

## Rocky Branch Monitoring Sites

### *Data Gaps*

- The Rocky Branch monitoring stations did not experience any submergence issues or periods of fouling during this monitoring period.

### *SCDHEC Standards*

- The ROCA and ROCB stations recorded average DO concentrations of 6.8 and 7.1 mg/L, respectively. The instantaneous DO concentration at the ROC stations did not fall below the minimum instantaneous standard of 4 mg/L.
- The lower pH standard of 6 was violated at the ROCA station on August 5<sup>th</sup> and 6<sup>th</sup>, when the pH fell to a low value of 5.8 briefly. Both of these instances of low pH levels were during storm events, and likely occurred as a result of the acidic rain commonly experienced in the Southeastern United States.

### *Storm Events*

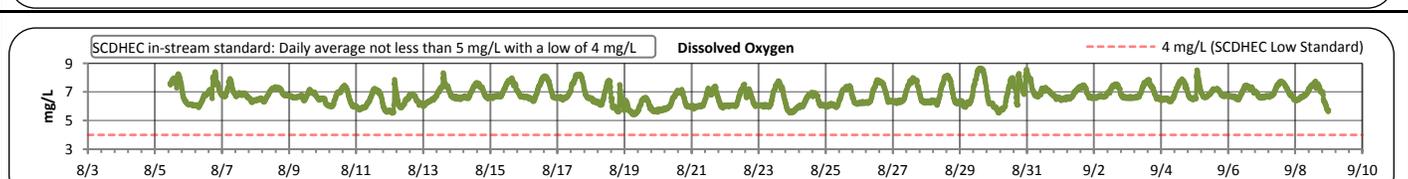
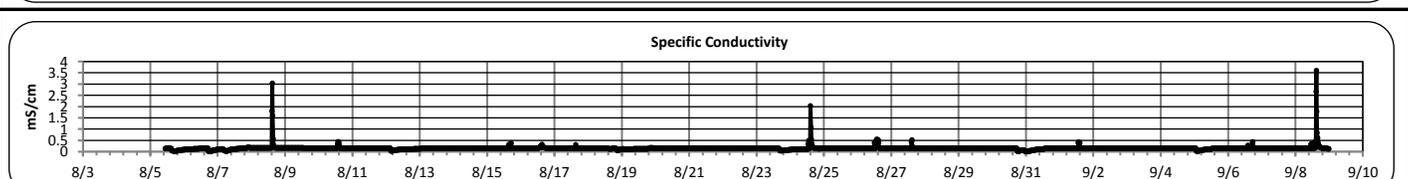
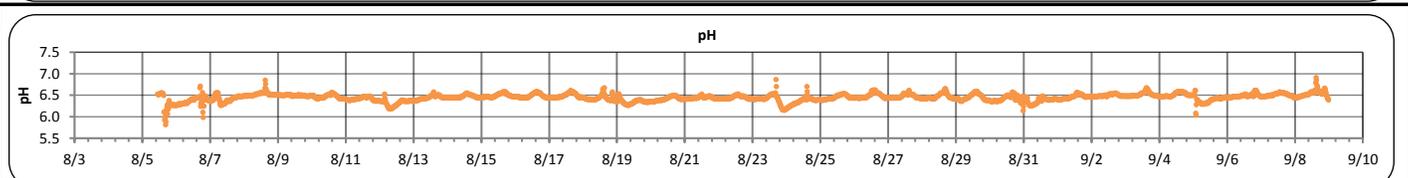
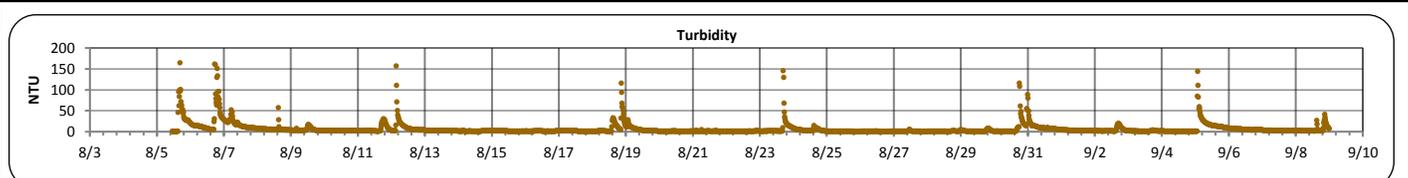
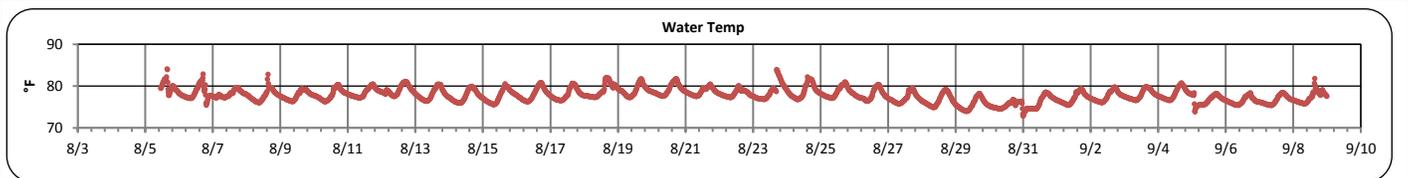
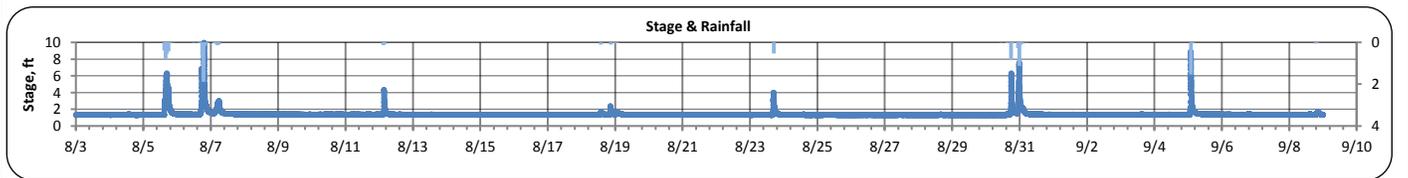
- This monitoring period recorded several large storm events totaling 10.8 and 10.0 inches of precipitation at the ROCA and ROCB rain gages, respectively.

### *Potential Illicit Discharges and Abnormal Events*

- At ROCA, 9 potential illicit discharges were recorded:
  - 3 of these events were associated with the pool filter maintenance at Maxcy Greg pool. These events were recorded on August 8<sup>th</sup>, and 24<sup>th</sup> and September 8<sup>th</sup>, resulting most notably in extremely elevated specific conductivity levels.
  - On August 10<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, and 17<sup>th</sup> and September 1<sup>st</sup>, smaller illicit discharges were noted which may also have been associated with pool maintenance activities other than pool filter backwash events.
- At ROCB, several increases in specific conductivity were noted. The most notable of these occurred on August 9<sup>th</sup> and September 9<sup>th</sup> and appear to have been the downstream result of the Maxcy Greg pool maintenance events which were observed at ROCA.

**Rocky Branch A (August 3, 2015 -- September 9, 2015)**

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Rocky Branch	STAGE (FT):	1.3	10.0	1.4	1.4	0.5
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	73	84	78	78	2
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	1	165	3	7	13
COORDINATES:	34.995864, -81.021842	pH:	5.8	6.9	6.5	6.5	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.012	3.595	0.148	0.151	0.117
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.4	8.7	6.7	6.8	0.6
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	9						
MAX. DAILY RAINFALL:	2.8 inches						
TOTAL RAINFALL (FOR PERIOD):	10.7 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**

**Rocky Branch A (August 3, 2015 -- September 9, 2015)**

**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.

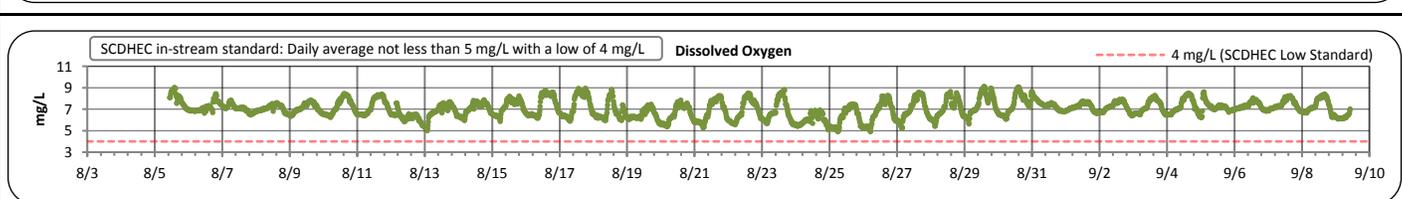
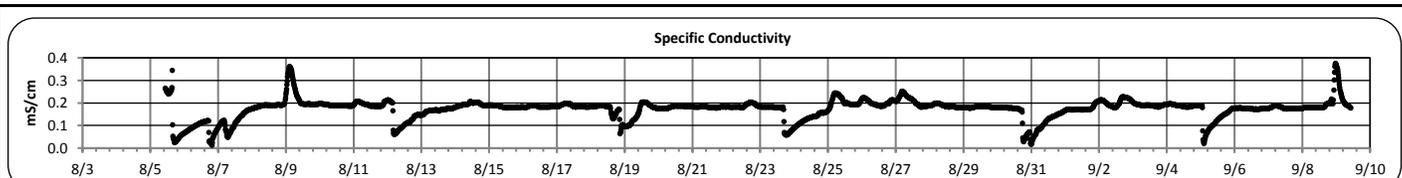
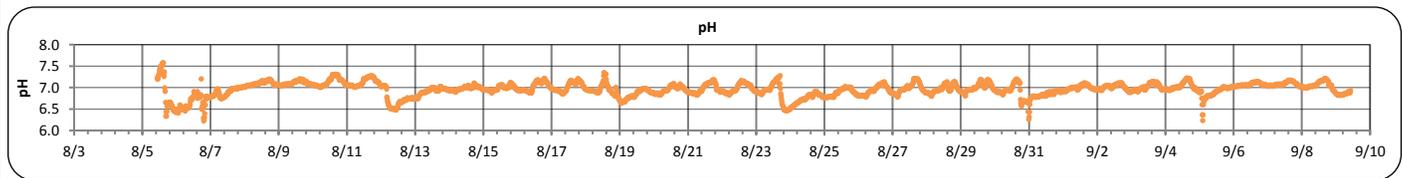
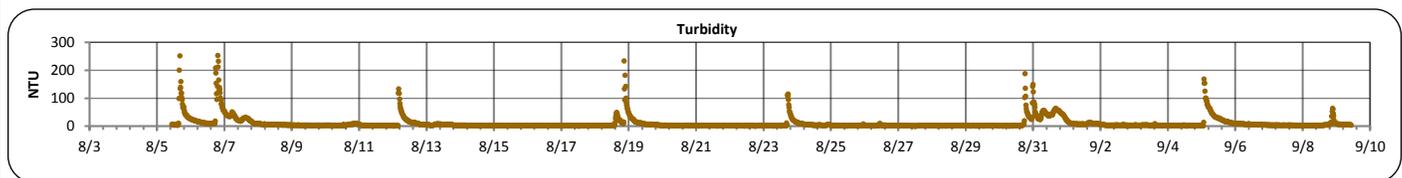
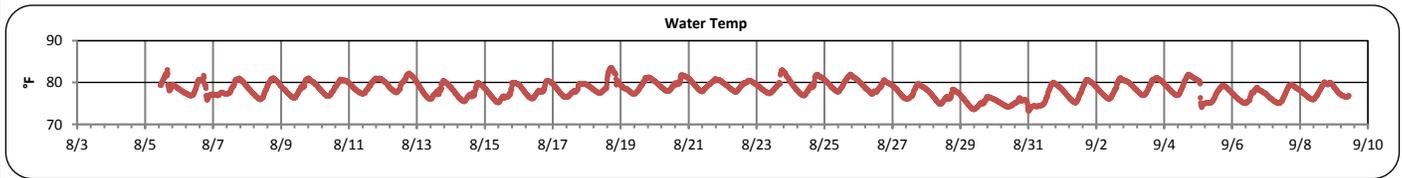
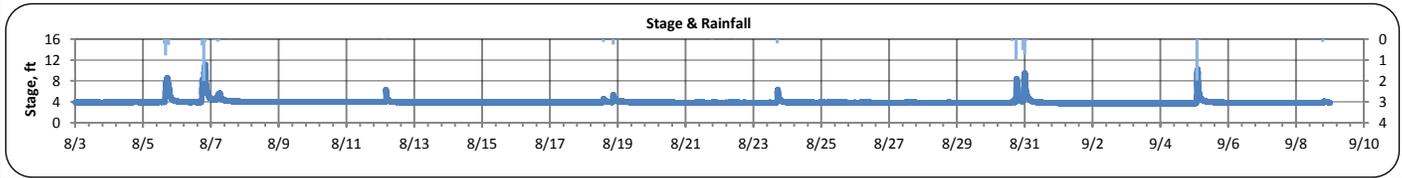
**Grab Sample Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	8/18/2015		8/18/2015					
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	13:04	456.0	13:14	7,568				
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: Sample 1 was collected during dry conditions at baseflow.

**Rocky Branch B (August 3, 2015 -- September 9, 2015)**

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Rocky Branch	STAGE (FT):	3.8	11.2	3.9	4.0	0.5
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	73	84	78	78	2
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	253	3	10	22
COORDINATES:	33.982578, -81.035036	pH:	6.2	7.6	7.0	7.0	0.2
TMDL/IMPAIRED:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.013	0.375	0.183	0.174	0.044
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	4.9	9.2	7.1	7.1	0.8
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	9						
MAX. DAILY RAINFALL:	2.5 inches						
TOTAL RAINFALL (FOR PERIOD):	10.0 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**

**Rocky Branch B (August 3, 2015 -- September 9, 2015)**

**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	
	8/18/2015							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	12:47	456						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: Sample was collected during dry conditions at baseflow.