Continuous Water Quality Monitoring Periodic Report

Smith Branch A (January 5, 2022 - February 9, 2022)

		CONTINUOUS	SUMMARY STATISTICS					
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Smith Branch	STAGE (FT):	1.6	3.9	1.7	1.8	0.3	
LOCATION:	Earlewood Park							
ADDRESS:	1111 Parkside Dr Columbia, SC 29201	TEMPERATURE (°F):	40	59	49	49	4	
COORDINATES:	34.027289,-81.04265	TURBIDITY (NTU):	3.3	152.3	9.5	0.0	19.8	
TMDL/IMPAIRMENT:	Fecal Coliform	, ,						
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.6	7.0	6.9	6.9	0.1	
SPATIAL LOCATION:	Most upstream site	SPECIFIC						
TOTAL NO. STORMS OVER 0.1 INCH:	6	CONDUCTIVITY (mS/cm):	0.048	1.091	0.168	0.191	0.086	
MAX. DAILY RAINFALL:	1.4 inches	DISSOLVED	0.2	40.0	40.2	40.2	0.6	
TOTAL RAINFALL (FOR PERIOD):	3.7 inches	OXYGEN (mg/L):	8.3	12.3	10.3	10.3	0.6	
9		Stage & Rain	fall				0.0	
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65		Water Ten	пр					
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SCDHEC in-stream standa	rd: All pH values not less than 6.0 and not i	more than 8.5 pH						
7.0 To 6.8				~~~	~~~			
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1/5 1/7 1/9	1/11 1/13 1/15 1/17	7 1/19 1/21 1/23	1/25 1/27	7 1/29 1/3	31 2/2 2	2/4 2/6	2/8 2/10	
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S 0.8 0.6 0.4 0.2		^				-		
0.0 1/5 1/7 1/9	1/11 1/13 1/15 1/1	17 1/19 1/21 1/23	1/25 1/2	7 1/29 1/	31 2/2 2	2/4 2/6	2/8 2/10	
SCDHEC in-stream stand	dard: Daily average not less than 5 mg/L w	ith a low of 4 mg/L Dissolve	d Oxygen			4 mg/L (SCDHEC I	Low Standard)	
7/8E 8 6	~~~~	-	~~~	~~~	~~~			
4 +								
2 +								

Continuous Water Quality Monitoring Periodic Report

Smith Branch A (January 5, 2022 - February 9, 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:

	Sample 1		Sam	ple 2	Sample 3		Sample 4	
Analyte (units)	44581							
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	8:27	1,785						
Total Suspended Solids (mg/L)	8:26	2.5						
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Sample 1 was collected during dry weather conditions.

Notes:

Data Gaps

Turbidity data was removed from January 11th - 14th, January 22nd - 24th, and February 1st - 3rd, because the sensor collected erroneous data due to fouling.

Potential Illicit Discharges and Abnormal Events:

The specific conductivity increased on January 16th, 19th, 20th, 22nd, 25th -26th, and 30th, which may have been a result of illicit discharges.

Continuous Water Quality Monitoring Periodic Report

Smith Branch B (January 5, 2022 - February 9, 2022)

	DESCRIPTION WATER QUA			ONTINUOUS	SUMMARY STATISTICS						
PARAMETER				v	WATER QUALITY PARAMETERS:		MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Smith Branch STAGE (FT):		0.7	2.8	0.7	0.8	0.2				
LOCATION:	Off Mo	untain D	rive								
NEAREST ADDRESS:		Clement ia, SC 29		1	TEMPERATURE (°F):		39	59	47	48	4
COORDINATES:		933,-81.0			TURBIDITY (NTU):		2.6	448.8	6.8	11.6	17.3
TMDL/IMPAIRMENT:	Feca	l Coliforr	m	ľ	\		2.0	110.0	0.0	11.0	17.0
NEIGHBORING LANDUSE:	Residential			pH:		6.3	7.3	7.1	7.0	0.2	
SPATIAL LOCATION:	Most Dov	wnstrean	n Site		epreirie.						
TOTAL NO. STORMS OVER 0.1 INCH:	8		0	SPECIFIC CONDUCTIVITY (mS/cm):		0.052 0.839		0.163	0.180	0.075	
MAX. DAILY RAINFALL: TOTAL RAINFALL (FOR				DISSOLVED OXYGEN (mg/L):		8.8	12.6	11.2	11.1	0.6	
PERIOD):							-				
9					Stage &	k Rainfa	<u> </u>			r r	0.0
Stage, #											Rainfall, in
0 1/5 1/7 1/9	1/11 1/	13 1/	/15 1/1	7 1	/19 1/21 1	1/23	1/25 1/27	1/29 1/31	2/2 2/4	2/6 2/8	1.0
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1/5 1/7 1/9	9 1/11	1/13	1/15	1/17	1/19 1/21	1/23	1/25 1/	27 1/29 1/3	31 2/2 2		2/8
SCDHEC in-stream standa						1/23 pH	1/25 1/	27 1/29 1/3	31 2/2 2		22/8
7.4 SCDHEC in-stream standa							1/25 1/	27 1/29 1/:	31 2/2 2		2/8
7.4 SCDHEC in-stream standa 7.0 6.6							1/25 1/	27 1/29 1/3	31 2/2 2		2/8
7.4 SCDHEC in-stream standa	ard: All pH values i	not less tha	an 6.0 and no	ot more t	han 8.5		1/25 1/		~~~	/4 2/6	2/8
7.4 SCDHEC in-stream standa 7.0 6.6 6.2	ard: All pH values i	not less tha	an 6.0 and no	ot more t	nan 8.5	pH 1/23	1/25 1/2		~~~	/4 2/6	
7.4 SCDHEC in-stream standa 7.0 6.6 6.2 1/5 1/7 1/9	ard: All pH values i	not less tha	an 6.0 and no	ot more t	nan 8.5	pH	1/25 1/2		~~~	/4 2/6	
7.4 SCDHEC in-stream standa 7.0 6.6 6.2 1/5 1/7 1/9	ard: All pH values i	not less tha	an 6.0 and no	ot more t	nan 8.5	pH 1/23	1/25 1/2		~~~	/4 2/6	
7.4 SCDHEC in-stream standa 7.0 6.6 6.2 1/5 1/7 1/9	ard: All pH values of the state	not less that	an 6.0 and no	ot more t	1/19 1/21 Specifi	pH 1/23	1/25 1/2	77 1/29 1/3	11 2/2 2	/4 2/6	2/8
7.4 7.0 6.6 6.2 1/5 1/7 1/9	ard: All pH values of the state	not less that	an 6.0 and no	ot more t	nan 8.5	pH 1/23	1/25 1/2	77 1/29 1/3	11 2/2 2	/4 2/6	
7.4 7.4 7.0 6.6 6.2 1.0 8 0.8 0.8 0.4 0.2 1/5 1/7 1/9 SCDHEC in-stream standa	1/11 1	/13 1 1/13	an 6.0 and no	1/17	1/19 1/21 Specification 1/19 1/21	pH 1/23	1/25 1/2 uctivity	77 1/29 1/3	31 2/2	/4 2/6	2/8
7.4 7.4 7.0 6.6 6.2 1.0 8 0.8 0.8 0.4 0.2 1/5 1/7 1/9 SCDHEC in-stream standa	1/11 1	/13 1 1/13	an 6.0 and no	1/17	1/19 1/21 Specification 1/19 1/21	pH 1/23	1/25 1/2 uctivity	77 1/29 1/3	31 2/2	/4 2/6	2/8
7.4 7.0 6.6 6.2 1/5 1/7 1/9 1.0 0.8 0.6 0.2 0.0 1/5 1/7 1/9	1/11 1	/13 1 1/13	an 6.0 and no	1/17	1/19 1/21 Specification 1/19 1/21	pH 1/23	1/25 1/2 uctivity	77 1/29 1/3	31 2/2	/4 2/6	2/8

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Explanation of Statistics:

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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 grab samples were collected during the monitoring period.

Analyte (units)	Sample 1		Sam	ple 2	Sample 3		Sample 4	
	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

Turbidity and DO data were removed from February 4th until the end of the monitoring period because the sensor collected erroneous data due to fouling.

Potential Illicit Discharges and Abnormal Events:

Specific conductivity increased on January 16th, 19th, 20th, 22nd, and 25th, which may have been a result of illicit discharges.