Continuous Water Quality Monitoring Periodic Report

Gills Creek A (August 11, 2022 - September 14, 2022)

		CONTINUOUS	SUMMARY STATISTICS					
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARI DEVIATION	
STREAM NAME:	Gills Creek	STAGE (FT):	1.6	4.1	1.9	2.0	0.4	
LOCATION:	Forest Drive Bridge							
ADDRESS:	4840 Forest Drive, Columbia, SC 29206	TEMPERATURE (°F):	75	88	83	83	2	
COORDINATES:	34.019826, -80.963566	TURBIDITY (NTU):	5	252	9	13	17	
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	(,			-			
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.5	7.2	6.8	6.9	0.1	
APPROX. DRAINAGE AREA:	48 square miles	p	0.0	7.2	0.0	0.0	0.1	
SPATIAL LOCATION:	Most upstream site	SPECIFIC CONDUCTIVITY	0.021	0.070	0.045	0.045	0.002	
TOTAL NO. STORMS OVER 0.1 INCH:	10	(mS/cm):	0.021	0.070	0.045	0.045	0.002	
MAX. DAILY RAINFALL:	2.0 inches	DISSOLVED						
TOTAL RAINFALL (FOR PERIOD):	5.2 inches	OXYGEN (mg/L):	5.9	8.4	7.3	7.3	0.4	
		Stage & Rain	fall					
± 8	1 1			1			0.0	
98e 4							1.0	
ž 2 0							1.5	
8/11 8/13 8/15	8/17 8/19 8/21 8/23	3 8/25 8/27 8/29	8/31 9/	2 9/4 9	9/6 9/8	9/10 9/12	9/14	
		Water Ten	пр					
90								
80	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~	~~~	~~~	~~~~			
70				ļ				
8/11 8/13 8/15	8/17 8/19 8/21 8/2	23 8/25 8/27 8/2	9 8/31 9	9/2 9/4	9/6 9/8	9/10 9/12	9/14	
300		Turbidit	у					
300								
E 100					• • • • • •	1 44		
8/11 8/13 8/1	.5 8/17 8/19 8/21 8	1/23 8/25 8/27 8/	/29 8/31	9/2 9/4	9/6 9/8	9/10 9/12	9/14	
0/11 0/15 0/1	.5 6/17 6/15 6/21 6	1,25 6,25 6,21 6,	29 6/31	3/2 3/4	3/0 3/6	9/10 9/12	5/14	
	ard: All pH values not less than 6.0 and not	t more than 8.5 pH						
7.5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	00000	1- A A A	A A A				
E 6.5	000000	300000	مسر	POPE		A MA		
6.0				ļ				
8/11 8/13 8/15	8/17 8/19 8/21 8/2	23 8/25 8/27 8/2	29 8/31	9/2 9/4	9/6 9/8	9/10 9/12	9/14	
		Specific Con	ductivity					
0.08 c 0.06	1				4 1			
5 0.06 0.04 0.02			 					
0.02				1				
8/11 8/13 8/15	5 8/17 8/19 8/21 8/	/23 8/25 8/27 8/	29 8/31	9/2 9/4	9/6 9/8	9/10 9/12	9/14	
SCDHEC in-stream sta	ndard: Daily average not less than 5 mg/L v	with a low of 4 mg/L Dissolve	d Oxygen			- 4 mg/L (SCDHEC Lo	ow Standard)	
12		2.55010	. ,0			J. (, , , , , , , , , , , , , , , , , , ,		
10 8 8 6					~~~	-		
4 2								
8/11 8/13 8/15	5 8/17 8/19 8/21 8	/23 8/25 8/27 8/	/29 8/31	9/2 9/4	9/6 9/8	9/10 9/12	9/14	

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 (August 11, 2022 - September 14, 2022)

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)								
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli								
(MPN/100mL)								
Total Suspended								
Solids (mg/L)								
Total Phosphorus								
(mg/L)								
Total Nitrogen								
(mg/L)								

There were no samples collected during this monitoring period.

Notes:

Data Gaps

Turbidity, DO, and specific conductivity data was removed on September 12th due to fouling.

Potential Illicit Discharges and Abnormal Events:

Specific conductivity increased several times throughout the monitoring period, which may have been the result of illicit discharges.

Continuous Water Quality Monitoring Periodic Report

Gills Creek B (August 11, 2022 - September 14, 2022)

		CONTINUOUS	SUMMARY STATISTICS				
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Gills Creek	DISCHARGE (CFS):	16.5	458.0	33.6	51.6	63.0
LOCATION:	Devine Street bridge	TEMPERATURE	76	00	00	00	2
ADDRESS:	4716 Devine Street Columbia, SC 29209	(°F):	76	89	82	82	2
COORDINATES:	33.989656, -80.97433	TURBIDITY (NTU):	8	170	12	14	11
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen						
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.3	6.8	6.5	6.5	0.1
APPROX. DRAINAGE AREA:	59 square miles	P	0.0	0.0	0.0	0.0	0.1
SPATIAL LOCATION:	Middle site	SPECIFIC					
TOTAL NO. STORMS OVER 0.1 INCH:	13	CONDUCTIVITY (mS/cm):	0.013	0.059	0.052	0.052	0.003
MAX. DAILY RAINFALL:	1.8 inches	DISSOLVED					
TOTAL RAINFALL (FOR PERIOD):	6.4 inches	OXYGEN (mg/L):	4.5	8.2	6.3	6.3	0.8
	e USGS 02169570 Gills Creek station.	Discharge & Rain	nfall			•	
800	TTTT	Discharge & Rain		1	I	11	0.0
\$\frac{9}{8}\$ 400 \frac{1}{8}\$ 200							8 ain 1.5 Sain 1.5 Sa
8/11 8/13 8/15 8	3/17 8/19 8/21 8/23	8/25 8/27 8/29	8/31 9/2	9/4 9/	6 9/8 9	9/10 9/12	9/14
100 90 80 70 8/11 8/13 8/15	8/17 8/19 8/21 8/23	8/25 8/27 8/29	8/31 9/3	2 9/4 9	/6 9/8	9/10 9/12	9/14
		Turbidity					
P 100 50 8/11 8/13 8/15	8/17 8/19 8/21 8/23	8/25 8/27 8/29	8/31 9,	/2 9/4	9/8	9/10 9/12	9/14
SCDHEC in-stream standard: All	pH values not less than 6.0 and not more t	than 8.5 pH					
E 6.6 6.4 6.2		1 05 007 000		~~~		0/10 0/10	0/11
8/11 8/13 8/15	8/17 8/19 8/21 8/23	8/25 8/27 8/29	8/31 9/	2 9/4 9	9/6 9/8	9/10 9/12	9/14
0.09		Specific Condu	ctivity				
g 0.08							
8 0.06 0.04 0.02		•				14	
8/11 8/13 8/15	8/17 8/19 8/21 8/23	8/25 8/27 8/29	8/31 9	/2 9/4	9/6 9/8	9/10 9/12	9/14
12	Daily average not less than 5 mg/L with a	low of 4 mg/L Dissolved O	xygen			4 mg/L (SCDHE	Low Standard)
10 8 6 4.000	manan						
4 2			0/5		0/5	0/10	
8/11 8/13 8/15	8/17 8/19 8/21 8/23	8/25 8/27 8/29	8/31	9/2 9/4	9/6 9/8	9/10 9/12	9/14

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 (August 11, 2022 - September 14, 2022)

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)								
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli								
(MPN/100mL)								
Total Suspended								
Solids (mg/L)								
Total Phosphorus								
(mg/L)								
Total Nitrogen								
(mg/L)								

There were no samples collected during this monitoring period.

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 the GILB station during this monitoring period.

Continuous Water Quality Monitoring Periodic Report

Gills Creek C (August 11, 2022 - September 14, 2022)

		CONTINUOUS		SUM	MARY STATIS	TICS	
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Gills Creek	STAGE (FT):	2.7	6.5	3.0	3.2	0.8
LOCATION:	Bluff Road bridge	TEMPERATURE (0E)	7.5	00	00	70	0
ADDRESS:	3009 Bluff Rd. Columbia, SC 29209	TEMPERATURE (°F):	75	83	80	79	2
COORDINATES:	33.948043, -80.9889		_		_		_
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	TURBIDITY (NTU):	5	58	8	10	6
NEIGHBORING LANDUSE:	Residential and commercial						
APPROX. DRAINAGE AREA:	64 square miles	pH:	5.9	6.4	6.3	6.3	0.1
SPATIAL LOCATION:	Most downstream site	SPECIFIC					
TOTAL NO. STORMS OVER 0.1 INCH:	11	CONDUCTIVITY (mS/cm):	0.041	0.069	0.059	0.057	0.005
MAX. DAILY RAINFALL:	1.39 inches	DISSOLVED					
TOTAL RAINFALL (FOR PERIOD):	4.9 inches	OXYGEN (mg/L):	4.5	6.2	5.5	5.4	0.3
		Stage & Rain	fall				
16 12	1			T	I.e		0.0
Stage 8							0.0 0.5 1.0 1.5
8/11 8/13 8/15	8/17 8/19 8/21 8/2	3 8/25 8/27 8/29	8/31 9/	2 9/4 9	9/8	9/10 9/12	9/14 2.0 °
90		Water Tem	p				
85 # 80		~~~	~~~	~~~	~~		
75	1 2 2						
70							
70	8/17 8/19 8/21 8/2	3 8/25 8/27 8/2	9 8/31 9,	/2 9/4	9/6 9/8	9/10 9/12	9/14
8/11 8/13 8/15	8/17 8/19 8/21 8/2			/2 9/4	9/6 9/8	9/10 9/12	9/14
8/11 8/13 8/15 100 75	8/17 8/19 8/21 8/2	3 8/25 8/27 8/2 Turbidity		/2 9/4	9/6 9/8	9/10 9/12	9/14
8/11 8/13 8/15	8/17 8/19 8/21 8/2			/2 9/4	99/6 9/8	9/10 9/12	9/14
8/11 8/13 8/15 100 75 50	\^	Turbidity		9/4		9/10 9/12	9/14
8/11 8/13 8/15 P	^	Turbidity					9/14
8/11 8/13 8/15 100 75 50 25 0 8/11 8/13 8/1	^	Turbidity					9/14
8/11 8/13 8/15 100 75 50 8/11 8/13 8/1 SCDHEC in-stream standa	5 8/17 8/19 8/21 8	723 8/25 8/27 8/					9/14
8/11 8/13 8/15 100 75 50 25 0 8/11 8/13 8/15	5 8/17 8/19 8/21 8	723 8/25 8/27 8/					9/14
8/11 8/13 8/15 100 75 50 25 0 8/11 8/13 8/1 SCDHEC in-stream standa 6.6 6.4 4 6.2 6.0	5 8/17 8/19 8/21 8	Turbidity /23 8/25 8/27 8/ more than 8.5 pH	29 8/31				9/14
8/11 8/13 8/15 100 75 50 8/11 8/13 8/15 SCDHEC in-stream stands 6.6 4 6.2 6.0 5.8 5.6	5 8/17 8/19 8/21 8, ard: All pH values not less than 6.0 and not	Turbidity /23 8/25 8/27 8/ more than 8.5 pH 23 8/25 8/27 8/2	29 8/31	9/2 9/4	9/6 9/8	9/10 9/12	9/14
8/11 8/13 8/15 100 75 50 8/11 8/13 8/15 SCDHEC in-stream stands 6.6 4. 6.2 6.0 5.8 5.6 8/11 8/13 8/15	5 8/17 8/19 8/21 8, ard: All pH values not less than 6.0 and not	Turbidity /23 8/25 8/27 8/ more than 8.5 pH	29 8/31	9/2 9/4	9/6 9/8	9/10 9/12	9/14
8/11 8/13 8/15 100 75 50 8/11 8/13 8/15 SCDHEC in-stream stands 6.6 4. 6.2 6.0 5.8 5.6 8/11 8/13 8/15	5 8/17 8/19 8/21 8, ard: All pH values not less than 6.0 and not	Turbidity /23 8/25 8/27 8/ more than 8.5 pH 23 8/25 8/27 8/2	29 8/31	9/2 9/4	9/6 9/8	9/10 9/12	9/14
8/11 8/13 8/15 100 75 50 8/11 8/13 8/15 6.6 4 6.2 6.4 6.2 6.0 5.8 8/11 8/13 8/15	5 8/17 8/19 8/21 8, ard: All pH values not less than 6.0 and not	Turbidity /23 8/25 8/27 8/ more than 8.5 pH 23 8/25 8/27 8/2	29 8/31	9/2 9/4	9/6 9/8	9/10 9/12	9/14
8/11 8/13 8/15 100 75 50 8/11 8/13 8/15 SCDHEC in-stream standa 6.4 6.2 6.4 6.2 6.2 5.8 8/11 8/13 8/15 8/11 8/13 8/15	5 8/17 8/19 8/21 8, ard: All pH values not less than 6.0 and not 8/17 8/19 8/21 8/2	Turbidity /23 8/25 8/27 8/ more than 8.5 pH 23 8/25 8/27 8/2 Specific Cond	29 8/31 9 9 8/31 9	9/2 9/4	9/6 9/8	9/10 9/12	9/14
8/11 8/13 8/15 100 75 50 8/11 8/13 8/15 SCDHEC in-stream stands 6.6 4. 6.2 6.0 5.8 7.5 8/11 8/13 8/15 SCDHEC in-stream stands 0.08 0.08 0.00 8/11 8/13 8/15	5 8/17 8/19 8/21 8, ard: All pH values not less than 6.0 and not 8/17 8/19 8/21 8/2	Turbidity /23 8/25 8/27 8/ more than 8.5 pH 23 8/25 8/27 8/2 Specific Conce 23 8/25 8/27 8/2	29 8/31 9 9 8/31 9	9/2 9/4	9/6 9/8	9/10 9/12	9/14
8/11 8/13 8/15 100 75 50 8/11 8/13 8/15 6.6 6.4 6.2 6.0 5.8 6.0 8/11 8/13 8/15	5 8/17 8/19 8/21 8, ard: All pH values not less than 6.0 and not 8/17 8/19 8/21 8/2 8/17 8/19 8/21 8/2 8/17 8/19 8/21 8/2 8/2 8/17 8/19 8/21 8/2 8/2 8/2 8/2 8/2 8/2 8/2 8/2 8/2 8/2	Turbidity /23 8/25 8/27 8/ more than 8.5 pH 23 8/25 8/27 8/2 Specific Conce 23 8/25 8/27 8/2	29 8/31 9 Buctivity 29 8/31	9/2 9/4	9/6 9/8	9/10 9/12 9/10 9/12	9/14
8/11 8/13 8/15 100 75 50 8/11 8/13 8/15 6.6 6.4 6.2 6.0 5.8 6.0 8/11 8/13 8/15	5 8/17 8/19 8/21 8, ard: All pH values not less than 6.0 and not 8/17 8/19 8/21 8/2 8/17 8/19 8/21 8/2 8/17 8/19 8/21 8/2 8/2 8/17 8/19 8/21 8/2 8/2 8/2 8/2 8/2 8/2 8/2 8/2 8/2 8/2	Turbidity /23 8/25 8/27 8/ more than 8.5 pH 23 8/25 8/27 8/2 Specific Conce 23 8/25 8/27 8/2	29 8/31 9 Buctivity 29 8/31	9/2 9/4	9/6 9/8	9/10 9/12 9/10 9/12	9/14

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 (August 11, 2022 - September 14, 2022)

Explanation of Statistics:

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Sampled Data:

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

There were no samples collected during this monitoring period.

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.