

Rocky Branch Monitoring Sites

Monitoring Data Summary for July 14th, 2017 – August 15th, 2017

Data Gaps

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

SCDHEC Standards

- The ROCA and ROCB 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 6.8 mg/L and 7.6 mg/L, respectively, which are well above the SCDHEC daily average minimum standard of 5 mg/L.
- The minimum DO concentration recorded at the ROCA and ROCB stations were both 4.9 mg/L and 6.0 mg/L, respectively, which is 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 7.7 inches of precipitation, and the ROCB station recorded 10 storms, resulting in 10.5 inches of precipitation.
- Both 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 18.7 days at the ROCA station prior to the storm event on August 13th and approximately 12.8 days at the ROCB station prior to the August 7th storm event.

Potential Illicit Discharges and Abnormal Events

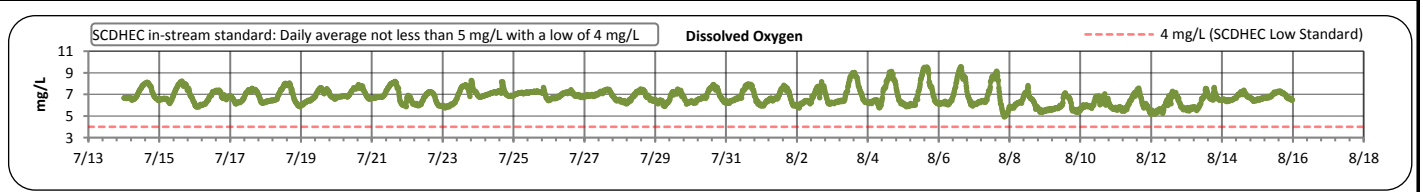
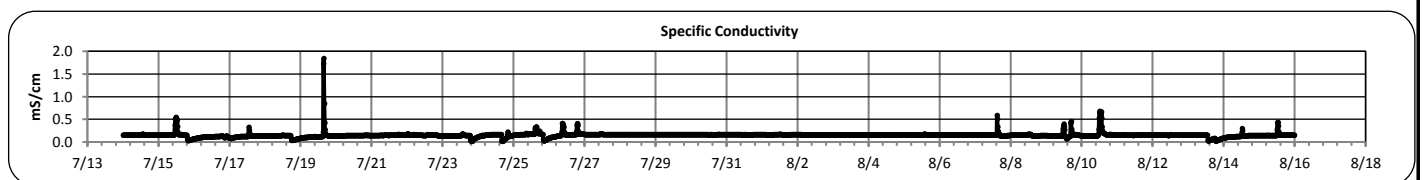
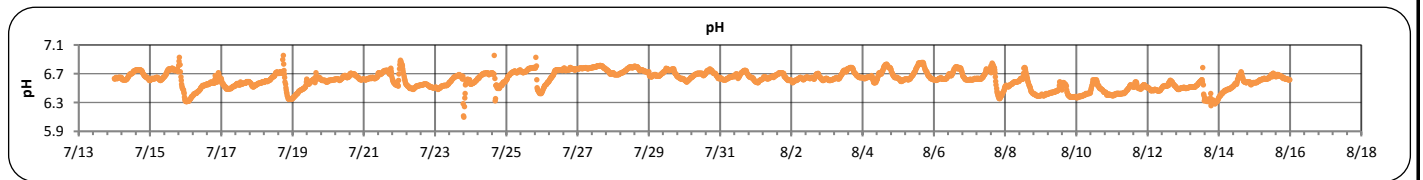
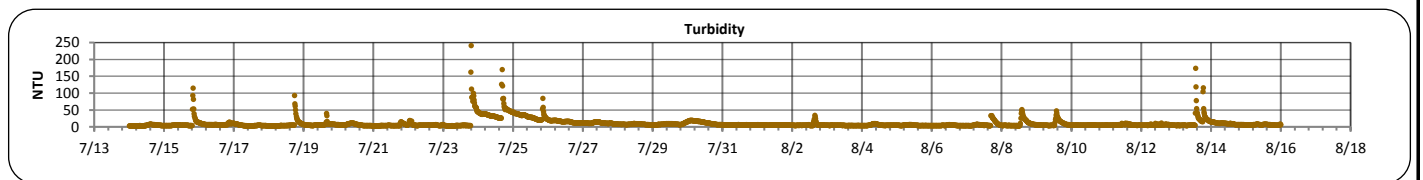
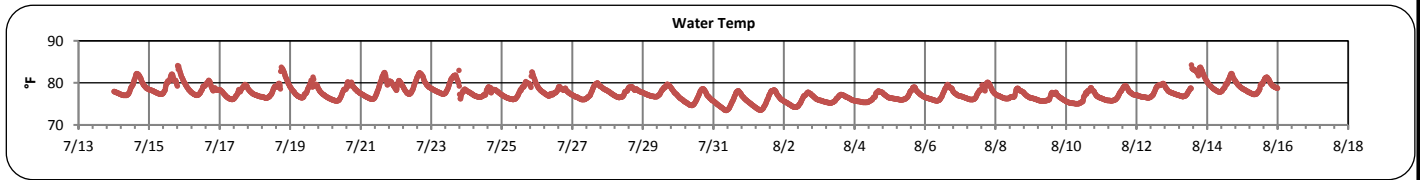
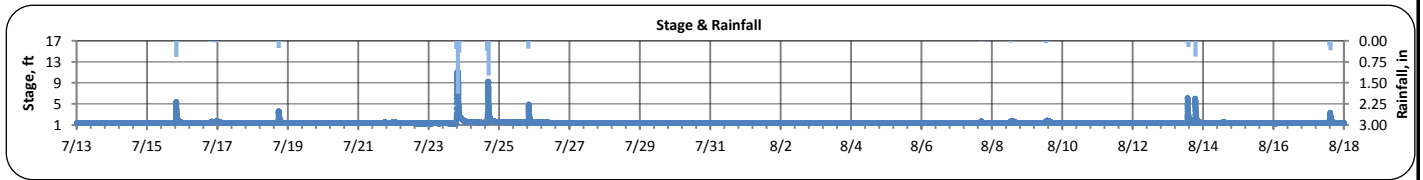
- At ROCA, several abnormal trends were noted during this monitoring period:
 - Slightly elevated specific conductivity levels that took place on: July 14th, 15th, 17th, 22nd, 23rd, 25th, 26th, August, 7th, 9th, 10th, 12th, 14th, and 15th. All of the specific conductivity spikes during this deployment period are likely related to Maxcy Gregg pool.
 - On August 2nd, there was a DO drop that lined up with a turbidity increase that could have potentially been an illicit.
- At ROCB, several slightly elevated specific conductivity levels that took place on: July 20th, 20th-21st, 25th, 29th-30th, 30th-31st, August 1st, 1st-2nd, 5th, 6th-7th, 8th, 10th-11th, 11th-12th, 14th, and 15th. Most of these elevated periods occurred over night.

Flow Measurements

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

Rocky Branch A (July 13, 2017 -- August 17, 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):	1.3	11.1	1.4	1.4	0.5
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	74	84	77	78	2
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	3	241	6	10	13
COORDINATES:	34.995864, -81.021842	pH:	6.1	7.0	6.6	6.6	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.014	1.842	0.152	0.151	0.063
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	4.9	9.6	6.7	6.8	0.7
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	11						
MAX. DAILY RAINFALL:	2.7 inches						
TOTAL RAINFALL (FOR PERIOD):	7.7 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 (July 13, 2017 -- August 17, 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.

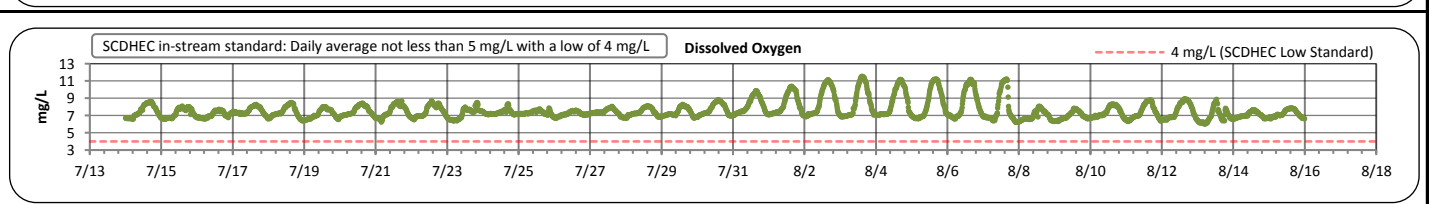
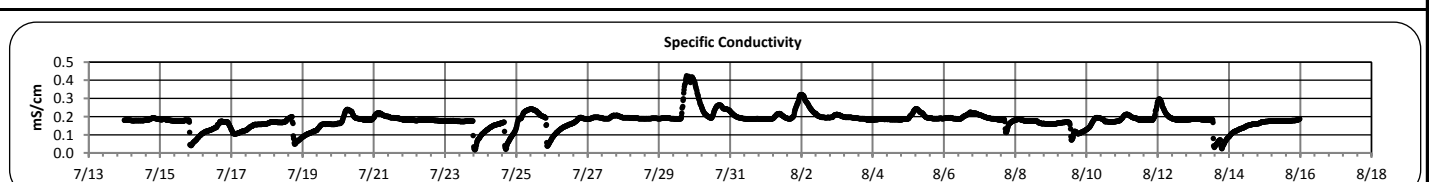
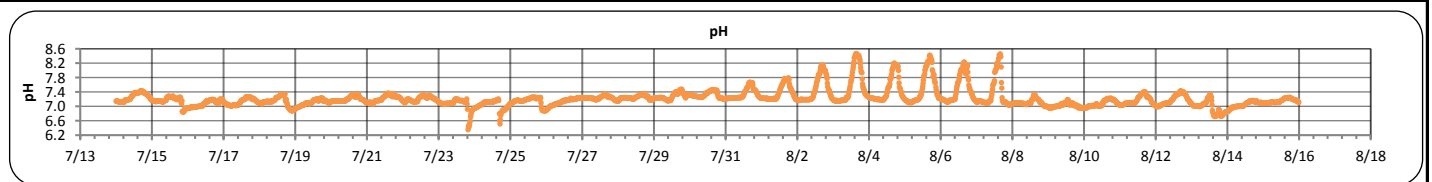
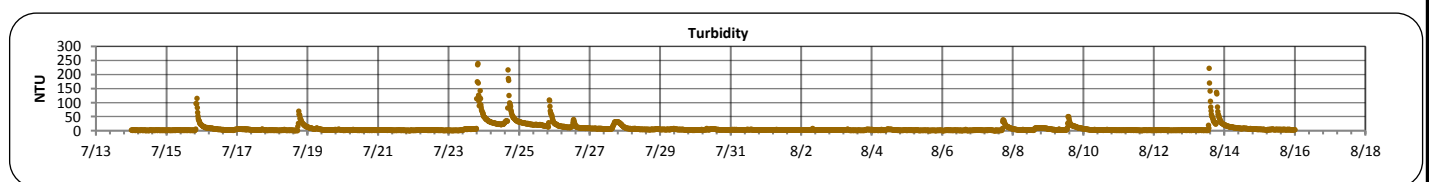
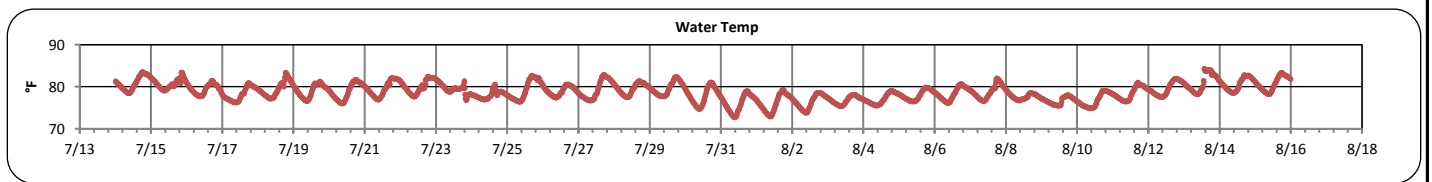
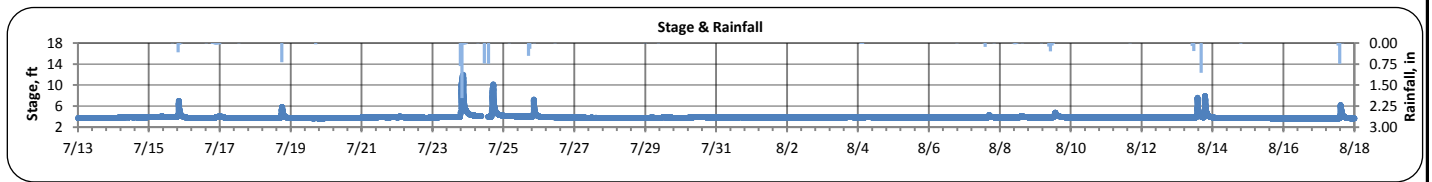
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	8/8/2017							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	14:40	22,400						
Total Suspended Solids (mg/L)	14:40	18.6						
Total Phosphorus (mg/L)	14:40	0.19						
Total Nitrogen (mg/L)	14:40	2.65						

Note:

Rocky Branch B (July 13, 2017 -- August 17, 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):	3.7	12.0	3.9	3.9	0.5
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	73	84	79	79	2
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	240	3	8	17
COORDINATES:	33.982578, -81.035036	pH:	6.4	8.5	7.2	7.2	0.3
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.019	0.425	0.183	0.179	0.048
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	6.0	11.6	7.3	7.6	1.0
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	10						
MAX. DAILY RAINFALL:	2.9 inches						
TOTAL RAINFALL (FOR PERIOD):	10.5 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 (July 13, 2017 -- August 17, 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	
	8/8/2017							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	14:26	3,214						
Total Suspended Solids (mg/L)	14:26	10.9						
Total Phosphorus (mg/L)	14:26	0.15						
Total Nitrogen (mg/L)	14:26	2.45						

Note: