Continuous Water Quality Monitoring Periodic Report

Gills Creek A (May 3, 2023 - June 7, 2023)

	DESCRIPTION				CONTINUOUS WATER QUALITY			SUMMARY STATISTICS										
PARAMETER	DES	CRIPTIO	N			QUALIT ETERS:	Y	MININ			IMUM ERVED		MEDIAN BSERVI		MEAN OBSERV		STAN DEVIA	
STREAM NAME:	Gi	lls Creek			STAGE	(FT):		1.3	7	2	2.9		1.9		2.0		0.	3
LOCATION:	Forest	Drive Bri	dge															
ADDRESS:		Forest Dr bia, SC 29	,		TEMPERATURE (°F):		(°F):	63	,	1	33		75		75		2	!
COORDINATES:	34.01982	26, -80.96	63566		TURRIC	ITY (NTU	n-	3		1	06		6		7		7	
TMDL/IMPAIRMENT:	Fecal & Di	issolved (Oxygen		TORDIE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	".	3			00		U		,		,	
NEIGHBORING LANDUSE:	Residential	and com	nmercial		pH:			6.	5	-	' .1		6.8		6.8		0.	1
APPROX. DRAINAGE AREA:	48 sc	quare mile	es		•													
SPATIAL LOCATION:	Most u	ıpstream	site		SPECIF													
OTAL NO. STORMS OVER 0.1 INCH:		4			(mS/cm	CTIVITY):		0.0	32	0.	071		0.046		0.046	6	0.0	02
IAX. DAILY RAINFALL:	1.7	inches			DISSOL	VED												
OTAL RAINFALL FOR PERIOD):	3.6	inches				N (mg/L)		6.6	5	Ç	9.1		8.0		8.0		0.	5
						Stage	& Rainfa	II										
12 8						11.					T							0.0
8 4																		1.0
5/3 5/5 5/7	5/9 5	5/11 5	5/13 5/	15	5/17	5/19	5/21	5/23	5/2	5 5	/27	5/29	5/31	6,	/2 6/	' 4	6/6	1.5
90						Wa	er Temp											
80 70		~~	~~	\succeq	~~	7		~~	~~	~			^	~	~	-	<u> </u>	
60 50		+						_			~	Ŧ						
5/3 5/5 5/7	5/9	5/11	5/13 5/	/15	5/17	5/19	5/21	5/2	5/	25	5/27	5/29	5/3	1	6/2	6/4	6/6	
150						т	ırbidity											1
100 50 50		_		+		-	\dashv				2	+			+			
Z 50				1		سأنس				<u> </u>	ازر						i	
	/7 5/9	5/11	5/13	5/15	5/17	5/19	5/2	1 5/	23 5	5/25	5/27	5/29	5/3	31	6/2	6/4	6/6	
SCDHEC in-stream stan	dard: All pH values	not less th	an 6.0 and no	ot mo	re than 8.5		рН											
7.0	~^~		A A A					~~				_	~~	✓		AA		
6.8 6.6 6.4				Y	V V													
6.2 	5/9	5/11	5/13 5	5/15	5/17	5/19	5/21	5/2	3 5	/25	5/27	5/29	5/3	31	6/2	6/4	6/6	_
						Speci	ic Cond	ıctivity										7
0.08				╧						-		\pm						-
0.08				_						1	Y						\neg	1
								- 1										
	7 5/9	5/11	5/13	5/15	5/17	5/19	5/2:	L 5/	23 5	5/25	5/27	5/29	5/:	31	6/2	6/4	6/6	J
0.06 0.04 0.02 0.00									23 5	5/25	5/27	5/29	5/:					J
0.06 0.04 0.02 0.00 5/3 5/5 5/							5/2:		23 5	5/25	5/27	5/29	5/:		6/2 4 mg/L (SCD] ====================================
0.06 0.04 0.02 0.00 5/3 5/5 5/									23 5	5/25	5/27	5/29	5/3					i)
0.06 0.04 0.02 0.00 5/3 5/5 5/									23 5	5/25	5/27	5/29	5/:					j i)

Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

Continuous Water Quality Monitoring Periodic Report

Gills Creek A (May 3, 2023 - June 7, 2023)

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:

	Sample 1							
Analyte (units)	5/18/2023							
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli	9:38	220						
(MPN/100mL)	9.56	220						
Total Suspended								
Solids (mg/L)								
Total Phosphorus								
(mg/L)								
Total Nitrogen								
(mg/L)								

Notes:

Data Gaps

There were no data gaps at the GILA station during this monitoring period.

Potential Illicit Discharges and Abnormal Events:

Specific conductivity and turbidity increased on 6/5, which may have been the result of a potential illicit discharge.

Continuous Water Quality Monitoring Periodic Report

Gills Creek B (May 3, 2023 - June 7, 2023)

		SUMMARY STATISTICS						
PARAMETER	DESCRIPTION WATER QUALITY PARAMETERS:		MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARI DEVIATION	
STREAM NAME:	Gills Creek	DISCHARGE (CFS):	17.1	147.0	30.7	43.8	30.3	
LOCATION:	Devine Street bridge	TEMPERATURE						
ADDRESS:	4716 Devine Street Columbia, SC 29209	(°F):	63	84	75	75	4	
COORDINATES:	33.989656, -80.97433	TURRIDITY (NTU).	8	68	12	14	7	
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	TURBIDITY (NTU):	0	00	12	14	,	
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.3	6.9	6.5	6.5	0.1	
APPROX. DRAINAGE AREA:	59 square miles	pri.	0.5	0.9	0.5	0.3	0.1	
SPATIAL LOCATION:	Middle site	SPECIFIC						
TOTAL NO. STORMS OVER 0.1 INCH:	4	CONDUCTIVITY (mS/cm):	0.040	0.064	0.052	0.053	0.003	
MAX. DAILY RAINFALL:	1.9 inches	DISSOLVED						
TOTAL RAINFALL (FOR PERIOD):	3.7 inches	OXYGEN (mg/L):	4.8	9.1	7.5	7.3	0.9	
	e USGS 02169570 Gills Creek station.	Discharge & Rai	nfall		.	-	•	
200							0.0	
200		1					0.5 - 0.5 - 1.0 - 1.5	
0	 						2.0	
5/3 5/5 5/7	5/9 5/11 5/13 5/15	5/17 5/19 5/21	5/23 5/25	5 5/27 5/	29 5/31	6/2 6/4	6/6	
		Water Temp						
90		~~		_		~~~	∼	
70 60				~				
50	-/		- ((-		/			
5/3 5/5 5/7	5/9 5/11 5/13 5/15	5/17 5/19 5/21	5/23 5/2	5 5/27 5,	/29 5/31	6/2 6/4	6/6	
150		Turbidity						
P 100		//		- ha				
0 	5/9 5/11 5/13 5/15	5/17 5/19 5/21	5/23 5/	25 5/27 5	5/29 5/31	6/2 6/4	6/6	
SCOURCE in stream standard: All	pH values not less than 6.0 and not more	than 9 E						
7.2 7.0 6.8 6.8 6.6 6.4 6.2	pri values not less than 0.0 and not more	than 8.5 pH						
5 6.8 6.6			WW.		W/V			
6.2								
	5/9 5/11 5/13 5/15	5/17 5/19 5/21	5/23 5/2	25 5/27 5	5/29 5/31	6/2 6/4	6/6	
		Specific Condu	rtivity					
0.08		Specific condu						
0.04		-			+			
0.02					1			
5/3 5/5 5/7	5/9 5/11 5/13 5/15	5/17 5/19 5/21	5/23 5/	25 5/27	5/29 5/31	6/2 6/4	6/6	
SCDHFC in-stream standard:	Daily average not less than 5 mg/L with a	low of 4 mg/L Dissolved O	vygen			A 1/2	21 C	
12	are tage not less than 3 mg/L with 6	Dissolved U	^y5 ^C II			4 mg/L (SCDHE	Low Standard)	
7/8m 8	~~~~		~~~			~~~		
4								
5/3 5/5 5/7	5/9 5/11 5/13 5/15	5/17 5/19 5/21	5/23 5	/25 5/27	5/29 5/31	6/2 6/4	6/6	

Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

Continuous Water Quality Monitoring Periodic Report

Gills Creek B (May 3, 2023 - June 7, 2023)

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:

	Sample 1							
Analyte (units)	5/18/2023							
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli	0.50	2 1 4 0						
(MPN/100mL)	9:50	2,140						
Total Suspended								
Solids (mg/L)								
Total Phosphorus								
(mg/L)								
Total Nitrogen								
(mg/L)								

Notes:

Data Gaps

There were no data gaps at the GILB station during this monitoring period.

<u>Potential Illicit Discharges and Abnormal Events:</u>

Specific conductivity increased on 5/8 and 5/11, which may have been the result of a potential illicit discharge.

Continuous Water Quality Monitoring Periodic Report

Gills Creek C (May 3, 2023 - June 7, 2023)

		SUMMARY STATISTICS						
PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Gills Creek	STAGE (FT):	2.8	5.2	3.1	3.4	0.6	
LOCATION:	Bluff Road bridge	TEMPERATURE (%F).	00	70	70	70	4	
ADDRESS:	3009 Bluff Rd. Columbia, SC 29209	TEMPERATURE (°F):	62	78	73	72	4	
COORDINATES:	33.948043, -80.9889	TURRIDITY (NTU)	0	04		40	_	
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	TURBIDITY (NTU):	6	61	8	10	5	
NEIGHBORING LANDUSE:	Residential and commercial							
APPROX. DRAINAGE AREA:	64 square miles	pH:	6.2	6.5	6.4	6.4	0.0	
SPATIAL LOCATION:	Most downstream site	SPECIFIC						
TOTAL NO. STORMS OVER 0.1 INCH:	5	CONDUCTIVITY (mS/cm):	0.042	0.070	0.059	0.058	0.005	
MAX. DAILY RAINFALL:	1.63 inches	DISSOLVED						
TOTAL RAINFALL (FOR PERIOD):	4.6 inches	OXYGEN (mg/L):	4.9	7.5	6.1	6.1	0.5	
16		Stage & Rainf	all				0.0	
# 12		- Y - '		V .			0.5 1.0 1.5	
Stage, 8							1.5	
5/3 5/5 5/7	5/9 5/11 5/13 5/15	5 5/17 5/19 5/21	5/23 5/2	5 5/27 5,	/29 5/31	6/2 6/4	6/6	
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ا او داد داد								
85		Water Tem						
85 75 65								
85 75 65 55 45		Water Tem	0		5/29 5/31		6/6	
85 75 65 55	5/9 5/11 5/13 5/1	Water Tem	0		5/29 5/31	6/2 6/4	6/6	
85 75 65 55 45		Water Tem	0		5/29 5/31		6/6	
85 75 65 55 45 5/3 5/5 5/7		Water Tem 5 5/17 5/19 5/2:	0		5/29 5/31		6/6	
85 75 65 45 5/3 5/5 5/7	5/9 5/11 5/13 5/1	Water Tem 5 5/17 5/19 5/2: Turbidity	5/23 5/	25 5/27 5		6/2 6/4		
85 75 65 55 45 57 57 100 50	5/9 5/11 5/13 5/1	Water Tem 5 5/17 5/19 5/2:	5/23 5/	25 5/27 !	5/29 5/31 5/29 5/31		6/6	
85 75 75 55 45 57 100 50 57 57 57 57 57 57 57 57 57 57 57 57 57	5/9 5/11 5/13 5/1	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/	5/23 5/	25 5/27 5		6/2 6/4		
85 75 75 55 45 57 100 50 0 5/3 5/5 5/7 SCDHEC in-stream standa	5/9 5/11 5/13 5/1	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/	5/23 5/	25 5/27 5		6/2 6/4		
85 75 75 55 45 57 100 0 5/3 5/5 5/7 SCDHEC in-stream standa 6.6 6.6 6.2 6.2	5/9 5/11 5/13 5/1	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/	5/23 5/	25 5/27 5		6/2 6/4		
85 75 65 45 5/3 5/5 5/7 150 100 50 0 5/3 5/5 5/7	5/9 5/11 5/13 5/1	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/	5/23 5/	25 5/27 S		6/2 6/4		
85 75 65 45 50 0 50 0 50 0 50 0 50 0 50 0 50	5/9 5/11 5/13 5/1 5/9 5/11 5/13 5, 17 5/9 5/11 5/13 5, 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/ more than 8.5 pH	1 5/23 5/ 1 5/23 5/ 1 5/23 5	25 5/27 S	5/29 5/31	6/2 6/4	6/6	
85 75 65 45 5/3 5/5 5/3 5/5 5/7 SCDHEC in-stream standa 7.0 6.8 6.4 6.2 6.0 5/3 5/5 5/7	5/9 5/11 5/13 5/1 5/9 5/11 5/13 5, 17 5/9 5/11 5/13 5, 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/	1 5/23 5/ 1 5/23 5/ 1 5/23 5	25 5/27 S	5/29 5/31	6/2 6/4	6/6	
85 75 65 45 5/3 5/5 5/3 5/5 5/7 SCDHEC in-stream standa 7.0 6.8 6.4 6.2 6.0 5/3 5/5 5/7	5/9 5/11 5/13 5/1 5/9 5/11 5/13 5, 17 5/9 5/11 5/13 5, 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/ more than 8.5 pH	1 5/23 5/ 1 5/23 5/ 1 5/23 5	25 5/27 S	5/29 5/31	6/2 6/4	6/6	
85 75 75 55 45 57 50 0 5/3 5/5 5/7 SCDHEC in-stream standa 6.8 6.6 6.4 6.2 6.2 6.0 5/3 5/5 5/7	5/9 5/11 5/13 5/1 5/9 5/11 5/13 5, 17 5/9 5/11 5/13 5, 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/ more than 8.5 pH	1 5/23 5/ 1 5/23 5/ 1 5/23 5	25 5/27 S	5/29 5/31	6/2 6/4	6/6	
85 75 65 45 5/3 5/5 5/3 5/5 5/7 SCDHEC in-stream standa 7.0 6.8 6.4 6.2 6.0 5/3 5/5 5/7	5/9 5/11 5/13 5/1 5/9 5/11 5/13 5/1 rd: All pH values not less than 6.0 and not	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/ more than 8.5 pH	1 5/23 5/ uctivity	25 5/27 S	5/29 5/31	6/2 6/4	6/6	
85 75 75 75 75 75 75 75 75 75 75 75 75 75	5/9 5/11 5/13 5/1 5/9 5/11 5/13 5/1 rd: All pH values not less than 6.0 and not	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/ Specific Cond 15 5/17 5/19 5/2	1 5/23 5/ uctivity	25 5/27 S	5/29 5/31 5/29 5/31 5/29 5/31	6/2 6/4	6/6	
85 75 75 75 75 75 75 75 75 75 75 75 75 75	5/9 5/11 5/13 5/1 5/9 5/11 5/13 5/1 ird: All pH values not less than 6.0 and not 5/9 5/11 5/13 5/1 5/9 5/11 5/13 5/1	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/ Specific Cond 15 5/17 5/19 5/2	1 5/23 5/ 21 5/23 5 uctivity	25 5/27 S	5/29 5/31 5/29 5/31 5/29 5/31	6/2 6/4	6/6	
85 75 75 75 75 75 75 75 75 75 75 75 75 75	5/9 5/11 5/13 5/1 5/9 5/11 5/13 5/1 ird: All pH values not less than 6.0 and not 5/9 5/11 5/13 5/1 5/9 5/11 5/13 5/1	Water Tem 5 5/17 5/19 5/2: Turbidity /15 5/17 5/19 5/ Specific Cond 15 5/17 5/19 5/2	1 5/23 5/ 21 5/23 5 uctivity	25 5/27 S	5/29 5/31 5/29 5/31 5/29 5/31	6/2 6/4	6/6	

Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

Continuous Water Quality Monitoring Periodic Report

Gills Creek C (May 3, 2023 - June 7, 2023)

Explanation of Statistics:

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Sampled Data:

	Sam	ple 1						
Analyte (units)	5/18/2023							
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli	10.10	322						
(MPN/100mL)	10:10	322						
Total Suspended								
Solids (mg/L)								
Total Phosphorus								
(mg/L)								
Total Nitrogen								
(mg/L)								

Notes:

Data Gaps

There were no data gaps at the GILC station during this monitoring period.

Potential Illicit Discharges and Abnormal Events:

There were no abnormal events at the GILC station during this monitoring period.