

## Rocky Branch Monitoring Sites

### *Data Gaps*

- There were no gaps in the dataset at either Rocky Branch monitoring site during this deployment period.

### *SCDHEC Standards*

- The average DO at ROCA and ROCB was above the 5 mg/L limit, with values of 7.5 mg/L and 9.4 mg/L, respectively. These averages were higher than in the previous deployment period, which is to be expected as water temperatures decrease into the winter season.
- The instantaneous DO limit was not violated at either Rocky branch station during this deployment period.
- The pH standard was not violated at either of the ROC sites.

### *Storm Events*

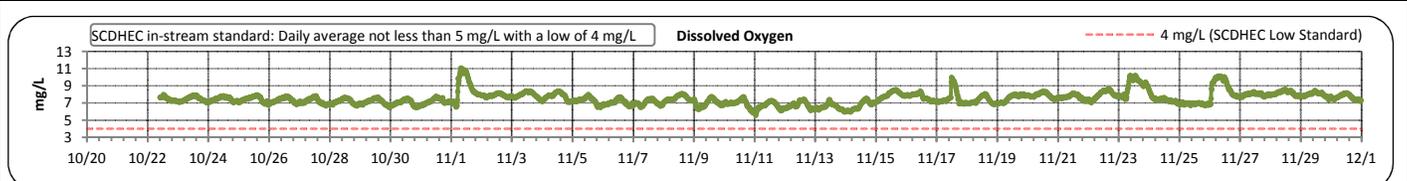
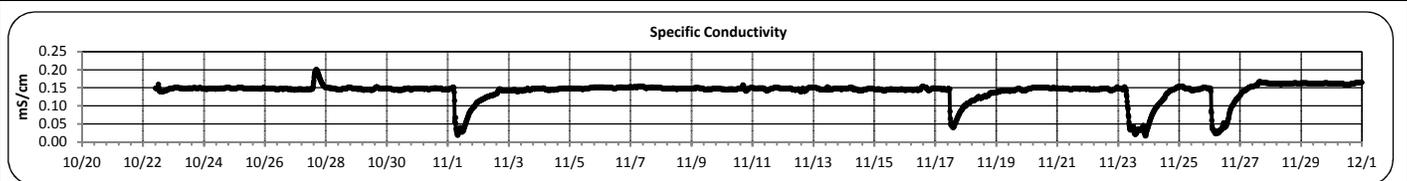
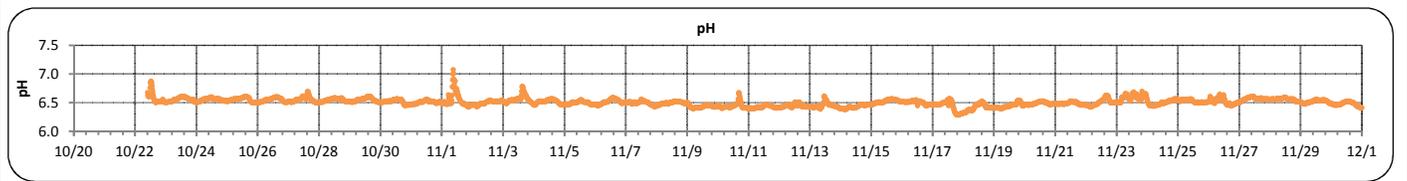
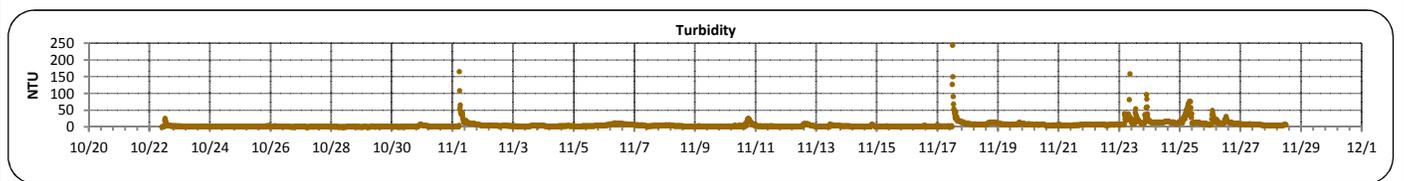
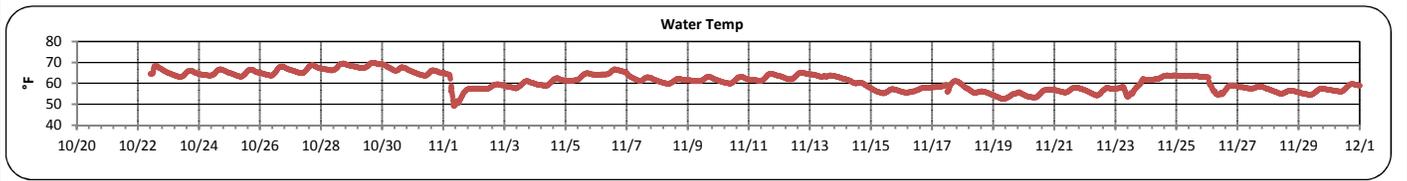
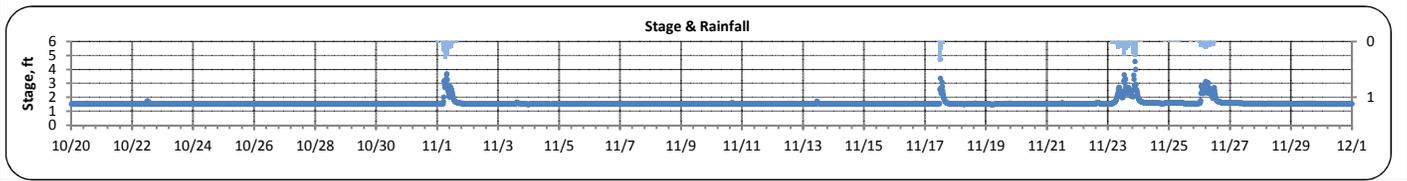
- The ROCA and ROCB stations both recorded 4 storm events during this monitoring period.
- The most significant rain event during this monitoring period delivered 1.6 and 1.5 inches of precipitation at ROCA and ROCB, respectively.

### *Potential Illicit Discharges*

- At ROCA, a number of potential illicit discharges were recorded:
  - The first of these was seen in the dataset shortly after the sondes were deployed, on October 22nd, when the specific conductivity, pH, turbidity, and stage all increased slightly. This may have been related to maintenance activities at the Maxcy Greg pool.
  - On October 27th and November 3rd, an increase in specific conductivity and pH was recorded.
  - On November 10th, an increase in specific conductivity, pH, turbidity and stage were observed, and may have been related to activities at Maxcy Greg pool.
  - A number of more minor events were observed on November 13th, 14th, 16th, 19th, and 22nd.
- At ROCB, a number of sporadic increases in specific conductivity levels were observed on October 23rd and 31st, as well as November 3rd-4th, 8th, 11th, 14th, 16th, 20th-21st, and 27th-28th.

**Rocky Branch A (Oct 20, 2014 -- Dec 1, 2014)**

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Rocky Branch	STAGE (FT):	1.5	5.1	1.5	1.6	0.2
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	49	70	61	61	4
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	1	244	3	6	10
COORDINATES:	34.995864, -81.021842	pH:	6.3	7.1	6.5	6.5	0.1
TMD/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.017	0.2	0.147	0.140	0.027
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.6	11.1	7.5	7.5	0.7
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	2.2 inches						
TOTAL RAINFALL (FOR PERIOD):	5.2 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 (Oct 20, 2014 -- Dec 1, 2014)**

