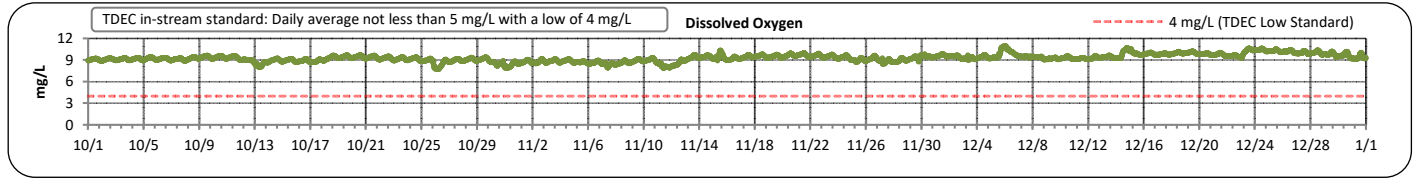
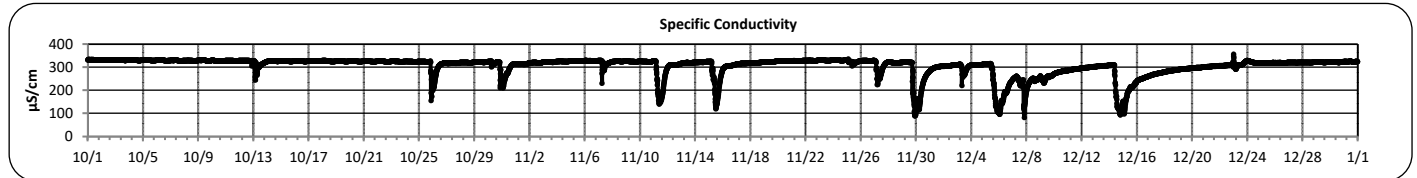
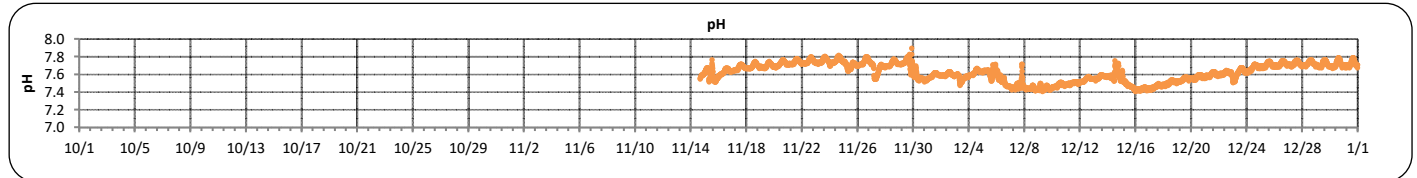
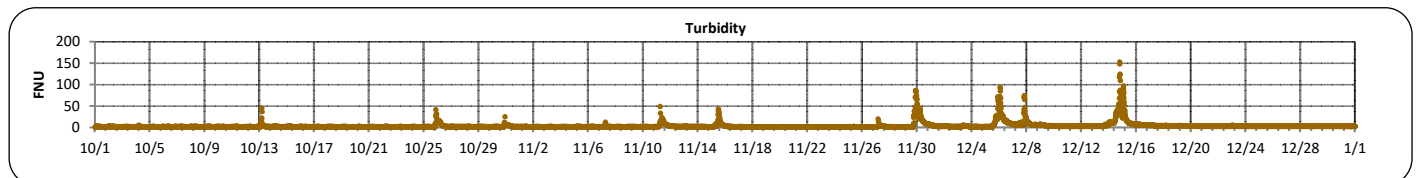
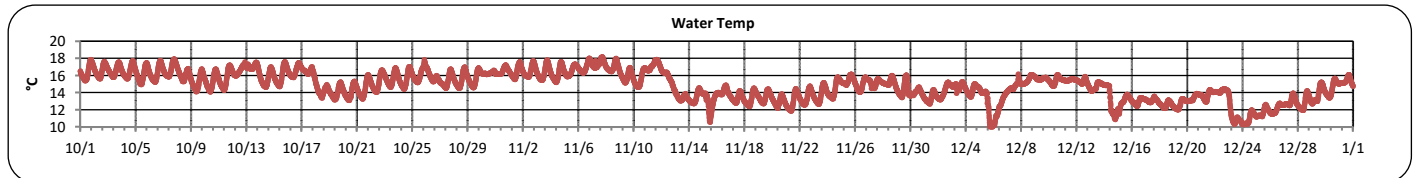
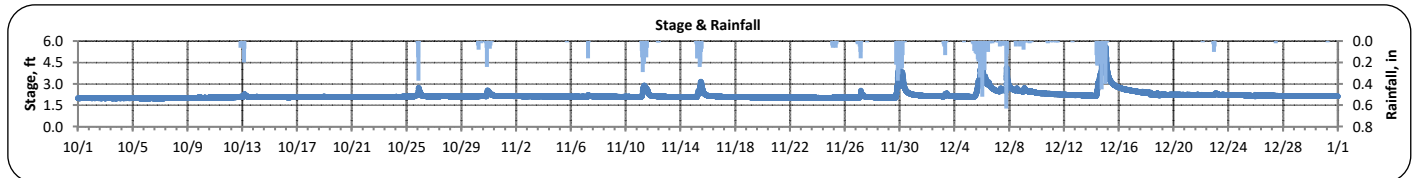




The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
Quarterly Report (October 1, 2022 - December 31, 2022)
Stringers Branch at Signal Mountain



PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Stringers Branch	STAGE (FT):	2.0	5.6	2.1	2.2	0.3
LOCATION:	Signal Mountain Rd	TEMPERATURE (°C):	10	18	15	15	2
TMDL/IMPAIRMENT:	<i>E. coli</i> , Siltation, Habitat Alteration	TURBIDITY (FNU):	1	153	2	4	8
		pH:	7.4	7.9	7.6	7.6	0.1
APPROX. DRAINAGE AREA:	5.7 square miles	SPECIFIC CONDUCTIVITY (µS/cm):	82	357	322	306	40
TOTAL NO. STORMS OVER 0.1 INCH:	18						
MAX. DAILY RAINFALL:	2.8 inches	DISSOLVED OXYGEN (mg/L):	7.7	11.0	9.3	9.3	0.5
TOTAL RAINFALL (FOR PERIOD):	15.2 inches						





The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
Quarterly Report (October 1, 2022 - December 31, 2022)
Stringers Branch at Signal Mountain



Explanation of Statistics:

MINIMUM OBSERVED	The minimum of the values recorded by the datasonde in 15 minute intervals.
MAXIMUM OBSERVED	The maximum of the values recorded by the datasonde in 15 minute intervals.
MEDIAN OBSERVED	The median of all the values recorded by the datasonde in 15 minute intervals.
MEAN OBSERVED	The average of all the values recorded by the datasonde in 15 minute intervals.
STANDARD DEVIATION	The standard deviation of all the values recorded by the datasonde in 15 minute intervals.

Sampled Data:

Analyte (units)	Dry Sample		Dry Sample		Storm Sample		Storm Sample		Storm Sample		Storm Sample	
	10/24/2022		11/3/2022		11/11/2022		11/11/2022		11/11/2022		11/11/2022	
	Time	Results	Time	Results	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	10:48	240	11:30	90	13:05	10,000	13:15	9,400	13:25	11,000	13:35	10,000
Total Suspended Solids (mg/L)	10:48	2	11:30	2	13:05	7	13:15	7	13:25	7	13:35	6
Total Phosphorus (mg/L)	10:48	0.070	11:30	0.090	13:05	0.110	13:15	0.240	13:25	0.070	13:35	0.060
Total Nitrogen (mg/L)	10:48	3.54	11:30	2.86	13:05	2.03	13:15	2.82	13:25	2.42	13:35	2.22

Notes:

Data Gaps

New pH sensor installed on 11/14/2022 to replace the sensor that failed on 9/1/2022.

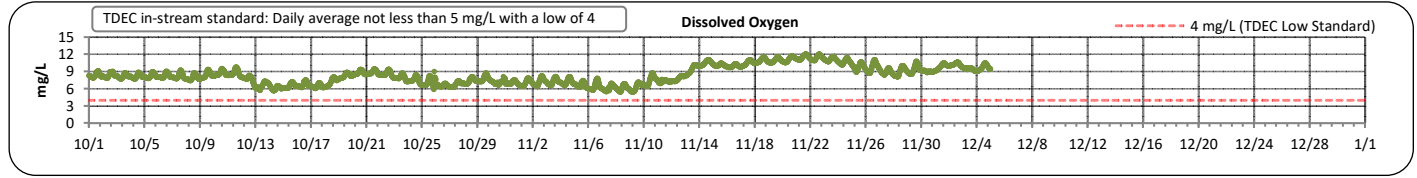
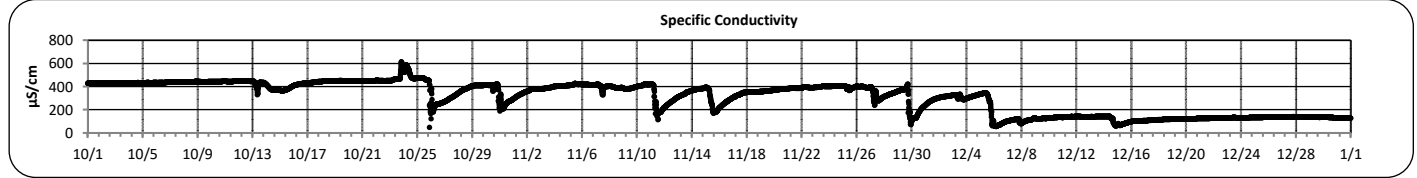
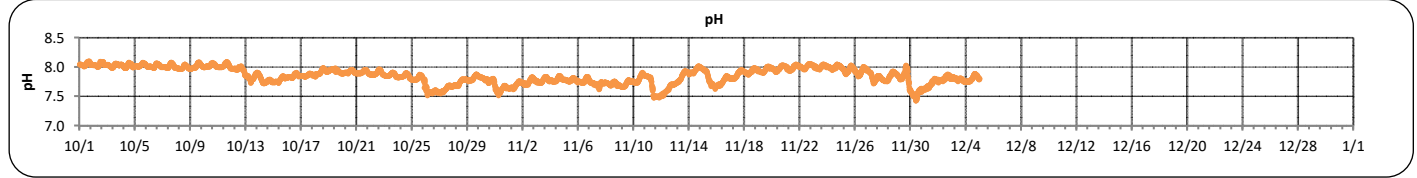
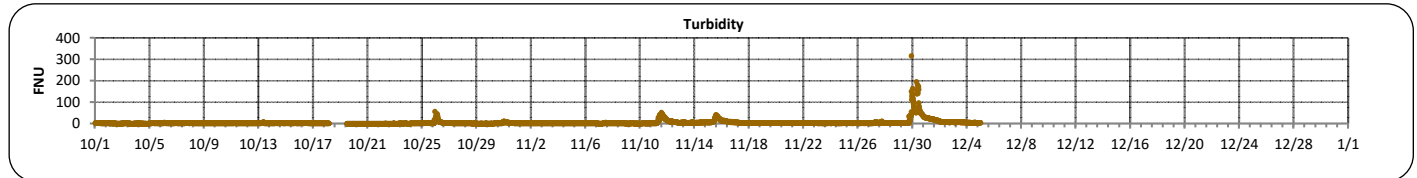
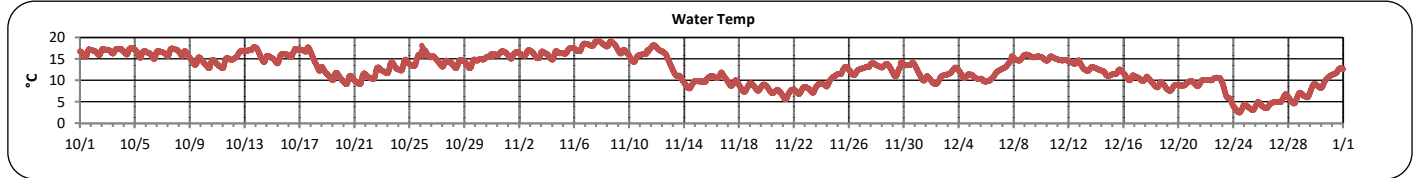
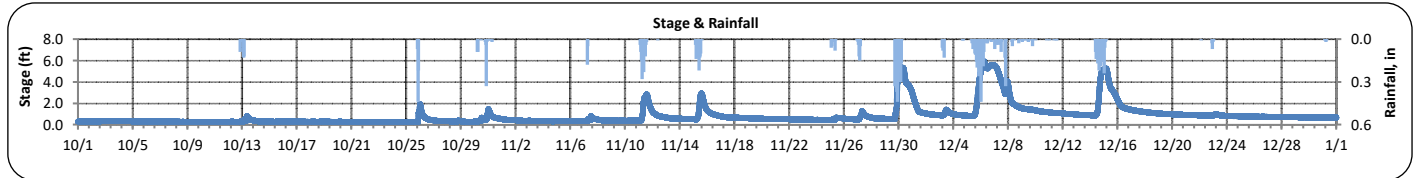


The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (October 1, 2022 - December 31, 2022)

Friar Branch at Polymer Drive



PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Friar Branch	STAGE (FT):	0.2	6.0	0.6	0.8	1.0
LOCATION:	Polymer Drive Bridge	TEMPERATURE (°C):	3	19	13	13	4
TMDL/IMPAIRMENT:	<i>E. coli</i> , Siltation, Habitat Alteration	TURBIDITY (FNU):	1	317	2	4	13
		pH:	7.4	8.1	7.9	7.9	0.1
APPROX. DRAINAGE AREA:	20.7 square miles	SPECIFIC CONDUCTIVITY (µS/cm):	49	617	358	308	130
TOTAL NO. STORMS OVER 0.1 INCH:	17						
MAX. DAILY RAINFALL:	1.9 inches	DISSOLVED OXYGEN (mg/L):	5.5	12.1	8.2	8.4	1.6
TOTAL RAINFALL (FOR PERIOD):	14.3 inches						





The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
Quarterly Report (October 1, 2022 - December 31, 2022)
Friar Branch at Polymer Drive



Explanation of Statistics:

MINIMUM OBSERVED	The minimum of the values recorded by the datasonde in 15 minute intervals.
MAXIMUM OBSERVED	The maximum of the values recorded by the datasonde in 15 minute intervals.
MEDIAN OBSERVED	The median of all the values recorded by the datasonde in 15 minute intervals.
MEAN OBSERVED	The average of all the values recorded by the datasonde in 15 minute intervals.
STANDARD DEVIATION	The standard deviation of all the values recorded by the datasonde in 15 minute intervals.

Sampled Data:

Analyte (units)	Dry Sample							
	11/29/2022							
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	10:50	2,200						
Total Suspended Solids (mg/L)	10:50	2.4						
Total Phosphorus (mg/L)	10:50	<0.500						
Total Nitrogen (mg/L)	10:50	0.659*						

*Value represents Nitrate/Nitrite concentrations only. TKN was below the detection limit of 1 mg/L.

Notes:

Data Gaps

Turbidity data were removed between 10/18-10/19 due to sensor fouling.

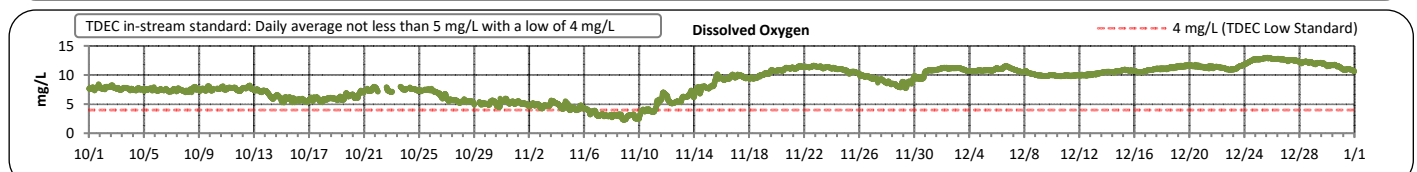
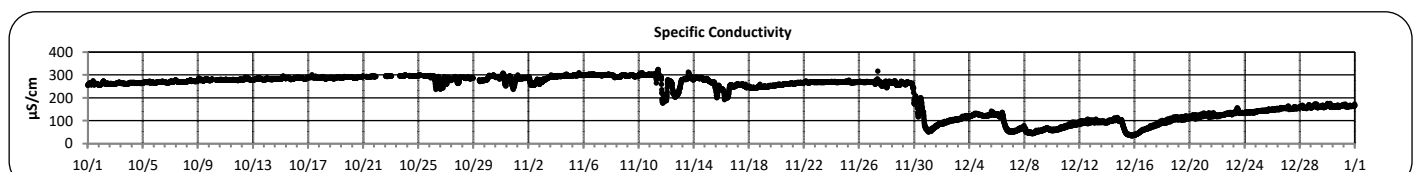
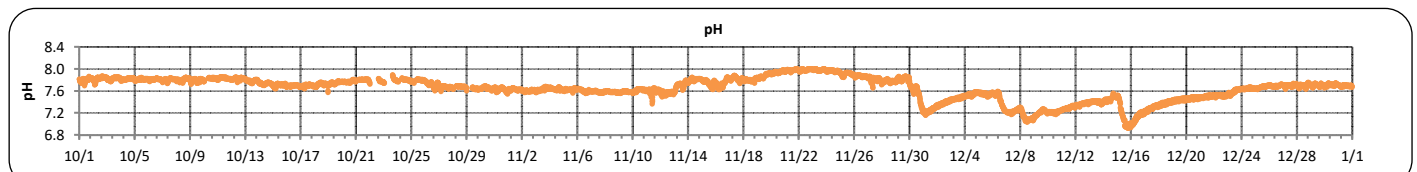
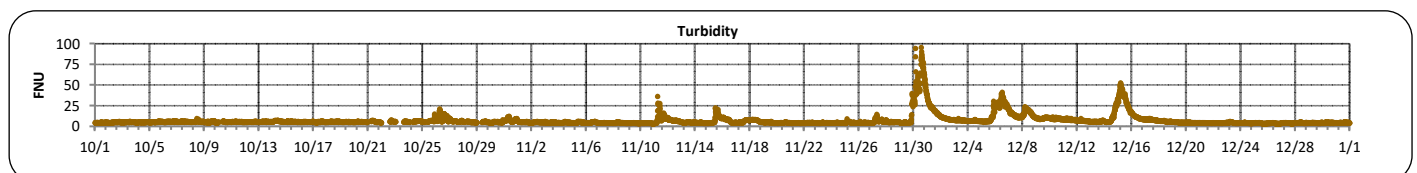
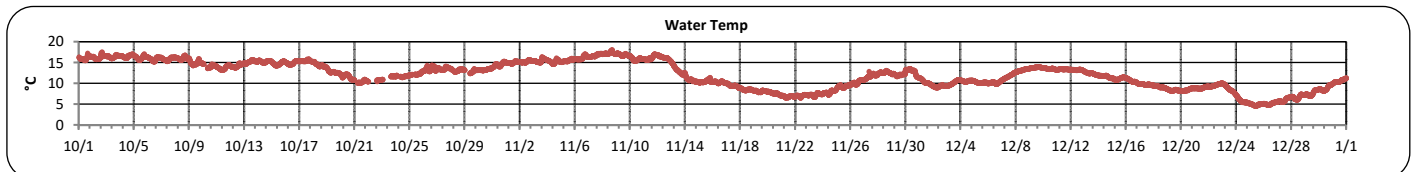
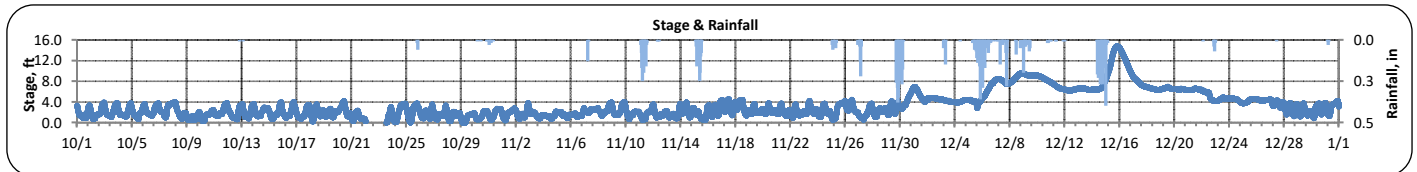
Turbidity, pH, and dissolved oxygen data were removed between 12/05-12/31 due to the sensors being covered by sediment.



The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
Quarterly Report (October 1, 2022 - December 31, 2022)
N. Chick Creek at Greenway Farms



PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	N. Chick Creek	STAGE (FT):	0.0	14.8	2.6	3.4	2.5
LOCATION:	Greenway Farms Boat Launch	TEMPERATURE (°C):	5	18	12	12	3
TMDL/IMPAIRMENT:	pH, Siltation, Habitat Alteration	TURBIDITY (FNU):	3	96	5	7	7
		pH:	6.9	8.0	7.7	7.7	0.2
APPROX. DRAINAGE AREA:	117.4 square miles	SPECIFIC CONDUCTIVITY (µS/cm):	36	325	265	217	84
TOTAL NO. STORMS OVER 0.1 INCH:	20						
MAX. DAILY RAINFALL:	2.6 inches	DISSOLVED OXYGEN (mg/L):	2.4	13.1	8.9	8.6	2.7
TOTAL RAINFALL (FOR PERIOD):	15.3 inches						





The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
Quarterly Report (October 1, 2022 - December 31, 2022)
N. Chick Creek at Greenway Farms



Explanation of Statistics:

MINIMUM OBSERVED	The minimum of the values recorded by the datasonde in 15 minute intervals.
MAXIMUM OBSERVED	The maximum of the values recorded by the datasonde in 15 minute intervals.
MEDIAN OBSERVED	The median of all the values recorded by the datasonde in 15 minute intervals.
MEAN OBSERVED	The average of all the values recorded by the datasonde in 15 minute intervals.
STANDARD DEVIATION	The standard deviation of all the values recorded by the datasonde in 15 minute intervals.

Sampled Data:

Analyte (units)	Dry Sample							
	11/29/2022							
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	11:00	150						
Total Suspended Solids (mg/L)	11:00	2.8						
Total Phosphorus (mg/L)	11:00	<0.500						
Total Nitrogen (mg/L)	11:00	0.45*						

*Value represents Nitrate/Nitrite concentrations only. TKN was below the detection limit of 1 mg/L.

Notes:

Data Gaps

Depth data are unavailable between 10/22-10/23 due to equipment reporting issues.

Data gaps are present on 10/10, 10/21-10/25, and 10/28-10/29 due to all sensors being unsubmerged.

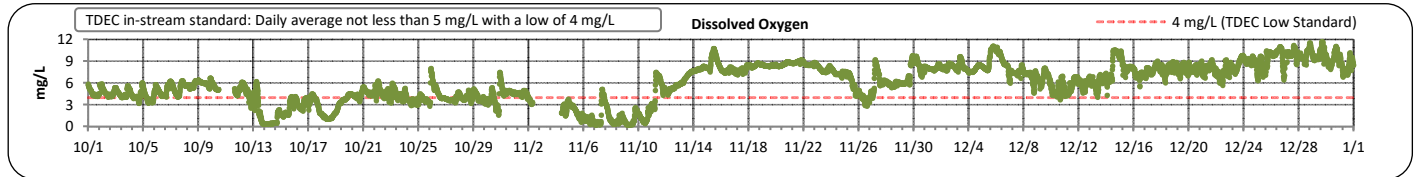
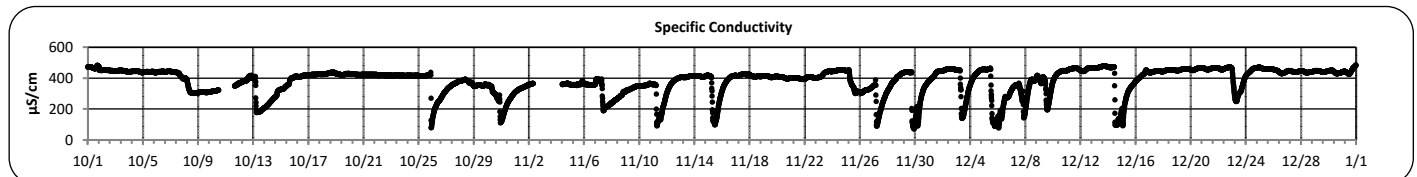
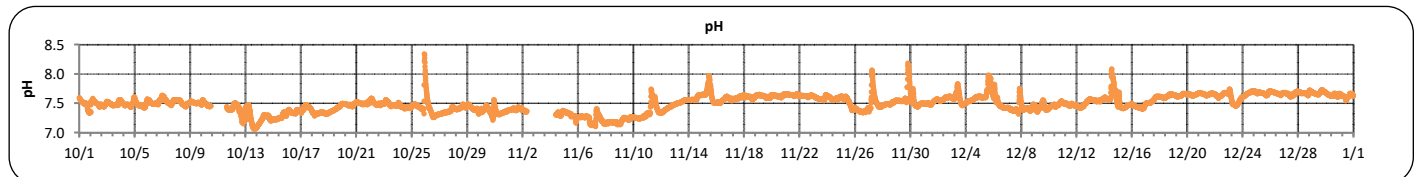
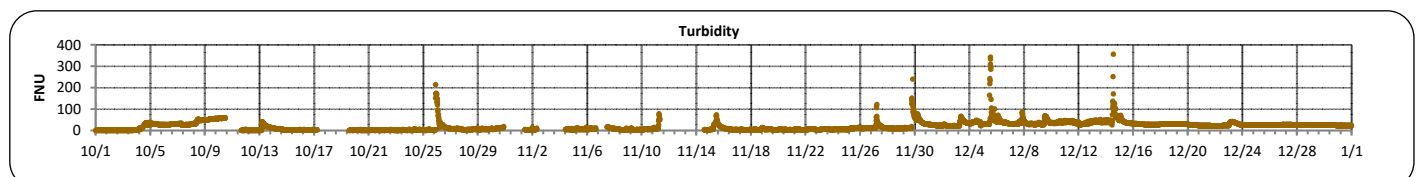
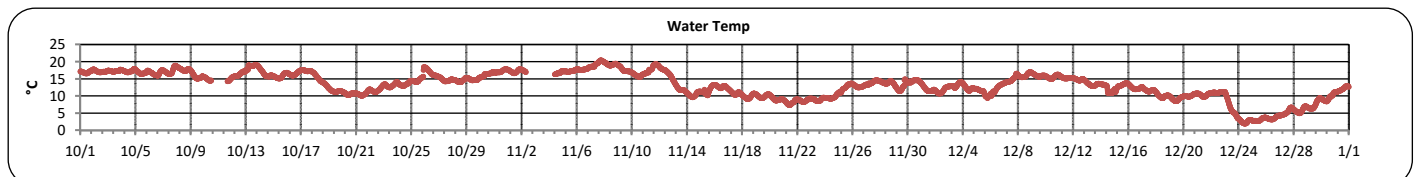
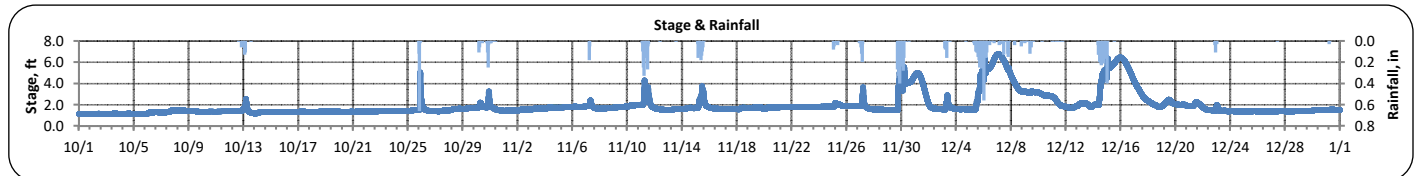


The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (October 1, 2022 - December 31, 2022)

Dobbs Branch at Park City Park



PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Dobbs Branch	STAGE (FT):	1.1	6.8	1.6	2.0	1.1
LOCATION:	Park City Park	TEMPERATURE (°C):	2	20	14	13	4
TMDL/IMPAIRMENT:	<i>E. coli</i> , Siltation, Habitat Alteration	TURBIDITY (FNU):	1	357	17	20	21
		pH:	7.1	8.4	7.5	7.5	0.1
APPROX. DRAINAGE AREA:	6.2 square miles	SPECIFIC CONDUCTIVITY (µS/cm):	72	487	414	383	84
TOTAL NO. STORMS OVER 0.1 INCH:	17						
MAX. DAILY RAINFALL:	2.3 inches	DISSOLVED OXYGEN (mg/L):	0.3	11.7	6.1	6.0	2.6
TOTAL RAINFALL (FOR PERIOD):	15.2 inches						





The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
Quarterly Report (October 1, 2022 - December 31, 2022)
Dobbs Branch at Park City Park



Explanation of Statistics:

MINIMUM OBSERVED	The minimum of the values recorded by the datasonde in 15 minute intervals.
MAXIMUM OBSERVED	The maximum of the values recorded by the datasonde in 15 minute intervals.
MEDIAN OBSERVED	The median of all the values recorded by the datasonde in 15 minute intervals.
MEAN OBSERVED	The average of all the values recorded by the datasonde in 15 minute intervals.
STANDARD DEVIATION	The standard deviation of all the values recorded by the datasonde in 15 minute intervals.

Sampled Data:

Analyte (units)	Dry Sample							
	11/29/2022							
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	09:40	370						
Total Suspended Solids (mg/L)	09:40	4.4						
Total Phosphorus (mg/L)	09:40	<0.500						
Total Nitrogen (mg/L)	09:40	0.61*						

*Value represents Nitrate/Nitrite concentrations only. TKN was below the detection limit of 1 mg/L.

Notes:

Data Gaps

Sonde data are unavailable between 10/10-10/11 and 11/2-11/4 due to sonde reporting issues.

Turbidity data were removed between 10/18-10/19, 10/31-11/01, 11/6-11/7, and 11/11-11/14 due to sensor fouling.