

Smith Branch Monitoring Sites

Data Gaps

- At the SMIA station, the sonde became buried on two occasions, causing data gaps in both the turbidity and DO datasets.
- The SMIB station did not experience any data gaps.

SCDHEC Standards

- The SMIA and SMIB stations recorded average DO levels of 8.4 and 8.9 mg/L, respectively, well above the SCDHEC daily average standard of 5 mg/L. Neither of the stations recorded any DO levels below the 4 mg/L instantaneous standard.
- The pH standard was not violated at either the SMIA or SMIB stations.

Storm Events

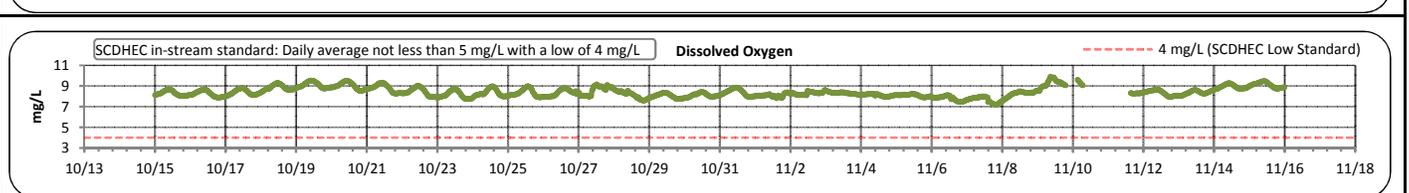
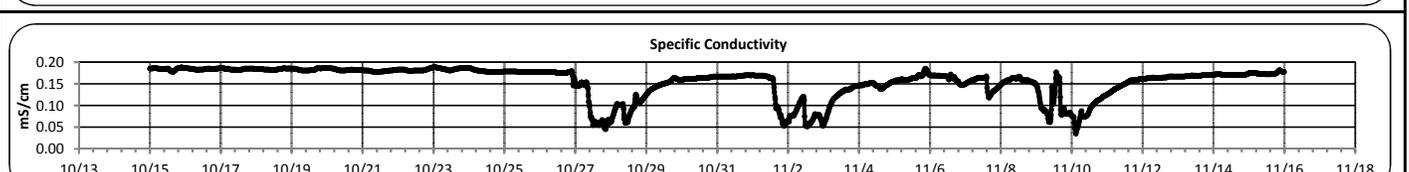
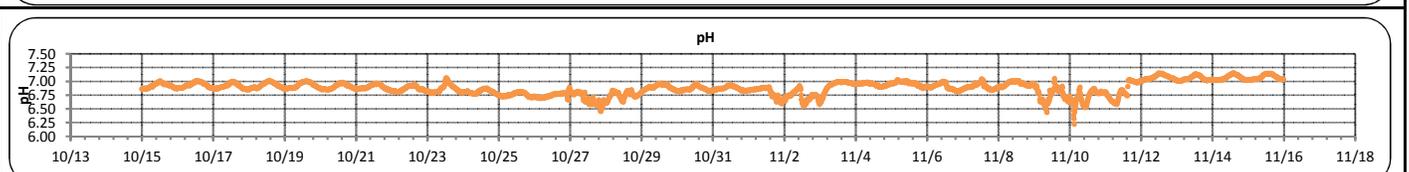
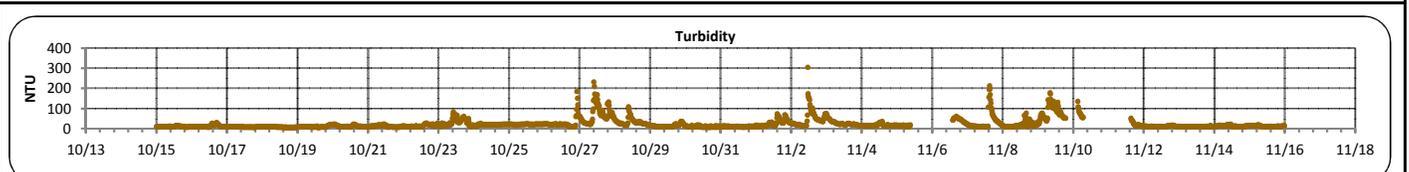
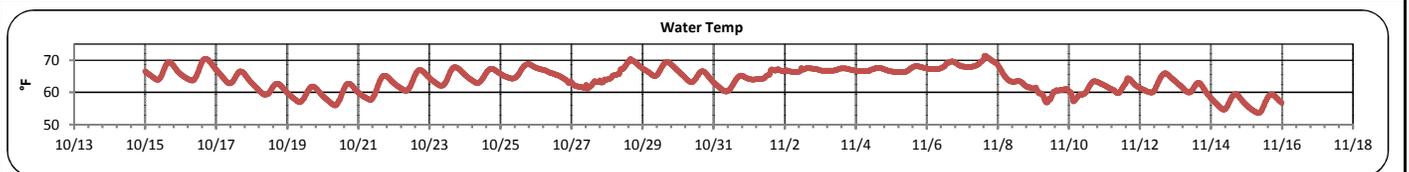
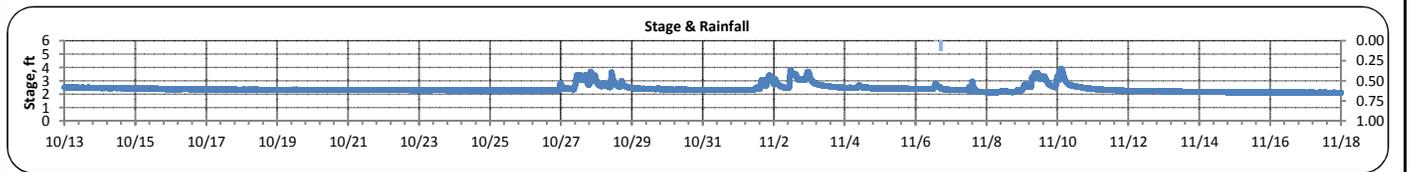
- The SMIA rain gage was not recording rainfall during this deployment due to damage incurred during the October flood event.
- The SMIB station recorded a total of 5.1 inches of rainfall during this period from a number of small, low intensity rain events.

