

# Smith Branch Monitoring Sites

## Monitoring Data Summary for October 30<sup>th</sup>, 2020 – December 1<sup>st</sup>, 2020

### *Data Gaps*

- The SMIA station experienced a period of fouling turbidity data from November 3<sup>rd</sup>-4<sup>th</sup>, November 7<sup>th</sup>-9<sup>th</sup>, November 19<sup>th</sup>-24<sup>th</sup> so those periods of data were removed from the dataset. DO data was not available for this reporting period because the sensor was out of commission due to repairs.
- The SMIB station experienced a period of fouling turbidity data from November 26<sup>th</sup>-27<sup>th</sup> and periods of specific conductivity fouling from November 27<sup>th</sup>-28<sup>th</sup> and November 28<sup>th</sup>-29<sup>th</sup>, so those periods of data were removed from the dataset. DO data was not available for this reporting period because the sensor was out of commission due to repairs. Stage data was also not available during this reporting period.

### *SCDHEC Standards*

- The SMIA and SMIB stations did not record any pH values outside the acceptable SCDHEC range of 6 to 8.5.

### *Storm Events*

- The SMIA rain gauge recorded 8 storms (at least 0.1 inches) in this monitoring period resulting in 3.5 inches of precipitation. The SMIB rain gauge recorded 7 storms (at least 0.1 inches) in this monitoring period resulting in 3.1 inches of precipitation.
- The SMIA and SMIB monitoring stations recorded typical water quality responses to the storm events observed during this monitoring period.

### *Potential Illicit Discharges and Abnormal Events*

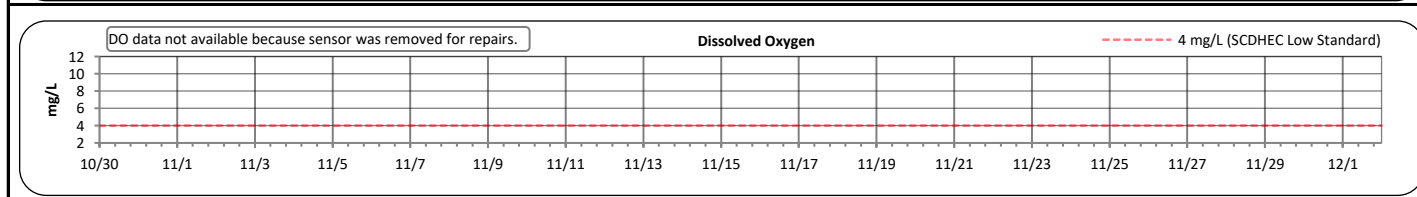
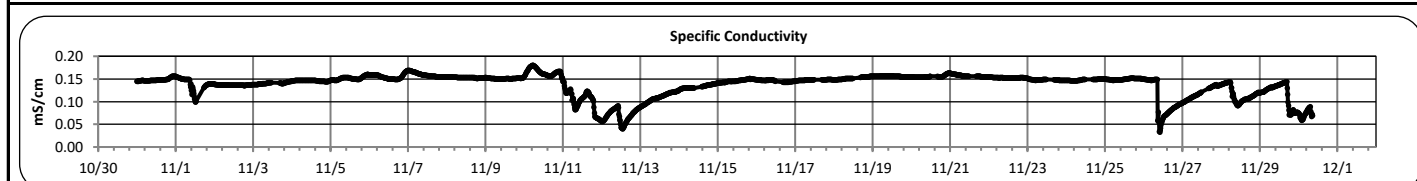
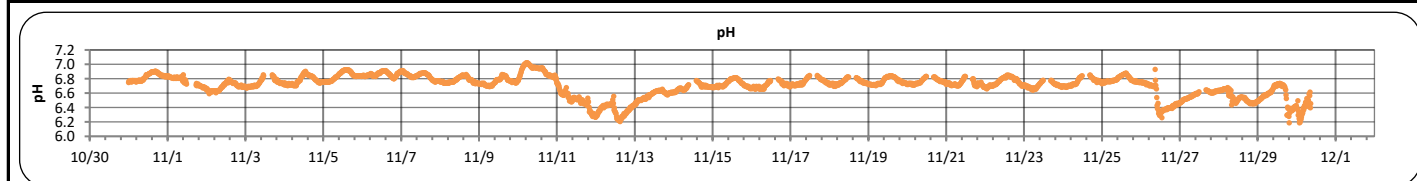
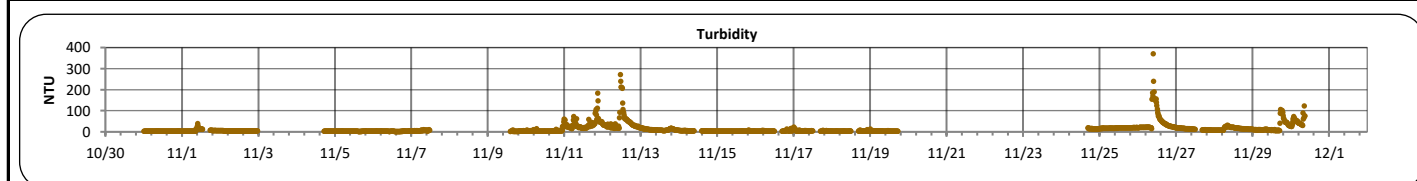
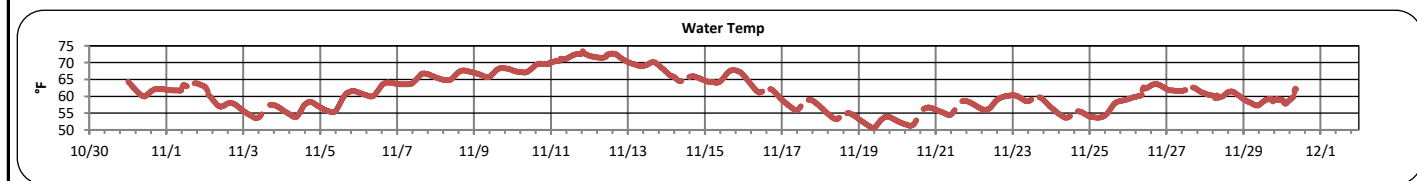
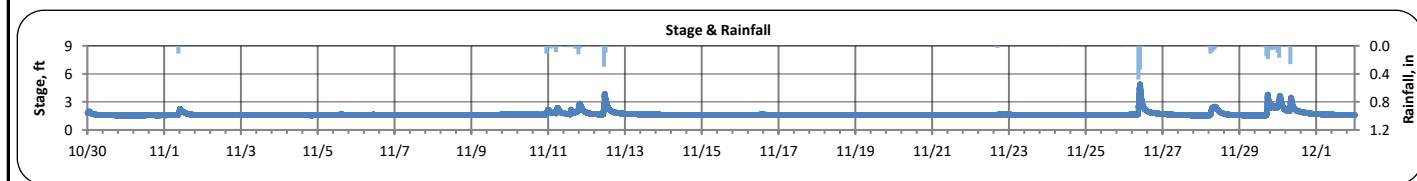
- At the SMIA and SMIB stations, there was an increase in pH and specific conductivity on November 10<sup>th</sup> that may have been the result of an illicit discharge.

### *Flow Measurements*

- No flow measurements were taken in this watershed during this monitoring period.

Smith Branch A (October 30, 2020 - December 1, 2020)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Smith Branch	STAGE (FT):	1.6	4.9	1.6	1.7	0.2
LOCATION:	Earlewood Park	TEMPERATURE (°F):	51	73	61	61	5
ADDRESS:	1111 Parkside Dr Columbia, SC 29201	TURBIDITY (NTU):	3	371	6	15	25
COORDINATES:	34.027289,-81.04265	pH:	6.2	7.0	6.7	6.7	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.033	0.18	0.148	0.138	0.026
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	-	-	-	-	-
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	8						
MAX. DAILY RAINFALL:	0.9 inches						
TOTAL RAINFALL (FOR PERIOD):	3.5 inches						



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**

**Smith Branch A (October 30, 2020 - December 1, 2020)**

**Explanation of Statistics:**

<b>MINIMUM OBSERVED</b>	The minimum of the values recorded by the datasonde in 15 minute intervals.
<b>MAXIMUM OBSERVED</b>	The maximum of the values recorded by the datasonde in 15 minute intervals.
<b>MEDIAN OBSERVED</b>	The median of all the values recorded by the datasonde in 15 minute intervals.
<b>MEAN OBSERVED</b>	The average of all the values recorded by the datasonde in 15 minute intervals.
<b>STANDARD DEVIATION</b>	The standard deviation of all the values recorded by the datasonde in 15 minute intervals.

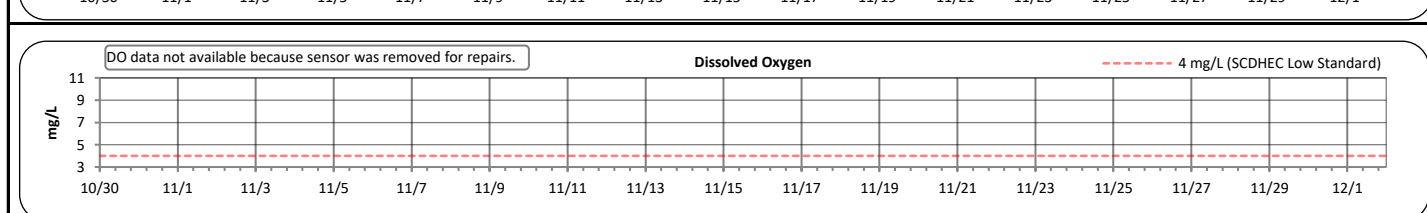
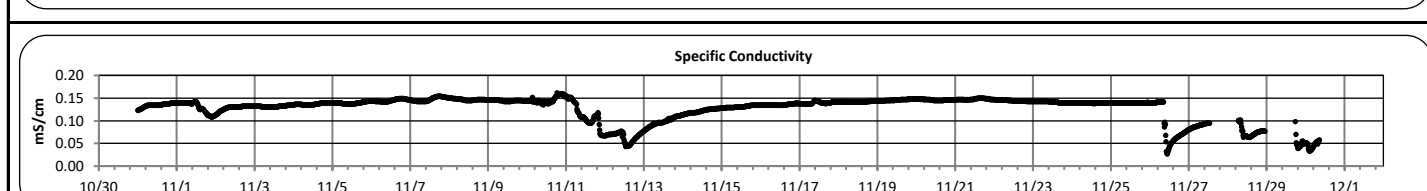
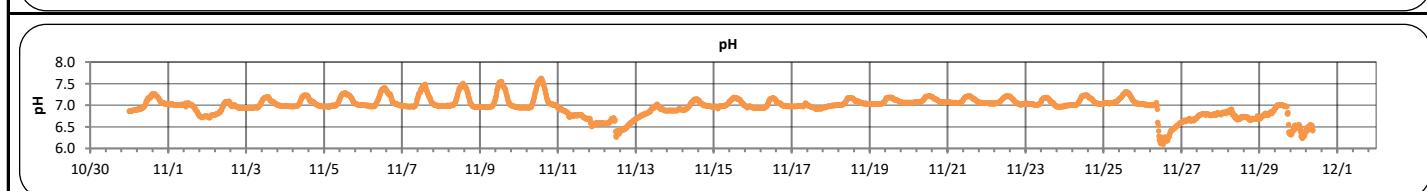
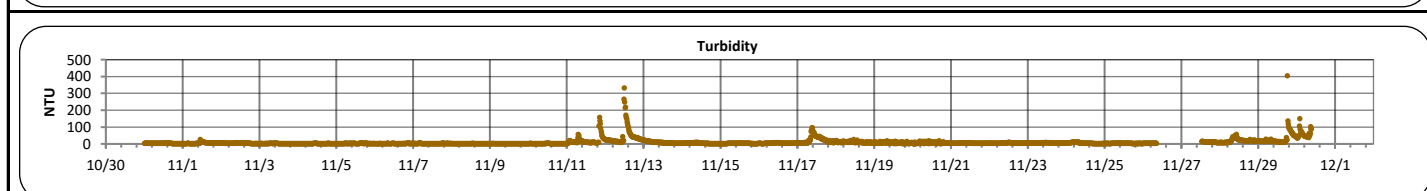
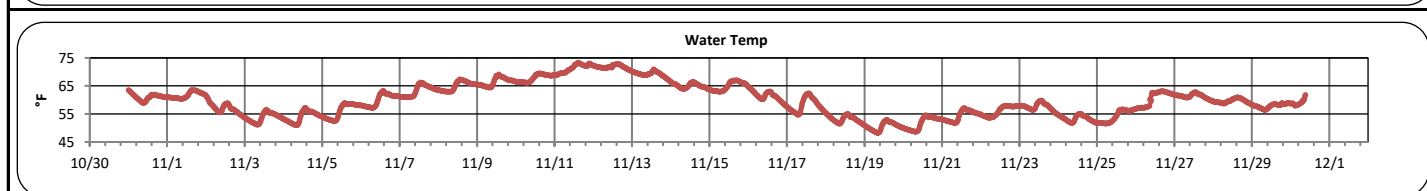
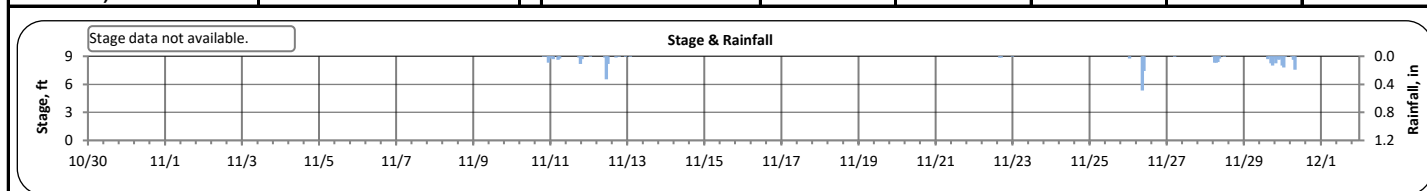
**Sampled Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	11/12/2020		11/12/2020		11/12/2020		11/20/2020	
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	10:32	3,214	11:49	34,660	13:24	24,070	7:40	482
Total Suspended Solids (mg/L)	10:32	50	11:49	299	13:24	50.6	7:40	0
Total Phosphorus (mg/L)	10:32	0.500	11:49	0.46	13:24	0.17		
Total Nitrogen (mg/L)	10:32	0.09	11:49	2.14	13:24	2.07		

Notes: Samples 1-3 were taken during wet weather conditions. Sample 4 was taken during dry weather conditions.

Smith Branch B (October 30, 2020 - December 1, 2020)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Smith Branch	STAGE (FT):	-	-	-	-	-
LOCATION:	Off Mountain Drive	TEMPERATURE (°F):	48	73	59	60	6
NEAREST ADDRESS:	3950 Clement Rd Columbia, SC 29203	TURBIDITY (NTU):	1	406	5	10	20
COORDINATES:	34.037933,-81.0591	pH:	6.1	7.6	7.0	7.0	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.027	0.162	0.139	0.128	0.027
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	-	-	-	-	-
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	7						
MAX. DAILY RAINFALL:	0.7 inches						
TOTAL RAINFALL (FOR PERIOD):	3.1 inches						



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**

**Smith Branch B (October 30, 2020 - December 1, 2020)**

**Explanation of Statistics:**

<b>MINIMUM OBSERVED</b>	The minimum of the values recorded by the datasonde in 15 minute intervals.
<b>MAXIMUM OBSERVED</b>	The maximum of the values recorded by the datasonde in 15 minute intervals.
<b>MEDIAN OBSERVED</b>	The median of all the values recorded by the datasonde in 15 minute intervals.
<b>MEAN OBSERVED</b>	The average of all the values recorded by the datasonde in 15 minute intervals.
<b>STANDARD DEVIATION</b>	The standard deviation of all the values recorded by the datasonde in 15 minute intervals.

**Sampled Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	11/12/2020		11/12/2020		11/12/2020			
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	10:14	1,476	11:36	24,070	13:11	34,660		
Total Suspended Solids (mg/L)	10:14	6	11:36	655	13:11	138		
Total Phosphorus (mg/L)	10:14	0.088	11:36	0.91	13:11	0.33		
Total Nitrogen (mg/L)	10:14	0.64	11:36	4.34	13:11	0.64		

Notes: All samples were taken during wet weather conditions.