**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.

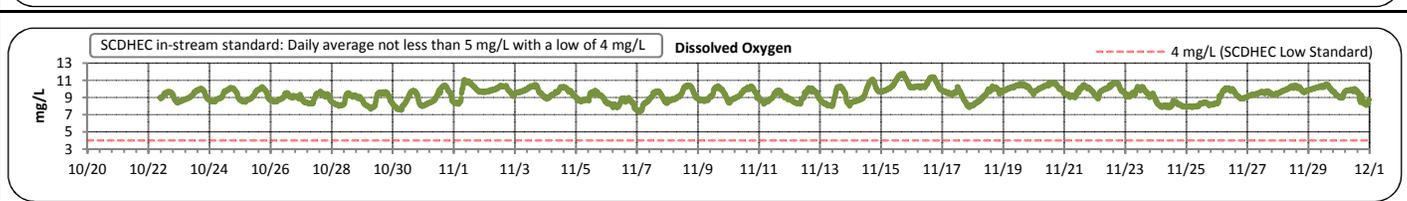
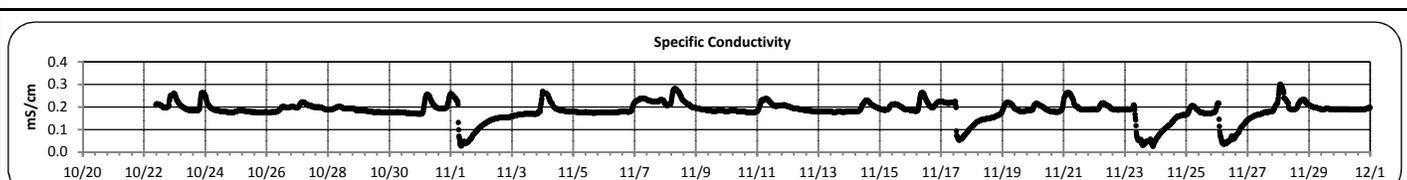
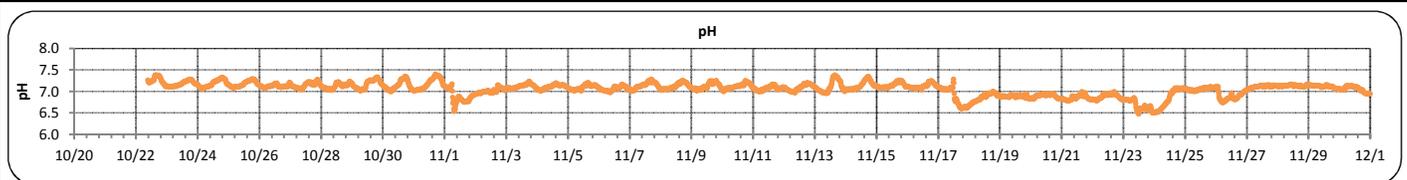
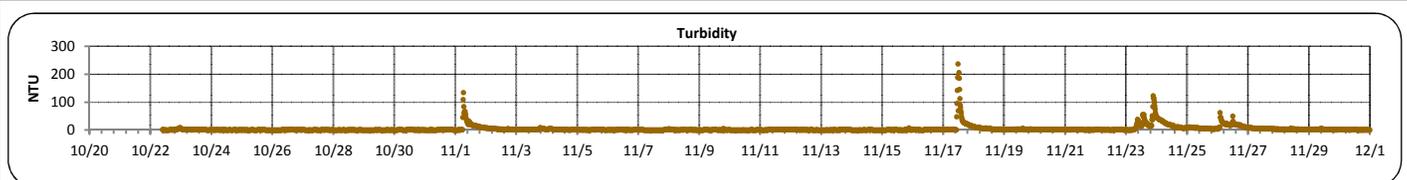
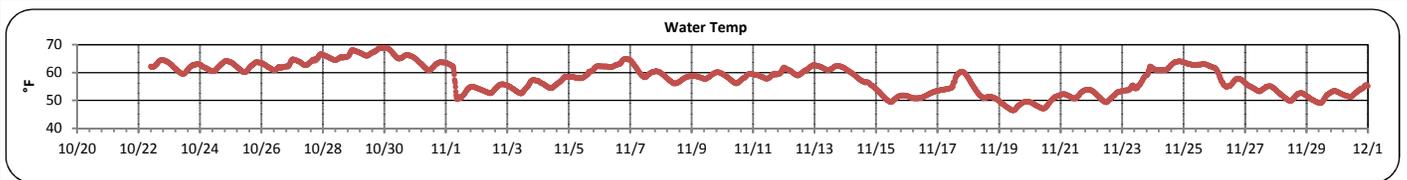
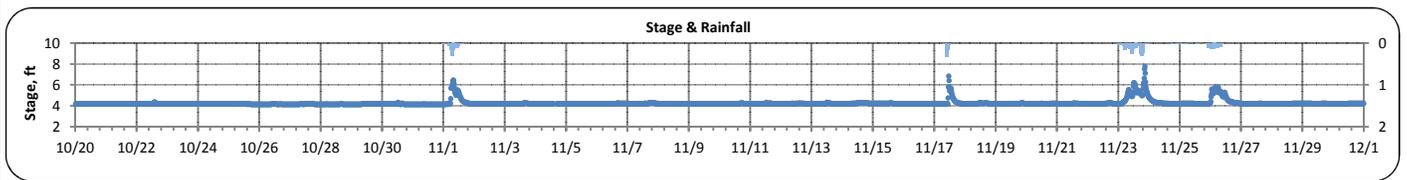
**Grab Sample Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	11/17/2014		11/17/2014		11/17/2014		11/17/2014	
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	10:13	285.0	11:25	19,860	12:49	9,804	14:13	4,884
Total Suspended Solids (mg/L)	10:13	3	11:25	97	12:49	29.6	14:13	13.2
Total Phosphorus (mg/L)	10:13	0.042	11:25	0.44	12:49	0.29	14:13	0.24
Total Nitrogen (mg/L)	10:13	2.84	11:25	3.82	12:49	1.48	14:13	1.34

Note:

**Rocky Branch B (Oct 20, 2014 -- Dec 1, 2014)**

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Rocky Branch	STAGE (FT):	4.1	7.8	4.2	4.3	0.3
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	46	69	58	58	5
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	236	1	4	12
COORDINATES:	33.982578, -81.035036	pH:	6.5	7.4	7.1	7.1	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.026	0.301	0.186	0.182	0.042
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	7.4	11.9	9.4	9.4	0.8
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	2.1 inches						
TOTAL RAINFALL (FOR PERIOD):	4.8 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 (Oct 20, 2014 -- Dec 1, 2014)**

**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	
	11/17/2014		11/17/2014		11/17/2014		11/17/2014	
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	10:00	331	11:13	>24,196	12:35	8,164	13:57	9,804
Total Suspended Solids (mg/L)	10:00	ND	11:13	415	12:35	92	13:57	35.6
Total Phosphorus (mg/L)	10:00	0.11	11:13	0.81	12:35	0.37	13:57	0.31
Total Nitrogen (mg/L)	10:00	3.01	11:13	4.12	12:35	2	13:57	1.57

Note: ND means that total suspended solids were not detected at or above the reporting limit of 2.0 mg/L.