

Rocky Branch Monitoring Sites

Monitoring Data Summary for February 23rd, 2017 – March 29th, 2017

Data Gaps

- The ROCA station did not record any interruptions in the dataset during this monitoring period.
- The ROCB station experienced a brief period of turbidity fouling following the March 12th storm event.

SCDHEC Standards

- No violations of either the lower or the upper pH standard were observed at the Rocky Branch monitoring stations during this deployment period.
- The ROCA and ROCB stations recorded average DO concentrations of 8.1 mg/L and 9.0 mg/L, respectively, well above the SCDHEC daily average minimum standard of 5 mg/L.
- The minimum DO concentrations recorded at the ROCA and ROCB stations were 5.4 mg/L and 5.2 mg/L, respectively, well above the SCDHEC discrete minimum standard of 4 mg/L.

Storm Events

- The ROCA station recorded five storm events during this monitoring period, resulting in 2.5 inches of precipitation, and the ROCB station recorded four storms, resulting in 2.3 inches of precipitation.
- The ROCA and ROCB stations exhibited typical responses to storm events during this monitoring period. One exception, however, was during the March 13th storm event, when the pH levels at the ROCA station increased significantly.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 14 days in the Rocky Branch watershed and occurred prior to the March 1st-2nd rainfall event.

Potential Illicit Discharges and Abnormal Events

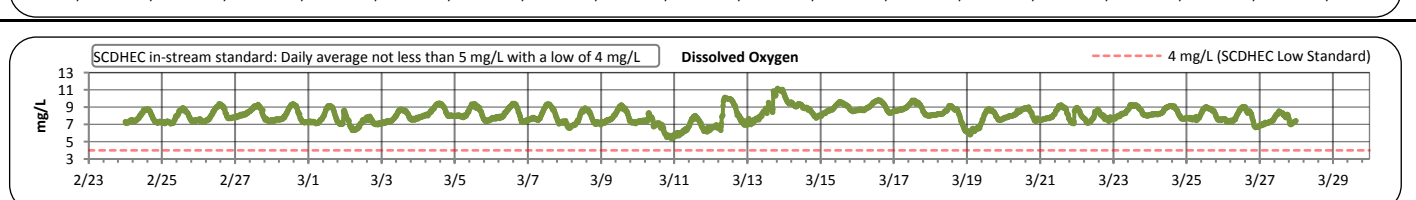
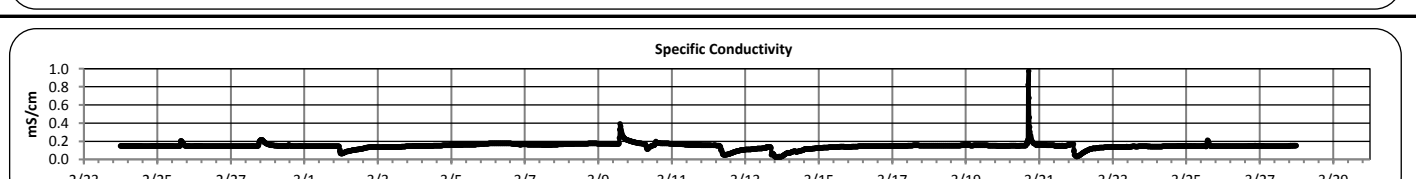
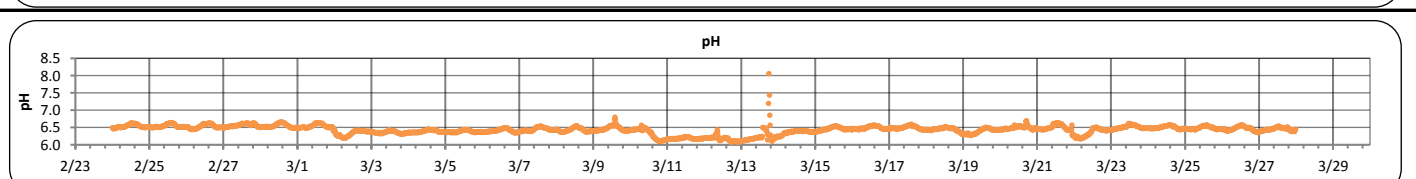
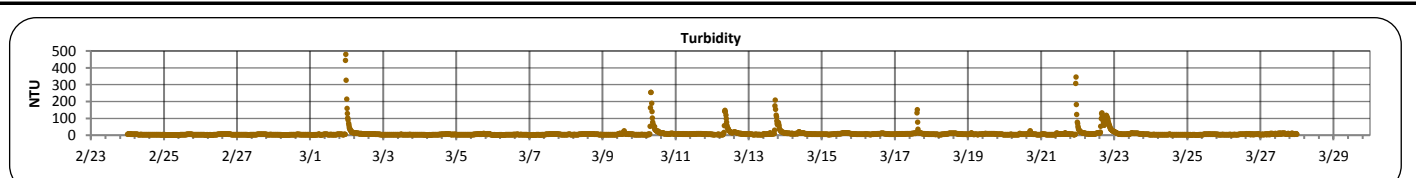
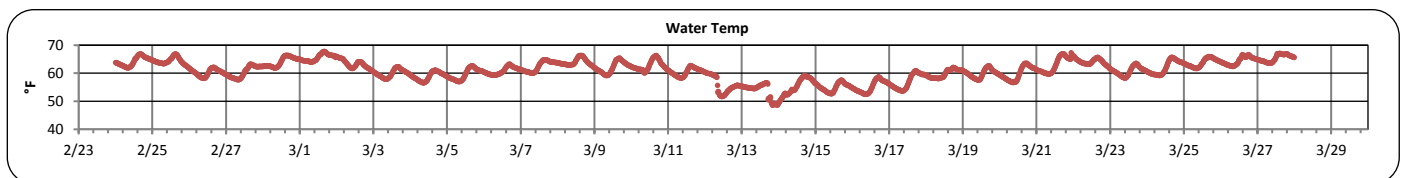
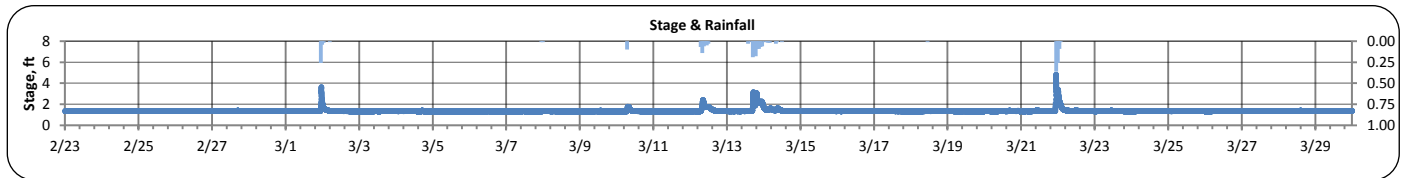
- At ROCA, six abnormal events were noted:
 - Five of these events effected specific conductivity and occurred on February 25th and 27th-28th, and March 9th, 20th, and 25th. This activity may be related to the operation of the Maxcy Greg pool.
 - One event resulted in elevated turbidity readings and was recorded on March 17th.
- At ROCB, 12 abnormal events were recorded, all of which involved elevated specific conductivity levels. These occurred on: February 24th, 25th, 25th-26th, and 27th, and March 1st, 4th-5th, 7th-8th, 8th, 10th, 15th-16th, 18th, 21st, 23rd-24th, and 24th-25th.
- The ROCB station also recorded frequent small increases in turbidity levels throughout the monitoring period.

Flow Measurements

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

Rocky Branch A (February 23, 2107 -- March 29, 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	4.9	1.4	1.4	0.2
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	49	68	61	61	4
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	3	482	6	10	23
COORDINATES:	34.995864, -81.021842	pH:	6.1	8.1	6.5	6.4	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.026	0.975	0.148	0.148	0.036
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.4	11.2	8.0	8.1	0.9
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	5						
MAX. DAILY RAINFALL:	0.8 inches						
TOTAL RAINFALL (FOR PERIOD):	2.5 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 (February 23, 2107 -- March 29, 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.

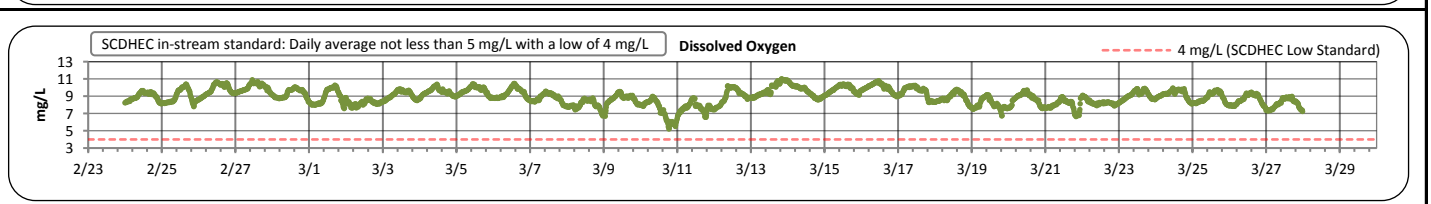
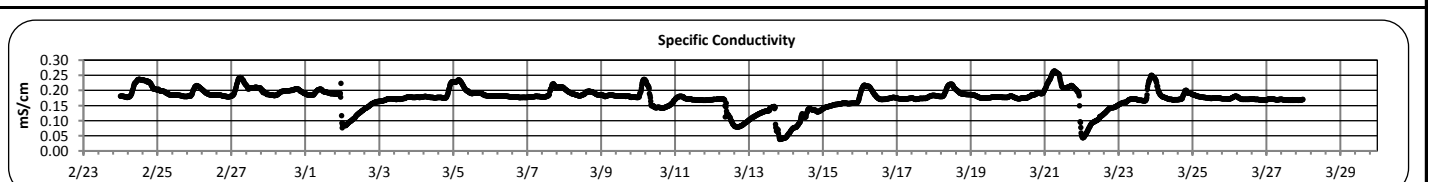
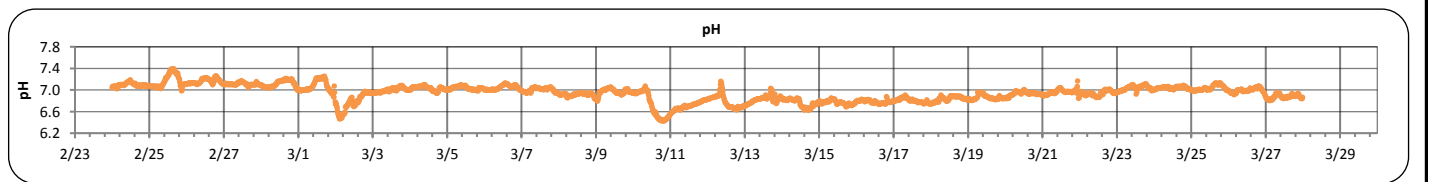
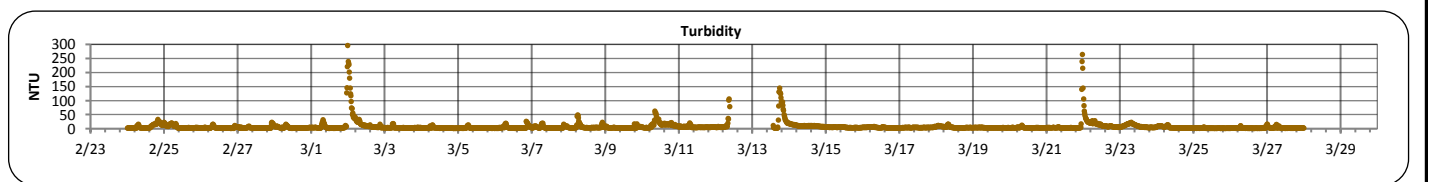
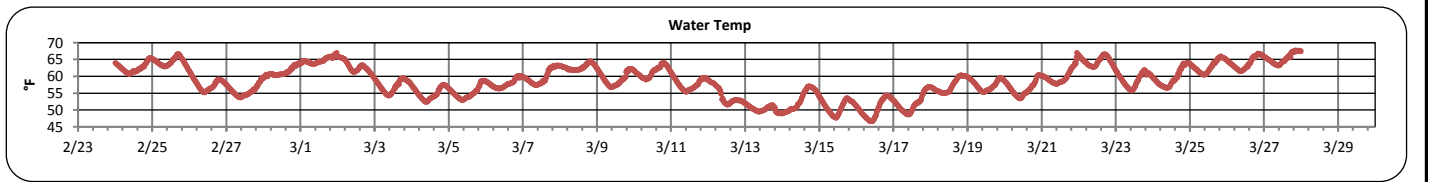
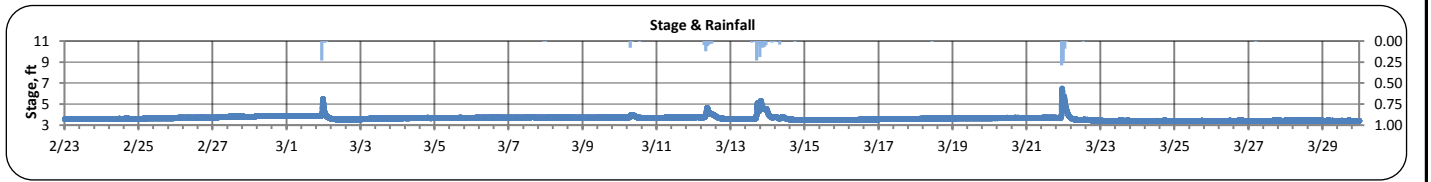
Grab Sample Data:

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 (February 23, 2107 -- March 29, 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):	3.4	6.5	3.7	3.7	0.2
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	47	68	59	59	5
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	296	4	8	18
COORDINATES:	33.982578, -81.035036	pH:	6.4	7.4	7.0	6.9	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.038	0.264	0.178	0.174	0.035
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.2	11.0	9.0	9.0	0.9
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	0.8 inches						
TOTAL RAINFALL (FOR PERIOD):	2.3 inches						



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**Continuous Water Quality
Monitoring Periodic Report**

Rocky Branch B (February 23, 2107 -- March 29, 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: