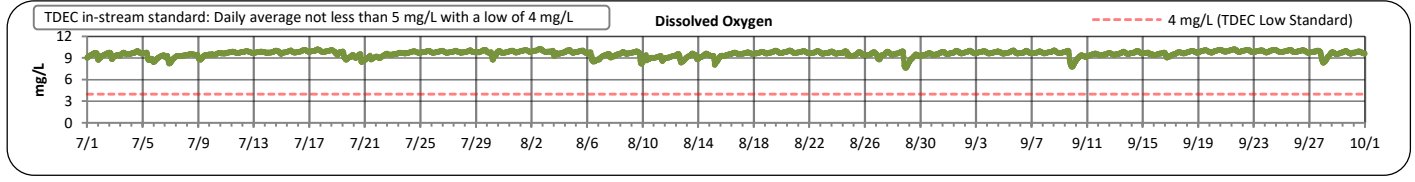
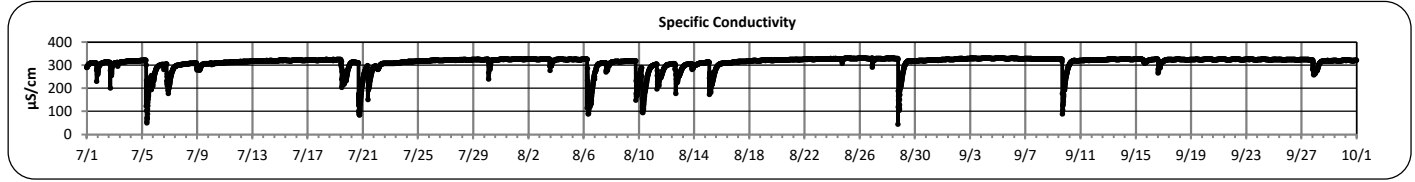
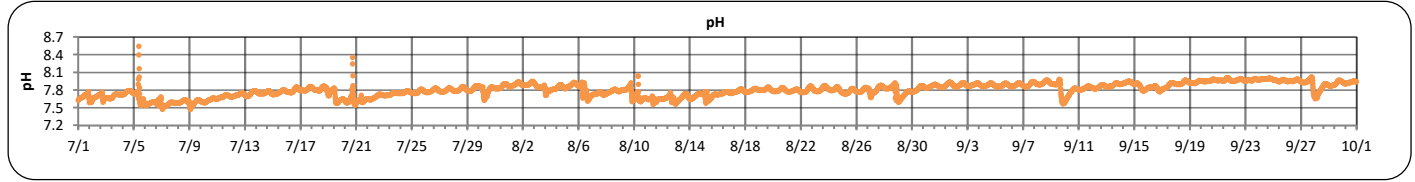
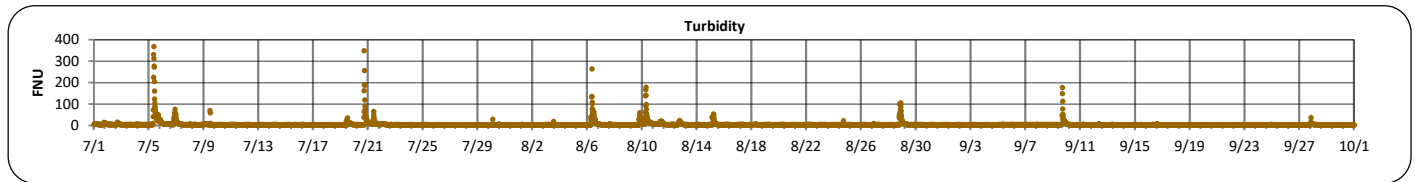
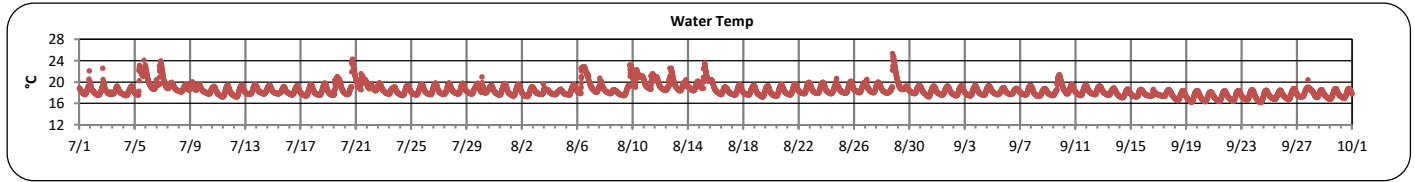
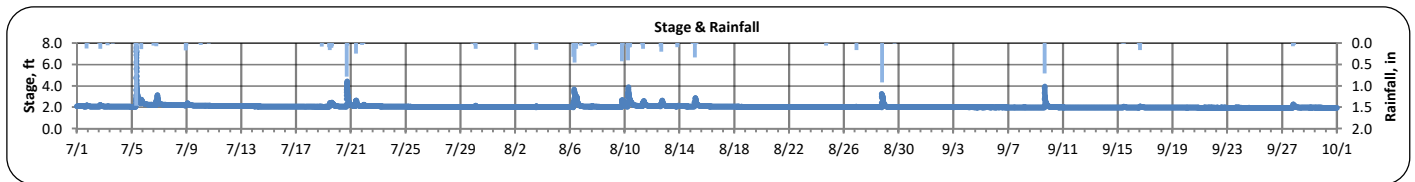




# The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2023 - September 30, 2023) Stringers Branch at Signal Mountain



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	7.7	2.0	2.1	0.2
LOCATION:	Signal Mountain Rd	TEMPERATURE (°C):	16	25	18	18	1
TMDL/IMPAIRMENT:	<i>E. coli</i> , Siltation, Habitat Alteration	TURBIDITY (FNU):	1	368	3	5	13
		pH:	7.5	8.6	7.8	7.8	0.1
APPROX. DRAINAGE AREA:	5.7 square miles	SPECIFIC CONDUCTIVITY (µS/cm):	45	332	322	313	30
TOTAL NO. STORMS OVER 0.1 INCH:	23	DISSOLVED OXYGEN (mg/L):	7.6	10.3	9.7	9.6	0.4
MAX. DAILY RAINFALL:	1.9 inches						
TOTAL RAINFALL (FOR PERIOD):	10.6 inches						





**The City of Chattanooga and Hamilton County Joint Water Quality Monitoring  
Quarterly Report (July 1, 2023 - September 30, 2023)  
Stringers Branch at Signal Mountain**



**Explanation of Statistics:**

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

**Sampled Data:** No samples were collected at Stringers Branch at Signal Mountain during this monitoring period.

Analyte (units)								
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)								
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

**Notes:**

Data Gaps

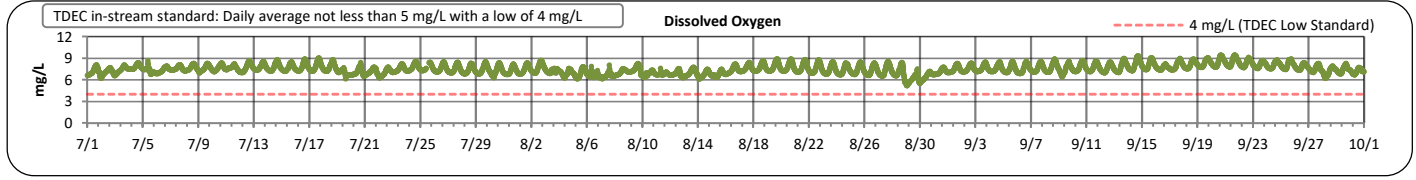
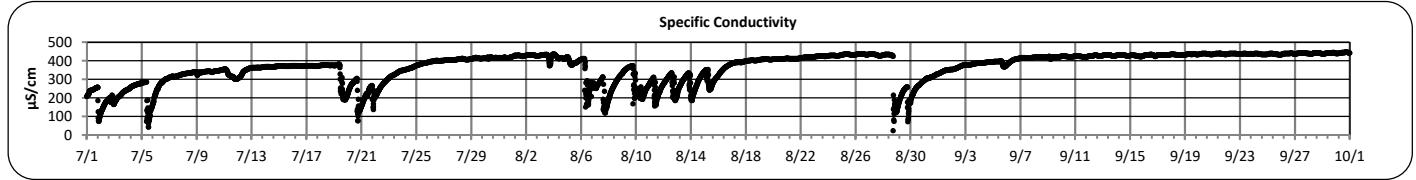
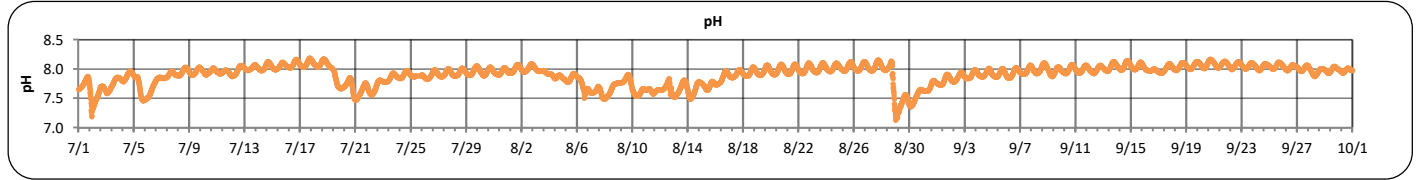
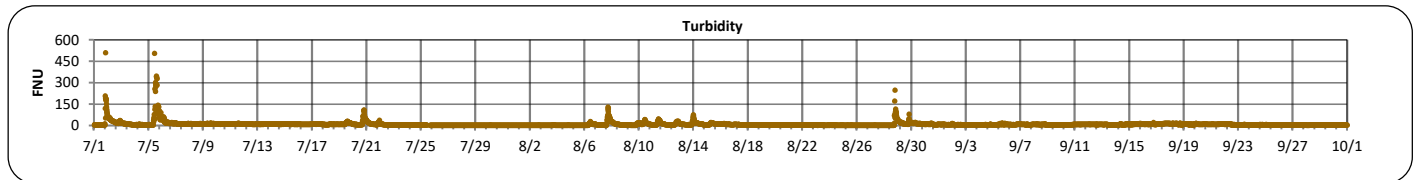
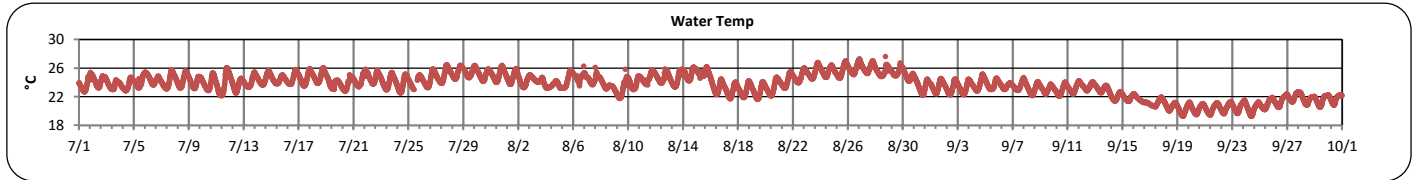