Potential Illicit Discharges and Abnormal Events

- At the SMIA station, two potential illicit discharge events were recorded during this deployment:
 - On October 16th, the turbidity at SMIA increased to 30 NTU for several hours.
 - On the evening of November 5th, the specific conductivity increase slightly along with a stage increase.
- No potential illicit discharge events were noted at the SMIB station.

Smith Branch A (October 13, 2015 -- November 17, 2015)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Smith Branch	STAGE (FT):	2.1	3.9	2.3	2.4	0.3
LOCATION:	Earlewood Park	TEMPERATURE (°F):	54	71	64	64	4
ADDRESS:	1111 Parkside Dr Columbia, SC 29201	TURBIDITY (NTU):	6	306	14	23	25
COORDINATES:	34.027289,-81.04265	pH:	6.2	7.2	6.9	6.9	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.035	0.188	0.168	0.156	0.035
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	7.2	9.9	8.3	8.4	0.5
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	1						
MAX. DAILY RAINFALL:	0.1 inches*						
TOTAL RAINFALL (FOR PERIOD):	0.1 inches*						



Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors.

*The rain gage was not recording rainfall data during this deployment period due to damage from the flood.

**Continuous Water Quality
Monitoring Periodic Report**

Smith Branch A (October 13, 2015 -- November 17, 2015)

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.

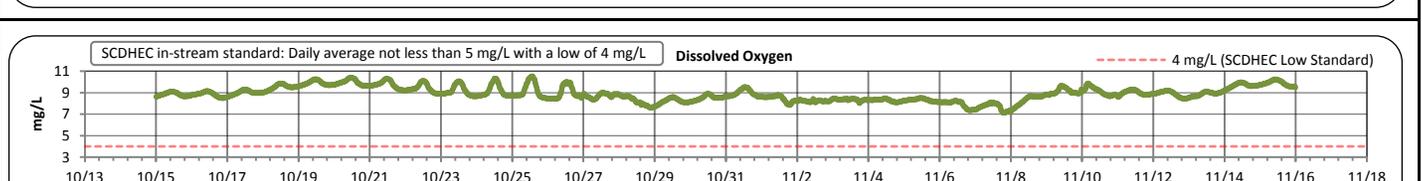
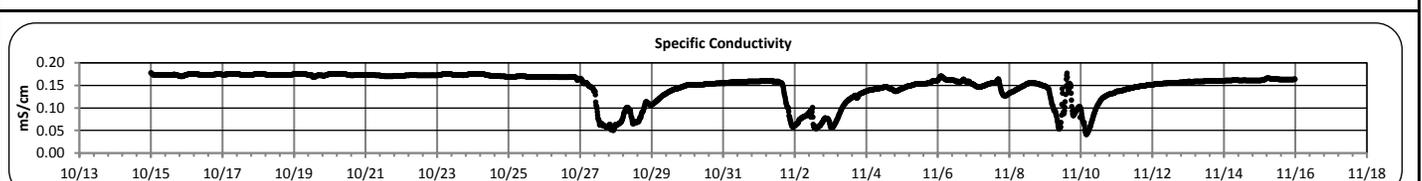
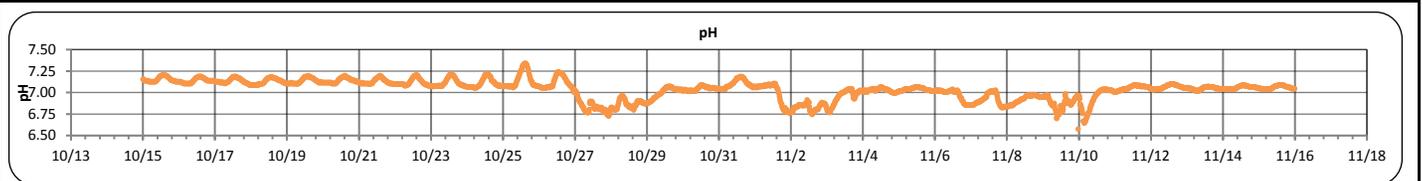
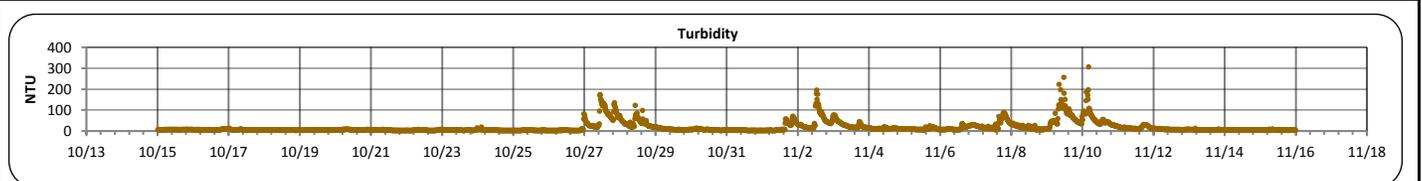
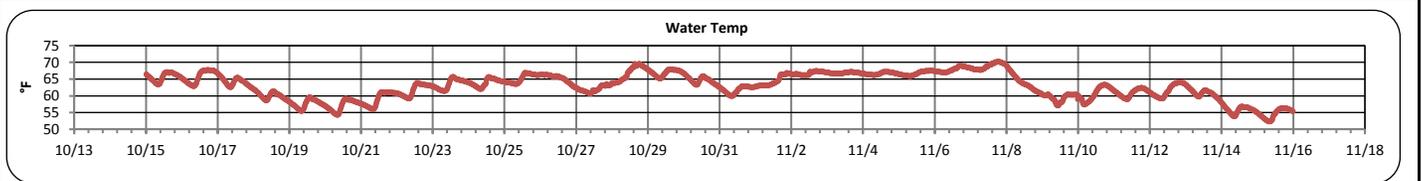
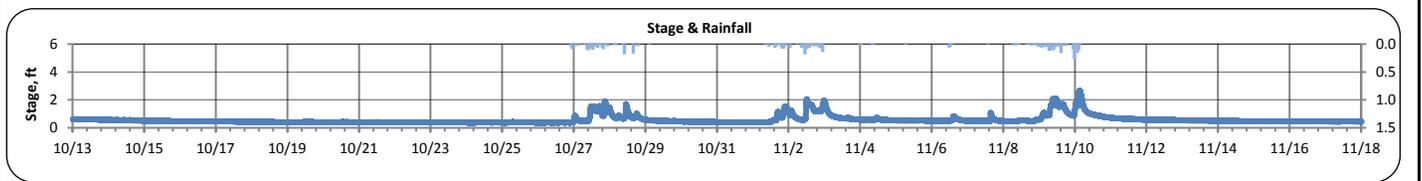
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	10/27/2015							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	12:08	14540.0						
Total Suspended Solids (mg/L)	12:08	136						
Total Phosphorus (mg/L)	12:08	0.28						
Total Nitrogen (mg/L)	12:08	1.3						

Note:

Smith Branch B (October 13, 2015 -- November 17, 2015)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Smith Branch	STAGE (FT):	0.4	2.7	0.5	0.6	0.3
LOCATION:	Off Mountain Drive	TEMPERATURE (°F):	52	70	63	63	4
NEAREST ADDRESS:	3950 Clement Rd Columbia, SC 29203	TURBIDITY (NTU):	3	308	8	18	26
COORDINATES:	34.037933,-81.0591	pH:	6.6	7.3	7.1	7.0	0.1
TMDL/IMPAIRED:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.041	0.178	0.159	0.149	0.032
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	7.2	10.6	8.8	8.9	0.7
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	8						
MAX. DAILY RAINFALL:	1.4 inches						
TOTAL RAINFALL (FOR PERIOD):	5.1 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 13, 2015 -- November 17, 2015)

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	
	10/27/2015							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	12:26	18,420						
Total Suspended Solids (mg/L)	12:26	151						
Total Phosphorus (mg/L)	12:26	0.28						
Total Nitrogen (mg/L)	12:26	1.76						

Note: