

Rocky Branch Monitoring Sites

Monitoring Data Summary for August 22nd, 2018 – September 26th

Data Gaps

- There were no interruptions in the Rocky Branch datasets during this deployment period.

SCDHEC Standards

- Both Rocky Branch monitoring stations did not record any pH values outside of the acceptable SCDHEC range of 6 to 8.5 during this monitoring period.
- The ROCA and ROCB stations recorded average DO concentrations of 6.3 mg/L and 7 mg/L, respectively, which are both above the SCDHEC daily average minimum standard of 5 mg/L.
- The minimum DO concentration recorded during this deployment period was 4.2 mg/L at ROCA and 5.4 mg/L at ROCB, which are both above the SCDHEC discrete minimum standard of 4.0 mg/L.

Storm Events

- The ROCA station recorded 5 storm events during this monitoring period, resulting in 5.3 inches of total precipitation. The ROCB station also recorded 5 storm events during this monitoring period, which resulted in 5 inches of total 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 22 days at both Rocky Branch stations prior to the storm event on September 11th.

Potential Illicit Discharges and Abnormal Events

- Specific conductivity was extremely high on August 27th, at ROCA, which is likely an activity from the Maxcy Gregg pool. Abnormally high specific conductivity is typically observed once every month during the summer months when the pool is open.
- At both Rocky Branch stations, there were a few short periods of slightly elevated specific conductivity levels observed throughout the deployment period. These specific conductivity spikes are typical observances of the Rocky Branch monitoring stations, especially during the summer months when the Maxcy Gregg pool is open.

Flow Measurements

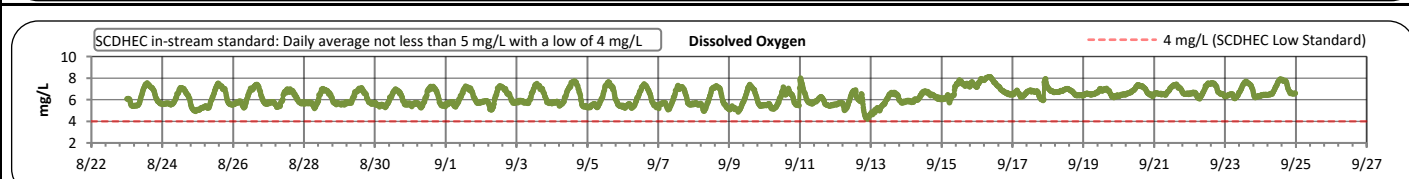
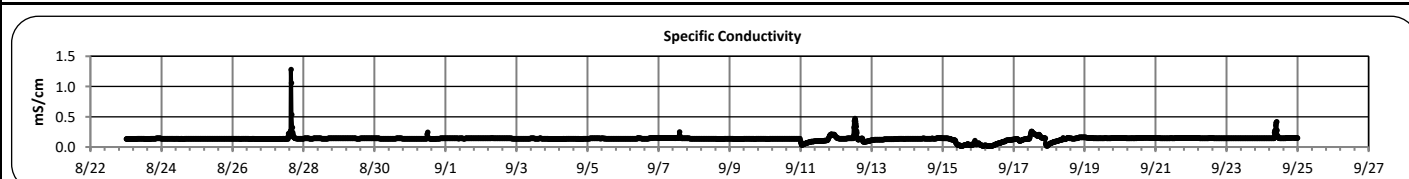
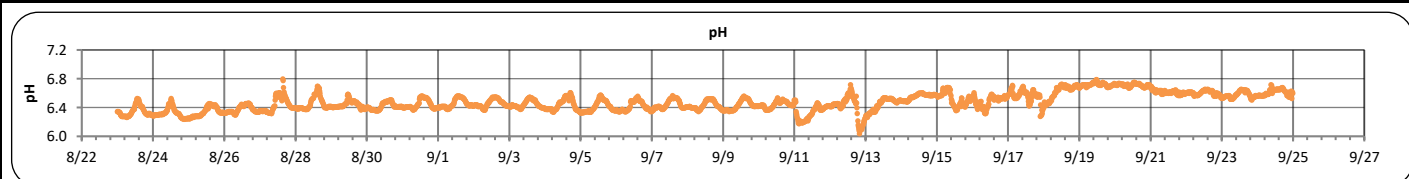
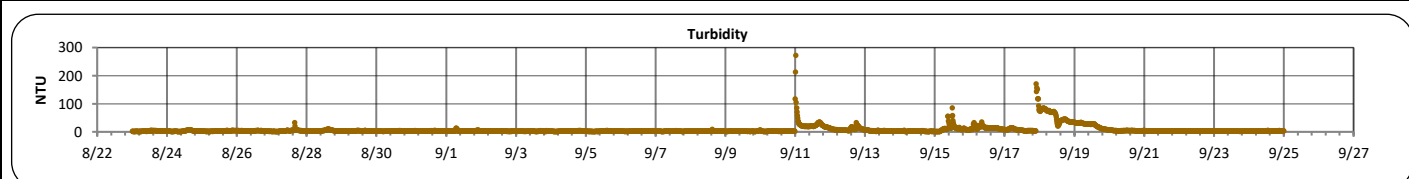
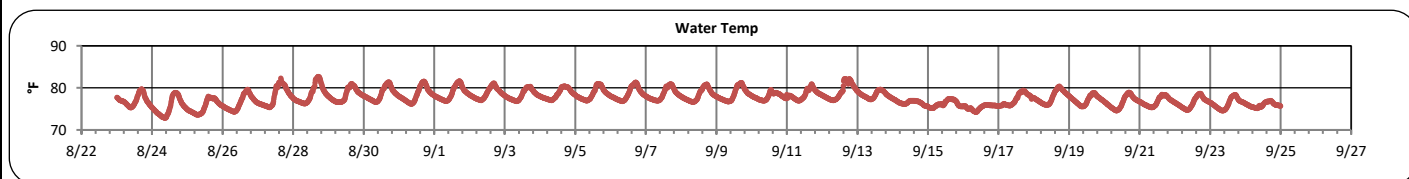
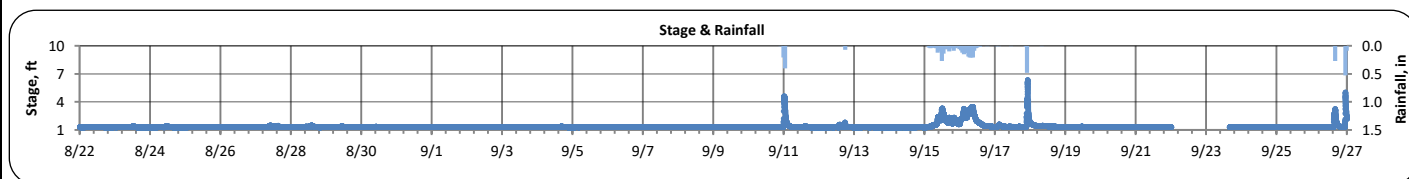
- No flow measurements were taken in Rocky Branch during this monitoring period.

Notes

- There was a minor gap observed in the pressure transducer dataset at each Rocky Branch site on September 22nd that will be replaced with secondary onsite stage data from the YSI data sonde.

Rocky Branch A (August 22, 2018 -- September 26, 2018)

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	6.4	1.3	1.4	0.3
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	73	83	77	78	2
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	2	273	3	8	15
COORDINATES:	33.995864, -81.021842	pH:	6.0	6.8	6.5	6.5	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.015	1.28	0.140	0.138	0.042
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	4.2	8.1	6.4	6.3	0.7
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	5						
MAX. DAILY RAINFALL:	1.6 inches						
TOTAL RAINFALL (FOR PERIOD):	5.3 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 (August 22, 2018 -- September 26, 2018)

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)								

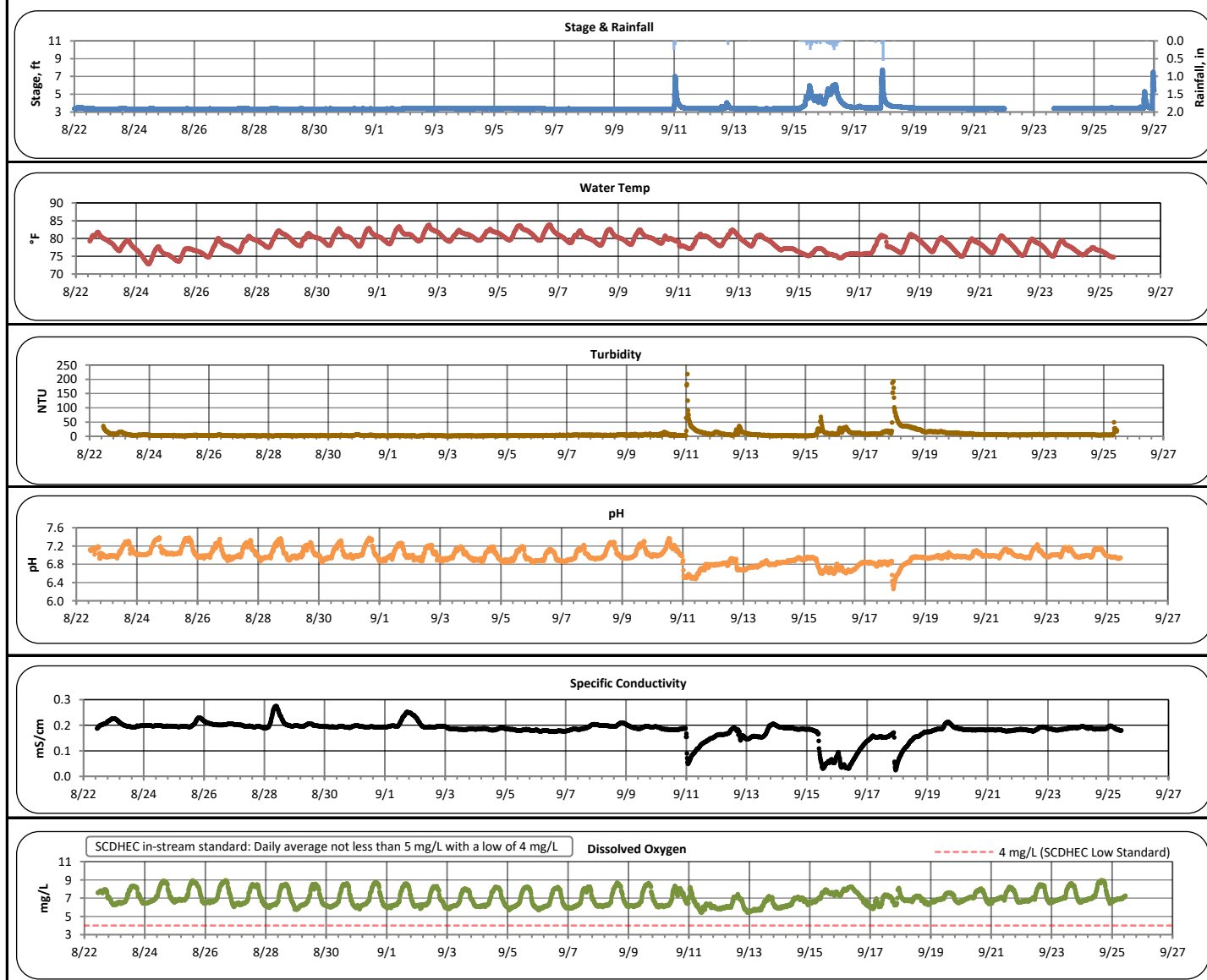
Note:

Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

REPORT GENERATED ON 10/29/2018

Rocky Branch B (August 22, 2018 -- September 26, 2018)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Rocky Branch	STAGE (FT):	3.3	7.8	3.4	3.5	0.4
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	73	84	79	79	2
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	219	5	8	13
COORDINATES:	33.982578, -81.035036	pH:	6.3	7.4	7.0	7.0	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.025	0.274	0.188	0.181	0.036
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.4	9.0	6.8	7.0	0.8
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	5						
MAX. DAILY RAINFALL:	1.3 inches						
TOTAL RAINFALL (FOR PERIOD):	5.0 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 (August 22, 2018 -- September 26, 2018)

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:

Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

REPORT GENERATED ON 10/29/2018