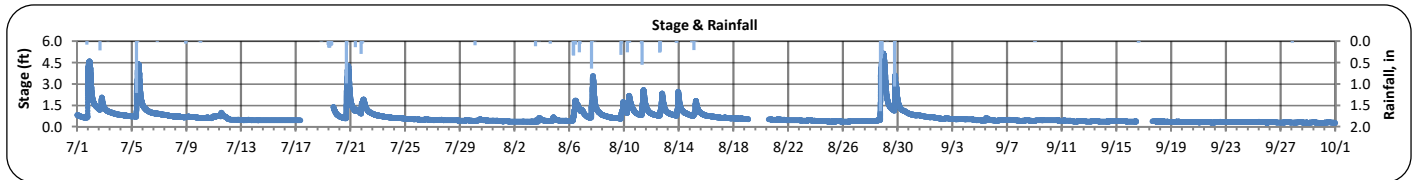
There were no data gaps at the Stringers Branch at Signal Mountain location during this monitoring period.



# The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2023 - September 30, 2023) 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:	Friar Branch	STAGE (FT):	0.3	5.2	0.5	0.7	0.5
LOCATION:	Polymer Drive Bridge	TEMPERATURE (°C):	19	28	24	24	2
TMDL/IMPAIRMENT:	<i>E. coli</i> , Siltation, Habitat Alteration	TURBIDITY (FNU):	1	510	6	9	18
		pH:	7.1	8.2	8.0	7.9	0.2
APPROX. DRAINAGE AREA:	20.7 square miles	SPECIFIC CONDUCTIVITY (µS/cm):	24	447	399	367	79
TOTAL NO. STORMS OVER 0.1 INCH:	18	DISSOLVED OXYGEN (mg/L):	5.2	9.5	7.4	7.5	0.7
MAX. DAILY RAINFALL:	2.4 inches						
TOTAL RAINFALL (FOR PERIOD):	12.3 inches						





**The City of Chattanooga and Hamilton County Joint Water Quality Monitoring  
Quarterly Report (July 1, 2023 - September 30, 2023)  
Stringers Branch at Signal Mountain**



**Explanation of Statistics:**

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

**Sampled Data:**

Analyte (units)	Dry Sample							
	9/19/2023							
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	11:15	100						
Total Suspended Solids (mg/L)	11:15	2.8						
Total Phosphorus (mg/L)	11:15	<0.500						
Total Nitrogen (mg/L)	11:15	1.14*						

\*Value represents Nitrate/Nitrite concentrations only. TKN was below the detection limit of 0.5 mg/L.

**Notes:**

Data Gaps

Sonde data are unavailable for a portion of 7/25 due to the sonde being calibrated during that time.

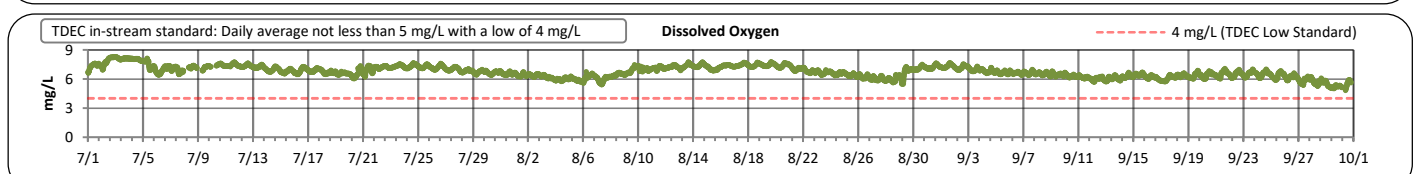
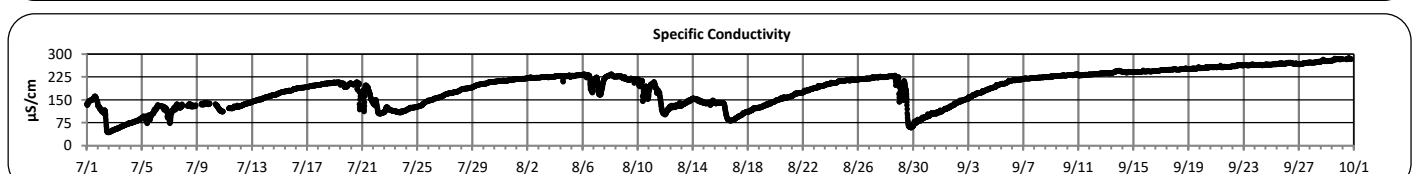
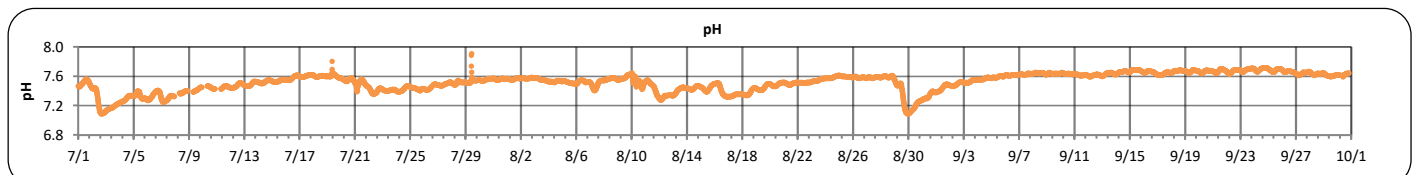
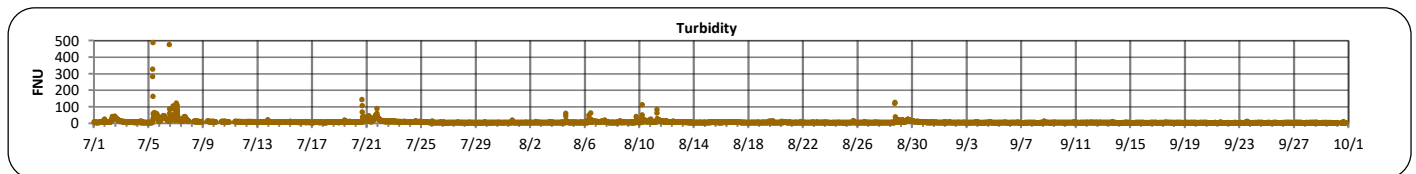
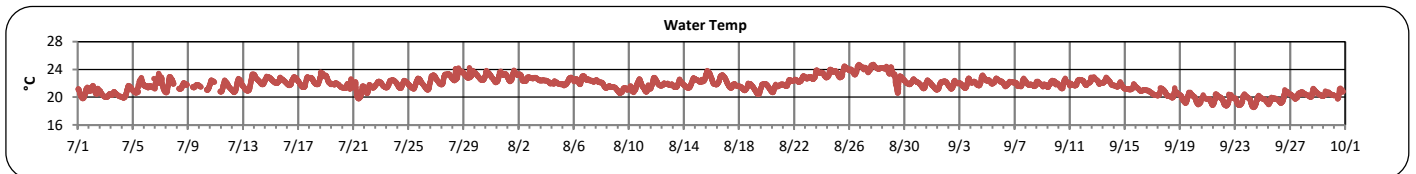
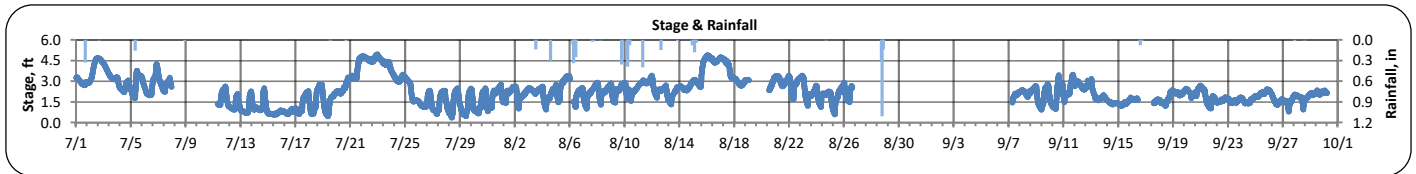
Stage data are unavailable on 7/17-7/19, 8/19-8/20, 9/16-9/17 due to equipment reporting issues.



# The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2023 - September 30, 2023) 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:	N. Chick Creek	STAGE (FT):	0.4	5.0	2.2	2.3	1.0
LOCATION:	Greenway Farms Boat Launch	TEMPERATURE (°C):	19	25	22	22	1
TMDL/IMPAIRMENT:	pH, Siltation, Habitat Alteration	TURBIDITY (FNU):	1	488	5	8	12
		pH:	7.1	7.9	7.6	7.5	0.1
APPROX. DRAINAGE AREA:	117.4 square miles	SPECIFIC CONDUCTIVITY (µS/cm):	44	288	199	187	56
TOTAL NO. STORMS OVER 0.1 INCH:	19	DISSOLVED OXYGEN (mg/L):	4.9	8.3	6.8	6.8	0.6
MAX. DAILY RAINFALL:	1.7 inches						
TOTAL RAINFALL (FOR PERIOD):	12.1 inches						





**The City of Chattanooga and Hamilton County Joint Water Quality Monitoring  
Quarterly Report (July 1, 2023 - September 30, 2023)  
Stringers Branch at Signal Mountain**



**Explanation of Statistics:**

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

**Sampled Data:**

Analyte (units)	Dry Sample							
	9/19/2023							
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	10:55	190						
Total Suspended Solids (mg/L)	10:55	13						
Total Phosphorus (mg/L)	10:55	<0.500						
Total Nitrogen (mg/L)	10:55	0.532*						

\*Value represents Nitrate/Nitrite concentrations only. TKN was below the detection limit of 0.5 mg/L.

**Notes:**

Data Gaps

Sonde data are periodically unavailable between 7/7-7/11 and on 9/30 due to equipment reporting issues.

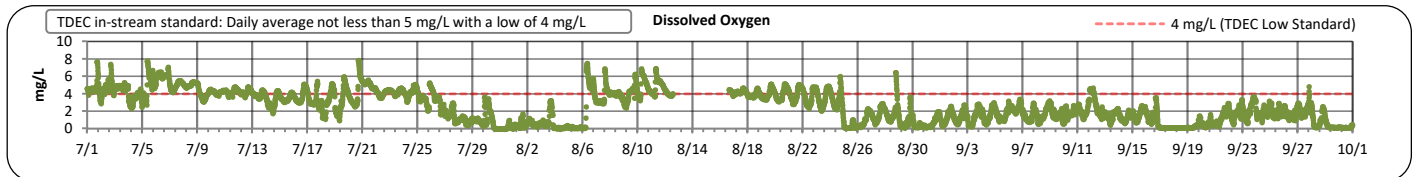
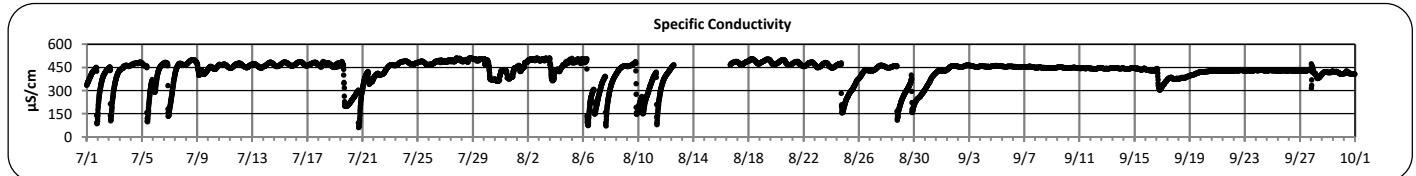
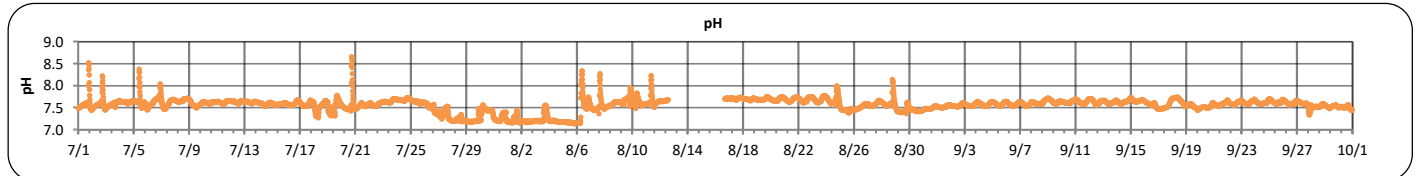
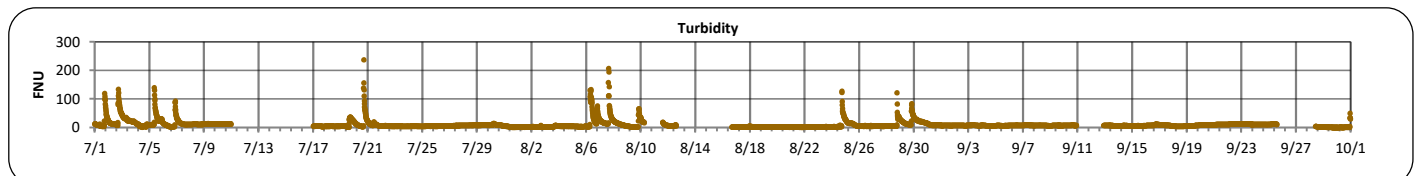
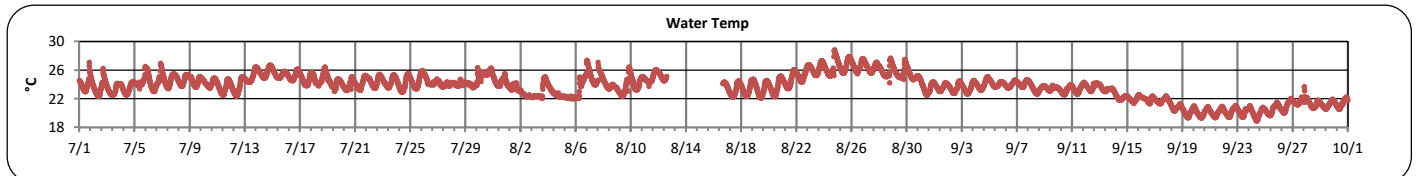
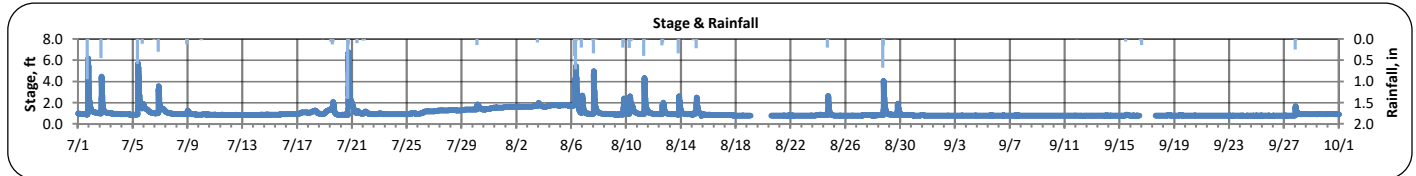
Stage data are unavailable on 7/7-7/11, 8/6, 8/19-8/20, 8/26-9/7, 9/16-9/17, and 9/30 due to equipment reporting issues.



The City of Chattanooga and Hamilton County Joint Water Quality Monitoring  
 Quarterly Report (July 1, 2023 - September 30, 2023)  
 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:	Dobbs Branch	STAGE (FT):	0.7	6.8	0.9	1.0	0.4
LOCATION:	Park City Park	TEMPERATURE (°C):	19	29	24	24	2
TMDL/IMPAIRMENT:	<i>E. coli</i> , Siltation, Habitat Alteration	TURBIDITY (FNU):	1	237	7	10	13
		pH:	7.1	8.7	7.6	7.6	0.2
APPROX. DRAINAGE AREA:	6.2 square miles	SPECIFIC CONDUCTIVITY (µS/cm):	62	512	448	427	74
TOTAL NO. STORMS OVER 0.1 INCH:	23	DISSOLVED OXYGEN (mg/L):	0.0	7.9	2.5	2.6	1.8
MAX. DAILY RAINFALL:	1.6 inches						
TOTAL RAINFALL (FOR PERIOD):	10.8 inches						





**The City of Chattanooga and Hamilton County Joint Water Quality Monitoring  
Quarterly Report (July 1, 2023 - September 30, 2023)  
Stringers Branch at Signal Mountain**



**Explanation of Statistics:**

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

**Sampled Data:**

Analyte (units)	Dry Sample							
	9/19/2023							
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	10:15	610						
Total Suspended Solids (mg/L)	10:15	6						
Total Phosphorus (mg/L)	10:15	<0.500						
Total Nitrogen (mg/L)	10:15	0.213*						

\*Value represents Nitrate/Nitrite concentrations only. TKN was below the detection limit of 0.5 mg/L.

**Notes:**

Data Gaps

Sonde data are unavailable between 8/12-8/16 due to a faulty SOA. The SOA was replaced on 8/16.  
Turbidity data were removed between 7/11-7/16, 8/10-8/11, 9/10-9/12, and 9/25-9/28 due to fouling.  
Stage data are unavailable between 8/19-8/20 and 9/16-9/17 due to equipment reporting issues.

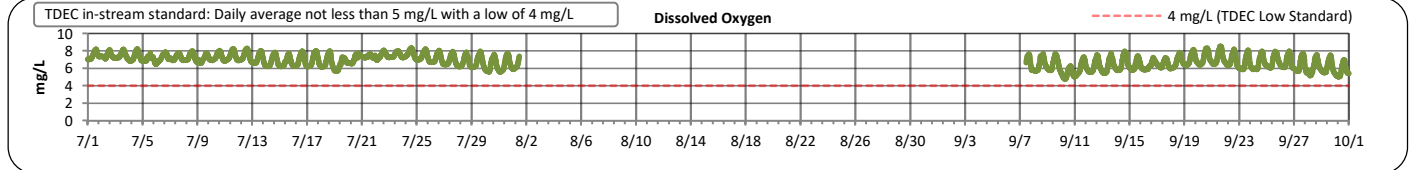
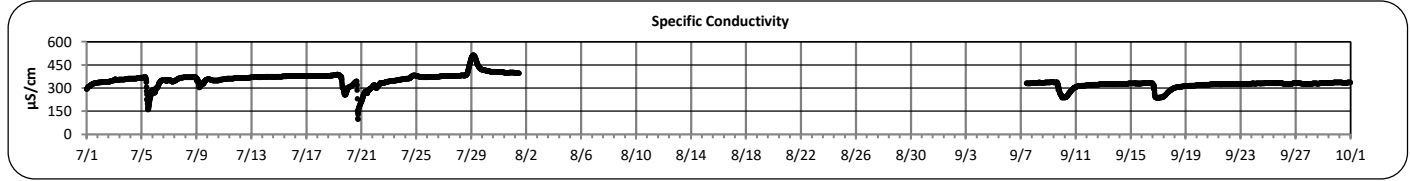
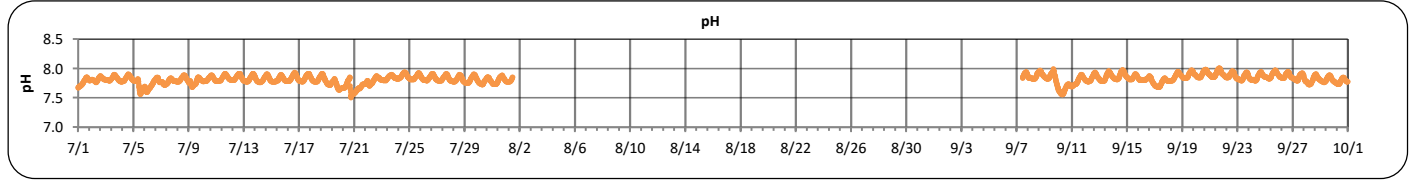
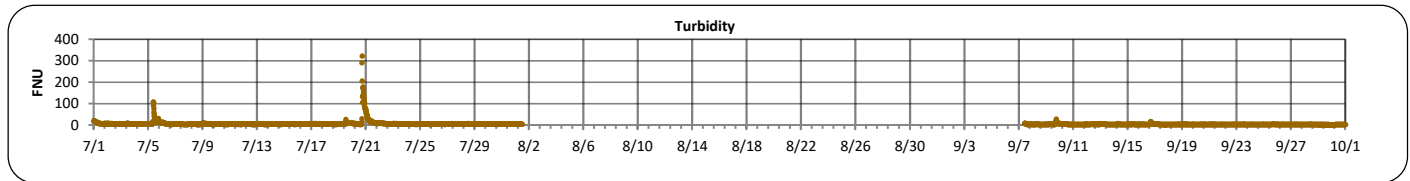
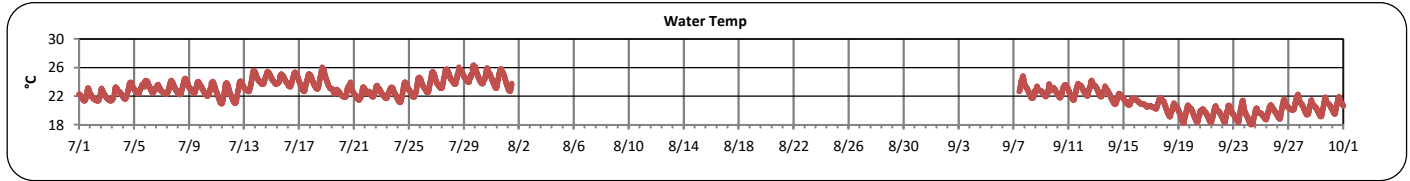
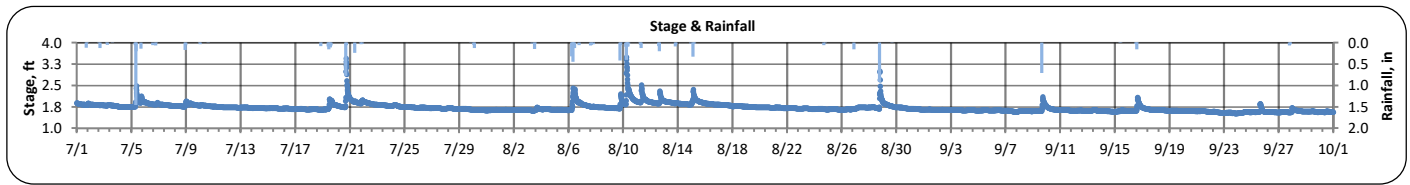




# The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2023 - September 30, 2023) Stringers Branch at Signal Mountain



PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Mountain Creek	STAGE (FT):	1.5	3.5	1.7	1.7	0.1
LOCATION:	Red Bank Elementary School	TEMPERATURE (°C):	18	26	23	22	2
TMDL/IMPAIRMENT:	<i>E. coli</i> , Siltation, Habitat Alteration	TURBIDITY (FNU):	2	322	4	5	11
		pH:	7.5	8.0	7.8	7.8	0.1
APPROX. DRAINAGE AREA:	5.5 square miles	SPECIFIC CONDUCTIVITY (µS/cm):	100	514	337	344	41
TOTAL NO. STORMS OVER 0.1 INCH:	23						
MAX. DAILY RAINFALL:	1.9 inches	DISSOLVED OXYGEN (mg/L):	4.8	8.5	6.9	6.8	0.7
TOTAL RAINFALL (FOR PERIOD):	10.6 inches						





**The City of Chattanooga and Hamilton County Joint Water Quality Monitoring  
Quarterly Report (July 1, 2023 - September 30, 2023)  
Stringers Branch at Signal Mountain**



**Explanation of Statistics:**

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

**Sampled Data:** No samples were collected at Mountain Creek at Elementary School during this monitoring period

Analyte (units)								
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)								
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

**Notes:**

Sonde data are unavailable between 8/1-9/7 due to a sonde error when attempting to retrieve data.