## Continuous Water Quality Monitoring Periodic Report

## Smith Branch A (Septemeber 15, 2022 - October 18, 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	4.5	1.6	1.7	0.3	
LOCATION:	Earlewood Park							
ADDRESS:	1111 Parkside Dr Columbia, SC 29201	TEMPERATURE (°F):	61	77	67	68	4	
COORDINATES:	34.027289,-81.04265	TURBIDITY (NTU):	1	176	4	8	14	
TMDL/IMPAIRMENT:	Fecal Coliform	(44.5)	·		•	-		
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.5	7.1	7.0	7.0	0.1	
SPATIAL LOCATION:	Most upstream site	pri.	0.0	7.1	7.0	7.0	0.1	
TOTAL NO. STORMS OVER 0.1 INCH:	2	SPECIFIC CONDUCTIVITY (mS/cm):	0.028	0.178	0.162	0.153	0.026	
MAX. DAILY RAINFALL:	2.6 inches	DISSOLVED OXYGEN	6.5	9.5	7.9	7.8	0.5	
TOTAL RAINFALL (FOR PERIOD):	0.4 398.000	(mg/L):						
		Stage & Rainf	all					
# 9		- T					0.0	
Stage, #							- 0.5 Head	
9/15 9/17 9/19	9/21 9/23 9/25	9/27 9/29 10/1 10	0/3 10/5	10/7 10/9	10/11 10/13	10/15 10/1	7 10/19	
85		Water Tem	p					
75 ·	~~~							
65			~~	<del>/~~</del>	~~~	<del>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>		
9/15 9/17 9/19	9/21 9/23 9/25	9/27 9/29 10/1 1	0/3 10/5	10/7 10/9	10/11 10/13	10/15 10/	17 10/19	
250		Turbidity	,					
200 150 100		•						
50								
9/15 9/17 9/	19 9/21 9/23 9/25	9/27 9/29 10/1	10/3 10/5	10/7 10/9	10/11 10/1	3 10/15 10	/17 10/19	
SCDHEC in-stream standa	rd: All pH values not less than 6.0 and not	more than 8.5 pH						
7.2 <b>E</b> 6.8	~~~~	~~~~			~~~			
6.4								
9/15 9/17 9/19	9/21 9/23 9/25	9/27 9/29 10/1	10/3 10/5	10/7 10/9	10/11 10/1	3 10/15 10	0/17 10/19	
0.25		Specific Conc	auctivity					
5 0.20 0.15 0.10								
0.05					· · · · · · · · · · · · · · · · · · ·			
9/15 9/17 9/1	9 9/21 9/23 9/25	9/27 9/29 10/1	10/3 10/5	10/7 10/9	10/11 10/	13 10/15 1	0/17 10/19	
SCDHEC in-stream stan	dard: Daily average not less than 5 mg/L	with a low of 4 mg/L Dissolved	d Oxygen			4 mg/L (SCDHEC I	ow Standard)	
12 10 8								
√8 8 6 4								
9/15 9/17 9/2	9/21 9/23 9/25	9/27 9/29 10/1	10/3 10/5	10/7 10/9	10/11 10/	/13 10/15 :	0/17 10/19	
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# **Continuous Water Quality Monitoring Periodic Report**

Smith Branch A (Septemeber 15, 2022 - October 18, 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		Sample 2		Sam	ple 3	Sample 4	
Analyte (units)	9/30/3022		9/30/3022		9/30,	/3022	9/30/3022	
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	8:27	10,950	10:17	12,260	12:00	17,330	13:31	9,222
Total Suspended Solids (mg/L)	8:27	70.4	10:17	44.0	12:00	24.6	13:31	84.8
Total Phosphorus (mg/L)	8:27	0.41	10:17	0.26	12:00	0.20	13:31	0.26
Total Nitrogen (mg/L)	8:27	2.61	10:17	1.80	12:00	1.51	13:31	1.63

All samples were collected during wet weather conditions.

### **Notes:**

#### **Data Gaps**

There was a gap in turbidity from 9/21 - 9/27 and 10/5 - 10/10 at the SMIA station due to fouling.

## Potential Illicit Discharges and Abnormal Events:

There were no abnormal events at the SMIA station during this monitoring period.

## Continuous Water Quality Monitoring Periodic Report

# Smith Branch B (Septemeber 15, 2022 - October 18, 2022)

			CONTINUOUS		SUMMARY STATISTICS						
PARAMETER	DESCRIPTION		WATER QUALITY PARAMETERS:		MINIMUM BSERVED	MAXIMI OBSER\		MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Smith Branch STAGE		STAGE (FT):		0.2	4.0		0.6	0.7	0.3	
LOCATION:	Off Mountain Drive										
NEAREST ADDRESS:	3950 Clement Rd Columbia, SC 29203	] [	TEMPERATURE (°F):		59	79		66	67	4	
COORDINATES:	34.037933,-81.0591	11	TURBIDITY (NTU)	):	1	133		4	8	14	
TMDL/IMPAIRMENT:	Fecal Coliform	J L									
NEIGHBORING LANDUSE:	Residential and commercial	]	pH:		7.0	8.3		7.1	7.3	0.3	
SPATIAL LOCATION:	Most Downstream Site	lL	r			0.5					
TOTAL NO. STORMS OVER 0.1 INCH:	2	SPECIFIC CONDUCTIVITY (mS/cm):			0.023	0.165		0.112	0.119	0.038	
MAX. DAILY RAINFALL: TOTAL RAINFALL (FOR	2.9 inches 0.4 398.000	<b> </b>	DISSOLVED OXYO	GEN	6.7	12.0		8.5	8.6	1.0	
PERIOD):	0.1 000.000										
12			Stage 8	& Rainfall				4		0.0	
Stage, ft 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8										0.5 1.5 2.0 4.0 1.5 2.0 4.0 1.5 2.0 4.0 1.5 2.0 4.0 1.5 2.0 1.	
3 3 Stage		-								1.5 mg 2.0	
9/15 9/17 9/19	9/21 9/23 9/25	9/27	9/29 10/1	10/3	10/5	10/7 10	)/9 :	10/11 10/13	3 10/15 10/1	7 10/19	
90			Wate	er Temp							
80	~~~								_		
F 70 60			V	~~	w	~~	<b>~~</b>	~~	ww	~	
50 <del>     </del> 9/15 9/17 9/19	9/21 9/23 9/25	9/27	9/29 10/1	10/3	10/5	10/7 1	10/9	10/11 10/1	13 10/15 10/	17 10/19	
200			Tu	rbidity							
150 150 100		-	4								
50			1								
0 <del>                                    </del>	19 9/21 9/23 9/25	9/2	7 9/29 10/1	1 10/3	10/5	10/7	10/9	10/11 10/	/13 10/15 10	/17 10/19	
	rd: All pH values not less than 6.0 and r	not more	e than 8.5	pH							
8.5	A										
된 7.5 7.0											
6.5 <del>                                    </del>	9/21 9/23 9/25	9/27	9/29 10/1	10/3	10/5	10/7	10/9	10/11 10/	/13 10/15 10	/17 10/19	
3,25 3,25	-,,,	-,									
			Specif	fic Conductiv	ity						
0.20 E 0.15											
8 0.15 0.10 0.05											
0.00			<del>-</del>						Y		
9/15 9/17 9/3	9 9/21 9/23 9/25	9/2	7 9/29 10/1	1 10/3	10/5	10/7	10/9	10/11 10	)/13 10/15 1	0/17 10/19	
SCDHEC in-stream sta	ndard: Daily average not less than 5 mg	/L with	a low of 4 mg/L Dis	ssolved Oxyg	en				4 mg/L (SCDHEC L	ow Standard)	
SCDHEC in-stream sta	ndard: Daily average not less than 5 mg	/L with	a low of 4 mg/L Dis	ssolved Oxyg	gen			0 0 0	4 mg/L (SCDHEC L	ow Standard)	
14 12 10 10 8 6	ndard: Daily average not less than 5 mg	J/L with	a low of 4 mg/L Dis	ssolved Oxyg	ren	~~	^^	^^^	4 mg/L (SCDHEC L	ow Standard)	
SCDHEC in-stream star 12 10 10 8 8 6 4 2 9/15 9/17 9/	^^^^	y/L with	^^^		~~	10/7	10/9	10/11 10		ow Standard)	

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### Sampled Data:

	Sample 1		Sam	ple 2	Sam	ple 3	Sample 4	
Analyte (units)	9/30/3022		9/30/3022		9/30,	/3022	9/30/3022	
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	8:43	4,488	10:43	17,330	12:21	12,260	13:48	7,308
Total Suspended Solids (mg/L)	8:43	89.2	10:43	81.6	12:21	32.9	13:48	25.7
Total Phosphorus (mg/L)	8:43	0.28	10:43	0.34	12:21	0.23	13:48	0.2
Total Nitrogen (mg/L)	8:43	2.71	10:43	2.19	12:21	1.74	13:48	1.43

All samples were collected during wet weather conditions.

#### **Notes:**

#### Data Gaps

There was a data gap in pH from 9/20 through the end of deployment due to sensor repairs, as well as a gap in turbidity from 9/28-9/30 due to fouling on the sensor.

#### Potential Illicit Discharges and Abnormal Events:

There were no abnormal events at the SMIB station during this monitoring period.