

Rocky Branch Monitoring Sites

Data Gaps

- The ROCA station experienced one period of sensor fouling on the turbidity probe during this deployment period.
- The ROCB station did not have any sensor fouling or submergence issues.

SCDHEC Standards

- The average DO at ROCA and ROCB was above the 5 mg/L limit, with values of 6.6 mg/L and 7.3 mg/L, respectively. These averages were higher than in the previous deployment period, which is to be expected as water temperatures decrease into the fall 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

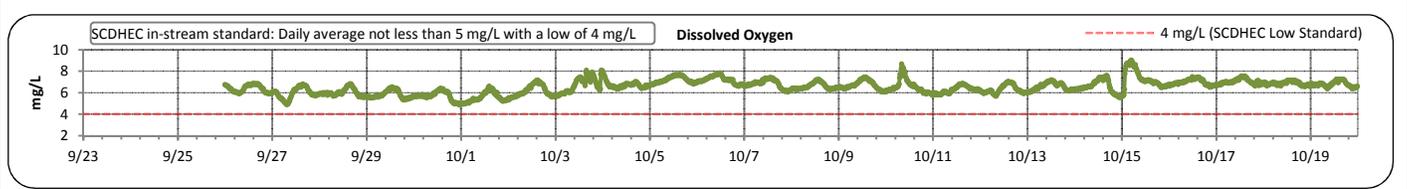
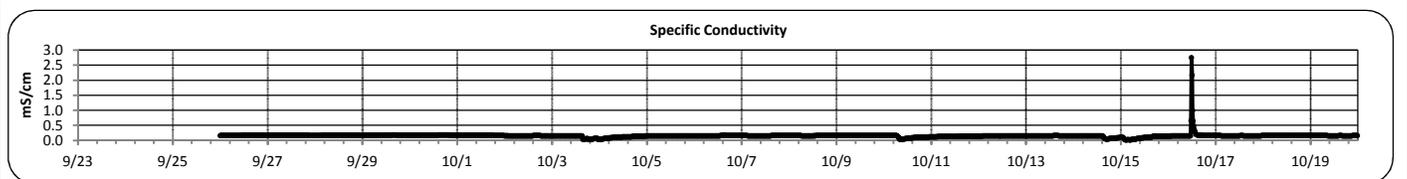
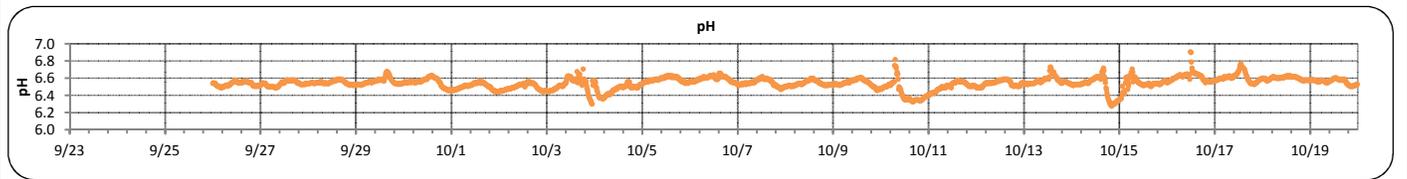
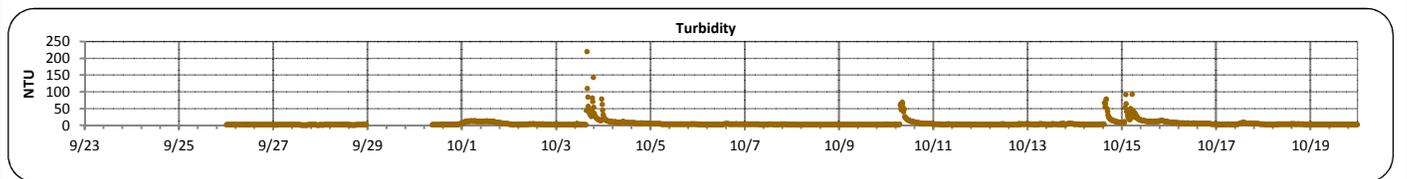
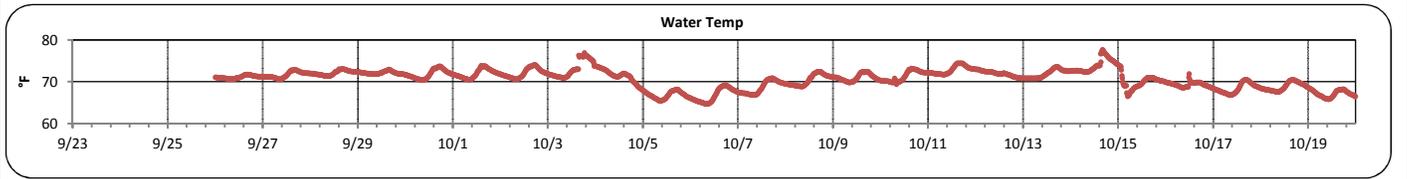
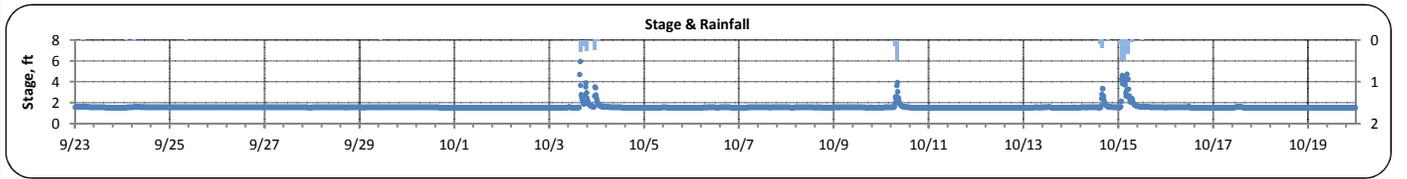
- The ROCA and ROCB stations both recorded 4 storm events during this monitoring period.
- The most significant rain event during this monitoring period occurred on October 15th, when the ROCA and ROCB stations recorded 1.6 and 1.5 inches, respectively.

Potential Illicit Discharges

- At ROCA, a number of potential illicit discharges were recorded:
 - It appears likely that the Maxcy Greg pool filter was backwashed on October 16th. This event had a very noticeable impact, resulting in high specific conductivity levels, as well as other parameter influences.
 - Two other water quality events were noted which may have been the result of pool activities. These events occurred on September 29th and October 17th, and while both caused increases in conductivity and pH, they did not influence water quality to the same degree that is typically observed during pool backwash events.
 - Additionally, two very minor events were recorded on September 30th and October 6th.
- At ROCB, a number of potential illicit discharge events were noted:
 - On September 26th through the 27th, and on September 28th, there were notable increases in specific conductivity at the ROCB station. No other monitored parameters were obviously affected by this event.
 - On October 6th, there was a very slight increase in pH, temperature, and stage.
 - The impacts of the pool backwash activities seen at ROCA were recorded at ROCB on October 16th through the 17th.

Rocky Branch A (Sept 23, 2014 -- Oct 19, 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	5.9	1.6	1.6	0.3
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	65	78	71	71	2
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	1	220	3	6	10
COORDINATES:	34.995864, -81.021842	pH:	6.3	6.9	6.6	6.5	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.015	2.755	0.154	0.150	0.079
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	4.9	9.1	6.6	6.6	0.6
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	1.6 inches						
TOTAL RAINFALL (FOR PERIOD):	3.7 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 (Sept 23, 2014 -- Oct 19, 2014)

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.

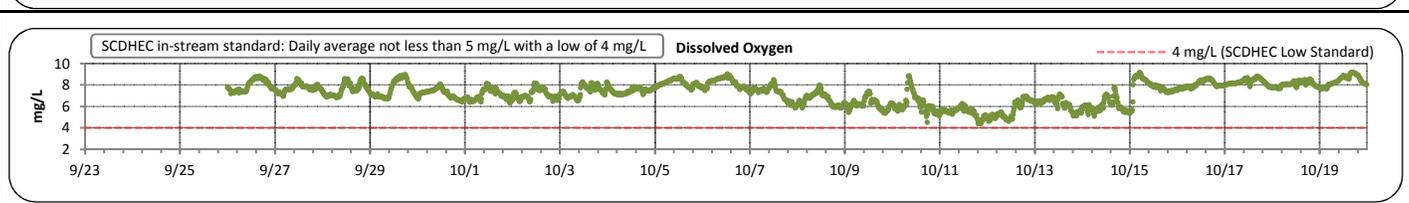
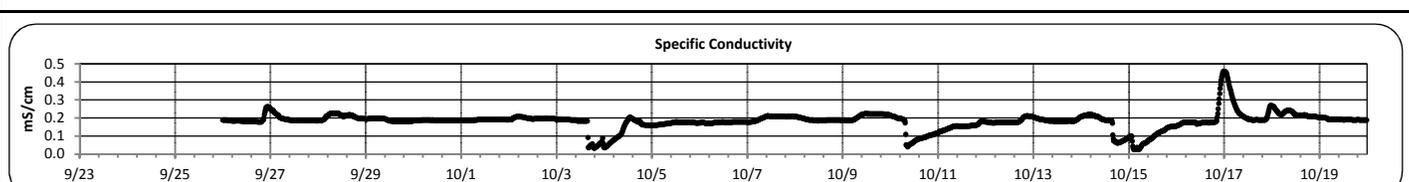
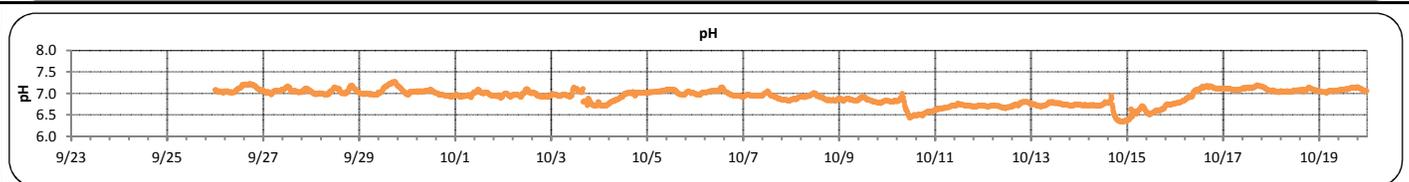
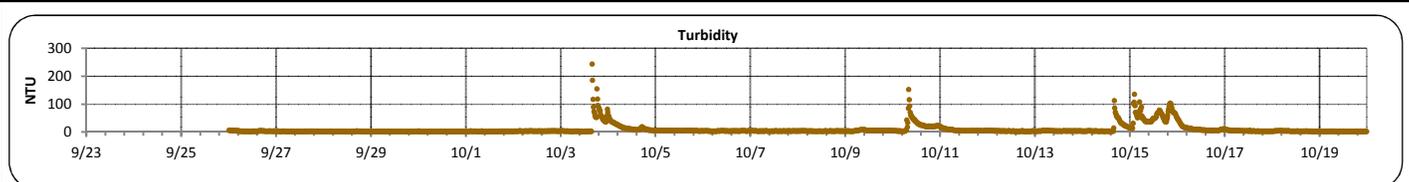
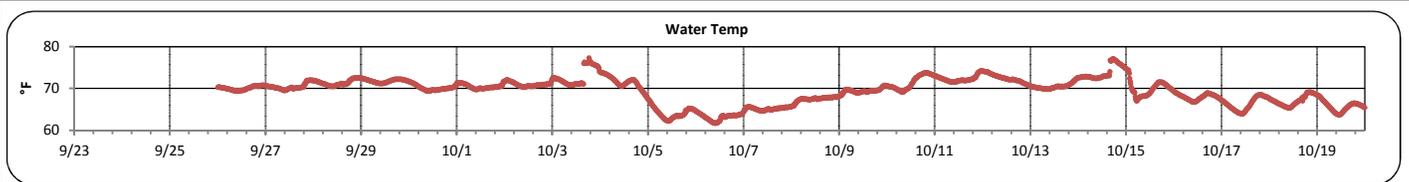
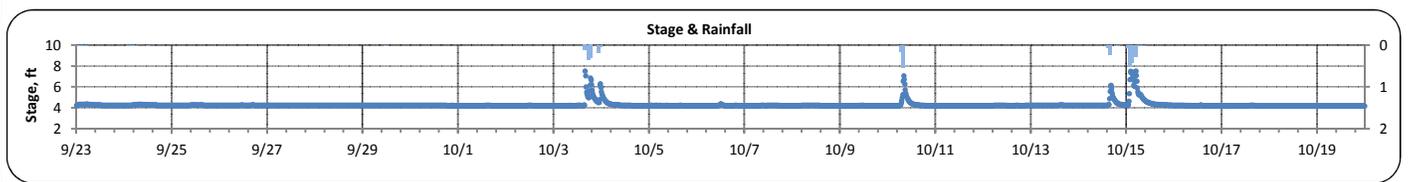
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3	
	10/7/2014					
	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	12:48	556.0				
Total Suspended Solids (mg/L)						
Total Phosphorus (mg/L)						
Total Nitrogen (mg/L)						

Notes: Dry weather grab samples were collected on 10/7/2014 to aide in establishing an E. coli background level.

Rocky Branch B (Sept 23, 2014 -- Oct 19, 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):	4.2	7.5	4.2	4.3	0.3
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	62	77	70	69	3
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	244	4	9	18
COORDINATES:	33.982578, -81.035036	pH:	6.4	7.3	7.0	6.9	0.2
TMDL/IMPAIRED:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.025	0.459	0.187	0.181	0.048
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	4.4	9.2	7.5	7.3	1.0
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	1.5 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 (Sept 23, 2014 -- Oct 19, 2014)

Explanation of Statistics:

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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	
	10/7/2014					
	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	12:33	285				
Total Suspended Solids (mg/L)						
Total Phosphorus (mg/L)						
Total Nitrogen (mg/L)						

Notes: Dry weather grab samples were collected on 10/7/2014 to aide in establishing an E. coli background level.