Continuous Water Quality Monitoring Periodic Report

Smith Branch A (November 8, 2023 - December 18, 2023)

		CONTINUOUS		SUMMARY STATISTICS				
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Smith Branch	STAGE (FT):	1.7	4.7	1.7	1.8	0.3	
LOCATION:	Earlewood Park						_	
ADDRESS:	1111 Parkside Dr Columbia, SC 29201	TEMPERATURE (°F):	46	65	56	55	5	
COORDINATES:	34.027289,-81.04265	TURBIDITY (NTU):	4	384	10	16	21	
TMDL/IMPAIRMENT:	Fecal Coliform							
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.5	7.1	7.0	7.0	0.1	
SPATIAL LOCATION:	Most upstream site	SPECIFIC						
TOTAL NO. STORMS OVER 0.1 INCH:	7	CONDUCTIVITY (mS/cm):	0.019	0.183	0.160	0.147	0.033	
MAX. DAILY RAINFALL: TOTAL RAINFALL	2.2 inches	DISSOLVED OXYGEN (mg/L):	7.0	10.8	9.0 9.0		1.0	
(FOR PERIOD):	0.4 inches						<u> </u>	
8 —		Stage & Rainf	all		177		0.0	
# 6 • • • • • • • • • • • • • • • • • • •					1.1		0.5 1.0 1.5	
ž 2							1.5	
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		Water Tem	р					
70								
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400		Turbidity					•	
300 200								
2 100					غناسا		À	
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 1	2/8 12/10 12/	12 12/14 12/1	5 12/18	
SCDHEC in-stream standar	d: All pH values not less than 6.0 and not	more than 8.5 pH						
7.3			~~~	~~~				
됩 6.8 6.6	1				- W			
6.3	11/14 11/16 11/18 11/20 1:	1/22 11/24 11/26 11/28	11/30 12/2	12/4 12/6 1	2/8 12/10 12/	/12 12/14 12/2	.6 12/18	
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0.24 E 0.16								
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			·	·	· · · · · · · · · · · · · · · · · · ·	· · · · · ·	·	
CORUEO:	dard: Daily average not less than 5 mg/L v	vith a low of 4 mg/L Dissolve	d Oxygen			4 mg/L (SCDHEC	Low Standard)	
12 SCDHEC in-stream stan		1 1 1 1						
12								
12								

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Smith Branch A (November 8, 2023 - December 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:

Analyte (units)	Sam	ple 1	Sam	ple 2	Sam	ple 3	Sample 4	
	11/16/2023		11/21	/2023	11/21	/2023	11/21/2023	
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	11:05	398	11:06	6,880	13:15	10,300	14:42	7,220
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Sample 1 was collected during dry weather conditions. Samples 2 - 4 were collected during wet weather conditions.

Notes:

Data Gaps

There was a data gap in stage data on 11/9 through 11/13 due to instrument communication malfunction.

Potential Illicit Discharges and Abnormal Events:

There were no abnormal events during this monitoring period.

Continuous Water Quality Monitoring Periodic Report

Smith Branch B (November 8, 2023 - December 18, 2023)

					CONTINUOUS		SUMMARY STATISTICS					
PARAMETER	DESCRIPTION				WATER QUALITY PARAMETERS:		MININ		MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Smith Branch		;	STAGE (FT):		0.4	4	3.9	0.5	0.6	0.3	
LOCATION:	Off Mountain Drive											
NEAREST ADDRESS:		lement Rd a, SC 2920			TEMPERATURE (°F):		48	3	66	57	56	4
COORDINATES:	34.0379	33,-81.059)1		TURBIDI	TY (NTU):	3		390	6	10	17
TMDL/IMPAIRMENT:	Fecal	Coliform										
NEIGHBORING LANDUSE:	Residential a	and comm	ercial		рН:		6.9	5	7.5	7.4	7.3	0.1
SPATIAL LOCATION:	Most Dow	nstream S	Site									
TOTAL NO. STORMS OVER 0.1 INCH:		8		SPECIFIC CONDUCTIVITY (mS/cm):		0.0	13	0.199	0.163	0.157	0.030	
MAX. DAILY RAINFALL: TOTAL RAINFALL (FOR		inches		D		ED OXYGEN g/L):	7.8	3	10.6	9.4	9.4	0.6
PERIOD):										<u> </u>	<u> </u>	
6			1			Stage & Rain	fall					0.0
gg 2												Rain 0.5 0.7 i. i. i. i.
0 +			<u> </u>									1.5
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	2/4 12/6 12	/8 12/10 12/12	12/14 12/16	12/18
85						Water Ter	np					
70		~~~										
55	~~~				\sim		~~~		~~~		~~~	
11/8 11/10 11/12	11/14 11/16	11/18 11	/20 11	./22	11/24 1	1/26 11/28	11/30 12	2/2 1	2/4 12/6 1	2/8 12/10 12/1	2 12/14 12/16	12/18
						Turbidit	v					
300										•		•
200 100												
0 	11/14 11/16	11/18	11/20	11/22	11/24	11/26 11/28	11/30	12/2	12/4 12/6	12/8 12/10 12/	12 12/14 12/16	5 12/18
SCDHEC in-stream standa	ard: All pH values no	ot less than 6	.0 and no	t more	than 8.5	рН						
8.0												
됩 7.0			T -							 		
6.0 11/8 11/10 11/12	11/14 11/16	11/19 11	1/20 1:	1/22	11/24 1	11/26 11/28	11/30 1	2/2	12/4 12/6	12/8 12/10 12/		5 12/18
11/0 11/10 11/12	11/14 11/10			1,22		11/20 11/20	11,50		12/4 12/0	12/0 12/10 12/		
						Specific Cor	ductivity					
0.30			L.	Т								
₹ 0.20 2 0.10		~~						_	~~~		,	~ •
0.00	44/44	44/40	14 (22	14 (22	11/21	11/25 11/20	11 (22	12/2	12/2 12/5	12/0 12/10 12	/42 42/44 42/4	12/12
11/8 11/10 11/12	11/14 11/16	11/18 1	11/20	11/22	11/24	11/26 11/28	11/30	12/2	12/4 12/6	12/8 12/10 12	/12 12/14 12/1	16 12/18
SCDHEC in-stream sta	ndard: Daily averag	ge not less tha	an 5 mg/l	with a	low of 4 m	g/L Dissolve	d Oxygen				4 mg/L (SCDHEC L	ow Standard)
							_	4				
7/8E 6												
2 	11/14 11/16	11/18	. 11/20	. 11/22	11/24	11/26 11/28	11/30	12/2	12/4 12/6	12/8 12/10 12	 2/12 12/14 12/	16 12/18
		-	-	-	-		•	-	•		· ·	

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Sampled Data:

	Sam	ple 1	Sam	ple 2	Sam	ple 3	Sample 4		
Analyte (units)	11/16	/2023	11/21	/2023	11/21	./2023	11/21/2023		
	Time	Results	Time	Results	Time	Results	Time	Results	
Escherichia coli (MPN/100mL)	10:50	ND	10:50	10,300	13:25	7,310	14:51	9,770	
Total Suspended Solids (mg/L)									
Total Phosphorus (mg/L)									
Total Nitrogen (mg/L)									

Sample 1 was collected during dry weather conditions. Samples 2 - 4 were collected during wet weather conditions.

Notes:

Data Gaps

Specific conductivity, DO, pH and turbidity had data gaps from 11/21 - 11/22 and on 12/11 - 12/12 because the sensors were buried. There was a gap in stage data from 11/9 - 11/14 due to an instrument communication malfunction.

Potential Illicit Discharges and Abnormal Events:

There were no abnormal events during this monitoring period.