Continuous Water Quality Monitoring Periodic Report

Gills Creek A (January 31, 2024 - March 12, 2024)

			CONTINUOUS		SUMMARY STATISTICS							
PARAMETER	DESCRIPTION		WATER QUALITY PARAMETERS:		MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARI DEVIATION			
STREAM NAME:	Gills Creek		STAGE (FT):		1.0	4.8	1.9	2.2	0.7			
LOCATION:	Forest Drive Brid	dge										
ADDRESS:	4840 Forest Driv Columbia, SC 29		TEMPERATURE (°F):		37	64	56	56	4			
COORDINATES:	34.019826, -80.96	3566	TURBIC	DITY (NTU):	4	137	7	17	21			
TMDL/IMPAIRMENT:	Fecal & Dissolved C	Oxygen	l	(7	107	,	17	21			
NEIGHBORING LANDUSE:	Residential and com	mercial	pH:		6.4	7.7	6.7	6.7	0.1			
APPROX. DRAINAGE AREA:	48 square mile	es	'									
SPATIAL LOCATION:	Most upstream s	site	SPECIF									
TOTAL NO. STORMS OVER 0.1 INCH:	6		CONDU (mS/cm	ICTIVITY i):	0.034	0.125	0.047	0.049	0.009			
MAX. DAILY RAINFALL:	2.6 inches		DISSOL	VFD								
TOTAL RAINFALL (FOR PERIOD):	8.4 inches			N (mg/L):	6.6	11.2	10.2	10.1	0.6			
		<u> </u>		Stage & Rain	fall	<u>.</u>			ļ			
# 6 T		W		Stage & Rain	iali			T T	0.0			
98e 4			_					V-	0.0 0.3 0.6 0.9			
2 0									0.9			
	2/6 2/8 2/10 2/	/12 2/14	2/16 2/	18 2/20 2/2	22 2/24 2/2	6 2/28 3/1	3/3 3/5	3/7 3/9 3/	11 3/13			
70				Water Tem	np							
€ 60 50		-		~~~								
40	700								-			
1/31 2/2 2/4	2/6 2/8 2/10 2	2/12 2/14	2/16 2	/18 2/20 2,	 /22	/26 2/28 3/1	3/3 3/5	3/7 3/9	3/11 3/13			
160				Turbidit	у							
120							2	1				
80 40		1				1	A .	The same of the sa				
1/31 2/2 2/4	2/6 2/8 2/10	2/12 2/14	2/16	2/18 2/20	-	2/26 2/28 3/1	3/3 3/5	3/7 3/9	3/11 3/13			
1/51 2/2 2/4	2/0 2/8 2/10	2/12 2/14	2/10	2/16 2/20	2/22 2/24 2	2/20 2/28 3/1	3/3 3/3	3/1 3/9	3/11 3/13			
		n 6 0 and not i	more than 8.5	pH								
SCDHEC in-stream standa	ord: All pH values not less that											
8.0 SCDHEC in-stream standa	ard: All pH values not less tha	III 0.0 and not i										
7.5	ard: All pH values not less tha	III O.O and not i					. 1 1	8.0				
8.0 7.5 7.0 6.5	ard: All pH values not less tha	III O.O and Hot I				1 1 1	. 1 1	M				
8.0 7.5 7.0 6.5 6.0	-	2/12 2/14	2/16 2		2/22 2/24 2	1 1 1	. 1 1	3/7 3/9	3/11 3/13			
8.0 7.5 7.0 6.5 6.0	-		2/16 2		2/22 2/24 2			3/7 3/9	3/11 3/13			
8.0 7.5 E 7.0 6.5 6.0 1/31 2/2 2/4	-		2/16 2					3/7 3/9	3/11 3/13			
8.0 7.5 7.0 6.5 6.0 1/31 2/2 2/4	-		2/16 2	//18 2/20 2				3/7 3/9	3/11 3/13			
8.0 7.5 7.0 6.5 6.0 1/31 2/2 2/4	-		2/16 2	//18 2/20 2				3/7 3/9	3/11 3/13			
8.0 7.5 E 7.0 6.5 6.0 1/31 2/2 2/4	-		2/16 2	//18 2/20 2				3/7 3/9	3/11 3/13			
8.0 7.5 7.0 6.5 6.0 1/31 2/2 2/4	2/6 2/8 2/10 2			/18 2/20 2 Specific Con	ductivity		3/3 3/5	3/7 3/9	3/11 3/13			
8.0 7.5 7.0 6.5 6.0 1/31 2/2 2/4	2/6 2/8 2/10 2	2/12 2/14	2/16	Specific Con-	ductivity 2/22 2/24 2	/26 2/28 3/1	3/3 3/5	3/7 3/9	3/11 3/13			
8.0 7.5 7.0 6.5 6.0 1/31 2/2 2/4	2/6 2/8 2/10 2	2/12 2/14	2/16	Specific Con-	ductivity	/26 2/28 3/1	3/3 3/5	44	3/11 3/13			
8.0 7.0 6.5 6.0 1/31 2/2 2/4 8.0 1/31 2/2 2/4 SCDHEC in-stream star	2/6 2/8 2/10 2	2/12 2/14	2/16	Specific Con-	ductivity 2/22 2/24 2	/26 2/28 3/1	3/3 3/5	3/7 3/9	3/11 3/13			

 ${\bf Note: Data\ gaps\ appear\ when\ the\ sonde\ is\ removed\ for\ calibration\ or\ when\ the\ flow\ depth\ is\ below\ the\ sensors}$

Continuous Water Quality Monitoring Periodic Report

Gills Creek A (January 31, 2024 - March 12, 2024)

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: No samples were collected at GIL A during this monitoring period.

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)								

Notes:

Data Gaps

There was a data gap in turbidity, pH, DO, and specific conductivity from 2/7 - 2/9 due to fouling.

Potential Illicit Discharges and Abnormal Events:

There were multiple instances of increased specfic conductivity throughout the monitoring period which may have been the result of illicit discharges.

Continuous Water Quality Monitoring Periodic Report

Gills Creek B (January 31, 2024 - March 12, 2024)

		CONTINUOUS	SUMMARY STATISTICS						
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION		
STREAM NAME:	Gills Creek	DISCHARGE (CFS):	12.2	958.0	59.1	134.7	145.3		
LOCATION:	Devine Street bridge	TEMPERATURE	40				3		
ADDRESS:	4716 Devine Street Columbia, SC 29209	(°F):	48	64	55	56			
COORDINATES:	33.989656, -80.97433	TURBIDITY (NTU):	4	211	14	16	12		
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	TOKBIBITT (NTO).	4	211	14	10	12		
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.3	6.8	6.6	6.6	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:	8	CONDUCTIVITY (mS/cm):	0.037	0.067	0.052	0.052	0.006		
MAX. DAILY RAINFALL:	2.5 inches	DISSOLVED	6.0	44.0	0.0	0.7	0.0		
TOTAL RAINFALL (FOR PERIOD):	8.4 inches	OXYGEN (mg/L):	6.9	11.0	9.9	9.7	0.6		
	e USGS 02169570 Gills Creek station.	Discharge & Rain	nfall						
\$1200	THE STATE OF THE S			1	7	T T	0.0 0.3 .=		
90 800 90 90 90 90 90 90 90 90 90 90 90 90 9				^			- 0.3 - 0.6 - 0.9 u - 1.2		
1/31 2/2 2/4 2/6	2/8 2/10 2/12 2/14 2/	16 2/18 2/20 2/22	2/24 2/26	2/28 3/1	3/3 3/5	3/7 3/9 3/2	1.5		
70		Water Temp							
₩ ⁶⁰	~~~~~	~~~	~~~		~	~~~	~		
40									
1/31 2/2 2/4 2/6	2/8 2/10 2/12 2/14 2/	16 2/18 2/20 2/22	2/24 2/26	2/28 3/1	3/3 3/5	3/7 3/9 3/	/11 3/13		
250		Turbidity							
250 200 150									
E 150 100 50									
1/31 2/2 2/4 2/6	2/8 2/10 2/12 2/14	2/16 2/18 2/20 2/2	2 2/24 2/26	5 2/28 3/1	3/3 3/5		/11 3/13		
7.0 SCDHEC in-stream standard: All	pH values not less than 6.0 and not more to	than 8.5 pH							
₹ 6.5	~~~~	~~~		-	400	·			
6.0							<u> </u>		
1/31 2/2 2/4 2/6	2/8 2/10 2/12 2/14 2,	/16 2/18 2/20 2/22	2/24 2/26	2/28 3/1	3/3 3/5	3/7 3/9 3	/11 3/13		
		Specific Conduc	tivity						
0.08		1, 1500 550	<u> </u>						
5 0.06 € 0.04					~	W			
0.02		1				III.	ļļ		
1/31 2/2 2/4 2/6	2/8 2/10 2/12 2/14 2	2/16 2/18 2/20 2/22	2 2/24 2/26	5 2/28 3/1	3/3 3/5	3/7 3/9 3	3/11 3/13		
	Daily average not less than 5 mg/L with a le	ow of 4 mg/L Dissolved O	kygen			4 mg/L (SCDHEC	Low Standard)		
12 10	Manual Company	1-1-1-1	~	~			,		
1/8m 6 4									
1/31 2/2 2/4 2/6	2/8 2/10 2/12 2/14	2/16 2/18 2/20 2/2	2 2/24 2/2	26 2/28 3/1	3/3 3/5	3/7 3/9	3/11 3/13		
1/31 2/2 2/4 2/6	2/0 2/10 2/12 2/14	2,10 2,10 2,20 2,2	2/24 2/2	.0 2/20 3/1	3/3 3/3	פןכ זוןכ	5/11 5/15		

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 (January 31, 2024 - March 12, 2024)

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: No samples were collected at GIL B during this monitoring period.

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)								

Notes:

Data Gaps

There were data gaps in turbidity, pH, DO and specific conductivity from 3/2 - 3/5 due to fouling. Tubidity, pH, and specific conductivity data was removed from 3/6 - 3/7, and additional turbidity data was removed from 3/7 - 3/11 due to fouling.

Potential Illicit Discharges and Abnormal Events:

There were multiple instances of increased specific conductivity throughtout the monitoring period which may have been the result of illicit discharges.

Continuous Water Quality Monitoring Periodic Report

Gills Creek C (January 31, 2024 - March 12, 2024)

					CONTINUOUS		SUMMARY STATISTICS								
PARAMETER	DESCRI	IPTION			R QUALITY METERS:		IIMUM ERVED	MAXIN OBSER		MEDIAI OBSERV		MEAN OBSERVED		ANDARI VIATION	
STREAM NAME:	Gills C	Creek		STAGE	E (FT):	:	2.6	8.8	3	3.7		4.6		1.6	
LOCATION:	Bluff Roa	nd bridge													
ADDRESS:	3009 Bl Columbia,		1	TEMPE	ERATURE (°F):		-	-		-		-		-	
COORDINATES:	33.948043		1										1		
TMDL/IMPAIRMENT:	Fecal & Disso	olved Oxygen		TURBI	DITY (NTU):		-	-		-		-		-	
NEIGHBORING	Residential an	d commercial													
LANDUSE: APPROX. DRAINAGE AREA:	64 squar	re miles		pH:			-	-		-		-		-	
SPATIAL LOCATION:	Most downs	stream site		SPECI	FIC										
TOTAL NO. STORMS OVER 0.1 INCH:	8	3			UCTIVITY		-	-		-		-			
MAX. DAILY RAINFALL:	2.95 in	iches	1	DIGGG						-			+		
TOTAL RAINFALL (FOR PERIOD):	9.4 in		i	DISSO OXYGI	EN (mg/L):		-					-	-		
					Stage & Rair	fall									
20 15		THE							1		7	T T		0.0	
10 5														0.0 0.4 0.8 1.2	
0 +	2/6 2/8 2/1	10 2/12 2/14	4	2/16 2	/18 2/20 2/	22 2/	24 2/26	2/28	3/1	3/3 3/	 5 3	/7 3/9 3	/11 3	↓ _{1.6} /13	
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80					Water Ten	пр									
70									_						
50															
1/31 2/2 2/4	2/6 2/8 2/2	10 2/12 2/1	4	2/16 2	2/18 2/20 2	/22 2	/24 2/2	5 2/28	3/1	3/3 3	/5	3/7 3/9	3/11	 3/13	
					Turbidity										
			Т		Turbialty		1				Τ			\neg	
15			1												
15 T															
§ 0	2/6 2/8 2	2/10 2/12 2.	/14	2/16	2/18 2/20	2/22	2/24 2/	26 2/28	3/1	3/3	3/5	3/7 3/9	3/11	3/13	
P 0	2/6 2/8 2	2/10 2/12 2,	/14	2/16	2/18 2/20	2/22	2/24 2/	26 2/28	3/1	3/3	3/5	3/7 3/9	3/11	3/13	
SCDHEC in-stream standa						2/22	2/24 2/	26 2/28	3/1	3/3	3/5	3/7 3/9	3/11	3/13	
7.0 SCDHEC in-stream stands						2/22	2/24 2/	26 2/28	3/1	3/3	3/5	3/7 3/9	3/11	3/13	
7.0 SCDHEC in-stream stands						2/22	2/24 2/	26 2/28	3/1	3/3	3/5	3/7 3/9	3/11	3/13	
SCDHEC in-stream stands 7.0 6.5		less than 6.0 and no	ot mo	ore than 8.5	рн		2/24 2/		3/1		3/5	3/7 3/9	3/11	3/13	
7.0 SCDHEC in-stream stands 6.5 6.0 5.5	ard: All pH values not	less than 6.0 and no	ot mo	ore than 8.5	рн										
5CDHEC in-stream stands 6.5 6.0 5.5 1/31 2/2 2/4	ard: All pH values not	less than 6.0 and no	ot mo	ore than 8.5	рн	2/22 2									
SCDHEC in-stream stands 7.0 6.5 6.0 5.5 1/31 2/2 2/4	ard: All pH values not	less than 6.0 and no	ot mo	ore than 8.5	pH 2/20 Z	2/22 2									
SCDHEC in-stream stands 7.0 6.5 6.0 5.5 1/31 2/2 2/4	ard: All pH values not	less than 6.0 and no	ot mo	ore than 8.5	pH 2/20 Z	2/22 2									
7.0 6.5 6.0 5.5 1/31 2/2 2/4	ard: All pH values not	less than 6.0 and no	ot mo	2/16 :	pH 2/20 2 Specific Con	ductivity	//24 2/2	6 2/28	3/1	3/3	3/5	3/7 3/9	3/11	3/13	
5CDHEC in-stream stands 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	2/6 2/8 2/ 2/6 2/8 2	less than 6.0 and no	114 //14	2/16 2/16	5 pH 2/18 2/20 Specific Con 2/18 2/20	ductivity	2/24 2/2			3/3	3/5	3/7 3/9	3/11	3/13	
7.0 6.5 6.0 5.5 1/31 2/2 2/4 SCDHEC in-stream stands 7.0 0.09 0.00 1/31 2/2 2/4 SCDHEC in-stream stands 0.09 SCDHEC in-stream stands	2/6 2/8 2/ 2/6 2/8 2	less than 6.0 and no	114 //14	2/16 2/16	5 pH 2/18 2/20 Specific Con 2/18 2/20	ductivity	2/24 2/2	6 2/28	3/1	3/3	3/5	3/7 3/9	3/11	3/13	
0 1/31 2/2 2/4 SCDHEC in-stream stands 10 0 0.09 0.00 0.01 0.00 1/31 2/2 2/4 SCDHEC in-stream stands 10 0 0.00 0.00 0.00 0.00 1/31 2/2 2/4	2/6 2/8 2/ 2/6 2/8 2	less than 6.0 and no	114 //14	2/16 2/16	5 pH 2/18 2/20 Specific Con 2/18 2/20	ductivity	2/24 2/2	6 2/28	3/1	3/3	3/5	3/7 3/9	3/11	3/13	
7.0 6.5 6.0 5.5 1/31 2/2 2/4 SCDHEC in-stream stands 7.0 0.09 0.00 1/31 2/2 2/4 SCDHEC in-stream stands 0.09 SCDHEC in-stream stands	2/6 2/8 2/ 2/6 2/8 2	less than 6.0 and no	114 //14	2/16 2/16	5 pH 2/18 2/20 Specific Con 2/18 2/20	ductivity	2/24 2/2	6 2/28	3/1	3/3	3/5	3/7 3/9	3/11	3/13	

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 (January 31, 2024 - March 12, 2024)

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: No samples were collected at GilC during this monitoring period.

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)								

Notes:

Data Gaps

No temperature, turbididty, pH, specific conductivity and DO data was collected during this monitoring period because the sensors were out for maintenance.

Potential Illicit Discharges and Abnormal Events:

N/A