Continuous Water Quality Monitoring Periodic Report

Smith Branch A (October 19, 2022 - December 6, 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	3.7	1.6	1.7	0.2	
LOCATION:	Earlewood Park							
ADDRESS:	1111 Parkside Dr Columbia, SC 29201	TEMPERATURE (°F):	48	71	59	59	5	
COORDINATES:	34.027289,-81.04265	TURBIDITY (NTU):	2	226	5	10	16	
TMDL/IMPAIRMENT:	Fecal Coliform	TONBIBITT (NTO).	2	220	ŭ	10	10	
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.5	7.1	7.0	6.9	0.1	
SPATIAL LOCATION:	Most upstream site							
TOTAL NO. STORMS OVER 0.1 INCH:	7	SPECIFIC CONDUCTIVITY (mS/cm):	0.044	0.356	0.161	0.157	0.036	
MAX. DAILY RAINFALL: TOTAL RAINFALL	0.9 inches	DISSOLVED OXYGEN (mg/L):	5.7	10.3	8.4	8.3	1.0	
(FOR PERIOD):	0.4 398.000	\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.					<u> </u>	
6 3 0 10/19 10/21 10/23 10/2	5 10/27 10/29 10/31 11/2 11/-	Stage & Rainf.		11/20 11/22 11/	24 11/26 11/28	11/30 12/2 12/4	0.0 1 0.5 1 1.0	
		Water Tem	p					
80 70 50 40 10/19 10/21 10/23 10/2	/23 10/25 10/27 10/29 10/31 11/2 11/4 11/6 11/8 11/10 11/12 11/14 11/16 11/18 11/20 11/22 11/24 11/26 11/28 11/30 12/2 12/4 12/6							
300		Turbidity	,					
E 150 150 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 10/25 10/27 10/29 10/31 11/2 11/4 11/6 11/8 11/10 11/12 11/14 11/16 11/18 11/20 11/22 11/24 11/26 11/28 11/3					11/30 12/2 12	/4 12/6	
ECDUIC in abroom abounds	d: All pH values not less than 6.0 and no	t mars than 2.5						
7.6 7.2 6.8 6.4 6.0	15 10/27 10/29 10/31 11/2 11		11/14 11/16 11/13	8 11/20 11/22 1	.1/24 11/26 11/28	11/30 12/2 1	2/4 12/6	
0.40		Specific Cond	luctivity					
0.40 0.30 0.20 0.10 0.00 10/19 10/21 10/23 10/	25 10/27 10/29 10/31 11/2 1	1/4 11/6 11/8 11/10 11/12	11/14 11/16 11/1	18 11/20 11/22	11/24 11/26 11/28	3 11/30 12/2 1	2/4 12/6	
12 10 8 6 4 2	dard: Daily average not less than 5 mg/l			18 11/20 11/22	~~~	4 mg/L (SCDHEC I		

Continuous Water Quality Monitoring Periodic Report

Smith Branch A (October 19, 2022 - December 6, 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)	Sample 1							
	11/10/2022							
	Time	Results						
Escherichia coli (MPN/100mL)	15:44	28,270						
Total Suspended Solids (mg/L)	15:44	300						
Total Phosphorus (mg/L)	15:44	0.67						
Total Nitrogen (mg/L)	15:44	2.70						

Sample 1 was collected during wet weather conditions.

Notes:

Data Gaps

There were data gaps in turbidity from 11/12-11/14, 11/19-11/22, and 12/3-12/5 due to sensor fouling. There was a gap in stage data from 10/22 - 10/23 due to equipment communication failure.

Potential Illicit Discharges and Abnormal Events:

There was a spike in specific conductivity from 11/23-11/25, which may be the result of an illicit discharge.

Continuous Water Quality Monitoring Periodic Report

Smith Branch B (October 19, 2022 - December 6, 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):	0.6	2.7	0.6	0.7	0.2	
LOCATION:	Off Mountain Drive							
NEAREST ADDRESS:	3950 Clement Rd Columbia, SC 29203	TEMPERATURE (°F):	45	71	57	58	6	
COORDINATES:	34.037933,-81.0591	TURBIDITY (NTU):	1	221	5	9	16	
TMDL/IMPAIRMENT:	Fecal Coliform	()						
NEIGHBORING LANDUSE:	Residential and commercial	pH:	4.5	8.4	7.2	6.9	0.7	
SPATIAL LOCATION:	Most Downstream Site	F	0	J		0.0		
TOTAL NO. STORMS OVER 0.1 INCH:	9	SPECIFIC CONDUCTIVITY (mS/cm):	0.040	0.269	0.146	0.142	0.029	
MAX. DAILY RAINFALL: TOTAL RAINFALL (FOR PERIOD):	1.0 inches 0.4 398.000	DISSOLVED OXYGEN (mg/L):	5.8	11.6	9.4	9.3	1.2	
FERIODJ.	<u> </u>			<u> </u>	l	l		
6		Stage & Raini	an		**		0.0	
Stage, ft							Rainfall,	
0 +	5 10/27 10/29 10/31 11/2 11/4	11/6 11/8 11/10 11/12 1	1/14 11/16 11/18	11/20 11/22 11/	24 11/26 11/28	11/30 12/2 12/4	1.0	
85		Water Ten	пр					
75						_		
65 55 45				~~~				
35 +	5 10/27 10/29 10/31 11/2 11/4	11/6 11/8 11/10 11/12 1	1/14 11/16 11/18	3 11/20 11/22 11	/24 11/26 11/28	11/30 12/2 12/	4 12/6	
		Turbidity	,					
300 250 200 100								
50								
0 10/19 10/21 10/23 10)/25 10/27 10/29 10/31 11/2 11/	/4 11/6 11/8 11/10 11/12	11/14 11/16 11/1	18 11/20 11/22 1	1/24 11/26 11/28	11/30 12/2 12	/4 12/6	
SCOHEC in-stream standa	rd: All pH values not less than 6.0 and not	t more than 8.5						
9.0	A A A A A A A A A A A A A A A A A A A	t more than 8.5 pH						
된 7.0 6.0								
5.0					(2.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1			
10/19 10/21 10/23 10/2	25 10/27 10/29 10/31 11/2 11/4	11/6 11/8 11/10 11/12	11/14 11/16 11/1	8 11/20 11/22 1	1/24 11/26 11/28	11/30 12/2 12	2/4 12/6 	
		Specific Con	ductivity					
0.30		Specific con	udentity		^			
0.25 0.20 0.15 0.10					√\			
E 0.10 0.05 0.00		1					b	
	/25 10/27 10/29 10/31 11/2 11/	4 11/6 11/8 11/10 11/12	11/14 11/16 11/	18 11/20 11/22	11/24 11/26 11/2	8 11/30 12/2 1	2/4 12/6	
SCDHEC in-stream sta	ndard: Daily average not less than 5 mg/L	with a low of 4 mg/L Dissolved	l Oxygen			4 mg/L (SCDHEC L	ow Standard)	
14 12 10 8 8 6				^^^		J. (2220		
1/8m 6		MANA			7			
4 2	/25_ 40/27_ 46/22_ 40/27_ ****	14 44 15 44 15 44 15	10/00 22/22	(40, 44/20, :: '5'	44/24 44/25	10. 44/00. 55/5	12/4 12/5	
10/19 10/21 10/23 10	/25 10/27 10/29 10/31 11/2 11,	/4 11/6 11/8 11/10 11/12	11/14 11/16 11/	718 11/20 11/22	11/24 11/26 11/2	8 11/30 12/2	12/4 12/6	

Continuous Water Quality Monitoring Periodic Report

Smith Branch B (October 19, 2022 - December 6, 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)	Sample 1				
	11/10/2022				
	Time	Results			
Escherichia coli (MPN/100mL)	15:58	9,222			
Total Suspended Solids (mg/L)	15:58	244.0			
Total Phosphorus (mg/L)	15:58	0.35			
Total Nitrogen (mg/L)	15:58	2.49			

Sample 1 was collected during wet weather conditions.

Notes:

Data Gaps

There were data gaps in turbidity from 10/30-11/1 and 11/6-11/8 due to sensor fouling. There was a gap in stage data from 10/22 - 10/23 due to equipment communication failure.

Potential Illicit Discharges and Abnormal Events:

There was a spike in specific conductivity from 11/24-11/25, which may be the result of an illicit discharge.