/26/20 8:27 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	8/27/20 8:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18								
172	8/28/20 8:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18								
172	9/9/20 8:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	9/10/20 8:54 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25								
172	9/11/20 7:52 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25								
172	9/21/20 8:27 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
172	9/23/20 8:04 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	9/24/20 8:22 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
172	9/25/20 8:21 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	3/31/20 8:34 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82								
276	4/2/20 9:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13								
276	4/7/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	4/14/20 8:27 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56								
276	4/16/20 8:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	4/21/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33								
276	4/28/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83								
276	4/30/20 8:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01								
276	5/6/20 7:34 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01								
276	5/12/20 8:41 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23								
276	5/18/20 8:51 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04								
276	5/25/20 9:03 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	5/27/20 8:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	6/1/20 9:17 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09								
276	6/8/20 8:36 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14								
276	6/10/20 8:31 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	6/15/20 8:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	7/21/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	7/22/20 7:42 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11								
276	7/23/20 7:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68								
276	7/24/20 7:35 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68								
276	7/28/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	7/30/20 7:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	8/11/20 8:08 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	8/12/20 7:51 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	8/13/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	8/14/20 7:42 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	8/26/20 8:16 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	8/27/20 8:23 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18								
276	8/28/20 8:38 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18								
276	9/9/20 8:06 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	9/10/20 8:45 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25								
276	9/11/20 7:37 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25								
276	9/21/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	9/23/20 7:55 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	9/24/20 8:16 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
276	9/25/20 8:12 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	3/31/20 8:29 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.08	0.82								
070	4/2/20 9:10 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.13	0.13	0.13								
070	4/7/20 8:36 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	4/14/20 8:16 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.56	0.56								
070	4/16/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	4/21/20 8:33 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.33	0.33	0.33								
070	4/28/20 8:23 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.61	0.83								
070	4/30/20 8:02 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.01								
070	5/6/20 7:26 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.01	0.01	0.01								
070	5/12/20 8:24 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.23	0.23								
070	5/18/20 8:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.04								
070	5/25/20 8:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	5/27/20 8:25 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	6/1/20 9:03 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.09								
070	6/8/20 8:20 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0.14								
070	6/10/20 8:15 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	6/15/20 8:18 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	7/21/20 8:05 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	7/22/20 7:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.11	0.11	0.11								
070	7/23/20 7:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.57	0.68	0.68								
070	7/24/20 7:32 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.57	0.68								
070	7/28/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	7/30/20 7:23 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	8/11/20 7:54 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	8/12/20 7:40 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	8/13/20 8:07 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	8/14/20 7:34 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	8/26/20 8:07 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	8/27/20 8:13 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.18	0.18	0.18								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
070	8/28/20 8:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.18	0.18								
070	9/9/20 7:53 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	9/10/20 8:31 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0.25	0.25	0.25								
070	9/11/20 7:30 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0.25	0.25								
070	9/21/20 8:06 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	9/23/20 7:48 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	9/24/20 8:12 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
070	9/25/20 8:00 AM	S	MYSTIC/ALEWIFE	ALEWIFE BROOK	0.1	0	0	0								
083	1/2/20 9:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.27	2.782	0.59	12.07	89.5	1.196	2.02	7.31	
083	1/13/20 9:42 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.03	0.03	4.007	0.64	11.62	89	1.289	4.76	7.23	
083	1/28/20 9:54 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	3.11	0.65	12.45	93.2	1.307	5.12	7.34	
083	2/10/20 9:44 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.16	0.16	0.16	3.062	0.66	13.31	99.5	1.324	5.91	7.37	
083	2/24/20 9:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	3.722	0.72	8.71	66.3	1.441	10.79	7.14	
083	3/10/20 8:47 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	5.789	0.64	11.88	95.3	1.273	14.25	7.41	
083	3/26/20 7:21 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.35								
083	3/31/20 8:25 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.08	0.82								
083	4/2/20 9:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.13	0.13	0.13								
083	4/7/20 8:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	4/8/20 7:50 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.07	0.07	0.07								
083	4/14/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.56	0.56								
083	4/16/20 7:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	4/21/20 8:17 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.33	0.33	0.33								
083	4/22/20 7:46 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.33	0.33								
083	4/28/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.61	0.83								
083	4/30/20 7:50 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.01								
083	5/5/20 8:24 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	5/6/20 7:18 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.01	0.01								
083	5/12/20 8:04 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.23	0.23								
083	5/18/20 8:27 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.04								
083	5/19/20 8:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	5/25/20 8:27 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	5/27/20 8:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	6/1/20 8:48 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.09								
083	6/3/20 7:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.03	0.03								
083	6/8/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.14								
083	6/10/20 7:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	6/15/20 8:04 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	6/16/20 8:06 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	6/29/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.19	1.38	1.4								
083	7/13/20 8:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.07	0.07	0.08								
083	7/21/20 9:41 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	7/22/20 9:28 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.11	0.11	0.11								
083	7/23/20 9:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.57	0.68	0.68								
083	7/24/20 9:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.57	0.68								
083	7/28/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	7/29/20 7:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	7/30/20 7:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	8/10/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	8/11/20 7:49 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	8/12/20 7:32 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	8/13/20 7:38 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	8/14/20 7:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	8/24/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	1.33	1.33								
083	8/26/20 7:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	8/27/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.18	0.18	0.18								
083	8/28/20 8:25 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.18	0.18								
083	9/8/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	9/9/20 7:41 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	9/10/20 8:24 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.25	0.25	0.25								
083	9/11/20 7:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.25	0.25								
083	9/21/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	9/22/20 8:06 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	9/23/20 7:38 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	9/24/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	9/25/20 7:46 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	10/6/20 8:17 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	10/20/20 8:16 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
083	11/2/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.62	0.62								
083	11/18/20 9:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.05								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
083	11/30/20 9:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.85	0.85	0.85								
083	12/15/20 9:43 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.06	0.06								
083	12/28/20 9:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	3/31/20 8:22 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.08	0.82								
057	4/2/20 9:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.13	0.13	0.13								
057	4/7/20 8:32 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	4/14/20 8:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.56	0.56								
057	4/16/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	4/21/20 8:23 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.33	0.33	0.33								
057	4/28/20 8:17 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.61	0.83								
057	4/30/20 7:56 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.01								
057	5/6/20 7:22 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.01	0.01								
057	5/12/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.23	0.23								
057	5/18/20 8:33 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.04								
057	5/25/20 8:35 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	5/27/20 8:18 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	6/1/20 8:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.09								
057	6/8/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.14								
057	6/10/20 8:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	6/15/20 8:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	7/21/20 9:35 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	7/22/20 9:23 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.11	0.11	0.11								
057	7/23/20 9:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.57	0.68	0.68								
057	7/24/20 9:49 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.57	0.68								
057	7/28/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	7/30/20 7:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	8/11/20 7:51 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	8/12/20 7:35 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	8/13/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	8/14/20 7:24 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	8/26/20 7:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	8/27/20 7:59 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.18	0.18	0.18								
057	8/28/20 8:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.18	0.18								
057	9/9/20 7:49 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	9/10/20 8:26 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.25	0.25	0.25								
057	9/11/20 7:22 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.25	0.25								
057	9/21/20 8:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	9/23/20 7:42 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	9/24/20 8:08 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
057	9/25/20 7:53 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
066	1/2/20 9:33 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.27	2.704	0.62	11.58	85.7	1.247	2.31	7.37	
066	1/2/20 9:33 AM	B	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.27	2.707	0.62	11.41	84.5	1.254	2.69	7.34	
066	1/13/20 9:33 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.03	0.03	3.999	0.64	11.94	91.5	1.285	1.94	7.25	
066	1/28/20 9:47 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	3.116	0.65	12.22	91.5	1.319	1.19	7.37	
066	2/10/20 9:38 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.16	0.16	0.16	2.884	0.66	12.51	93.1	1.337	2.26	7.37	
066	2/10/20 9:38 AM	B	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.16	0.16	0.16	2.887	0.66	12.31	91.6	1.337	3	7.35	
066	2/24/20 9:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	2.927	0.67	13.03	97	1.35	2.19	7.17	
066	3/10/20 8:39 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	6.105	0.67	11.51	93.1	1.329	2.65	7.38	
066	3/10/20 8:39 AM	B	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0	5.961	0.66	11.51	92.8	1.323	2.68	7.37	
066	3/26/20 7:14 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.35								
066	4/8/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.07	0.07	0.07								
066	4/22/20 7:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.33	0.33								
066	5/5/20 8:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
066	5/19/20 8:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
066	6/3/20 7:23 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.03	0.03								
066	6/16/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
066	6/29/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.19	1.38	1.4								
066	7/13/20 7:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.07	0.07	0.08								
066	7/29/20 7:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
066	8/10/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
066	8/24/20 8:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	1.33	1.33								
066	9/8/20 8:07 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
066	9/22/20 8:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
066	10/6/20 8:05 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
066	10/20/20 8:06 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
066	11/2/20 8:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.62	0.62								
066	11/18/20 9:35 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.05								
066	11/30/20 9:10 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.85	0.85	0.85								
066	12/15/20 9:32 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.06	0.06								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
066	12/28/20 9:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
056	3/31/20 8:12 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.08	0.82								
056	4/2/20 8:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.13	0.13	0.13								
056	4/7/20 8:09 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
056	4/14/20 7:57 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.56	0.56								
056	4/16/20 7:30 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
056	4/21/20 8:03 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.33	0.33	0.33								
056	4/28/20 8:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.61	0.83								
056	4/30/20 7:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.01								
056	5/6/20 7:07 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.01	0.01	0.01								
056	5/12/20 7:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.23	0.23								
056	5/18/20 8:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.04								
056	5/25/20 8:13 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
056	5/27/20 7:50 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
056	6/1/20 8:28 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.09								
056	6/8/20 7:53 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0.14								
056	6/10/20 7:50 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
056	6/15/20 7:56 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								
056	7/21/20 9:11 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								1.5
056	7/22/20 8:55 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.11	0.11	0.11								1
056	7/23/20 9:18 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.57	0.68	0.68								1.5
056	7/24/20 9:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.57	0.68								1.5
056	7/28/20 8:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								1.5
056	7/30/20 8:58 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								1.5
056	8/11/20 8:53 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								1
056	8/12/20 9:46 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								1.8
056	8/13/20 9:00 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								1.4
056	8/14/20 8:54 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								1.5
056	8/26/20 9:32 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								1
056	8/27/20 9:52 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.18	0.18	0.18								0.8
056	8/28/20 9:29 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.18	0.18								0.5
056	9/9/20 8:45 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								0.6
056	9/10/20 7:57 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0.25	0.25	0.25								0.5
056	9/11/20 8:47 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0.25	0.25								0.6
056	9/21/20 9:25 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								0.6
056	9/23/20 9:20 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								0.5
056	9/24/20 9:15 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								0.7
056	9/25/20 9:40 AM	S	MYSTIC/ALEWIFE	UPPER MYSTIC	0.1	0	0	0								0.4
177	1/2/20 9:07 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.27	2.539	0.61	11.61	85.6	1.234	2.38	7.51	
177	1/2/20 9:07 AM	B	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0	0	0	0.27	2.557	0.61	11.43	84.2	1.237	2.46	7.44	
177	1/13/20 8:56 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.01	0.03	0.03	6.939	0.64	11.12	91.8	1.282	2.26	7.15	
177	1/13/20 8:56 AM	B	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0	0.01	0.03	0.03	6.929	0.64	10.98	90.7	1.282	2.29	7.15	
177	1/28/20 9:22 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	3.762	0.66	12.32	93.8	1.33	1.4	7.43	
177	1/28/20 9:22 AM	B	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0	0	0	0	3.773	0.66	11.92	90.8	1.332	1.9	7.35	
177	2/10/20 9:15 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.16	0.16	0.16	2.272	0.69	12.94	94.7	1.391	2.73	7.17	
177	2/10/20 9:15 AM	B	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0	0.16	0.16	0.16	2.234	0.71	11.91	87.1	1.435	5.24	7.29	
177	2/24/20 9:19 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	3.84	0.67	13.19	100.6	1.354	1.99	6.82	
177	3/10/20 8:08 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0	6.973	0.67	12.24	101.2	1.334	1.97	7.3	
177	3/10/20 8:08 AM	B	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0	0	0	0	6.573	0.68	12.22	100	1.348	4.77	7.36	
177	3/26/20 7:02 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.35								
177	4/8/20 7:32 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.07	0.07	0.07								
177	4/22/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.33	0.33								
177	5/5/20 7:47 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0								
177	5/19/20 8:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0								
177	6/3/20 7:13 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.01	0.03	0.03								
177	6/16/20 7:37 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0								
177	6/29/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.19	1.38	1.4								
177	7/13/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.07	0.07	0.08								
177	7/29/20 7:42 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0								
177	8/10/20 7:47 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0								
177	8/24/20 7:48 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	1.33	1.33								
177	9/8/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0								
177	9/22/20 7:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0								
177	10/6/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0								
177	10/20/20 7:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0								
177	11/2/20 7:42 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.62	0.62								
177	11/18/20 9:20 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0	0.05								
177	11/30/20 8:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0.85	0.85	0.85								
177	12/15/20 9:12 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN	0.1	0	0.06	0.06								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
177	12/28/20 9:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
067	3/31/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.08	0.82								
067	4/2/20 8:27 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.13	0.13	0.13								
067	4/7/20 7:53 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
067	4/14/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.56	0.56								
067	4/16/20 7:25 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
067	4/21/20 7:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.33	0.33	0.33								
067	4/28/20 7:51 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.01	0.61	0.83								
067	4/30/20 7:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.01								
067	5/6/20 6:58 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.01	0.01	0.01								
067	5/12/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.23	0.23								
067	5/18/20 8:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.04								
067	5/25/20 8:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
067	5/27/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
067	6/1/20 8:13 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.09								
067	6/8/20 7:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.14								
067	6/10/20 7:41 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
067	6/15/20 7:43 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
067	7/21/20 8:54 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.4
067	7/22/20 8:44 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.11	0.11	0.11								0.9
067	7/23/20 8:58 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.57	0.68	0.68								1
067	7/24/20 9:04 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.57	0.68								1
067	7/28/20 8:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.3
067	7/30/20 8:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.4
067	8/11/20 8:41 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.2
067	8/12/20 9:24 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.2
067	8/13/20 8:43 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.5
067	8/14/20 8:42 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.5
067	8/26/20 9:18 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.7
067	8/27/20 9:34 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.18	0.18	0.18								0.6
067	8/28/20 9:15 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.18	0.18								0.5
067	9/9/20 8:33 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.5
067	9/10/20 8:07 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.25	0.25	0.25								0.4
067	9/11/20 8:36 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.25	0.25								0.4
067	9/21/20 9:07 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.5
067	9/23/20 9:05 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.4
067	9/24/20 8:54 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.7
067	9/25/20 9:21 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.5
059	7/21/20 8:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.3
059	7/22/20 8:31 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.11	0.11	0.11								1.3
059	7/23/20 8:41 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.57	0.68	0.68								1
059	7/24/20 8:51 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.57	0.68								0.6
059	7/28/20 8:31 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.5
059	7/30/20 8:27 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.5
059	8/11/20 8:29 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.2
059	8/12/20 9:11 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.4
059	8/13/20 8:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								1.5
059	8/14/20 8:29 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
059	8/26/20 9:05 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.6
059	8/27/20 9:16 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.18	0.18	0.18								0.9
059	8/28/20 9:05 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.18	0.18								0.3
059	9/9/20 8:21 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.7
059	9/10/20 8:20 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.25	0.25	0.25								0.2
059	9/11/20 8:24 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.25	0.25								0.5
059	9/21/20 8:48 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.6
059	9/23/20 8:50 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.5
059	9/24/20 8:39 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.7
059	9/25/20 8:59 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								0.6
176	3/31/20 7:35 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.08	0.82								
176	4/2/20 8:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.13	0.13	0.13								
176	4/7/20 7:32 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								
176	4/14/20 7:35 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.56	0.56								
176	4/16/20 7:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								
176	4/21/20 7:35 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.33	0.33	0.33								
176	4/28/20 7:32 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.01	0.61	0.83								
176	4/30/20 7:32 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0.01								
176	5/6/20 6:42 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.01	0.01	0.01								
176	5/12/20 7:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.23	0.23								
176	5/18/20 7:43 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0.04								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
176	5/25/20 7:40 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								
176	5/27/20 7:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								
176	6/1/20 7:45 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0.09								
176	6/8/20 7:25 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0.14								
176	6/10/20 7:25 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								
176	6/15/20 7:24 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								
176	7/21/20 8:45 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								0.9
176	7/22/20 8:34 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.11	0.11	0.11								1
176	7/23/20 8:45 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.57	0.68	0.68								1.2
176	7/24/20 8:55 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.57	0.68								0.9
176	7/28/20 8:35 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								1.1
176	7/30/20 8:31 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								1.4
176	8/11/20 8:32 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								1.1
176	8/12/20 9:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								1
176	8/13/20 8:33 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								1
176	8/14/20 8:32 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								1
176	8/26/20 9:09 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								0.7
176	8/27/20 9:21 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.18	0.18	0.18								0.6
176	8/28/20 9:07 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.18	0.18								0.5
176	9/9/20 8:26 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								0.5
176	9/10/20 8:15 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0.25	0.25	0.25								0.3
176	9/11/20 8:28 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0.25	0.25								0.4
176	9/21/20 8:55 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								0.5
176	9/23/20 8:54 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								0.5
176	9/24/20 8:46 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								0.7
176	9/25/20 9:07 AM	S	MYSTIC/ALEWIFE	MALDEN RIVER	0.1	0	0	0								0.5
167	1/2/20 8:53 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.27	3.262	0.77	12.65	95.2	1.549	3.52	7.68	
167	1/13/20 8:44 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.01	0.03	0.03	7.474	0.84	11.74	98.4	1.651	3.67	7.07	
167	1/28/20 9:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0	3.048	0.88	12.41	92.9	1.751	3.92	6.91	
167	1/28/20 9:00 AM	B	MYSTIC/ALEWIFE	LOWER MYSTIC BASIN					3.734	27.79	9.33	85.3	44.155	9.97	6.97	
167	2/10/20 9:01 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.16	0.16	0.16	2.525	1.42	13.37	99	2.777	7.92	7.02	
167	2/24/20 9:06 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0	4.895	0.85	13.28	104.3	1.678		6.58	
167	3/10/20 7:53 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0	8.011	0.99	12.39	105.3	1.942	3.94		
167	3/26/20 6:48 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.35								
167	3/31/20 7:43 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.08	0.82								
167	4/2/20 8:20 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.13	0.13	0.13								
167	4/7/20 7:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	4/8/20 7:18 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.07	0.07	0.07								
167	4/14/20 7:44 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.56	0.56								
167	4/16/20 7:20 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	4/21/20 7:44 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.33	0.33	0.33								
167	4/22/20 7:18 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.33	0.33								
167	4/28/20 7:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.01	0.61	0.83								
167	4/30/20 7:39 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.01								
167	5/5/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	5/6/20 6:52 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.01	0.01	0.01								
167	5/12/20 7:23 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.23	0.23								
167	5/18/20 7:52 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.04								
167	5/19/20 7:40 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	5/25/20 7:52 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	5/27/20 7:27 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	6/1/20 8:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.09								
167	6/3/20 7:00 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.01	0.03	0.03								
167	6/8/20 7:33 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.14								
167	6/10/20 7:33 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	6/15/20 7:36 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	6/16/20 7:24 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	6/29/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.19	1.38	1.4								
167	7/13/20 7:15 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.07	0.07	0.08								
167	7/29/20 7:15 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	8/10/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	8/24/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	1.33	1.33								
167	9/8/20 7:33 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	9/22/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	10/6/20 7:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	10/20/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
167	11/2/20 7:30 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.62	0.62								
167	11/18/20 9:05 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0.05								
167	11/30/20 8:35 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0.85	0.85	0.85								

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
167	12/15/20 8:56 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0.06	0.06								
167	12/28/20 8:45 AM	S	MYSTIC/ALEWIFE	LOWER MYSTIC BA	0.1	0	0	0								
052	7/21/20 8:34 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
052	7/21/20 8:34 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.9	0	0	0								
052	7/22/20 8:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.11	0.11	0.11								1.7
052	7/22/20 8:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.9	0.11	0.11	0.11								
052	7/23/20 8:34 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.57	0.68	0.68								
052	7/23/20 8:34 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.2	0.57	0.68	0.68								
052	7/24/20 8:40 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.57	0.68								
052	7/28/20 8:22 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								2.9
052	7/28/20 8:22 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.2	0	0	0								
052	7/30/20 8:18 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								3
052	7/30/20 8:18 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.4	0	0	0								
052	8/11/20 8:23 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
052	8/12/20 9:07 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
052	8/13/20 8:21 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
052	8/14/20 8:23 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
052	8/14/20 8:23 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.1	0	0	0								
052	8/26/20 8:58 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								1.9
052	8/27/20 9:08 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.18	0.18	0.18								
052	8/27/20 9:08 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.6	0.18	0.18	0.18								
052	8/28/20 9:01 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.18	0.18								2
052	8/28/20 9:01 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.8	0	0.18	0.18								
052	9/9/20 8:12 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								1.6
052	9/10/20 8:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.25	0.25	0.25								1.5
052	9/10/20 8:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.8	0.25	0.25	0.25								
052	9/11/20 8:19 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.25	0.25								
052	9/21/20 8:38 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								2
052	9/21/20 8:38 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.7	0	0	0								
052	9/23/20 8:40 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
052	9/23/20 8:40 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	1.5	0	0	0								
052	9/24/20 8:34 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
052	9/24/20 8:34 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.9	0	0	0								
052	9/25/20 8:53 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
052	9/25/20 8:53 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.8	0	0	0								
069	7/21/20 8:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	7/21/20 8:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	4.8	0	0	0								
069	7/22/20 8:16 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.11	0.11	0.11								1.5
069	7/23/20 8:22 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.57	0.68	0.68								
069	7/23/20 8:22 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.9	0.57	0.68	0.68								
069	7/24/20 8:30 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.57	0.68								
069	7/28/20 8:13 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	7/30/20 8:06 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	8/11/20 8:13 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	8/12/20 8:55 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	8/13/20 8:12 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	8/14/20 8:12 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	8/26/20 8:48 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	8/27/20 9:01 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.18	0.18	0.18								
069	8/28/20 8:49 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.18	0.18								2
069	8/28/20 8:49 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.2	0	0.18	0.18								
069	9/9/20 8:08 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	9/10/20 8:32 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.25	0.25	0.25								
069	9/11/20 8:12 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.25	0.25								
069	9/21/20 8:30 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	9/21/20 8:30 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.7	0	0	0								
069	9/23/20 8:30 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								2.3
069	9/23/20 8:30 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	3.7	0	0	0								
069	9/24/20 8:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	9/24/20 8:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.8	0	0	0								
069	9/25/20 8:49 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								
069	9/25/20 8:49 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	2.7	0	0	0								
137	1/6/20 11:03 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.11	0.24	4.141	28.8	10.74	99.9	45.54	3.3	7.91	1.7
137	1/6/20 11:03 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	12.4	0	0.11	0.24	4.688	30.26	10.16	96.7	47.533	6.96	7.91	
137	1/23/20 11:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0	3.864	30.92	11.27	105.5	48.629	2.14	7.94	1.6
137	1/23/20 11:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.3	0	0	0	3.995	31.75	10.57	99.8	49.778	2.13	7.92	
137	2/5/20 11:35 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.05	0.05	0.05	3.701	21.98	11.24	98.7	35.647	1.48	7.94	2.3
137	2/5/20 11:35 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	11.6	0.05	0.05	0.05	3.572	30.92	10.38	96.5	48.69	2.44	7.98	
137	2/25/20 11:11 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.26	0.26	0.26	5.26	19.26	12.36	110.8	31.404	0.26	8.13	2.6

2020 MWRA Central Lab Field Results

Station	Day/Time (EST)	Surface or Bottom	Region	Subregion	Sample depth (m)	Logan Rainfall 1-Day	Logan Rainfall 2-Day	Logan Rainfall 3-Day	Temperature (C)	Salinity (PSU)	Dissolved Oxygen (mg/L)	DO Pct Saturation (pct)	Specific Conductivity (mS/cm)	Turbidity (NTU)	pH	Secchi depth (m)
137	2/25/20 11:11 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.2	0.26	0.26	0.26	3.094	31.16	10.97	101	49.143	1.32	7.97	
137	3/5/20 9:07 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.03	0.06	3.597	30.46	11.64	108	48.026	1.94	8.21	2.6
137	3/5/20 9:07 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	12	0	0.03	0.06	3.681	31.16	11.36	106.1	49.015	2.55	8.18	
137	6/23/20 10:18 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								1.2
137	6/23/20 10:18 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	12	0	0	0								
137	7/6/20 9:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.11	0.11								1.5
137	7/6/20 9:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	9.9	0	0.11	0.11								
137	7/27/20 9:45 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								2.3
137	7/27/20 9:45 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	10.4	0	0	0								
137	8/7/20 9:17 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								2.7
137	8/7/20 9:17 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	10.8	0	0	0								
137	8/17/20 9:35 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.08	0.24	0.24								2.6
137	8/17/20 9:35 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13	0.08	0.24	0.24								
137	9/2/20 10:03 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.2	0.2	0.2								2.4
137	9/2/20 10:03 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	12.3	0.2	0.2	0.2								
137	9/14/20 9:25 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								2.5
137	9/14/20 9:25 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.1	0	0	0								
137	10/2/20 9:35 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.02	0.02	0.48								2.6
137	10/2/20 9:35 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.7	0.02	0.02	0.48								
137	10/21/20 9:50 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.06	0.06	0.06								2.4
137	10/21/20 9:50 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	10.5	0.06	0.06	0.06								
137	11/4/20 11:18 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0	0								3
137	11/4/20 11:18 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	14.5	0	0	0								
137	11/17/20 10:53 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.05	0.39								3.1
137	11/17/20 10:53 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.9	0	0.05	0.39								
137	12/2/20 11:10 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0	0.41	1.26								1.8
137	12/2/20 11:10 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	14.8	0	0.41	1.26								
137	12/14/20 11:15 AM	S	MYSTIC/ALEWIFE	MYSTIC MOUTH	0.1	0.06	0.06	0.56								3.7
137	12/14/20 11:15 AM	B	MYSTIC/ALEWIFE	MYSTIC MOUTH	13.8	0.06	0.06	0.56								



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