

## **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 6.6 and 6.2 mg/L, respectively. The average DO levels decreased during this monitoring period when compared to the previous monitoring period, likely as a result of increasing water temperatures and continued dry conditions leading to low flows. The instantaneous DO concentration at ROCA did not fall below the 4 mg/L SDHEC standard; however the ROCB station recorded a minimum DO level of 2.2 mg/L, following the storm event the night of July 12th.
- The pH standard was not violated at either of the Rocky Branch monitoring sites.

### **Storm Events**

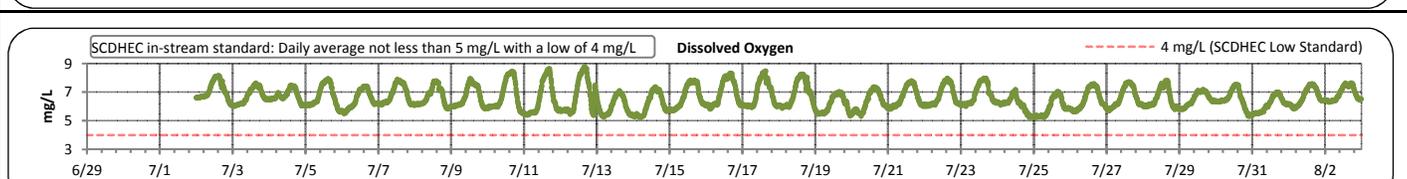
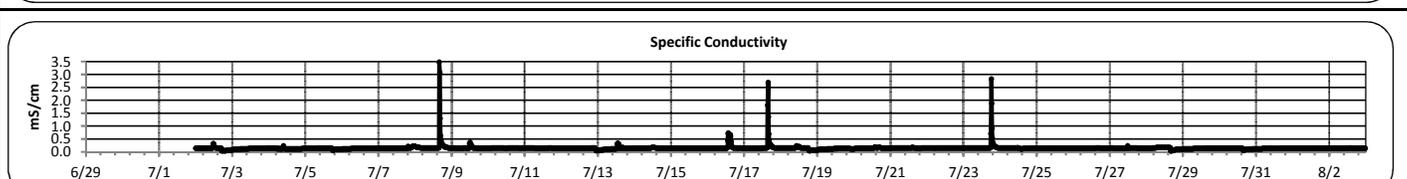
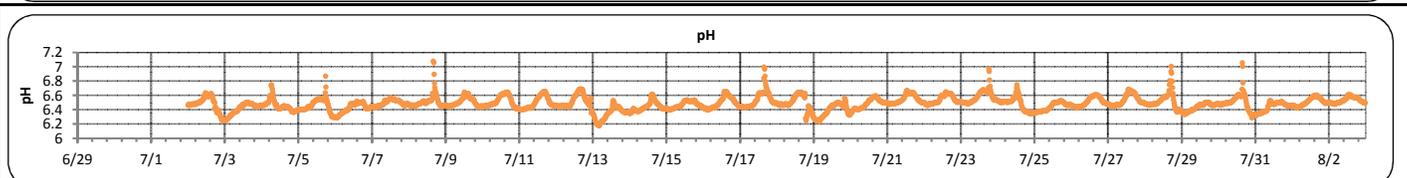
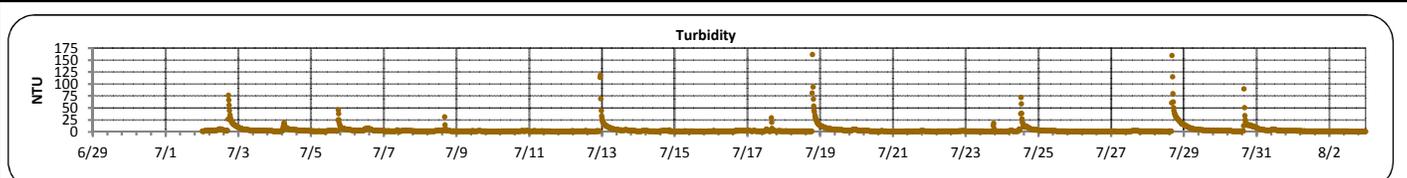
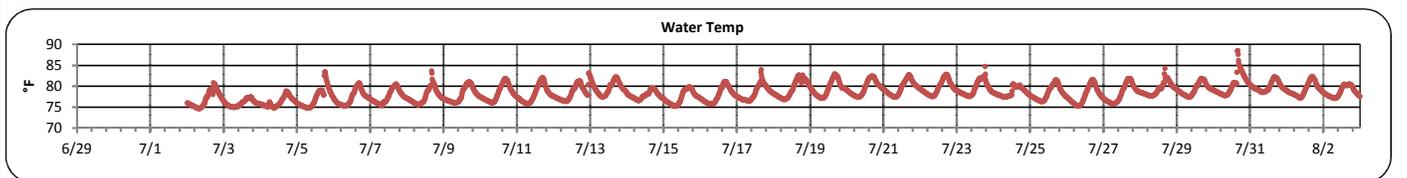
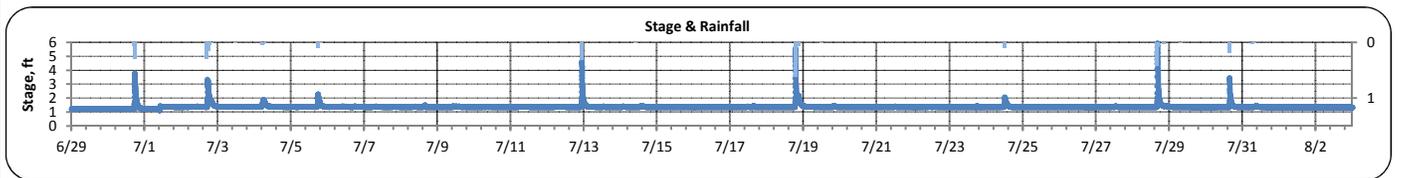
- This monitoring period was very dry, with the U.S. Drought Monitor Placing Richland County in a status of “Abnormally Dry” at the beginning of the deployment and moving the County into the category of “Moderate Drought” by the end of the deployment.

### **Potential Illicit Discharges and Abnormal Events**

- At ROCA, 10 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 July 8th, 17th and 23rd, resulting most notably in extremely elevated specific conductivity levels.
- On July 9th, 13th, 16th, 20th, and 27th, 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. These occurred on July 9th, 17th, 18th, and 24th. These appear to have been the downstream result of the Maxcy Greg pool maintenance events which were observed at ROCA. Additionally, on July 5th, the turbidity levels at ROCB increased up to 53 NTU in the early morning hours of the day. The cause for this increase was not known.

**Rocky Branch A (June 29, 2015 -- August 2, 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):	1.1	7.1	1.4	1.4	0.2
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	75	89	78	78	2
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	1	162	2	4	9
COORDINATES:	34.995864, -81.021842	pH:	6.2	7.2	6.5	6.5	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.031	3.487	0.143	0.147	0.126
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.2	8.8	6.4	6.6	0.8
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	8						
MAX. DAILY RAINFALL:	0.8 inches						
TOTAL RAINFALL (FOR PERIOD):	3.0 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 A (June 29, 2015 -- August 2, 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.

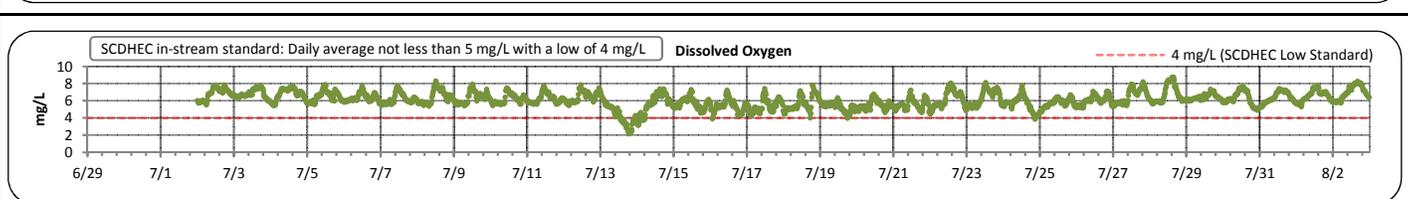
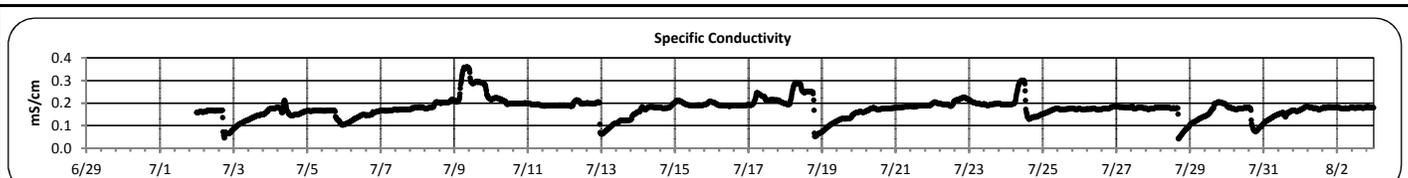
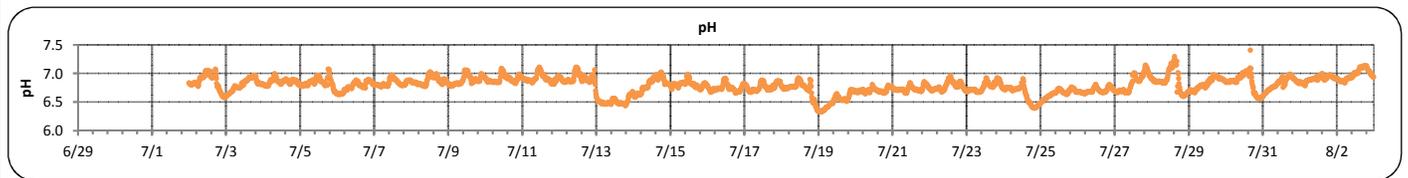
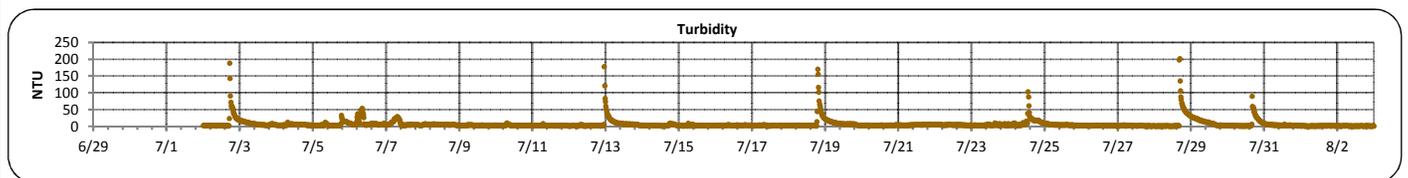
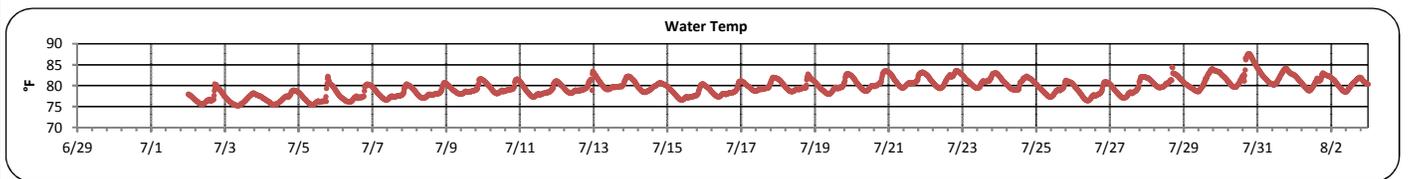
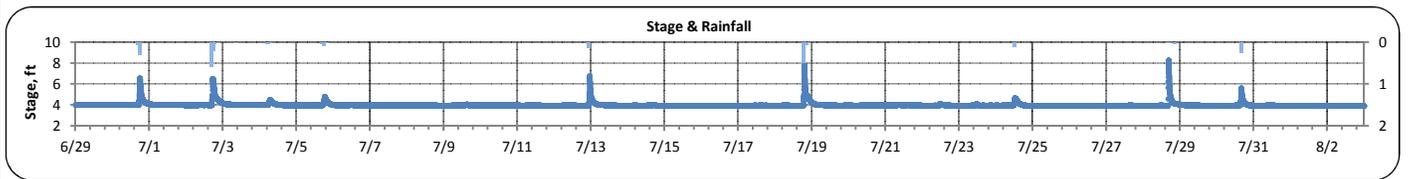
**Grab Sample Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)								
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note:

**Rocky Branch B (June 29, 2015 -- August 2, 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):	3.9	8.3	4.0	4.0	0.2
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	75	88	79	80	2
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	202	3	6	13
COORDINATES:	33.982578, -81.035036	pH:	6.3	7.4	6.8	6.8	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.041	0.360	0.178	0.176	0.042
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	2.2	8.8	6.1	6.2	0.9
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	7						
MAX. DAILY RAINFALL:	0.9 inches						
TOTAL RAINFALL (FOR PERIOD):	2.6 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 (June 29, 2015 -- August 2, 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	
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)								
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: