

Rocky Branch Monitoring Sites

Monitoring Data Summary for May 4th, 2017 – June 7th, 2017

Data Gaps

- The ROCA and ROCB stations did not record any interruptions in the dataset during this monitoring period.

SCDHEC Standards

- The Rocky stations did not record any pH readings outside of the acceptable SCDHEC range of 6 to 8.5.
- The ROCA and ROCB stations recorded average DO concentrations of 7.4 mg/L and 7.9 mg/L, respectively, well above the SCDHEC daily average minimum standard of 5 mg/L.
- The minimum DO concentration recorded at the ROCA and ROCB stations was 5.4 mg/L and 5.7 mg/L, respectively, well above the SCDHEC discrete minimum standard of 4 mg/L.

Storm Events

- The ROCA station recorded 11 storm events during this monitoring period, resulting in 7.4 inches of precipitation, and the ROCB station recorded 10 storms, resulting in 7.5 inches of precipitation.
- The ROCA and ROCB stations exhibited typical responses to storm events during this monitoring period.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 7.9 days in the Rocky Branch watershed and occurred prior to the storm event on May 21st.

Potential Illicit Discharges and Abnormal Events

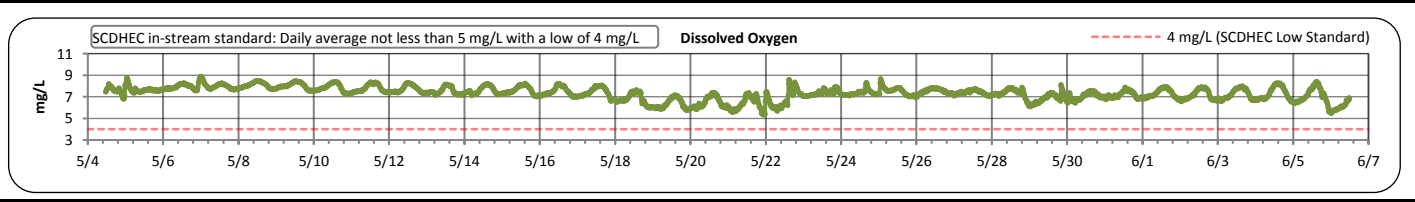
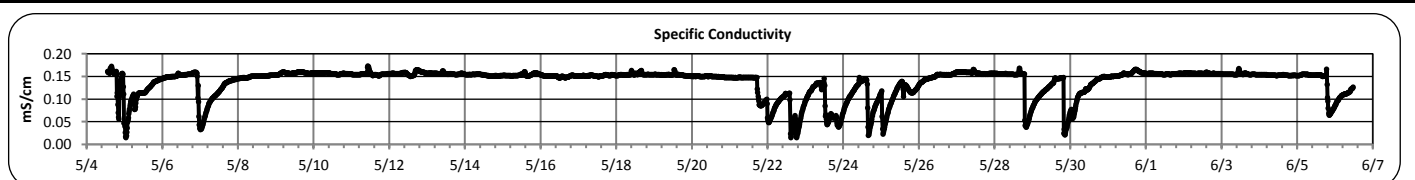
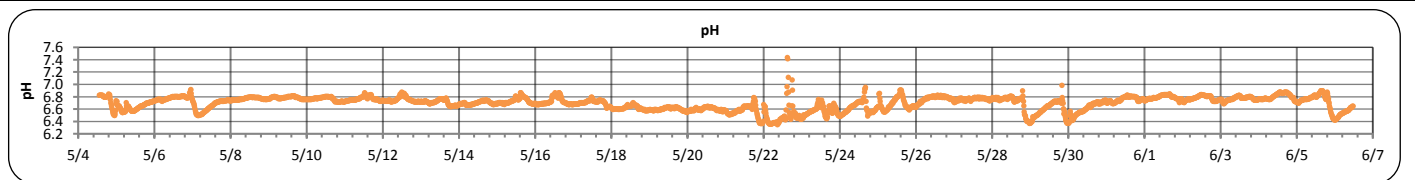
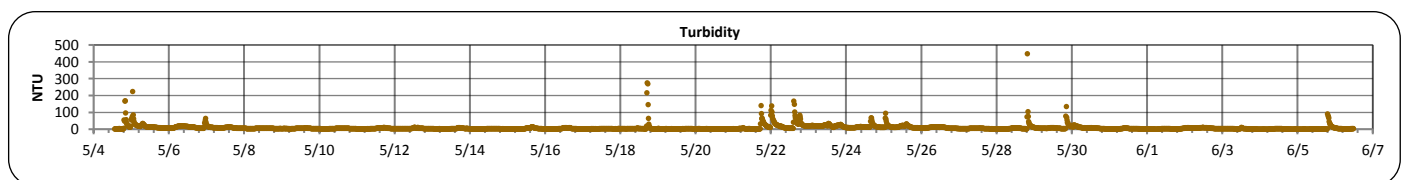
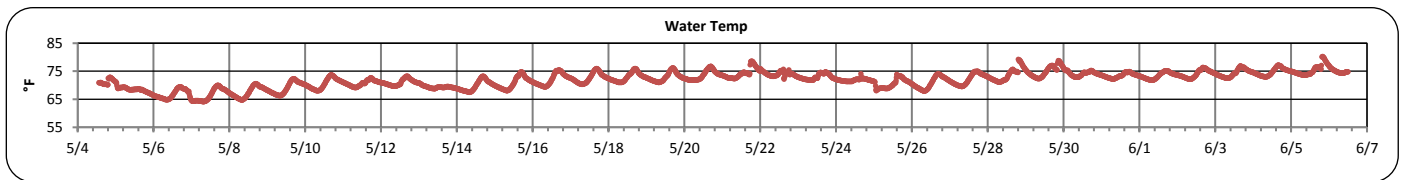
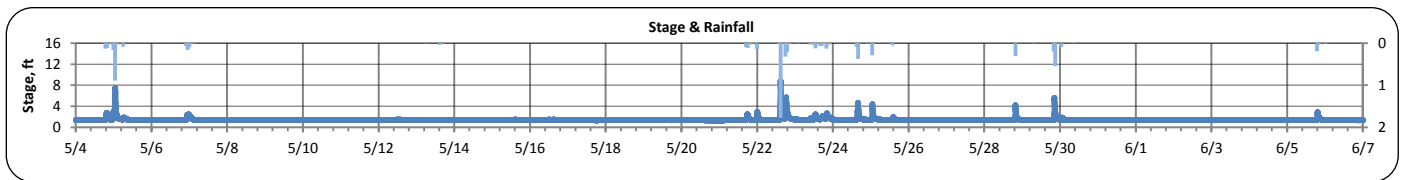
- At ROCA, slightly elevated specific conductivity values were observed on May 18th, 27th, 28th, and June 3rd.
- At ROCB, several abnormal trends were noted during this monitoring period:
 - Slightly elevated specific conductivity levels that took place on: May 11th, 12th, 13th, 18th, 19th, 20th-21st, 25th, 26th, 30th, and June 2nd.
 - Also at ROCB, there were several occurrences of slightly increased turbidity levels observed. These took place once each day from May 7th-21st and each day from June 2nd-5th.

Flow Measurements

- No flow measurements were taken in this watershed during this monitoring period.

Rocky Branch A (May 4, 2017 -- June 7, 2017)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Rocky Branch	STAGE (FT):	1.4	8.9	1.4	1.5	0.4
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	64	80	72	72	3
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	1	450	5	9	17
COORDINATES:	34.995864, -81.021842	pH:	6.4	7.4	6.7	6.7	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.015	0.173	0.152	0.139	0.030
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.4	8.9	7.4	7.4	0.6
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	11						
MAX. DAILY RAINFALL:	2.4 inches						
TOTAL RAINFALL (FOR PERIOD):	7.4 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 (May 4, 2017 -- June 7, 2017)

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.

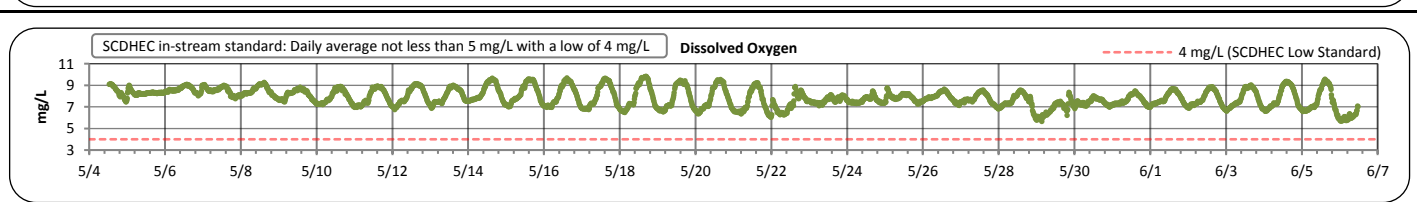
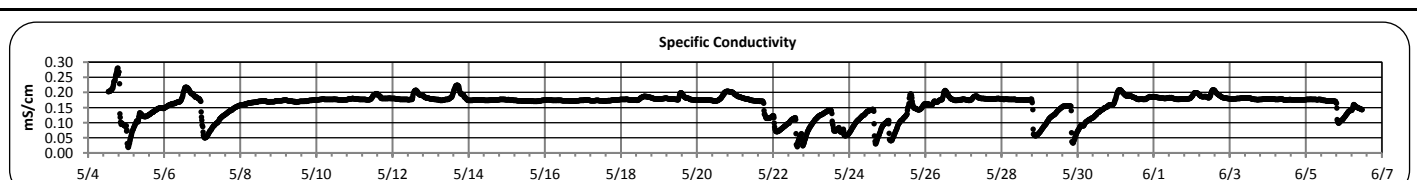
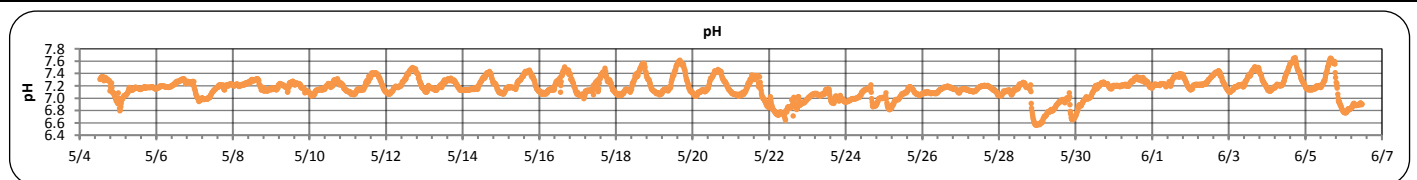
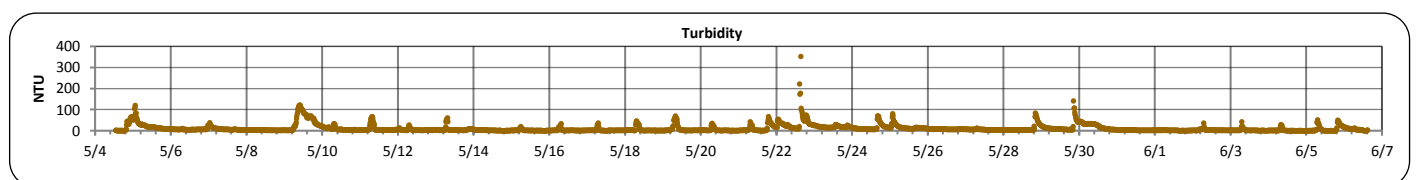
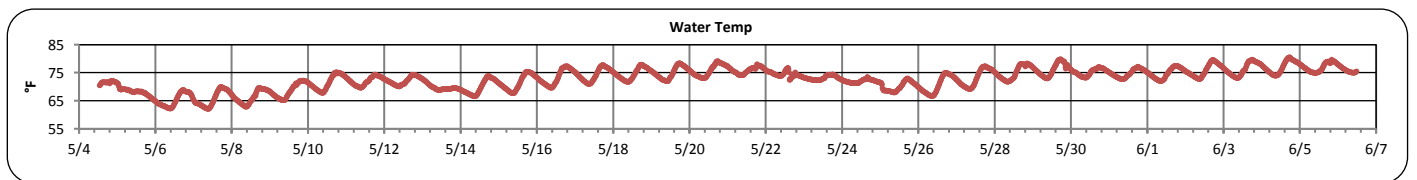
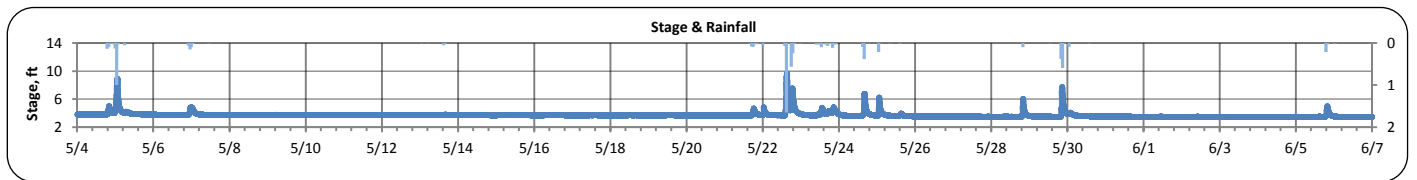
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		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 (May 4, 2017 -- June 7, 2017)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Rocky Branch	STAGE (FT):	3.5	9.8	3.7	3.7	0.4
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	62	81	73	73	4
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	352	4	11	18
COORDINATES:	33.982578, -81.035036	pH:	6.6	7.7	7.2	7.2	0.2
TMDL/IMPAIRED:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.018	0.281	0.175	0.159	0.038
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.7	9.9	7.8	7.9	0.8
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	10						
MAX. DAILY RAINFALL:	2.6 inches						
TOTAL RAINFALL (FOR PERIOD):	7.5 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 B (May 4, 2017 -- June 7, 2017)

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.

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: