

## Rocky Branch Monitoring Sites

### *Data Gaps*

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

### *SCDHEC Standards*

- The ROCA and ROCB stations recorded average DO concentrations of 9.0 and 10.9 mg/L, respectively. These levels are well above the SCDHEC daily average lower limit of 5 mg/L. Additionally, the minimum recorded DO values at the Rocky Branch monitoring stations were 6.3 and 9.5 mg/L, both above the SCDHEC instantaneous DO level of 4 mg/L.
- The pH standard was not violated at either of the Rocky Branch monitoring sites.

### *Storm Events*

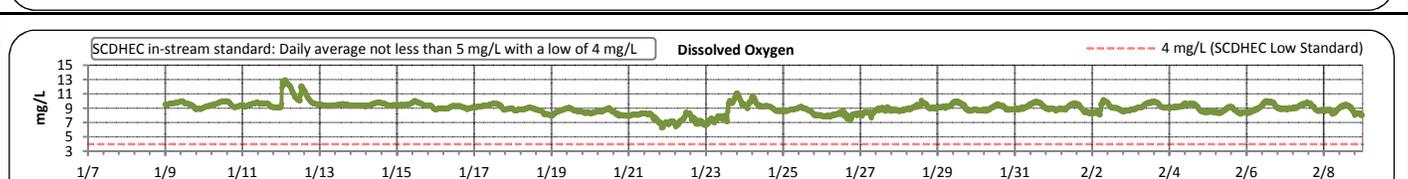
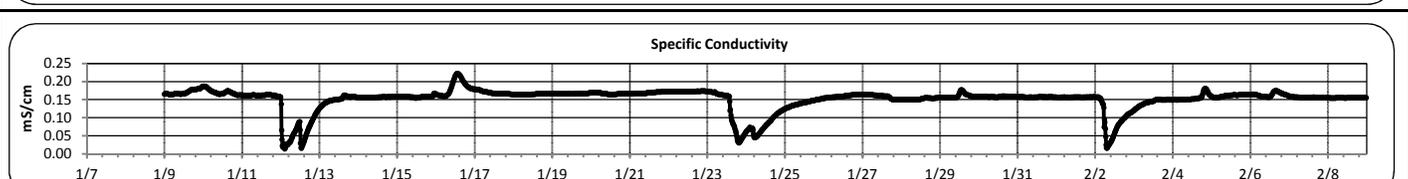
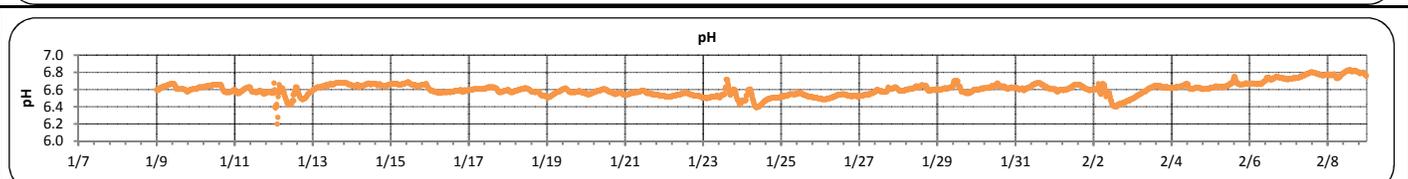
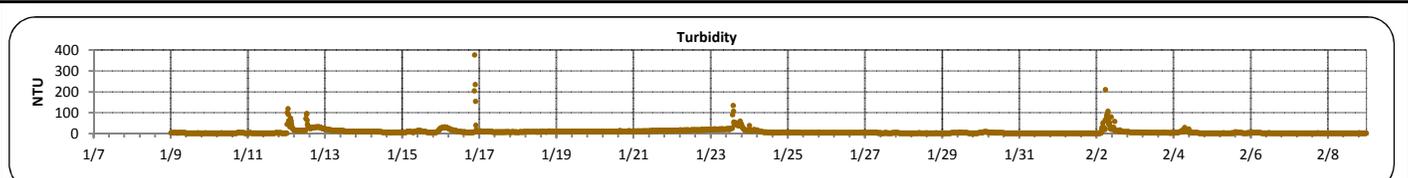
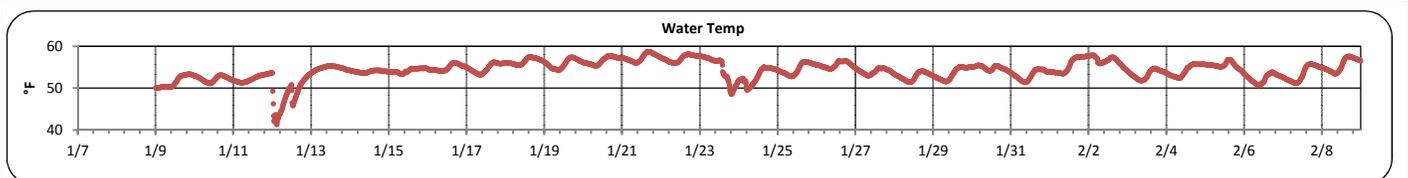
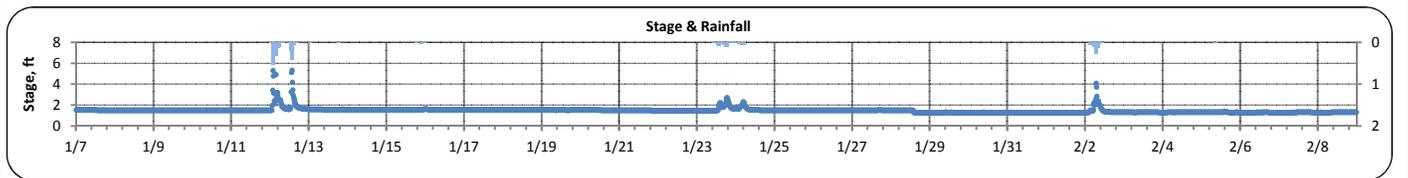
- The ROCA and ROCB rain gages both recorded 4 storm events during this deployment period.
- The most significant storm event occurred in two waves on January 12th, when the ROCA and ROC rain gages recorded 1.9 and 2.1 inches of precipitation, respectively.

### *Potential Illicit Discharges*

- At ROCA, 6 potential illicit discharges were recorded:
  - 5 of the suspected illicit discharge events effected the specific conductivity at ROCA. They occurred on January 13th, 16th, and 29th, and February 4th and 6th. The most significant of these events occurred on January 16th, and caused an increase in specific conductivity up to 0.22 mS/cm.
  - On January 16th, a potential illicit discharge caused a sudden increase in turbidity, with levels reaching 370 NTU.
- At ROCB, a number of sporadic increases in specific conductivity levels were observed on January 8th, 10th, 13th, 14th, 15th, 16th-17th, 17th-18th, 20th, 21st-22nd, 23rd, 25th, 27th-28th, 29th, 30th, and 30th-31st, as well as February 1st-2nd, 5th, 5th-6th, and 8th.

**Rocky Branch A (Jan 7 -- Feb 8, 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	5.3	1.5	1.5	0.3
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	41	59	54	54	2
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	2	377	5	9	14
COORDINATES:	34.995864, -81.021842	pH:	6.2	6.8	6.6	6.6	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.013	0.222	0.158	0.152	0.031
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	6.3	13.0	9.1	9.0	0.8
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	1.9 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**

**Rocky Branch A (Jan 7 -- Feb 8, 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.

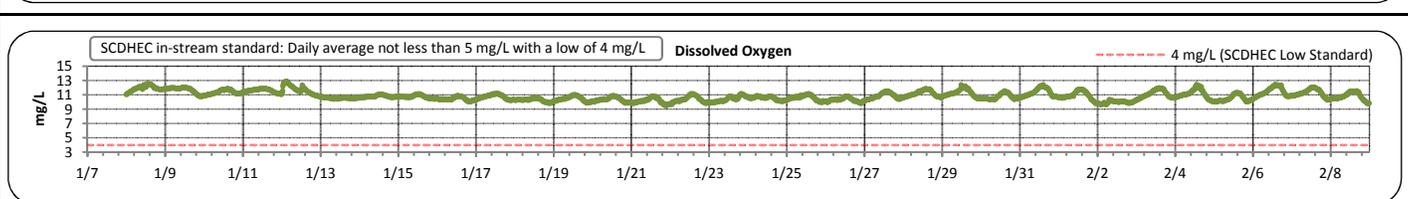
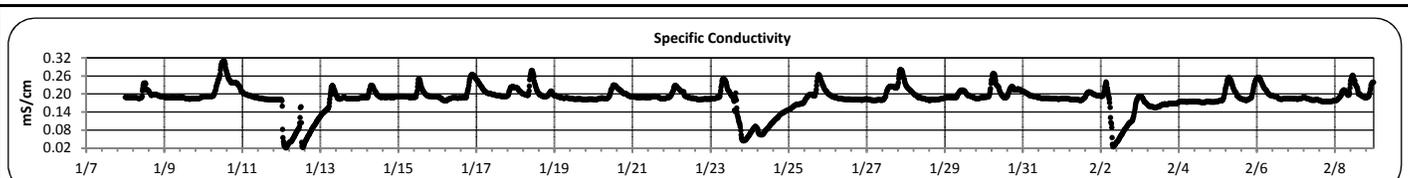
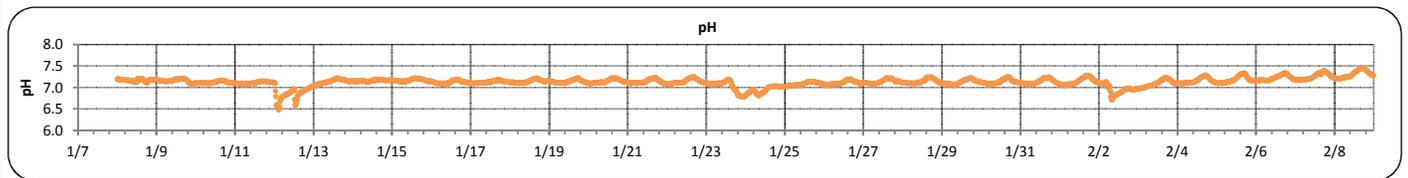
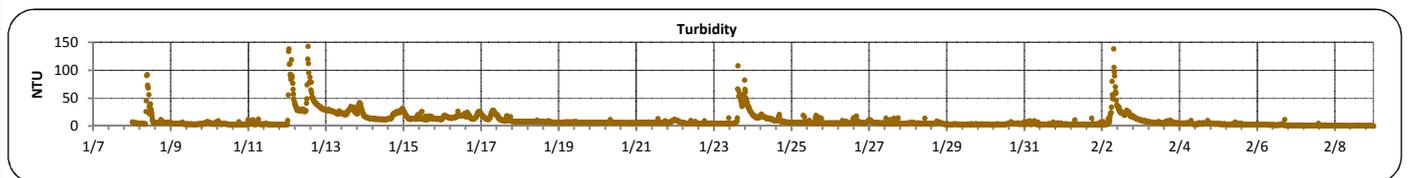
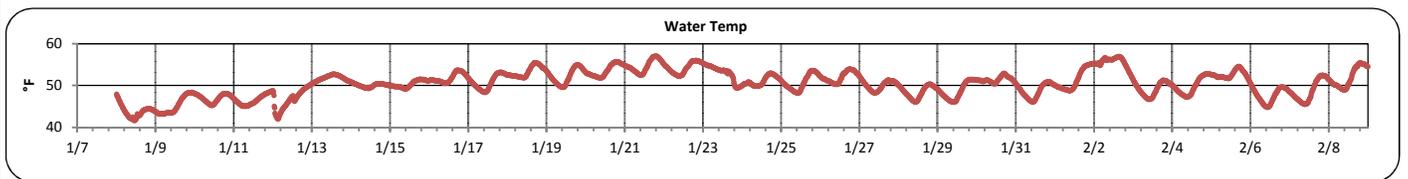
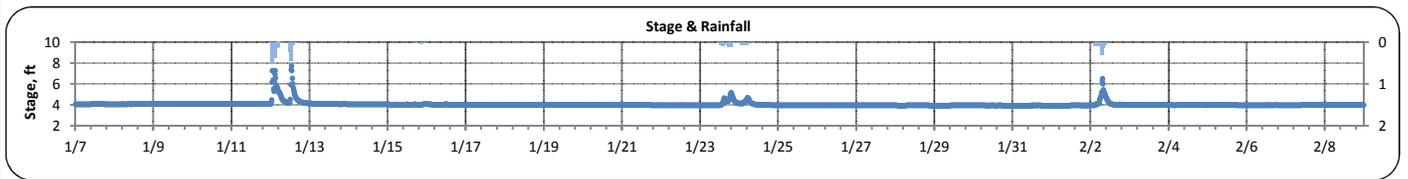
**Grab Sample Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3	
	1/23/2015		2/2/2015			
	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	11:17	119	9:03	2,723		
Total Suspended Solids (mg/L)			9:05	14		
Total Phosphorus (mg/L)			9:05	0.079		
Total Nitrogen (mg/L)			9:05	0.67		

Note: One preliminary sample was collected on January 23rd prior to an increase in the creek's stage. Due to the delay of the storm event, the collection and analysis of samples were not feasible for this event.

**Rocky Branch B (Jan 7 -- Feb 8, 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	7.7	4.0	4.0	0.3
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	42	57	51	50	3
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	143	6	10	13
COORDINATES:	33.982578, -81.035036	pH:	6.5	7.5	7.1	7.1	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.021	0.310	0.187	0.185	0.041
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	9.5	13.0	10.8	10.9	0.6
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	2.1 inches						
TOTAL RAINFALL (FOR PERIOD):	3.6 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 (Jan 7 -- Feb 8, 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	
	1/23/2015		2/2/2015		2/2/2015		2/2/2015	
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	10:51	573	9:15	2,098	9:58	1,850	12:03	2,064
Total Suspended Solids (mg/L)			9:15	24.4				
Total Phosphorus (mg/L)			9:15	0.093				
Total Nitrogen (mg/L)			9:15	0.72				

Note: One preliminary sample was collected on January 23rd prior to an increase in the creek's stage. Due to the delay of the storm event, the collection and analysis of samples were not feasible for this event.