

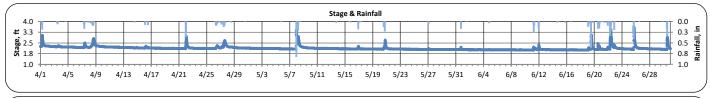
The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2023 - June 30, 2023)

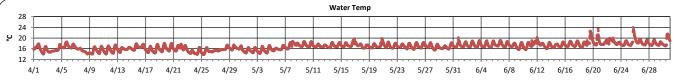
Hamilton County

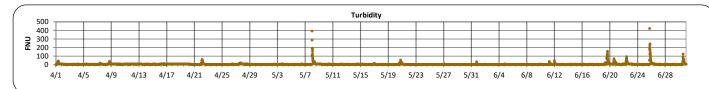
Stringers Branch at Signal Mountain

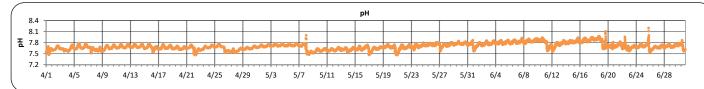
PARAMETER	DESCRIPTION
STREAM NAME:	Stringers Branch
LOCATION:	Signal Mountain Rd
TMDL/IMPAIRMENT:	<i>E. coli</i> , Siltation, Habitat Alteration
APPROX. DRAINAGE AREA:	5.7 square miles
TOTAL NO. STORMS OVER 0.1 INCH:	22
MAX. DAILY RAINFALL:	1.2 inches
TOTAL RAINFALL (FOR PERIOD):	10.8 inches

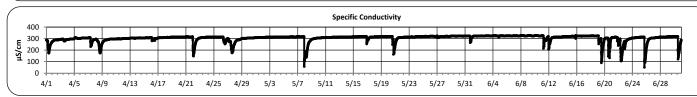
· ·					Quality Progra							
CONTINUOUS	SUMMARY STATISTICS											
WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION							
STAGE (FT):	2.0	3.7	2.1	2.1	0.1							
TEMPERATURE (°C):	14	24	17	17	1							
TURBIDITY (FNU):	1	422	4	6	13							
pH:	7.5	8.2	7.7	7.7	0.1							
SPECIFIC CONDUCTIVITY (μS/cm):	51 329		313	305	30							
DISSOLVED OXYGEN (mg/L):	8.3	10.5	9.8	9.7	0.4							

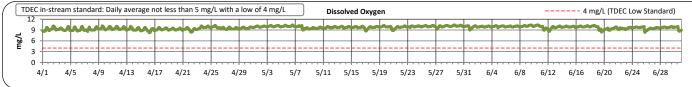














The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2023 - June 30, 2023) Stringers Branch at Signal Mountain



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:

	Dry Sa	ample	Storm :	Sample	Storm	Sample		
Analyte (units)	5/15/	/2023	6/14/	/2023	6/14,	/2023		
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	13:47	60	11:10	80	-	-		
Total Suspended Solids (mg/L)	13:47	1	11:10	2	13:17	4		
Total Phosphorus (mg/L)	13:47	0.080	11:10	0.070	-	-		
Total Nitrogen (mg/L)	13:47	0.94	11:10	1.04	-	-		

Notes:

Data Gaps

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



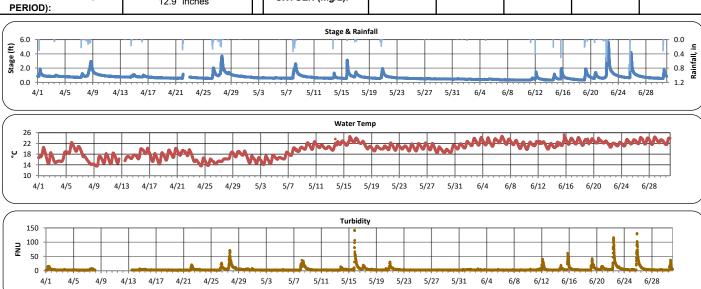


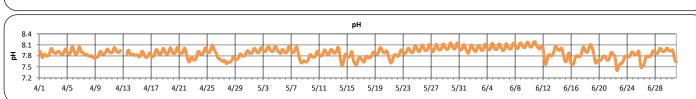
The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2023 - June 30, 2023)

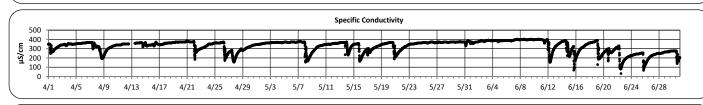
Friar Branch at Polymer Drive

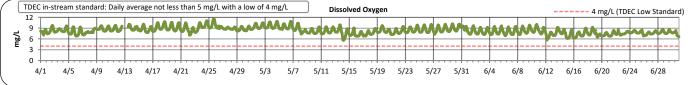


		CONTINUOUS WATER	SUMMARY STATISTICS									
PARAMETER	DESCRIPTION	QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION					
STREAM NAME:	Friar Branch	STAGE (FT):	0.3	5.7	0.7	0.8	0.5					
LOCATION:	Polymer Drive Bridge	TEMPERATURE (°C):	14	25	20	20	3					
TMDL/IMPAIRMENT: E. co	<i>E. coli</i> , Siltation, Habitat	TURBIDITY (FNU):	2	142	3	5	9					
TWO DIMPARMENT.	Alteration	pH:	7.4	8.2	7.9	7.9	0.1					
APPROX. DRAINAGE AREA:	20.7 square miles	SPECIFIC										
TOTAL NO. STORMS OVER 0.1 INCH:	22	CONDUCTIVITY (μS/cm):	33	403	350	327	61					
MAX. DAILY RAINFALL:	2.0 inches	DISSOLVED										
TOTAL RAINFALL (FOR PERIOD):	12.9 inches	OXYGEN (mg/L):	5.6	11.7	8.3	8.3	1.0					
60	Stage & Rainfall											













The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2023 - June 30, 2023) 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:

	Dry Sa	ample	Storm :	Sample	Storm :	Sample	Storm Sample			
Analyte (units)	5/23/	/2023	6/14/	/2023	6/14,	/2023	6/14/2023			
	Time	Results	Time	Results	Time	Results	Time	Results		
Escherichia coli (MPN/100mL)	11:15	120	14:10	390	14:30	1,200	14:50	1,200		
Total Suspended Solids (mg/L)	11:15	3	14:10	7	14:30	14	14:50	11		
Total Phosphorus (mg/L)	11:15	<0.500	14:10	<0.500	14:30	<0.500	14:50	<0.500		
Total Nitrogen (mg/L)	11:15	0.80*	14:10	1.13*	14:30	1.17*	14:50	1.17*		

^{*}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 4/12-4/13 due to the sonde being removed for maintenance and calibration. Turbidity data between 4/8-4/12 are unavailable due to a sensor malfunction.

Stage data are unavailable on 4/22 due to a server outage.



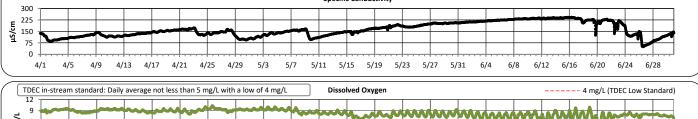


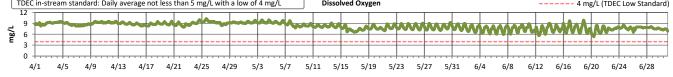
The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2023 - June 30, 2023)

N. Chick Creek at Greenway Farms



		CONTINUOUS	SUMMARY STATISTICS								
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDAR DEVIATIO				
STREAM NAME:	N. Chick Creek	STAGE (FT):	0.4	5.2	1.4	1.6	0.7				
LOCATION:	Greenway Farms Boat Launch	TEMPERATURE (°C):	13	23	19	18	3				
TMDL/IMPAIRMENT:	pH, Siltation, Habitat Alteration	TURBIDITY (FNU):	2	272	4	5	7				
		pH:	7.1	8.2	7.5	7.6	0.2				
APPROX. DRAINAGE AREA:	117.4 squre miles	SPECIFIC		0.10	450	400					
TOTAL NO. STORMS OVER 0.1 INCH:	21	CONDUCTIVITY (μS/cm):	50	243	153	163	46				
MAX. DAILY RAINFALL:	1.5 inches	DISSOLVED									
TOTAL RAINFALL (FOR PERIOD):	12.5 inches	OXYGEN (mg/L):	5.3	10.4	8.4	8.3	0.9				
		Stage & Rain	fall								
# 4.5 # 3.0 #	13 4/17 4/21 4/25 4/29 5/	3 5/7 5/11 5/15 5	/19 5/23 5/27	5/31 6/4	6/8 6/12 6/16	5 6/20 6/24	0.0 0.3 0.6 0.9 1.2				
		Water Ten	ıp								
24 21			AAAAAAA		Mary and the same	PART NO PART					
V 18	MANAN AL	****									
12	/13 4/17 4/21 4/25 4/29 5	/3 5/7 5/11 5/15 5	5/19 5/23 5/27	7 5/31 6/4	6/8 6/12 6/1	.6 6/20 6/24	6/28				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			-,		-,,,-		-,				
		Turbidity	,								
300		•									
<u>F</u> 150		•	+ + +			•					
75											
4/1 4/5 4/9	4/13 4/17 4/21 4/25 4/29	5/3 5/7 5/11 5/15	5/19 5/23 5/2	27 5/31 6/4	6/8 6/12 6/	16 6/20 6/24	6/28				
8.4		рН									
8.0					******	AAA aa	-				
표 7.6	market to the same	my when				No.					
7.2 6.8											
	/13 4/17 4/21 4/25 4/29 5	5/3 5/7 5/11 5/15	5/19 5/23 5/2	7 5/31 6/4	6/8 6/12 6/	16 6/20 6/24	6/28				
200		Specific Con	ductivity								
300											









The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2023 - June 30, 2023) 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:

	Storm :	Sample	Storm :	Sample	Storm :	Sample	Storm Sample			
Analyte (units)	5/23/	/2023	6/14/	/2023	6/14/	/2023	6/14/2023			
	Time	Results	Time	Results	Time	Results	Time	Results		
Escherichia coli (MPN/100mL)	11:15	100	14:15	240	14:35	100	14:55	82		
Total Suspended Solids (mg/L)	11:15	4	14:15	11	14:35	5	14:55	4		
Total Phosphorus (mg/L)	11:15	<0.500	14:15	<0.500	14:35	<0.500	14:55	<0.500		
Total Nitrogen (mg/L)	11:15	0.47*	14:15	0.45*	14:35	0.73*	14:55	0.45*		

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

Notes:

Data Gaps

Stage data are unavailable on 4/22 due to a server outage.





7.5 7.0 4/1

4/5

4/9

4/13 4/17

4/21

4/25

4/29

5/3

5/7

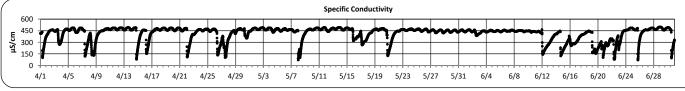
5/11

The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2023 - June 30, 2023)

Dobbs Branch at Park City Park



							CONTINUOUS				SUMMARY STATISTICS												
PARAMETER		DESC	RIPTIC	ON			WATER QUALITY PARAMETERS:				MINII OBSE			AXIMUI SSERVE		MEDIAN OBSERVED		,	MEAN OBSERVED			ANDARE VIATION	
STREAM NAME:		Dobbs	s Branc	ch		ST	AGI	E (FT):		I	0.	8		6.5		C	.9		1.	.1		0.5	
LOCATION:		Park (City Pa	rk		TE (°C		ERATI	JRE		1	3		26		2	20		2	0		3	
TMDL/IMPAIRMENT:	E. c		tation, I		ıt	TU	IRBI	DITY ((FNU):		1			309			6		1	1		17	
		Alteration			pН	l:				7.	2		8.8		7	7.7		7.	.7		0.1		
APPROX. DRAINAGE AREA:		6.2 squ	uare mi	iles			SPECIFIC																
TOTAL NO. STORMS OVER 0.1 INCH:			24				CONDUCTIVITY (μS/cm):				7	1		498		4	51		41	15		89	
MAX. DAILY RAINFALL:		1.9	inches			DIS	sso	LVED		T		_					_	\neg					
TOTAL RAINFALL (FOR PERIOD):		13.3	inches					EN (m			1.	8	9.7			5.9			5.8			1.4	
								s	tage & Ra	infall													
# 6.0 ±	7		\Box	77	•		H		- 1	+	7	\neg	-						4	H		0.0	
9) 4.0 2.0																					0.3 0.5 0.8		
0.0 4/1 4/5 4/9 4/	13 4/17	7 4/2:	1 4/25	5 4/2	29 5/	/3 5,	 /7	5/11	5/15	. . 5/19	5/23	3 5/2	7 5/3	1 6/4	4 6,	8 6/	12	6/16	6/20	6/24	6/28	1 1.0	
30									Water Te	mp												_	
25		-	\dashv					000	. 0.00					~~V	ww	-	A	.	A to N	200	~~~	V	
S 20 15	~~~\	M	M	كعمم	M	M	7					-	400										
10 	/13 4/1	7 4/2	1 4/2	5 4/	29 5	/3 5	5/7	5/11	5/15	5/19	9 5/2	3 5/2	27 5/	31 6,	/4 6	5/8	5/12	6/16	6/20	6/24	6/28		
400		Ι		Т	1		_		Turbid	ty			1	Т	T	Т	_						
300 200																	\perp						
100			L	u	+-									\longrightarrow					i i		i l		
0 4/1 4/5 4/9	4/13 4/	/17 4,	/21 4/	/25 4	1/29	5/3	5/7	5/11	5/15	5/:	19 5/	23 5,	/27 5	/31 6	5/4	6/8	6/12	6/1	6/20	6/24	6/28		
									pH														
9.0							1																



5/15 5/19

5/23

5/27

5/31

6/4

6/8

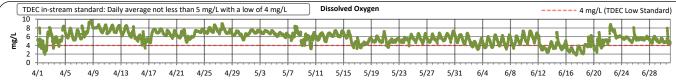
6/12

6/16

6/20

6/24

6/28







The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2023 - June 30, 2023) 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:

	Dry Sample		Storm Sample		Storm Sample		Storm Sample	
Analyte (units)	5/23/2023		6/14/2023		6/14/2023		6/14/2023	
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	10:15	720	15:20	24,000	15:40	24,000	16:00	40,000
Total Suspended Solids (mg/L)	10:15	4	15:20	232	15:40	198	16:00	170
Total Phosphorus (mg/L)	10:15	<0.500	15:20	0.548	15:40	<0.500	16:00	<0.500
Total Nitrogen (mg/L)	10:15	0.69*	15:20	1.82	15:40	1.62	16:00	1.44

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

Notes:

Data Gaps

Turbidity data were removed on 4/24-4/26 due to sensor fouling.

Stage data are unavailable on 4/22 due to a server outage.

Stage data are unavailable between 6/11-6/13 due to a sensor communication issue.





AREA:

TOTAL NO. STORMS

MAX. DAILY RAINFALL:

TOTAL RAINFALL (FOR

OVER 0.1 INCH:

The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2023 - June 30, 2023) **Mountain Creek at Elementary School**



36

1.1

SUMMARY STATISTICS CONTINUOUS PARAMETER DESCRIPTION WATER QUALITY MINIMUM MAXIMUM MEDIAN MEAN STANDARD PARAMETERS: **OBSERVED OBSERVED OBSERVED** OBSERVED DEVIATION STREAM NAME: Mountain Creek STAGE (FT): 1.6 1.9 1.9 0.1 **TEMPERATURE** LOCATION: Red Bank Elementary School 12 24 19 18 3 (°C): TURBIDITY (FNU): 1 387 4 6 13 E. coli, Siltation, Habitat TMDL/IMPAIRMENT: Alteration pH: 7.5 8.2 7.8 7.8 0.1 APPROX. DRAINAGE 5.5 squre miles **SPECIFIC**

111

5.6

368

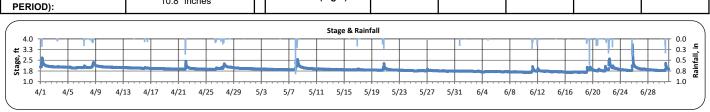
11.5

315

8.3

311

8.4



CONDUCTIVITY

(μS/cm):

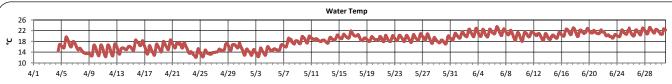
DISSOLVED

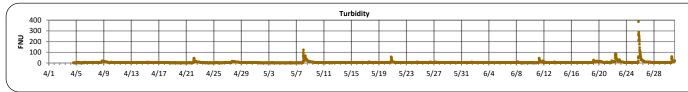
OXYGEN (mg/L):

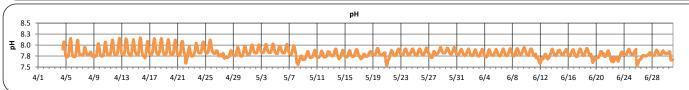
22

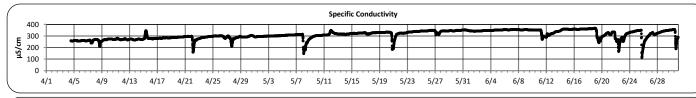
1.2 inches

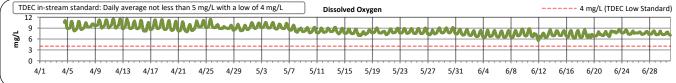
10.8 inches













The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2023 - June 30, 2023) Mountain Creek at Elementary School



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							
	5/23/2023							
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	10:15	110						
Total Suspended Solids (mg/L)	10:15	4						
Total Phosphorus (mg/L)	10:15	<0.500						
Total Nitrogen (mg/L)	10:15	0.45*						

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

Notes:

The sonde was sent to Xylem for repair on 12/11/2022. A replacement sonde was received and deployed on 4/4/2023.

