

Smith Branch Monitoring Sites

Monitoring Data Summary for August 27th, 2020 – September 24th, 2020

Data Gaps

- The SMIA station experienced a brief period of fouling turbidity data from September 4th-7th so that period of data was removed from the dataset. The station experienced brief gaps in reporting on August 29th and September 15th which affected all the sonde sensors.
- The SMIB station experienced issues with the power regulator and did not report any sonde data from September 7th to the end of this monitoring period. No DO data was available for this reporting period because the sensor was out of commission due to repairs.

SCDHEC Standards

- The SMIA and SMIB stations did not record any pH values outside the acceptable SCDHEC range of 6 to 8.5.
- The SMIA station recorded an average DO concentration of 6.6 mg/L, which was above the SCDHEC daily average standard of 5 mg/L.
- The minimum DO concentration recorded at the SMIA station was 4.8 mg/L, which was above the SCDHEC discrete minimum standard of 4 mg/L.

Storm Events

- The SMIA rain gauge recorded 4 storms (at least 0.1 inches) in this monitoring period resulting in 3.5 inches of precipitation. The SMIB rain gauge data was not available due to the power regulator issues at the site.
- The SMIA monitoring station recorded typical water quality responses to the storm events observed during this monitoring period.

Potential Illicit Discharges and Abnormal Events

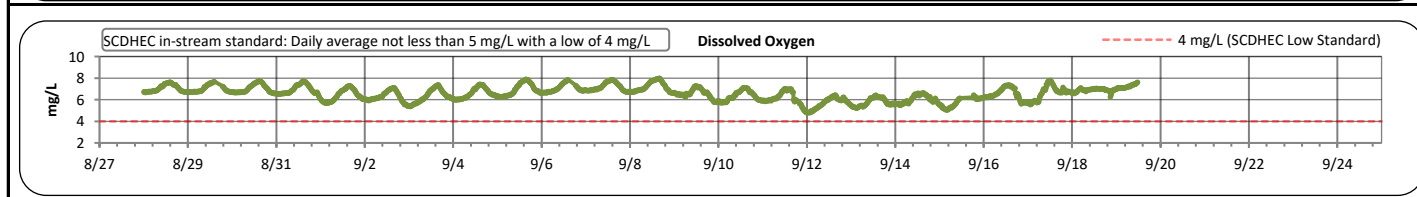
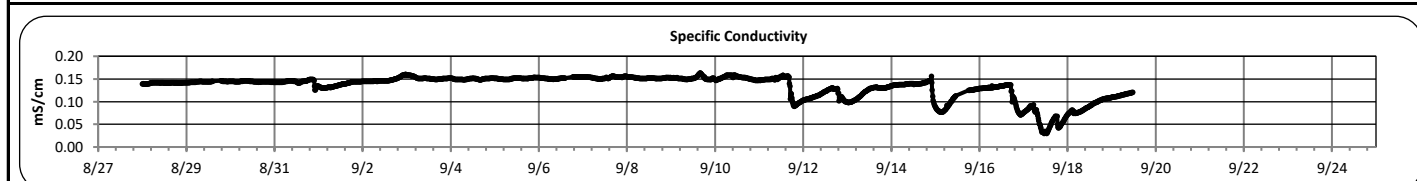
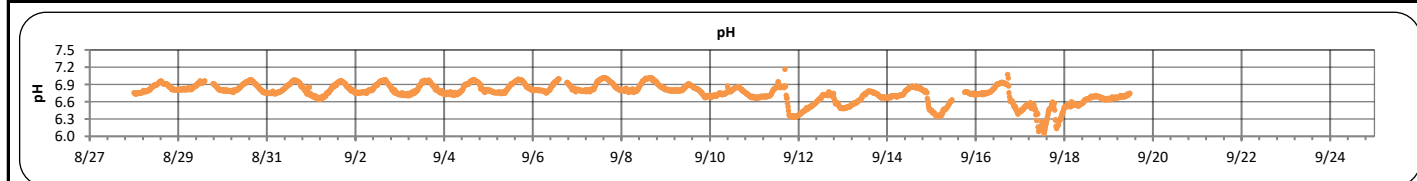
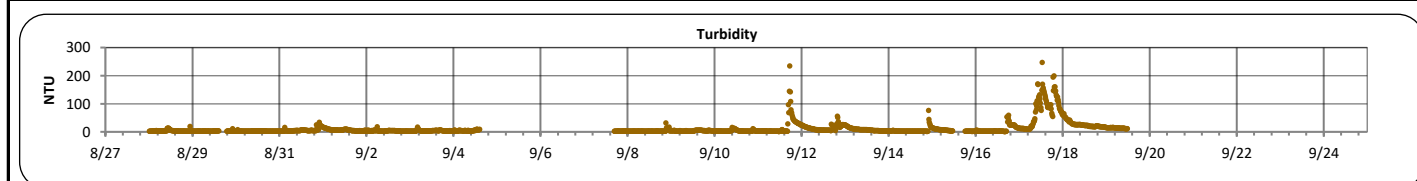
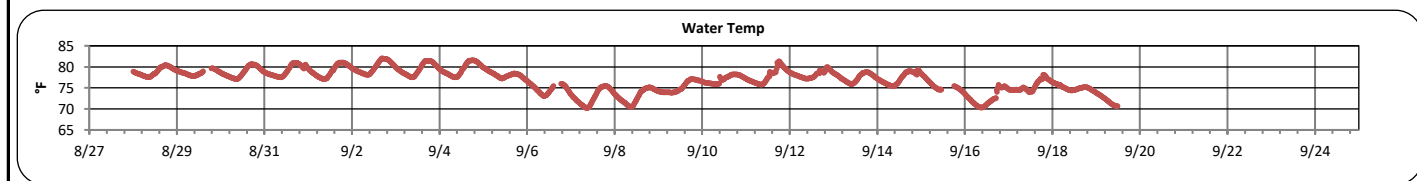
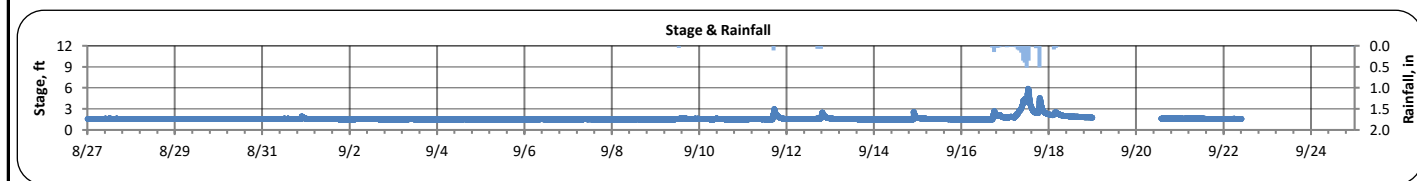
- There were no potential illicit discharges at the SMIA and SMIB stations during this monitoring period.

Flow Measurements

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

Smith Branch A (August 27, 2020 - September 24, 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):	1.5	5.9	1.5	1.6	0.4
LOCATION:	Earlewood Park	TEMPERATURE (°F):	70	82	78	77	3
ADDRESS:	1111 Parkside Dr Columbia, SC 29201	TURBIDITY (NTU):	2	248	4	12	23
COORDINATES:	34.027289,-81.04265	pH:	6.1	7.2	6.8	6.8	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.030	0.163	0.144	0.134	0.025
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	4.8	8.0	6.7	6.6	0.7
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	2.7 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 (August 27, 2020 - September 24, 2020)

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:

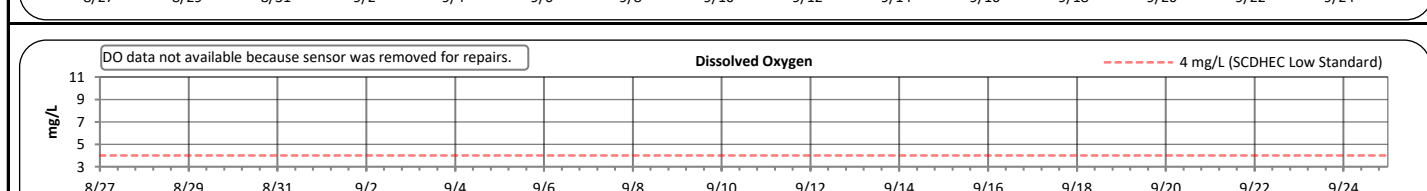
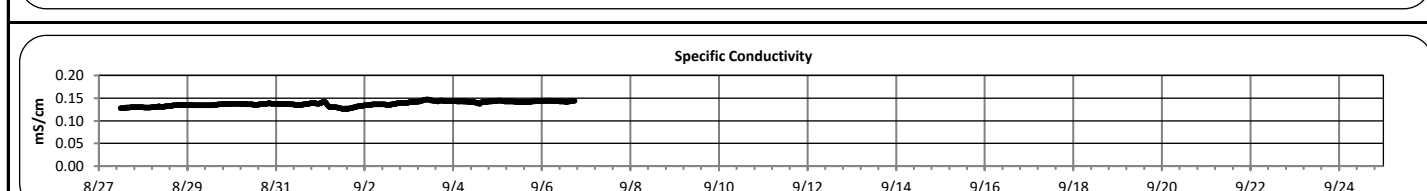
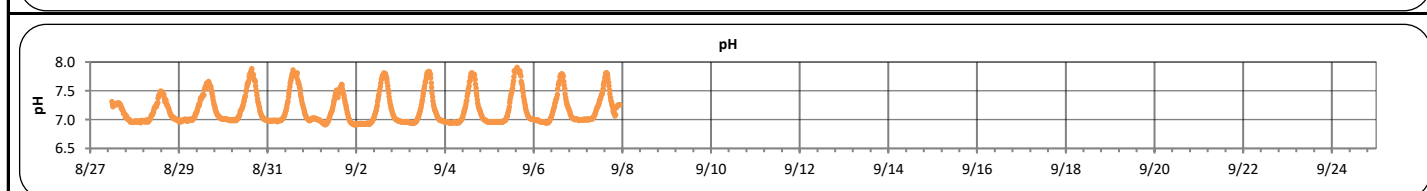
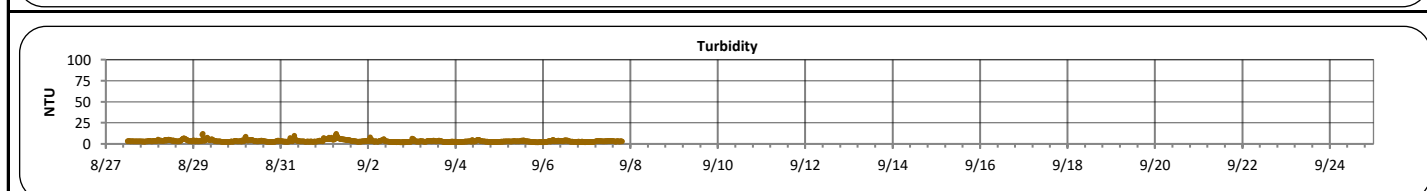
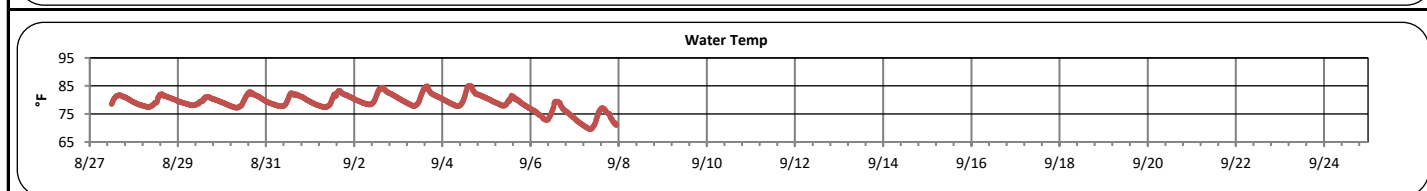
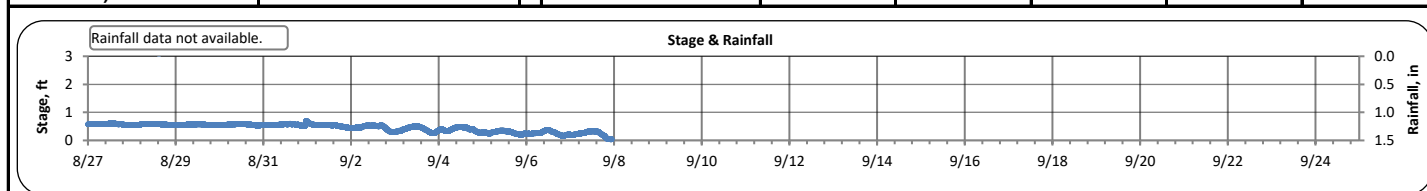
Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	9/17/2020		9/17/2020		9/17/2020		9/17/2020	
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	10:25	2,444	11:53	1,400	13:45	10,340	15:02	6,152
Total Suspended Solids (mg/L)	10:25	166	11:53	182	13:45	37.7	15:02	32.3
Total Phosphorus (mg/L)	10:25	0.210	11:53	0.23	13:45	0.088	15:02	0.098
Total Nitrogen (mg/L)	10:25	0.77	11:53	1.33	13:45	1.09	15:02	1.3

Analyte (units)	Sample 5		Sample 6		Sample 7		Sample 8	
	9/21/2020							
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	9:10	914						
Total Suspended Solids (mg/L)	9:10	2.4						
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Notes: Samples 1-4 were taken during wet weather conditions. Sample 5 was taken during dry weather conditions.

Smith Branch B (August 27, 2020 - September 24, 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):	-0.1	0.7	0.5	0.5	0.1
LOCATION:	Off Mountain Drive	TEMPERATURE (°F):	70	85	79	79	3
NEAREST ADDRESS:	3950 Clement Rd Columbia, SC 29203	TURBIDITY (NTU):	2	12	3	4	1
COORDINATES:	34.037933,-81.0591	pH:	6.9	7.9	7.1	7.2	0.3
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.126	0.147	0.137	0.138	0.005
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	-	-	-	-	-
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	0						
MAX. DAILY RAINFALL:	0.0 inches						
TOTAL RAINFALL (FOR PERIOD):	0.0 inches						



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**Continuous Water Quality
Monitoring Periodic Report**

Smith Branch B (August 27, 2020 - September 24, 2020)

Explanation of Statistics:

MINIMUM OBSERVED	The minimum of the values recorded by the datasonde in 15 minute intervals.
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MEDIAN OBSERVED	The median of all the values recorded by the datasonde in 15 minute intervals.
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STANDARD DEVIATION	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	
	9/17/2020		9/17/2020		9/17/2020		9/17/2020	
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	10:10	3,450	11:36	2,966	13:30	13,730	14:49	9,768
Total Suspended Solids (mg/L)	10:10	274	11:36	91.2	13:30	29	14:49	27.1
Total Phosphorus (mg/L)	10:10	0.350	11:36	0.16	13:30	0.076	14:49	0.079
Total Nitrogen (mg/L)	10:10	1.94	11:36	0.82	13:30	0.58	14:49	0.83

Notes: Samples 1-4 were taken during wet weather conditions.