Continuous Water Quality Monitoring Periodic Report

Gills Creek A (June 8, 2023 - July 18, 2023)

		CONTINUOUS	SUMMARY STATISTICS					
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARI DEVIATION	
STREAM NAME:	Gills Creek	STAGE (FT):	1.5	5.6	2.0	2.1	0.6	
LOCATION:	Forest Drive Bridge							
ADDRESS:	4840 Forest Drive, Columbia, SC 29206	TEMPERATURE (°F):	74	91	84	83	3	
COORDINATES:	34.019826, -80.963566	TURBIDITY (NTU):	4	360	11	14	19	
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	TOKBIDITT (NTO).	4	300	11	14	19	
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.3	7.1	6.8	6.8	0.1	
APPROX. DRAINAGE AREA:	48 square miles	F					• • •	
SPATIAL LOCATION:	Most upstream site	SPECIFIC						
TOTAL NO. STORMS OVER 0.1 INCH:	17	CONDUCTIVITY (mS/cm):	0.022	0.064	0.042	0.043	0.004	
MAX. DAILY RAINFALL:	2.3 inches	DISSOLVED						
TOTAL RAINFALL (FOR PERIOD):	10.8 inches	OXYGEN (mg/L):	6.1	8.1	7.4	7.3	0.5	
16		Stage & Rain	fall				0.0	
16 # 12	1 7 7 7				1 17		0.0	
Stage 8							0.5 1.0 1.5	
6/8 6/10 6/12 6	6/14 6/16 6/18 6/20 6/22	6/24 6/26 6/28	6/30 7/2 7	/4 7/6 7/8	7/10 7/12	7/14 7/16	7/18	
		Water Tem	np					
105								
* 85 75			<u> </u>		~	~~~	~	
65	6/14 6/16 6/18 6/20 6/2	2 6/24 6/26 6/28	6/30 7/2	7/4 7/6 7/	/8 7/10 7/12	7/14 7/16	7/18	
400		Turbidit	у					
E 200								
2 100		1 3						
0								
	6/14 6/16 6/18 6/20 6/	22 6/24 6/26 6/28	6/30 7/2	7/4 7/6 7	7/8 7/10 7/1	2 7/14 7/16	7/18	
0 6/8 6/10 6/12 SCDHEC in-stream standa	6/14 6/16 6/18 6/20 6,		6/30 7/2	7/4 7/6 7	7/8 7/10 7/1	2 7/14 7/16	7/18	
0 6/8 6/10 6/12 SCDHEC in-stream standa 7.2 7.0			6/30 7/2	7/4 7/6 7	7/10 7/1	2 7/14 7/16	7/18	
0 6/8 6/10 6/12 SCDHEC in-stream standa 7.2 7.0 E 6.8			6/30 7/2	7/4 7/6 7	/8 7/10 7/1	2 7/14 7/16	7/18	
0 6/8 6/10 6/12 SCDHEC in-stream standa 7.2 T 6.8 6.4 6.4 6.2	ard: All pH values not less than 6.0 and not	more than 8.5 pH	~	^	^	^ Ma	~^	
0 6/8 6/10 6/12 SCDHEC in-stream standa 7.2 7.0 4 6.8 6.4 6.4 6.2		more than 8.5 pH	6/30 7/2	^	/8 7/10 7/1	^ Ma	~^	
0 6/8 6/10 6/12 SCDHEC in-stream standa 7.2 T 6.8 6.4 6.4 6.2	ard: All pH values not less than 6.0 and not	more than 8.5 pH	6/30 7/2	^	^	^ Ma	~^	
0 6/8 6/10 6/12 SCDHEC in-stream standa 7.2 7.0 6.8 6.4 6.2 6.8 6.4 6.2 6/8 6/10 6/12	ard: All pH values not less than 6.0 and not	more than 8.5 pH 2 6/24 6/26 6/28	6/30 7/2	^	^	^ Ma	~	
0 6/8 6/10 6/12 SCDHEC in-stream standa 7.2 7.0 6.8 6.6 6.4 6.2 6/8 6/10 6/12	ard: All pH values not less than 6.0 and not	more than 8.5 pH 2 6/24 6/26 6/28	6/30 7/2	^	^	^ Ma	~^	
0 6/8 6/10 6/12 SCDHEC in-stream standa 7.2 7.0 8.6.8 6.4 6.2 6/8 6/10 6/12	ard: All pH values not less than 6.0 and not	pH 2 6/24 6/26 6/28 Specific Con	6/30 7/2	7/4 7/6 7	^	2 7/14 7/16	7/18	
7.2 7.2 7.0 6.8 6.6 6.4 6.2 6/8 6/10 6/12 8 6/10 6/12	6/14 6/16 6/18 6/20 6/20 6/24 6/14 6/16 6/18 6/20 6/20 6/20 6/20 6/20 6/20 6/20 6/20	pH 2 6/24 6/26 6/28 Specific Con 22 6/24 6/26 6/28	6/30 7/2 ductivity	7/4 7/6 7	/8 7/10 7/1	2 7/14 7/16	7/18	
5CDHEC in-stream standa 7.2 6.8 6.6 6.4 6.2 6.8 6.10 6.12 SCDHEC in-stream standa 7.2 6.8 6.10 6.12 SCDHEC in-stream standa	rd: All pH values not less than 6.0 and not	pH 2 6/24 6/26 6/28 Specific Con 22 6/24 6/26 6/28	6/30 7/2 ductivity	7/4 7/6 7	/8 7/10 7/1	2 7/14 7/16	7/18	
5CDHEC in-stream standa 7.2 8.6.8 6.4 6.2 6.8 6.4 6.2 6.8 6.4 6.2 6.8 6.4 6.2 6.8 6.4 6.2 6.8 6.10 6.12 SCDHEC in-stream standa 7.2 8.6.8 6.4 6.2 6.8 6.4 6.2 6.8 6.10 6.12	6/14 6/16 6/18 6/20 6/20 6/24 6/14 6/16 6/18 6/20 6/20 6/20 6/20 6/20 6/20 6/20 6/20	pH 2 6/24 6/26 6/28 Specific Con 22 6/24 6/26 6/28	6/30 7/2 ductivity	7/4 7/6 7	/8 7/10 7/1	2 7/14 7/16	7/18	

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 (June 8, 2023 - July 18, 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		Sample 2		Sample 3					
Analyte (units)	6/22	/2023	6/22/	/2023	6/22/	/2023				
	Time	Results	Time	Results	Time	Results	Time	Results		
Escherichia coli (MPN/100mL)	11:00	588	13:00	462	15:00	172				
Total Suspended Solids (mg/L)	11:00	14.3	13:00	8.5	15:00	7.2				
Total Phosphorus (mg/L)	11:00	0.028	13:00	0.027	15:00	0.024				
Total Nitrogen (mg/L)	11:00	0.53	13:00	0.51	15:00	0.55				

Notes:

Data Gaps

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

Potential Illicit Discharges and Abnormal Events:

Specific conductivity increased on 7/3 and 7/9, which may have been the result of a potential illicit discharge.

Continuous Water Quality Monitoring Periodic Report

Gills Creek B (June 8, 2023 - July 18, 2023)

		CONTINUOUS	SUMMARY STATISTICS						
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION		
STREAM NAME:	Gills Creek	DISCHARGE (CFS):	19.4	846.0	53.8	99.0	118.1		
LOCATION:	Devine Street bridge	TEMPERATURE	=0			83			
ADDRESS:	4716 Devine Street Columbia, SC 29209	(°F):	76	92	84		3		
COORDINATES:	33.989656, -80.97433	TURBIDITY (NTU):	6	120	12	15	10		
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	TORBIDITY (NTO).	0	120	12	15	10		
NEIGHBORING LANDUSE:	Residential and commercial	-11-	5.0	0.7	0.0		0.0		
APPROX. DRAINAGE AREA:	59 square miles	pH:	5.8	6.7	6.3	6.3	0.2		
SPATIAL LOCATION:	Middle site	SPECIFIC							
TOTAL NO. STORMS OVER 0.1 INCH:	17	CONDUCTIVITY (mS/cm):	0.028	0.061	0.050	0.050	0.004		
MAX. DAILY RAINFALL:	1.7 inches	DISSOLVED	0.0	7.7	F.0	5.0			
TOTAL RAINFALL (FOR PERIOD):	9.7 inches	OXYGEN (mg/L):	3.9	7.7	5.8	5.8	0.9		
	e USGS 02169570 Gills Creek station.	Discharge & Rai	nfall						
\$1500	17.11.11.4			P 1	117	7	0.0		
0 Schage 200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							0.5		
6/8 6/10 6/12 6/14	6/16 6/18 6/20 6/22	6/24 6/26 6/28 6/3	0 7/2 7/4	4 7/6 7/8	7/10 7/12	7/14 7/16	7/18		
		Water Temp							
105									
# 85		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~	~~~	^^		~		
75 65									
6/8 6/10 6/12 6/14	6/16 6/18 6/20 6/22	6/24 6/26 6/28 6/	30 7/2 7/	/4 7/6 7/8	7/10 7/12	7/14 7/16	7/18		
		Turbidity							
150		·				•			
100 50									
0				<u> </u>					
6/8 6/10 6/12 6/1	4 6/16 6/18 6/20 6/22	6/24 6/26 6/28 6	/30 7/2 7	7/4 7/6 7/3	8 7/10 7/12	7/14 7/16	7/18		
	pH values not less than 6.0 and not more t	than 8.5 pH							
7.0									
E 6.0						The same of the sa	~ →		
5.5	C/45 C/49 C/20 C/22	6/24 6/26 6/20 6/	20 7/2 7	10 7/5 7/1	7/10 7/12	7/44 7/46	7/10		
6/8 6/10 6/12 6/14	6/16 6/18 6/20 6/22	6/24 6/26 6/28 6/	30 7/2 7	/4 7/6 7/8	8 7/10 7/12	7/14 7/16	7/18		
		Specific Condu	ctivity						
0.08		-,							
_ 0.06	The second secon						A		
S 0.04		•		1 3	- T				
SE 0.04									
5 0.04 0.02 0.00 6/8 6/10 6/12 6/1		6/24 6/26 6/28 6	/30 7/2 7	7/4 7/6 7/	8 7/10 7/12	2 7/14 7/16	7/18		
0.04 0.02 0.00		6/24 6/26 6/28 6	/30 7/2	7/4 7/6 7/	8 7/10 7/12	2 7/14 7/16	7/18		
5 0.04 0.02 0.00 6/8 6/10 6/12 6/1				7/4 7/6 7/		2 7/14 7/16			
5 0.04 0.02 0.00 6/8 6/10 6/12 6/1	4 6/16 6/18 6/20 6/22			7/4 7/6 7/					
5 0.04 0.02 0.00 6/8 6/10 6/12 6/1. SCDHEC in-stream standard:	4 6/16 6/18 6/20 6/22			7/4 7/6 7/					
5 0.04 0.02 0.00 6/8 6/10 6/12 6/1	Daily average not less than 5 mg/L with a	low of 4 mg/L Dissolved O				4 mg/L (SCDHEC	C Low Standard)		

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 (June 8, 2023 - July 18, 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:

	Sam	ple 1	Samı	ple 2	Sam	ple 3		
Analyte (units)	6/22,	/2023	6/22/	/2023	6/22,	/2023		
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	11:45	1,770	13:30	558	15:30	264		
Total Suspended Solids (mg/L)	11:45	33.2	13:30	25.4	15:30	17.8		
Total Phosphorus (mg/L)	11:45	0.069	13:30	0.064	15:30	0.059		
Total Nitrogen (mg/L)	11:45	1.03	13:30	0.84	15:30	0.84		

Notes:

Data Gaps

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

Potential Illicit Discharges and Abnormal Events:

There were no abnormal events at GILB during this monitoring period.

Continuous Water Quality Monitoring Periodic Report

Gills Creek C (June 8, 2023 - July 18, 2023)

		CONTINUOUS	SUMMARY STATISTICS						
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION		
STREAM NAME:	Gills Creek	STAGE (FT):	2.7	7.5	3.6	4.1	1.3		
LOCATION:	Bluff Road bridge	TEMPERATURE (%F).	70	00	04	00	0		
ADDRESS:	3009 Bluff Rd. Columbia, SC 29209	TEMPERATURE (°F):	73	86	81	80	3		
COORDINATES:	33.948043, -80.9889	TURRIDITY (AITU).		440	40	40	40		
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	TURBIDITY (NTU):	6	146	10	13	10		
NEIGHBORING LANDUSE:	Residential and commercial								
APPROX. DRAINAGE AREA:	64 square miles	pH:	6.0	6.5	6.3	6.2	0.1		
SPATIAL LOCATION:	Most downstream site	SPECIFIC							
TOTAL NO. STORMS OVER 0.1 INCH:	15	CONDUCTIVITY (mS/cm):	0.038	0.066	0.052	0.052	0.006		
MAX. DAILY RAINFALL:	1.97 inches	DISSOLVED							
TOTAL RAINFALL (FOR PERIOD):	9.3 inches	OXYGEN (mg/L):	4.0	6.6	5.1	5.1	0.4		
105 95 85 75 66/8 6/10 6/12	6/14 6/16 6/18 6/20 6/2:	Water Temp		7/4 7/6 7/	8 7/10 7/12	2 7/14 7/16	7/18		
E 150 150 150 150 150 150 150 150 150 150	6/14 6/16 6/18 6/20 6/	Turbidity 22 6/24 6/26 6/28	6/30 7/2	7/4 7/6 7	/8 7/10 7/1.	2 7/14 7/16	7/18		
7.0 E 6.5 6.0 5.5	ard: All pH values not less than 6.0 and not		6/30 7/2	7/4 7/6 7,	/8 7/10 7/12	2 7/14 7/16	7/18		
0.08		Specific Cond	uctivity						
\$\\ \begin{align*} \b	6/14 6/16 6/18 6/20 6/3	22 6/24 6/26 6/28	6/30 7/2	7/4 7/6 7	7/8 7/10 7/1	7/14 7/16	7/18		
SCDHEC in-stream stands 12 10 8 6 4 4 6/8 6/10 6/12	ard: Daily average not less than 5 mg/L with	Dissolve 22 6/24 6/26 6/28	ed Oxygen 6/30 7/2	7/4 7/6 7	/8 7/10 7/1	4 mg/L (SCDHEC L	ow Standard) 7/18		

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 (June 8, 2023 - July 18, 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:

	Sam	ple 1	Sam	ple 2					
Analyte (units)	6/22,	/2023	6/22/	/2023					
	Time	Results	Time	Results	Time	Results	Time	Results	
Escherichia coli (MPN/100mL)	10:15	618	11:20	378					
Total Suspended Solids (mg/L)	10:15	10.4	11:20	11.0					
Total Phosphorus (mg/L)	10:15	0.059	11:20	0.056					
Total Nitrogen (mg/L)	10:15	0.72	11:20	0.63					

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.